

A large, stylized graphic of the letters 'GLWA' in a light blue color, serving as a background for the text. The letters are composed of thick, rounded strokes.

GLWA

Great Lakes Water Authority

Water Fund

Fiscal Year Ended June 30, 2023

Dedicated to efficiently delivering the nation's best water and sewer services in partnership with our member partners across southeast Michigan

Prepared by
Great Lakes Water Authority
Financial Services Area
Detroit, Michigan

GREAT LAKES WATER AUTHORITY WATER FUND

TABLE OF CONTENTS Fiscal Year Ended June 30, 2023

	<u>Page</u>
FINANCIAL SECTION	
Independent Auditors' Report	1-3
Financial Statements	
Statement of Net Position	6-7
Statement of Revenues, Expenses and Changes in Net Position	9
Statement of Cash Flows	10-12
Index to Notes to Financial Statements	14
Notes to Financial Statements	15-51
Required Supplementary Information	
Nonemployer Contributing Entity Share of City of Detroit General Employees Retirement System – Component II:	
Schedule of Changes in Net Pension Liability and Related Ratios – Water Fund	54
Schedule of Contributions	55
Notes to Required Supplementary Information	56
Supplementary Information	
Combining Schedule of Net Position – Water Fund	58-59
Combining Schedule of Revenues, Expenses and Changes in Net Position – Water Fund	60
Schedule of Interfund Receivables and Payables	61
Schedule of Operating Expenses for Water Operations Fund – Budget to Actual	62
Schedule of Revenue Requirements – Budget to Actual – Water Operations	63
Schedule of Revenue Requirements to Statement of Revenues, Expenses and Changes in Net Position Crosswalk	64
Water Improvement and Extension Fund – Budget to Actual	65
Water Construction Fund – Budget to Actual	66
Schedule of Days Cash – Liquidity	67
Notes to Supplementary Information	68-69

GREAT LAKES WATER AUTHORITY WATER FUND

TABLE OF CONTENTS (cont.)
Fiscal Year Ended June 30, 2023

	<u>Page</u>
STATISTICAL SECTION	
Financial Trends	
Schedules of Net Position – Water Fund	74-75
Changes in Net Position – Water Fund	76
Revenue Capacity	
Charge Adjustments	78
Water Fund Operating Revenues / Largest Water Customers	79
Water System Service Charges	80
Debt Capacity	
Ratios of Outstanding Debt by Type	82
Debt by Lien	83
Schedule of Debt Service Requirements	84
Debt Credit Rating History	85
Debt Service Coverage	
Debt Service Coverage Overview	86
GAAP Basis – Water System	87
Rate Covenant Basis – Water System	88
Demographic and Economic Information	
Service Area Demographics	90
Largest Employers	91
Operating Information	
Produced and Billed Water Volumes	94
Additional Summary Statistics	95

FINANCIAL SECTION

Independent Auditors' Report

To the Board Directors of
Great Lakes Water Authority

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Water Fund of the Great Lakes Water Authority (the Water Fund), as of and for the year ended June 30, 2023 and 2022, and the related notes to the 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 Water Fund major fund of the Great Lakes Water Authority, as of June 30, 2023 and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Water Fund and do not purport to, and do not, present fairly the financial position of the Great Lakes Water Authority as of June 30, 2023, and the changes in financial position or cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

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.

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 opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with 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 Water Fund'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.

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 required supplementary information, as listed in the table of contents be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.

The Water Fund has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. Our opinion on the financial statements is not affected by this missing information. We note the significant financial events of the Water Fund are included in the Management's Discussion and Analysis of the Great Lakes Water Authority's Annual Comprehensive Financial Report.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Water Fund's financial statements. The supplementary information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated in all material respects, in relation to the financial statements as a whole.

Other Information

Management is responsible for the other information of this annual report. The other information comprises the statistical section included in the annual report but does not include the financial statements and our auditors' report thereon. Our opinion on the financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on Summarized Comparative Information

We have previously audited the Water Fund's 2022 financial statements, and we expressed an unmodified audit opinion on those statements in our report dated December 14, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 13, 2023 on our consideration of the Great Lakes Water 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 Great Lakes Water 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 the Great Lakes Water Authority's internal control over financial reporting and compliance.



Madison, Wisconsin
December 13, 2023

FINANCIAL STATEMENTS

GREAT LAKES WATER AUTHORITY WATER FUND

STATEMENT OF NET POSITION

As of June 30, 2023

With Comparative Amounts at June 30, 2022

	2023	2022
Assets		
Current Assets		
Cash and cash equivalents	\$ 222,625,550	\$ 147,191,020
Restricted cash and cash equivalents	127,679,570	49,069,747
Restricted cash for the benefit of DWSD	17,474,699	11,371,285
Investments	21,081,772	91,499,859
Restricted investments	9,975,144	30,711,544
Receivables, net	72,947,774	70,897,955
Due from other governments	5,785,565	11,246,188
Due from other funds	1,032,754	2,328,086
Contractual obligation receivable	20,608,286	18,126,021
Prepaid items and other assets	10,795,086	8,701,487
Total Current Assets	510,006,200	441,143,192
Noncurrent Assets		
Restricted cash and cash equivalents	96,480,165	2,773,291
Restricted investments	22,002,166	9,506,991
Contractual obligation receivable	544,820,801	549,493,189
Prepaid lease	11,250,000	11,250,000
Capital assets		
Nondepreciable/nonamortizable	670,557,112	567,414,021
Depreciated/amortized, net	1,330,639,811	1,384,312,298
Prepaid insurance on debt	5,995,322	6,649,782
Total Noncurrent Assets	2,681,745,377	2,531,399,572
Total Assets	3,191,751,577	2,972,542,764
Deferred Outflows of Resources		
Deferred charge on refunding	39,316,288	41,997,055
Deferred pension amounts	17,107,308	10,810,800
Total Deferred Outflows of Resources	56,423,596	52,807,855

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

GREAT LAKES WATER AUTHORITY WATER FUND

STATEMENT OF NET POSITION

As of June 30, 2023

With Comparative Amounts at June 30, 2022

	2023	2022
Liabilities		
Current Liabilities		
Accounts and contracts payable	\$ 60,207,304	\$ 56,890,771
Accrued salaries, wages and benefits	1,757,758	1,046,674
Accrued liabilities	25,111,216	15,261,427
Due to other governments	3,124,058	17,610,601
Due to other funds	2,214,714	-
Interest payable	41,789,634	36,398,995
Current portion of		
Revenue bonds and loans	62,332,082	40,091,255
Raw water rights obligation	2,963,619	2,845,282
BC Note obligation	214,151	203,954
Regional system leases	5,928,467	5,686,745
Other liabilities	3,743,223	3,378,083
Total Current Liabilities	209,386,226	179,413,787
Noncurrent Liabilities		
Revenue bonds and loans	2,592,206,224	2,359,238,286
Raw water rights obligation	89,552,155	92,515,774
BC Note obligation	16,124,188	16,338,339
Regional system leases	394,167,195	400,095,662
Other liabilities	3,713,668	4,132,979
Net pension liability	22,645,805	23,379,480
Total Noncurrent Liabilities	3,118,409,235	2,895,700,520
Total Liabilities	3,327,795,461	3,075,114,307
Deferred Inflows of Resources		
Deferred gain on refunding	44,182,654	48,216,421
Deferred amounts for swap terminations	56,712	61,438
Deferred pension amounts	-	11,224,189
Total Deferred Inflows of Resources	44,239,366	59,502,048
Net Position (Deficit)		
Net investment in capital assets	(198,390,747)	(109,163,683)
Restricted for debt service	56,139,482	31,660,045
Restricted for payment assistance program	2,289,905	5,272,708
Unrestricted	16,101,706	(37,034,806)
TOTAL NET POSITION (DEFICIT)	\$ (123,859,654)	\$ (109,265,736)

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

This page intentionally left blank.

GREAT LAKES WATER AUTHORITY WATER FUND

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the Year Ended June 30, 2023

With Comparative Amounts at June 30, 2022

	2023	2022
Operating Revenues		
Wholesale customer charges	\$ 340,593,806	\$ 323,026,213
Local system charges	22,834,300	21,697,300
Other revenues	350,991	234,462
Total Operating Revenues	363,779,097	344,957,975
Operating Expenses		
Operating expenses before depreciation and amortization		
Personnel	48,855,342	44,892,622
Contractual services	52,817,187	50,683,897
Utilities	33,436,545	28,725,292
Chemicals	12,689,666	7,788,784
Supplies and other expenses	11,926,150	9,157,367
Capital program allocation	(1,172,302)	(1,618,459)
Intergovernmental reimbursements	(3,385,540)	(1,813,535)
Total operating expenses before depreciation and amortization	155,167,048	137,815,968
Depreciation	126,485,762	123,196,027
Amortization of intangible assets	3,566,664	3,566,664
Total Operating Expenses	285,219,474	264,578,659
Operating Income	78,559,623	80,379,316
Nonoperating Revenues (Expenses)		
Earnings (loss) on investments	16,724,485	(2,361,396)
Interest on shortfall and obligations receivable	24,662,083	25,107,207
Interest expense	(131,161,860)	(125,086,379)
Amortization of debt related items and cost of issuance	14,577,852	15,610,434
Legacy pension recovery (expense)	7,443,572	(4,988,132)
Water Residential Assistance Program	(5,023,436)	(1,049,908)
Other	526,389	388,656
Discontinued capital projects	(20,902,626)	-
Total Nonoperating Expenses	(93,153,541)	(92,379,518)
Change in Net Position	(14,593,918)	(12,000,202)
NET POSITION (DEFICIT), Beginning of Year	(109,265,736)	(97,265,534)
NET POSITION (DEFICIT), END OF YEAR	\$ (123,859,654)	\$ (109,265,736)

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

GREAT LAKES WATER AUTHORITY WATER FUND

STATEMENT OF CASH FLOWS For the Year Ended June 30, 2023 With Comparative Amounts at June 30, 2022

	2023	2022
Cash Flows From Operating Activities		
Cash received from customers	\$ 355,242,971	\$ 335,022,666
Cash received from intergovernmental reimbursements	10,611,322	2,694,534
Cash payments for intergovernmental services provided	(3,385,540)	(1,813,536)
Cash payments to suppliers for goods and services	(115,165,508)	(98,259,357)
Cash payments for employee services	(45,728,366)	(46,681,790)
Cash payments to other governments for obligation payable	(875,507)	(875,509)
Cash payments for WRAP	(2,999,887)	(1,049,908)
Cash payments for GLWA share pension agreement	(11,440,800)	(11,440,800)
Cash received from insurance claims	-	72,709
Cash received from grants	25,198	-
Cash received (paid) nonoperating income (expense)	(5,718)	435,044
Cash received for DWSD nonoperating pension	4,427,400	4,427,400
Cash paid for DWSD nonoperating pension	(4,427,393)	(4,427,394)
Cash received for DWSD WRAP	841,300	671,100
Cash payments for DWSD WRAP	(621,375)	(671,100)
Cash increase from DWSD budgetary surplus (1)	6,097,784	7,470,103
Principal payments received on obligation receivable	17,358,850	15,820,056
Interest received on obligation receivable	25,345,025	26,069,023
Advanced payments received on obligation receivable	5,623	475,121
Cash received from DWSD for cost of issuance fees	29,500	49,500
Payments for bond issuance costs on DWSD debt	-	(79,000)
Payments of state revolving fund loan proceeds to DWSD	(23,886,889)	(11,851,337)
Net Cash Provided by Operating Activities	211,447,990	216,057,525
Cash Flows From Noncapital Financing Activities		
Proceeds from state revolving fund loans for DWSD	17,694,392	18,043,834
Cash received from grants	511,714	147,288
Principal payments	(17,358,850)	(15,820,056)
Interest payments	(23,188,902)	(25,787,369)
Net Cash Used in Noncapital Financing Activities	(22,341,646)	(23,416,303)

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

	2023	2022
Cash Flows From Capital and Related Financing Activities		
Proceeds from sale of assets	\$ 195,874	\$ 15,857
Proceeds from revenue bonds	228,878,775	-
Proceeds from state revolving fund loans	87,088,198	25,642,083
Payment of bond issuance costs	(878,769)	(204,225)
Principal payments on bonds	(44,582,900)	(50,798,000)
Principal payments on regional system leases	(5,686,745)	(5,454,878)
Interest payments	(98,303,474)	(95,078,335)
Purchase of capital assets	<u>(197,407,129)</u>	<u>(158,973,426)</u>
Net Cash Used in Capital and Related Financing Activities	<u>(30,696,170)</u>	<u>(284,850,924)</u>
 Cash Flows From Investing Activities		
Investment purchases	(388,757,476)	(213,527,072)
Investment sales and maturities	474,538,066	279,775,191
Interest received	<u>9,663,877</u>	<u>2,259,942</u>
Net Cash Provided in Investing Activities	<u>95,444,467</u>	<u>68,508,061</u>
 Net change in cash and cash equivalents	253,854,641	(23,701,641)
CASH AND CASH EQUIVALENTS, Beginning of Year	<u>210,405,343</u>	<u>234,106,984</u>
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 464,259,984</u>	<u>\$ 210,405,343</u>
 STATEMENT OF NET POSITION CLASSIFICATION OF CASH		
Cash and cash equivalents	\$ 222,625,550	\$ 147,191,020
Restricted cash and cash equivalents	127,679,570	49,069,747
Restricted cash for the benefit of DWSD	17,474,699	11,371,285
Noncurrent restricted cash and cash equivalents	<u>96,480,165</u>	<u>2,773,291</u>
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 464,259,984</u>	<u>\$ 210,405,343</u>
 NONCASH OPERATING ACTIVITIES		
Credits given on billings-Flint KWA obligation	\$ (6,452,573)	\$ (6,496,428)
Interest income obligation receivable premium amortization	\$ (767,171)	\$ (738,660)

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

GREAT LAKES WATER AUTHORITY WATER FUND

STATEMENT OF CASH FLOWS
For the Year Ended June 30, 2023
With Comparative Amounts at June 30, 2022

Continued From
Previous Page

	2023	2022
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES		
Bond proceeds paid directly to underwriters for cost of issuance	\$ 635,485	\$ -
Decrease in raw water rights obligation	\$ 2,845,282	\$ 2,734,246
Interest paid for raw water rights obligation	\$ 3,607,291	\$ 3,762,182
Increase in unrealized gain (loss) on investments	\$ 5,809,575	\$ (860,822)
Amortization income (expense)	\$ 16,091,106	\$ 15,815,659
Reconciliation of Operating Income to Net Cash Provided by Operating Activities:		
Operating income	\$ 78,559,623	\$ 80,379,316
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	126,485,762	123,196,027
Amortization of intangible assets	3,566,664	3,566,664
Credits for raw water rights	(6,452,573)	(6,496,427)
Miscellaneous nonoperating income (expense)	(5,718)	435,044
Legacy pension recovery (expense) and administrative fee	7,219,715	(5,150,550)
WRAP (Water Residential Assistance Program)	(5,023,436)	(1,049,908)
Loan forgiveness pass-through to DWSD	(1,758,494)	(2,518,000)
Interest income on contractual obligation receivable	24,662,083	25,107,207
Interest expense on obligation payable	(671,554)	(681,267)
Changes in:		
Receivables	(2,049,819)	(3,613,279)
Due from other governments	5,982,342	602,303
Due from other funds	1,295,332	458,258
Contractual obligation receivable	2,190,123	1,032,882
Prepaid items and other assets (operating)	(2,154,269)	(1,561,979)
Inventories	-	794,521
Accounts payable (operating)	(174,339)	1,113,432
Accrued salaries, wages and benefits	711,084	(3,845,359)
Accrued liabilities	9,849,789	8,302,871
Due to other governments	(14,486,543)	1,916,608
Due to other funds	2,214,714	(162,368)
Obligation payable including accrued interest	(203,953)	(194,242)
Other liabilities	(54,171)	248,439
Net pension liability and deferred items	(18,254,372)	(5,822,668)
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 211,447,990</u>	<u>\$ 216,057,525</u>

(1) Represents local system retail receipts received in excess of DWSD's current year budget requirements. Amounts will be used to meet future budget requirements.

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

NOTES TO FINANCIAL STATEMENTS

GREAT LAKES WATER AUTHORITY WATER FUND

INDEX TO NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 1	Summary of Significant Accounting Policies	15
NOTE 2	Budgetary Information	22
NOTE 3	Cash Deposits and Investments	22
NOTE 4	Restricted Assets	25
NOTE 5	Receivables, Net	27
NOTE 6	Due From Other Governments	28
NOTE 7	Due to and Due From Other Funds	28
NOTE 8	Contractual Obligation Receivable	28
NOTE 9	Capital Assets	30
NOTE 10	Accrued Liabilities	32
NOTE 11	Due to Other Governments	32
NOTE 12	Long-Term Debt	32
	Revenue Bonds	34
	State Revolving Fund Loans	35
	Pledges of Future Revenue	36
	Debt Ratings	36
	Raw Water Rights Obligation	37
	BC Note Obligation	37
	Interest Expense	38
NOTE 13	Regional Systems Leases Payable and Related Prepaid Lease	39
NOTE 14	Other Liabilities	40
	Compensated Absences	40
	Workers' Compensation	40
	Claims and Judgements	41
	Cash Held for the Benefit of DWSD Budget Stabilization	41
NOTE 15	Risk Management/Self-Insurance Programs	41
NOTE 16	Defined Contribution Pension Plans	43
NOTE 17	Net Pension Liability (Special Funding Situation)	44
NOTE 18	Commitments and Contingencies	48
NOTE 19	Net Investment in Capital Assets	50
NOTE 20	Subsequent Events	50

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ACCOUNTING AND REPORTING PRINCIPLES

The financial statements of the Authority have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the Authority's accounting policies are described below.

REPORTING ENTITY

The Great Lakes Water Authority (GLWA or the Authority) is the regional wholesale provider of water and sewage disposal services in southeast Michigan. The Authority was incorporated by the counties of Macomb, Oakland, Wayne and the City of Detroit (the City) on November 26, 2014 pursuant to Act 233, Public Acts of Michigan, 1955, as amended (Act 233). Pursuant to Regional System Leases that became effective on January 1, 2016, the Authority assumed possession and control of the regional assets of both the water supply and sewage disposal systems owned by the City, which were previously operated by the Detroit Water and Sewerage Department (DWSD). The City, acting through DWSD, will continue to manage and operate its own local retail water and sewage disposal system infrastructure. The Regional System Leases assigned all revenues of both systems to the Authority for an initial term of 40 years and, pursuant to bondholder consent, replaced the City with GLWA as the obligor on all outstanding debt obligations of the City related to the systems.

The term "Regional System Leases" is used throughout the financial statements to represent the agreements that transferred the regional water system and sewage disposal system assets and operations from the City of Detroit to GLWA. The Regional System Leases are not considered a lease as defined by the Government Auditing Standards Board (GASB) in GASB Statement No. 87, *Leases*.

The Authority's water system is one of the largest in the United States, both in terms of water produced and population served. The water system currently serves an area of 1,698 square miles located in eight Michigan counties and an estimated population of approximately 3.8 million or approximately 38% of Michigan's population. Suburban wholesale customers comprise approximately 82% of the population in the service area, and the DWSD retail water customers comprise the remainder.

The Authority's Board is authorized to establish rates, fees and charges for its water supply and sewage disposal services. Under the Water and Sewer Services Agreement, the City is appointed as agent of the Authority for setting retail rates and for billing, collecting and enforcing the collection of charges from retail water and sewer customers. As an agent of the Authority, the City, through the Board of Water Commissioners and without further approval by the City Council, is required to set retail rates to meet the revenue requirements that the Authority establishes for the retail system for regional commitments as well as other reasonable costs of the local DWSD systems. Under certain conditions, the Authority may terminate the City's appointment.

GOVERNANCE

The GLWA Board is composed of six voting members. Two members are residents of the City of Detroit and are appointed by the Mayor of the City of Detroit. The chief executive of the counties of Macomb, Oakland and Wayne each appoint one member who is a resident of the county from which appointed and the Governor of the State of Michigan appoints one member who is a resident of an area served by the Authority outside of the counties. All members of the GLWA Board must have at least seven years of experience in a regulated industry, a utility, engineering, finance, accounting or law firm. After the initial term specified in its Articles of Incorporation, each GLWA Board member is appointed for a four-year term and serves at the pleasure of the appointing government.

The GLWA Board has adopted a committee structure. Four committees have been established: Audit, Capital Improvement Planning, Operations and Resources, and Legal.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

BASIS OF PRESENTATION

The Authority presents a water enterprise fund for its financial statements which consists of a statement of net position, statement of revenues, expenses and changes in net position, a statement of cash flows and these notes to the financial statements.

BASIS OF ACCOUNTING

The accounting policies of the Authority conform to GAAP as applicable to governmental entities. The accounts of the Authority are used to account for its activities, which are financed and operated in a manner similar to a private business enterprise. Accordingly, the Authority maintains its records on the accrual basis of accounting. Revenues from operations, investments and other sources are recorded when earned. Expenses (including depreciation) of providing services are accrued when incurred.

Nonexchange transactions, in which the Authority receives value without directly giving equal value in return, include contributions and grants. On an accrual basis, revenue from contributions and grants is recognized in the fiscal year in which all eligibility requirements have been satisfied, including timing and expense requirements. Timing requirements specify the year when the resources are required to be used or the fiscal year when use is first permitted. Expense requirements specify the year in which the resources are provided to the Authority on a reimbursement basis.

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

Cash and Cash Equivalents and Investments

The Authority's cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with original maturities of three months or less from the date of acquisition. Investments are reported at fair value or estimated value. The Authority maintains and adheres to a formal investment policy in accordance with Michigan Public Act 20 of 1943, Investment of Surplus Funds of Political Subdivisions. Michigan State law allows the Authority to deposit in the accounts of federally insured banks, credit unions and savings and loan associations and to invest in obligations of the U.S. Treasury, certain commercial paper, repurchase agreements, bankers' acceptances and mutual funds composed of otherwise legal investments. These investments are subject to interest rate risk and credit risk which may affect the value at which these investments are recorded.

Restricted Assets

Restricted assets are those assets set aside as required by the Authority's Master Bond Ordinance (MBO), funds held on behalf of another entity, or where legally restricted for a particular purpose such as bond proceeds for the capital program. See Note 4 for further details.

Accounts Receivable, Net

The Authority records unbilled revenues for services provided prior to year-end by accruing actual revenues billed in the subsequent month. The Authority recognizes an estimate of uncollectible accounts for its customer accounts receivable related to its water services.

Due from and Due to Other Governments

The due from other governments includes amounts owed to the Authority by DWSD for shared services and intergovernmental agreements, accrued interest receivable on the contractual obligation receivable and grants. The due to other governments includes amounts owed by the Authority to DWSD for shared services.

Due from and Due to Other Funds

An amount owed between the Water and Sewage Disposal Funds based on shared centralized and administrative services administered by the Water Fund and allocated to the Sewage Disposal Fund. Any water system usage of inventory in the Sewage Disposal Fund is charged through an interfund payable to the Sewage Disposal Fund.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

Contractual Obligation Receivable

Pursuant to the Water and Sewer Services Agreement, the City through DWSD is responsible for paying the portion of debt service on the bonds assumed by the Authority that were issued to finance the cost of improvements to the Detroit local facilities. The resulting contractual obligation is a receivable recorded by the Authority and is repaid by DWSD based upon an agreed upon schedule. Any new debt issued on behalf of the City for DWSD is also included in the contractual obligation receivable.

Prepaid Items and Other Assets

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in the financial statements. Other assets include accrued interest receivable on investments.

Inventories

Inventories consist of operating, maintenance and repair parts for sewage disposal system assets and are valued at the lower of cost or market, with cost being determined on an average cost method. Inventory is recorded as expense when consumed rather than when purchased. The water fund does not report inventory because the amounts are insignificant and for efficiency are recorded in the sewage disposal fund. Any inventory usage by the water fund is charged through an interfund payable to the sewage disposal fund.

Prepaid Lease

As described in Note 14, the Authority has recorded a prepaid lease for cash paid to DWSD on the date GLWA began operations equivalent to six months of lease payments. As noted in the 2018 MOU dated June 2018, this amount will be applied at the end of the 40-year term and, hence, it is classified as a noncurrent asset.

Capital Assets

Capital assets are recorded at historical cost. All acquisitions of land and land improvements are capitalized regardless of cost. The capitalization threshold is \$5,000 for capital assets with an estimated useful life greater than one year, except for information technology assets and the right to use leased assets. The capitalization threshold for information technology assets is \$1,000,000 with an estimated useful life greater than three years. Subscription-Based Information Technology Arrangement (SBITA) contracts greater than \$1,000,000 are analyzed for the both the quantitative and qualitative aspects of materiality to determine if they will be recorded as an intangible asset under GASB 96. Right to use leased assets have a capitalization threshold of \$1,000,000 for leases greater than one year. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are not capitalized. Major outlays for capital assets and improvements are capitalized as projects are constructed.

Capital assets acquired after January 1, 2016 are depreciated on the straight-line basis over the useful life of the assets as follows:

	<u>Useful Lives (In Years)</u>
Site improvements	15
Buildings and structures	20-50
Infrastructure	80
Machinery and equipment	3-20
Vehicles	5-7
Leasehold improvements	15

Capital assets acquired as of the operational effective date of the Authority at January 1, 2016 are depreciated over their estimated remaining useful lives at that time as determined by a third-party valuation. These remaining lives differ from the years cited above for newly acquired capital assets and, in most instances, are significantly shorter.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

The Authority has recorded an intangible asset for raw water rights which are being amortized on a straight-line basis over 30 years in the water fund. See Note 9 for a description of these rights.

Prepaid Insurance on Debt

Prepaid insurance on debt represents insurance costs incurred in connection with the issuance of long-term debt. Such costs are being amortized over the term of the respective debt using the straight-line method.

Deferred Outflows of Resources

In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net assets that applies to future periods. At that time, the activity will be recognized as an outflow of resources (or expense). The Authority reports deferred outflows of resources for two items: deferred charges on refunding and pension amounts. Deferred charges on refunding results from the difference in the carrying value of refunded debt and its reacquisition price; these amounts are deferred and amortized over the shorter of the life of the refunded or refunding debt. Deferred outflows of resources from pension amounts relate to differences between expected and actual investment returns and contributions to the plan subsequent to the plan measurement date. More detailed information on pension amounts can be found in Note 17.

Accrued Liabilities

Accrued liabilities represent amounts held for specific purposes or other parties as described below:

- Under the terms of the MBO, the Authority retains cash on hand for the benefit of DWSD to be used for current revenue requirements.
- Pursuant to the water service contract with a customer, the Authority holds a security deposit for \$3,750,000 plus interest earned net of bank fees.
- Amounts owed to the WRAP service delivery partners for WRAP expenses incurred.
- Advanced billings on rentals

Revenue Bonds and Loans

The Authority issues revenue bonds to finance capital improvement projects, refund outstanding bonds to reduce future debt service payment and pay the cost of issuance. Loans are direct borrowings through the State of Michigan revolving fund loan program. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. See Note 12 for the details on revenue bonds and loans.

Raw Water Rights Obligation

The Authority has recorded a liability for the purchase obligation on raw water rights. See Note 12 for the details of this obligation.

BC Note Obligation

Under the terms of the lease agreements with the City, the Authority is required to pay a portion of the City's B and C notes allocated to the regional water system. See "BC Note Obligation" in Note 12.

Regional System Leases

The effective date of the Regional System leases by the City to the Authority for the leased water facilities was January 1, 2016. See Note 13 for the details of the regional system leases.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

Other Liabilities

Other liabilities include the following liabilities which are discussed in Note 14:

- Compensated absences
- Workers' compensation
- Claims and judgements
- Cash held for the benefit of DWSD budget stabilization

Net Pension Liability

Under the terms of the Regional System leases, the Authority is a nonemployer contributing entity in the City of Detroit General Employee's Retirement system (GRS) Component II plan in a special funding situation. For the purposes of measuring the net pension liability, deferred outflows, and pension expense, information about the fiduciary net position of the Component II plan of the GRS and additions to and deductions from the plan's net position have been determined on the same basis as they are reported by GRS. The GRS combined plan uses the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred. Plan member contributions are recognized in the period in which the contributions are due. Benefits are recognized when due and payable in accordance with the terms of the plan. Investments are reported at fair value or estimated fair value. Refer to Note 17 for additional information on the net pension liability.

Deferred Inflows of Resources

In addition to liabilities, the statement of net position includes a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net assets that applies to future periods. At that time, the activity will be recognized as an inflow of resources (or revenues). The Authority has included the deferred gain on refunding, deferred amounts on swap terminations and deferred pension amounts in this reporting category. Deferred gain on refunding results from the difference in the carrying value of refunded debt and its reacquisition price; these amounts are deferred and amortized over the shorter of the life of the refunded or refunding debt. The deferred amounts on swap terminations were assumed as part of the regional system lease agreements with the City. The amounts will be fully amortized for both funds by fiscal 2035. Deferred inflows of resources from pension amounts relate to differences between expected and actual investment returns. More detailed information on pension amounts can be found in Note 17.

Net Position (Deficit)

Net position, which represents the difference between assets, deferred outflows of resources, liabilities and deferred inflows of resources, is reported in three components as follows:

Net Investment in Capital Assets - consists of capital assets, net of accumulated depreciation and reduced by the balance of outstanding related debt including the share of the regional system lease liability allocable to the net investment in capital assets acquisition value of the regional systems recorded under GASB 69.

Restricted – consists of amounts that are legally restricted by outside parties or by law through constitutional provisions or enabling legislation. The restricted net position consists of restricted assets reduced by liabilities related to those assets.

Unrestricted – is the residual balance of net position after net investment in capital assets and restricted.

When both restricted and unrestricted resources are available for use, generally it is the Authority's policy to use restricted resources first and then unrestricted resources when they are needed.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Classification of Revenues and Expenses

The Authority classifies its revenues and expenses as either operating or nonoperating.

Operating revenues are those revenues generated from providing services in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are wholesale charges for providing water treatment. The local system charges are the charges to the City of Detroit under the Water and Sewer Services Agreement (WSSA), dated June 12, 2015. Wholesale customer charges are shown net of loss contingency expense of \$2,308,673 for the Water Fund.

Operating expenses include the direct costs of operating the water system, centralized support, utilities, administrative expenses, depreciation on capital assets and amortization of intangible assets. The following items are shown as a reduction to operating expenses:

- The capital program allocation represents personnel costs that support the project delivery of the Capital Improvement Plan and have been capitalized.
- Intergovernmental reimbursements represent reimbursement of costs related to shared facilities and personnel which the Authority provides to DWSD through a shared services agreement or separate interlocal agreement. It also includes reimbursement of costs for contracted services that are billed to member partners under an intergovernmental agreement.

All revenue and expenses not meeting these definitions above are reported as nonoperating revenues and expenses.

Taxes

The Authority pays no direct federal or state taxes except for Social Security and Medicare taxes. The Authority pays a local tax bill for maintenance charges on a county drain and an international local tax on leased property as part of the lease agreement.

Interest Income on Obligations Receivable

Interest income is the interest earned on the contractual obligation receivable.

Amortization of Debt Related Items and Cost of Issuance

Bond premiums, discounts, and gains or losses on refunding are deferred and amortized over the life of the bonds. Bond premiums, discounts and GASB 69 debt value adjustment are amortized using the effective interest method. The deferred amounts on refunding are amortized using the straight-line method. Debt cost of issuance is expensed when incurred.

Legacy Pension Expense

GLWA is legally responsible for making substantial contributions to a legacy pension plan of another entity, see Note 17 for additional information on this Plan.

Water Residential Assistance Program (WRAP)

The Water Residential Assistance Program is a unique program that started with the formation of GLWA. The program provides that an amount equal to half of one percent of GLWA Regional Systems revenue be set aside to provide assistance to qualified residents in participating communities across southeast Michigan. The amount expensed represents the amount expended for this purpose during the year. Amounts set aside and not spent are shown as restricted cash. Information on restricted assets is disclosed in Note 4.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

Centralized Services and Administrative Services

Certain costs incurred by the Authority are allocated between the Water and Sewerage Disposal Funds. The allocations are based on an annual cost allocation analysis. The following table shows the allocation of these common costs for the year ended June 30, 2023:

<u>Common Costs</u>	<u>Water % Allocation</u>	<u>Water Allocation</u>	<u>Sewer % Allocation</u>	<u>Sewer Allocation</u>	<u>Total Common Costs</u>
Centralized services	52.1%	\$ 51,965,447	47.9%	\$ 47,713,609	\$ 99,679,056
Administrative services	43.1%	\$ 15,238,261	56.9%	\$ 20,091,544	\$ 35,329,805

Centralized services includes the following operating areas: planning services, systems control, facility operations, fleet operations, field service operations, energy research and innovation, transformation, information technology and security and integrity.

Administrative services includes the following operating areas: board of directors, chief executive officer, chief administrative and compliance officer, general counsel, public affairs, organizational development, and financial services.

USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

ADOPTION OF NEW ACCOUNTING STANDARDS

The following GASB pronouncements were implemented in the current fiscal year with no effect on the financial statements as a result of implementation:

- Statement No. 91, *Conduit Debt Obligations* (effective for fiscal years beginning after December 15, 2021)
- Statement 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (effective for fiscal years beginning after June 15, 2022)
- Statement No. 100, *Accounting Changes and Error Corrections-an amendment of GASB Statement No. 62* (effective for fiscal years beginning after June 15, 2023)

NEW ACCOUNTING PRONOUNCEMENTS TO BE IMPLEMENTED IN THE FUTURE

The following GASB pronouncement will be implemented in the future. The Authority has not completed its assessment of the future impact of the adoption of this statement, if any.

- Statement No. 101, *Compensated Absences* (effective for fiscal years beginning after December 15, 2023)

RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to current year presentation.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 2 – BUDGETARY INFORMATION

The financial activity of the Authority is presented in two enterprise funds. While enterprise funds are not required under State statutes to adopt appropriated budgets, the Authority's Articles of Incorporation outlines a budget adoption process. Budget to actual schedules for revenues and expenses are presented in the Supplementary Information section of this report. This schedule is not required by GAAP or subject to audit procedures. It is presented strictly for informational purposes.

BUDGET PROCESS

GLWA adopts a biennial budget for the regional water and sewage disposal systems as required by its Articles of Incorporation. The revenue requirements budget is adopted separately for the water and sewerage disposal systems. It is the sum of: a) operation and maintenance expenses; b) amounts necessary to pay the principal of and interest on all bonds and to fund any reserves required by the Master Bond Ordinances; c) the Regional Systems lease payments, which shall be a common-to-all charge; d) GLWA's portion of the GRS net pension liability and the BC Note obligations; e) the required deposit to the Water Residential Assistance Program (WRAP) Fund; f) the amounts needed to make the required deposits to the regional Extraordinary Repair and Replacement Reserve Fund as defined in the Master Bond Ordinance; g) deposits to the regional Improvement and Extension Funds; and h) the amount necessary to satisfy the coverage ratios required by the rate covenant in the Master Bond Ordinance.

As provided in the Regional System leases, through the fiscal year ending June 30, 2025, the water and sewage disposal systems are limited to annual increases in the regional revenue requirement of not more than 4%. This limitation shall not be applicable if the regional revenue requirement must increase beyond the 4% assumption in order to satisfy the rate covenant or to pay the cost of improvements to the leased water and/or sewage disposal facilities that are required to be made by applicable laws.

In the Regional System leases, the City acknowledges that all local water and sewer system revenues received from customers in the City are the property of GLWA and will be deposited as received in the Receiving Fund as defined in the Master Bond Ordinance and applied as provided in the Bond Ordinance. As a result, the City agrees to provide the Authority with a budget for the local water and sewage disposal system as required in the Water and Sewer Services Agreement.

SCHEDULE OF CHARGES PROCESS

The GLWA Wholesale Customer Model Water Contract requires that GLWA provide wholesale customers with written notice of a proposed charge, meet to review the proposed charge, and the underlying data used to calculate the charge not less than 30 calendar days prior to a public hearing. Further, the contract requires that a public hearing be held no less than 120 days prior to the date that proposed charges take effect.

The Water and Sewer Services Agreement between GLWA and DWSD requires that GLWA provide the City with written notice of the proposed charge and the underlying data used to calculate the charge not less than 120 calendar days prior to the effective date of any new charge.

NOTE 3 – CASH DEPOSITS AND INVESTMENTS

Michigan Compiled Laws Section 129.91 (Public Act 20 of 1943, as amended) authorizes the Authority to make deposits and invest in the accounts of federally insured banks, credit unions, and savings and loan associations that have offices in Michigan. The law also allows investments outside the state of Michigan when fully insured. The Authority is allowed to invest in bonds, securities, and other direct obligations of the United States or any agency or instrumentality of the United States; repurchase agreements; bankers' acceptances of United States banks; commercial paper rated within the two highest classifications that matures not more than 270 days after the date of purchase; obligations of the State of Michigan or its political subdivisions that are rated as investment grade; and mutual funds composed of investment vehicles that are legal for direct investment by local units of government in Michigan.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

The deposits and investments of the Authority at June 30, 2023 are reported in the financial statements as follows:

Statement of Net Position

Cash and cash equivalents	\$ 222,625,550
Restricted cash and cash equivalents	127,679,570
Restricted cash for the benefit of DWSD	17,474,699
Investments	21,081,772
Restricted investments	9,975,144
Noncurrent restricted cash and cash equivalents	96,480,165
Noncurrent restricted investments	<u>22,002,166</u>
 Total	 <u>\$ 517,319,066</u>

Cash Deposits and Investments

Bank deposits – checking and savings accounts	\$ 63,007,459
Money market accounts	401,252,525
Investments in securities	<u>53,059,082</u>
 Total	 <u>\$ 517,319,066</u>

CUSTODIAL RISK OF BANK DEPOSITS

Deposits and money market accounts are exposed to custodial credit risk if they are not covered by depository insurance. At year-end, the carrying amount of the Authority's deposits and money market accounts was \$464,259,984 for the water fund. The bank balance of the water fund deposits and money market accounts was \$466,465,276 of which \$448,273,029 was uninsured and uncollateralized.

In accordance with the Authority's investment policy and State law, all deposits are held in the Authority's name, and evidenced by a safekeeping receipt. Also, due to the dollar amounts of cash deposits and the limits of FDIC insurance, the Authority believes it is impractical to insure all bank deposits. As a result, the Authority evaluates each financial institution and assesses the level of risk of each institution; only those institutions with an acceptable estimated risk level are used as depositories.

INVESTMENTS

Following is a summary of the Authority's investments as of June 30, 2023:

	<u>Water Fund</u>	<u>Standard & Poors Rating</u>	<u>Weighted Maturity In Years</u>
U.S. treasury notes	\$ 24,225,975	AA+	1.22
U.S. government agencies	1,648,515	AA+	0.03
Commercial paper	<u>27,184,592</u>	A1	0.11
 Total	 <u>\$ 53,059,082</u>		

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

CUSTODIAL RISK OF INVESTMENTS

Investments are exposed to custodial credit risk if the securities are uninsured, unregistered or held by a counterparty or its agent but not in the government's name. In accordance with the Authority's investment policy, all investments are held in the name of the Authority and are evidenced by a safekeeping receipt confirmation, and thus not exposed to custodial credit risk.

CREDIT RISK

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Authority's investment policy and State law require that commercial paper be rated in the top two ratings by at least two nationally recognized statistical rating organizations.

As of June 30, 2023, all of the Authority's investments in securities of U.S. agencies were rated AA+ by Standard & Poor's and Aaa by Moody's. The Authority's investment in commercial paper was rated A1 by Standard and Poor's and P1 by Moody's. U.S Treasury notes are explicitly guaranteed by the U.S. government and not considered to have credit risk. The Authority's money market accounts were not rated.

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. In order to manage its exposure risk, the Authority's investment policy requires diversification by security type to no more than 50% of the total investment portfolio.

At June 30, 2023, the Authority had greater than 5% of its total investment portfolio concentrated as follows:

<u>Investment Type</u>	<u>Issuer</u>	<u>% of Portfolio</u>
Commercial paper	Natixis Bank NY	19.90%
Commercial paper	Bank of America Securities	14.81
Commercial paper	Mitsubishi UFJ Financial Group Bank LTD NY	12.38

INTEREST RATE RISK

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of investments. As a means of limiting its exposure to fair value losses due to rising interest rates, the Authority's investment policy limits the maximum maturity period to no more than five years, unless matched to a particular cash flow need. The Authority's investment policy further provides risk will be minimized by matching investments with short and long-term cash flow requirements and monitoring the maturity dates of individual securities and the weighted average maturity of the investment portfolio, to ensure duration is commensurate with the cash flow requirements.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

FAIR VALUE MEASUREMENTS

The Authority categorizes investments measured at fair value within the fair value hierarchy established by generally accepted accounting principles. The Authority is required to classify certain assets and liabilities based on the following fair value hierarchy:

Level 1: Quoted price in active markets for identical assets.

Level 2: Inputs other than quoted prices included in Level 1 that are observable, either directly or indirectly. Debt securities are priced based on a compilation of primarily observable market information or broker quote in non-active market.

Level 3: Inputs are significant unobservable inputs.

	<u>Level 2</u>
Investments by fair value:	
U.S. treasury notes	\$ 24,225,975
U.S. government agencies	1,648,515
Commercial paper	<u>27,184,592</u>
Total Investments	<u>\$ 53,059,082</u>

The Water Fund has no Level 1 or 3 inputs on June 30, 2023.

NOTE 4 – RESTRICTED ASSETS

Restricted assets, comprised of cash and investments, are available for debt service on revenue bonds and to provide funds for improvements, enlargements, extensions and construction. In accordance with the provisions of the Master Bond Ordinance and Regional System Leases, the Authority follows a sequential flow of funds in segregated accounts through which revenue receipts are deposited and are maintained at certain levels in satisfaction of all legal requirements.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 4 – RESTRICTED ASSETS (cont.)

The following schedules provide, in the order of the flow of funds per the Master Bond Ordinance, the assignment of cash and investments between restricted and unrestricted assets based on the source of the monies as of June 30, 2023.

	Funded from Revenue and Other		Funded from Debt Issuance	
	Unrestricted	Restricted	Restricted	Total
Water Fund				
Receiving fund	\$ 67,350,172 *	\$ -	\$ -	\$ 67,350,172
Operations and maintenance	29,372,504	-	-	29,372,504
Operations and maintenance – legacy pension	-	325,928	-	325,928
Senior lien debt service	-	54,922,269	-	54,922,269
Senior lien bond reserve	-	-	101,461,882	101,461,882
Second and junior lien debt service	-	35,922,001	-	35,922,001
Second lien bond reserve	-	-	49,184,236	49,184,236
Legacy pension obligation	-	595,285	-	595,285
Water residential assistance program (WRAP)	-	4,313,454	-	4,313,454
Budget stabilization	-	2,000,000	-	2,000,000
Extraordinary repair and replacement	28,445,753	-	-	28,445,753
Improvement and extension – regional	118,538,893	-	-	118,538,893
Subtotal – Reserves Defined by Ordinance	243,707,322	98,078,937	150,646,118	492,432,377
Less: Funded by surety (noncash)	-	-	(142,325,062)	(142,325,062)
Total – Reserves Defined by Ordinance (net of surety coverage)	243,707,322	98,078,937	8,321,056	350,107,315
Cash held for the benefit of DWSD	-	17,474,699	-	17,474,699
Construction retainage and deposits	-	22,012,952	-	22,012,952
Construction fund	-	-	127,724,100	127,724,100
Total Cash, Cash Equivalents and Investments Water Fund	\$ 243,707,322	\$ 137,566,588	\$ 136,045,156	\$ 517,319,066

* Balance includes funds sufficient for two months of required Master Bond Ordinance transfers

Surety coverage includes series specific policies; therefore, this represents the lesser of the maximum amount of the policy or amount of reserve requirement allocated to the specific series covered by such policy.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 4 – RESTRICTED ASSETS (cont.)

A reconciliation of restricted assets to restricted net position is as follows:

Restricted assets from schedule above:	
From revenue and other	\$ 137,566,588
From debt issuance	136,045,156
Amounts payable for liabilities and debt	<u>(215,182,357)</u>
 Restricted Net Position	 <u>\$ 58,429,387</u>
 Restricted net position for:	
Debt service	\$ 56,139,482
Payment assistance program	<u>2,289,905</u>
 Total Restricted Net Position	 <u>\$ 58,429,387</u>

The following summary reconciles the above cash and investment balances with the balances per the Statement of Net Position. The allocation of restricted balances to current and noncurrent categories is not intended to directly align with the funding source allocation included in the schedule.

	<u>Unrestricted</u>	<u>Restricted Current</u>	<u>Restricted Noncurrent</u>	<u>Total</u>
Cash and cash equivalents	\$ 222,625,550	\$ 127,679,570	\$ 96,480,165	\$ 446,785,285
Cash held for the benefit of DWSD	-	17,474,699	-	17,474,699
Investments	<u>21,081,772</u>	<u>9,975,144</u>	<u>22,002,166</u>	<u>53,059,082</u>
 Total	 <u>\$ 243,707,322</u>	 <u>\$ 155,129,413</u>	 <u>\$ 118,482,331</u>	 <u>\$ 517,319,066</u>

NOTE 5 – RECEIVABLES, NET

The following is a summary of the net receivables as of June 30, 2023:

Receivables, net:	
Billed	\$ 55,359,908
Unbilled	33,527,694
Other	<u>286,079</u>
Subtotal	89,173,681
 Allowance for doubtful accounts	 <u>(16,225,907)</u>
 Total Receivables, net	 <u>\$ 72,947,774</u>

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 6 – DUE FROM OTHER GOVERNMENTS

Due from other governments in the statement of net position are as follows:

DWSD-Billed shared services	\$	644,536
DWSD-Unbilled shared services		1,351,751
DWSD-Accrued interest on obligation receivable		306,114
Intergovernmental agreements and other		2,233,678
Grants-Federal and State		22,000
State of Michigan FEMA		<u>1,227,486</u>
 Total Due From Other Governments	 \$	 <u>5,785,565</u>

NOTE 7 – DUE TO AND DUE FROM OTHER FUNDS

Interfund balances result from the time lag between the dates the interfund reimbursements occur and the payment between the funds are made. Interfund balances for the year ended June 30, 2023 consisted of the following:

	Water Fund – Due from Sewage Disposal Fund	Sewage Disposal Fund - Due from Water Fund
Water Fund – Due to Sewage Disposal Fund	\$ -	\$ 2,214,714
Sewage Disposal Fund – Due to Water Fund	<u>1,032,754</u>	<u> </u>
 Total Due From	 <u>\$ 1,032,754</u>	 <u>\$ 2,214,714</u>

NOTE 8 – CONTRACTUAL OBLIGATION RECEIVABLE

As part of the regional system lease transaction, in which GLWA leased the regional water system from the City of Detroit, all DWSD revenue bonds outstanding as of December 31, 2015, including those purchased by the Michigan Finance Authority under its state revolving loan program, were assumed by GLWA with the consent of bondholders. The total bonds assumed by GLWA on January 1, 2016 totaled \$2,313,683,761 for the Water Fund.

Per the lease agreements, the WSSA and the MBO, the Detroit retail class continues to pay its common-to-all share of debt service revenue requirements and its allocated share of debt service revenue requirements associated with improvements to the local water system. Payments on the debt service incurred by GLWA on the outstanding revenue bonds assumed as of December 31, 2015 are to be allocated using an agreed-upon percentage of total debt service associated with bond-financed local improvements over the life of such bonds, though the bonds themselves continue to be secured by the net revenue of GLWA, and the revenues of the Detroit retail class. The MOU dated June 27, 2018 defines an agreed upon allocation and amortization schedule. This allocated debt is referred to as “Bifurcated debt” in the table below. Any additional debt issued by GLWA on behalf of the local system is also included in the obligation receivable. DWSD is billed monthly for the debt requirements on a debt set-aside basis so the funds are available when the associated debt payment is due.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 8 – CONTRACTUAL OBLIGATION RECEIVABLE (cont.)

Changes in obligation receivable for the year ended June 30, 2023 were as follows:

	Beginning Balance	Increase	Decrease	Debt Forgiveness	Ending Balance	Due Within One Year
Obligation Receivable						
Bifurcated debt	\$ 368,672,900	\$ -	\$ (15,890,000)	\$ -	\$ 352,782,900	\$ 16,646,300
New money bonds	136,320,000	-	-	-	136,320,000	1,670,000
State revolving funds	43,759,364	17,694,392	(1,468,850)	(1,758,494)	58,226,412	1,495,200
Total Obligation						
Receivable	548,752,264	17,694,392	(17,358,850)	(1,758,494)	547,329,312	19,811,500
Deferred amounts for:						
Unamortized premiums	18,866,946	-	(767,171)	-	18,099,775	796,786
Total Obligation						
Receivable	\$ 567,619,210	\$ 17,694,392	\$ (18,126,021)	\$ (1,758,494)	\$ 565,429,087	\$ 20,608,286

The current obligation receivable payment schedule is as follows:

	Year Ended June 30	Principal	Interest	Total
2024	\$	19,811,500	\$ 24,819,135	\$ 44,630,635
2025		21,209,050	23,905,698	45,114,748
2026		22,163,300	22,945,688	45,108,988
2027		23,171,000	21,941,276	45,112,276
2028		24,215,100	20,890,011	45,105,111
2029-2033		138,659,900	86,878,204	225,538,104
2034-2038		173,334,200	52,154,636	225,488,836
2039-2043		50,743,810	24,741,940	75,485,750
2044-2048		65,133,561	9,311,955	74,445,516
2049-2052		8,887,891	421,146	9,309,037
Total	\$	547,329,312	\$ 288,009,689	\$ 835,339,001

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 9 – CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2023 was as follows:

	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Nondepreciable and nonamortizable capital assets					
Land	\$ 34,907,091	\$ -	\$ (459,432)	\$ 30,000	\$ 34,477,659
Easements	259,138,946	-	-	-	259,138,946
Construction in progress	272,954,060	195,531,135	(21,543,446)	(72,697,796)	374,243,953
Prepaid subscription assets	413,924	2,282,630	-	-	2,696,554
Total Nondepreciable and Nonamortizable Capital Assets	567,414,021	197,813,765	(22,002,878)	(72,667,796)	670,557,112
Depreciated and amortized capital assets					
Site improvements	84,054,180	-	-	-	84,054,180
Buildings and structures	607,176,076	301,069	-	4,396,850	611,873,995
Infrastructure	668,116,959	-	-	18,883,260	687,000,219
Machinery and equipment	791,592,580	2,770,921	(1,227,769)	49,387,686	842,523,418
Vehicles	5,281,129	1,010,099	(35,607)	-	6,255,621
Leasehold improvements	8,407,125	14,660	-	-	8,421,785
Intangible asset – raw water rights	106,999,919	-	-	-	106,999,919
Total Depreciable and Amortizable Assets	2,271,627,968	4,096,749	(1,263,376)	72,667,796	2,347,129,137
Less: Accumulated depreciation and amortization					
Site improvements	(54,638,999)	(6,855,620)	-	-	(61,494,619)
Buildings and structures	(197,253,224)	(25,200,015)	-	-	(222,453,239)
Infrastructure	(248,147,691)	(38,825,276)	-	-	(286,972,967)
Machinery and equipment	(367,472,545)	(54,280,617)	845,572	-	(420,907,590)
Vehicles	(2,289,286)	(766,983)	33,198	-	(3,023,071)
Leasehold improvements	(1,166,715)	(557,251)	-	-	(1,723,966)
Intangible asset – raw water rights	(16,347,210)	(3,566,664)	-	-	(19,913,874)
Total Accumulated Depreciation and Amortization	(887,315,670)	(130,052,426)	878,770	-	(1,016,489,326)
Total Depreciated and Amortized Capital Assets, Net	1,384,312,298	(125,955,677)	(384,606)	72,667,796	1,330,639,811
Net Capital Assets	\$ 1,951,726,319	\$ 71,858,088	\$(22,387,484)	\$ -	\$ 2,001,196,923

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 9 – CAPITAL ASSETS (cont.)

ASSET IMPAIRMENT

Capital assets are evaluated annually to determine if any asset impairments exist, defined as a significant, unexpected decline in the service utility of a capital asset. The 2015 Water Master Plan recommended right-sizing the capacity of the Regional Water System based on the trends of lower projections of population and water volume demands. The Water Master Plan found that the Authority's combined water treatment plant design capacity was estimated to be over 60% greater than the forecasted 20-year water demands. The total rated capacity of the existing five water treatment plants is 1.7 billion gallons per day. The 2015 Master Plan Update identified likely maximum demands in the range of up to 1.0 billion gallons per day during the 20-year planning period. This provided the rationale to strategically align capacity and service requirements and planning for structural de-rating of capacity as warranted at all of the water treatment plants. The Water Master Plan identified the financial benefit of capital cost avoidance in reducing the combined treatment capacity at all five of the GLWA Water Treatment Plants. That recommendation included the decommissioning of Water Treatment Plants. During FY 2023, operational, regulatory and life cycle cost updates no longer support decommissioning Water Treatment Plants. A report related to the factors that impacted this decision was presented to the GLWA Board of Directors on June 28, 2023 which included a write-off of some or all of the activity for the following CIP projects: 122003 – Waterworks Park to NE Transmission Main, 122017 – Seven Mile/Nevada Transmission Main, and 122018 – Garland, Hurlbut, Bewick Transmission Main. As a result \$20,902,626 has been recognized as a loss for the discontinued capital projects.

RAW WATER RIGHTS ASSET

Effective December 1, 2017, the Authority, the City of Flint, Karegnondi Water Authority (KWA), Genesee County Drain Commission (GCDC) and State of Michigan entered into a long-term partnership agreement to satisfy a number of critical water service needs across the region. Key provisions of a master agreement includes: 1) a 30-year water service contract with the City of Flint that establishes the Authority as the long-term water source for the City of Flint and credits the City of Flint for its debt service payment obligations on existing KWA bonds for the building of its raw water intake and supply line; 2) a license to the Authority of the 72-inch line serving the City of Flint; and 3) a 30-year contract for reciprocal, emergency water services between the Authority and GCDC.

The 30-year water service contract with the City of Flint includes a license to raw water rights on 17.46 MGD of the 18 MGD purchased by Flint as part of KWA bond obligation. These license rights constitute an intangible asset under governmental accounting standards. Therefore, the Authority has recorded an intangible asset and purchase obligation liability of approximately \$107 million associated with this agreement in the accompanying financial statements. The Authority is amortizing the intangible asset over 30 years. As the City of Flint satisfies its monthly bond payment obligations to KWA, the Authority credits Flint's water invoice for that payment and reduces the Authority's purchase obligation. This process will continue each year over the 30-year life of the asset.

PREPAID SUBSCRIPTION ASSETS

The Authority has entered into two contracts for Subscription-Based Information Technology Arrangements (SBITA) that will be recorded under GASB 96. The SBITA's are in the initial implementation stage, therefore costs associated with these SBITA's have been recorded as prepaid subscription assets. Once the subscription assets are placed in service, the costs incurred and any future subscription liability (present value of expected future payments) will be recognized as an intangible right-to-use subscription asset and amortized over the subscription term.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 10 – ACCRUED LIABILITIES

As described in Note 1, other accrued liabilities in the statement of net position are as follows:

Cash held for the benefit of DWSD	\$ 17,474,699
Due to WRAP service delivery partners	2,023,549
Advanced billings	1,707,978
Customer deposit	<u>3,904,990</u>
 Total Accrued Liabilities	 <u><u>\$ 25,111,216</u></u>

NOTE 11 – DUE TO OTHER GOVERNMENTS

Due to other governments, which consists entirely of amounts due to the DWSD, in the statement of net position is as follows:

Shared services	<u><u>\$ 3,124,058</u></u>
-----------------	----------------------------

NOTE 12 – LONG-TERM DEBT

Changes in long-term debt for the year ended June 30, 2023 were as follows:

	Beginning Balance	Increase	Decrease	Debt Forgiveness	Ending Balance	Due Within One Year
Bonds and Loans						
Revenue bonds	\$2,128,890,000	\$ 207,215,000	\$ (56,845,000)	\$ -	\$2,279,260,000	\$ 40,250,000
Notes from direct borrowings and direct placements -						
State revolving loan	<u>109,429,462</u>	<u>104,782,590</u>	<u>(5,096,750)</u>	<u>(1,758,494)</u>	<u>207,356,808</u>	<u>6,985,000</u>
Total Bonds and Loans	<u>2,238,319,462</u>	<u>311,997,590</u>	<u>(61,941,750)</u>	<u>(1,758,494)</u>	<u>2,486,616,808</u>	<u>47,235,000</u>
Deferred amounts for:						
Unamortized premiums	167,471,141	22,299,260	(16,285,358)	-	173,485,043	15,838,410
Unamortized discounts	<u>(6,461,062)</u>	<u>-</u>	<u>897,517</u>	<u>-</u>	<u>(5,563,545)</u>	<u>(741,328)</u>
Total Bonds and Loans, Net	<u>2,399,329,541</u>	<u>334,296,850</u>	<u>(77,329,591)</u>	<u>(1,758,494)</u>	<u>2,654,538,306</u>	<u>62,332,082</u>
Other Debt						
Raw water rights obligation	95,361,056	-	(2,845,282)	-	92,515,774	2,963,619
BC Note obligation	<u>16,542,293</u>	<u>-</u>	<u>(203,954)</u>	<u>-</u>	<u>16,338,339</u>	<u>214,151</u>
Total	<u><u>\$2,511,232,890</u></u>	<u><u>\$ 334,296,850</u></u>	<u><u>\$ (80,378,827)</u></u>	<u><u>\$ (1,758,494)</u></u>	<u><u>\$2,763,392,419</u></u>	<u><u>\$ 65,509,852</u></u>

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

As of June 30, 2023, aggregate debt service requirements of the Authority's bonds and loans (fixed and variable-rate) were as follows. These amounts assume that current interest rates on variable-rate bonds will remain the same for their respective terms. As these rates vary, interest payments on variable-rate bonds will vary.

Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct Placements		Total
	Principal	Interest	Principal	Interest	
2024 *	\$ 40,250,000	\$ 91,625,071	\$ 6,985,000	\$ 4,099,446	\$ 142,959,517
2025	82,590,000	103,512,277	12,453,950	3,888,845	202,445,072
2026	86,795,000	99,634,323	12,710,000	3,641,836	202,781,159
2027	90,805,000	95,382,395	12,952,820	3,389,809	202,530,024
2028	95,310,000	90,959,407	11,560,000	3,150,348	200,979,755
2029-2033	561,450,000	378,469,377	60,195,190	12,292,397	1,012,406,964
2034-2038	619,035,000	227,124,415	45,605,907	6,887,898	898,653,220
2039-2043	357,870,000	124,057,575	32,398,814	3,045,047	517,371,436
2044-2048	283,025,000	48,048,437	9,272,237	901,376	341,247,050
2049-2053	62,130,000	7,691,537	3,222,890	137,896	73,182,323
Total	<u>\$ 2,279,260,000</u>	<u>\$ 1,266,504,814</u>	<u>\$ 207,356,808</u>	<u>\$ 41,434,898</u>	<u>\$ 3,794,556,520</u>

* For bonds issued through the Michigan Finance Authority (MFA) in 2014 and 2015, the Authority is required to make payment on these obligations to the MFA depository account five business days prior to the actual due date of the bond principal and interest payments. Therefore, the payments for principal and interest due on July 1, 2023 are not included in the debt service requirements amounts above as they were paid on June 26, 2023.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

REVENUE BONDS

Net revenues of the Authority are pledged to repayment of bonds; following are the revenue bonds payable at June 30, 2023:

Issue	Bond Date	Original Issue Amount	Range of Interest Rates	Maturity Dates	Outstanding Ending Balance	Callable at Par
Series 2003A	1/30/03	\$ 234,805,000	5.00%	7/01/34	\$ 100,000	\$ 100,000
Series 2003B	1/30/03	172,945,000	5.00%	7/01/34	100,000	100,000
Series 2005B	5/14/08	194,900,000	5.25%	7/01/35	100,000	100,000
Series 2006A	8/16/06	280,000,000	5.00%	7/01/34	100,000	100,000
Series 2006B	4/01/09	120,000,000	6.25%	7/01/36	100,000	100,000
Series 2014D-1	9/04/14	206,540,000	5.00%	7/01/35-37	44,190,000	44,190,000
Series 2014D-2	9/04/14	188,455,000	5.00%	7/01/24-28	182,480,000	136,925,000
Series 2014D-4	9/04/14	307,645,000	5.00%	7/01/29-34	209,360,000	209,360,000
Series 2014D-6	9/04/14	65,425,000	5.00%	7/01/24-36	45,820,000	43,690,000
Series 2015D-1	12/15/15	89,430,000	5.00%	7/01/27-35	69,275,000	69,275,000
Series 2015D-2	12/15/15	37,235,000	5.00%	7/01/34	37,235,000	37,235,000
Series 2016A	10/27/16	88,000,000	5.00%	7/01/23-46	87,990,000	87,970,000
Series 2016B	10/27/16	163,830,000	5.00%	7/01/23-46	163,820,000	163,800,000
Series 2016C	10/27/16	443,930,000	5.00-5.25%	7/01/23-35	439,065,000	367,685,000
Series 2016D	10/27/16	222,045,000	4.00-5.00%	7/01/24-36	222,045,000	217,380,000
Series 2018A	10/3/18	155,595,000	5.00%	7/01/23-29	109,040,000	-
Series 2020A	5/12/20	42,445,000	5.00%	7/01/24-49	42,445,000	35,685,000
Series 2020B	5/12/20	43,135,000	5.00%	7/01/24-49	43,135,000	36,265,000
Series 2020C**	5/12/20	377,515,000	1.879-3.473%	7/01/23-41	375,645,000	317,530,000
Series 2022A	9/13/22	137,470,000	5.00-5.25%	7/01/25-52	137,470,000	132,900,000
Series 2022B	9/13/22	69,745,000	5.00-5.50%	7/01/25-52	69,745,000	66,710,000
Total Revenue Bonds Payable					<u>\$ 2,279,260,000</u>	

** Taxable bond

New Money Bond – Water Fund

On September 13, 2022, the Authority completed a new money water supply system revenue bond transaction. The Authority issued \$137,470,000 in Series 2022A senior lien revenue bonds and \$69,745,000 in 2022B second lien revenue bonds for a total issue of \$207,215,000.

Arbitrage

Certain bonds are subject to arbitrage rebate requirements in accordance with regulations issued by the U.S. Treasury Department. The requirements generally stipulate that earnings from the investment of the tax-exempt bond proceeds that exceeds related interest costs on the bonds must be remitted to the Federal government on every fifth anniversary of each bond issue. The Authority did not have an arbitrage rebate liability as of June 30, 2023.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

STATE REVOLVING FUND LOANS

The Authority participates in direct borrowings through the State of Michigan Drinking Water State Revolving Fund (DWSRF) to finance qualified water supply system projects. As GLWA draws additional amounts, the outstanding principal amounts of such loans will correspondingly increase. All loans are callable under terms specified in the loan agreements.

The Authority received direct borrowing loans from the State of Michigan Revolving Loan Fund during the year ended June 30, 2023 for the Water Fund totaling \$104,782,590 of which \$1,758,494 has been forgiven. The water loans forgiven and \$17,694,392 of the proceeds of the Water Fund loans were a pass through to DWSD, the subrecipient of the loans. The remaining proceeds of the Water Fund loans were used to pay costs of acquiring, constructing extensions, and making certain repairs and improvements to the regional water system. At June 30, 2023, \$73,915,545 for the Water Fund was authorized and unissued. Of the authorized and unissued amount, \$9,145,105 of the Water Fund is for pass through loans to DWSD.

Net revenues of the Authority are pledged for repayment of the loans.

The following is a schedule of the state revolving loans payable at June 30, 2023:

Issue	Bond Date	Amount Issued	Range of Interest Rates	Maturity Dates	Outstanding Ending Balance
Series 2005 SRF-1	9/22/05	\$ 13,805,164	2.125%	10/01/23-26	\$ 3,130,164
Series 2005 SRF-2	9/22/05	8,891,730	2.125%	10/01/23-26	1,976,730
Series 2006 SRF-1	9/21/06	5,180,926	2.125%	10/01/23-26	1,165,926
Series 2008 SRF-1	9/29/08	2,590,941	2.50%	10/01/23-28	650,941
Series 2016 SRF-1	9/16/16	8,273,168	2.50%	4/01/24-48	7,258,168
Series 2016 SRF-2	9/16/16	3,393,543	2.50%	4/01/24-48	2,968,543
Series 2017 SRF-1	6/23/17	5,807,931	2.50%	10/1/23-48	5,192,931
Series 2019 SRF-1	6/7/19	8,330,000	2.00%	10/1/23-40	7,635,000
Series 2019 SRF-2	8/30/19	29,950,000	2.00%	4/1/24-42	27,824,226
Series 2019 SRF-3	8/30/19	11,788,056	2.00%	10/1/23-43	7,447,932
Series 2020 SRF-1	7/31/20	20,538,700	2.00%	4/1/24-52	19,514,960
Series 2020 SRF-2	8/28/20	9,000,000	2.00%	10/1/23-39	6,940,958
Series 2020 SRF-3	8/28/20	8,960,000	2.00%	4/1/24-41	7,909,220
Series 2020 SRF-4	9/30/20	12,153,050	2.00%	4/1/24-47	8,832,593
Series 2021 SRF-1	6/21/21	11,940,000	1.875%	10/1/24-31	4,209,249
Series 2021 SRF-2	8/30/21	104,725,000	1.875%	10/1/24-34	50,945,907
Series 2021 SRF-3	8/30/21	11,528,950	1.875%	10/1/24-41	9,678,360
Series 2022 SRF-2	9/20/22	34,075,000	1.875%	10/1/23-43	34,075,000
Total State Revolving Loans Payable					<u>\$ 207,356,808</u>

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

PLEDGES OF FUTURE REVENUE

The Authority has pledged assets to secure the repayment of the revenue bonds and State of Michigan revolving fund loans. The Water System bonds and loans are paid solely from the net revenues of the Water System. Net revenues are defined in the Great Lakes Water Authority Water Master Bond Ordinances as all revenues except those transferred to the Operation and Maintenance funds. These revenues are further defined to include the revenues from the Retail Customers who are serviced under the Water and Sewer Services Agreement with the City of Detroit which are reported in the financial statements of the City of Detroit Water and Sewerage Department. The pledged revenues calculation for the fiscal year ending June 30, 2023 includes revenues reported by the Great Lakes Water Authority and the City of Detroit Water and Sewerage Department as this revenue is pledged for payment of the bonds and loans of the Great Lakes Water Authority.

The general purpose of the Water System debt is to provide funding for various water treatment and transmission capital improvements, refund certain water revenue bonds, pay termination amounts for interest rate swap agreements and fund reserve requirements. The term of pledge commitment for the water bonds is through fiscal year 2053.

The table below has the pledged revenue coverage as of June 30, 2023:

Remaining principal and interest requirement	\$ 3,794,556,520
Principal and interest funding requirement for the year ending June 30, 2023 (calculated on a debt set aside basis consistent with rate covenant basis for rate determination)	\$ 192,800,887
Pledged revenue for the year ending June 30, 2023	\$ 266,472,915
Pledged revenue collected as a percentage of funding requirement	138%

At the date of the issuance of the GLWA financial report, DWSD's audited financial report had not been released. The local system amounts used for the calculation above reflect DWSD's management representation of preliminary financial results for the year ended June 30, 2023.

DEBT RATINGS

In August 2022, S&P Global Ratings affirmed the Authority's senior lien water system rating of AA- and its second lien water system rating of A+. The outlook remained stable. Moody's Investors Service affirmed the Authority's water system senior lien ratings of A1, and its second lien ratings of A2. The outlook was moved to positive from stable. Fitch affirmed the Authority's ratings for its water system senior lien bonds at an A+, and its second lien bonds at an A. The water system outlook remained stable.

In November 2018, S&P Global Ratings assigned an A+ rating to the Authority's junior lien water system SRF bonds.

See Note 20 for rating agency upgrades received in October 2023.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

RAW WATER RIGHTS OBLIGATION

An obligation has been recorded related to the license of the raw water rights that were part of the 30-year service contract with the City of Flint. This obligation represents the future credits to the City of Flint's water bills as the City of Flint satisfies its monthly bond payment obligations to KWA. See related footnote for the raw water rights intangible asset (Note 9).

The future credits to be issued are detailed below:

Year Ended June 30	Principal	Interest	Total
2024	\$ 2,963,619	\$ 3,689,208	\$ 6,652,827
2025	3,085,994	3,567,008	6,653,002
2026	3,212,750	3,439,803	6,652,553
2027	3,345,194	3,307,356	6,652,550
2028	3,483,226	3,169,448	6,652,674
2029-2033	19,688,493	13,571,493	33,259,986
2034-2038	24,097,490	9,164,433	33,261,923
2039-2043	28,187,150	3,811,606	31,998,756
2044-2046	<u>4,451,858</u>	<u>158,742</u>	<u>4,610,600</u>
Total	<u>\$ 92,515,774</u>	<u>\$ 43,879,097</u>	<u>\$ 136,394,871</u>

BC NOTE OBLIGATION

Under the terms of the lease agreements with the City, the Authority is required to pay a portion of the City's Financial Recovery Bonds, Series 2014-B and 2014-C allocated to the regional water and sewage disposal systems. The Financial Recovery Bonds, Series 2014-B are federally taxable. The Series 2014-B bonds have two components: B(1) which has a 4.0 percent per annum interest rate and B(2) which has a variable interest rate until the maturity date of April 1, 2044. The bonds were delivered to classes of creditors in satisfaction of: (1) Class 12 OPEB claims the bonds were distributed to the new Voluntary Employee Beneficiary Associations (VEBA) for the general retirees and police and fire retirees; (2) Class 9 Pension Obligation Certificate (POC) claims; and (3) other unsecured bankruptcy claims. GLWA has a contractual obligation to pay a portion of the bonds based on an agreed-upon allocation percentage.

The Financial Recovery Bonds, Series 2014-C were issued with interest at 5.0 percent per annum. The 2014-C bonds were issued as part of the Syncora Settlement and FGIC/POC Settlement in the bankruptcy plan. GLWA has a contractual obligation to pay a portion of the bonds based on an agreed-upon allocation percentage.

In 2018, the governing body of the City of Detroit authorized the use of general funds for the full redemption of the General Obligation Bonds, 2014 Series C, including the amount allocated to the Authority. The 2014 Series C debt was fully redeemed on April 13, 2018. In addition, on December 13, 2018, the City issued Financial Recovery Refunding Bonds to redeem a portion of the 2014 Series B. The Authority will repay the City of Detroit General Fund under the terms of the original debt payment schedules for the 2014 Series B & C General Obligation Bonds, with principal and interest due on June 30 each year.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 12 – LONG-TERM DEBT (cont.)

BC NOTE OBLIGATION (cont.)

The following is a schedule of the BC Note obligation for the Financial Recovery Bonds at June 30, 2023:

Bond Issue (GLWA share)	Original Issue Amount (GLWA share)	Range of Interest Rates	Maturity Date	Outstanding Ending Balance
Series 2014-B	\$ 26,540,080	4.00% and variable	4/1/44	\$ 15,556,024
Series 2014-C	3,829,794	5.00%	6/30/27	782,315
Total				<u>\$ 16,338,339</u>

As of June 30, 2023, debt service requirements of the BC Note obligation for the Financial Recovery Bonds were as follows:

Year Ended June 30	Principal	Interest	Total
2024	\$ 214,151	\$ 661,357	\$ 875,508
2025	1,002,661	650,649	1,653,310
2026	1,013,904	608,294	1,622,198
2027	885,004	565,378	1,450,382
2028	777,802	528,905	1,306,707
2029-2033	3,889,008	2,177,844	6,066,852
2034-2038	3,889,008	1,928,948	5,817,956
2039-2043	3,889,008	933,362	4,822,370
2044	777,793	46,668	824,461
Total	<u>\$ 16,338,339</u>	<u>\$ 8,101,405</u>	<u>\$ 24,439,744</u>

INTEREST EXPENSE

The following represents the amounts recorded as interest expense for the year ended June 30, 2023:

Revenue bonds and loans	\$ 110,094,574
Regional System Lease	16,793,494
Raw water rights obligation	3,602,238
BC Note obligation	<u>671,554</u>
Total Interest Expense	<u>\$ 131,161,860</u>

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 13 – REGIONAL SYSTEMS LEASES PAYABLE AND RELATED PREPAID LEASE

On January 1, 2016, the Authority effectuated lease agreements with the City for the regional water and sewage disposal systems for a term of 40 years, to be extended automatically to coincide with the final maturity of any bonds issued to finance improvements to the regional or local sewage disposal systems. The agreements collectively provide for an annual lease payment of \$50 million. Currently, \$22,500,000 is allocated to the Water Fund. The lease for the water system provides service to the wholesale customers and the retail water customers of the City up to the point of connection to the local water system facilities of the City. In addition, the leases provide that certain other assets including cash and investments held by DWSD as of December 31, 2015 be transferred to GLWA, all revenues of the regional and local water and sewage disposal systems are assigned to GLWA, and that GLWA assumes all DWSD bonded debt and certain other liabilities. The long-term leases are recorded as the present value of all future debt payments.

The regional system leases were recorded under GASB 69 to record the acquisition of the operations of the City of Detroit water and sewage disposal systems. The liability for the leases is allocated in the computation of net position based upon the components of net position acquired. Under the definitions of the regional system leases all improvements, additions and replacements to the original facilities acquired are considered to be leased facilities.

Amounts reported as a liability at year-end represent the net present value of all future lease payments. Changes in the Water Regional System lease payable for the year ended June 30, 2023 is as follows:

Beginning Balance	Increase	Decrease	Ending Balance	Amount due Within One Year*
\$ 405,782,407	\$ -	\$ (5,686,745)	\$ 400,095,662	\$ 5,928,467

* The current portion of the Water Regional System lease payable represents the 12 monthly payments required from July 1, 2023 through June 30, 2024. Future revenues are intended to cover these payments.

As of June 30, 2023, aggregate requirements of the Water Regional System lease is as follows:

Year Ended June 30	Principal	Interest	Total
2024	\$ 5,928,467	\$ 16,571,533	\$ 22,500,000
2025	6,180,464	16,319,536	22,500,000
2026	6,443,173	16,056,827	22,500,000
2027	6,717,048	15,782,952	22,500,000
2028	7,002,565	15,497,435	22,500,000
2029-2033	39,738,870	72,761,130	112,500,000
2034-2038	48,933,801	63,566,199	112,500,000
2039-2043	60,256,289	52,243,711	112,500,000
2044-2048	74,198,617	38,301,383	112,500,000
2049-2053	91,366,974	21,133,026	112,500,000
2054-2056	53,329,394	2,920,606	56,250,000
Total	\$ 400,095,662	\$ 331,154,338	\$ 731,250,000

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 13 – REGIONAL SYSTEMS LEASES PAYABLE AND RELATED PREPAID LEASE (cont.)

As part of the 2018 MOU, the MBO requirement for six months of lease payments made to DWSD on January 1, 2016 will be treated as a prepaid lease payment. The initial term of the regional system leases began on the effective date and ends on December 31, 2055. GLWA's last monthly payment shall be June 1, 2055 and GLWA's \$25 million lease pre-payment on January 1, 2016 shall be applied to the period of July 1, 2055 through December 31, 2055. Of the \$25 million recorded as a prepaid on the statement of net position, \$11,250,000 is recorded in the Water Fund.

NOTE 14 – OTHER LIABILITIES

Changes in other liabilities for the year ended June 30, 2023 were as follows:

	Beginning Balance	Increase	Decrease	Ending Balance	Due Within One Year
Compensated absences	\$ 4,797,762	\$ 4,225,984	\$ (3,920,228)	\$ 5,103,518	\$ 3,464,850
Workers' compensation	213,300	448,142	(443,069)	218,373	143,373
Claims and judgements	500,000	85,000	(450,000)	135,000	135,000
Cash held for the benefit of DWSD budget stabilization	2,000,000	-	-	2,000,000	-
Total	\$ 7,511,062	\$ 4,759,126	\$ (4,813,297)	\$ 7,456,891	\$ 3,743,223

COMPENSATED ABSENCES

The Authority has a paid time off (PTO) policy which has an annual accrual period ending September 30 each year. Employees are allowed to carry over a maximum bank of 80 hours to the next accrual period. Balances greater than 80 hours up to a maximum of 160 hours are converted to the retiree health saving program at 50% of the value of the PTO time. Hours in excess of 160 hours are forfeited if unused by September 30 of each accrual period. Due to Covid, an additional Reserve PTO account was created in September 2020 to allow team members to set aside an additional 80 hours of their PTO balance to be used through September 30, 2022. In August 2022, a change was made allowing employees an option to elect a payout of all or a partial amount of this Reserve PTO balance by September 30, 2022. Any amounts not paid out will remain in the Reserve PTO account until September 30, 2023 at which point any unused remaining hours will expire. The accrued compensated absences on June 30, 2023 for PTO accruals are \$3,166,198 for the Water Fund which is current.

The Authority also has an accrued compensated absence liability assumed on January 1, 2016 relating to the accumulated unpaid vacation and sick leave balances for those employees who retired from the City or resigned from the City and accepted employment with the Authority on January 1, 2016. The June 30, 2023 balance of the accrued compensated absences for the liability assumed on January 1, 2016 is approximately \$1,937,320 of which \$298,652 is current. This liability is recorded in the Water Fund as the disbursements for payment will be processed from the Water Fund with reimbursement from the Sewage Disposal Fund.

The accrued compensated absences include the employers' share of Social Security and Medicare taxes as well as the 401 (a) employer contribution.

WORKERS' COMPENSATION

Workers' compensation is discussed in Note 15 Risk Management/Self-Insurance Programs.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 14 – OTHER LIABILITIES (cont.)

CLAIMS AND JUDGEMENTS

The Authority has accrued in its financial statements for known asserted claims in which future settlements may be necessary. See Note 15 for discussion of risk of loss and insurance coverages.

CASH HELD FOR THE BENEFIT OF DWSD BUDGET STABILIZATION

Under the terms of the Master Bond Ordinance (MBO), the Authority retains cash on hand for the benefit of DWSD for budget stabilization funds to be used if DWSD has cash shortfalls. The 2018 Memorandum of Understanding set the balance to be retained in the Budget Stabilization Funds at \$7,500,000 for the life of the Regional System Leases. The Water Fund has retained \$2,000,000.

NOTE 15 – RISK MANAGEMENT/SELF-INSURANCE PROGRAMS

The Authority is exposed to various types of risk of loss including torts; theft of, damage to, or destruction of assets; errors or omissions; occupationally related illnesses or injuries to employees; natural disasters; and environmental occurrences. Also included are risk of loss associated with providing medical and prescription drug benefits to employees.

The Authority transfers risk via the purchase of a variety of insurance policies the most significant of which are shown in the table below (alphabetical by coverage):

<u>Coverage</u>	<u>Coverage Limits</u>	<u>Maximum Retention Per Occurrence</u>
Aviation	\$5,000,000	Physical damage 5% of insured value
Fiduciary	\$15,000,000	\$5,000
General Liability	\$10,000,000	\$1,000,000
Pollution Legal Liability	\$25,000,000	\$500,000
Property Damage	\$750,000,000	\$3,500,000 combined for all coverages
Public Officials and Employment Practices	\$25,000,000	\$500,000
Underground Storage Tanks	\$2,000,000	\$5,000
Workers' Compensation	Statutory/\$2,000,000	\$1,250,000

The Authority assumes all risk for motor vehicle physical damage.

Settled claims relating to commercial insurance have not exceeded the amount of insurance coverage since inception of the Authority.

A liability for claims is reported when it is probable that a loss has occurred, and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. The Authority estimates the liability for medical and worker's compensation claims that have been incurred through the end of the fiscal year, including claims that have been reported as well as those that have not yet been reported, which includes estimates of both future payments of losses and related claim adjustments expense. The liability is based on individual claims and management's evaluation of experience with respect to the probable number and nature of claims.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 15 – RISK MANAGEMENT/SELF-INSURANCE PROGRAMS (cont.)

MEDICAL AND PRESCRIPTION DRUG INSURANCE

The Authority provides medical and prescription drug benefits to a significant number of employees through a self-insured health plan that is administered by third party administrators. The Authority has stop-loss insurance for its self-insured medical and prescription drug plans with terms of \$300,000 per contract to reduce risk exposure. The self-insured program is administered by a third-party administrator who provides claims review and processing services as well as illustrated premium rates, which are anticipated, over time, to approximate the actual cost of benefits. Claim payments are reported net of rebates received for negotiated pricing for pharmacy benefits and stop loss reimbursements. The unpaid claims estimate is accrued within the Water Fund's accrued salaries, wages and benefits payable account on the Statement of Net Position. Although the liability is recorded in the Water Fund, the Sewage Disposal Fund's share of these costs are allocated through the Centralized and Administrative Services allocation.

	2023	2022
Unpaid claims, beginning of year	\$ 765,795	\$ 917,531
Incurred claims (including change in IBNR provisions)	9,661,534	10,510,451
Claims payments	(9,878,417)	(10,662,187)
Unpaid Claims, End of Year	\$ 548,912	\$ 765,795

WORKERS' COMPENSATION

The Authority maintains a self-insurance program for workers' compensation coverage up to statutory limits. The program is administered by a third-party who provides claim review and medical bill review services. Claim liabilities are calculated considering the effects of recent claim settlement trends including frequency and amount of payouts and other economic and social factors. The claim liabilities also include estimated costs for claim administration fees and outside legal and medical assistance costs. The liabilities for workers' compensation current year claims is based on estimates and payments are based on actuals. The unpaid claims estimate is accrued within the Water Fund's accrued workers' compensation account (See Note 14). Although the liability is recorded in the Water Fund, the Sewage Disposal Fund's share of these costs are allocated through the Centralized and Administrative Services allocation.

Changes in the balances of claims liabilities during the past two years are as follows:

	2023	2022
Unpaid claims, beginning of year	\$ 213,300	\$ 330,817
Incurred claims (including change in IBNR provisions)	448,142	717,963
Claims payments	(443,069)	(835,480)
Unpaid Claims, End of Year	\$ 218,373	\$ 213,300

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 16 – DEFINED CONTRIBUTION PENSION PLANS

DEFINED CONTRIBUTION PLANS

The Great Lakes Water Authority Defined Contribution Retirement Plan is a 401(a) governmental money purchase plan administered by ICMA Retirement Corporation (the “Administrator”) to provide benefits at retirement to all full-time employees of the Authority. The Authority contributes 6.0% of an employee’s base pay to the plan. The Authority will make an additional contribution to the 401(a) plan to match employee contributions under the Great Lakes Water Authority 457 Plan up to 3% of compensation. Employees are 100% vested after three years of service (cliff vesting). Employees who transferred to the Authority on or around January 1, 2016 from DWSD retain their years of service for vesting purposes. The Authority recognized expense of \$5,999,361, which is net of forfeitures of \$113,314, for the year ended June 30, 2023. The Authority has accrued approximately \$83,000 of expense on the accrued payroll at June 30, 2023. At June 30, 2023, there were 1,231 plan members, of which 1,007 are active.

The Great Lakes Water Authority Defined Contribution Plan Make-Up Benefit is a 401(a) governmental money purchase plan administered by ICMA Retirement Corporation (the “Administrator”) to provide benefits at retirement to all employees who terminated employment with DWSD on or around January 1, 2016 and were not vested in the City of Detroit General Retirement System (GRS). Eligible employees were required to rollover to the Authority’s Section 457 Deferred Compensation Plan their refunded employee mandatory contribution from GRS. The amount of the make-up benefit was determined by an actuary based on the present value of the lost GRS benefit. It was accrued in fiscal year 2018 and funded during fiscal year 2019. No additional contributions are required for this plan. Employees are 100% vested after one year of service. At June 30, 2023 there are 24 participants in the plan.

The Authority has a Section 457 Deferred Compensation Plan which employees can make pre-tax or post-tax (Roth) contributions which are immediately 100% vested. At June 30, 2023 there were 1,194 plan members, of which 1,083 are active.

The Authority has a Roth IRA Plan which allows employees to make post-tax contributions which are immediately 100% vested.

RETIREMENT HEALTH SAVINGS PLAN

The Authority also provides a Retirement Health Savings Program for full-time employees. Employees are required to contribute \$10 per pay period and the Authority contributes \$80 per pay period. Employees are 100% vested after three years of service (cliff vesting). Employees who transferred to the Authority on or around January 1, 2016 from DWSD retain their years of service for vesting purposes. Members can access their account for reimbursement of qualified medical expenses and payment of insurance premiums for their dependents when they separate from GLWA and reach age 60. The Authority recognized an expense \$2,127,738, which is net of forfeitures of \$52,776, for the year ended June 30, 2023. The Authority has accrued approximately \$28,000 of expense on the accrued payroll at June 30, 2023. Employee contributions were \$249,000 for the year ended June 30, 2023. At June 30, 2023, there were 1,799 plan members, of which 1,098 are active.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION)

As part of the City of Detroit bankruptcy plan of adjustment (POA) and the Regional System Leases (Section 4.3), the City, the City of Detroit General Employees' Retirement system (GRS or the System) and the Authority entered into an agreement on December 1, 2015 that set forth the terms for contributions and reporting of the DWSD share of the GRS pension pool. GRS provides the information necessary for the Authority and DWSD to report the proportionate share separately in their respective statements. On January 24, 2017, DWSD and the Authority provided a supplement to the agreement whereby GRS is directed to allocate investments and pension liabilities of the DWSD division on the basis of 70.3% to the Authority and 29.7% to DWSD effective January 1, 2016. This agreement constitutes a special funding situation pursuant to the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. As such, while no Authority employees earn service credit in the legacy or hybrid plans, GLWA is legally responsible for making substantial contributions to a legacy pension plan of another entity and, accordingly, must record a net pension liability for its proportion and make the following disclosures regarding the plan as repaired by the standard. Information is available in a separate audit report for the "General Retirement System of the City of Detroit Financial Report with Supplemental Information" as well as "The General Retirement System of the City of Detroit GASB Statement Nos. 67 and 68 Accounting and Financial Reporting for Pension Plans of Component II" as of June 30, 2022 which are available by contacting the Authority's management.

Plan Administration. The Authority contributes to (and DWSD participates in) the System. The System is a single employer plan composed of a defined benefit plan component and a defined contribution annuity plan component. The plan provides retirement, disability, and survivor benefits to plan members and beneficiaries. The plan is administered by its own board of trustees. Plan members include active employees, retirees and beneficiaries from various departments within the City. Benefit terms have been established by contractual agreements between the City and the employees' collective bargaining units; amendments are subject to the same process.

The System issues publicly available financial reports that include financial statements and the required supplementary information. The reports can be obtained from City of Detroit Retirement Systems, One Detroit Center, 500 Woodward Avenue, Suite 3000, Detroit, MI 48226 or obtained from the Systems' website (www.rscd.org). Detailed information about the pension plan's fiduciary net position is available in the separately issued financial reports.

Benefits Provided. Plan members may retire at age 55 or 60 with 5, 8, 10 or 25 years of credited service depending on which group the employee is in. Members are vested after completing 5, 8 or 10 years of credited service. Retirement options that provide for survivor benefits are available to members. The Plan also provides death and disability benefits. If a member leaves employment or dies before vesting, accumulated member contributions plus interest are refunded to the member or designated beneficiary.

Component II is the legacy plan, the original defined benefit plan, which includes a defined benefit component and a defined contribution component. Component II generally applies to benefits accrued by members prior to July 1, 2014. The plan provides retirement, disability, and survivor benefits to plan members and beneficiaries. Except as specifically provided in the combined plan, benefits provided under Component II are frozen effective June 30, 2014. Component II also includes the income stabilization fund. The fund, a part of Component II and established as a provision of the POA, was established for the sole purpose of paying the income stabilization benefits to eligible pensioners. Complete details regarding the Component II benefits and changes in those benefits by virtue of the POA are presented in the System financial statements.

Employer Contributions. Employer contributions, including the Authority's nonemployer contribution, for the respective components are as follows:

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

During the Plan's fiscal year 2022, employer contributions were not actuarially determined, but are determined by the provisions of the POA. Included within contributions for fiscal year 2022 are contributions from the Foundation for Detroit's Future in the amount of \$375,000 and approximately \$47.9 million of contributions from the City, City-related entities, and GLWA.

The POA obligates DWSD to pay \$2,500,000 per year towards administrative costs and annual plan contributions of \$42,900,000 per year in total for both water and sewer employees, until 2023. Pursuant to the Regional System leases, the Authority is obligated to pay its allocable share of such liability. The portion allocated to the Authority is \$31,916,200 for fiscal year 2023. This includes a contribution to the GRS pension plan of \$10,810,800 for the Water Fund. The contribution was made subsequent to the measurement date and has been recorded as a deferred outflow. It also includes an administrative fee of \$1,757,500, with \$630,000 paid by the Water Fund. Part of the administrative fee is considered a prepayment based on actual administrative expenses incurred by the plan as reported in the other supplemental information of the audited financial report of the GRS Plan.

Subsequent to 2023, DWSD and the Authority will be responsible for paying their allocable share of any additional amounts that are actuarially determined to be payable. An estimate of the 2024 contribution was included in the GRS annual actuarial valuation of Component II dated June 30, 2022. The total share for the DWSD is estimated to be \$0.7 million. GLWA's share of the 2024 estimated contribution will be \$0.5 million with approximately \$0.18 million allocated to the Water Fund.

DWSD Employee Contributions. Contribution requirements of plan members are established and may be amended by the GRS Board of Trustees in accordance with the City Charter, union contracts, and plan provisions. For the year ended June 30, 2022, there were no employee contributions into Component II, as the plan was frozen as of June 30, 2014; contributions into Component I began thereafter.

Actuarial Assumptions. The total pension liability was actuarial determined as of June 30, 2021, which used updated procedures to roll forward the estimated liability to June 30, 2022. The actuarial valuation used the following actuarial assumptions applied to all periods included in the measurement.

Inflation	Not applicable
Salary increases	No inflation assumption or salary increases due to plan freeze as of June 30, 2014
Investment rate of return	6.75%, net of investment expense and including inflation

Note that the long-term assumed rate of return used for the purpose of the GASB Statement No. 67 valuations was determined in accordance with generally accepted accounting principles. This rate will change annually based on capital market expectations in consideration of the System's most recently approved asset mix. This should not be confused with the provisions in the Plan of Adjustment, which established a 6.75 percent assumed rate of return that does not change annually as it is set by the POA for the purpose of the various provisions within the plan; the Plan of Adjustment did not attempt to dictate the long-term rate of return to be used for accounting purposes.

The mortality table assumption was based on the PubG-2010(B) Below-Median General Retiree Table. The tables are projected to be fully generational, based on the two-dimensional, sex-distinct mortality scale MP-2021.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2023

NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

The actuarial assumptions, other than the investment rate of return, used in the June 30, 2021 valuation to calculate the total pension liability as of June 30, 2022 were based on the results of an actuarial experience study for the period from July 1, 2015 through June 30, 2020. The assumptions were first used in the June 30, 2021 actuarial valuation and assumption changes included mortality tables (change from the RP-2014 Blue Collar Annuitant Table), withdrawal rates, and disability rates.

Investment Rate of Return. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) 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 and by adding expected inflation. Best estimates of the long-term expected real rate of return as of June 30, 2022 for each major asset class and the target allocations are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global equity	46.0%	5.02%
Global fixed income	33.0%	4.02%
Real estate	13.0%	3.73%
Diversifying strategies	8.0%	3.95%
	100.0%	

Single Discount Rate. A Single Discount Rate of 6.75%, net of investment expenses, was used to measure the total pension liability as of June 30, 2022. This Single Discount Rate was based on the expected rate of return on pension plan investments of 6.75% as directed by the System and approved by the System's Auditor. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions ceased as of June 30, 2014, and that employer contributions will be made at rates equal to those set by the final Plan of Adjustment through June 30, 2023 and contributions consistent with PERSIA and the intention to fully fund the System by 2053 as determined in the bankruptcy (POA). Based on these 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 was applied to all periods of projected benefit payments to determine the total pension liability.

Net Pension Liability. As permitted by GASB Statement No. 68, the net pension liability was measured as of June 30, 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

The information below represents the Water Fund's share of pension liability activity. DWSD separately reports its pro rata share of activity in its separate financial statements.

Changes in the Net Pension Liability. The components of the change in the Water Fund's share of the net pension liability are summarized as follows:

Total pension liability	\$ 168,530,590
Plan fiduciary net position	(145,884,785)
Net Pension Liability	\$ 22,645,805

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2022	\$ 183,593,989	\$ 160,214,509	\$ 23,379,480
Changes for the year:			
Interest	11,408,491	-	11,408,491
Difference between expected and actual experience	(43,813)	-	(43,813)
Changes in assumptions	(10,270,600)	-	(10,270,600)
Employer contributions	-	10,810,800	(10,810,800)
Net investment income	-	(9,347,846)	9,347,846
Benefit payments, including refunds of employee contributions	(16,157,477)	(16,157,477)	-
Other changes	-	364,799	(364,799)
Net changes	<u>(15,063,399)</u>	<u>(14,329,724)</u>	<u>(733,675)</u>
Balances at June 30, 2023	<u>\$ 168,530,590</u>	<u>\$ 145,884,785</u>	<u>\$ 22,645,805</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the net pension liability of the Water Fund, calculated using the discount rate of 6.75%, as well as what the Water Fund's net pension liability would be if it were calculated using a discount rate that is 1% lower (5.75%) or 1% higher (7.75%) than the current rate:

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
Net Pension Liability	<u>\$ 27,724,756</u>	<u>\$ 22,645,805</u>	<u>\$ 18,269,024</u>

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

Pension Expense and Deferred Outflows and Inflows of Resources Related to Pensions. For the year ended June 30, 2023, the Authority recognized pension income of \$7,443,572 for the Water Fund. At June 30, 2023, the Water Fund reported deferred outflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows (Inflows) of Resources
Net difference between projected and actual earnings on pension plan investments	\$ 6,296,508	\$ -	\$ 6,296,508
Employer contributions to the plan subsequent to the measurement date	<u>10,810,800</u>	<u>-</u>	<u>10,810,800</u>
Total	<u>\$ 17,107,308</u>	<u>\$ -</u>	<u>\$ 17,107,308</u>

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction in the net pension liability for the year ending June 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ended June 30	
2024	\$ 2,440,975
2025	1,087,832
2026	(1,152,274)
2027	<u>3,919,975</u>
Total	<u>\$ 6,296,508</u>

Payable to the Pension Plan. At June 30, 2023, the Authority did not have any outstanding contributions payable to the pension plan for the year then ended.

NOTE 18 – COMMITMENTS AND CONTINGENCIES

CAPITAL IMPROVEMENT PROGRAM

The Authority is engaged in a variety of projects that are part of its five-year capital improvement program (the Program). The total cost of this Program for the Water Fund is anticipated to be approximately \$986.6 million with an 100% spend rate assumption through fiscal year 2028. The Program is being financed from revenue bond and state revolving fund proceeds in addition to the Improvement and Extension Funds.

The total amount of construction contract commitments outstanding at June 30, 2023 was approximately \$213 million for the Water Fund.

SUBSCRIPTION-BASED INFORMATION TECHNOLOGY ARRANGEMENTS (SBITA)

The Authority has two SBITA's that are in the implementation phase. A summary of the commitments for each SBITA are detailed below:

NEXGEN is an enterprise asset management system subscription service. The contract is a \$1.7 million purchase for a duration of five years with one two-year renewal. The contract ends November 30, 2026 with a two-year renewal which would end November 30, 2028. The anticipated in-service date is expected during fiscal year 2025. There is a separate implementation contract for three years ending early in fiscal year 2025 for a not to exceed cost of \$4.6 million. The Authority's remaining commitment under this contract is \$3.4 million. Implementation costs incurred up to the date placed in service will be capitalized.

Workday is an enterprise resource planning system subscription service which is an integrated financial, HR, payroll and analytic system service. The contract is for eight years ending in fiscal year 2030. The cost for the SBITA for the eight-year period is \$5.3 million. The remaining commitment under this contract is \$4.3 million. The anticipated in-service date for HR and payroll is January 2024, and the financial system in July 2024. There are two separate implementation contracts that terminate in 2029 for a not to exceed cost of \$7.7 million. The Authority's remaining commitment under these contracts is \$4.5 million. Implementation costs incurred up to the date placed in service will be capitalized.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 18 – COMMITMENTS AND CONTINGENCIES (cont.)

CONTINGENCIES

The Authority is subject to various government environmental laws and regulations. GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, established accounting and financial reporting standards for pollution (including contamination) remediation obligations, which are obligations to address the current or potential detrimental effects of existing pollution by participating in pollution remedial activities such as site assessments and cleanups. The standard excludes pollution prevention or control obligations with respect to current operations, and future pollution remediation activities that are required upon retirement of an asset, such as landfill closure and post-closure care. The Authority determined that there were no estimated pollution remediation obligations to be recorded at June 30, 2023.

GASB Statement No. 83, *Certain Asset Retirement Obligations*, established accounting and financial reporting standards for legally enforceable liabilities related to the retirement of tangible capital asset(s) where the tangible capital asset is permanently removed from service. The retirement of a tangible capital asset can occur via sale, abandonment, recycling or disposal in some other manner and excludes the temporary idling of a tangible capital asset. An asset retirement obligation does not apply to obligations resulting from the disposal, or plan to dispose, of a tangible capital asset; obligation(s) associated with using a tangible capital asset for a different purpose; obligation(s) for pollution remediation; obligation(s) from regular maintenance or the cost to replace a component. The Authority determined there were no legally enforceable asset retirement obligations to be recorded at June 30, 2023.

The Authority is a defendant in numerous alleged claims, lawsuits, billing disputes, and other stated and pending demands. The Authority's Legal Department has estimated a reserve of \$135,000 for the Water Fund, which is included in the accompanying financial statements, for the potential outcome of such claims or the amount of potential damages in the event of an unfavorable outcome for each of the above contingencies. The Authority's management believes that any differences in reserved amounts and final settlement, after consideration of claims covered by insurance, resulting from such litigation will not materially impact the Authority's financial position or results of operations.

The Authority holds various commercial insurance policies to cover other potential loss exposures.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 19 – NET INVESTMENT IN CAPITAL ASSETS

The composition of net investment in capital assets as of June 30, 2023 was as follows:

Capital Assets	
Nondepreciable/nonamortizable	\$ 670,557,112
Depreciated/amortized – net	<u>1,330,639,811</u>
Total Capital Assets	<u>2,001,196,923</u>
Less: Related Debt	
Total bonds and loans, net (Note 12)	2,654,538,306
Less outstanding bonds used for:	
SWAP termination agreements	(167,261,744)
Unspent bond proceeds	(108,161,275)
To fund reserves	(3,030,378)
Obligation receivable-local system share of debt (Note 8)	(565,429,087)
Deferred charge on refunding	(39,316,288)
Deferred gain on refunding	44,182,654
Capital portion of regional system lease	291,549,708
Lease obligation-raw water rights (Note 12)	<u>92,515,774</u>
Total Related Debt	<u>2,199,587,670</u>
Net Investment in Capital Assets	<u>\$ (198,390,747)</u>

The capital portion of the regional system lease payable is the percentage of the lease liability that has been determined to be allocated to the net investment in capital assets acquired. The lease is described in Note 13.

NOTE 20 – SUBSEQUENT EVENTS

JUNIOR LIEN REVENUE BONDS

On July 17, 2023, Water Supply System Revenue Bonds, Series 2023 SRF-1, were issued for \$48.2 million to fund regional water system improvements. The series ordinance authorizing issuance of these revenue bonds (SRF Junior Lien) in an aggregate amount not to exceed \$71 million (Ordinance No. 2023-02) was approved by the GLWA Board in May 2023.

The above SRF loan bears a fixed interest rate of 1.875% for a term of twenty (20) years.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO FINANCIAL STATEMENTS
As of and for the Year Ended June 30, 2023

NOTE 20 – SUBSEQUENT EVENTS (cont.)

HIGHLAND PARK AGREEMENT

On October 25, 2023, GLWA's Board of Directors approved a Term Sheet between the State of Michigan (SOM), City of Highland Park, and GLWA which provides an outline for the resolution of their mutual differences. Highland Park's unpaid water and sewer disposal charges date back many years and have been recognized as a reduction to revenue in the estimate of uncollectible accounts over the years. The SOM will pay for service work that the Department of Environment, Great Lakes and Energy (EGLE) determines necessary to decrease the water loss the HP water distribution system is experiencing. The SOM will also pay and EGLE will oversee the installation of meters for both the water and sewer systems at the connection points to the GLWA system. In order to provide some relief to the communities the Authority serves, who have been burdened by these uncollectible amounts from HP, the SOM will provide \$5 million for water infrastructure improvements and \$25 million for sewer infrastructure improvements to the regional system.

RATING AGENCY UPGRADES

In October 2023, S&P Global Ratings affirmed the Authority's senior lien water systems rating of AA- and its second lien rating of A+. The outlook remained stable. Moody's Investors Service upgraded the Authority's water system senior lien ratings to Aa3 from A1, and its second lien ratings to A1 from A2. The outlook was moved to stable from positive for both. Fitch Ratings affirmed the Authority's ratings for its water system for senior lien bonds of A+ and second lien bonds of A. The water system outlook remained stable.

WATER BOND REFUNDING AND NEW MONEY TRANSACTION

On December 5, 2023, the Authority issued \$215,745,000 of Water Supply System Revenue and Revenue Refunding Bonds (\$148,535,000 in new money and \$67,210,000 in refunding bonds). The net present value savings from the refunding transaction for the water fund was \$7.9 million.

This page intentionally left blank.

REQUIRED SUPPLEMENTARY INFORMATION

GREAT LAKES WATER AUTHORITY WATER FUND

REQUIRED SUPPLEMENTARY INFORMATION Nonemployer Contributing Entity Share of City of Detroit General Employees' Retirement System - Component II Schedule of Changes in Net Pension Liability and Related Ratios - Water Fund

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Measurement Date	2022*	2021*	2020*	2019*	2018*	2017*	2016*	2015**
Share of Total Pension Liability								
Interest	\$ 11,408,491	\$ 12,299,693	\$ 13,006,533	\$ 13,155,758	\$ 13,111,573	\$ 13,560,348	\$ 14,475,348	\$ 18,422,673
Differences between expected and actual experience	(43,813)	(3,299,415)	(3,679,680)	1,241,001	(114,927)	849,266	(1,815,233)	(153,112)
Changes in assumptions	(10,270,600)	8,341,534	4,696,986	-	(7,651,537)	5,431,838	6,318,782	(7,093,982)
Benefit changes	-	-	-	-	-	-	-	(54,618,440)
Benefit payments, including refunds of employee contributions	(16,157,477)	(15,928,886)	(16,166,129)	(16,671,401)	(16,989,833)	(18,310,822)	(24,963,262)	(19,462,302)
Net change	(15,063,399)	1,412,926	(2,142,290)	(2,274,642)	(11,644,724)	1,530,630	(5,984,365)	(62,905,163)
Share of total pension liability, beginning of year	183,593,989	182,181,063	184,323,353	186,597,995	198,242,719	196,712,089	202,696,454	265,601,617
Share of Total Pension Liability, End of Year	168,530,590	183,593,989	182,181,063	184,323,353	186,597,995	198,242,719	196,712,089	202,696,454
Share of Plan Fiduciary Net Position								
Employer contributions	10,810,800	10,810,800	10,810,800	10,810,800	10,810,800	10,810,800	10,810,800	10,808,000
Employee contributions	-	-	-	-	-	-	-	46,941
Net investment income (loss)	(9,347,846)	34,407,230	(1,295,521)	3,295,871	10,878,360	13,912,782	(470,295)	6,194,355
Benefit payments, including refunds of employee contributions	(16,157,477)	(15,928,886)	(16,166,129)	(16,671,401)	(16,989,833)	(18,310,822)	(24,963,262)	(19,462,302)
Administrative expense	-	-	-	-	-	-	-	(7,633)
Other changes	364,799	472,481	423,755	(42,826)	496,841	535,562	90,427	9,950,436
Net change	(14,329,724)	29,761,625	(6,227,095)	(2,607,556)	5,196,168	6,948,322	(14,532,330)	7,529,797
Share of plan fiduciary net position, beginning of year	160,214,509	130,452,884	136,679,979	139,287,535	134,091,367	127,143,045	141,675,375	134,145,578
Share of Plan Fiduciary Net Position, End of Year	145,884,785	160,214,509	130,452,884	136,679,979	139,287,535	134,091,367	127,143,045	141,675,375
SHARE OF NET PENSION LIABILITY	\$ 22,645,805	\$ 23,379,480	\$ 51,728,179	\$ 47,643,374	\$ 47,310,460	\$ 64,151,352	\$ 69,569,044	\$ 61,021,079
Nonemployer contributing entity share of collective net pension liability - Water Fund	2.5%	2.6%	4.7%	5.1%	5.7%	6.8%	7.0%	7.4%
Plan fiduciary net position as a percentage of total pension liability	86.6%	87.3%	71.6%	74.2%	74.6%	67.6%	64.6%	69.9%

* As described in Notes 1 and 17 GLWA was established on January 1, 2016. At that time, GLWA assumed a portion of the net position and liabilities of the City of Detroit Water and Sewerage Department. This reflects only the portion allocated to GLWA.

** The 2015 information is presented based on City of Detroit Water and Sewerage Department (DWSD) prior to the establishment of GLWA. The amounts shown represent GLWA's allocation, fiduciary net position and net pension liability. The actual employer contributions made by DWSD were \$18,440,222.

This schedule is being built prospectively; ultimately, 10 years of data will be presented.

The accompanying notes to required supplementary information are an integral part of these financial statements.

GREAT LAKES WATER AUTHORITY WATER FUND

REQUIRED SUPPLEMENTARY INFORMATION
 Nonemployer Contributing Entity Share of City of Detroit General Employees' Retirement System - Component II
 Schedule of Contributions

	Fiscal Year							
	2023*	2022*	2021*	2020*	2019*	2018*	2017*	2016*
Water Fund								
Contractually required contribution**	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800
Actual contribution	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>	<u>10,810,800</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

* As described in Notes 1 and 17 GLWA was established on January 1, 2016. At that time GLWA assumed a portion of the net position and liabilities of the City of Detroit Water and Sewerage Department. This reflects only the portion allocated to GLWA.

** Contributions are determined by the provisions of the Plan of Adjustment and are not actuarially determined.

This schedule is being built prospectively; ultimately, 10 years of data will be presented.

The accompanying notes to required supplementary information are an integral part of these financial statements.

GREAT LAKES WATER AUTHORITY WATER FUND

Nonemployer Contributing Entity Share of City of Detroit General Employees' Retirement System –
Component II

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION For the Year Ended June 30, 2023

Changes in Assumptions

In 2016, amounts reported as changes in assumptions resulted from adjustment of the discount rate from 7.61 percent to 7.23 percent.

In 2017, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.23 percent to 6.91 percent.

In 2018, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 6.91 percent to 7.38 percent.

In 2020, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.38 percent to 7.06 percent.

In 2021, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.06 percent to 6.50 percent.

In 2022, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 6.50 percent to 6.75 percent and updating the mortality tables from the RP-2014 Blue Collar Annuitant Table to the Pub-2010 General Employee table, as well as updates to wage inflation, withdrawal, and disability rates.

Note: GLWA began operations on January 1, 2016. Accounting standards allow the presentation of as many years as are available until ten fiscal years are presented. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

SUPPLEMENTARY INFORMATION

GREAT LAKES WATER AUTHORITY WATER FUND

COMBINING SCHEDULE OF NET POSITION - WATER FUND

As of June 30, 2023

	Water Operations Fund	Water Improvement and Extension Fund	Water Construction Fund	Total Water Fund
Assets				
Current Assets				
Cash and cash equivalents	\$ 105,735,172	\$ 116,890,378	\$ -	\$ 222,625,550
Restricted cash and cash equivalents	90,024,353	-	37,655,217	127,679,570
Restricted cash for the benefit of DWSD	17,474,699	-	-	17,474,699
Investments	19,433,257	1,648,515	-	21,081,772
Restricted investments	9,975,144	-	-	9,975,144
Receivables				
Billed	55,359,908	-	-	55,359,908
Unbilled	33,527,694	-	-	33,527,694
Other	286,079	-	-	286,079
Allowance for doubtful accounts	(16,225,907)	-	-	(16,225,907)
Due from other governments	5,692,565	93,000	-	5,785,565
Due from other funds	-	1,001,087	31,667	1,032,754
Due from other water funds	109,746	20,553,426	679,970	21,343,142
Contractual obligation receivable	20,608,286	-	-	20,608,286
Prepaid items and other assets	10,793,138	1,948	-	10,795,086
Total Current Assets	<u>352,794,134</u>	<u>140,188,354</u>	<u>38,366,854</u>	<u>531,349,342</u>
Noncurrent Assets				
Restricted cash and cash equivalents	7,280,283	-	89,199,882	96,480,165
Restricted investments	3,040,772	-	18,961,394	22,002,166
Contractual obligation receivable	544,820,801	-	-	544,820,801
Prepaid lease	11,250,000	-	-	11,250,000
Capital assets				
Nondepreciable/nonamortizable	670,557,112	-	-	670,557,112
Depreciated/amortized, net	1,330,639,811	-	-	1,330,639,811
Prepaid insurance on debt	5,995,322	-	-	5,995,322
Total noncurrent assets	<u>2,573,584,101</u>	<u>-</u>	<u>108,161,276</u>	<u>2,681,745,377</u>
Total Assets	<u>2,926,378,235</u>	<u>140,188,354</u>	<u>146,528,130</u>	<u>3,213,094,719</u>
Deferred outflows of resources				
Deferred charge on refunding	39,316,288	-	-	39,316,288
Deferred pension amounts	17,107,308	-	-	17,107,308
Total Deferred Outflows of Resources	<u>56,423,596</u>	<u>-</u>	<u>-</u>	<u>56,423,596</u>

The accompanying notes to the supplementary information are an integral part of this schedule.

	Water Operations Fund	Water Improvement and Extension Fund	Water Construction Fund	Total Water Fund
Liabilities				
Current Liabilities				
Accounts and contracts payable	\$ 21,428,232	\$ 1,123,855	\$ 37,655,217	\$ 60,207,304
Accrued salaries, wages and benefits	1,757,758	-	-	1,757,758
Accrued liabilities	23,477,888	1,633,328	-	25,111,216
Due to other governments	3,124,058	-	-	3,124,058
Due to other funds	226,996	-	1,987,718	2,214,714
Due to other water funds	20,553,426	679,970	109,746	21,343,142
Interest payable	41,789,634	-	-	41,789,634
Current portion of:				
Revenue bonds and loans	62,332,082	-	-	62,332,082
Raw water rights obligation	2,963,619	-	-	2,963,619
BC Note obligation	214,151	-	-	214,151
Regional system lease	5,928,467	-	-	5,928,467
Other liabilities	3,743,223	-	-	3,743,223
Total Current Liabilities	187,539,534	3,437,153	39,752,681	230,729,368
Noncurrent Liabilities				
Revenue bonds and loans	2,592,206,224	-	-	2,592,206,224
Raw water rights obligation	89,552,155	-	-	89,552,155
BC Note obligation	16,124,188	-	-	16,124,188
Regional system lease	394,167,195	-	-	394,167,195
Other liabilities	3,713,668	-	-	3,713,668
Net pension liability	22,645,805	-	-	22,645,805
Total Noncurrent Liabilities	3,118,409,235	-	-	3,118,409,235
Total Liabilities	3,305,948,769	3,437,153	39,752,681	3,349,138,603
Deferred Inflows of Resources				
Deferred gain on refunding	44,182,654	-	-	44,182,654
Deferred amounts for swap terminations	56,712	-	-	56,712
Total Deferred Inflows of Resources	44,239,366	-	-	44,239,366
Net Position (Deficit)				
Net investment in capital assets	(305,166,196)	-	106,775,449	(198,390,747)
Restricted for debt service	56,139,482	-	-	56,139,482
Restricted for payment assistance program	2,289,905	-	-	2,289,905
Unrestricted	(120,649,495)	136,751,201	-	16,101,706
TOTAL NET POSITION	\$ (367,386,304)	\$ 136,751,201	\$ 106,775,449	\$ (123,859,654)

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

COMBINING SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION - WATER FUND

For the Year Ended June 30, 2023

	Water Operations Fund	Water Improvement and Extension Fund	Water Construction Fund	Total Water Fund
Operating Revenues				
Wholesale customer charges	\$ 340,593,806	\$ -	\$ -	\$ 340,593,806
Local system charges	22,834,300	-	-	22,834,300
Other revenues	350,991	-	-	350,991
Total Operating Revenues	363,779,097	-	-	363,779,097
Operating Expenses				
Operating expenses before depreciation and amortization				
Personnel	48,855,342	-	-	48,855,342
Contractual services	51,025,400	1,791,787	-	52,817,187
Utilities	33,436,545	-	-	33,436,545
Chemicals	12,689,666	-	-	12,689,666
Supplies and other expenses	11,926,150	-	-	11,926,150
Capital program allocation	(1,172,302)	-	-	(1,172,302)
Intergovernmental reimbursements	(2,785,190)	(600,350)	-	(3,385,540)
Total operating expenses before depreciation and amortization	153,975,611	1,191,437	-	155,167,048
Depreciation	126,485,762	-	-	126,485,762
Amortization of intangible assets	3,566,664	-	-	3,566,664
Total Operating Expenses	284,028,037	1,191,437	-	285,219,474
Operating Income (Loss)	79,751,060	(1,191,437)	-	78,559,623
Nonoperating Revenues (Expenses)				
Earnings on investments	7,326,654	3,218,195	6,179,636	16,724,485
Interest on obligations receivable	24,662,083	-	-	24,662,083
Interest expense	(131,161,860)	-	-	(131,161,860)
Amortization of debt related items and cost of issuance	14,577,852	-	-	14,577,852
Legacy pension recovery	7,443,572	-	-	7,443,572
Water Residential Assistance Program	(5,023,436)	-	-	(5,023,436)
Other	526,317	72	-	526,389
Discontinued capital projects	(20,902,626)	-	-	(20,902,626)
Capital outlay	199,617,587	(6,405,255)	(193,212,332)	-
Total Nonoperating Revenues (Expenses)	97,066,143	(3,186,988)	(187,032,696)	(93,153,541)
Income (Loss) Before Transfers	176,817,203	(4,378,425)	(187,032,696)	(14,593,918)
Transfer in	8,210,635	47,166,122	316,152,254	371,529,011
Transfer out	(340,278,651)	(4,292,361)	(26,957,999)	(371,529,011)
Change in Net Position	(155,250,813)	38,495,336	102,161,559	(14,593,918)
NET POSITION (DEFICIT), Beginning of Year	(212,135,491)	98,255,865	4,613,890	(109,265,736)
NET POSITION (DEFICIT), END OF YEAR	\$ (367,386,304)	\$ 136,751,201	\$ 106,775,449	\$ (123,859,654)

Note: Transfers in (out) are used for recording financial activity related to borrowing proceeds and MBO requirements.

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF INTERFUND RECEIVABLES AND PAYABLES

For the Year Ended June 30, 2023

Interfund balances result from the time lag between the dates interfund goods and services are provided or reimbursable expenditures occur and when the payment between funds are made. Interfund balances for the year ended June 30, 2023 consisted of the following:

	Sewage Disposal Fund due to Water Fund			
	Sewer Operations Fund	Sewer Improvement and Extension Fund	Sewer Construction Fund	Total
Water Operations Fund	\$ -	\$ -	\$ -	\$ -
Water Improvement and Extension Fund	-	1,001,087	-	1,001,087
Water Construction Fund	-	31,667	-	31,667
TOTALS	\$ -	\$ 1,032,754	\$ -	\$ 1,032,754

	Water Fund due to Sewage Disposal Fund			
	Water Operations Fund	Water Improvement and Extension Fund	Water Construction Fund	Total
Sewer Operations	\$ -	\$ -	\$ -	\$ -
Sewer Improvement and Extension	46,996	-	-	46,996
Sewer Construction Fund	180,000	-	1,987,718	2,167,718
TOTALS	\$ 226,996	\$ -	\$ 1,987,718	\$ 2,214,714

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF OPERATING EXPENSES FOR WATER OPERATIONS FUND - BUDGET TO ACTUAL

For the Year Ended June 30, 2023

	Original Budget	Amended Budget	Administrative and Centralized Services Reclassification	Final Amended Budget	Actual	Variance Over (Under) Amended Budget	Percent Over (Under) Amended Budget
Operating Expenses							
Personnel	\$ 82,081,400	\$ 77,939,000	\$ (27,254,800)	\$ 50,684,200	\$ 48,855,342	\$ (1,828,858)	-3.61%
Contractual services	80,285,600	81,232,500	(32,718,700)	48,513,800	51,025,400	2,511,600	5.18%
Utilities	27,233,900	33,304,400	(173,600)	33,130,800	33,436,545	305,745	0.92%
Chemicals	6,721,100	12,189,500	-	12,189,500	12,689,666	500,166	4.10%
Supplies and other expenses	20,419,200	20,888,300	(7,705,800)	13,182,500	11,926,150	(1,256,350)	-9.53%
Capital program allocation	(2,946,700)	(1,161,200)	-	(1,161,200)	(1,172,302)	(11,102)	0.96%
Intergovernmental reimbursements	(2,476,400)	(1,042,300)	-	(1,042,300)	(2,785,190)	(1,742,890)	167.22%
Centralized services allocation	(53,238,900)	(49,748,300)	49,748,300	-	-	-	0.00%
Administrative services allocation	(17,616,200)	(18,025,800)	18,025,800	-	-	-	0.00%
Unallocated reserve	4,384,700	1,171,600	(273,400)	898,200	-	(898,200)	-100.00%
Total operating expenses before depreciation and amortization financial reporting basis	144,847,700	156,747,700	(352,200)	156,395,500	153,975,611	(2,419,889)	
SBITA [1]	-	-	352,200	352,200	352,159	(41)	0.00%
TOTAL OPERATING EXPENSES BUDGET BASIS	\$ 144,847,700	\$ 156,747,700	\$ -	\$ 156,747,700	\$ 154,327,770	\$ (2,419,930)	-1.54%

[1] The subscription based information technology arrangements (SBITA) costs are an expense for budget purposes. These costs are capitalized under GASB 96 for financial reporting purposes. See Note 2 in the Notes to Supplementary Information.

Note: Centralized and administrative services allocations have been applied to the expense categories above for presentation of the amended budget to the actual amounts.

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF REVENUE REQUIREMENTS BUDGET TO ACTUAL - WATER OPERATIONS For the Year Ended June 30, 2023

The Great Lakes Water Authority Board adopts a budget using a revenue requirements method for its operating funds that aligns with water and wastewater revenue charges. This method applies an accrual basis of accounting for revenues and operating expenses in addition to a cash basis of accounting for other commitments, such as debt service, Detroit General Retirement closed pension commitment, lease payment, reserves and certain other payments. The schedule below presents the Board adopted budget, adjusted for amendments, for comparison with actual revenues, expenses, and other payments. Overall, Water Operations experienced a positive variance of approximately \$0.6 million.

	Adopted Budget	Amended Budget	Actual	Variance Over (Under) Amended Budget
Revenues				
Revenue from charges				
Suburban wholesale customers [1]	\$ 331,962,000	\$ 333,856,300	\$ 334,141,233	\$ 284,933
Local system charges	<u>22,985,900</u>	<u>22,834,300</u>	<u>22,834,300</u>	<u>-</u>
Total revenue from charges	<u>354,947,900</u>	<u>356,690,600</u>	<u>356,975,533</u>	<u>284,933</u>
Other revenue [2]	175,000	995,000	1,378,706	383,706
Investment earnings [3]				
Restricted			3,660,022	
Unrestricted			<u>5,501,592</u>	
Total Investment earnings	<u>948,700</u>	<u>9,670,200</u>	<u>9,161,614</u>	<u>(508,586)</u>
Total Revenues	<u>\$ 356,071,600</u>	<u>\$ 367,355,800</u>	<u>\$ 367,515,853</u>	<u>\$ 160,053</u>
Revenue Requirements				
Operations and maintenance [4]	144,847,700	156,747,700	154,327,770	(2,419,930)
General Retirement System legacy pension	6,048,000	6,048,000	6,048,000	-
Debt service	150,337,100	150,055,300	150,055,300	-
General Retirement System accelerated pension	6,268,300	6,268,300	6,268,300	-
Water Residential Assistance Program contribution	1,770,500	1,770,500	1,770,500	-
Extraordinary Repair & Replacement Reserve Fund	-	200,000	2,200,000	2,000,000
Regional system lease	22,500,000	22,500,000	22,500,000	-
Transfer to the Improvement & Extension Fund	<u>24,300,000</u>	<u>23,766,000</u>	<u>23,766,000</u>	<u>-</u>
Total Revenue Requirements	<u>\$ 356,071,600</u>	<u>\$ 367,355,800</u>	<u>\$ 366,935,870</u>	<u>\$ (419,930)</u>
Revenue Requirement Variance	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 579,983</u>	<u>\$ 579,983</u>

[1] Revenue from Charges - Suburban Wholesale Customers presented in this schedule differs from those presented on the Statement of Revenues, Expenses and Changes in Net Position due to \$6,452,573 of revenue which was credited for the KWA debt service which is a non-cash transaction that is the payment obligation on the raw water rights.

[2] Other Revenue includes other operating revenues and other nonoperating revenues for the Water Operations Fund. Numbers will not match combining schedules as other nonoperating is net of income and expenses.

[3] Investment earnings excludes earnings on bond proceeds in the Construction Fund. As required by the Master Bond Ordinance, investment earnings on bond proceeds will remain in the Construction Fund.

[4] See the Schedule of Operating Expenses for Water Operations Fund - Budget to Actual. Operations and maintenance expenses in this schedule are based on activities relating only to the Water Operations Fund.

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF REVENUE REQUIREMENTS TO STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION CROSSWALK For the Year Ended June 30, 2023

The Great Lakes Water Authority establishes a Revenue Requirements budget for the purpose of establishing charges for services which follows a modified cash basis of accounting. Conversely, the annual financial report is prepared in accordance with Generally Accepted Accounting Principles for enterprise funds of a local government. Because the budget and the financial report are prepared using different bases of accounting, a crosswalk is prepared to reconcile fiscal year financial performance from the budget basis of accounting to the financial statement basis of accounting. Key areas of reconciliation include the following:

- Defined Benefit Pension related to the City of Detroit General Employees Retirement System. Annual contributions are an expense for the budget basis while the accrual basis financial report reflects the current year payment as a deferred outflow.
- Debt Service, BC Note obligation and Regional system lease (principal and interest) are an expense for the budget basis while the accrual basis financial report treats interest as an expense and principal payments as a reduction of a liability.
- WRAP funds are expensed for budget purposes when they are set aside. For financial reporting purposes they are expensed when the service delivery partners provide statements of expenditures.
- Contributions to the Extraordinary Repair & Replacement Fund and Regional System Improvement & Extension Fund are an expense for the budget basis while the accrual basis financial report treats this activity as an increase in assets.
- Payments for the warehouse lease and subscription based information technology arrangements (SBITA) are expensed for budget purposes. For financial reporting purposes the warehouse lease is recorded under GASB 87 and payments are treated as a reduction in the lease liability and interest expense (which is a nonoperating expense). The SBITA payments are recorded under GASB 96 and are treated as a prepaid subscription asset as the software is currently in the implemented phase.
- Depreciation and amortization are not a components of the budget basis while the accrual basis financial report treats these as an expense.

Revenue Requirement Variance from Schedule of Revenue Requirements	\$ 579,983
 Budgetary adjustments to financial reporting basis	
Pension delayed accounting election adjustments:	
Current year pension payments recorded as deferral	10,810,800
Prior year pension deferral accounted for in current year	7,443,572
Administrative fee prepaid adjustment	406,143
Debt service	64,622,809
BC Note obligation	203,942
Regional system lease	5,706,506
Water Residential Assistance Program (WRAP)	(3,252,936)
Extraordinary Repair & Replacement Fund transfers	2,200,000
Improvement & Extension Fund transfers	23,766,000
GASB 87 & GASB 96 adjustments	352,159
 Nonbudgeted financial reporting adjustments	
Depreciation and amortization	(130,052,426)
Amortization - debt related	14,577,852
Improvement & Extension Fund operating expenses	(1,191,437)
Investment earnings on bond funds in Construction Fund	6,060,710
Investment earnings unrealized gain (loss)	1,502,165
Discontinued capital projects	(20,902,626)
Raw water rights obligation	2,850,335
Other nonoperating income (expenses)	<u>(277,469)</u>
 Change in Net Position per Statement of Revenues, Expenses and Changes in Net Position	 <u>\$ (14,593,918)</u>

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

WATER IMPROVEMENT AND EXTENSION FUND - BUDGET TO ACTUAL

For the Year Ended June 30, 2023

The Great Lakes Water Authority Board adopts a budget for the uses of the Improvement & Extension Funds. The schedule below presents the Board adopted budget, adjusted for amendments, for comparison with actual activity in the Water I&E Fund. The Water I&E Fund experienced an increase of \$38.5 million in net position and a negative budget variance of approximately \$0.9 million.

	Adopted Budget	Amended Budget	Actual [4]	Variance Over (Under) Amended Budget
Inflows				
Transfers in from Water Operations Fund				
Revenue transfers	\$ 24,300,000	\$ 23,766,000	\$ 23,766,000	\$ -
Transfers in from Water Construction Fund				
Working capital adjustment [1]	-	23,039,700	23,039,725	25
Investment earnings [2]	-	2,768,700	1,942,739	(825,961)
Total Inflows	<u>24,300,000</u>	<u>49,574,400</u>	<u>48,748,464</u>	<u>(825,936)</u>
Outflows				
Capital spending other (net operating expenses)	-	3,503,400	1,191,437	(2,311,963)
Capital outlay	15,452,600	5,570,100	6,405,255	835,155
Transfers out to Water Operations Fund				
GASB 96 expenditures [3]	-	-	1,930,471	1,930,471
Investment earnings [2]	-	2,768,700	2,361,890	(406,810)
Transfer out to Water Construction Fund				
Revenue financed capital	28,735,400	-	-	-
Total Outflows	<u>44,188,000</u>	<u>11,842,200</u>	<u>11,889,053</u>	<u>46,853</u>
Net Increase (Decrease) - Budget Basis	<u>\$ (19,888,000)</u>	<u>\$ 37,732,200</u>	36,859,411	<u>\$ (872,789)</u>
Non-budgeted inflows (outflows)				
Unrealized net increase in fair value of investments			1,275,456	
Other			72	
Other transfers in			360,397	
Combining Schedule Water Improvement and Extension Fund Change in Net Position [4]			<u>\$ 38,495,336</u>	

[1] The I&E Fund provided working capital and funding of capital expenditures in prior years through revenue financed capital transfers to the Construction Fund. The remaining working capital funds were returned to the I&E Fund during the year.

[2] As required by the Master Bond Ordinance, investment earnings on I&E funds are transferred to the receiving fund on a monthly basis.

[3] The subscription based information technology arrangements (SBITA) costs are an expense for budget purposes. These costs are capitalized under GASB 96 for financial reporting purposes, therefore they are shown as a transfer out to the Water Operations Fund for this analysis. See Note 2 in the Notes to Supplementary Information.

[4] See the Combining Schedule of Revenues, Expenses and Changes in Net Position - Water Fund. Information in this schedule is based on activity in the Water Improvement and Extension Fund.

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

WATER CONSTRUCTION FUND - BUDGET TO ACTUAL For the Year Ended June 30, 2023

The Great Lakes Water Authority Board adopts a budget for the use of the Construction Funds. The schedule below presents the Board adopted budget, adjusted for amendments, for comparison with actual activity in the Water Construction Fund. The Water Construction Fund had an increase of \$102.2 million in net position and a positive budget variance of approximately \$8.4 million.

	Adopted Budget	Amended Budget	Actual [4]	Variance Over (Under) Amended Budget
Inflows				
Transfers from Water Improvement & Extension Fund				
Revenue financed capital	\$ 28,735,400	\$ -	\$ -	\$ -
Transfers in from Water Operations Fund				
Bond proceeds	-	225,000,000	228,878,775	3,878,775
State revolving loans	54,992,000	95,000,000	87,088,198	(7,911,802)
Proceeds sale of asset [1]	-	185,300	185,281	(19)
Investment earnings [2]	128,800	4,565,800	6,179,231	1,613,431
Total Inflows	<u>83,856,200</u>	<u>324,751,100</u>	<u>322,331,485</u>	<u>(2,419,615)</u>
Outflows				
Capital projects	155,501,000	207,962,000	193,212,332	(14,749,668)
Transfers out to Water Operations Fund				
Investment earnings [2]	-	-	89,627	89,627
Bond cost of issuance	-	-	3,828,647	3,828,647
Transfers out to Water Improvement & Extension Fund				
Working capital adjustment [3]	-	23,039,700	23,039,725	25
Total Outflows	<u>155,501,000</u>	<u>231,001,700</u>	<u>220,170,331</u>	<u>(10,831,369)</u>
Net Increase (Decrease) - Budget Basis	<u>\$ -</u>	<u>\$ 23,039,700</u>	102,161,154	<u>\$ 8,411,754</u>
Non-budgeted inflows (outflows)				
Unrealized net increase in fair value of investments			405	
Combining Schedule Water Construction Fund Change in Net Position [4]			<u>\$ 102,161,559</u>	

[1] Proceeds from the sale of an asset that was purchased using bond funds.

[2] As required by the Master Bond Ordinance investment earnings on I&E funds are transferred to the receiving fund on a monthly basis. Any earnings on bond proceeds will remain in the Construction Fund.

[3] The I&E Fund provided working capital and funding of capital expenditures in prior years through revenue financed capital transfers to the Construction Fund. The remaining working capital funds were returned to the I&E Fund during the year.

[4] See the Combining Schedule of Revenues, Expenses and Changes in Net Position - Water Fund. Information in this schedule is based on activity in the Water Construction Fund.

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF DAYS CASH - LIQUIDITY

For the Fiscal Years Ended June

	2023	2022	2021	2020	2019	2018	2017	2016*
Cash and investments - Unrestricted	\$ 243,707,322	\$ 238,690,879	\$ 353,308,385	\$ 394,440,814	\$ 347,204,928	\$ 317,089,746	\$ 267,335,558	\$ 167,292,572
Operating Expense								
Operating expense	\$ 285,219,474	\$ 264,578,659	\$ 250,476,297	\$ 263,282,730	\$ 263,959,730	\$ 254,602,752	\$ 245,868,861	\$ 120,841,204
Less: depreciation	(126,485,762)	(123,196,027)	(123,271,541)	(127,183,228)	(140,571,120)	(143,991,815)	(144,137,912)	(71,295,545)
Less: amortization of intangible asset	(3,566,664)	(3,566,664)	(3,566,664)	(3,566,664)	(3,566,664)	(2,080,554)	-	-
Net Operating Expense	\$ 155,167,048	\$ 137,815,968	\$ 123,638,092	\$ 132,532,838	\$ 119,821,946	\$ 108,530,383	\$ 101,730,949	\$ 49,545,659
Operating Expense per Day (365 days)	\$ 425,115	\$ 377,578	\$ 338,734	\$ 363,104	\$ 328,279	\$ 297,344	\$ 278,715	\$ 273,733
Number of days cash	573	632	1,043	1,086	1,058	1,066	959	611

* GLWA assumed operations on January 1, 2016. Data for 2016 includes six months of operation under GLWA. Operating expense per day for 2016 is computed using 181 days (six months of operations).

The accompanying notes to the supplementary information are an integral part of this schedule.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO SUPPLEMENTARY INFORMATION

For the Year Ended June 30, 2023

Note 1 – Combining Fund Schedules

The Combining Fund Schedules presented combined the three funds the Authority maintains in the Water Fund. The following describes the three funds and the purpose of each fund.

Water Operations Fund – All water revenues are credited to this fund. All expenses for the operations and maintenance of the water system are paid from this fund. This fund aligns with the operations and maintenance (O&M) expense revenue requirement for establishing service charges.

Water Improvement & Extension Fund (I&E) – Amounts that are budgeted in the water revenue requirement to reduce debt financing are transferred to this fund as well as any other water funds that management has determined are available for this use. This fund is used for water system capital outlays and capital improvements. Expenditures under the operating expenses category are expenditures incurred for the betterment of the system, which may lead to capital expenditures but are not necessarily applicable to any current capital improvement.

Water Construction Fund – This fund is used for the proceeds of water debt obligations and investment earnings thereon. I&E funds may also be transferred to this fund when bond proceeds have been exhausted. Funds are used to pay for water system capital improvements in accordance with the debt obligations.

Note 2 – Budget to Actual Schedules

Schedule of Operating Expenses – Budget to Actual

The schedule of operating expenses for the water system operations provides the detail of the major expense categories of the operations budget compared to the actual results. The schedule includes the actual operating expenses before depreciation and amortization for the Water Operations Fund reported in the Combining Schedule of Revenues, Expenses and Changes in Net position for the Water Fund. The subscription based information technology arrangements (SBITA) payments line represents the payments made for the SBITA's which is included in the budget as a contractual service. For financial reporting purposes these costs have been treated as a prepaid subscription asset as the software is not in service as of June 30, 2023.

Schedule of Revenue Requirement – Budget to Actual

The revenue requirements are the basis for GLWA's budget and calculating Member Partner service charges. The revenue requirements are presented to align with the Master Bond Ordinance flow of funds categories. The budget basis reflects revenues and operations and maintenance expenses on an accrual basis adjusted for GASB 96 as described in the note above. The budget also includes the cash payments for debt service, legacy pension obligations, water residential assistance program and regional system lease related activities.

The revenue requirement basis is foundational to GLWA's daily operations and long-term financial planning. The budget is adopted by the GLWA Board of Directors by resolution. The Board's action establishes the total operations and maintenance budget, total debt service requirements and total capital expenditures for the I&E Fund and Construction Fund for the Regional Water System. The legal level of budgetary control is at this level. Administratively, the budget may be modified within these categories. Modifications to the budget beyond those established levels would be presented to the Audit Committee, and subsequently to the Board.

GREAT LAKES WATER AUTHORITY WATER FUND

NOTES TO SUPPLEMENTARY INFORMATION For the Year Ended June 30, 2023

Note 2 – Budget to Actual Schedules (cont.)

Investment earnings for the budget basis includes the stated interest rate received, amortization of the market discount or premium, and realized gains and losses (calculated for budget purposes as the difference between the selling price and the amortized cost basis). This will vary from the investment earnings reported in the financial statements. The main difference is the budget basis does not include unrealized gains and losses (calculated for budget purposes as the difference between the market value and the amortized cost basis).

Note 3 – Schedule of Revenue Requirement to Statement of Revenues, Expenses and Changes in Net Position Crosswalk

The Great Lakes Water Authority establishes a revenue requirement budget for the purposes of establishing charges, which follows a modified cash basis of accounting. The financial report is prepared in accordance with Generally Accepted Accounting Principles for enterprise funds of a local government. The crosswalk provides a reconciliation between the different basis of accounting used for the budget and the financial report.

This page intentionally left blank.

STATISTICAL SECTION

The objective of the statistical section is to provide financial statement users with additional historical perspective, context, and detail to assist in using the information in the financial statements, notes to financial statements and required supplementary information to understand and assess the Authority's economic condition.

The statistical section is divided into five sections as follows:

- Financial Trends
- Revenue Capacity
- Debt Capacity
- Demographic and Economic Information
- Operating Information

Sources: Unless otherwise noted, information presented in the statistical schedules is compiled from GLWA's Annual Comprehensive Financial Reports, the prior financial reports of DWSD or other internal information systems

FINANCIAL TRENDS

Financial trends information is intended to show how the Authority's financial position has changed over time.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF NET POSITION - WATER FUND

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Assets								
Current Assets								
Cash and cash equivalents	\$ 222,625,550	\$ 147,191,020	\$ 162,766,427	\$ 88,786,996	\$ 148,643,793	\$ 310,085,221	\$ 266,483,138	\$ 155,712,891
Restricted cash and cash equivalents	127,679,570	49,069,747	65,677,030	39,304,453	68,564,311	51,097,342	60,753,268	53,028,844
Restricted cash for the benefit of DWSD	17,474,699	11,371,285	3,144,400	1,544,529	2,690,397	8,418,827	288,378	10,430
Investments	21,081,772	91,499,859	190,541,958	305,653,818	198,561,135	7,004,525	852,420	11,579,681
Restricted investments	9,975,144	30,711,544	2,932,400	30,900,352	1,468,148	1,234,954	1,169,187	27,818,000
Receivables								
Billed	55,359,908	54,169,640	48,694,817	38,769,605	38,336,701	38,272,740	36,459,563	37,629,170
Unbilled	33,527,694	30,349,758	30,066,884	31,032,237	26,144,348	29,229,709	29,539,433	32,307,945
Other	286,079	295,791	85,494	214,997	916,074	5,850	1,300	21,899,046
Allowance for doubtful accounts	(16,225,907)	(13,917,234)	(11,562,519)	(8,634,075)	(7,455,747)	(6,221,815)	(4,941,777)	(25,040,612)
Due from other governments	5,785,565	11,246,188	11,889,748	20,343,238	30,063,571	23,588,754	21,327,713	41,486,157
Due from other funds	1,032,754	2,328,086	2,786,344	2,134,191	2,876,954	330,293	-	-
Contractual obligation receivable	20,608,286	18,126,021	16,558,716	15,620,163	14,328,368	13,560,086	12,076,942	6,851,584
Prepaid items and other assets	10,795,086	8,701,487	7,601,239	6,458,613	5,647,661	3,265,972	2,437,047	2,183,690
Inventories	-	-	794,521	636,621	386,612	-	-	-
Total Current Assets	<u>510,006,200</u>	<u>441,143,192</u>	<u>531,977,459</u>	<u>572,765,738</u>	<u>531,172,326</u>	<u>479,872,458</u>	<u>426,446,612</u>	<u>365,466,826</u>
Noncurrent Assets								
Restricted cash and cash equivalents	96,480,165	2,773,291	2,519,127	20,491,397	32,154,262	18,261,706	177,939,494	5,460,942
Restricted investments	22,002,166	9,506,991	8,651,762	10,770,585	77,075,423	150,436,225	20,530,374	42,841,345
Contractual obligation receivable	544,820,801	549,493,189	552,093,376	554,942,283	468,481,719	477,039,443	483,604,380	466,317,666
Prepaid lease	11,250,000	11,250,000	11,250,000	11,250,000	11,250,000	11,250,000	11,250,000	-
Capital assets								
Nondepreciable/nonamortizable	670,557,112	567,414,021	498,010,970	418,996,654	467,830,218	434,684,895	452,185,674	415,558,090
Depreciated/amortized, net	1,330,639,811	1,384,312,298	1,418,773,460	1,487,915,510	1,492,118,136	1,604,038,058	1,587,291,603	1,728,054,410
Prepaid insurance on debt	5,995,322	6,649,782	7,304,243	7,958,703	8,754,897	13,002,376	14,112,324	20,831,496
Total Noncurrent Assets	<u>2,681,745,377</u>	<u>2,531,399,572</u>	<u>2,498,602,938</u>	<u>2,512,325,132</u>	<u>2,557,664,655</u>	<u>2,708,712,703</u>	<u>2,746,913,849</u>	<u>2,679,063,949</u>
Total Assets	<u>3,191,751,577</u>	<u>2,972,542,764</u>	<u>3,030,580,397</u>	<u>3,085,090,870</u>	<u>3,088,836,981</u>	<u>3,188,585,161</u>	<u>3,173,360,461</u>	<u>3,044,530,775</u>
Deferred Outflows of Resources								
Deferred charge on refunding	39,316,288	41,997,055	44,677,823	47,358,590	82,508,971	94,431,823	99,294,499	116,511,949
Deferred pension amounts	17,107,308	10,810,800	22,112,642	15,292,494	11,369,496	18,645,719	21,491,506	13,620,562
Total Deferred Outflows of Resources	<u>56,423,596</u>	<u>52,807,855</u>	<u>66,790,465</u>	<u>62,651,084</u>	<u>93,878,467</u>	<u>113,077,542</u>	<u>120,786,005</u>	<u>130,132,511</u>

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Liabilities								
Current Liabilities								
Accounts and contracts payable	\$ 60,207,304	\$ 56,890,771	\$ 53,039,330	\$ 43,231,679	\$ 36,657,714	\$ 33,754,534	\$ 36,751,842	\$ 49,474,527
Accrued salaries, wages and benefits	1,757,758	1,046,674	4,892,033	5,321,864	4,284,220	4,734,956	3,190,038	2,887,280
Accrued liabilities	25,111,216	15,261,427	6,958,556	5,357,056	6,481,670	12,679,692	1,353,816	875,796
Due to other governments	3,124,058	17,610,601	15,693,993	18,282,254	15,963,934	11,935,868	25,393,813	13,668,890
Due to other funds	2,214,714	-	162,368	-	12,568	3,447,927	-	65,971
Interest payable	41,789,634	36,398,995	36,621,768	30,887,915	40,325,682	39,322,324	39,329,322	37,226,125
Current portion of:								
Revenue bonds and loans	62,332,082	40,091,255	32,500,450	33,058,615	29,244,447	20,569,843	23,393,905	35,650,167
Raw water rights obligation	2,963,619	2,845,282	2,734,246	2,624,820	2,520,996	2,999,458	-	-
BC Note obligation	214,151	203,954	194,242	184,992	176,183	167,794	159,803	152,193
Regional system lease	5,928,467	5,686,745	5,454,878	5,232,465	5,019,121	4,814,476	4,618,174	4,429,876
Other liabilities	3,743,223	3,378,083	3,123,843	5,331,161	4,938,308	4,635,565	2,182,888	6,675,228
Total Current Liabilities	<u>209,386,226</u>	<u>179,413,787</u>	<u>161,375,707</u>	<u>149,512,821</u>	<u>145,624,843</u>	<u>139,062,437</u>	<u>136,373,601</u>	<u>151,106,053</u>
Noncurrent Liabilities								
Revenue bonds and loans	2,592,206,224	2,359,238,286	2,407,391,624	2,459,730,737	2,467,177,447	2,545,529,255	2,606,465,431	2,488,824,632
Raw water rights obligation	89,552,155	92,515,774	95,361,056	98,095,302	100,720,123	103,241,118	-	-
BC Note obligation	16,124,188	16,338,339	16,542,293	16,736,534	16,921,526	17,097,709	17,265,503	17,425,306
Regional system lease	394,167,195	400,095,662	405,782,406	411,237,284	416,469,750	421,488,871	426,303,346	430,921,520
Other liabilities	3,713,668	4,132,979	4,138,780	4,840,615	4,979,604	4,933,977	5,170,201	9,784,562
Net pension liability	22,645,805	23,379,480	51,728,179	47,643,374	47,310,460	64,151,352	69,569,044	61,021,079
Total Noncurrent Liabilities	<u>3,118,409,235</u>	<u>2,895,700,520</u>	<u>2,980,944,338</u>	<u>3,038,283,846</u>	<u>3,053,578,910</u>	<u>3,156,442,282</u>	<u>3,124,773,525</u>	<u>3,007,977,099</u>
Total Liabilities	<u>3,327,795,461</u>	<u>3,075,114,307</u>	<u>3,142,320,045</u>	<u>3,187,796,667</u>	<u>3,199,203,753</u>	<u>3,295,504,719</u>	<u>3,261,147,126</u>	<u>3,159,083,152</u>
Deferred Inflows of Resources								
Deferred gain on refunding	44,182,654	48,216,421	52,250,187	56,283,953	60,317,719	59,252,431	62,822,646	-
Deferred amounts for swap terminations	56,712	61,438	66,164	70,890	75,616	80,342	85,068	4,134,908
Deferred pension amounts	-	11,224,189	-	-	-	7,260,572	6,565,776	15,536,821
Total Deferred Inflows of Resources	<u>44,239,366</u>	<u>59,502,048</u>	<u>52,316,351</u>	<u>56,354,843</u>	<u>60,393,335</u>	<u>66,593,345</u>	<u>69,473,490</u>	<u>19,671,729</u>
Net Position (Deficit)								
Net investment in capital assets	(198,390,747)	(109,163,683)	(191,352,010)	(237,858,820)	(166,485,092)	(84,133,546)	(2,321,309)	90,778,518
Restricted for debt service	56,139,482	31,660,045	23,688,943	19,479,656	29,731,576	23,239,368	26,194,280	69,797,836
Restricted for payment assistance program	2,289,905	5,272,708	4,614,294	3,754,368	3,369,875	2,462,214	2,218,373	1,451,598
Unrestricted	16,101,706	(37,034,806)	65,783,239	118,215,240	56,502,001	(2,003,397)	(62,565,494)	(166,119,547)
TOTAL NET POSITION (DEFICIT)	<u>\$ (123,859,654)</u>	<u>\$ (109,265,736)</u>	<u>\$ (97,265,534)</u>	<u>\$ (96,409,556)</u>	<u>\$ (76,881,640)</u>	<u>\$ (60,435,361)</u>	<u>\$ (36,474,150)</u>	<u>\$ (4,091,595)</u>

GLWA began operations on January 1, 2016. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND

CHANGES IN NET POSITION - WATER FUND

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016*
Operating Revenues								
Wholesale customer charges	\$ 340,593,806	\$ 323,026,213	\$ 322,423,768	\$ 312,701,777	\$ 311,399,136	\$ 323,117,344	\$ 331,115,131	\$ 160,777,169
Local system charges	22,834,300	21,697,300	21,925,500	21,295,500	20,181,400	15,130,600	15,490,300	6,833,500
Bad debt recovery	-	-	-	-	-	-	5,107,125	-
Other revenues	350,991	234,462	265,822	256,300	21,340	64,200	37,388	54,863
Total Operating Revenues	363,779,097	344,957,975	344,615,090	334,253,577	331,601,876	338,312,144	351,749,944	167,665,532
Operating Expenses								
Personnel	48,855,342	44,892,622	43,889,495	43,946,225	42,085,546	41,845,295	38,261,393	8,301,022
Contractual services	52,817,187	50,683,897	40,410,811	46,097,405	43,083,078	35,794,549	34,257,419	3,304,113
Utilities	33,436,545	28,725,292	28,828,226	27,719,754	26,247,858	26,871,081	28,469,603	12,368,557
Chemicals	12,689,666	7,788,784	6,028,141	5,569,437	5,088,827	4,804,768	5,340,753	2,444,543
Supplies and other expenses	11,926,150	9,157,367	9,158,990	12,034,192	11,797,279	9,543,615	7,982,562	1,440,644
Capital adjustment	-	-	-	26,780	-	-	-	-
Capital program allocation	(1,172,302)	(1,618,459)	(2,123,060)	(2,164,003)	(2,054,913)	(713,779)	(977,762)	-
Intergovernmental reimbursements	(3,385,540)	(1,813,535)	(2,554,511)	(696,952)	(6,425,729)	(9,615,146)	(11,603,019)	-
Centralized services	-	-	-	-	-	-	-	18,494,851
Administrative services	-	-	-	-	-	-	-	3,191,929
Depreciation	126,485,762	123,196,027	123,271,541	127,183,228	140,571,120	143,991,815	144,137,912	71,295,545
Amortization of intangible asset	3,566,664	3,566,664	3,566,664	3,566,664	3,566,664	2,080,554	-	-
Total Operating Expenses	285,219,474	264,578,659	250,476,297	263,282,730	263,959,730	254,602,752	245,868,861	120,841,204
Operating Income	78,559,623	80,379,316	94,138,793	70,970,847	67,642,146	83,709,392	105,881,083	46,824,328
Nonoperating Revenues (Expenses)								
Earnings (loss) on investments	16,724,485	(2,361,396)	768,918	13,744,774	14,754,401	6,129,530	1,832,918	392,031
Interest on obligations receivable	24,662,083	25,107,207	25,474,904	22,945,866	22,921,380	23,351,220	25,269,750	12,231,250
Interest expense	(131,161,860)	(125,086,379)	(128,257,367)	(133,537,621)	(136,704,033)	(139,343,204)	(132,434,945)	(65,958,095)
Amortization of debt related items and COI	14,577,852	15,610,434	15,988,278	14,258,569	10,771,937	13,837,585	2,403,018	2,418,891
Legacy pension recovery (expense)	7,443,572	(4,988,132)	(8,075,457)	(7,220,716)	6,014,441	(8,933,691)	(2,516,776)	-
Water Residential Assistance Program	(5,023,436)	(1,049,908)	(593,206)	(1,393,179)	(855,455)	(1,506,554)	(884,327)	-
Other	526,389	388,656	(300,841)	703,544	(991,096)	(1,205,489)	878,305	-
Discontinued capital projects	(20,902,626)	-	-	-	-	-	-	-
Total Nonoperating Expenses	(93,153,541)	(92,379,518)	(94,994,771)	(90,498,763)	(84,088,425)	(107,670,603)	(105,452,057)	(50,915,923)
Income (loss) before special item	(14,593,918)	(12,000,202)	(855,978)	(19,527,916)	(16,446,279)	(23,961,211)	429,026	(4,091,595)
Special Item - MOU with DWSD	-	-	-	-	-	-	(32,811,581)	-
Change in Net Position	(14,593,918)	(12,000,202)	(855,978)	(19,527,916)	(16,446,279)	(23,961,211)	(32,382,555)	(4,091,595)
NET POSITION (DEFICIT), Beginning of Year	(109,265,736)	(97,265,534)	(96,409,556)	(76,881,640)	(60,435,361)	(36,474,150)	(4,091,595)	-
NET POSITION (DEFICIT), END OF YEAR	\$ (123,859,654)	\$ (109,265,736)	\$ (97,265,534)	\$ (96,409,556)	\$ (76,881,640)	\$ (60,435,361)	\$ (36,474,150)	\$ (4,091,595)

* GLWA began operations on January 1, 2016. The data for FY 2016 relates to six months of activity through June 30, 2016.

This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

REVENUE CAPACITY

Revenue capacity information is intended to show the factors affecting the Authority's ability to generate its own-source revenue.

GREAT LAKES WATER AUTHORITY WATER FUND

CHARGE ADJUSTMENTS As Originally Adopted by the Board of Directors

	Fiscal Year								
	2024	2023	2022	2021	2020	2019	2018	2017	2016 [5]
Budgeted revenue requirement [1]	\$ 370,314,500	\$ 356,071,600	\$ 344,030,500	\$ 341,642,000	\$ 339,664,200	\$ 331,400,500	\$ 328,119,300	\$ 331,213,200	\$ 318,474,200
Percent change in budgeted revenue requirement	4.0%	3.5%	0.7%	0.6%	2.5%	1.0%	-0.9%	4.0%	4.0%
Average annual charge adjustment [2]									
Total regional system	2.75%	3.7%	1.5%	3.2%	0.6%	1.8%	1.8%	4.5%	n/a [6]
Suburban wholesale	2.1%	3.5%	1.9%	3.1%	0.3%	0.2%	2.0%	3.4%	11.3%
Local system charge [3]	6.2%	3.0%	-2.0%	3.0%	2.7%	14.1%	-1.0%	11.6%	n/a [6]
Number of wholesale water customers [4]	87	87	87	87	87	87	87	88	85

[1] This is the revenue requirements in the original adopted budget for the fiscal year which is used in the calculation of charges. The revenue requirement represents the funding requirements which are defined in the Master Bond Ordinance.

[2] Average annual charge adjustment percentages is the required charge adjustment required when calculating revenue with the prior year existing charges, usage projections and any other specific individual contract requirements. For the sewage disposal system, this also includes the bad debt adjustment.

[3] Represents the annual change in the local system charges to the Detroit customer class before the annual credit of \$20.7 million for water. Does not include any lookback charges in the percentage increase/decrease calculation. Does not include any Detroit local system operating costs or charges included in the Detroit retail rate. Also does not include any impact of Detroit's use of the regional system lease payment to finance allocated debt service obligations.

[4] Does not include the City of Detroit. The water system includes one emergency basis contract.

[5] GLWA began operations on January 1, 2016. Amounts in this column are based on annual budget of Detroit Water and Sewage Department for FY 2016 which was the basis for the revenue requirement for the six months of operations of GLWA.

[6] Due to the establishment of the Authority and DWSD as separate entities during FY 2016, this information is not applicable.

Source: Great Lakes Water Authority Financial Services Area and the Foster Group

This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND
WATER FUND OPERATING REVENUES/ LARGEST WATER CUSTOMERS

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016*
Operating Revenues								
Suburban wholesale charges [1]	\$ 340,593,806	\$ 323,026,213	\$ 322,423,768	\$ 312,701,777	\$ 311,399,136	\$ 323,117,344	\$ 331,115,131	\$ 160,777,169
Local system charges	22,834,300	21,697,300	21,925,500	21,295,500	20,181,400	15,130,600	15,490,300	6,833,500
Bad debt recovery	-	-	-	-	-	-	5,107,125	-
Other revenue	350,991	234,462	265,822	256,300	21,340	64,200	37,388	54,863
Total Operating Revenues	\$ 363,779,097	\$ 344,957,975	\$ 344,615,090	\$ 334,253,577	\$ 331,601,876	\$ 338,312,144	\$ 351,749,944	\$ 167,665,532
Suburban wholesale charges % of total operating revenue	93.63%	93.64%	93.56%	93.55%	93.91%	95.51%	94.13%	95.89%
Local system charges % of total operating revenue	6.28%	6.29%	6.36%	6.37%	6.09%	4.47%	4.40%	4.08%
Ten Largest Suburban Wholesale Member Partners								
Southeast Oakland County Water Authority	\$ 25,534,464	\$ 24,035,255	\$ 23,722,602	\$ 23,089,967	\$ 23,311,743	\$ 23,118,160	\$ 22,434,129	\$ 11,160,701
North Oakland County Water Authority	24,485,805	22,798,372	22,667,931	22,293,795	23,464,096	23,365,866	22,913,261	11,105,152
Sterling Heights	16,661,863	16,235,356	16,375,729	15,242,912	14,644,368	15,571,146	15,480,008	7,155,303
Shelby Township	16,043,316	14,885,135	15,690,553	14,482,451	13,719,053	13,554,398	13,462,808	6,114,243
Troy	14,538,261	13,811,983	14,324,990	13,607,770	13,700,093	13,842,135	13,939,815	6,058,667
Macomb Township	14,279,105	13,065,395	13,388,385	12,870,377	11,063,225	11,167,739	10,945,117	-
Livonia	12,383,989	11,860,410	11,806,151	11,553,730	14,001,058	13,669,376	13,483,657	6,223,290
West Bloomfield Township	11,824,605	11,229,363	11,010,166	-	10,733,617	-	-	-
Canton Township	11,802,563	-	10,919,607	10,491,407	-	13,334,615	13,872,584	6,032,404
Ypsilanti Community Utilities Authority	11,464,455	11,059,703	-	10,450,861	-	11,038,134	-	-
Warren	-	10,940,909	-	-	10,648,162	-	-	-
Flint [2]	-	-	10,980,526	10,325,345	11,604,504	12,235,483	13,256,330	6,738,009
Genesee County Drain Commission [3]	-	-	-	-	-	-	18,493,530	8,593,304
Novi	-	-	-	-	-	-	-	5,595,031
Total Revenue Ten Largest Suburban Wholesale Member Partners	\$ 159,018,426	\$ 149,921,881	\$ 150,886,640	\$ 144,408,615	\$ 146,889,919	\$ 150,897,052	\$ 158,281,239	\$ 74,776,104
Ten largest suburban wholesale member partners % of total operating revenues	43.71%	43.46%	43.78%	43.20%	44.30%	44.60%	45.00%	44.60%

[1] Net of bad debt expense.

[2] Represents billed revenues prior to the credit to Flint for its proportional share of KWA debt service.

[3] Genesee County Drain Commission changed service providers in December 2017 and has contracted GLWA for as needed emergency water service.

* GLWA began operations on January 1, 2016. The data for 2016 is for the six months of activity through June 30, 2016.

This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND

WATER SYSTEM SERVICE CHARGES*

Community Name	Fixed Monthly Charge	Commodity \$/Mcf	Community Name	Fixed Monthly Charge	Commodity \$/Mcf
Allen Park	\$ 136,800	\$ 7.52	Mayfield Township	\$ 2,200	\$ 34.12
Almont, Village of	13,000	10.84	Melvindale	35,000	6.66
Ash Township	45,100	8.56	New Haven, Village of	20,300	8.83
Belleville	17,900	9.41	North Oakland County Water Authority	1,192,200	10.89
Berlin Township	39,900	11.75	Northville, City	41,900	10.77
Brownstown Township	195,700	11.49	Northville Township	306,100	17.72
Bruce Township	18,700	56.29	Novi	490,900	13.42
Canton Township	563,000	12.52	Oak Park	75,300	6.35
Center Line	25,600	6.38	Oakland County Drain Commission	4,400	3.64
Chesterfield Township	233,100	10.56	Plymouth, City	59,000	10.59
Clinton Township	409,600	8.21	Plymouth Township	240,700	11.96
Commerce Township	195,300	14.96	Redford Township	171,300	8.64
Dearborn	548,800	7.46	River Rouge	37,000	7.81
Dearborn Heights	199,200	8.08	Riverview	48,100	8.02
Eastpointe	84,600	6.49	Rockwood	15,000	12.33
Ecorse	78,400	4.94	Romeo	14,100	18.33
Farmington	54,700	9.79	Romulus	233,200	8.34
Farmington Hills	478,200	10.95	Roseville	145,500	6.24
Ferndale	56,400	6.27	Royal Oak Township	10,500	8.14
Flat Rock	69,600	10.65	Shelby Township	781,200	15.14
Flint (1)	577,300	9.84	Southeastern Oakland County Water Authority	1,242,900	8.08
Fraser	65,900	9.06	South Rockwood	6,200	10.74
Garden City	89,600	9.16	Southgate	118,700	8.49
Gibraltar	18,100	8.83	St. Clair County-Burtchville Township	18,800	17.95
Grosse Ile Township	59,500	12.49	St. Clair County-Greenwood Energy Center	71,400	22.78
Grosse Pointe Park	72,800	10.60	St. Clair Shores	168,200	6.92
Grosse Pointe Shores	35,100	14.65	Sterling Heights	836,700	11.32
Grosse Pointe Woods	68,700	7.91	Sumpter Township	37,100	9.80
Hamtramck	43,500	5.58	Sylvan Lake	12,700	15.92
Harper Woods	43,600	7.38	Taylor	250,800	7.75
Harrison Township	88,100	7.38	Trenton	91,600	8.47
Hazel Park	39,900	6.36	Troy	738,900	12.71
Highland Park	62,900	4.76	Utica	30,100	10.44
Huron Township	80,800	10.43	Van Buren Township	191,100	11.28
Imlay City	79,900	13.82	Walled Lake	43,000	11.51
Imlay Township	800	45.33	Warren	558,100	7.22
Inkster	69,300	5.47	Washington Township	127,400	12.46
Keego Harbor	16,300	12.99	Wayne	174,700	13.26
Lapeer	83,600	12.64	West Bloomfield Township	567,600	17.03
Lenox Township	15,700	8.99	Westland	335,100	8.32
Lincoln Park	126,300	6.11	Wixom	134,800	14.32
Livonia	620,700	10.54	Woodhaven	90,900	12.57
Macomb Township	682,100	17.01	Ypsilanti Community Utilities Authority	563,400	9.34
Madison Heights	100,400	7.64			

Annual Detroit Wholesale Revenue Requirement \$22,834,300

* Water charges went into effect July 1, 2022. Amounts reflect the amended charges approved by the GLWA Board of Director's on June 2, 2022.

(1) Net fixed monthly charge will include \$554,300 monthly credits for KWA debt service

DEBT CAPACITY

Debt capacity information is intended to show the Authority's debt burden and its ability to issue additional debt.

GREAT LAKES WATER AUTHORITY WATER FUND

RATIOS OF OUTSTANDING DEBT BY TYPE

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Revenue bonds [1]	\$ 2,447,181,498	\$ 2,289,900,079	\$ 2,368,632,473	\$ 2,453,471,088	\$ 2,466,561,092	\$ 2,540,663,196	\$ 2,612,607,101	\$ 2,507,091,038
State revolving loans	207,356,808	109,429,462	71,259,601	39,318,264	29,860,802	25,435,902	17,252,235	17,383,761
Raw water rights obligation	92,515,774	95,361,056	98,095,302	100,720,122	103,241,119	106,240,576	-	-
BC Note obligation	<u>16,338,339</u>	<u>16,542,293</u>	<u>16,736,535</u>	<u>16,921,526</u>	<u>17,097,709</u>	<u>17,265,503</u>	<u>17,425,306</u>	<u>17,577,499</u>
Total Water Fund	<u>\$ 2,763,392,419</u>	<u>\$ 2,511,232,890</u>	<u>\$ 2,554,723,911</u>	<u>\$ 2,610,431,000</u>	<u>\$ 2,616,760,722</u>	<u>\$ 2,689,605,177</u>	<u>\$ 2,647,284,642</u>	<u>\$ 2,542,052,298</u>
Total taxable value [2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total population served [3]:								
Water	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000
Total debt per capita:								
Water	\$ 727	\$ 661	\$ 672	\$ 687	\$ 689	\$ 708	\$ 697	\$ 669
Per capita income [4]	\$ 66,285	\$ 62,274	\$ 60,965	\$ 57,755	\$ 53,428	\$ 51,823	\$ 49,809	\$ 48,605
Total debt as a percentage of income:								
Water	1.10%	1.06%	1.10%	1.19%	1.29%	1.37%	1.40%	1.38%

[1] Amounts are reported net of premiums and discounts.

[2] GLWA is not authorized to levy property taxes; therefore, presentation of taxable values and the ratio of total debt to taxable value is not applicable.

[3] Source: Estimated based on data from Southeast Michigan Council of Governments (SEMCOG).

[4] Source: FRED Economic Data, St. Louis Fed and Michigan State University Center for Economic Analysis. (Prior year amounts have been updated to match current data from FRED)

Further details regarding the Authority's debt can be found in the notes to the financial statements.

GLWA began operations on January 1, 2016. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND

DEBT BY LIEN
As of June 30, 2023

	Original Principal Amount [1]	Outstanding as of June 30, 2023
Water Supply System Revenue Bonds		
Senior Lien Bonds		
Water Supply System Revenue Senior Lien Bonds, Series 2003A	\$ 234,805,000	\$ 100,000
Water Supply System Revenue Senior Lien Bonds, Series 2005B	194,900,000	100,000
Water Supply System Revenue Senior Lien Bonds, Series 2006A	280,000,000	100,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-1	206,540,000	44,190,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-2	188,455,000	182,480,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-4	307,645,000	209,360,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2015D-1	89,430,000	69,275,000
Water Supply System Revenue Senior Lien Bonds, Series 2016A	88,000,000	87,990,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C	443,930,000	439,065,000
Water Supply System Revenue Senior Lien Bonds, Series 2020A	42,445,000	42,445,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2020C	377,515,000	375,645,000
Water Supply System Revenue Senior Lien Bonds, Series 2022A	137,470,000	137,470,000
Total Senior Lien Bonds	2,591,135,000	1,588,220,000
Second Lien Bonds		
Water Supply System Revenue Second Lien Bonds, Series 2003B	172,945,000	100,000
Water Supply System Revenue Second Lien Bonds, Series 2006B	120,000,000	100,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2014D-6	65,425,000	45,820,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2015D-2	37,235,000	37,235,000
Water Supply System Revenue Second Lien Bonds, Series 2016B	163,830,000	163,820,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D	222,045,000	222,045,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2018A	155,595,000	109,040,000
Water Supply System Revenue Second Lien Bonds, Series 2020B	43,135,000	43,135,000
Water Supply System Revenue Second Lien Bonds, Series 2022B	69,745,000	69,745,000
Total Second Lien Bonds	1,049,955,000	691,040,000
SRF Junior Lien Bonds		
Water Supply System Revenue Bonds, Series 2005 SRF-1	13,805,164	3,130,164
Water Supply System Revenue Bonds, Series 2005 SRF-2	8,891,730	1,976,730
Water Supply System Revenue Bonds, Series 2006 SRF-1	5,180,926	1,165,926
Water Supply System Revenue Bonds, Series 2008 SRF-1	2,590,941	650,941
Water Supply System Revenue Bonds, Series 2016 SRF-1	8,273,168	7,258,168
Water Supply System Revenue Bonds, Series 2016 SRF-2	3,393,543	2,968,543
Water Supply System Revenue Bonds, Series 2017 SRF-1	5,807,931	5,192,931
Water Supply System Revenue Bonds, Series 2019 SRF-1	8,330,000	7,635,000
Water Supply System Revenue Bonds, Series 2019 SRF-2	29,950,000	27,824,226
Water Supply System Revenue Bonds, Series 2019 SRF-3	11,788,056	7,447,932
Water Supply System Revenue Bonds, Series 2020 SRF-1	20,538,700	19,514,960
Water Supply System Revenue Bonds, Series 2020 SRF-2	9,000,000	6,940,958
Water Supply System Revenue Bonds, Series 2020 SRF-3	8,960,000	7,909,220
Water Supply System Revenue Bonds, Series 2020 SRF-4	12,153,050	8,832,593
Water Supply System Revenue Bonds, Series 2021 SRF-1	11,940,000	4,209,249
Water Supply System Revenue Bonds, Series 2021 SRF-2	104,725,000	50,945,907
Water Supply System Revenue Bonds, Series 2021 SRF-3	11,528,950	9,678,360
Water Supply System Revenue Bonds, Series 2022 SRF-2	34,075,000	34,075,000
Total SRF Junior Lien Bonds	310,932,159	207,356,808
TOTAL WATER SUPPLY SYSTEM REVENUE BONDS	\$ 3,952,022,159	\$ 2,486,616,808

[1] Reflects original amount issued by predecessor entity, DWSD, for bonds issued prior to January 1, 2016.

GREAT LAKES WATER AUTHORITY WATER FUND

SCHEDULE OF DEBT SERVICE REQUIREMENTS
As of June 30, 2023

Fiscal Year Ending [1]	Senior Lien Bonds (\$000)			Second Lien Bonds (\$000)			Junior Lien Bonds (\$000)			All Bonds (\$000) Total Debt
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Service
2024 [2]	\$27,280	\$60,003	\$87,283	\$12,970	\$31,622	\$44,592	\$6,985	\$4,099	\$11,084	\$142,960
2025	64,210	70,597	134,807	18,380	32,915	51,295	12,454	3,889	16,343	202,445
2026	67,320	67,666	134,986	19,475	31,969	51,444	12,710	3,642	16,352	202,781
2027	70,355	64,412	134,767	20,450	30,970	51,420	12,953	3,390	16,343	202,530
2028	73,835	61,037	134,872	21,475	29,922	51,397	11,560	3,150	14,710	200,980
2029	77,435	57,531	134,966	22,795	28,816	51,611	11,801	2,924	14,725	201,301
2030	81,190	53,692	134,882	23,930	27,647	51,577	11,885	2,694	14,579	201,039
2031	85,115	49,648	134,763	27,935	26,351	54,286	12,130	2,462	14,592	203,640
2032	89,285	45,390	134,675	29,330	24,919	54,249	12,334	2,225	14,559	203,483
2033	93,635	40,916	134,551	30,800	23,559	54,359	12,045	1,989	14,034	202,943
2034	87,550	36,435	123,985	42,720	22,065	64,785	12,265	1,753	14,018	202,788
2035	95,855	31,870	127,725	40,530	20,186	60,716	10,731	1,529	12,260	200,701
2036	123,660	26,400	150,060	15,270	18,791	34,061	7,390	1,351	8,741	192,862
2037	20,540	22,903	43,443	124,865	15,287	140,152	7,530	1,203	8,733	192,328
2038	61,925	21,175	83,100	6,120	12,012	18,132	7,690	1,052	8,742	109,974
2039	66,240	18,654	84,894	4,755	11,740	16,495	7,835	898	8,733	110,122
2040	71,880	16,125	88,005	1,765	11,577	13,342	7,526	745	8,271	109,618
2041	74,550	13,410	87,960	1,850	11,487	13,337	7,339	595	7,934	109,230
2042	76,020	10,613	86,633	1,945	11,392	13,337	5,344	457	5,801	105,771
2043	27,200	8,509	35,709	31,665	10,551	42,216	4,355	351	4,706	82,631
2044	25,300	7,177	32,477	36,395	8,846	45,241	2,048	266	2,314	80,032
2045	26,575	5,863	32,438	38,225	6,972	45,197	1,980	223	2,203	79,838
2046	27,920	4,483	32,403	40,140	5,005	45,145	2,030	179	2,209	79,757
2047	29,340	3,033	32,373	42,155	2,938	45,093	1,598	135	1,732	79,199
2048	10,525	2,017	12,542	6,450	1,714	8,164	1,617	99	1,716	22,422
2049	7,720	1,545	9,265	6,860	1,366	8,226	1,098	63	1,161	18,651
2050	8,115	1,136	9,251	7,215	993	8,208	865	42	907	18,366
2051	5,585	780	6,365	4,600	675	5,275	880	25	905	12,545
2052	5,875	479	6,354	4,855	415	5,270	380	8	388	12,012
2053	6,185	162	6,347	5,120	141	5,261	-	-	-	11,608
Total	<u>\$1,588,220</u>	<u>\$803,660</u>	<u>\$2,391,880</u>	<u>\$691,040</u>	<u>\$462,844</u>	<u>\$1,153,884</u>	<u>\$207,357</u>	<u>\$41,435</u>	<u>\$248,792</u>	<u>\$3,794,557</u>

[1] Reflects fiscal period in which actual payments are due.

[2] For bonds issued through the Michigan Finance Authority (MFA) in 2014 and 2015, the Authority is required to make payment on these obligations to the MFA depository account five business days prior to the actual due date of the bond principal and interest payments. Therefore, the payments for the principal and interest due on July 1, 2023 are not included in the debt service requirement amounts above as they were paid on June 26, 2023.

Schedule may not foot due to rounding

GREAT LAKES WATER AUTHORITY WATER FUND

DEBT CREDIT RATING HISTORY

As of June 30, 2023

Debt Type	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Standards & Poor's								
Senior Lien	AA-	AA-	AA-	AA-	AA-	A-	A-	A-
Second Lien	A+	A+	A+	A+	A+	BBB+	BBB+	BBB+
Junior Lien	A+	A+	A+	A+	A+	N/A	N/A	N/A
Moody's								
Senior Lien	A1	A1	A1	A1	A2	A3	A3	Baa1
Second Lien	A2	A2	A2	A2	A3	Baa1	Baa1	Baa2
Fitch								
Senior Lien	A+	A+	A+	A+	A	A	A	BBB
Second Lien	A	A	A	A	A-	A-	A-	BBB-

GLWA began operations on January 1, 2016. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND

CALCULATION OF DEBT SERVICE COVERAGE - OVERVIEW

As of June 30, 2023

The Authority has pledged Net Revenues of the water and sewage disposal systems to secure the repayment of the principal and interest of the revenue bonds and State of Michigan revolving fund loans. Revenues are defined in the Master Bond Ordinance (MBO) and are in accordance with State of Michigan Public Act 94, the Revenue Bond Act of 1933, as all monies collected, directly or indirectly, by GLWA, or by the DWSD as agent for GLWA for the local system under the water and sewer services agreement. Net Revenues are defined in the MBO as all Revenues except for those transferred to the Operations and Maintenance Fund.

Debt service coverage ratios are presented using both (a) the GAAP methodology which calculates pledged revenue on an accrual basis and (b) the Rate Covenant methodology which calculates pledged revenue on a cash basis.

The MBO establishes that rates and charges be set such that they are expected to produce debt service coverage that is not less than the Required Coverage. Required Coverage is defined as debt service coverage levels of 1.20 for senior lien bonds, 1.10 for second lien bonds and 1.00 for any junior lien bonds, other than second lien bonds. Debt service coverage ratios are inclusive of all revenue bonds and state revolving loans held on behalf of both GLWA and DWSD.

GREAT LAKES WATER AUTHORITY WATER FUND
DEBT SERVICE COVERAGE - GAAP BASIS - WATER SYSTEM

	Fiscal Year							
	2023	2022 [8]	2021	2020	2019	2018	2017	2016 [1]
GLWA Revenues								
Wholesale customer charges	\$ 340,593,806	\$ 323,026,213	\$ 322,423,768	\$ 312,701,777	\$ 311,399,136	\$ 323,117,344	\$ 336,222,256	\$ 160,777,169
KWA debt service credits	(6,452,573)	(6,496,428)	(6,652,253)	(6,652,348)	(6,979,503)	(3,176,073)	-	-
DWSD Local System charges	22,834,300	21,697,300	21,925,500	21,295,500	20,181,400	15,130,600	15,490,300	6,833,500
Other revenue	1,378,706	775,537	267,562	1,912,636	21,340	64,200	37,388	54,863
Earnings on investments [2]	9,161,614	1,945,613	4,195,305	9,115,115	11,818,203	4,489,397	1,348,898	520,891
Total GLWA Revenues	367,515,853	340,948,235	342,159,882	338,372,680	336,440,576	339,625,468	353,098,842	168,186,423
DWSD Local System Revenues [7]								
Local System revenues [3]	107,558,342	83,591,720	67,464,986	73,817,339	69,777,041	83,983,786	69,680,402	183,279,645
Other Revenue	1,749,998	2,349,445	1,958,151	7,289,468	1,013,276	1,635,430	5,265,229	2,074,095
Total DWSD Local System Revenues	109,308,340	85,941,165	69,423,137	81,106,807	70,790,317	85,619,216	74,945,631	185,353,740
Total Revenue	476,824,193	426,889,400	411,583,019	419,479,487	407,230,893	425,244,684	428,044,473	353,540,163
Operating Costs								
GLWA operating expenses	155,167,048	137,815,968	123,638,092	132,532,838	119,821,946	108,530,383	101,730,949	49,545,659
GASB 96 expenditures [4]	2,282,630	413,924	-	-	-	-	-	-
O&M transfers:								
DWSD Local System operations	42,581,600	29,989,000	35,833,900	34,662,400	35,484,300	35,059,704	33,596,400	22,444,800
Legacy Pension Regional System [5]	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	3,024,000
Legacy Pension DWSD Local System [5]	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	2,136,000
Total Operating Costs	210,351,278	178,538,892	169,791,992	177,515,238	165,626,246	153,910,087	145,647,349	77,150,459
Pledged Revenue	\$ 266,472,915	\$ 248,350,508	\$ 241,791,027	\$ 241,964,249	\$ 241,604,647	\$ 271,334,597	\$ 282,397,124	\$ 276,389,704
Principal and interest funding requirement [6]:								
Senior lien bonds	\$ 133,773,102	\$ 124,309,692	\$ 123,798,304	\$ 122,318,928	\$ 119,230,820	\$ 127,687,420	\$ 134,234,660	\$ 128,177,999
Second lien bonds	50,117,190	46,840,350	51,731,158	47,849,350	46,214,385	42,852,813	38,990,023	41,178,843
Total senior and second lien bonds	183,890,292	171,150,042	175,529,462	170,168,278	165,445,205	170,540,233	173,224,683	169,356,842
Junior lien bonds	8,910,595	5,439,273	3,684,917	2,700,795	2,521,249	2,009,658	1,785,328	1,781,683
Total All Bonds	\$ 192,800,887	\$ 176,589,315	\$ 179,214,379	\$ 172,869,073	\$ 167,966,454	\$ 172,549,891	\$ 175,010,011	\$ 171,138,525
GAAP Basis Debt Service Coverage								
Senior lien bonds	1.99	2.00	1.95	1.98	2.03	2.12	2.10	2.16
Senior and second lien bonds	1.45	1.45	1.38	1.42	1.46	1.59	1.63	1.63
All bonds, including SRF junior lien	1.38	1.41	1.35	1.40	1.44	1.57	1.61	1.62

[1] GLWA started operations on January 1, 2016. Includes 6 months under operations of DWSD and 6 months under the operations of GLWA under the Master Bond Ordinances in effect during the respective time periods.

[2] Excludes investment earnings on bond proceeds in construction fund.

[3] Local Service Revenue reported net of bad debt expense.

[4] Amounts recorded under GASB 96 for financial reporting purposes are treated as operating expenditures for budget purposes and the debt service coverage calculation.

[5] The legacy pension obligations reflects only the Legacy Pension Obligation as defined in Section 504(c) of the Water Master Bond Ordinance.

[6] Calculated on a debt set aside basis consistent with rate covenant basis for rate determination purposes.

[7] At the time of the issuance of the GLWA financial report, DWSD's audited financial report had not been released. Amounts used were provided by DWSD's management of the preliminary financial results for the year ended June 30, 2023.

[8] DWSD local system revenues for 2022 were based on DWSD preliminary financial results. Amounts have been updated to actual.

This schedule is being built prospectively; ultimately, 10 years of data will be presented.

GREAT LAKES WATER AUTHORITY WATER FUND

DEBT SERVICE COVERAGE - RATE COVENANT BASIS - WATER SYSTEM

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016 [1]
GLWA Receipts								
Wholesale System receipts	\$ 332,337,913	\$ 313,964,381	\$ 310,032,178	\$ 303,568,071	\$ 308,690,722	\$ 319,728,881	\$ 336,362,250	
DWSD Local System charges	22,834,300	21,697,300	21,925,500	21,295,500	20,181,400	15,130,600	15,490,300	
Investment Earnings	8,163,261	2,456,013	4,684,353	7,742,625	7,722,112	3,592,524	579,546	
Total GLWA Receipts	363,335,474	338,117,694	336,642,031	332,606,196	336,594,234	338,452,005	352,432,096	
DWSD Local System Receipts	98,010,223	80,267,663	80,141,924	75,590,223	79,686,819	85,962,882	80,960,806	
Total Receipts	461,345,697	418,385,357	416,783,955	408,196,419	416,281,053	424,414,887	433,392,902	
Operation and Maintenance Transfers								
GLWA Regional System operations [2]	156,747,700	143,933,800	124,167,627	126,188,192	116,356,994	114,426,522	105,431,843	
DWSD Local System operations	42,581,600	29,989,000	35,833,900	34,662,400	35,484,300	35,059,704	33,596,400	
Legacy Pension Regional System [3]	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	
Legacy Pension DWSD Local System [3]	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	4,272,000	
Total Operations and Maintenance Transfers	209,649,300	184,242,800	170,321,527	171,170,592	162,161,294	159,806,226	149,348,243	
Pledged Revenue	\$ 251,696,397	\$ 234,142,557	\$ 246,462,428	\$ 237,025,827	\$ 254,119,759	\$ 264,608,661	\$ 284,044,659	
Principal and interest funding requirement [4]:								
Senior lien bonds	\$ 133,773,102	\$ 124,309,692	\$ 123,798,304	\$ 122,318,928	\$ 119,230,820	\$ 127,687,420	\$ 134,234,660	
Second lien bonds	50,117,190	46,840,350	51,731,158	47,849,350	46,214,385	42,852,813	38,990,023	
Total senior and second lien bonds	183,890,292	171,150,042	175,529,462	170,168,278	165,445,205	170,540,233	173,224,683	
Junior lien bonds	8,910,595	5,439,273	3,684,917	2,700,795	2,521,249	2,009,658	1,785,328	
Total All Bonds	\$ 192,800,887	\$ 176,589,315	\$ 179,214,379	\$ 172,869,073	\$ 167,966,454	\$ 172,549,891	\$ 175,010,011	
Rate Covenant Basis Debt Service Coverage								
Senior lien bonds	1.88	1.88	1.99	1.94	2.13	2.07	2.12	
Senior and second lien bonds	1.37	1.37	1.40	1.39	1.54	1.55	1.64	
All bonds, including SRF junior lien	1.31	1.33	1.38	1.37	1.51	1.53	1.62	

[1] GLWA started operations on January 1, 2016. Due to the bifurcation from DWSD the Rate Covenant Basis cannot be computed for 2016.

[2] For years prior to 2022 a different methodology was used. A calculation was performed to determine the cash basis disbursements from the operations fund.

[3] The legacy pension obligations reflects only the Legacy Pension Obligation as defined in Section 504 (c) of the Water Master Bond Ordinance.

[4] Calculated on a debt set aside basis consistent with rate covenant basis for rate determination purposes.

This schedule is being built prospectively; ultimately, 10 years of data will be presented.

DEMOGRAPHIC AND ECONOMIC INFORMATION

Demographic and economic information is intended to show the socioeconomic environment within which the Authority operates.

GREAT LAKES WATER AUTHORITY WATER FUND

SERVICE AREA DEMOGRAPHICS

Last Ten Years

Year	Population (1)	Unemployment (2)	Per Capita Income (3)	Total Debt Service (5)	Debt Per Capita	Debt Service as a Percentage of Income
2023	3,800,000	3.7%	\$ 66,285 (4)	\$ 192,800,887	\$ 50.74	0.08%
2022	3,800,000	3.8%	62,274 (4)	176,589,315	46.47	0.07%
2021	3,800,000	6.2%	60,965	179,214,379	47.16	0.08%
2020	3,800,000	11.5%	57,755	172,869,073	45.49	0.08%
2019	3,800,000	4.3%	53,428	167,966,454	44.20	0.08%
2018	3,800,000	4.3%	51,823	172,549,891	45.41	0.09%
2017	3,800,000	4.6%	49,809	175,010,011	46.06	0.09%
2016 *	3,800,000	5.3%	48,605	171,138,525	45.04	0.09%
2015 *	3,800,000	5.9%	47,473	178,923,900	47.09	0.10%
2014 *	3,800,000	8.1%	44,884	182,464,900	48.02	0.11%

(1) Source: Estimated based on data from Southeast Michigan Council of Governments (SEMCOG).

(2) Source: Bureau of Labor Statistics Detroit-Warren-Dearborn MSA Annual Average (For 2023 the June rate was used). The Detroit-Warren-Dearborn Metropolitan Statistical Area (MSA) is comprised of six counties: Wayne, Oakland, Macomb, Livingston, Lapeer and St. Clair. This represents the majority of the service area customers.

(3) Source: FRED Economic Data, St. Louis Fed (Prior year amounts have been updated to match current information from FRED)

(4) Source: Michigan State University Center for Economic Analysis

(5) Debt service is based on set aside debt service requirements for the fiscal year which includes the subsequent year July 1st debt payment.

* GLWA assumed operations on January 1, 2016. The information in this table from 2014-2015 is based on operations under the City of Detroit Water and Sewerage Department (DWSD). Data for 2016 includes six months of operation under DWSD and six months of operation under GLWA.

GREAT LAKES WATER AUTHORITY WATER FUND

LARGEST EMPLOYERS

Current Year and 9 years prior

Employer	Type of Business	Fiscal Year 2023			Fiscal Year 2014		
		Full- Time Employees	Rank	Percent of Total Employment (b)	Full- Time Employees	Rank	Percent of Total Employment (d)
		(a)			(c)		
Ford Motor Co.	Automobile Manufacturer	47,750	1	2.34%	43,977	1	2.35%
Stellantis NV (Formerly FCA US LLC)	Automobile Manufacturer	42,444	2	2.08%	32,106	2	1.71%
General Motors Co.	Automobile Manufacturer	38,600	3	1.89%	30,570	3	1.63%
University of Michigan	Public University and Health System	35,620	4	1.74%	29,855	4	1.59%
Corewell Health (Formerly BHSH System)	Health Care System	21,674	5	1.06%	n/a	n/a	n/a
U.S. Government	Federal Government	19,953	6	0.98%	18,703	5	1.00%
Henry Ford Health System	Health Care System	17,469	8	0.85%	17,492	6	0.93%
Rocket Companies Inc.	FinTech platform company consisting of personal finance and consumer technology brands	14,109	7	0.69%	11,563	9	0.62%
Trinity Health Michigan	Health Care System	13,186	9	0.65%	14,341	7	0.77%
Ascension Michigan	Health Care System	12,085	10	0.59%	11,337	10	0.61%
Detroit Medical Center	Health Care System	n/a	n/a	n/a	12,268	8	0.65%
Total		<u>262,890</u>		<u>12.87%</u>	<u>222,212</u>		<u>11.86%</u>

- (a) July 2022 Employment data from Largest Southeast Michigan Employers - Ranked by full-time employees in the December 19, 2022 Crain's Detroit Business (most recent available)
- (b) Percentage base on U.S. Bureau of Labor Statistics from July 2022 of 2,043,249 for the Detroit-Warren-Dearborn, MI Metropolitan Statistical Area
- (c) July 2014 Employment data from comparative column in July 2015 listing of Largest Southeast Michigan Employers - Ranked by full-time employees issued by Crain's Detroit Business
- (d) Percentage base on U.S. Bureau of Labor Statistics from July 2014 of 1,873,108 for the Detroit-Warren-Dearborn, MI Metropolitan Statistical Area

This page intentionally left blank.

OPERATING INFORMATION

Operating information is intended to show contextual information about the Authority's operations and resources to assist in using financial statement information to understand and assess the Authority's economic condition.

GREAT LAKES WATER AUTHORITY WATER FUND

PRODUCED AND BILLED WATER VOLUMES (Mcf)

Fiscal Year	Water Produced [1]	Water Sales			Estimated Non-Revenue Water	Estimated Non-Revenue Water as % of Production
		Wholesale Billed [2]	Local System Billed [3]	Total Water Billed		
2023	21,159,700	13,803,500	4,342,400	18,145,900	3,013,800	14.2%
2022	19,725,700	13,205,300	4,297,300	17,502,600	2,223,100	11.3%
2021	20,565,800	14,258,300	4,120,000	18,378,300	2,187,500	10.6%
2020	19,989,500	13,578,700	4,161,300	17,740,000	2,249,500	11.3%
2019	20,968,100	13,708,600	4,354,600	18,063,200	2,904,900	13.9%
2018	23,228,600	14,391,800	4,428,200	18,820,000	4,408,600	19.0%
2017	23,915,600	14,824,000	4,465,800	19,289,800	4,625,800	19.3%
2016 *	23,580,700	14,730,400	4,649,100	19,379,500	4,201,200	17.8%

The table for historical water sales and reported total water production presents water volume in thousands of cubic feet ("Mcf") for suburban wholesale customers, for the Retail Water Customers, and for the Regional Water System as a whole, together with total water production and non-revenue water volume. As is common for all large water systems, the Regional Water System experiences a differential between the quantity of water produced by the treatment plants during the fiscal year and the quantity of water billed to customers over the same period, and the difference is referred to as "non-revenue water." Non-revenue water results from a variety of factors such as the range of accuracy of production and retail meters, losses due to leaks or major breaks in the transmission and distribution systems, unmetered water that is used for fire protection, and the accuracy of estimates for unmetered use. The Authority believes that improvements in the accuracy of the reported production figures may reduce the level of non-revenue water. Production at some of the water plants is not metered, but rather is estimated based on pump curves. The data continues to be reviewed, and the Authority has initiated efforts to measure production figures and refine production estimating techniques.

The schedule of charges for each of the wholesale customers consists of a fixed monthly charge and a commodity charge applied to monthly metered water usage. While the overall methodology used to determine charges for each customer is uniform, the service charge schedule for each customer is unique, reflecting the specific volumes, peak demands, and other demographic information in their individual contracts. Charges are designed to recover 60% of the revenue requirement via fixed monthly charges, with the other 40% generated by commodity charges.

[1] Represents, in part, estimated volumes based on pump curves and engineering analysis. GLWA engineering studies in 2017 concluded that the total water production values for calendar year 2016 were over-reported by 5.8%.

[2] Represents metered amounts for all suburban wholesale customers, with the exception of Dearborn which is based on self-reported billed volumes (including local system losses), and Highland Park, which is based on estimated volumes.

[3] The GLWA charges the DWSD local system a flat charge based on average historical usage from DWSD retail billings data adjusted for water loss. These amounts reflect retail water sales as reported by DWSD plus estimated real and apparent losses in the local distribution system based on engineering studies.

* GLWA assumed operations on January 1, 2016. Data for 2016 includes six months of operation under DWSD and six months of operation under GLWA.

Source: Great Lakes Water Authority Financial Services Area and the Foster Group

This schedule is being built prospectively; ultimately, 10 years of data will be presented

GREAT LAKES WATER AUTHORITY WATER FUND
ADDITIONAL SUMMARY STATISTICS

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Capital Asset Statistics - Water								
Water Treatment Plants	5	5	5	5	5	5	5	5
Intake Facilities	3	3	3	3	3	3	3	3
Booster Pumping Stations	19	19	19	19	19	19	19	19
Water Storage Reservoirs	32	32	32	32	32	32	32	32
Miles of Transmission Lines	816	816	816	816	816	803	803	803
GLWA Employees								
Water Operations	217	203	211	211	213	205	180	155
Sewage Disposal Operations	289	298	320	344	369	358	342	320
Centralized Services	321	295	298	302	295	276	249	217
Administrative Services	181	152	156	152	147	129	110	90
Total Employees	<u>1,008</u>	<u>948</u>	<u>985</u>	<u>1,009</u>	<u>1,024</u>	<u>968</u>	<u>881</u>	<u>782</u>

GLWA began operations on January 1, 2016. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.



Financial Services Area
735 Randolph, Suite 1608
Detroit, Michigan 48226