



GLWA

Great Lakes Water Authority

Sewage Disposal 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 SEWAGE DISPOSAL 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	15-57
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 - Sewage Disposal Fund	60
Schedule of Contributions	61
Notes to Required Supplementary Information	62
Supplementary Information	
Combining Schedule of Net Position – Sewage Disposal Fund	64-65
Combining Schedule of Revenues, Expenses and Changes in Net Position – Sewage Disposal Fund	66
Schedule of Interfund Receivables and Payables	67
Schedule of Operating Expenses for Sewer Operations Fund– Budget to Actual	68
Schedule of Revenue Requirements – Budget to Actual – Sewage Disposal Operations	69
Schedule of Revenue Requirements to Statement of Revenues, Expenses and Changes in Net Position Crosswalk	70
Sewer Improvement and Extension Fund – Budget to Actual	71
Sewer Construction Fund – Budget to Actual	72
Schedule of Days Cash – Liquidity	73
Notes to Supplementary Information	74-75

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

	<u>Page</u>
STATISTICAL SECTION	
Financial Trends	
Schedules of Net Position – Sewage Disposal Fund	80-81
Changes in Net Position – Sewage Disposal Fund	82
Revenue Capacity	
Charge Adjustments	84
Sewage Disposal Fund Operating Revenues / Largest Sewer Customers	85
Sewage Disposal System Service Charges	86
Industrial Waste Control Charges and Pollutant Surcharges	87
Debt Capacity	
Ratios of Outstanding Debt by Type	90
Debt by Lien	91-92
Schedule of Debt Service Requirements	93
Debt Credit Rating History	94
Debt Service Coverage	
Calculation of Debt Service Coverage Overview	95
GAAP Basis – Sewage Disposal System	96
Rate Covenant Basis – Sewage Disposal System	97
Demographic and Economic Information	
Service Area Demographics	100
Largest Employers	101
Operating Information	
Wastewater Volumes	104
Additional Summary Statistics	105

FINANCIAL SECTION

Independent Auditors' Report

To the Board of Directors of
Great Lakes Water Authority

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Sewage Disposal Fund of the Great Lakes Water Authority (the Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 Sewage Disposal 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 by us and other auditors. In our opinion, based on our audit, the procedures performed as described above, and the report of the other auditors, 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 Sewage Disposal 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.

Baker Tilly US, LLP

Madison, Wisconsin
December 13, 2023

FINANCIAL STATEMENTS

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	\$ 260,110,098	\$ 200,464,397
Restricted cash and cash equivalents	137,098,372	38,574,227
Restricted cash for the benefit of DWSD	24,989,273	9,098,348
Investments	42,159,523	93,709,233
Restricted investments	33,698,337	73,042,550
Receivables, net	37,685,656	46,858,599
Due from other governments	6,095,717	2,208,272
Due from other funds	2,214,714	-
Contractual obligation receivable	16,060,725	15,403,674
Prepaid items and other assets	5,678,605	4,920,898
Inventories	10,649,496	8,366,771
Total Current Assets	576,440,516	492,646,969
Noncurrent Assets		
Restricted cash and cash equivalents	66,482,098	2,491,300
Restricted investments	112,322,569	31,184,328
Contractual obligation receivable	354,229,111	369,794,921
Prepaid lease	13,750,000	13,750,000
Capital assets		
Nondepreciable/nonamortizable	418,201,364	320,526,307
Depreciated/amortized, net	1,989,243,893	2,142,771,572
Prepaid insurance on debt	9,147,648	10,124,011
Total Noncurrent Assets	2,963,376,683	2,890,642,439
Total Assets	3,539,817,199	3,383,289,408
Deferred Outflows of Resources		
Deferred charge on refunding	94,632,191	110,341,248
Deferred pension amounts	30,616,652	19,347,900
Total Deferred Outflows of Resources	125,248,843	129,689,148

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

	<u>2023</u>	<u>2022</u>
Liabilities		
Current Liabilities		
Accounts and contracts payable	\$ 53,101,194	\$ 37,488,263
Accrued salaries, wages and benefits	305,601	1,013,356
Accrued liabilities	28,840,076	9,743,206
Due to other governments	3,750,000	3,750,000
Due to other funds	1,032,754	2,328,086
Interest payable	40,400,733	34,566,553
Current portion of		
Revenue bonds and loans	87,393,258	87,312,545
BC Note obligation	481,694	458,756
Regional system leases	7,245,904	6,950,466
Other liabilities	<u>25,439,622</u>	<u>3,435,863</u>
Total Current Liabilities	<u>247,990,836</u>	<u>187,047,094</u>
Noncurrent Liabilities		
Revenue bonds and loans	2,899,287,729	2,790,722,856
BC Note obligation	36,268,418	36,750,113
Regional system leases	481,759,905	489,005,809
Other liabilities	29,864,963	16,989,290
Net pension liability	<u>40,528,802</u>	<u>41,841,847</u>
Total Noncurrent Liabilities	<u>3,487,709,817</u>	<u>3,375,309,915</u>
Total Liabilities	<u>3,735,700,653</u>	<u>3,562,357,009</u>
Deferred Inflows of Resources		
Deferred gain on refunding	37,087,199	40,566,648
Deferred amounts for swap terminations	377	457
Deferred pension amounts	<u>-</u>	<u>20,087,733</u>
Total Deferred Inflows of Resources	<u>37,087,576</u>	<u>60,654,838</u>
Net Position (Deficit)		
Net investment in capital assets	(138,162,246)	(85,551,623)
Restricted for construction	2,180,985	-
Restricted for debt service	91,296,778	91,754,608
Restricted for payment assistance program	2,362,658	7,045,715
Unrestricted	<u>(65,400,362)</u>	<u>(123,281,991)</u>
TOTAL NET POSITION (DEFICIT)	<u>\$ (107,722,187)</u>	<u>\$ (110,033,291)</u>

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

This page intentionally left blank.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	\$ 275,917,502	\$ 268,813,369
Local system charges	191,042,200	188,662,200
Industrial waste charges	8,393,103	8,300,278
Pollutant surcharges	4,894,567	5,181,816
Other revenues	1,660,020	429,491
Total Operating Revenues	481,907,392	471,387,154
Operating Expenses		
Operating expenses before depreciation and amortization		
Personnel	65,952,676	62,160,768
Contractual services	64,129,786	63,410,109
Utilities	43,839,991	30,930,459
Chemicals	17,852,397	12,593,379
Supplies and other expenses	22,645,561	19,911,985
Capital program allocation	(1,017,340)	(1,013,677)
Intergovernmental reimbursements	(1,746,945)	(1,074,346)
Total operating expenses before depreciation and amortization	211,656,126	186,918,677
Depreciation	163,470,838	158,013,629
Amortization of intangible assets	439,704	439,704
Total Operating Expenses	375,566,668	345,372,010
Operating Income	106,340,724	126,015,144
Nonoperating Revenues (Expenses)		
Earnings (loss) on investments	20,877,345	(3,022,882)
Interest on shortfall and obligations receivable	16,397,278	17,157,558
Interest expense	(140,129,194)	(131,110,125)
Amortization of debt related items and cost of issuance	(10,579,542)	(2,292,419)
Legacy pension recovery (expense)	13,321,630	(8,927,171)
Water Residential Assistance Program	(7,319,076)	(1,742,929)
Other	1,225,939	(234,915)
Total Nonoperating Expenses	(106,205,620)	(130,172,883)
Income (loss) before capital contributions	135,104	(4,157,739)
Capital Contributions	2,176,000	6,991,039
Change in Net Position	2,311,104	2,833,300
NET POSITION (DEFICIT), Beginning of Year	(110,033,291)	(112,866,591)
NET POSITION (DEFICIT), END OF YEAR	\$ (107,722,187)	\$ (110,033,291)

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	\$ 489,095,449	\$ 470,114,343
Cash received from intergovernmental reimbursements	1,593,091	588,645
Cash payments for intergovernmental services provided	(1,746,945)	(1,074,346)
Cash payments to suppliers for goods and services	(148,900,878)	(121,676,647)
Cash payments for employee services	(65,650,055)	(62,331,347)
Cash payments to other governments for obligation payable	(1,969,296)	(1,969,294)
Cash payments for WRAP	(4,295,104)	(1,742,930)
Cash payments for GLWA share pension agreement	(20,475,400)	(20,475,400)
Cash received from insurance claims	2,140,310	592,797
Cash received nonoperating income	326,029	428
Cash received from EFSD for DWSD local system	31,724,639	-
Cash received for DWSD nonoperating pension	3,066,700	3,066,700
Cash paid for DWSD nonoperating pension	(3,066,806)	(3,066,805)
Cash received for DWSD WRAP	1,279,600	1,510,400
Cash payments for DWSD WRAP	(1,096,487)	(1,510,400)
Cash increase from DWSD budgetary surplus (1)	15,802,842	6,024,896
Principal payments received on obligation receivable	14,995,300	14,244,900
Interest received on obligation receivable	16,804,261	17,500,600
Advanced payments received on obligation receivable	88,139	55,310
Payments received from DWSD for previous year budget shortfall	-	8,296,578
Interest payments received on previous year budget shortfall	-	144,918
Cash received from DWSD for cost of issuance fees	-	49,500
Cash payments for issuance costs on DWSD obligation receivable	-	(49,500)
Payments of state revolving fund loan proceeds to DWSD	(853,459)	(1,288,152)
Net Cash Provided by Operating Activities	328,861,930	307,005,194
Cash Flows From Noncapital Financing Activities		
Proceeds from state revolving fund loans for DWSD	853,459	1,288,152
Cash received from grants	332,333	149,018
Principal payments	(14,995,300)	(14,244,900)
Interest payments	(16,833,365)	(17,430,450)
Net Cash Used in Noncapital Financing Activities	(30,642,873)	(30,238,180)

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

	2023	2022
Cash Flows From Capital and Related Financing Activities		
Proceeds from insurance claims	\$ 713,750	\$ 345,645
Proceeds from grants	226,996	-
Proceeds from sale of assets	1,208,505	239,128
Cash received from capital contribution	2,176,000	-
Proceeds from revenue bonds	218,550,892	-
Proceeds from state revolving fund loans	17,712,417	9,215,214
Payments to bond escrow agent	(5,507,101)	-
Payment of bond issuance costs	(1,008,501)	(37,500)
Principal payments on bonds	(104,021,130)	(113,955,100)
Principal payments on regional system leases	(6,950,466)	(6,667,073)
Principal payments on right to use lease	(366,784)	(189,119)
Interest payments	(115,763,766)	(112,599,419)
Purchase of capital assets	<u>(97,706,397)</u>	<u>(75,575,344)</u>
Net Cash Used in Capital and Related Financing Activities	<u>(90,735,585)</u>	<u>(299,223,568)</u>
Cash Flows From Investing Activities		
Investment purchases	(484,579,004)	(307,745,971)
Investment sales and maturities	503,680,284	296,101,125
Interest received	<u>11,466,817</u>	<u>1,839,782</u>
Net Cash Provided in Investing Activities	<u>30,568,097</u>	<u>(9,805,064)</u>
Net change in cash and cash equivalents	238,051,569	(32,261,618)
CASH AND CASH EQUIVALENTS, Beginning of Year	<u>250,628,272</u>	<u>282,889,890</u>
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 488,679,841</u>	<u>\$ 250,628,272</u>
STATEMENT OF NET POSITION CLASSIFICATION OF CASH		
Cash and cash equivalents	\$ 260,110,098	\$ 200,464,397
Restricted cash and cash equivalents	137,098,372	38,574,227
Restricted cash for the benefit of DWSD	24,989,273	9,098,348
Noncurrent restricted cash and cash equivalents	<u>66,482,098</u>	<u>2,491,300</u>
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 488,679,841</u>	<u>\$ 250,628,272</u>
NONCASH OPERATING ACTIVITIES		
Interest income obligation receivable premium amortization	\$ (408,374)	\$ (392,284)

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 deposited into an escrow account for refunding revenue bonds	\$ 12,665,243	\$ -
Bond proceeds paid directly to underwriters for cost of issuance	\$ 644,295	\$ -
Increase in assets from contributed capital	\$ -	\$ 6,991,039
Increase in unrealized gain (loss) on investments	\$ 6,108,228	\$ (2,530,920)
Interest expense due to accretion	\$ -	\$ 170,931
Amortization income (expense)	\$ (8,785,146)	\$ (2,254,919)
Reconciliation of Operating Income to Net Cash Provided by Operating Activities:		
Operating income	\$ 106,340,724	\$ 126,015,144
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	163,470,838	158,013,629
Amortization of intangible assets	439,704	439,704
Miscellaneous nonoperating income (expense)	44,531	281,926
Legacy pension recovery (expense) and administrative fee	12,920,996	(9,217,846)
WRAP (Water Residential Assistance Program)	(7,319,076)	(1,742,929)
Loan forgiveness pass-through to DWSD	(358,544)	(808,000)
Interest income on contractual obligation receivable	16,397,278	17,012,640
Interest income on shortfall receivable	-	144,918
Interest expense on obligation payable	(1,510,539)	(1,532,384)
Changes in:		
Receivables	9,172,943	(1,817,386)
Due from other governments	(1,023,013)	(900,148)
Due from other funds	(2,214,714)	162,368
Contractual obligation receivable	14,908,759	14,157,032
Shortfall receivable	-	8,296,578
Prepaid items and other assets (operating)	(692,777)	(902,781)
Inventories	(2,282,725)	(1,366,140)
Accounts payable (operating)	1,355,833	6,585,172
Accrued salaries, wages and benefits	(707,755)	(123,209)
Accrued liabilities	19,096,870	5,127,951
Due to other funds	(1,295,332)	(458,258)
Obligation payable including accrued interest	(458,757)	(436,911)
Other liabilities	35,246,216	494,853
Net pension liability and deferred items	(32,669,530)	(10,420,729)
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 328,861,930</u>	<u>\$ 307,005,194</u>

(1) Represents local system retail receipts received in excess of DWSD's current year 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 SEWAGE DISPOSAL 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	23
NOTE 3	Cash Deposits and Investments	24
NOTE 4	Restricted Assets	26
NOTE 5	Receivables, Net	29
NOTE 6	Due from other Governments	29
NOTE 7	Due To and Due From Other Funds	29
NOTE 8	Contractual Obligation Receivable	30
NOTE 9	Capital Assets	31
NOTE 10	Accrued Liabilities	32
NOTE 11	Due to Other Governments	32
NOTE 12	Long-term Debt	33
	Revenue Bonds	35
	State Revolving Fund Loans	36
	Pledges of Future Revenue	38
	Debt Ratings	39
	BC Note Obligation	39
	Interest Expense	40
NOTE 13	Regional Systems Leases Payable and Related Prepaid Lease	41
NOTE 14	Other Liabilities	42
	Lease Payable – Right to Use Asset	43
	Compensated Absences	44
	Claims and Judgements	44
	DWSD Local System Capital Contribution from EFSD	44
	Cash Held for the Benefit of DWSD Budget Stabilization	44
NOTE 15	Risk Management/Self-Insurance Programs	45
NOTE 16	Defined Contribution Pension Plans	47
NOTE 17	Net Pension Liability (Special Funding Situation)	48
NOTE 18	Commitments and Contingencies	53
NOTE 19	Net Investment in Capital Assets	56
NOTE 20	Subsequent Events	56

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 sewage disposal system is one of the largest in the United States, both in terms of treatment capacity and population served. The sewer disposal system currently serves an area of 944 square miles located in three Michigan counties and an estimated population of approximately 2.8 million or approximately 28% of Michigan's population. Suburban customers comprise approximately 76% of the population in the service area, and the DWSD retail sewer 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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.

BASIS OF PRESENTATION

The Authority presents a sewage disposal 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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 sewage disposal 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 the green infrastructure program.

Due from and Due to Other Funds

An amount owed between the Water and Sewage Disposal Fund 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.

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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.

The Authority has recorded a right to use intangible asset for the lease of a warehouse in the sewage disposal fund. See Note 14 for a description of the leased right to use asset.

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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.
- Amounts owed to the WRAP service delivery partners for WRAP expenses incurred.
- Insurance proceeds received that have not been spent

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.

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 sewage disposal systems. 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 sewage disposal facilities was January 1, 2016. See Note 13 for the details of the regional system leases.

Other Liabilities

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

- Lease payable – right to use asset
- Compensated absences
- Claims and judgements
- DWSD local system capital contribution from the Evergreen-Farmington Sanitary Drain Drainage District (EFSD)
- 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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.

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 wastewater treatment. The local system charges are the charges to the City of Detroit under the Sewer Services Agreement (SSA), dated June 12, 2015. Wholesale customer charges are shown net of loss contingency expense of \$285,717 for the Sewage Disposal Fund.

Operating expenses include the direct costs of operating the sewage disposal systems, 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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.

Centralized Services and Administrative Services

Certain costs incurred by the Authority are allocated between the Water and Sewage 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

Capital Contribution

A \$2,176,000 capital contribution was recognized during the year from the Evergreen-Farmington Sanitary Drain Drainage District (EFSD). This capital contribution was part of an agreement with the EFSD to increase the capacity in their contract for a local system capital contribution of \$31.6 million and a regional system capital contribution for \$2.2 million. The Authority has recorded a liability for the \$31.6 million local system capital contribution received that is for DWSD and will disburse the funds to DWSD as DWSD incurs the costs related to the specified local system construction project identified in the contract, which will reduce the local system flow into the regional system. The \$2.2 million for the regional system has been restricted for a future capital project.

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 SEWAGE DISPOSAL 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 sewerage 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 sewerage 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 sewerage disposal system as required in the Water and Sewer Services Agreement.

SCHEDULE OF CHARGES PROCESS

The GLWA Wholesale Customer Model Sewer 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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.

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

Statement of Net Position

Cash and cash equivalents	\$ 260,110,098
Restricted cash and cash equivalents	137,098,372
Restricted cash for the benefit of DWSD	24,989,273
Investments	42,159,523
Restricted investments	33,698,337
Noncurrent restricted cash and cash equivalents	66,482,098
Noncurrent restricted investments	<u>112,322,569</u>
Total	<u>\$ 676,860,270</u>

Cash Deposits and Investments

Bank deposits – checking and savings accounts	\$ 45,367,531
Money market accounts	443,312,310
Investments in securities	<u>188,180,429</u>
Total	<u>\$ 676,860,270</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 \$488,679,841 for the sewage disposal fund. The bank balance of the sewage disposal fund deposits and money market accounts was \$488,679,841 of which \$488,429,841 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

INVESTMENTS

Following is a summary of the Sewage Disposal Fund's investments as of June 30, 2023:

	Sewage Disposal Fund	Standard & Poors Rating	Weighted Maturity In Years
U.S. treasury notes	\$ 120,578,055	AA+	0.73
U.S. government agencies	1,248,875	AA+	0.03
Commercial paper	66,353,499	A1	0.14
 Total	 \$ 188,180,429		

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 's investment policy, all investments are held in the name of the 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 Sewage Disposal Fund had greater than 5% of its total investment portfolio concentrated as follows:

Investment Type	Issuer	% of Portfolio
Commercial paper	Natixis Bank NY	8.52%
Commercial paper	Bank of America Securities	8.27

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 SEWAGE DISPOSAL 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	\$ 120,578,055
U.S. government agencies	1,248,875
Commercial paper	<u>66,353,499</u>
Total Investments	<u>\$ 188,180,429</u>

The Sewage Disposal 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 SEWAGE DISPOSAL 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
Receiving fund	\$ 77,775,562*	\$ -	\$ -	\$ 77,775,562
Operations and maintenance	56,941,606	-	-	56,941,606
Operations and maintenance – legacy pension	-	583,707	-	583,707
Senior lien debt service	-	71,023,919	-	71,023,919
Senior lien bond reserve	-	-	105,707,533	105,707,533
Second and junior lien debt service	-	45,844,063	-	45,844,063
Second lien bond reserve	-	-	41,263,877	41,263,877
Legacy pension obligation	-	823,032	-	823,032
Water residential assistance program (WRAP)	-	5,386,630	-	5,386,630
Budget stabilization	-	5,500,000	-	5,500,000
Extraordinary repair and replacement	41,987,982	-	-	41,987,982
Improvement and extension – regional	125,564,471	-	-	125,564,471
Subtotal – Reserves Defined by Ordinance	302,269,621	129,161,351	146,971,410	578,402,382
Less: Funded by surety (noncash)	-	-	(134,091,452)	(134,091,452)
Total – Reserves Defined by Ordinance (net of surety coverage)	302,269,621	129,161,351	12,879,958	444,310,930
Cash held for the benefit of DWSD	-	24,989,273	-	24,989,273
Construction Deposit	-	-	-	-
Intergovernmental	-	31,724,639	-	31,724,639
Construction retainage	-	12,792,876	-	12,792,876
Construction funds	-	-	163,042,552	163,042,552
Total Cash, Cash Equivalents and Investments Sewage Disposal Fund	\$ 302,269,621	\$ 198,668,139	\$ 175,922,510	\$ 676,860,270

* 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 SEWAGE DISPOSAL 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	\$ 198,668,139
From debt issuance	175,922,510
Amounts payable for liabilities and debt	<u>(278,750,228)</u>
Restricted Net Position	<u>\$ 95,840,421</u>
Restricted net position for:	
Construction	\$ 2,180,985
Debt service	91,296,778
Payment assistance program	<u>2,362,658</u>
Total Restricted Net Position	<u>\$ 95,840,421</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.

	Unrestricted	Restricted Current	Restricted Noncurrent	Total
Cash and cash equivalents	\$ 260,110,098	\$ 137,098,372	\$ 66,482,098	\$ 463,690,568
Cash held for the benefit of DWSD	-	24,989,273	-	24,989,273
Investments	<u>42,159,523</u>	<u>33,698,337</u>	<u>112,322,569</u>	<u>188,180,429</u>
 Total	 <u>\$ 302,269,621</u>	 <u>\$ 195,785,982</u>	 <u>\$ 178,804,667</u>	 <u>\$ 676,860,270</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 5 – RECEIVABLES, NET

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

Receivables, net:	
Billed	\$ 55,950,458
Unbilled	24,240,500
Other	<u>115,479</u>
Subtotal	80,306,437
Allowance for doubtful accounts	<u>(42,620,781)</u>
Total Receivables, net	<u>\$ 37,685,656</u>

NOTE 6 – DUE FROM OTHER GOVERNMENTS

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

DWSD-Billed shared services	\$ 757,573
DWSD-Unbilled shared services	719,565
DWSD-Accrued interest on obligation receivable	4,215
Intergovernmental agreements and other	1,028,184
Grants-Federal and State	2,362,280
State of Michigan FEMA	<u>1,223,900</u>
Total Due From Other Governments	<u>\$ 6,095,717</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>1,032,754</u>	<u>2,214,714</u>
Total Due From	<u>\$ 1,032,754</u>	<u>\$ 1,032,754</u>	<u>\$ 2,214,714</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 8 – CONTRACTUAL OBLIGATION RECEIVABLE

As part of the regional system lease transaction, in which GLWA leased the regional water and sewage disposal 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 \$3,291,282,050 for the Sewage Disposal 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 sewage disposal systems. 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.

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	\$ 298,804,000	\$ -	\$ (13,333,300)	\$ -	\$ 285,470,700	\$ 13,910,600
New money bonds	77,345,000	-	(1,530,000)	-	75,815,000	1,590,000
State revolving funds	480,152	853,459	(132,000)	(358,544)	843,067	135,000
Total Obligation Receivable	376,629,152	853,459	(14,995,300)	(358,544)	362,128,767	15,635,600
Deferred amounts for:						
Unamortized premiums	8,569,443	-	(408,374)	-	8,161,069	425,125
Total	\$ 385,198,595	\$ 853,459	\$ (15,403,674)	\$ (358,544)	\$ 370,289,836	\$ 16,060,725

The current obligation receivable payment schedule is as follows:

Year Ended June 30	Principal	Interest	Total
2024	\$ 15,635,600	\$ 16,167,161	\$ 31,802,761
2025	16,317,900	15,482,611	31,800,511
2026	17,031,400	14,768,061	31,799,461
2027	17,777,000	14,022,161	31,799,161
2028	18,556,000	13,243,311	31,799,311
2029-2033	105,095,767	53,304,981	158,400,748
2034-2038	130,175,100	28,077,000	158,252,100
2039-2043	18,250,000	8,648,750	26,898,750
2044-2048	23,290,000	3,607,250	26,897,250
Total	\$ 362,128,767	\$ 167,321,286	\$ 529,450,053

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	\$ 28,394,607	\$ -	\$ -	\$ 103,090	\$ 28,497,697
Easements	98,309,513	-	-	9,000	98,318,513
Construction in progress	193,100,463	102,501,332	-	(6,913,195)	288,688,600
Prepaid subscription assets	721,724	1,974,830	-	-	2,696,554
Total Nondepreciable and Nonamortizable Capital Assets	320,526,307	104,476,162	-	(6,801,105)	418,201,364
Depreciated and amortized capital assets					
Site improvements	52,506,188	29,059	-	297,474	52,832,721
Buildings and structures	1,167,449,113	111,299	(3,357,364)	2,739,335	1,166,942,383
Infrastructure	625,707,645	-	-	-	625,707,645
Machinery and equipment	1,366,957,111	5,076,774	(2,041,910)	3,764,296	1,373,756,271
Vehicles	6,917,905	1,515,871	(40,344)	-	8,393,432
Leasehold improvements	3,763,966	14,661	-	-	3,778,627
Intangible asset – right to use asset	4,543,607	-	-	-	4,543,607
Total Depreciable and Amortizable Assets	3,227,845,535	6,747,664	(5,439,618)	6,801,105	3,235,954,686
Less: Accumulated depreciation and amortization					
Site improvements	(32,508,704)	(3,243,281)	-	-	(35,751,985)
Buildings and structures	(291,920,318)	(37,049,741)	528,862	-	(328,441,197)
Infrastructure	(89,348,382)	(13,814,055)	-	-	(103,162,437)
Machinery and equipment	(667,327,028)	(108,062,343)	1,704,506	-	(773,684,865)
Vehicles	(2,712,175)	(1,053,257)	40,344	-	(3,725,088)
Leasehold improvements	(707,726)	(248,161)	-	-	(955,887)
Intangible asset – right to use asset	(549,630)	(439,704)	-	-	(989,334)
Total Accumulated Depreciation and Amortization	(1,085,073,963)	(163,910,542)	2,273,712	-	(1,246,710,793)
Total Depreciated and Amortized Capital Assets, Net	2,142,771,572	(157,162,878)	(3,165,906)	6,801,105	1,989,243,893
Net Capital Assets	\$ 2,463,297,879	\$ (52,686,716)	\$ (3,165,906)	\$ -	\$ 2,407,445,257

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. There were no recorded impairments for the Sewage Disposal Fund for the year ended June 30, 2023.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 9 – CAPITAL ASSETS (cont.)

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.

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	\$ 24,989,273
Advanced insurance proceeds	826,831
Due to WRAP service delivery partners	<u>3,023,972</u>
Total Accrued Liabilities	<u>\$ 28,840,076</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:

Green infrastructure	<u>\$ 3,750,000</u>
----------------------	---------------------

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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	\$2,439,745,000	\$ 210,455,000	\$ (89,065,000)	\$ -	\$2,561,135,000	\$ 42,565,000
Notes from direct borrowings and direct placements-						
State revolving loan	<u>379,648,216</u>	<u>18,565,876</u>	<u>(47,936,430)</u>	<u>(358,544)</u>	<u>349,919,118</u>	<u>40,360,000</u>
Total Bonds and Loans	2,819,393,216	229,020,876	(137,001,430)	(358,544)	2,911,054,118	82,925,000
Deferred amounts for:						
Unamortized premiums	117,958,567	21,405,430	(13,213,825)	-	126,150,172	12,912,998
Unamortized discounts	<u>(59,316,382)</u>	<u>-</u>	<u>8,793,079</u>	<u>-</u>	<u>(50,523,303)</u>	<u>(8,444,740)</u>
Total Bonds and Loans, Net	2,878,035,401	250,426,306	(141,422,176)	(358,544)	2,986,680,987	87,393,258
Other Debt						
BC Note obligation	<u>37,208,869</u>	<u>-</u>	<u>(458,757)</u>	<u>-</u>	<u>36,750,112</u>	<u>481,694</u>
Total	<u>\$2,915,244,270</u>	<u>\$ 250,426,306</u>	<u>\$(141,880,933)</u>	<u>\$ (358,544)</u>	<u>\$3,023,431,099</u>	<u>\$ 87,874,952</u>

* Of the \$89,065,000 decrease in revenue bonds, \$17,985,000 relates to the refunding. Of the \$13,213,825 decrease in unamortized premium, \$118,805 relates to the refunding.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 *	\$ 42,565,000	\$ 94,525,671	\$ 40,360,000	\$ 7,540,414	\$ 184,991,085
2025	98,650,000	108,619,233	44,155,870	6,620,084	258,045,187
2026	102,310,000	103,967,844	30,385,000	5,766,016	242,428,860
2027	112,375,000	98,639,973	27,170,308	5,153,979	243,339,260
2028	121,380,000	93,064,784	26,015,853	4,580,573	245,041,210
2029-2033	709,730,000	371,091,560	100,834,490	15,331,025	1,196,987,075
2034-2038	804,840,000	196,090,451	68,458,488	5,307,360	1,074,696,299
2039-2043	359,685,000	74,972,883	12,539,109	389,078	447,586,070
2044-2048	129,810,000	34,090,064	-	-	163,900,064
2049-2053	79,790,000	10,691,206	-	-	90,481,206
Total	<u>\$ 2,561,135,000</u>	<u>\$ 1,185,753,669</u>	<u>\$ 349,919,118</u>	<u>\$ 50,688,529</u>	<u>\$ 4,147,496,316</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 SEWAGE DISPOSAL 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 2001B	9/15/01	110,550,000	5.50%	7/01/23-29	\$ 78,895,000	\$ -
Series 2003B	6/17/09	150,000,000	7.50%	7/01/33	100,000	100,000
Series 2004A	2/12/04	101,435,000	5.25%	7/01/23-24	11,095,000	-
Series 2005A	3/17/05	273,355,000	4.50%	7/01/35	100,000	100,000
Series 2005C	4/05/05	63,160,000	5.00%	7/01/25	100,000	100,000
Series 2006B	8/10/06	250,000,000	5.00%	7/01/36	100,000	100,000
Series 2006D	12/14/06	370,000,000	Variable(*)	7/01/26-32	239,475,000	239,475,000
Series 2014C-3	9/04/14	446,170,000	5.00%	7/01/24-33	347,585,000	303,570,000
Series 2014C-6	9/04/14	143,880,000	5.00%	7/01/32-33	88,900,000	88,900,000
Series 2014C-7	9/04/14	76,715,000	5.00%	7/01/24-36	48,800,000	44,065,000
Series 2015C	12/15/15	197,660,000	5.00%	7/01/26-35	197,160,000	197,160,000
Series 2016B	10/27/16	126,105,000	5.00%	7/01/24-34	126,105,000	111,660,000
Series 2016C	10/27/16	295,190,000	4.00-5.00%	7/01/27-36	295,190,000	295,190,000
Series 2018A	10/03/18	81,595,000	5.00%	7/01/23-48	77,345,000	67,040,000
Series 2018B	10/03/18	131,690,000	5.00%	7/01/24-29	131,690,000	-
Series 2018C**	10/03/18	44,180,000	3.5-3.613%	7/01/23-24	31,260,000	-
Series 2020A**	6/16/20	594,930,000	1.503-3.506%	7/01/23-44	594,930,000	108,540,000
Series 2020B**	6/16/20	92,525,000	2.615-3.606%	7/01/23-44	81,850,000	15,325,000
Series 2022A	9/13/22	125,975,000	5.00-5.25%	7/01/25-52	125,975,000	122,440,000
Series 2022B	9/13/22	71,990,000	5.00-5.25%	7/01/25-52	71,990,000	68,405,000
Series 2022C	9/13/22	12,490,000	5.00%	7/01/23	12,490,000	-
Total Revenue Bonds Payable					<u>\$ 2,561,135,000</u>	

* Interest rates are reset quarterly based upon a formula specified in the bond using the three-month LIBOR rate. Starting with the October 1, 2023 interest rate adjustment date, the Secured Overnight Financing Rate (SOFR) will be used in place of the LIBOR rate.

** Taxable bond

Refunded Debt and New Money Bond – Sewage Disposal Fund

On September 13, 2022, the Authority completed a sewage disposal system revenue bond refunding and new money transaction. The Authority issued \$125,975,000 in Series 2022A senior lien revenue bonds, \$71,990,000 in Series 2022B second lien revenue bonds and \$12,490,000 in Series 2022C revenue refunding bonds for a total issue of \$210,455,000. The net proceeds of the Series 2022C were placed with an escrow agent to refund \$17,985,000 of Series 2012A revenue bonds which were called on September 16, 2022. The net present value savings from the refunding transaction was \$211,718.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 12 – LONG-TERM DEBT (cont.)

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.

STATE REVOLVING FUND LOANS

The Authority participates in direct borrowings through the Clean Water State Revolving Fund (CWSRF) to finance qualified sewage disposal 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's Sewage Disposal Fund received direct borrowing loans from the State of Michigan Revolving Loan Fund during the year ended June 30, 2023 totaling \$18,565,876 of which \$358,544 has been forgiven. The sewer loans forgiven and \$853,459 of the Sewage Disposal Fund loans were a pass through to DWSD the subrecipient of the loans. The remaining proceeds of the Sewage Disposal Fund loans were used to pay costs of acquiring, constructing extensions, and making certain repairs and improvements to the regional sewage disposal system. At June 30, 2023, \$204,517,200 of the Sewage Disposal Fund was authorized and unissued. Of the authorized and unissued amount, \$9,138,183 of the Sewage Disposal Fund is for pass through loans to DWSD.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 12 – LONG-TERM DEBT (cont.)

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 2001 SRF-1	6/28/01	\$ 82,200,000	2.50%	10/01/23-24	\$ 10,190,000
Series 2001-SRF-2	12/20/01	59,850,000	2.50%	10/01/23-24	7,420,000
Series 2002 SRF-3	12/19/02	31,549,466	2.50%	10/01/23-24	3,594,466
Series 2003 SRF-1	6/26/03	48,520,000	2.50%	10/01/23-25	8,910,000
Series 2003 SRF-2	9/25/03	25,055,370	2.50%	4/01/24-25	3,080,370
Series 2004 SRF-1	6/24/04	2,910,000	2.125%	10/01/23-24	350,000
Series 2004 SRF-2	6/24/04	18,353,459	2.125%	4/01/24-25	2,203,459
Series 2004 SRF-3	6/24/04	12,722,575	2.125%	4/01/24-25	1,517,575
Series 2007 SRF-1	9/20/07	167,540,598	1.625%	10/01/23-29	64,885,598
Series 2009 SRF-1	4/17/09	13,970,062	2.50%	4/01/24-30	5,500,062
Series 2010 SRF-1	1/22/10	4,214,763	2.50%	4/01/24-31	1,910,763
Series 2012 SRF-1	8/30/12	14,950,000	2.50%	10/01/23-34	9,840,000
Series 2015A SRF	3/20/15	79,500,000	2.50%	4/01/24-36	56,015,000
Series 2015B SRF	3/20/15	27,175,304	2.50%	10/01/23-35	18,795,304
Series 2015D SRF	12/11/15	15,321,478	2.50%	10/01/23-35	10,391,478
Series 2016 SAW-1	5/25/16	10,000,000	2.50%	10/01/23-38	8,380,000
Series 2016 SRF-1	9/16/16	15,463,628	2.50%	4/01/24-38	12,133,628
Series 2016 SRF-2	9/16/16	48,315,683	2.50%	4/01/24-39	40,045,683
Series 2017 SRF-1	6/23/17	33,566,682	2.50%	10/01/23-38	28,196,682
Series 2018 SRF-2	9/14/18	17,510,000	2.00%	10/01/23-42	17,510,000
Series 2020 SRF-1	3/27/20	28,350,000	2.00%	10/1/23-35	22,086,744
Series 2020 SRF-2	9/30/20	3,232,000	2.00%	10/1/23-25	843,067
Series 2021 SRF-1	3/26/21	12,940,000	1.875%	10/1/23-30	7,438,078
Series 2021 SRF-2 **	9/24/21	6,881,250	1.875%	-	-
Series 2022 SRF-1 *	6/6/22	34,195,000	1.875%	-	-
Series 2022 SRF-2	8/29/22	50,245,000	1.875%	4/1/25-27	5,630,308
Series 2022 SRF-3	9/20/22	19,035,000	1.875%	4/1/25-28	3,050,853
Series 2023 SRF-1 *	6/5/23	88,820,000	1.875%	-	-
Total State Revolving Loans Payable					<u>\$ 349,919,118</u>

* Loan has been authorized, no draws on loan as of June 30, 2023.

** Current draws on loan fall under loan forgiveness, therefore there is no outstanding balance at June 30, 2023

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 Sewer System bonds and loans are paid solely from the net revenues of the Sewer System. Net revenues are defined in the Great Lakes Water Authority Sewer 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 Sewer System bonds is to provide funding for various wastewater treatment and collection activities, capital improvements, refund certain sewage disposal revenue bonds, pay termination amounts for interest rate swap agreements and fund reserve requirements. The term of pledge commitment for the sewage disposal bonds is through fiscal year 2053.

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

Remaining principal and interest requirement	\$ 4,147,496,316
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)	\$ 242,858,798
Pledged revenue for the year ending June 30, 2023	\$ 325,205,682
Pledged revenue collected as a percentage of funding requirement	134%

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 12 – LONG-TERM DEBT (cont.)

DEBT RATINGS

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

In March 2020, the junior lien sewage disposal system SRF bonds were upgraded to A+ from an A rating.

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

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 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.

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	44,233,463	4.00% and variable	4/1/44	\$ 34,990,439
Series 2014-C	6,382,990	5.00%	6/30/27	1,759,673
Total				<u>\$ 36,750,112</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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.)

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	\$ 481,694	\$ 1,487,601	\$ 1,969,295
2025	2,255,301	1,463,516	3,718,817
2026	2,280,590	1,368,246	3,648,836
2027	1,990,655	1,271,711	3,262,366
2028	1,749,522	1,189,675	2,939,197
2029-2033	8,747,608	4,898,660	13,646,268
2034-2038	8,747,608	4,338,813	13,086,421
2039-2043	8,747,608	2,099,426	10,847,034
2044	1,749,526	104,971	1,854,497
Total	\$ 36,750,112	\$ 18,222,619	\$ 54,972,731

INTEREST EXPENSE

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

	Sewage Disposal Fund
Revenue bonds and loans	\$ 117,971,429
Regional System Lease	20,525,381
BC Note obligation	1,510,539
Lease-right to use asset	121,845
Total Interest Expense	\$ 140,129,194

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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, \$27,500,000 is allocated to the Sewage Disposal Fund. The lease for the sewage disposal system provides service to the wholesale customers and the retail sewage disposal customers of the City up to the point of connection to the local sewage disposal 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 Sewage Disposal 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*
\$ 495,956,275	\$ -	\$ (6,950,466)	\$ 489,005,809	\$ 7,245,904

* The current portion of the Sewage Disposal 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 of June 30, 2023, aggregate requirements of the Sewage Disposal Regional System lease is as follows:

Year Ended June 30	Principal	Interest	Total
2024	\$ 7,245,904	\$ 20,254,096	\$ 27,500,000
2025	7,553,901	19,946,099	27,500,000
2026	7,874,989	19,625,011	27,500,000
2027	8,209,726	19,290,274	27,500,000
2028	8,558,691	18,941,309	27,500,000
2029-2033	48,569,730	88,930,270	137,500,000
2034-2038	59,807,979	77,692,021	137,500,000
2039-2043	73,646,575	63,853,425	137,500,000
2044-2048	90,687,199	46,812,801	137,500,000
2049-2053	111,670,746	25,829,254	137,500,000
2054-2056	65,180,369	3,569,631	68,750,000
Total	<u>\$ 489,005,809</u>	<u>\$ 404,744,191</u>	<u>\$ 893,750,000</u>

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, \$13,750,000 is in the Sewage Disposal 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
Lease payable – right to use asset	\$ 4,258,178	\$ -	\$ (366,784)	\$ 3,891,394	\$ 390,070
Compensated absences	816,975	1,630,683	(1,669,106)	778,552	778,552
Claim and judgements	9,850,000	4,010,000	(450,000)	13,410,000	7,660,000
DWSD local system capital contribution from EFSD	-	31,724,639	-	31,724,639	16,611,000
Cash held for the benefit of DWSD budget stabilization	5,500,000	-	-	5,500,000	-
Total	<u>\$ 20,425,153</u>	<u>\$ 37,365,322</u>	<u>\$ (2,485,890)</u>	<u>\$ 55,304,585</u>	<u>\$ 25,439,622</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 14 – OTHER LIABILITIES (cont.)

LEASE PAYABLE – RIGHT TO USE ASSET

The Authority entered into a lease agreement for a warehouse to store inventory for operational needs which began on April 1, 2021. The lease was recorded under GASB 87 using a discount rate of 3%. The lease term is for 5 years and 4 months with one five-year renewal option. The Authority has included the renewal period when recording the lease. An estimate of a 2.5% CPI at the time of renewal was used in calculating the payments for the renewal period.

The future lease payments are detailed below:

Year Ended June 30	Principal	Interest	Total
2024	\$ 390,070	\$ 111,443	\$ 501,513
2025	414,719	99,404	514,123
2026	436,958	86,622	523,580
2027	462,398	73,181	535,579
2028	490,037	58,931	548,968
2029-2032	<u>1,697,212</u>	<u>82,785</u>	<u>1,779,997</u>
Total	<u>\$ 3,891,394</u>	<u>\$ 512,366</u>	<u>\$ 4,403,760</u>

The right to use assets acquired through the lease are summarized below:

	Cost	Accumulated Amortization	Ending Book Value
Warehouse	<u>\$ 4,543,607</u>	<u>\$ (989,334)</u>	<u>\$ 3,554,273</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 14 – OTHER LIABILITIES (cont.)

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 \$778,552 for the Sewage Disposal 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.

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.

DWSD LOCAL SYSTEM CAPITAL CONTRIBUTION FROM EFSD

The Authority is holding a DWSD local system contribution received from the Evergreen-Farmington Sanitary Drain Drainage District for specific DWSD local system construction projects which were identified in an agreement. These funds will be disbursed to DWSD as the project expenses are incurred.

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 Sewage Disposal Fund has retained \$5,500,000.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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):

Coverage	Coverage Limits	Maximum Retention Per Occurrence
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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL 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 \$19,347,900 for the Sewage Disposal 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 \$1,127,500 paid by the Sewage Disposal 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 \$0.32 million allocated to the Sewage Disposal 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 SEWAGE DISPOSAL 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 Sewage Disposal 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 Sewage Disposal Fund's share of the net pension liability are summarized as follows:

Total pension liability	\$ 301,616,255
Plan fiduciary net position	(261,087,453)
Net Pension Liability	\$ 40,528,802

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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)
	<u> </u>	<u> </u>	<u> </u>
Balances at June 30, 2022	\$ 328,574,957	\$ 286,733,110	\$ 41,841,847
Changes for the year:			
Interest	20,417,578	-	20,417,578
Difference between expected and actual experience	(78,411)	-	(78,411)
Changes in assumptions	(18,381,115)	-	(18,381,115)
Employer contributions	-	19,347,900	(19,347,900)
Net investment income	-	(16,729,676)	16,729,676
Benefit payments, including refunds of employee contributions	(28,916,754)	(28,916,754)	-
Other changes	-	652,873	(652,873)
Net changes	<u>(26,958,702)</u>	<u>(25,645,657)</u>	<u>(1,313,045)</u>
Balances at June 30, 2023	<u>\$ 301,616,255</u>	<u>\$ 261,087,453</u>	<u>\$ 40,528,802</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the net pension liability of the Sewage Disposal Fund, calculated using the discount rate of 6.75%, as well as what the Sewage Disposal 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%)
	<u> </u>	<u> </u>	<u> </u>
Net Pension Liability	<u>\$ 49,618,513</u>	<u>\$ 40,528,802</u>	<u>\$ 32,695,753</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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

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 \$13,321,630 for the Sewage Disposal Fund. At June 30, 2023, the Sewage Disposal 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	\$ 11,268,752	\$ -	\$ 11,268,752
Employer contributions to the plan subsequent to the measurement date	<u>19,347,900</u>	<u>-</u>	<u>19,347,900</u>
 Total	 <u>\$ 30,616,652</u>	 <u>\$ -</u>	 <u>\$ 30,616,652</u>

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	\$ 4,368,570
2025	1,946,874
2026	(2,062,204)
2027	<u>7,015,512</u>
Total	<u>\$ 11,268,752</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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

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 Sewage Disposal Fund is anticipated to be approximately \$798.2 million with a 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 \$272 million for the Sewage Disposal Fund.

The current wastewater disposal service contract with the Oakland-Macomb Interceptor Drain Drainage District (OMIDD) provides for OMIDD to maintain, repair, and improve Interceptor PCI-5, the Northeast Sewer Pump Station and the North Interceptor East Arm, which are related to the capital assets in the Regional Sewage Disposal System Lease (See Note 13). The amount of capital improvements in progress related to the contract are estimated by OMIDD to be worth \$64.5 million for the Sewage Disposal Fund at June 30, 2023. At a future date, in accordance with the contract, OMIDD will offer and transfer the assets, following GLWA's acceptance, as the assets are placed in service.

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.

2021 RAIN EVENTS

During the Summer of 2021, GLWA's service area experienced several intense rain events. These rain events resulted in sewer backups, causing property damage. GLWA received over 24,000 property damage claims from these intense rain events. Most of the claims relate to rain events occurring on June 25-26, 2021 and July 16, 2021.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 18 – COMMITMENTS AND CONTINGENCIES (cont.)

The Board hired an independent investigative team to review the rain events. In June 2022, the Independent Investigative Team reviewing the rain events of June and July 2021 presented its final report to the Great Lakes Water Authority (GLWA) Board of Directors. The report concluded that heavy and historic rainfalls exceeded the design capacity of the wastewater system, making surface flooding and basement backups inevitable. For the June 25/26 rain event, the report also stated that even if every piece of piping and equipment in the regional system worked in an ideal manner, basement backups and surface flooding would still have occurred in GLWA's system, or any other collection system designed to today's standard. This standard reflects a collection system designed to handle 1.7 inches of rain in one hour (with no rain before/no rain after) or 3.31 inches in 24 hours. On June 25, more than six inches was experienced in only half that time, which is double the maximum design standard for 24 hours.

In July 2022, GLWA announced that it is denying all claims submitted to the Authority related to the historic rain events that took place in the summer of 2021. Official notification was mailed to the claimants. This decision was based on the findings of the independent investigation and that under Michigan's Governmental Liability for Negligence Act, a public entity such as GLWA can only be liable for a sewage disposal system event (a basement backup) if a defect in its sewage disposal system was the substantial proximate cause (50 percent or more of the cause) of the event and property damage or physical injury.

While no claim under an individual lawsuit would have a material impact on GLWA's operations or revenues, in the aggregate, the claimed amounts under all such lawsuits could be material. As it relates to the June 25-26, 2021 rain event, the trial court dismissed many of the class action lawsuits against GLWA, finding no defect in the Sewer System. The plaintiffs have appealed the dismissal decision. As it relates to the July 16, 2021 rain event, GLWA filed a dispositive motion, which is pending before the Court.

The Authority received insurance payments of \$1 million during fiscal year 2022 and \$2.6 million in the current fiscal year for a total of \$3.6 million. These payment were net of the \$1 million deductible on the insurance policy. The Federal Emergency Management Agency (FEMA) has committed to reimburse the Authority for the \$1 million deductible, net of the GLWA 10% cost share. During the current fiscal year the Authority received \$0.4 million of FEMA funds toward the deductible cost. The Authority expects future additional costs for repairs and maintenance and debris removal from the interceptors as a result of the heavy rains. The amount is not able to be estimated at this time. Claims will be submitted to the insurance company and FEMA as these costs are incurred.

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 18 – COMMITMENTS AND CONTINGENCIES (cont.)

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 Sewage Disposal Fund's operations are subject to regulation pursuant to the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (collectively, the Clean Water Act). Included in the regulatory framework established by the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) permit program, which requires operation of wastewater system facilities according to discharge limitations and other requirements as set forth in permits issued to each facility. The Environmental Protection Agency (EPA) has authorized the Michigan Department of Environmental Quality (MDEQ) to implement and enforce the federal NPDES permit program. The Sewage Disposal Fund operates pursuant to the NPDES Permit. The Authority's current NPDES permit was issued July 1, 2019 and expired on October 1, 2022. A new permit application was submitted in March 2022. The Authority will continue to operate under the old permit until the new permit is issued.

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 \$13,410,000 for the Sewage Disposal 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 SEWAGE DISPOSAL 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	\$ 418,201,364
Depreciated/amortized – net	<u>1,989,243,893</u>
Total Capital Assets	<u>2,407,445,257</u>
Less: Related Debt	
Total bonds and loans, net (Note 12)	2,986,680,987
Less outstanding bonds used for:	
SWAP termination agreements	(213,516,698)
Unspent bond proceeds	(143,130,085)
Obligation receivable-local system share of debt (Note 8)	(370,289,836)
Deferred charge on refunding	(94,632,191)
Deferred gain on refunding	37,087,199
Capital portion of regional system lease	339,516,733
Lease obligation-right to use asset (Note 14)	<u>3,891,394</u>
Total Related Debt	<u>2,545,607,503</u>
Net Investment in Capital Assets	<u>\$ (138,162,246)</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

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

NOTE 20 – SUBSEQUENT EVENTS (cont.)

RATING AGENCY UPGRADES

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

SEWER BOND REFUNDING AND SEWER NEW MONEY BOND TRANSACTION

On December 5, 2023, the Authority issued \$297,060,000 of Sewage Disposal System Revenue and Revenue Refunding Bonds (\$96,860,000 in new money and \$200,200,000 in refunding bonds). The net present value savings from the refunding transaction for the sewage disposal fund was \$20.9 million.

This page intentionally left blank.

REQUIRED SUPPLEMENTARY INFORMATION

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 - Sewage Disposal 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	\$ 20,417,578	\$ 22,012,546	\$ 23,277,566	\$ 23,544,630	\$ 23,465,553	\$ 24,268,718	\$ 25,906,278	\$ 32,970,738
Differences between expected and actual experience	(78,411)	(5,904,906)	(6,585,459)	2,220,999	(205,683)	1,519,917	(3,248,690)	(274,022)
Changes in assumptions	(18,381,115)	14,928,696	8,406,113	-	(13,693,822)	9,721,266	11,308,613	(12,695,976)
Benefit changes	-	-	-	-	-	-	-	(97,749,668)
Benefit payments, including refunds of employee contributions	(28,916,754)	(28,507,650)	(28,932,239)	(29,836,515)	(30,406,407)	(32,770,558)	(44,676,314)	(34,831,342)
Net change	(26,958,702)	2,528,686	(3,834,019)	(4,070,886)	(20,840,359)	2,739,343	(10,710,113)	(112,580,270)
Share of total pension liability, beginning of year	328,574,957	326,046,271	329,880,290	333,951,176	354,791,535	352,052,192	362,762,305	475,342,575
Share of Total Pension Liability, End of Year	301,616,255	328,574,957	326,046,271	329,880,290	333,951,176	354,791,535	352,052,192	362,762,305
Share of Plan Fiduciary Net Position								
Employer contributions	19,347,900	19,347,900	19,347,900	19,347,900	19,347,900	19,347,900	19,347,900	19,342,889
Employee contributions	-	-	-	-	-	-	-	84,010
Net investment income (loss)	(16,729,676)	61,578,019	(2,318,571)	5,898,562	19,468,812	24,899,462	(841,679)	11,085,930
Benefit payments, including refunds of employee contributions	(28,916,754)	(28,507,650)	(28,932,239)	(29,836,515)	(30,406,407)	(32,770,558)	(44,676,314)	(34,831,342)
Administrative expense	-	-	-	-	-	-	-	(13,661)
Other changes	652,873	845,589	758,387	(76,643)	889,186	958,487	161,836	17,808,122
Net change	(25,645,657)	53,263,858	(11,144,523)	(4,666,696)	9,299,491	12,435,291	(26,008,257)	13,475,948
Share of plan fiduciary net position, beginning of year	286,733,110	233,469,252	244,613,775	249,280,471	239,980,980	227,545,689	253,553,946	240,077,998
Share of Plan Fiduciary Net Position, End of Year	261,087,453	286,733,110	233,469,252	244,613,775	249,280,471	239,980,980	227,545,689	253,553,946
SHARE OF NET PENSION LIABILITY	\$ 40,528,802	\$ 41,841,847	\$ 92,577,019	\$ 85,266,515	\$ 84,670,705	\$ 114,810,555	\$ 124,506,503	\$ 109,208,359
Nonemployer contributing entity share of collective net pension liability - Sewage Disposal Fund								
	4.4%	4.7%	8.4%	9.1%	10.2%	12.2%	12.5%	13.2%
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 \$24,448,667.

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 SEWAGE DISPOSAL 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*
Contractually required contribution**	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900	\$ 19,347,900
Actual contribution	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</u>	<u>19,347,900</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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL FUND

COMBINING SCHEDULE OF NET POSITION - SEWAGE DISPOSAL FUND

As of June 30, 2023

	Sewer Operations Fund	Sewer Improvement and Extension Fund	Sewer Construction Fund	Total Sewage Disposal Fund
Assets				
Current Assets				
Cash and cash equivalents	\$ 146,232,552	\$ 113,877,546	\$ -	\$ 260,110,098
Restricted cash and cash equivalents	106,715,859	229,095	30,153,418	137,098,372
Restricted cash for the benefit of DWSD	24,989,273	-	-	24,989,273
Investments	30,472,598	11,686,925	-	42,159,523
Restricted investments	33,698,337	-	-	33,698,337
Receivables:				
Billed	55,950,458	-	-	55,950,458
Unbilled	24,240,500	-	-	24,240,500
Other	115,479	-	-	115,479
Allowance for doubtful accounts	(42,620,781)	-	-	(42,620,781)
Due from other governments	5,936,441	159,276	-	6,095,717
Due from other funds	-	46,996	2,167,718	2,214,714
Due from other sewage disposal funds	195,035	406,782	142,549	744,366
Contractual obligation receivable	16,060,725	-	-	16,060,725
Prepaid items and other assets	5,433,198	1,476	243,931	5,678,605
Inventories	10,649,496	-	-	10,649,496
Total Current Assets	418,069,170	126,408,096	32,707,616	577,184,882
Noncurrent assets				
Restricted cash and cash equivalents	26,908,700	-	39,573,398	66,482,098
Restricted investments	8,765,882	-	103,556,687	112,322,569
Contractual obligation receivable	354,229,111	-	-	354,229,111
Prepaid lease	13,750,000	-	-	13,750,000
Capital assets				
Nondepreciable/nonamortizable	418,201,364	-	-	418,201,364
Depreciated/amortized, net	1,989,243,893	-	-	1,989,243,893
Prepaid insurance on debt	9,147,648	-	-	9,147,648
Total Noncurrent Assets	2,820,246,598	-	143,130,085	2,963,376,683
Total Assets	3,238,315,768	126,408,096	175,837,701	3,540,561,565
Deferred Outflows of Resources				
Deferred charge on refunding	94,632,191	-	-	94,632,191
Deferred pension amounts	30,616,652	-	-	30,616,652
Total Deferred Outflows of Resources	125,248,843	-	-	125,248,843

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

	Sewer Operations Fund	Sewer Improvement and Extension Fund	Sewer Construction Fund	Total Sewage Disposal Fund
Liabilities				
Current Liabilities				
Accounts and contracts payable	\$ 20,583,264	\$ 2,364,512	\$ 30,153,418	\$ 53,101,194
Accrued salaries, wages and benefits	305,601	-	-	305,601
Accrued liabilities	28,840,076	-	-	28,840,076
Due to other governments	3,750,000	-	-	3,750,000
Due to other funds	-	1,032,754	-	1,032,754
Due to other sewage disposal funds	406,782	142,549	195,035	744,366
Interest payable	40,400,733	-	-	40,400,733
Current portion of:				
Revenue bonds and loans	87,393,258	-	-	87,393,258
BC Note obligation	481,694	-	-	481,694
Regional system lease	7,245,904	-	-	7,245,904
Other liabilities	25,439,622	-	-	25,439,622
Total Current Liabilities	<u>214,846,934</u>	<u>3,539,815</u>	<u>30,348,453</u>	<u>248,735,202</u>
Noncurrent Liabilities				
Revenue bonds and loans	2,899,287,729	-	-	2,899,287,729
BC Note obligation	36,268,418	-	-	36,268,418
Regional system lease	481,759,905	-	-	481,759,905
Other liabilities	29,864,963	-	-	29,864,963
Net pension liability	40,528,802	-	-	40,528,802
Total Noncurrent Liabilities	<u>3,487,709,817</u>	<u>-</u>	<u>-</u>	<u>3,487,709,817</u>
Total Liabilities	<u>3,702,556,751</u>	<u>3,539,815</u>	<u>30,348,453</u>	<u>3,736,445,019</u>
Deferred Inflows of Resources				
Deferred gain on refunding	37,087,199	-	-	37,087,199
Deferred amounts for swap terminations	377	-	-	377
Total Deferred Inflows of Resources	<u>37,087,576</u>	<u>-</u>	<u>-</u>	<u>37,087,576</u>
Net Position (Deficit)				
Net investment in capital assets	(283,651,494)	-	145,489,248	(138,162,246)
Restricted for construction	2,180,985	-	-	2,180,985
Restricted for debt service	91,296,778	-	-	91,296,778
Restricted for payment assistance program	2,362,658	-	-	2,362,658
Unrestricted	(188,268,643)	122,868,281	-	(65,400,362)
TOTAL NET POSITION	<u>\$ (376,079,716)</u>	<u>\$ 122,868,281</u>	<u>\$ 145,489,248</u>	<u>\$ (107,722,187)</u>

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

For the Year Ended June 30, 2023

	Sewer Operations Fund	Sewer Improvement and Extension Fund	Sewer Construction Fund	Total Sewage Disposal Fund
Operating Revenues				
Wholesale customer charges	\$ 275,917,502	\$ -	\$ -	\$ 275,917,502
Local system charges	191,042,200	-	-	191,042,200
Industrial waste charges	8,393,103	-	-	8,393,103
Pollutant surcharges	4,894,567	-	-	4,894,567
Other revenues	1,660,020	-	-	1,660,020
Total Operating Revenues	481,907,392	-	-	481,907,392
Operating Expenses				
Operating expenses before depreciation and amortization				
Personnel	65,952,676	-	-	65,952,676
Contractual services	58,677,847	5,451,939	-	64,129,786
Utilities	43,839,991	-	-	43,839,991
Chemicals	17,852,397	-	-	17,852,397
Supplies and other expenses	22,645,561	-	-	22,645,561
Capital program allocation	(1,017,340)	-	-	(1,017,340)
Intergovernmental reimbursements	(1,462,622)	(284,323)	-	(1,746,945)
Total operating expenses before depreciation and amortization	206,488,510	5,167,616	-	211,656,126
Depreciation	163,470,838	-	-	163,470,838
Amortization of intangible assets	439,704	-	-	439,704
Total Operating Expenses	370,399,052	5,167,616	-	375,566,668
Operating Income (Loss)	111,508,340	(5,167,616)	-	106,340,724
Nonoperating Revenues (Expenses)				
Earnings on investments	10,560,274	3,267,913	7,049,158	20,877,345
Interest on shortfall and obligations receivable	16,397,278	-	-	16,397,278
Interest expense	(140,129,194)	-	-	(140,129,194)
Amortization of debt related items and cost of issuance	(10,579,542)	-	-	(10,579,542)
Legacy pension recovery	13,321,630	-	-	13,321,630
Water Residential Assistance Program	(7,319,076)	-	-	(7,319,076)
Other	998,864	47,075	180,000	1,225,939
Capital outlay	109,198,942	(7,170,586)	(102,028,356)	-
Total Nonoperating Revenues (Expenses)	(7,550,824)	(3,855,598)	(94,799,198)	(106,205,620)
Income (Loss) Before Transfers and Capital Contributions	103,957,516	(9,023,214)	(94,799,198)	135,104
Transfer in	5,022,649	33,748,293	244,707,659	283,478,601
Transfer out	(271,045,145)	(4,128,733)	(8,304,723)	(283,478,601)
Capital Contributions	2,176,000	-	-	2,176,000
Change in Net Position	(159,888,980)	20,596,346	141,603,738	2,311,104
NET POSITION (DEFICIT), Beginning of Year	(216,190,736)	102,271,935	3,885,510	(110,033,291)
NET POSITION (DEFICIT), END OF YEAR	\$ (376,079,716)	\$ 122,868,281	\$ 145,489,248	\$ (107,722,187)

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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL FUND

SCHEDULE OF OPERATING EXPENSES FOR SEWER 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	\$ 40,062,900	\$ 38,206,400	\$ 27,254,800	\$ 65,461,200	\$ 65,952,676	\$ 491,476	0.75%
Contractual services	24,293,600	25,392,500	32,718,700	58,111,200	58,677,847	566,647	0.98%
Utilities	23,773,500	41,317,300	173,600	41,490,900	43,839,991	2,349,091	5.66%
Chemicals	9,397,500	17,335,300	-	17,335,300	17,852,397	517,097	2.98%
Supplies and other expenses	14,492,600	15,274,300	6,511,900	21,786,200	22,645,561	859,361	3.94%
Capital program allocation	(1,429,500)	(974,100)	-	(974,100)	(1,017,340)	(43,240)	4.44%
Intergovernmental reimbursements	(448,600)	(528,500)	-	(528,500)	(1,462,622)	(934,122)	176.75%
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	3,055,500	325,200	273,400	598,600	-	(598,600)	-100.00%
Total operating expenses before depreciation and amortization financial reporting basis	184,052,600	204,122,500	(841,700)	203,280,800	206,488,510	3,207,710	
SBITA [1]	-	-	352,200	352,200	352,159	(41)	0.00%
Warehouse lease [2]	-	-	489,500	489,500	489,546	46	0.01%
TOTAL OPERATING EXPENSES BUDGET BASIS	<u>\$ 184,052,600</u>	<u>\$ 204,122,500</u>	<u>\$ -</u>	<u>\$ 204,122,500</u>	<u>\$ 207,330,215</u>	<u>\$ 3,207,715</u>	1.57%

[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.

[2] The warehouse lease is an expense for budget purposes. For financial reporting it is accounted for under GASB 87. 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 SEWAGE DISPOSAL FUND

SCHEDULE OF REVENUE REQUIREMENTS BUDGET TO ACTUAL - SEWAGE DISPOSAL 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, Sewage Disposal Operations had a negative variance of approximately \$0.9 million.

	Adopted Budget	Amended Budget	Actual	Variance Over (Under) Amended Budget
Revenues				
Revenue from charges				
Suburban wholesale customers	\$ 275,403,500	\$ 274,907,200	\$ 275,917,502	\$ 1,010,302
Local system charges	191,042,200	191,042,200	191,042,200	-
Industrial waste control	8,420,000	8,420,000	8,393,103	(26,897)
Pollutant surcharges	4,950,800	4,950,800	4,894,567	(56,233)
Total revenue from charges	<u>479,816,500</u>	<u>479,320,200</u>	<u>480,247,372</u>	<u>927,172</u>
Other revenue [1]	400,000	2,355,000	4,901,316	2,546,316
Investment earnings [2]				
Restricted			4,102,394	
Unrestricted			8,395,898	
Total Investment earnings	<u>1,155,600</u>	<u>13,532,100</u>	<u>12,498,292</u>	<u>(1,033,808)</u>
Total Revenues	<u>\$ 481,372,100</u>	<u>\$ 495,207,300</u>	<u>\$ 497,646,980</u>	<u>\$ 2,439,680</u>
Revenue Requirements				
Operations and maintenance [3]	184,052,600	204,122,500	207,330,215	3,207,715
General Retirement System legacy pension	10,824,000	10,824,000	10,824,000	-
Debt service	205,638,100	212,509,100	212,669,100	160,000
General Retirement System accelerated pension	11,620,700	11,620,700	11,620,700	-
Water Residential Assistance Program contribution	2,394,200	2,394,200	2,394,200	-
Regional system lease	27,500,000	27,500,000	27,500,000	-
Transfer to the Improvement & Extension Fund	39,342,500	26,236,800	26,236,800	-
Total Revenue Requirements	<u>\$ 481,372,100</u>	<u>\$ 495,207,300</u>	<u>\$ 498,575,015</u>	<u>\$ 3,367,715</u>
Revenue Requirement Variance	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (928,035)</u>	<u>\$ (928,035)</u>

[1] Other revenue includes other operating revenues and other nonoperating revenues for the Sewer Operations Fund. Amounts will not match combining schedules as other nonoperating is net of income and expenses.

[2] 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.

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

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	\$ (928,035)
Budgetary adjustments to financial reporting basis	
Pension delayed accounting election adjustments:	
Current year pension payments recorded as deferral	19,347,900
Prior year pension deferral accounted for in current year	13,321,630
Administrative fee prepaid adjustment	726,866
Debt service	111,094,949
BC Note obligation	458,757
Regional system lease	6,974,619
Water Residential Assistance Program (WRAP)	(4,924,876)
Improvement & Extension Fund transfers	26,236,800
GASB 87 & GASB 96 adjustments	719,860
Nonbudgeted financial reporting adjustments	
Depreciation and amortization	(163,910,542)
Amortization - debt related	(10,579,542)
Improvement & Extension Fund operating expenses	(5,167,616)
Investment earnings on bond funds in Construction Fund	6,964,460
Investment earnings unrealized gain (loss)	1,414,597
Other nonoperating income (expenses)	(1,614,723)
Capital contribution	2,176,000
Change in Net Position per Statement of Revenues, Expenses and Changes in Net Position	\$ 2,311,104

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SEWER 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 Sewer I&E Fund. The Sewer I&E Fund experienced an increase of \$20.6 million in net position and a positive budget variance of approximately \$0.5 million.

	Adopted Budget	Amended Budget	Actual [4]	Variance Over (Under) Amended Budget
Inflows				
Transfers in from Sewer Operations Fund				
Revenue transfers	\$ 39,342,500	\$ 26,236,800	\$ 26,236,800	\$ -
Transfers in from Sewer Construction Fund				
Working capital adjustment [1]	-	7,410,800	7,410,807	7
Other nonoperating revenue - grants	-	-	46,996	46,996
Investment earnings [2]	-	3,395,700	2,533,262	(862,438)
Total Inflows	<u>39,342,500</u>	<u>37,043,300</u>	<u>36,227,865</u>	<u>(815,435)</u>
Outflows				
Capital spending other (net operating expenses)	-	7,748,000	5,167,616	(2,580,384)
Capital outlay	18,447,100	6,630,700	7,170,586	539,886
Transfers out to Sewer Operations Fund				
GASB 96 expenditures [3]	-	-	1,622,671	1,622,671
Investment earnings [2]	-	3,395,700	2,506,062	(889,638)
Transfer out to Sewer Construction Fund				
Revenue financed capital	26,444,900	-	-	-
Total Outflows	<u>44,892,000</u>	<u>17,774,400</u>	<u>16,466,935</u>	<u>(1,307,465)</u>
Net Increase (Decrease) - Budget Basis	<u>\$ (5,549,500)</u>	<u>\$ 19,268,900</u>	<u>19,760,930</u>	<u>\$ 492,030</u>
Non-budgeted inflows (outflows)				
Unrealized net increase in fair value of investments			734,651	
Other			79	
Other transfers in			100,686	
Combining Schedule Sewer Improvement and Extension Fund Change in Net Position [4]			<u>\$ 20,596,346</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 Sewer 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 - Sewage Disposal Fund. Information in this schedule is based on activity in the Sewer Improvement and Extension Fund.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SEWER 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 Sewer Construction Fund. The Sewer Construction Fund had an increase of \$141.6 million in net position and a positive budget variance of approximately \$2.3 million.

	Adopted Budget	Amended Budget	Actual [4]	Variance Over (Under) Amended Budget
Inflows				
Transfers in from Sewer Improvement & Extension Fund				
Revenue financed capital	\$ 26,444,900	\$ -	\$ -	\$ -
Transfers in from Sewer Operations Fund				
Bond proceeds	-	225,000,000	218,550,892	(6,449,108)
Reserve release	-	-	7,303,668	7,303,668
State revolving loans	18,720,000	20,000,000	17,712,417	(2,287,583)
Contributed capital		2,176,000	-	(2,176,000)
Proceeds sale of asset [1]	-	1,140,700	1,140,682	(18)
Other nonoperating revenue - grants	-	-	180,000	180,000
Investment earnings [2]	86,200	4,803,800	7,220,881	2,417,081
Total Inflows	<u>45,251,100</u>	<u>253,120,500</u>	<u>252,108,540</u>	<u>(1,011,960)</u>
Outflows				
Capital projects	94,449,000	106,220,300	102,028,356	(4,191,944)
Transfers out to Sewer Operations Fund				
Investment earnings [2]	-	-	62,665	62,665
Bond cost of issuance	-	-	831,251	831,251
Transfers out to Sewer Improvement & Extension Fund				
Working capital adjustment [3]	-	7,410,800	7,410,807	7
Total Outflows	<u>94,449,000</u>	<u>113,631,100</u>	<u>110,333,079</u>	<u>(3,298,021)</u>
Net Increase (Decrease) - Budget Basis	<u>\$ (49,197,900)</u>	<u>\$ 139,489,400</u>	<u>141,775,461</u>	<u>\$ 2,286,061</u>
Non-budgeted inflows (outflows)				
Unrealized net decrease in fair value of investments			(171,723)	
Combining Schedule Sewer Construction Fund Change in Net Position [4]			<u>\$ 141,603,738</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 - Sewage Disposal Fund. Information in this schedule is based on activity in the Sewer Construction Fund.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SCHEDULE OF DAYS CASH - LIQUIDITY

For the Fiscal Years Ended June

	2023	2022	2021	2020	2019	2018	2017	2016*
Cash and investments - Unrestricted	\$ 302,269,621	\$ 294,173,630	\$ 323,972,718	\$ 287,464,920	\$ 236,057,128	\$ 208,563,268	\$ 205,179,312	\$ 188,063,375
Operating Expense								
Operating expense	\$ 375,566,668	\$ 345,372,010	\$ 328,983,415	\$ 329,870,427	\$ 342,585,175	\$ 363,629,987	\$ 336,946,731	\$ 170,401,050
Less: depreciation	(163,470,838)	(158,013,629)	(150,772,065)	(152,920,967)	(168,544,370)	(187,250,583)	(185,628,465)	(86,021,029)
Less: amortization of intangible asset	(439,704)	(439,704)	(109,926)	-	-	-	-	-
Net Operating Expense	\$ 211,656,126	\$ 186,918,677	\$ 178,101,424	\$ 176,949,460	\$ 174,040,805	\$ 176,379,404	\$ 151,318,266	\$ 84,380,021
Operating Expense per Day (365 days)	\$ 579,880	\$ 512,106	\$ 487,949	\$ 484,793	\$ 476,824	\$ 483,231	\$ 414,571	\$ 466,188
Number of days cash	521	574	664	593	495	432	495	403

* 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 SEWAGE DISPOSAL 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 Sewage Disposal Fund. The following describes the three funds and the purpose of each fund.

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

Sewer Improvement & Extension Fund (I&E) – Amounts that are budgeted in the wastewater revenue requirement to reduce debt financing are transferred to this fund as well as any other wastewater funds that management has determined are available for this use. This fund is used for wastewater 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.

Sewer Construction Fund – This fund is used for the proceeds of sewer 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 the wastewater system capital improvements in accordance with the debt obligations.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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

Note 2 – Budget to Actual Schedules

Schedule of Operating Expenses – Budget to Actual

The schedule of operating expenses for the sewer 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 Sewer Operations Fund reported in the Combining Schedule of Revenues, Expenses and Changes in Net position for the Sewage Disposal Fund. The warehouse lease line represents the total lease payments made for the warehouse which is included in the budget as an operating lease. For financial reporting purposes the warehouse payments are treated as a reduction in the lease liability and interest expense (which is a nonoperating expense). 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 87 and 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 Sewer 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.

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 SEWAGE DISPOSAL FUND

SCHEDULE OF NET POSITION - SEWAGE DISPOSAL FUND

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Assets								
Current Assets								
Cash and cash equivalents	\$ 260,110,098	\$ 200,464,397	\$ 191,584,705	\$ 119,569,724	\$ 160,371,766	\$ 199,056,556	\$ 203,748,704	\$ 156,022,295
Restricted cash and cash equivalents	137,098,372	38,574,227	85,509,014	26,060,277	95,931,528	54,832,050	72,213,813	81,181,424
Restricted cash for the benefit of DWSD	24,989,273	9,098,348	2,919,797	-	627,919	-	-	51,648
Investments	42,159,523	93,709,233	132,388,013	167,895,196	75,685,362	9,506,712	1,430,608	32,041,080
Restricted investments	33,698,337	73,042,550	28,758,582	87,066,562	33,384,445	31,790,386	31,371,834	28,843,000
Receivables								
Billed	55,950,458	64,722,773	59,552,759	56,390,056	60,549,471	50,439,450	52,234,778	48,046,934
Unbilled	24,240,500	24,045,449	24,320,796	23,861,029	24,297,140	25,200,108	24,279,170	23,037,391
Other	115,479	996,875	489,412	95,376	221,452	3,723,036	3,157,050	92,748,989
Allowance for doubtful accounts	(42,620,781)	(42,906,498)	(39,321,754)	(36,357,891)	(34,802,168)	(32,863,001)	(30,410,232)	(98,968,630)
Due from other governments	6,095,717	2,208,272	1,351,111	11,459,398	179,585	24,339,106	29,461,328	66,202,143
Due from other funds	2,214,714	-	162,368	-	12,568	3,447,927	-	65,971
Contractual obligation receivable	16,060,725	15,403,674	14,637,184	14,041,327	12,089,779	11,253,800	11,262,300	5,077,675
Shortfall receivable - DWSD	-	-	8,296,578	18,206,431	17,542,669	9,367,355	-	-
Prepaid items and other assets	5,678,605	4,920,898	4,143,303	3,691,723	2,801,271	1,683,659	1,089,521	407,359
Inventories	10,649,496	8,366,771	7,000,631	6,370,587	5,445,981	8,471,626	8,509,454	9,984,063
Total Current Assets	<u>576,440,516</u>	<u>492,646,969</u>	<u>521,792,499</u>	<u>498,349,795</u>	<u>454,338,768</u>	<u>400,248,770</u>	<u>408,348,328</u>	<u>444,741,342</u>
Noncurrent Assets								
Restricted cash and cash equivalents	66,482,098	2,491,300	2,876,374	27,014,187	62,030,778	30,001,353	128,378,837	155,488,780
Restricted investments	112,322,569	31,184,328	29,882,148	29,048,921	73,903,089	143,261,763	81,177,748	62,186,734
Contractual obligation receivable	354,229,111	369,794,921	384,718,443	399,355,626	414,766,953	335,574,500	346,828,300	366,254,075
Shortfall receivable - DWSD	-	-	-	8,296,578	26,503,010	19,932,645	-	-
Prepaid lease	13,750,000	13,750,000	13,750,000	13,750,000	13,750,000	13,750,000	13,750,000	-
Capital assets								
Nondepreciable/nonamortizable	418,201,364	320,526,307	315,474,451	300,868,836	318,574,902	271,362,100	278,286,118	295,876,258
Depreciated/amortized, net	1,989,243,893	2,142,771,572	2,225,906,341	2,298,917,647	2,357,018,353	2,485,098,172	2,591,023,442	2,699,891,145
Prepaid insurance on debt	9,147,648	10,124,011	11,053,199	12,030,061	13,880,254	16,931,255	18,581,897	27,822,085
Total Noncurrent Assets	<u>2,963,376,683</u>	<u>2,890,642,439</u>	<u>2,983,660,956</u>	<u>3,089,281,856</u>	<u>3,280,427,339</u>	<u>3,315,911,788</u>	<u>3,458,026,342</u>	<u>3,607,519,077</u>
Total Assets	<u>3,539,817,199</u>	<u>3,383,289,408</u>	<u>3,505,453,455</u>	<u>3,587,631,651</u>	<u>3,734,766,107</u>	<u>3,716,160,558</u>	<u>3,866,374,670</u>	<u>4,052,260,419</u>
Deferred Outflows of Resources								
Deferred charge on refunding	94,632,191	110,341,248	118,709,227	127,077,205	159,370,167	186,544,140	198,351,942	212,147,508
Deferred pension amounts	30,616,652	19,347,900	39,574,610	27,368,710	20,347,789	33,369,917	38,462,972	24,376,481
Total Deferred Outflows of Resources	<u>125,248,843</u>	<u>129,689,148</u>	<u>158,283,837</u>	<u>154,445,915</u>	<u>179,717,956</u>	<u>219,914,057</u>	<u>236,814,914</u>	<u>236,523,989</u>

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Liabilities								
Current Liabilities								
Accounts and contracts payable	\$ 53,101,194	\$ 37,488,263	\$ 32,182,085	\$ 30,838,950	\$ 38,004,322	\$ 34,077,602	\$ 27,546,558	\$ 36,152,087
Accrued salaries, wages and benefits	305,601	1,013,356	1,136,565	-	-	-	-	-
Accrued liabilities	28,840,076	9,743,206	4,615,255	-	627,919	-	898,800	674,458
Due to other governments	3,750,000	3,750,000	3,750,000	1,750,000	-	47,539	35,848,573	24,225,013
Due to other funds	1,032,754	2,328,086	2,786,344	2,134,191	2,876,954	330,293	-	-
Interest payable	40,400,733	34,566,553	35,189,612	27,565,045	44,130,602	41,108,994	41,011,198	43,912,888
Current portion of:								
Revenue bonds and loans	87,393,258	87,312,545	87,409,283	88,939,460	88,357,662	61,186,207	65,920,307	60,902,189
BC Note obligation	481,694	458,756	436,911	416,105	396,291	377,419	359,448	342,331
Regional system lease	7,245,904	6,950,466	6,667,073	6,395,235	6,134,481	5,884,359	5,644,435	5,414,293
Other liabilities	<u>25,439,622</u>	<u>3,435,863</u>	<u>2,743,360</u>	<u>1,049,422</u>	<u>813,439</u>	<u>1,051,478</u>	<u>4,531,322</u>	<u>1,114,045</u>
Total Current Liabilities	<u>247,990,836</u>	<u>187,047,094</u>	<u>176,916,488</u>	<u>159,088,408</u>	<u>181,341,670</u>	<u>144,063,891</u>	<u>181,760,641</u>	<u>172,737,304</u>
Noncurrent Liabilities								
Revenue bonds and loans	2,899,287,729	2,790,722,856	2,912,505,035	3,015,182,999	3,163,394,353	3,168,566,028	3,236,016,730	3,387,291,190
BC Note obligation	36,268,418	36,750,113	37,208,869	37,645,781	38,061,886	38,458,178	38,835,597	39,195,045
Regional system lease	481,759,905	489,005,809	495,956,275	502,623,348	509,018,588	515,153,064	521,037,424	526,681,859
Other liabilities	29,864,963	16,989,290	17,376,059	13,917,291	13,791,681	13,503,540	6,170,701	36,217,981
Net pension liability	<u>40,528,802</u>	<u>41,841,847</u>	<u>92,577,019</u>	<u>85,266,515</u>	<u>84,670,705</u>	<u>114,810,555</u>	<u>124,506,503</u>	<u>109,208,359</u>
Total Noncurrent Liabilities	<u>3,487,709,817</u>	<u>3,375,309,915</u>	<u>3,555,623,257</u>	<u>3,654,635,934</u>	<u>3,808,937,213</u>	<u>3,850,491,365</u>	<u>3,926,566,955</u>	<u>4,098,594,434</u>
Total Liabilities	<u>3,735,700,653</u>	<u>3,562,357,009</u>	<u>3,732,539,745</u>	<u>3,813,724,342</u>	<u>3,990,278,883</u>	<u>3,994,555,256</u>	<u>4,108,327,596</u>	<u>4,271,331,738</u>
Deferred Inflows of Resources								
Deferred gain on refunding	37,087,199	40,566,648	44,046,097	47,525,546	47,982,938	46,654,836	49,257,784	-
Deferred amounts for swap terminations	377	457	18,041	35,625	165,223	189,808	214,393	238,978
Deferred capital contribution	-	-	-	5,960,000	-	-	-	-
Deferred pension amounts	<u>-</u>	<u>20,087,733</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>12,994,118</u>	<u>11,750,654</u>	<u>27,805,977</u>
Total Deferred Inflows of Resources	<u>37,087,576</u>	<u>60,654,838</u>	<u>44,064,138</u>	<u>53,521,171</u>	<u>48,148,161</u>	<u>59,838,762</u>	<u>61,222,831</u>	<u>28,044,955</u>
Net Position (Deficit)								
Net investment in capital assets	(138,162,246)	(85,551,623)	(110,660,463)	(113,359,960)	(62,382,494)	34,412,661	142,699,532	220,388,158
Restricted for construction	2,180,985	-	-	-	-	-	-	-
Restricted for debt service	91,296,778	91,754,608	90,855,751	85,803,313	117,246,259	101,996,536	107,931,677	108,793,840
Restricted for payment assistance program	2,362,658	7,045,715	6,428,815	5,233,710	4,631,494	3,308,896	3,117,744	2,052,550
Unrestricted	<u>(65,400,362)</u>	<u>(123,281,991)</u>	<u>(99,490,694)</u>	<u>(102,845,010)</u>	<u>(183,438,240)</u>	<u>(258,037,496)</u>	<u>(320,109,796)</u>	<u>(341,826,833)</u>
TOTAL NET POSITION (DEFICIT)	<u>\$ (107,722,187)</u>	<u>\$ (110,033,291)</u>	<u>\$ (112,866,591)</u>	<u>\$ (125,167,947)</u>	<u>\$ (123,942,981)</u>	<u>\$ (118,319,403)</u>	<u>\$ (66,360,843)</u>	<u>\$ (10,592,285)</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 SEWAGE DISPOSAL FUND

CHANGES IN NET POSITION - SEWAGE DISPOSAL FUND

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016*
Operating Revenues								
Wholesale customer charges	\$ 275,917,502	\$ 268,813,369	\$ 267,567,816	\$ 266,003,286	\$ 272,772,460	\$ 268,978,831	\$ 263,311,745	\$ 121,106,353
Local system charges	191,042,200	188,662,200	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	95,826,900
Industrial waste charges	8,393,103	8,300,278	8,004,939	7,854,593	9,106,274	14,334,979	14,381,106	6,910,192
Pollutant surcharges	4,894,567	5,181,816	6,719,964	6,448,508	5,932,550	6,908,404	5,206,294	2,423,910
Bad debt recovery	-	-	-	-	-	-	35,065,030	-
Other revenues	1,660,020	429,491	501,121	521,957	506,323	4,391,145	538,807	4,197,614
Total Operating Revenues	481,907,392	471,387,154	470,753,540	466,635,644	469,476,907	473,582,559	505,807,082	230,464,969
Operating Expenses								
Personnel	65,952,676	62,160,768	63,055,636	60,320,195	56,503,053	53,680,162	47,894,911	13,289,741
Contractual services	64,129,786	63,410,109	62,913,214	63,350,953	58,660,680	64,082,761	55,878,440	13,875,756
Utilities	43,839,991	30,930,459	23,921,428	23,432,981	25,147,527	26,823,299	27,191,866	12,668,942
Chemicals	17,852,397	12,593,379	7,953,995	8,672,406	8,187,033	8,073,045	9,424,428	4,006,941
Supplies and other expenses	22,645,561	19,911,985	21,938,081	23,393,081	25,323,636	24,982,773	12,180,128	16,462,711
Capital adjustment	-	-	-	-	2,258,351	-	-	-
Capital program allocation	(1,017,340)	(1,013,677)	(1,068,749)	(1,183,398)	(1,325,842)	(969,671)	(1,150,316)	-
Intergovernmental reimbursements	(1,746,945)	(1,074,346)	(612,181)	(1,036,758)	(713,633)	(292,965)	(101,191)	-
Centralized services	-	-	-	-	-	-	-	16,733,431
Administrative services	-	-	-	-	-	-	-	7,342,499
Depreciation	163,470,838	158,013,629	150,772,065	152,920,967	168,544,370	187,250,583	185,628,465	86,021,029
Amortization of intangible assets	439,704	439,704	109,926	-	-	-	-	-
Total Operating Expenses	375,566,668	345,372,010	328,983,415	329,870,427	342,585,175	363,629,987	336,946,731	170,401,050
Operating Income	106,340,724	126,015,144	141,770,125	136,765,217	126,891,732	109,952,572	168,860,351	60,063,919
Nonoperating Revenues (Expenses)								
Earnings (loss) on investments	20,877,345	(3,022,882)	490,706	11,671,932	11,763,401	5,266,255	2,209,872	1,089,367
Interest on obligations receivable	16,397,278	17,157,558	18,247,607	19,489,018	18,856,322	15,505,300	17,062,678	8,831,250
Interest expense	(140,129,194)	(131,110,125)	(135,227,647)	(155,410,235)	(159,893,300)	(161,052,102)	(159,157,152)	(82,489,347)
Amortization of debt related items and COI	(10,579,542)	(2,292,419)	(3,022,639)	(3,956,009)	(6,776,707)	(5,153,300)	(17,340,200)	(363,167)
Legacy pension recovery (expense)	13,321,630	(8,927,171)	(14,452,504)	(12,922,789)	10,763,940	(15,988,471)	(4,504,230)	-
Water Residential Assistance Program	(7,319,076)	(1,742,929)	(924,247)	(1,921,938)	(1,168,664)	(2,248,980)	(1,243,006)	-
Other	1,225,939	(234,915)	(540,045)	(900,162)	466,898	1,760,166	(498,896)	275,693
Sewer lookback - MOU adjustment	-	-	-	-	(6,527,200)	-	-	-
Total Nonoperating Expenses	(106,205,620)	(130,172,883)	(135,428,769)	(143,950,183)	(132,515,310)	(161,911,132)	(163,470,934)	(72,656,204)
Income (loss) before capital contributions and special item	135,104	(4,157,739)	6,341,356	(7,184,966)	(5,623,578)	(51,958,560)	5,389,417	(12,592,285)
Capital Contributions	2,176,000	6,991,039	5,960,000	5,960,000	-	-	320,707	2,000,000
Special Item - MOU with DWSD	-	-	-	-	-	-	(61,478,682)	-
Change in Net Position	2,311,104	2,833,300	12,301,356	(1,224,966)	(5,623,578)	(51,958,560)	(55,768,558)	(10,592,285)
NET POSITION (DEFICIT), Beginning of Year	(110,033,291)	(112,866,591)	(125,167,947)	(123,942,981)	(118,319,403)	(66,360,843)	(10,592,285)	-
NET POSITION (DEFICIT), END OF YEAR	\$ (107,722,187)	\$ (110,033,291)	\$ (112,866,591)	\$ (125,167,947)	\$ (123,942,981)	\$ (118,319,403)	\$ (66,360,843)	\$ (10,592,285)

* 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 SEWAGE DISPOSAL 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]	\$ 500,627,000	\$ 481,372,100	\$ 475,429,200	\$ 486,751,300	\$ 480,605,300	\$ 470,156,000	\$ 465,500,100	\$ 464,078,500	\$ 446,229,300
Percent change in budgeted revenue requirement	4.0%	1.3%	-2.3%	1.3%	2.2%	1.0%	0.3%	4.0%	4.0%
Average annual charge adjustment [2]									
Total regional system	2.75%	2.4%	-0.6%	2.0%	0.8%	0.1%	-0.7%	8.3%	n/a [6]
Suburban wholesale	2.6%	3.2%	-0.1%	1.7%	-0.1%	1.3%	1.8%	4.9%	-1.1%
Local system charge [3]	2.8%	1.2%	-0.7%	2.3%	2.5%	1.2%	-4.2%	13.9%	n/a [6]
Number of wholesale sewer customers [4]	18	18	18	18	18	18	18	18	21

[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 \$5.5 million for sewer. 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.

[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 SEWAGE DISPOSAL FUND

SEWAGE DISPOSAL FUND OPERATING REVENUES / LARGEST SEWER CUSTOMERS

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016*
Operating Revenues								
Suburban wholesale charges [1]	\$ 275,917,502	\$ 268,813,369	\$ 267,567,816	\$ 266,003,286	\$ 272,772,460	\$ 268,978,831	\$ 263,311,745	\$ 121,106,353
Local system charges	191,042,200	188,662,200	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	95,826,900
Industrial waste and surcharges	13,287,670	13,482,094	14,724,903	14,303,101	15,038,824	21,243,383	19,587,400	9,334,102
Bad debt recovery	-	-	-	-	-	-	35,065,030	-
Other revenue	1,660,020	429,491	501,121	521,957	506,323	4,391,145	538,807	4,197,614
Total Operating Revenues	\$ 481,907,392	\$ 471,387,154	\$ 470,753,540	\$ 466,635,644	\$ 469,476,907	\$ 473,582,559	\$ 505,807,082	\$ 230,464,969
Suburban wholesale charges % of total operating revenue	57.26%	57.03%	56.84%	57.00%	58.10%	56.80%	52.06%	52.55%
Local system charges % of total operating revenue	39.64%	40.02%	39.93%	39.82%	38.59%	37.79%	37.03%	41.58%
Ten Largest Suburban Wholesale Member Partners								
Oakland-Macomb Interceptor Drainage District	\$ 71,614,874	\$ 70,683,993	\$ 70,355,029	\$ 69,870,786	\$ 77,533,200	\$ 72,816,000	\$ 69,627,600	\$ 34,541,400
Wayne County - Rouge Valley	55,930,800	55,267,200	54,536,400	54,162,000	53,761,200	55,022,400	55,486,800	25,901,400
Oakland County - George W Kuhn Drainage District	46,377,600	45,828,000	45,558,000	45,264,000	44,972,400	45,751,200	45,682,800	21,410,400
Evergreen Farmington	36,195,600	35,766,000	35,084,400	34,839,600	34,578,000	33,733,200	32,179,200	15,094,200
Southeast Macomb Sanitary District	25,070,400	24,772,800	25,000,800	24,837,600	24,672,000	24,637,200	24,120,000	11,501,400
Dearborn	20,299,200	20,058,000	19,628,400	19,502,400	19,372,800	19,628,400	19,603,200	8,049,000
Highland Park	5,420,400	5,356,800	5,708,400	5,670,000	5,614,800	5,642,400	5,818,800	2,808,600
Hamtramck	4,041,600	3,993,600	4,019,400	3,994,800	3,962,400	3,958,800	4,086,000	1,966,800
Grosse Pointe Farms	2,748,000	2,715,600	2,769,000	2,750,400	2,727,600	2,696,400	2,667,600	1,243,800
Grosse Pointe Park	1,904,400	1,882,800	1,824,000	1,812,000	1,801,200	1,740,000	1,626,000	746,400
Total Revenue Ten Largest Suburban Wholesale Member Partners	\$ 269,602,874	\$ 266,324,793	\$ 264,483,829	\$ 262,703,586	\$ 268,995,600	\$ 265,626,000	\$ 260,898,000	\$ 123,263,400
Ten largest suburban wholesale member partners % of total operating revenues	55.94%	56.50%	56.18%	56.30%	57.30%	56.09%	51.58%	53.48%

[1] Net of bad debt expense.

* 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 SEWAGE DISPOSAL FUND**SEWAGE DISPOSAL SYSTEM SERVICE CHARGES***

Community Name	Fixed Monthly Charge
Oakland-Macomb Interceptor District (OMID)	\$ 5,942,700
Rouge Valley	4,660,900
Oakland County - George W. Kuhn (GWK)	3,864,800
Evergreen Farmington	3,016,300
SE Macomb Sanitary District	2,089,200
Dearborn	1,691,600
Grosse Pointe Farms	229,000
Grosse Pointe Park	158,700
Melvindale	131,200
Farmington	99,900
Center Line	86,900
Allen Park	70,700
Highland Park	451,700
Hamtramck	336,800
Grosse Pointe	75,000
Harper Woods	18,200
Redford Township	22,600
Wayne County #3	4,400

Annual Detroit Wholesale Revenue Requirement \$191,042,200

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND
INDUSTRIAL WASTE CONTROL CHARGES AND POLLUTANT SURCHARGES
EFFECTIVE JULY 1, 2022

Industrial Waste Control Charges

Meter size (inches)	Admin Only Charge (1)	Monthly Charge (2)
5/8	\$ 0.90	\$ 3.58
3/4	\$ 1.34	\$ 5.37
1	\$ 2.24	\$ 8.95
1 1/2	\$ 4.92	\$ 19.69
2	\$ 7.16	\$ 28.64
3	\$ 12.98	\$ 51.91
4	\$ 17.90	\$ 71.60
6	\$ 26.85	\$ 107.40
8	\$ 44.75	\$ 179.00
10	\$ 62.65	\$ 250.60
12	\$ 71.60	\$ 286.40
14	\$ 89.50	\$ 358.00
16	\$ 107.40	\$ 429.60
18	\$ 125.30	\$ 501.20
20	\$ 143.20	\$ 572.80
24	\$ 161.10	\$ 644.40
30	\$ 179.00	\$ 716.00
36	\$ 196.90	\$ 787.60
48	\$ 214.80	\$ 859.20

- (1) Administration only charge is applicable to member partners that are within a geographical area defined in a specific agreement.
- (2) Includes both administration and field work components charges for all other member partners.

Pollutant Surcharges

Pollutant		Charge per Pound
Biochemical Oxygen Demand (BOD)	for concentrations > 275 mg/l	\$ 0.351
Total Suspended Solids (TSS)	for concentrations > 350 mg/l	\$ 0.482
Phosphorus (P)	for concentrations > 12 mg/l	\$ 6.448
Fats, Oil and Grease (FOG)	for concentrations > 100 mg/l	\$ 0.112
Septage Disposal Fee	per 500 gallons of disposal	\$ 36.00

This page intentionally left blank.

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 SEWAGE DISPOSAL FUND

RATIOS OF OUTSTANDING DEBT BY TYPE

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Revenue bonds [1]	\$ 2,636,761,869	\$ 2,498,387,185	\$ 2,577,642,399	\$ 2,643,788,368	\$ 2,764,196,915	\$ 2,739,090,653	\$ 2,797,168,264	\$ 2,922,089,599
Capital appreciation bonds [1]	-	-	5,504,069	10,667,560	13,377,972	14,984,042	19,501,737	19,668,138
State revolving loans	349,919,118	379,648,216	416,767,850	449,666,531	474,177,128	475,677,540	485,267,036	506,435,742
BC Note obligation	36,750,112	37,208,869	37,645,780	38,061,886	38,458,177	38,835,597	39,195,045	39,537,376
Total Sewage Disposal Fund	\$ 3,023,431,099	\$ 2,915,244,270	\$ 3,037,560,098	\$ 3,142,184,345	\$ 3,290,210,192	\$ 3,268,587,832	\$ 3,341,132,082	\$ 3,487,730,855
Total taxable value [2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total population served [3]:								
Sewage disposal	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
Total debt per capita:								
Sewage disposal	\$ 1,080	\$ 1,041	\$ 1,085	\$ 1,122	\$ 1,175	\$ 1,167	\$ 1,193	\$ 1,246
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:								
Sewage disposal	1.63%	1.67%	1.78%	1.94%	2.20%	2.25%	2.40%	2.56%

[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 SEWAGE DISPOSAL FUND

DEBT BY LIEN
As of June 30, 2023

Continued on Next Page

	Original Principal Amount [1]	Outstanding as of June 30, 2023
Sewage Disposal System Revenue Bonds		
Senior Lien Bonds		
Sewage Disposal System Senior Lien Revenue Bonds, Series 2003B	\$ 150,000,000	\$ 100,000
Sewage Disposal System Senior Lien Revenue Refunding Bonds, Series 2004A	101,435,000	11,095,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2006D	370,000,000	239,475,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014C-3	446,170,000	347,585,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014C-6	143,880,000	88,900,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B	126,105,000	126,105,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018A	81,595,000	77,345,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018B	131,690,000	131,690,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018C	44,180,000	31,260,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2020A	594,930,000	594,930,000
Sewage Disposal System Senior Lien Revenue Bonds, Series 2022A	125,975,000	125,975,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2022C	12,490,000	12,490,000
Total Senior Lien Bonds	<u>2,328,450,000</u>	<u>1,786,950,000</u>
Second Lien Bonds		
Sewage Disposal System Second Lien Revenue Bonds, Series 2001B	110,550,000	78,895,000
Sewage Disposal System Revenue Second Lien Bonds, Series 2005A	273,355,000	100,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2005C	63,160,000	100,000
Sewage Disposal System Revenue Second Lien Bonds, Series 2006B	250,000,000	100,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2014C-7	76,715,000	48,800,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2015C	197,660,000	197,160,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C	295,190,000	295,190,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2020B	92,525,000	81,850,000
Sewage Disposal System Revenue Second Lien Bonds, Series 2022B	71,990,000	71,990,000
Total Second Lien Bonds	<u>1,431,145,000</u>	<u>774,185,000</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

DEBT BY LIEN
As of June 30, 2023

Continued From Previous Page

	Original Principal Amount [1]	Outstanding as of June 30, 2023
Sewage Disposal System Revenue Bonds (cont.)		
SRF Junior Lien Bonds		
Sewage Disposal System Revenue Bonds, Series 2001 SRF-1	\$ 82,200,000	\$ 10,190,000
Sewage Disposal System Revenue Bonds, Series 2001 SRF-2	59,850,000	7,420,000
Sewage Disposal System Revenue Bonds, Series 2002 SRF-3	31,549,466	3,594,466
Sewage Disposal System Revenue Bonds, Series 2003 SRF-1	48,520,000	8,910,000
Sewage Disposal System Revenue Bonds, Series 2003 SRF-2	25,055,370	3,080,370
Sewage Disposal System Revenue Bonds, Series 2004 SRF-1	2,910,000	350,000
Sewage Disposal System Revenue Bonds, Series 2004 SRF-2	18,353,459	2,203,459
Sewage Disposal System Revenue Bonds, Series 2004 SRF-3	12,722,575	1,517,575
Sewage Disposal System Revenue Bonds, Series 2007 SRF-1	167,540,598	64,885,598
Sewage Disposal System Revenue Bonds, Series 2009 SRF-1	13,970,062	5,500,062
Sewage Disposal System Revenue Bonds, Series 2010 SRF-1	4,214,763	1,910,763
Sewage Disposal System Revenue Bonds, Series 2012 SRF-1	14,950,000	9,840,000
Sewage Disposal System Revenue Bonds, Series 2015A SRF	79,500,000	56,015,000
Sewage Disposal System Revenue Bonds, Series 2015B SRF	27,175,304	18,795,304
Sewage Disposal System Revenue Bonds, Series 2015D SRF	15,321,478	10,391,478
Sewage Disposal System Revenue Bonds, Series 2016 SAW-1	10,000,000	8,380,000
Sewage Disposal System Revenue Bonds, Series 2016 SRF-1	15,463,628	12,133,628
Sewage Disposal System Revenue Bonds, Series 2016 SRF-2	48,315,683	40,045,683
Sewage Disposal System Revenue Bonds, Series 2017 SRF-1	33,566,682	28,196,682
Sewage Disposal System Revenue Bonds, Series 2018 SRF-2	17,510,000	17,510,000
Sewage Disposal System Revenue Bonds, Series 2020 SRF-1	28,350,000	22,086,744
Sewage Disposal System Revenue Bonds, Series 2020 SRF-2	3,232,000	843,067
Sewage Disposal System Revenue Bonds, Series 2021 SRF-1	12,940,000	7,438,078
Sewage Disposal System Revenue Bonds, Series 2021 SRF-2	6,881,250	-
Sewage Disposal System Revenue Bonds, Series 2022 SRF-1	34,195,000	-
Sewage Disposal System Revenue Bonds, Series 2022 SRF-2	50,245,000	5,630,308
Sewage Disposal System Revenue Bonds, Series 2022 SRF-3	19,035,000	3,050,853
Sewage Disposal System Revenue Bonds, Series 2023 SRF-1	88,820,000	-
Total SRF Junior Lien Bonds	<u>972,387,318</u>	<u>349,919,118</u>
TOTAL SEWAGE DISPOSAL SYSTEM REVENUE BONDS	<u>\$ 4,731,982,318</u>	<u>\$ 2,911,054,118</u>

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 Service
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	
2024 [2]	\$40,550	\$63,381	\$103,931	\$2,015	\$31,145	\$33,160	\$40,360	\$7,540	\$47,900	\$184,991
2025	82,615	71,810	154,425	16,035	36,809	52,844	44,156	6,620	50,776	258,045
2026	85,100	68,048	153,148	17,210	35,920	53,130	30,385	5,766	36,151	242,429
2027	91,115	63,742	154,857	21,260	34,898	56,158	27,170	5,154	32,324	243,339
2028	95,355	59,413	154,768	26,025	33,652	59,677	26,016	4,581	30,596	245,041
2029	102,795	54,948	157,743	27,170	32,255	59,425	25,908	4,028	29,936	247,104
2030	114,800	49,923	164,723	20,415	30,995	51,410	26,241	3,478	29,718	245,851
2031	109,495	44,603	154,098	33,130	29,620	62,750	16,096	2,998	19,093	235,942
2032	113,375	39,540	152,915	34,785	27,922	62,707	16,090	2,608	18,698	234,320
2033	131,210	34,797	166,007	22,555	26,489	49,044	16,500	2,219	18,719	233,770
2034	133,095	29,148	162,243	26,590	25,284	51,874	16,930	1,819	18,749	232,867
2035	54,305	24,658	78,963	113,150	22,119	135,269	17,400	1,410	18,810	233,041
2036	12,190	23,212	35,402	162,800	15,914	178,714	16,405	1,004	17,409	231,525
2037	12,530	22,809	35,339	170,230	8,174	178,404	8,790	641	9,431	223,174
2038	118,255	20,691	138,946	1,695	4,083	5,778	8,934	433	9,366	154,090
2039	118,130	16,904	135,034	5,695	3,922	9,617	8,112	220	8,333	152,984
2040	126,030	12,978	139,008	1,815	3,759	5,574	1,337	75	1,412	145,994
2041	32,680	10,250	42,930	1,880	3,692	5,572	1,010	52	1,062	49,564
2042	34,035	8,868	42,903	1,950	3,623	5,573	1,030	31	1,061	49,537
2043	35,450	7,425	42,875	2,020	3,552	5,572	1,050	11	1,061	49,507
2044	35,375	5,962	41,337	3,615	3,437	7,052	-	-	-	48,389
2045	36,615	4,479	41,094	3,775	3,278	7,053	-	-	-	48,147
2046	14,260	3,356	17,616	1,700	3,152	4,852	-	-	-	22,468
2047	15,000	2,599	17,599	1,795	3,061	4,856	-	-	-	22,454
2048	15,780	1,803	17,583	1,895	2,964	4,859	-	-	-	22,441
2049	9,025	1,164	10,189	9,485	2,653	12,138	-	-	-	22,327
2050	4,105	826	4,931	10,010	2,117	12,127	-	-	-	17,058
2051	4,325	605	4,930	10,565	1,551	12,116	-	-	-	17,046
2052	4,555	372	4,927	11,150	954	12,104	-	-	-	17,031
2053	4,800	126	4,926	11,770	324	12,094	-	-	-	17,020
Total	\$1,786,950	\$748,437	\$2,535,387	\$774,185	\$437,316	\$1,211,501	\$349,919	\$50,689	\$400,608	\$4,147,496

[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 SEWAGE DISPOSAL FUND
DEBT CREDIT RATING HISTORY

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016
Standard's & Poor's								
Senior Lien	AA-	AA-	AA-	AA-	A+	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 SEWAGE DISPOSAL 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 SEWAGE DISPOSAL FUND

DEBT SERVICE COVERAGE - GAAP BASIS - SEWAGE DISPOSAL SYSTEM

	Fiscal Year							
	2023	2022 [8]	2021	2020	2019	2018	2017	2016 [1]
GLWA Revenues								
Suburban Wholesale Customers	\$ 275,917,502	\$ 268,813,369	\$ 267,567,816	\$ 266,003,286	\$ 272,772,460	\$ 268,978,831	\$ 298,376,775	\$ 121,106,353
DWSD Local system charges	191,042,200	188,662,200	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	95,826,900
Industrial waste charges	8,393,103	8,300,278	8,004,939	7,854,593	9,106,274	14,334,979	14,381,106	6,910,192
Pollutant surcharges	4,894,567	5,181,816	6,719,964	6,448,508	5,932,550	6,908,404	5,206,294	2,423,910
Other Revenue	4,901,316	817,448	6,481,905	6,491,617	506,323	4,391,145	538,807	4,197,614
Earnings on investments [2]	12,498,292	1,842,475	2,802,041	7,775,080	9,592,270	4,022,582	1,384,225	586,072
Total GLWA Revenues	<u>497,646,980</u>	<u>473,617,586</u>	<u>479,536,365</u>	<u>480,380,384</u>	<u>479,069,177</u>	<u>477,605,141</u>	<u>507,191,307</u>	<u>231,051,041</u>
DWSD Local System Revenues [7]								
Local system revenues [3]	106,468,842	132,274,680	79,360,298	80,935,263	71,542,770	84,018,973	45,587,339	206,870,710
Other Revenue	286,763	1,797,906	915,216	914,969	346,821	159,535	4,617,148	(940,714)
Total DWSD Local System Revenues	<u>106,755,605</u>	<u>134,072,586</u>	<u>80,275,514</u>	<u>81,850,232</u>	<u>71,889,591</u>	<u>84,178,508</u>	<u>50,204,487</u>	<u>205,929,996</u>
Total Revenue	<u>604,402,585</u>	<u>607,690,172</u>	<u>559,811,879</u>	<u>562,230,616</u>	<u>550,958,768</u>	<u>561,783,649</u>	<u>557,395,794</u>	<u>436,981,037</u>
Operating Costs								
GLWA operating expenses	211,656,126	186,918,677	178,101,424	176,949,460	174,040,805	176,379,404	151,318,266	84,380,021
GASB 87 and GASB 96 expenditures [4]	2,464,377	1,041,308	118,759	-	-	-	-	-
O&M transfers:								
DWSD Local System operations	51,396,400	61,301,000	69,915,700	55,243,500	56,767,920	60,517,992	41,535,600	16,949,400
Legacy Pension Regional System [5]	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	5,412,000
Legacy Pension DWSD Local System [5]	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	1,428,000
Total Operating Costs	<u>279,196,903</u>	<u>262,940,985</u>	<u>261,815,883</u>	<u>245,872,960</u>	<u>244,488,725</u>	<u>250,577,396</u>	<u>206,533,866</u>	<u>108,169,421</u>
Pledged revenue	<u>\$ 325,205,682</u>	<u>\$ 344,749,187</u>	<u>\$ 297,995,996</u>	<u>\$ 316,357,656</u>	<u>\$ 306,470,043</u>	<u>\$ 311,206,253</u>	<u>\$ 350,861,928</u>	<u>\$ 328,811,616</u>
Principal and interest funding requirement [6]:								
Senior lien bonds	\$ 152,866,129	\$ 130,404,294	\$ 119,217,128	\$ 147,310,565	\$ 145,795,507	\$ 141,718,836	\$ 140,854,010	\$ 140,191,016
Second lien bonds	39,847,153	51,893,038	57,778,951	45,878,850	43,922,600	43,990,100	47,918,639	48,944,924
Total senior and second lien bonds	192,713,282	182,297,332	176,996,079	193,189,415	189,718,107	185,708,936	188,772,649	189,135,940
Junior lien bonds	50,145,516	53,550,614	53,166,797	52,593,843	49,454,156	46,571,896	45,782,165	39,434,631
Total All Bonds	<u>\$ 242,858,798</u>	<u>\$ 235,847,946</u>	<u>\$ 230,162,876</u>	<u>\$ 245,783,258</u>	<u>\$ 239,172,263</u>	<u>\$ 232,280,832</u>	<u>\$ 234,554,814</u>	<u>\$ 228,570,571</u>
GAAP Basis Debt Service Coverage								
Senior lien bonds	2.13	2.64	2.50	2.15	2.10	2.20	2.49	2.35
Senior and second lien bonds	1.69	1.89	1.68	1.64	1.62	1.68	1.86	1.74
All bonds, including SRF junior lien	1.34	1.46	1.29	1.29	1.28	1.34	1.50	1.44

[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 SEWAGE DISPOSAL FUND

DEBT SERVICE COVERAGE - RATE COVENANT BASIS - SEWAGE DISPOSAL SYSTEM

	Fiscal Year							
	2023	2022	2021	2020	2019	2018	2017	2016 [1]
GLWA Receipts								
Wholesale System receipts	\$ 297,751,807	\$ 281,636,430	\$ 288,132,728	\$ 293,321,993	\$ 281,485,522	\$ 294,503,834	\$ 281,528,551	
DWSD Local System charges	191,042,200	188,662,200	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	
Investment Earnings	10,094,409	1,680,667	2,739,425	5,372,063	5,098,922	2,796,727	372,505	
Total GLWA Receipts	498,888,416	471,979,297	478,831,853	484,501,356	467,743,744	476,269,761	469,205,156	
DWSD Local System Receipts	101,900,942	101,030,510	118,699,151	77,444,540	82,349,510	60,314,827	43,553,820	
Total Receipts	600,789,358	573,009,807	597,531,004	561,945,896	550,093,254	536,584,588	512,758,976	
Operations and Maintenance Transfers								
GLWA Regional System operations [2]	204,122,500	191,908,600	165,588,970	176,416,149	171,899,072	172,614,312	172,965,094	
DWSD Local System operations	51,396,400	61,301,000	69,915,700	55,243,500	56,767,920	60,517,992	41,535,600	
Legacy Pension Regional System [3]	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	
Legacy Pension DWSD Local System [3]	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	
Total Operations and Maintenance Transfers	269,198,900	266,889,600	249,184,670	245,339,649	242,346,992	246,812,304	228,180,694	
Pledged Revenue	\$ 331,590,458	\$ 306,120,207	\$ 348,346,334	\$ 316,606,247	\$ 307,746,262	\$ 289,772,284	\$ 284,578,282	
Principal and interest funding requirement [4]:								
Senior lien bonds	\$ 152,866,129	\$ 130,404,294	\$ 119,217,128	\$ 147,310,565	\$ 145,795,507	\$ 141,718,836	\$ 140,854,010	
Second lien bonds	39,847,153	51,893,038	57,778,951	45,878,850	43,922,600	43,990,100	47,918,639	
Total senior and second lien bonds	192,713,282	182,297,332	176,996,079	193,189,415	189,718,107	185,708,936	188,772,649	
Junior lien bonds	50,145,516	53,550,614	53,166,797	52,593,843	49,454,156	46,571,896	45,782,165	
Total All Bonds	\$ 242,858,798	\$ 235,847,946	\$ 230,162,876	\$ 245,783,258	\$ 239,172,263	\$ 232,280,832	\$ 234,554,814	
Rate Covenant Basis Debt Service Coverage								
Senior lien bonds	2.17	2.35	2.92	2.15	2.11	2.04	2.02	
Senior and second lien bonds	1.72	1.68	1.97	1.64	1.62	1.56	1.51	
All bonds, including SRF junior lien	1.37	1.30	1.51	1.29	1.29	1.25	1.21	

[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.

This page intentionally left blank.

DEMOGRAPHIC AND ECONOMIC INFORMATION

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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	2,800,000	3.7%	\$ 66,285 (4)	\$ 242,858,798	\$ 86.74	0.13%
2022	2,800,000	3.8%	62,274 (4)	235,847,946	84.23	0.14%
2021	2,800,000	6.2%	60,965	230,162,876	82.20	0.13%
2020	2,800,000	11.5%	57,755	245,783,258	87.78	0.15%
2019	2,800,000	4.3%	53,428	239,172,263	85.42	0.16%
2018	2,800,000	4.3%	51,823	232,280,832	82.96	0.16%
2017	2,800,000	4.6%	49,809	234,554,814	83.77	0.17%
2016 *	2,800,000	5.3%	48,605	228,570,571	81.63	0.17%
2015 *	2,807,000	5.9%	47,473	232,612,800	82.87	0.17%
2014 *	2,807,000	8.1%	44,884	229,611,100	81.80	0.18%

(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 SEWAGE DISPOSAL FUND

LARGEST EMPLOYERS

Current Year and 9 years prior

Employer	Type of Business	Fiscal Year 2023		Fiscal Year 2014			
		Full- Time Employees (a)	Rank	Percent of Total Employment (b)	Full- Time Employees (c)	Rank	Percent of Total Employment (d)
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 BSHS 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 SEWAGE DISPOSAL FUND

WASTEWATER VOLUMES (Mcf)

Fiscal Year	Wastewater Influent [1]	Customer Wastewater Volume [2]		"System" Volume [3]
		Metered Customers	Unmetered Customers [3]	
2023 *	26,039,900	11,684,200	8,381,700	5,974,000
2022	36,008,500	15,461,800	11,436,800	9,109,900
2021	27,543,700	11,859,700	8,918,200	6,765,800
2020	30,856,000	13,812,000	9,611,600	7,432,400
2019	34,080,800	14,658,300	10,891,500	8,531,000
2018	32,139,200	13,587,800	10,505,100	8,046,300
2017	33,623,600	14,141,100	10,805,100	8,677,400
2016 **	29,336,600	12,802,100	9,402,100	7,132,400

Wastewater volumes are monitored by GLWA operations and engineering teams throughout the year then go through a formal review and approval process over a period of six to nine months following the end of the fiscal year. The formal, annual, data analytic review is led by an outside consultant. As part of this process preliminary data is shared with customers to confirm. Current and historic data does change at times as system improvements are made and reporting refinements occur.

[1] Represents total influent volume to the System, including volumes treated and discharged at the Water Resource Recovery Facility and volumes discharged via Combined Sewer Overflow facilities.

[2] The GLWA Sewer Charge Methodology uses historical wastewater volumes to allocate annual revenue requirements to the member partners based on historical wastewater volumes, and recovers the allocated revenue requirements via fixed monthly charges.

[3] The GLWA Sewer Charge Methodology assigns a portion of the unmetered non-sanitary flow volume as a "system" responsibility allocable to all member partners. The remaining amount is assigned to unmetered customers, which includes the Local System and certain wholesale customers.

* Data is preliminary

** GLWA assumed operations on January 1, 2016. Data for 2016 includes six months of operation under City of Detroit Water and Sewerage Department (DWSD) and six months of operation under GLWA.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL 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 - Sewer								
Water Resource Recovery Facility	1	1	1	1	1	1	1	1
Major Interceptors	3	3	3	3	3	3	3	3
Pump Stations [1]	9	9	9	9	9	9	9	9
Combined Sewer Overflow Facilities:								
Retention Treatment Basins	5	5	5	5	5	5	5	5
Flow-through Type Facilities	3	3	3	3	3	3	3	3
Miles of Trunk Sewers and Interceptors	195	195	195	195	195	181	181	181
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>

[1] GLWA operates nine pump stations. This count includes four pump stations that are owned by DWSD and operated by GLWA under a shared services agreement.

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