

GLWA

Great Lakes Water Authority



Sewage Disposal Fund

Fiscal Year Ended June 30, 2021

*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*

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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Independent Auditors' Report

To the Board of Directors of
Great Lakes Water Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the Sewage Disposal Fund of the Great Lakes Water Authority (Sewage Disposal Fund), as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Sewage Disposal Fund's financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Sewage Disposal Fund of the Great Lakes Water Authority as of June 30, 2021, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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, 2021, and the changes in financial position, or cash flows thereof for the years 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.

Other Matters

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

Other Information

Our audit was conducted for the purpose of forming an opinion on the Sewage Disposal Fund financial statements. The statistical information as identified in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion or provide any assurance on it.

Prior-Year Comparative Information

We have previously audited the financial statements of the Sewage Disposal Fund, as of and for the year ended June 30, 2020, and we expressed an unmodified audit opinion on those statements. The summarized comparative information presented herein as of and for the year ended June 30, 2020, is consistent, in all material respects, with the audited financial statements from which it has derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have issued our report dated December 8, 2021 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 8, 2021

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

STATEMENT OF NET POSITION

As of June 30, 2021

With Comparative Amounts at June 30, 2020

	2021	2020
Assets		
Current Assets		
Cash and cash equivalents	\$ 191,584,705	\$ 119,569,724
Restricted cash and cash equivalents	85,509,014	26,060,277
Restricted cash for the benefit of DWSD	2,919,797	-
Investments	132,388,013	167,895,196
Restricted investments	28,758,582	87,066,562
Receivables, net	45,041,213	43,988,570
Due from other governments	1,351,111	11,459,398
Due from Water Fund	162,368	-
Contractual obligation receivable	14,637,184	14,041,327
Loan receivable - DWSD	8,296,578	18,206,431
Prepaid items and other assets	4,143,303	3,691,723
Inventories	7,000,631	6,370,587
Total Current Assets	<u>521,792,499</u>	<u>498,349,795</u>
Noncurrent Assets		
Restricted cash and cash equivalents	2,876,374	27,014,187
Restricted investments	29,882,148	29,048,921
Contractual obligation receivable	384,718,443	399,355,626
Loan receivable - DWSD	-	8,296,578
Prepaid lease	13,750,000	13,750,000
Assets not subject to depreciation	315,474,451	300,868,836
Capital assets being depreciated, net	2,221,472,660	2,298,917,647
Intangible assets, net	4,433,681	-
Prepaid insurance on debt	11,053,199	12,030,061
Total Noncurrent Assets	<u>2,983,660,956</u>	<u>3,089,281,856</u>
Total Assets	<u>3,505,453,455</u>	<u>3,587,631,651</u>
Deferred Outflows of Resources		
Deferred charge on refunding	118,709,227	127,077,205
Deferred pension amounts	<u>39,574,610</u>	<u>27,368,710</u>
Total Deferred Outflows of Resources	<u>158,283,837</u>	<u>154,445,915</u>

	2021	2020
Liabilities		
Current Liabilities		
Accounts and contracts payable	\$ 32,182,085	\$ 30,838,950
Accrued salaries, wages and benefits	1,136,565	-
Other accrued liabilities	4,615,255	-
Due to other governments	3,750,000	1,750,000
Due to Water Fund	2,786,344	2,134,191
Interest payable	35,189,612	27,565,045
Current portion of		
Revenue bonds and loans	87,409,283	88,939,460
Obligation payable	436,911	416,105
Regional system leases	6,667,073	6,395,235
Other liabilities	2,743,360	1,049,422
Total Current Liabilities	<u>176,916,488</u>	<u>159,088,408</u>
Noncurrent Liabilities		
Revenue bonds and loans	2,912,505,035	3,015,182,999
Obligation payable	37,208,869	37,645,781
Regional system leases	495,956,275	502,623,348
Other liabilities	17,376,059	13,917,291
Net pension liability	92,577,019	85,266,515
Total Noncurrent Liabilities	<u>3,555,623,257</u>	<u>3,654,635,934</u>
Total Liabilities	<u>3,732,539,745</u>	<u>3,813,724,342</u>
Deferred Inflows of Resources		
Deferred gain on refunding	44,046,097	47,525,546
Deferred amounts for swap terminations	18,041	35,625
Deferred capital contribution	-	5,960,000
Total Deferred Inflows of Resources	<u>44,064,138</u>	<u>53,521,171</u>
Net Position		
Net investment in capital assets	(110,660,463)	(113,359,960)
Restricted for debt service	90,855,751	85,803,313
Restricted for payment assistance program	6,428,815	5,233,710
Unrestricted (deficit)	<u>(99,490,694)</u>	<u>(102,845,010)</u>
TOTAL NET POSITION	<u>\$ (112,866,591)</u>	<u>\$ (125,167,947)</u>

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

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GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the Year Ended June 30, 2021

With Comparative Amounts for the Year Ended June 30, 2020

	2021	2020
Operating Revenues		
Wholesale customer charges	\$ 267,567,816	\$ 266,003,286
Local system charges	187,959,700	185,807,300
Industrial waste charges	8,004,939	7,854,593
Pollutant surcharges	6,719,964	6,448,508
Other revenues	501,121	521,957
Total Operating Revenues	<u>470,753,540</u>	<u>466,635,644</u>
Operating Expenses		
Operating expenses before depreciation and amortization		
Personnel	63,055,636	60,320,195
Contractual services	62,913,214	63,350,953
Utilities	23,921,428	23,432,981
Chemicals	7,953,995	8,672,406
Supplies and other expenses	21,938,081	23,393,081
Capital program allocation	(1,068,749)	(1,183,398)
Intergovernmental reimbursements	(612,181)	(1,036,758)
Total operating expenses before depreciation and amortization	178,101,424	176,949,460
Depreciation	150,772,065	152,920,967
Amortization of intangible assets	109,926	-
Total Operating Expenses	<u>328,983,415</u>	<u>329,870,427</u>
Operating Income	<u>141,770,125</u>	<u>136,765,217</u>
Nonoperating Revenues (Expenses)		
Earnings on investments	2,825,144	8,959,638
Net increase (decrease) in fair value of investments	(2,334,438)	2,712,294
Interest on loan and obligations receivable	18,247,607	19,489,018
Interest expense	(135,227,647)	(155,410,235)
Amortization of debt related items and cost of issuance	(3,022,639)	(3,956,009)
Legacy pension expense	(14,452,504)	(12,922,789)
WRAP (Water Residential Assistance Program)	(924,247)	(1,921,938)
Other	(298,940)	365,964
Loss on disposal of capital assets	(241,105)	(1,266,126)
Total Nonoperating Expenses	<u>(135,428,769)</u>	<u>(143,950,183)</u>
Income (loss) before capital contributions	6,341,356	(7,184,966)
Capital Contributions	<u>5,960,000</u>	<u>5,960,000</u>
Change in net position	12,301,356	(1,224,966)
NET POSITION (DEFICIT), Beginning of Year	<u>(125,167,947)</u>	<u>(123,942,981)</u>
NET POSITION (DEFICIT), END OF YEAR	<u>\$ (112,866,591)</u>	<u>\$ (125,167,947)</u>

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, 2021 With Comparative Amounts for the Year Ended June 30, 2020

	2021	2020
Cash Flows From Operating Activities		
Cash received from customers	\$ 469,974,866	\$ 472,912,969
Cash received from intergovernmental reimbursements	251,301	696,878
Cash payments for intergovernmental services provided	(612,181)	(1,036,758)
Cash payments to suppliers for goods and services	(110,575,113)	(121,537,325)
Cash payments for employee services	(60,883,214)	(58,935,302)
Cash payments to other governments for obligation payable	(1,969,295)	(1,969,296)
Cash payments for WRAP	(924,247)	(1,921,938)
Cash payments for GLWA share pension agreement	(20,475,400)	(20,475,400)
Cash received from insurance for fire remediation	1,695,458	-
Nonoperating cash received	20,784	9,666
Cash received for DWSD nonoperating pension	3,066,800	3,066,814
Cash paid for DWSD nonoperating pension	(3,066,807)	(3,066,807)
Cash received for DWSD WRAP	1,349,200	484,300
Cash payments for DWSD WRAP	(2,266,491)	(358,690)
Cash received (paid) for DWSD budgetary surplus (shortfall)	13,109,997	(10,817,816)
Principal payments received on obligation receivable	13,664,500	13,111,100
Interest received on obligation receivable	17,994,154	18,533,342
Principal payments received on loan receivable	18,206,431	17,542,670
Interest received on loan receivable	635,284	1,299,047
Net Cash Provided by Operating Activities	<u>339,196,027</u>	<u>307,537,454</u>
Cash Flows From Noncapital Financing Activities		
Principal payments	(13,619,500)	(11,741,100)
Interest payments	(18,009,700)	(19,518,444)
Net Cash Used in Noncapital Financing Activities	<u>(31,629,200)</u>	<u>(31,259,544)</u>
Cash Flows From Capital and Related Financing Activities		
Proceeds from sale of assets	52,779	660,530
Capital contributions	-	11,920,000
Proceeds from issuance of long-term refunding debt for COI	-	1,112,117
Proceeds from state revolving fund loans	17,261,319	25,164,403
Payment to bond refunding escrow agent	-	(50,408,912)
Payment of bond issuance costs	(555,801)	(644,653)
Principal payments on bonds	(104,965,500)	(97,758,900)
Principal payments on regional system leases	(6,395,235)	(6,134,486)
Principal payments on right to use lease	(96,310)	-
Interest payments	(107,543,682)	(134,646,698)
Purchase of capital assets	(88,804,223)	(82,332,156)
Net Cash Used in Capital and Related Financing Activities	<u>(291,046,653)</u>	<u>(333,068,755)</u>

	2021	2020
Cash Flows From Investing Activities		
Investment purchases	\$ (255,538,068)	\$ (457,158,002)
Investment maturities	346,505,000	361,004,326
Interest received	2,758,596	6,616,718
Net Cash Used in Investing Activities	93,725,528	(89,536,958)
Net change in cash and cash equivalents	110,245,702	(146,327,803)
CASH AND CASH EQUIVALENTS, Beginning of Year	172,644,188	318,961,991
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 282,889,890</u>	<u>\$ 172,634,188</u>
STATEMENT OF NET POSITION CLASSIFICATION OF CASH		
Cash and cash equivalents	\$ 191,584,705	\$ 119,569,724
Restricted cash and cash equivalents	85,509,014	26,060,277
Restricted cash for the benefit of DWSD	2,919,797	-
Noncurrent restricted cash and cash equivalents	2,876,374	27,014,187
CASH AND CASH EQUIVALENTS, END OF YEAR	<u>\$ 282,889,890</u>	<u>\$ 172,644,188</u>
NONCASH OPERATING ACTIVITIES		
Interest income obligation receivable premium amortization	<u>\$ (376,827)</u>	<u>\$ (348,679)</u>
NONCASH FINANCING AND INVESTMENT ACTIVITIES		
Net proceeds deposited into an escrow account for refunding	<u>\$ -</u>	<u>\$ 683,960,757</u>
Increase in lease liability right to use asset	<u>\$ 4,543,607</u>	<u>\$ -</u>
Increase in intangible right to use asset	<u>\$ 4,543,607</u>	<u>\$ -</u>
Change in unrealized gain on investments	<u>\$ 5,046,732</u>	<u>\$ 968,910</u>
Interest expense due to accretion	<u>\$ 496,509</u>	<u>\$ 734,587</u>
Amortization expense	<u>\$ (2,466,838)</u>	<u>\$ (1,476,725)</u>

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, 2021
With Comparative Amounts for the Year Ended June 30, 2020

	2021	2020
Reconciliation of Operating Income to Net		
Cash Provided by Operating Activities:		
Operating income	\$ 141,770,125	\$ 136,765,217
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	150,772,065	152,920,967
Amortization of intangible assets	109,926	-
Miscellaneous nonoperating income	20,784	9,666
Legacy pension expense and administrative fee	(14,772,228)	(13,311,226)
WRAP (Water Residential Assistance Program)	(924,247)	(1,921,938)
Interest income on contractual obligation receivable	17,612,323	18,189,971
Interest income on loan receivable	635,284	1,299,047
Interest expense on obligation payable	(1,553,190)	(1,573,028)
Changes in:		
Receivables	(778,674)	6,277,325
Due from other governments	9,834,318	(10,535,078)
Due from other funds	(162,368)	12,568
Contractual obligation receivable	14,041,326	13,459,779
Loan receivable	18,206,431	17,542,670
Prepaid items and other assets (excludes investing item)	(704,466)	(719,345)
Inventories	(630,044)	(924,606)
Accounts and contracts payable (excludes capital items)	1,920,781	(3,874,067)
Accrued salaries, wages and benefits	1,136,565	-
Other accrued liabilities (excludes capital items)	4,615,255	(627,919)
Due to other governments (excludes non-capital financing)	2,000,000	1,750,000
Due to other funds	652,153	(742,763)
Obligation payable including accrued interest	(416,105)	(396,268)
Accrued compensated absences	(52,300)	142,094
Claims and judgments	1,675,000	93,889
Other noncurrent liabilities	(917,291)	125,610
Net pension liability and deferred items	(4,895,396)	(6,425,111)
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ 339,196,027	\$ 307,537,454

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

NOTES TO FINANCIAL STATEMENTS

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

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GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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.

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

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

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 to the public are accrued when incurred.

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

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

Cash and Cash Equivalents and Investments

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

Restricted Assets

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

Accounts Receivable

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, accrued interest receivable on the contractual obligation receivable and state grants. The due to other governments includes amounts owed by the Authority to DWSD for green infrastructure program.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

Due from and Due to Other Funds

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

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.

Loan Receivable – DWSD

The balance represents loan receivables from DWSD established per the 2018 Memorandum of Understanding (MOU) dated June 27, 2018 executed between DWSD and the Authority to cure any shortfall created from difference between cash receipts and the MBO obligations. An annual loan amount and interest rate is determined based on any shortfalls during each fiscal year. There was no shortfall of local revenue requirements for the year ending June 30, 2021. The \$10.2 million shortfall in the sewage disposal fund for fiscal year ending June 30, 2020, did not become a loan receivable as it was repaid during the fiscal year ended June 30, 2021.

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. Prepaid insurance on debt is amortized over the life of the debt. 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.

Prepaid Lease

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

Capital Assets

Capital assets are recorded at historical cost. All acquisitions of land and land improvements are capitalized regardless of cost. The capitalization threshold is \$5,000 for capital assets with the exception of certain information technology which is \$1 million dollars. 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

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

	Useful Lives (In Years)
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.

Intangible Assets

The Authority has recorded a right to use intangible asset for the lease of a warehouse in the sewage disposal fund. See Note 15 for a description of the leased right to use asset.

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 position 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 18.

Other Accrued Liabilities

Other 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.
- Advanced insurance proceeds.

Arbitrage Rebate Payable

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, 2021.

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 13 for the details on revenue bonds and loans.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

Obligation Payable

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 "Obligation Payable - City of Detroit 2014 Financial Recovery Bonds" in Note 13.

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 14 for the details of the regional system leases.

Other Liabilities

Other liabilities include the following liabilities which are discussed in Note 15:

- Lease payable – Right to use asset
- Compensated absences
- Claims and judgements
- Cash held for the benefit of DWSD budget stabilization

Net Pension Liability

Under the terms of the Regional System leases, the Authority is a nonemployer contributing entity in the City of Detroit General Employee's Retirement system (GRS) Component II plan in a special funding situation. For the purposes of measuring the net pension liability, deferred outflows, and pension expense, information about the fiduciary net position of the Component II plan of the GRS and additions to/ 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 18 for additional information on the net pension liability.

Deferred Inflows of Resources

In addition to liabilities, the statement of net position includes a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position 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 capital contribution 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. The deferred capital contribution relates to the previous year, which was recognized in the current year and is discussed under the Capital Contribution heading in the Statement of Revenues, Expenses and Changes in Net Position section below.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

Net Position

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 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 (WSSA), dated June 12, 2015. Wholesale customer charges are shown net of bad debt expense of \$2,963,838 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, 2021

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

Capital Adjustment

As part of the Authority's capital improvement program the Authority incurs costs to design capital improvement projects. Periodically, the actual construction project may not be completed due to changes in plans or environmental requirements. Once it has been determined that construction will not proceed related costs are charged to the capital adjustment operating expense, including any costs previously recorded in construction in progress. There were no capital adjustments for the fiscal year ending June 30, 2021.

Taxes

The Authority pays no direct federal, state or local taxes, except local taxes on excess property and federal Social Security and Medicare taxes.

Interest Income on Loan and Obligations Receivable

Interest income is the interest earned on the loan receivable and 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 18 for additional information on this Plan.

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, 2021:

<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	42.0%	\$ 37,003,204	58.0%	\$ 51,125,617	\$ 88,128,821
Administrative services	49.8%	\$ 12,549,032	50.2%	\$ 12,667,792	\$ 25,216,824

Centralized services includes the following operating areas: planning services, systems control, facility operations, fleet operations, field service operations, energy research and innovation, 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, 2021

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

Capital Contribution

The Great Lakes Water Authority (GLWA) and the Oakland-Macomb Interceptor Drain Drainage District (OMIDDD) signed a contract amendment that redefined the operation, maintenance, repair and improvement responsibilities of each entity regarding the Northeast Sewer Pump Station (NESPS), interceptor PCI-5 and the North Interceptor East Arm (NIEA). As part of this agreement, OMIDDD paid GLWA a one-time contribution in the amount of \$11,920,000 during the fiscal year ending June 30, 2020, in exchange for the elimination of future capital charges related to GLWA assets that the customer will maintain in the future. This amount generally reflects GLWA's determination of net book value of the assets as of the effective date. For the fiscal year ending June 30, 2020, \$5,960,000 of this amount was recognized and \$5,960,000 was deferred to the fiscal year ending June 30, 2021 for budgeted revenue requirements related to the fiscal year ending June 30, 2021.

Use of Estimates

The preparation of basic 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 basic 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

GASB Statement No. 87, *Leases* is effective for years beginning after June 15, 2021. The Authority has implemented this statement early for the fiscal year ending June 30, 2021. This implementation did not have any effect on previous reporting periods as the lease recorded under this statement started during the current fiscal year.

GASB Statement No. 84, *Fiduciary Activities* and Statement No. 90, *Majority Equity Interests – an amendment of GASB Statement No. 14 and No. 61* became effective in the current fiscal year. Both of these statements were implemented during the current year with no effect on the financial statements as a result of implementation.

The Authority has also implemented GASB Statement No. 98, *The Annual Comprehensive Financial Report* early for the fiscal year ending June 30, 2021.

New Accounting Pronouncements to be Implemented in the Future

The following GASB pronouncements will be implemented in the future. The Authority has not completed its assessment of the future impact of the adoption of these statements, if any.

- Statement No. 91, *Conduit Debt Obligations* (effective for fiscal years beginning after December 15, 2021)
- Statement No. 92, *Omnibus 2020* (effective for fiscal years beginning after June 15, 2021)
- Statement 93, *Replacement of Interbank Offer Rates* (paragraph 11b is effective for fiscal years beginning after December 31, 2021, paragraphs 13 and 14 are effective for fiscal years beginning after June 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. 96, *Subscription-Based Information Technology Arrangements* (effective for fiscal years beginning after June 15, 2022)
- Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans - an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32* (effective for fiscal years beginning after June 15, 2021)

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

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

Reclassifications

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

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 Ordinance; c) the lease payment, which shall be a common-to-all charge; d) GLWA's portion of the GRS net pension liability and the B&C obligation payable; 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 and the regional Improvement and Extension Fund as defined in the Master Bond Ordinance; and g) the amount necessary to satisfy the coverage ratios required by the rate covenant in the Master Bond Ordinance.

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

In the Regional System leases, the City acknowledges that all local water and sewer system revenues received from customers in the City are the property of GLWA and will be deposited as received in the Receiving Fund as defined in the Master Bond Ordinance and applied as provided in the Bond Ordinance. As a result, the City agrees to provide the Authority with a budget for the local water and sewage disposal system as provided 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, 2021

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, 2021 are reported in the financial statements as follows:

Statement of Net Position

Cash and cash equivalents	\$ 191,584,705
Restricted cash and cash equivalents	85,509,014
Restricted cash for the benefit of DWSD	2,919,797
Investments	132,388,013
Restricted investments	28,758,582
Noncurrent restricted cash and cash equivalents	2,876,374
Noncurrent restricted investments	29,882,148
Total	<u>\$ 473,918,633</u>

Cash Deposits and Investments

Bank deposits – checking and savings accounts	\$ 45,722,248
Money market accounts	237,167,642
Investments in securities	191,028,743
Total	<u>\$ 473,918,633</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 \$282,889,890 for the sewage disposal fund. The bank balance of the sewage disposal fund deposits and money market accounts was \$282,889,890 of which \$282,639,890 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, 2021

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

INVESTMENTS

Following is a summary of the Sewage Disposal Fund's investments as of June 30, 2021:

	Sewage Disposal Fund	Standard & Poors Rating	Weighted Maturity In Years
U.S. treasury notes	\$ 102,100,736	AA+	1.60
U.S. government agencies	51,060,683	AA+	1.29
Commercial paper	<u>37,867,324</u>	A1	0.26
Total	<u>\$ 191,028,743</u>		

CUSTODIAL RISK OF INVESTMENTS

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

CREDIT RISK

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

As of June 30, 2021, 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, 2021, the Sewage Disposal Fund had greater than 5% of its total investment portfolio concentrated as follows:

Investment Type	Issuer	% of Portfolio
U.S. government agencies	Federal Home Loan Mortgage Company	10.10
U.S. government agencies	Federal National Mortgage Association	9.25
U.S. government agencies	Federal Home Loan Bank	7.38
Commercial paper	Collateralized Commercial Paper V Company, LLC	7.42
Commercial paper	Sumitomo Mitsu Bank	5.17
Commercial paper	Royal Bank of Canada	5.08

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

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.

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	\$ 102,100,736
U.S. government agencies	51,060,683
Commercial paper	<u>37,867,324</u>
Total Investments	<u>\$ 191,028,743</u>

The Sewage Disposal Fund has no Level 1 or 3 inputs at June 30, 2021.

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, 2021

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, 2021.

	Funded from Revenue and Other		Funded from Debt Issuance	
	Unrestricted	Restricted	Restricted	Total
Receiving fund	\$ 104,424,762*	\$ -	\$ -	\$ 104,424,762
Operations and maintenance	33,863,665	10,225,135**	-	44,088,800
Operations and maintenance - pension	-	329,484	-	329,484
Senior lien debt service	-	41,652,249	-	41,652,249
Senior lien bond reserve	-	-	114,378,494	114,378,494
Second and junior lien debt service	-	61,558,618	-	61,558,618
Second and junior lien debt reserve	-	-	48,112,098	48,112,098
Pension obligation	-	502,110	-	502,110
Water residential assistance program (WRAP)	-	6,428,815	-	6,428,815
Budget stabilization	-	5,493,494	-	5,493,494
Extraordinary repair and replacement	44,013,365	-	-	44,013,365
Improvement and extension – regional	121,356,399	-	-	121,356,399
Subtotal – Reserves Defined by Ordinance	303,658,191	126,189,905	162,490,592	592,338,688
Less: Funded by surety (noncash)	-	-	(141,654,379)	(141,654,379)
Total – Reserves Defined by Ordinance (net of surety coverage)	303,658,191	126,189,905	20,836,213	450,684,309
Cash held for the benefit of DWSD	-	2,919,797	-	2,919,797
Construction funds	20,314,527	-	-	20,314,527
Total Cash, Cash Equivalents and Investments	<u>\$ 323,972,718</u>	<u>\$ 129,109,702</u>	<u>\$ 20,836,213</u>	<u>\$ 473,918,633</u>

*Balance for two months required transfers

**Construction retainage and deposits

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, 2021

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	\$ 129,109,702
From debt issuance	20,836,213
Amounts payable to liabilities and debt	<u>(52,661,349)</u>
Restricted Net Position	<u>\$ 97,284,566</u>
Restricted net position for:	
Debt service	\$ 90,855,751
Payment assistance program	<u>6,428,815</u>
Total	<u>\$ 97,284,566</u>

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

	<u>Unrestricted</u>	<u>Restricted Current</u>	<u>Restricted Noncurrent</u>	<u>Total</u>
Cash and cash equivalents	\$ 191,584,705	\$ 85,509,014	\$ 2,876,374	\$ 279,970,093
Cash held for the benefit of DWSD	-	2,919,797	-	2,919,797
Investments	<u>132,388,013</u>	<u>28,758,582</u>	<u>29,882,148</u>	<u>191,028,743</u>
Total	<u>\$ 323,972,718</u>	<u>\$ 117,187,393</u>	<u>\$ 32,758,522</u>	<u>\$ 473,918,633</u>

NOTE 5 – RECEIVABLES

The following is a summary of the net receivables as of June 30, 2021:

Receivables, net:	
Billed	\$ 59,552,759
Unbilled	24,320,796
Other	<u>489,412</u>
Subtotal	84,362,967
Allowance for doubtful accounts	<u>(39,321,754)</u>
Total Receivables, net	<u>\$ 45,041,213</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 6 – DUE FROM OTHER GOVERNMENTS

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

DWSD-Billed shared services	\$ 606,376
State of Michigan FEMA	<u>744,735</u>
Total Due From Other Governments	<u>\$ 1,351,111</u>

NOTE 7 – DUE TO AND DUE FROM OTHER FUNDS

Interfund balances result from the time lag between the dates interfund goods and services are provided or reimbursable expenditures occur and the payment between funds are made. Interfund balances for the year ended June 30, 2021 consisted of the following:

	Water Fund - Due from Sewage Disposal Fund	Sewage Disposal Fund - Due from Water Fund	Total Due To
Water Fund - Due to Sewage Disposal Fund	\$ -	\$ 162,368	\$ 162,368
Sewage Disposal Fund - Due to Water Fund	<u>2,786,344</u>	<u>-</u>	<u>2,786,344</u>
Total Due From	<u>\$ 2,786,344</u>	<u>\$ 162,368</u>	<u>\$ 2,948,712</u>

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. Total bonds assumed by GLWA 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. Any additional debt issued by GLWA on behalf of the local system is also included in the obligation receivable. DWSD is billed monthly for the debt requirements on a debt set-aside basis so the funds are available when the associated debt payment is due.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 8 – CONTRACTUAL OBLIGATION RECEIVABLE (cont.)

Changes in obligation receivable for the year ended June 30, 2021 were as follows:

	Beginning Balance	Increase	Decrease	Ending Balance	Due Within One Year
Obligation Receivable					
Bifurcated debt	\$ 323,833,400	\$ -	\$ (12,249,500)	\$ 311,583,900	\$ 12,779,900
New money bonds	80,225,000	-	(1,415,000)	78,810,000	1,465,000
Total Obligation Receivable	404,058,400	-	(13,664,500)	390,393,900	14,244,900
Deferred amounts for:					
Unamortized premiums	9,338,553	-	(376,826)	8,961,727	392,284
Total	<u>\$ 413,396,953</u>	<u>\$ -</u>	<u>\$ (14,041,326)</u>	<u>\$ 399,355,627</u>	<u>\$ 14,637,184</u>

The current obligation receivable payment schedule is as follows:

Year Ended June 30	Principal	Interest	Total
2022	\$ 14,244,900	\$ 17,402,150	\$ 31,647,050
2023	14,863,300	16,790,150	31,653,450
2024	15,500,600	16,151,650	31,652,250
2025	16,177,900	15,469,850	31,647,750
2026	16,891,400	14,758,100	31,649,500
2027 - 2031	96,292,600	61,965,400	158,258,000
2032 - 2036	119,425,500	38,825,000	158,250,500
2037 - 2041	65,872,700	13,571,400	79,444,100
2042 - 2046	21,120,000	5,772,250	26,892,250
2047 - 2049	10,005,000	756,500	10,761,500
Total	<u>\$ 390,393,900</u>	<u>\$ 201,462,450</u>	<u>\$ 591,856,350</u>

NOTE 9 – LOAN RECEIVABLE – DWSD

Under the terms of the WSSA and the 2018 MOU, if DWSD experiences a cumulative negative variance of more than two percent (2%) of the total budget for either local system (a budget shortfall) from its adopted budget, DWSD, as the agent of GLWA, shall, within thirty (30) days thereafter, schedule a meeting of the Reconciliation Committee to discuss a remedy for the shortfall.

In accordance with the 2018 MOU, budget shortfalls not cured by the end of the fiscal year following the year in which they arise shall be repaid in full, in installments, over a period not to exceed the next three fiscal years, plus a surcharge calculated as provided below. The surcharge factor on the portion of the budget shortfall for the Sewage Disposal Fund, which remains unpaid, shall be based on the three-year U.S. Treasury note rate plus 150 basis points. The combined 2016 and 2017 budget shortfall was paid off during the year. The 2018 budget shortfall had a remaining balance of \$8,441,496. The surcharge factor for the combined 2016 and 2017 budget shortfall and the 2018 budget shortfall were 4.125% and 3.209%, respectively.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 9 – LOAN RECEIVABLE – DWSD (cont.)

The following is the budget shortfall loan receivable activity for the year ended June 30, 2021:

	Beginning Balance	Increase	Decrease	Ending Balance	Due Within One Year
2017 DWSD loan receivable	\$ 10,171,496	\$ -	\$ (10,171,496)	\$ -	-
2018 DWSD loan receivable	16,331,513	-	(8,034,935)	8,296,578	8,296,578
Total DWSD Loan Receivable	<u>\$ 26,503,009</u>	<u>\$ -</u>	<u>\$ (18,206,431)</u>	<u>\$ 8,296,578</u>	<u>\$ 8,296,578</u>

The budget shortfall loan receivable to be paid by DWSD payment schedule is as follows:

	Year Ended June 30	Principal	Interest	Total
2018 DWSD Loan Receivable	2022	<u>\$ 8,296,578</u>	<u>\$ 144,918</u>	<u>\$ 8,441,496</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 10 – CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2021 was as follows:

	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Nondepreciable capital assets					
Land	\$ 27,634,628	\$ -	\$ -	\$ 508,215	\$ 28,142,843
Easements	96,211,323	-	-	-	96,211,323
Construction in progress	177,022,885	81,508,838	-	(67,411,438)	191,120,285
Total Nondepreciable Assets	300,868,836	81,508,838	-	(66,903,223)	315,474,451
Depreciated capital assets					
Site improvements	51,282,571	22,527	(74,150)	429,557	51,660,505
Buildings and structures	1,156,168,738	250,607	-	80,463	1,156,499,808
Infrastructure	619,049,149	-	-	770,114	619,819,263
Machinery and equipment	1,242,297,233	4,066,825	(696,226)	65,623,089	1,311,290,921
Vehicles	3,621,907	2,462,495	(130,709)	-	5,953,693
Leasehold improvements	3,066,052	71,196	-	-	3,137,248
Total Depreciable Assets	3,075,485,650	6,873,650	(901,085)	66,903,223	3,148,361,438
Less: Accumulated depreciation					
Site improvements	(25,559,151)	(3,734,436)	-	-	(29,293,587)
Buildings and structures	(216,789,376)	(37,777,025)	-	-	(254,566,401)
Infrastructure	(61,873,712)	(13,734,033)	-	-	(75,607,745)
Machinery and equipment	(470,331,704)	(94,813,988)	320,585	-	(564,825,107)
Vehicles	(1,726,918)	(510,540)	130,705	-	(2,106,753)
Leasehold improvements	(287,142)	(202,043)	-	-	(489,185)
Total Accumulated Depreciation	(776,568,003)	(150,772,065)	451,290	-	(926,888,778)
Total Depreciated Capital Assets, Net	2,298,917,647	(143,898,415)	(449,795)	66,903,223	2,221,472,660
Intangible asset – right to use asset	-	4,543,607	-	-	4,543,607
Less: Accumulated amortization	-	(109,926)	-	-	(109,926)
Total Intangible Assets, Net	-	4,433,681	-	-	4,433,681
Net Capital Assets	\$2,599,786,483	\$ (57,955,896)	\$ (449,795)	\$ -	\$ 2,541,380,792

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 Authority for the year ended June 30, 2021.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 11 – OTHER 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	\$ 2,919,797
Advanced insurance proceeds	<u>1,695,458</u>
Total	<u>\$ 4,615,255</u>

NOTE 12 – 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>
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NOTE 13 – LONG-TERM DEBT

Changes in long-term debt for the year ended June 30, 2021 were as follows:

	Beginning Balance	Increase	Decrease	Ending Balance	Due Within One Year
Bonds and Loans					
Revenue bonds	\$ 2,578,220,000	\$ -	\$ (62,765,000)	\$ 2,515,455,000	\$ 31,545,000
Capital appreciation bonds	11,335,000	-	(5,660,000)	5,675,000	5,675,000
Notes from direct borrowings and direct placements-State revolving loan	<u>449,666,531</u>	<u>17,261,319</u>	<u>(50,160,000)</u>	<u>416,767,850</u>	<u>46,815,000</u>
Total Bonds and Loans	3,039,221,531	17,261,319	(118,585,000)	2,937,897,850	84,035,000
Discount on capital appreciation bonds	(667,440)	-	496,509	(170,931)	(170,931)
Deferred amounts for:					
Unamortized premiums	143,614,085	-	(12,935,379)	130,678,706	12,720,139
Unamortized discounts	<u>(78,045,717)</u>	<u>-</u>	<u>9,554,410</u>	<u>(68,491,307)</u>	<u>(9,174,925)</u>
Total Bonds and Loans, Net	3,104,122,459	17,261,319	(121,469,460)	2,999,914,318	87,409,283
Other Debt					
Obligation payable	<u>38,061,886</u>	<u>-</u>	<u>(416,106)</u>	<u>37,645,780</u>	<u>436,911</u>
Total	<u>\$ 3,142,184,345</u>	<u>\$ 17,261,319</u>	<u>\$ (121,885,566)</u>	<u>\$ 3,037,560,098</u>	<u>\$ 87,846,194</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – LONG-TERM DEBT (cont.)

As of June 30, 2021, aggregate debt service requirements of the Authority's bonds and loans (fixed and variable-rate) instruments 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	
2022	\$ 37,220,000	\$ 80,797,355	\$ 46,815,000	\$ 9,116,713	\$ 173,949,068
2023	79,830,000	97,276,036	47,804,430	8,024,829	232,935,295
2024	83,475,000	93,541,417	40,225,000	7,001,925	224,243,342
2025	98,650,000	89,406,369	41,125,870	6,086,982	235,269,221
2026	101,895,000	84,765,356	27,200,072	5,290,838	219,151,266
2027 - 2031	637,360,000	354,423,511	114,924,703	18,520,878	1,125,229,092
2032 - 2036	797,290,000	217,545,887	73,376,782	8,083,012	1,096,295,681
2037 - 2041	554,175,000	61,449,050	23,215,993	1,257,263	640,097,306
2042 - 2046	116,585,000	13,190,861	2,080,000	41,800	131,897,661
2047 - 2049	14,650,000	1,122,750	-	-	15,772,750
Total	<u>\$ 2,521,130,000</u>	<u>\$ 1,093,518,592</u>	<u>\$ 416,767,850</u>	<u>\$ 63,424,240</u>	<u>\$ 4,094,840,682</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, 2021 are not included in the debt service requirements amounts above as they were paid on June 24, 2021.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – LONG-TERM DEBT (cont.)

REVENUE AND CAPITAL APPRECIATION BONDS PAYABLE

Net revenues of the Authority are pledged to repayment of bonds; following are the revenue bonds payable at June 30, 2021:

Issue	Bond Date	Original Issue Amount	Range of Interest Rates	Maturity Dates	Outstanding Ending Balance	Callable at Par
Series 1999A***	12/01/99	\$ 33,510,118	-	7/01/21	\$ 5,675,000	\$ -
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%	7/01/21-24	14,050,000	-
Series 2005A	3/17/05	273,355,000	4.50%	7/01/35	100,000	100,000
Series 2005B	3/17/05	40,215,000	5.50%	7/01/21-22	17,115,000	-
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 2012A	6/26/12	659,780,000	5.00%	7/01/21-23	41,525,000	17,985,000
Series 2014C-1	9/04/14	123,220,000	5.00%	7/01/22	5,000	-
Series 2014C-2	9/04/14	27,470,000	5.00%	7/01/22	5,000	-
Series 2014C-3	9/04/14	446,170,000	5.00%	7/01/22-33	420,745,000	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%	7/01/22-36	55,210,000	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	4.00-5.00%	7/1/21-48	80,225,000	67,040,000
Series 2018B	10/03/18	131,690,000	5.00%	7/1/24-49	131,690,000	-
Series 2018C	10/03/18	44,180,000	3.249-3.613%	7/1/21-24	41,305,000	-
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	1.442-3.606%	7/1/21-44	<u>92,525,000</u>	<u>15,325,000</u>
Total Revenue and Capital Appreciation Bonds Payable					<u>\$ 2,521,130,000</u>	

* Interest rates are reset quarterly based upon a formula specified in the bond using the three-month LIBOR rate.

** Taxable bond

*** Bonds are capital appreciation bonds. The outstanding balance represents the discounted present value.

Refunded Debt

In prior years, the Authority's Sewage Disposal Fund defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts for the purpose of generating resources for all future debt service payments on the refunded debt. As a result, the refunded bonds are considered to be defeased and the trust fund assets and related liabilities have been removed from the statement of net position. At June 30, 2021, the balance of the bonds considered to be defeased is \$657,245,000. These defeased bonds include the following revenue bonds: \$419,810,000 Series 2012A (call date 7/1/22), \$123,200,000 Series 2014C-1 (call date 7/1/22), \$27,450,000 2014C-2 (call date 7/1/22), \$31,785,000 Series 2005A (call date 7/1/21) and \$55,000,000 Series 2006B (call date 7/1/21). As a result, the refunded bonds are considered to be defeased and the trust fund assets and related liabilities have been removed from the statement of net position.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – LONG-TERM DEBT (cont.)

STATE REVOLVING LOANS PAYABLE

The Authority participates in direct borrowings the Clean Water Revolving Fund (CWRP) 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 borrowings from the State of Michigan Revolving Loan Fund totaling \$17,261,319 during the year ended June 30, 2021. The 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, 2021, and \$34,051,648 for the Sewage Disposal Fund was authorized and unissued. Of the authorized and unissued \$4,040,000 of the Sewage Disposal Fund are for pass through loans to DWSD.

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

The following is a schedule of the state revolving loans payable at June 30, 2021:

Issue	Bond Date	Amount Issued	Range of Interest Rates	Maturity Dates	Outstanding Ending Balance
Series 1999 SRF-2	9/30/99	46,000,000	2.50%	10/01/21-22	\$ 5,700,000
Series 2000 SRF-1	3/30/00	44,197,995	2.50%	10/01/21-22	5,297,995
Series 2000 SRF-2	9/28/00	64,401,066	2.50%	10/01/21-22	7,941,066
Series 2001 SRF-1	6/28/01	82,200,000	2.50%	10/01/21-24	19,880,000
Series 2001-SRF-2	12/20/01	59,850,000	2.50%	10/01/21-24	14,475,000
Series 2002 SRF-1	6/27/02	18,985,000	2.50%	4/01/22-23	2,350,000
Series 2002 SRF-2	6/27/02	1,545,369	2.50%	4/01/22-23	190,369
Series 2002 SRF-3	12/19/02	31,549,466	2.50%	10/01/21-24	7,024,466
Series 2003 SRF-1	6/26/03	48,520,000	2.50%	10/01/21-25	14,490,000
Series 2003 SRF-2	9/25/03	25,055,370	2.50%	4/01/22-25	6,015,370
Series 2004 SRF-1	6/24/04	2,910,000	2.125%	10/01/21-24	685,000
Series 2004 SRF-2	6/24/04	18,353,459	2.125%	4/01/22-25	4,303,459
Series 2004 SRF-3	6/24/04	12,722,575	2.125%	4/01/22-25	2,972,575
Series 2007 SRF-1	9/20/07	167,540,598	1.625%	10/01/21-29	82,115,598
Series 2009 SRF-1	4/17/09	13,970,062	2.50%	4/01/22-30	6,915,062
Series 2010 SRF-1	1/22/10	4,214,763	2.50%	4/01/22-31	2,325,763
Series 2012 SRF-1	8/30/12	14,950,000	2.50%	10/01/21-34	11,215,000
Series 2015A SRF	3/20/15	79,500,000	2.50%	4/01/22-36	63,145,000
Series 2015B SRF	3/20/15	27,175,304	2.50%	10/01/21-35	21,185,304
Series 2015D SRF	12/11/15	15,321,478	2.50%	10/01/21-35	11,716,478
Series 2016 SAW-1	5/25/16	10,000,000	2.50%	10/01/21-38	9,210,000
Series 2016 SRF-1	9/16/16	15,463,628	2.50%	4/01/22-38	13,333,628
Series 2016 SRF-2	9/16/16	48,315,683	2.50%	4/01/22-39	44,245,683
Series 2017 SRF-1	6/23/17	33,566,682	2.50%	10/01/21-38	31,246,682
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%	10/1/23-44	9,728,280
Series 2020 SRF-2	9/30/20	3,232,000	2.00%	-	-
Series 2021 SRF-1	3/26/21	12,940,000	1.875%	10/1/23-25	1,550,072

Total State Revolving Loans Payable \$ 416,767,850

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – 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 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 Sewerage Department. The pledged revenues calculation for the fiscal year ending June 30, 2021 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 2049.

See table below for pledged revenue coverage as of June 30, 2021:

Remaining principal and interest requirement	\$ 4,094,840,682
Principal and interest funding requirement for the year ending June 30, 2021 (computed consistent with rate covenant basis for rate determination purposes. Not applicable for purpose of additional bond test)	\$ 230,162,876
Pledged revenue for the year ending June 30, 2021	\$ 303,903,364
Pledged revenue collected as a percentage of funding requirement	132%

DEBT RATINGS

In March 2020, Standard & Poor's Global Ratings Services upgraded the ratings on the sewage disposal system senior lien debt by one notch to AA- and the sewage disposal system second lien debt by one notch to A+. Both were assigned a stable outlook. Moody's Investor Services upgraded the ratings on the sewage disposal system senior lien debt by one notch to A1 and second lien debt by one notch to A2. The ratings outlook for both remained stable. Fitch upgraded the ratings on the sewage disposal system senior lien debt by one notch to A+ and second lien debt by one notch to an A. Both with a stable outlook.

The Authority was asked by the State to seek a rating for the junior lien debt, as this is the debt category of most of the state revolving fund bonds. In November 2018, S&P Global Ratings assigned an A rating to the Authority's junior lien sewage disposal system SRF bonds. In March 2020, the junior lien sewage disposal system SRF bonds were upgraded to A+.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – LONG-TERM DEBT (cont.)

OBLIGATION PAYABLE – CITY OF DETROIT 2014 FINANCIAL RECOVERY BONDS

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 obligation payable for the Financial Recovery Bonds at June 30, 2021:

Bond Issue	Original Issue Amount	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	2,655,341
Total				<u>\$ 37,645,780</u>

As of June 30, 2021, debt service requirements of the obligation payable for the Financial Recovery Bonds were as follows:

Year Ended June 30	Principal	Interest	Total
2022	\$ 436,911	\$ 1,532,384	\$ 1,969,295
2023	458,757	1,510,539	1,969,296
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 - 2031	8,988,740	5,610,525	14,599,265
2032 - 2036	8,747,608	4,513,765	13,261,373
2037 - 2041	8,747,608	3,149,139	11,896,747
2042 - 2044	5,248,571	629,828	5,878,399
Total	<u>\$ 37,645,780</u>	<u>\$ 21,265,543</u>	<u>\$ 58,911,323</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 13 – LONG-TERM DEBT (cont.)

INTEREST EXPENSE

The following represents the amounts recorded as interest expense for the year ended June 30, 2021:

Revenue bonds and loans	\$ 112,558,349
Regional System Lease	21,082,541
Obligation payable	1,553,190
Lease-right to use asset	<u>33,567</u>
Total Interest Expense	<u>\$ 135,227,647</u>

NOTE 14 – 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, both 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 Regional Systems leases payable for the year ended June 30, 2021 were as follows:

Beginning Balance	Increase	Decrease	Ending Balance	Amount due Within One Year*
<u>\$ 509,018,583</u>	<u>\$ -</u>	<u>\$ (6,395,235)</u>	<u>\$ 502,623,348</u>	<u>\$ 6,667,073</u>

* The current portion of the Regional Systems leases payable represents the 12 monthly payments required from July 1, 2021 through June 30, 2022. 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, 2021

NOTE 14 – REGIONAL SYSTEMS LEASES PAYABLE AND RELATED PREPAID LEASE (cont.)

As of June 30, 2021, aggregate requirements of the Sewage Disposal Regional System lease is as follows:

Year Ended June 30	Principal	Interest	Total
2022	\$ 6,667,073	\$ 20,832,927	\$ 27,500,000
2023	6,950,466	20,549,534	27,500,000
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 - 2031	44,689,790	92,810,210	137,500,000
2032 - 2036	55,030,284	82,469,716	137,500,000
2037 - 2041	67,763,399	69,736,601	137,500,000
2042 - 2046	83,442,751	54,057,249	137,500,000
2047 - 2051	102,750,051	34,749,949	137,500,000
2052 - 2056	112,654,740	11,095,260	123,750,000
Total	<u>\$ 502,623,348</u>	<u>\$ 446,126,652</u>	<u>\$ 948,750,000</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 \$13,750,000 in the Sewage Disposal Fund.

NOTE 15 – OTHER LIABILITIES

Changes in other liabilities for the year ended June 30, 2021 were as follows:

	Beginning Balance	Increase	Decrease	Ending Balance	Due Within One Year
Lease payable – Right to Use Asset	\$ -	\$ 4,543,607	\$ (96,310)	\$ 4,447,297	\$ 189,119
Compensated Absences	899,422	1,707,388	(1,759,688)	847,122	729,241
Claim and Judgements	7,650,000	1,736,250	(61,250)	9,325,000	1,825,000
WRAP payable	917,291	-	(917,291)	-	-
Cash held for the benefit of DWSD budget stabilization	5,500,000	-	-	5,500,000	-
Total	<u>\$ 14,966,713</u>	<u>\$ 7,987,245</u>	<u>\$ (2,834,539)</u>	<u>\$ 20,119,419</u>	<u>\$ 2,743,360</u>

Lease Payable – Right to Use Asset

The Authority entered into a lease agreement for a warehouse to store materials for operational needs. The lease commenced 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 15 – OTHER LIABILITIES (cont.)

The future lease payments are detailed below:

Year Ended June 30	Principal	Interest	Total
2022	\$ 189,119	\$ 130,465	\$ 319,584
2023	366,784	122,762	489,546
2024	390,070	111,443	501,513
2025	414,719	99,404	514,123
2026	436,958	86,622	523,580
2027 - 2031	2,600,405	214,774	2,815,179
2032	49,242	123	49,365
Total	<u>\$ 4,447,297</u>	<u>\$ 765,593</u>	<u>\$ 5,212,890</u>

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

	Cost	Accumulated Amortization	Ending Book Value
Warehouse	\$ 4,543,607	\$ (109,926)	\$ 4,433,681

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. The accrued compensated absences for PTO accrual are approximately \$847,000 for the Sewage Disposal Fund on June 30, 2021.

Due to the impact COVID-19 had on our team members, the Authority granted team members who were granted advanced PTO or used accrued PTO hours for a COVID-19 related absence between March 16, 2020 and June 30, 2021 replenishment of PTO, not to exceed 80 hours, for COVID-19 related absence.

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, 2021 balance of the accrued compensated absences for the liability assumed on January 1, 2016 is approximately \$2,117,000 of which \$357,000 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.

Workers' Compensation

Workers' compensation is discussed in Note 16 Risk Management/Self-Insurance Programs.

Claims and Judgements

The Authority has accrued in its financial statements for known asserted claims in which future settlements may be necessary. See Note 16 for discussion of risk of loss and insurance coverages.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 15 – OTHER LIABILITIES (cont.)

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.

NOTE 16 – 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	\$0
Fiduciary	\$15,000,000	\$1,000
General and Auto Liability	\$10,000,000/ \$12,000,000	\$1,000,000
Pollution Legal Liability	\$25,000,000	\$500,000
Property Damage	\$750,000,000	\$1,000,000/\$2,500,000 for conveyor operations
Public Officials and Employment Practices	\$25,000,000	\$250,000
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, 2021

NOTE 16 – 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. 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.

	2021	2020
Unpaid claims, beginning of year	\$ 1,376,431	\$ 1,001,198
Incurred claims (including change in IBNR provisions)	11,113,461	12,295,585
Claims payments	<u>(11,572,361)</u>	<u>(11,920,352)</u>
Unpaid Claims, End of Year	<u>\$ 917,531</u>	<u>\$ 1,376,431</u>

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. 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:

	2021	2020
Unpaid claims, beginning of year	\$ 251,834	\$ 292,480
Incurred claims (including change in IBNR provisions)	337,010	252,998
Claims payments	<u>(258,027)</u>	<u>(293,644)</u>
Unpaid Claims, End of Year	<u>\$ 330,817</u>	<u>\$ 251,834</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 17 – 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 earnings 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 \$5,102,937, which is net of forfeitures of \$292,210, for the year ended June 30, 2021. The Authority has accrued approximately \$250,000 of expense on the accrued payroll at June 30, 2021. At June 30, 2021, there were 1,173 plan members.

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, 2021 there are 34 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, 2021 there were 1,157 plan members.

The Authority has a Roth IRA Plan which allows employees to make post-tax contributions which are immediately 100% vested. At June 30, 2021 there were 74 plan members.

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. The Authority recognized an expense \$1,996,534, which is net of forfeitures of \$138,826, for the year ended June 30, 2021. The Authority has accrued approximately \$94,000 of expense on the accrued payroll at June 30, 2021. Employee contributions were \$257,870 for the year ended June 30, 2021. At June 30, 2021, there were 1,529 plan members.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 18 – 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 required by the standard. Information is available in a separate audit report for the "Combined Plan for the General Retirement System of the City of Detroit" 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, 2020 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 18 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

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

During fiscal year 2020, employer contributions were not actuarially determined, but are determined by the provisions of the POA. Included within contributions for fiscal year 2020 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 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 2021. 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 \$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, 2020. The total share for the DWSD is estimated to be between \$9.5 million and \$12.2 million. GLWA's share of the 2024 estimated contribution will be between \$6.6 million and \$8.6 million with approximately \$4.3 million to \$5.5 million allocated to the Sewage Disposal Fund.

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

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, 2020, 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, 2019, which used updated procedures to roll forward the estimated liability to June 30, 2020. The actuarial valuation used the following actuarial assumptions applied to all periods included in the measurement.

Inflation	Not applicable
Salary increases	Not applicable
Investment rate of return	7.06%, net of investment expense and including inflation

The actuarial assumptions were based on an experience study from 2008-2013 issued in February 2015; the mortality table assumption was based on RP-2014 Blue Collar Annuitant Table for males and females. The tables are projected to be fully generational, based on two-dimensional sex distinct mortality scale MP-2014.

The actuarial assumptions, other than mortality and the investment rate of return, used in the June 30, 2019 valuation to calculate the total pension liability as of June 30, 2020 were based on the results of an actuarial experience study for the period from 2002-2007.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 18 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

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 asset class. These real 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. For each asset class that is included in the pension plan's target asset allocation as of June 30, 2020, these best estimates are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Expected Money- Weighted Rate of Return
Global equity	37.0%	6.37%	2.36%
Global fixed income	27.0%	3.02%	0.82%
Private equity	8.0%	10.57%	0.85%
Cash	0.0%	0.00%	0.00%
Real estate	15.0%	5.39%	0.81%
Diversifying strategies	8.0%	2.38%	0.19%
Hedge funds	5.0%	3.69%	0.18%
	<u>100%</u>		<u>5.21%</u>
Inflation			<u>1.85%</u>
Investment Rate of Return			<u>7.06%</u>

Discount Rate. The discount rate used to measure the total pension liability was 7.06%, however, the single discount rate used at the beginning of the year was 7.38 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that City of Detroit's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees both at the beginning of the year, as well as at the end of the year. 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, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

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	\$ 326,046,271
Plan fiduciary net position	<u>(233,469,252)</u>
Net Pension Liability	<u>\$ 92,577,019</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 18 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2020	\$ 329,880,290	\$ 244,613,775	\$ 85,266,515
Changes for the year:			
Interest	23,277,566	-	23,277,566
Difference between expected and actual experience	(6,585,459)	-	(6,585,459)
Changes in assumptions	8,406,113	-	8,406,113
Employer contributions	-	19,347,900	(19,347,900)
Net investment income	-	(2,318,571)	2,318,571
Benefit payments, including refunds of employee contributions	(28,932,239)	(28,932,239)	-
Other changes	-	758,387	(758,387)
Net changes	(3,834,019)	(11,144,523)	7,310,504
Balances at June 30, 2021	\$ 326,046,271	\$ 233,469,252	\$ 92,577,019

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the net pension liability of the Authority, calculated using the discount rate of 7.06%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is 1% lower (6.06%) or 1% higher (8.06%) than the current rate:

	1% Decrease (6.06%)	Current Discount Rate (7.06%)	1% Increase (8.06%)
Net Pension Liability	\$ 112,297,783	\$ 92,577,019	\$ 75,692,040

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, 2021, the Authority recognized pension expense \$14,452,504 for the Sewage Disposal Fund. At June 30, 2021, the Authority reported deferred outflows and inflows 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	\$ 20,226,710	\$ -	\$ 20,226,710
Employer contributions to the plan subsequent to the measurement date	19,347,900	-	19,347,900
Total	\$ 39,574,610	\$ -	\$ 39,574,610

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 18 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION) (cont.)

The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction in the net pension liability for the year ending June 30, 2021. 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	
2022	\$ 4,003,581
2023	5,783,278
2024	6,430,774
2025	<u>4,009,077</u>
Total	<u>\$ 20,226,710</u>

Payable to the Pension Plan. At June 30, 2021, the Authority did not have any outstanding contributions payable to the pension plan for the year then ended.

NOTE 19 – 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 is anticipated to be approximately \$738.4 million with a 75% spend rate assumption of \$553.8 million for the Sewage Disposal Fund through fiscal year 2025. 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, 2021 was approximately \$90 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 14). The amount of capital improvements in progress related to the contract are estimated by OMIDD to be worth \$ 30.8 million for the Sewage Disposal Fund at June 30, 2021. 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.

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, 2021.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 19 – COMMITMENTS AND CONTINGENCIES

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, 2021.

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 expires on October 1, 2022.

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 \$9,325,000 for the Sewage Disposal Fund, which are 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, 2021

NOTE 20 – NET INVESTMENT IN CAPITAL ASSETS

The composition of net investment in capital assets as of June 30, 2021 was as follows:

Capital Assets and Intangible Asset	
Capital assets not being depreciated	\$ 315,474,451
Capital assets being depreciated, net	2,221,472,660
Intangible asset – net	<u>4,433,681</u>
Total Capital Assets and Intangible Asset	<u>2,541,380,792</u>
Less: Related Debt	
Total debt, net (Note 13)	2,999,914,318
Less: Portion of bonds used for SWAP termination agreements	(227,272,994)
Less: Obligation receivable-local share of debt (Note 8)	(399,355,627)
Deferred charge on refunding	(118,709,227)
Deferred gain on refunding	44,046,097
Capital portion of regional system lease	348,971,391
Lease obligation-right to use asset (Note 15)	<u>4,447,297</u>
Total Related Debt	<u>2,652,041,255</u>
Net Investment in Capital Assets	<u>\$ (110,660,463)</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 14.

NOTE 21 – SUBSEQUENT EVENTS

JUNIOR LIEN REVENUE BONDS

The Authority received an order of approval from EGLE in August 2021, for \$9.2 million for local sewage disposal system improvements. This order of approval is part of the \$30 million SRF Junior Lien Sewage Disposal System Revenue Bonds (Ordinance No. 2021-04) approved by the GLWA Board in June 2021.

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

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 23,000 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. GLWA submitted all claims to its general liability and pollution insurance carriers. GLWA is awaiting coverage opinion letters from its carriers.

GLWA is conducting an internal investigation into the June 25-26 and July 16 rain events. For June 25-26 rain event, the preliminary findings of the internal investigation suggest that the heavy rain was the primary cause of the sewer backups. For the July 16 rain event, the preliminary findings of the internal investigation suggest that external power quality issues at the Bluehill Pump Station played a role in reported sewer backups in the Bluehill Pump Station tributary area.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 2021

NOTE 21 – SUBSEQUENT EVENTS (cont.)

GLWA's Board of Directors is also conducting an independent investigation into the rain events as well. At its November 18, 2021 Board Meeting, the Board passed a resolution allowing the internal investigative team and the Board's independent investigative team to collaborate on findings and recommendations related to the June 25-26, and July 16 rain events.

As of November 29, 2021, GLWA has been named in 10 sewer backup lawsuits. In the lawsuits in which GLWA has been served with the Complaint, GLWA filed a motion to dismiss the case. In the dispositive motions, GLWA argued that the heavy rain (an Act of God) was the cause of the sewer backup and not a defect in GLWA's sewer system.

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					
	2021	2020	2019	2018	2017	2016
Measurement Date	2020*	2019*	2018*	2017*	2016*	2015**
Share of Total Pension Liability						
Interest	\$ 23,277,566	\$ 23,544,630	\$ 23,465,553	\$ 24,268,718	\$ 25,906,278	\$ 32,970,738
Differences between expected and actual experience	(6,585,459)	2,220,999	(205,683)	1,519,917	(3,248,690)	(274,022)
Changes in assumptions	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	(28,932,239)	(29,836,515)	(30,406,407)	(32,770,558)	(44,676,314)	(34,831,342)
Net change	(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	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	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	19,342,889
Employee contributions	-	-	-	-	-	84,010
Net investment income (loss)	(2,318,571)	5,898,562	19,468,812	24,899,462	(841,679)	11,085,930
Benefit payments, including refunds of employee contributions	(28,932,239)	(29,836,515)	(30,406,407)	(32,770,558)	(44,676,314)	(34,831,342)
Administrative expense	-	-	-	-	-	(13,661)
Other changes	758,387	(76,643)	889,186	958,487	161,836	17,808,122
Net change	(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	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	233,469,252	244,613,775	249,280,471	239,980,980	227,545,689	253,553,946
SHARE OF NET PENSION LIABILITY	\$ 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	8.4%	9.1%	10.2%	12.2%	12.5%	13.2%
Plan fiduciary net position as a percentage of total pension liability	71.6%	74.2%	74.6%	67.6%	64.6%	69.9%

* As described in Notes 1 and 18 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.

Note: 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					
	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
Actual contribution	19,347,900	19,347,900	19,347,900	19,347,900	19,347,900	19,347,900
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

* As described in Notes 1 and 18 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.

Note: 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, 2021

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.

Note: Great Lakes Water Authority is required to present the last ten fiscal years of data; however, accounting standards allow the presentation of as many years as are available until ten fiscal years are presented.

SUPPLEMENTARY INFORMATION

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COMBINING AND INDIVIDUAL FUND SCHEDULES

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

COMBINING SCHEDULE OF NET POSITION - SEWAGE DISPOSAL FUND

As of June 30, 2021

	Sewer Operations	Sewer Improvement and Extension	Sewer Construction Fund	Sewage Disposal Total
Assets				
Current Assets				
Cash and cash equivalents	\$ 138,319,740	\$ 37,944,126	\$ 15,320,839	\$ 191,584,705
Restricted cash and cash equivalents	75,327,683	22,866	10,158,465	85,509,014
Restricted cash for the benefit of DWSD	2,919,797	-	-	2,919,797
Investments	43,982,053	83,412,272	4,993,688	132,388,013
Restricted investments	28,758,582	-	-	28,758,582
Receivables:				
Billed	59,552,759	-	-	59,552,759
Unbilled	24,320,796	-	-	24,320,796
Other	376,923	112,489	-	489,412
Allowance for doubtful accounts	(39,321,754)	-	-	(39,321,754)
Due from other governments	1,351,111	-	-	1,351,111
Due from other funds	-	-	162,368	162,368
Due from other sewage disposal funds	70,934	4,121,750	-	4,192,684
Contractual obligation receivable	14,637,184	-	-	14,637,184
Loan receivable - DWSD	8,296,578	-	-	8,296,578
Prepaid items and other assets	3,875,337	267,966	-	4,143,303
Inventories	7,000,631	-	-	7,000,631
Total Current Assets	<u>369,468,354</u>	<u>125,881,469</u>	<u>30,635,360</u>	<u>525,985,183</u>
Noncurrent assets				
Restricted cash and cash equivalents	2,876,374	-	-	2,876,374
Restricted investments	29,882,148	-	-	29,882,148
Contractual obligation receivable	384,718,443	-	-	384,718,443
Prepaid lease	13,750,000	-	-	13,750,000
Assets not subject to depreciation	315,474,451	-	-	315,474,451
Capital assets being depreciated, net	2,221,472,660	-	-	2,221,472,660
Intangible assets, net	4,433,681	-	-	4,433,681
Prepaid insurance on debt	11,053,199	-	-	11,053,199
Total Noncurrent Assets	<u>2,983,660,956</u>	<u>-</u>	<u>-</u>	<u>2,983,660,956</u>
Total Assets	<u>3,353,129,310</u>	<u>125,881,469</u>	<u>30,635,360</u>	<u>3,509,646,139</u>
Deferred Outflows of Resources				
Deferred charge on refunding	118,709,227	-	-	118,709,227
Deferred pension amounts	39,574,610	-	-	39,574,610
Total Deferred Outflows of Resources	<u>158,283,837</u>	<u>-</u>	<u>-</u>	<u>158,283,837</u>

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

	Sewer Operations	Sewer Improvement and Extension	Sewer Construction Fund	Sewage Disposal Total
Liabilities				
Current Liabilities				
Accounts and contracts payable	\$ 12,402,617	\$ 1,379,097	\$ 18,400,371	\$ 32,182,085
Accrued salaries, wages and benefits	1,136,565	-	-	1,136,565
Other accrued liabilities	4,615,255	-	-	4,615,255
Due to other governments	3,750,000	-	-	3,750,000
Due to other funds	19,271	2,117,470	649,603	2,786,344
Due to other sewage disposal funds	4,079,968	-	112,716	4,192,684
Interest payable	35,189,612	-	-	35,189,612
Current portion of:				
Revenue bonds and loans	87,409,283	-	-	87,409,283
Obligation payable	436,911	-	-	436,911
Regional system lease	6,667,073	-	-	6,667,073
Accrued compensated absences	729,241	-	-	729,241
Lease payable	189,119	-	-	189,119
Claims and judgments	1,825,000	-	-	1,825,000
Total Current Liabilities	<u>158,449,915</u>	<u>3,496,567</u>	<u>19,162,690</u>	<u>181,109,172</u>
Noncurrent Liabilities				
Revenue bonds and loans	2,912,505,035	-	-	2,912,505,035
Obligation payable	37,208,869	-	-	37,208,869
Regional system lease	495,956,275	-	-	495,956,275
Long-term lease payable	4,258,178	-	-	4,258,178
Accrued compensated absences	117,881	-	-	117,881
Claims and judgments	7,500,000	-	-	7,500,000
Other liabilities	5,500,000	-	-	5,500,000
Net pension liability	92,577,019	-	-	92,577,019
Total Noncurrent Liabilities	<u>3,555,623,257</u>	<u>-</u>	<u>-</u>	<u>3,555,623,257</u>
Total Liabilities	<u>3,714,073,172</u>	<u>3,496,567</u>	<u>19,162,690</u>	<u>3,736,732,429</u>
Deferred Inflows of Resources				
Deferred gain on refunding	44,046,097	-	-	44,046,097
Deferred amounts for swap terminations	<u>18,041</u>	<u>-</u>	<u>-</u>	<u>18,041</u>
Total Deferred Inflows of Resources	<u>44,064,138</u>	<u>-</u>	<u>-</u>	<u>44,064,138</u>
Net Position				
Net investment in capital assets	(122,133,133)	-	11,472,670	(110,660,463)
Restricted for debt service	90,855,751	-	-	90,855,751
Restricted for payment assistance program	6,428,815	-	-	6,428,815
Unrestricted (deficit)	<u>(221,875,596)</u>	<u>122,384,902</u>	<u>-</u>	<u>(99,490,694)</u>
TOTAL NET POSITION	<u>\$ (246,724,163)</u>	<u>\$ 122,384,902</u>	<u>\$ 11,472,670</u>	<u>\$ (112,866,591)</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, 2021

	Sewer Operations	Sewer Improvement and Extension	Sewer Construction Fund	Sewage Disposal Total
Operating Revenues				
Wholesale customer charges	\$ 267,567,816	\$ -	\$ -	\$ 267,567,816
Local system charges	187,959,700	-	-	187,959,700
Industrial waste charges	8,004,939	-	-	8,004,939
Pollutant surcharges	6,719,964	-	-	6,719,964
Other revenues	501,121	-	-	501,121
Total Operating Revenues	470,753,540	-	-	470,753,540
Operating Expenses				
Operating expenses before depreciation and amortization				
Personnel	63,055,636	-	-	63,055,636
Contractual services	56,731,877	6,181,337	-	62,913,214
Utilities - gas	4,634,898	-	-	4,634,898
Utilities - electric	14,670,298	-	-	14,670,298
Utilities - sewage	1,630,219	-	-	1,630,219
Utilities - water	2,986,013	-	-	2,986,013
Chemicals	7,953,995	-	-	7,953,995
Supplies and other expenses	21,938,081	-	-	21,938,081
Capital program allocation	(1,068,749)	-	-	(1,068,749)
Intergovernmental reimbursements	(338,212)	(273,969)	-	(612,181)
Total Operating Expenses Before	172,194,056	5,907,368	-	178,101,424
Depreciation and Amortization	150,772,065	-	-	150,772,065
Depreciation	109,926	-	-	109,926
Amortization of intangible assets				
Total Operating Expenses	323,076,047	5,907,368	-	328,983,415
Operating Income (Loss)	147,677,493	(5,907,368)	-	141,770,125
Nonoperating Revenues (Expenses)				
Earnings on investments	1,291,733	1,510,308	23,103	2,825,144
Net decrease in fair value of investments	(1,091,351)	(1,239,466)	(3,621)	(2,334,438)
Interest on loan and obligations receivable	18,247,607	-	-	18,247,607
Interest expense	(135,227,647)	-	-	(135,227,647)
Amortization of debt related items and cost of issuance	(3,022,639)	-	-	(3,022,639)
Legacy pension expense	(14,452,504)	-	-	(14,452,504)
WRAP (Water Residential Assistance Program)	(924,247)	-	-	(924,247)
Other	(298,940)	-	-	(298,940)
Capital outlay	88,819,011	(9,120,833)	(79,698,178)	-
Loss on disposal of capital assets	(241,105)	-	-	(241,105)
Total Nonoperating Revenues (Expenses)	(46,900,082)	(8,849,991)	(79,678,696)	(135,428,769)
Income (Loss) Before Transfers and Capital Contributions	100,777,411	(14,757,359)	(79,678,696)	6,341,356
Transfer in	6,533,351	62,300,514	67,840,410	136,674,275
Transfer out	(84,291,720)	(52,382,388)	(167)	(136,674,275)
Capital Contributions	5,960,000	-	-	5,960,000
Change in net position	28,979,042	(4,839,233)	(11,838,453)	12,301,356
NET POSITION (DEFICIT), Beginning of Year	(275,703,205)	127,224,135	23,311,123	(125,167,947)
NET POSITION (DEFICIT), END OF YEAR	\$ (246,724,163)	\$ 122,384,902	\$ 11,472,670	\$ (112,866,591)

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, 2021

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, 2021 consisted of the following:

Sewage Disposal Fund due to Water Fund				
	Sewer Operations	Sewer Improvement and Extension	Sewer Construction Fund	Total
Water Operations	\$ -	\$ 1,539	\$ -	\$ 1,539
Water Improvement and Extension	-	1,680,681	-	1,680,681
Water Construction Fund	<u>19,271</u>	<u>435,250</u>	<u>649,603</u>	<u>1,104,124</u>
TOTALS	<u>\$ 19,271</u>	<u>\$ 2,117,470</u>	<u>\$ 649,603</u>	<u>\$ 2,786,344</u>

Water Fund due to Sewage Disposal Fund				
	Water Operations	Water Improvement and Extension	Water Bond Fund	Total
Sewer Operations	\$ -	\$ -	\$ -	\$ -
Sewer Improvement and Extension	-	-	-	-
Sewer Construction Fund	<u>162,368</u>	<u>-</u>	<u>-</u>	<u>162,368</u>
TOTALS	<u>\$ 162,368</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 162,368</u>

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 SEWAGE DISPOSAL OPERATIONS - BUDGET TO ACTUAL For the Year Ended June 30, 2021

	Original Budget	Amended Budget	Administrative and Centralized Services Reclassification	Final Amended Budget	Actual	Variance Under (Over) Amended Budget	Percent Under (Over) Amended Budget
Operating Expenses							
Personnel	\$ 37,871,716	\$ 37,762,892	\$ 25,876,915	\$ 63,639,807	\$ 63,055,636	\$ 584,171	0.92%
Contractual services	26,725,021	23,421,021	31,896,344	55,317,365	56,731,877	(1,414,512)	-2.56%
Utilities	25,531,600	23,523,600	130,820	23,654,420	23,921,428	(267,008)	-1.13%
Chemicals	8,365,940	8,338,340	-	8,338,340	7,953,995	384,345	4.61%
Supplies and other expenses	14,242,252	16,368,851	7,562,870	23,931,721	21,938,081	1,993,640	8.33%
Capital program allocation	(1,325,784)	(1,325,784)	-	(1,325,784)	(1,068,749)	(257,035)	19.39%
Intergovernmental reimbursements	(338,200)	(338,200)	-	(338,200)	(338,212)	12	0.00%
Centralized services allocation	53,415,100	52,176,000	(52,176,000)	-	-	-	0.00%
Administrative services allocation	15,854,600	15,145,000	(15,145,000)	-	-	-	0.00%
Unallocated reserve	4,603,855	7,224,280	1,735,251	8,959,531	-	8,959,531	100.00%
Total operating expenses before depreciation and amortization financial reporting basis	184,946,100	182,296,000	(118,800)	182,177,200	172,194,056	9,983,144	
Warehouse lease [1]	-	-	118,800	118,800	118,759	41	0.03%
TOTAL OPERATING EXPENSES							
BUDGET BASIS	<u>\$ 184,946,100</u>	<u>\$ 182,296,000</u>	<u>\$ -</u>	<u>\$ 182,296,000</u>	<u>\$ 172,312,815</u>	<u>\$ 9,983,185</u>	5.48%

[1] The warehouse lease is an expense for budget purposes. For financial reporting it is accounted for under GASB 87 as a capitalized lease.

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 REQUIREMENT BUDGET TO ACTUAL - SEWAGE DISPOSAL OPERATIONS For the Year Ended June 30, 2021

The Great Lakes Water Authority Board adopts a budget using a revenue requirement 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 budgeted, adjusted for amendments, for comparison with actual revenues, expenses, and other payments. Overall, the Sewage Disposal Operations had a positive variance of approximately \$11.9 million.

	2021 Adopted Budget	2021 Amended Budget	2021 Actual	Variance Over (Under) Amended Budget
Revenues				
Revenue from Charges				
Suburban Wholesale Customers	\$ 271,051,800	\$ 266,493,500	\$ 267,567,816	\$ 1,074,316
Suburban Wholesale Other	5,960,000	5,960,000	5,960,000	-
Local System Charges	190,112,100	187,959,700	187,959,700	-
Industrial Waste Control	8,775,400	7,684,700	8,004,939	320,239
Pollutant Surcharges	5,262,800	6,107,600	6,719,964	612,364
Total Revenue from Charges	<u>481,162,100</u>	<u>474,205,500</u>	<u>476,212,419</u>	<u>2,006,919</u>
Other Revenue [1]	-	2,195,300	2,217,405	22,105
Investment earnings [2]	5,589,200	2,778,100	2,802,041	23,941
Total Revenues	<u>\$ 486,751,300</u>	<u>\$ 479,178,900</u>	<u>\$ 481,231,865</u>	<u>\$ 2,052,965</u>
Revenue Requirements				
Operations and Maintenance [3]	184,946,100	182,296,000	172,312,815	(9,983,185)
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	-
Debt Service	209,739,900	201,780,400	201,945,083	164,683
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	-
Water Residential Assistance Program Contribution	2,415,100	2,415,100	2,415,100	-
Regional System Lease	27,500,000	27,500,000	27,500,000	-
Transfer to the Improvement & Extension Fund [4]	39,705,500	42,742,700	42,742,700	-
Total Revenue Requirements	<u>\$ 486,751,300</u>	<u>\$ 479,178,900</u>	<u>\$ 469,360,398</u>	<u>\$ (9,818,502)</u>
Revenue Requirement Variance	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 11,871,467</u>	<u>\$ 11,871,467</u>

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

[2] Investment earnings excludes construction fund.

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

[4] DWSD loan receivable payments are transferred directly to the Improvement & Extension Fund. They are excluded from this schedule because they are not part of the revenue requirement methodology used to set charges.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SCHEDULE OF REVENUE REQUIREMENT TO STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION CROSSWALK For the Year Ended June 30, 2021

The Great Lakes Water Authority establishes a Revenue Requirement 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 (principal and interest) is 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.
- Lease payments (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.
- Contributions to the 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.
- 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 Requirement

\$ 11,871,467

Budgetary categories adjustments to financial reporting basis

Pension delayed accounting election adjustments	
Current year pension transfers/ payments recorded as deferral	19,347,900
Prior year pension contribution accounted for in current year	(14,452,504)
Administrative prepaid adjustment	807,776
Debt service	106,999,056
Accelerated pension and B&C notes obligation	416,110
Regional system lease	6,417,459
Right to use lease - warehouse	85,193
Water Residential Assistance Program (WRAP)	1,490,853
Improvement & Extension fund transfers	42,742,700

Nonbudgeted financial reporting categories adjustments

Depreciation and amortization	(150,881,991)
Amortization - debt related	(3,022,639)
Improvement & Extension operating expenses	(5,907,368)
Gain (loss) on disposal of capital assets	(241,105)
Raw water rights obligation	-
Investment earnings for construction fund	23,103
Interest on DWSD note receivable	635,284
Investment earnings unrealized gain (loss)	(2,334,438)
Other temporary differences	<u>(1,695,500)</u>

Change in Net Position per Statement of Revenues, Expenses and Changes in Net Position

\$ 12,301,356

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, 2021

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. Overall, the Sewer System I&E Fund experienced a decrease of \$4.8 million in net position which represents use of I&E funds reserved from prior years. This was expected as it aligns with the capital funding strategy. The system experienced a negative budget variance of approximately \$5.4 million.

	Adopted Budget	Amended Budget	Actual [2]	Variance Over (Under) Amended Budget
Inflows				
Revenue transfers	\$ 39,705,500	\$ 42,742,700	\$ 42,742,700	\$ -
Receipt of DWSD shortfall loan	19,288,300	19,288,300	18,841,715	(446,585)
Investment earnings [1]	-	1,401,300	1,510,308	109,008
Total Inflows	58,993,800	63,432,300	63,094,723	(337,577)
Outflows				
Capital spending other (net operating expenses)	-	2,460,700	5,907,368	3,446,668
Capital outlay	20,481,100	14,270,300	9,120,833	(5,149,467)
Sewer system revenue transfer out [1]	-	1,401,300	1,532,672	131,372
Revenue financed capital - transfer to Sewer Construction Fund	42,500,000	43,971,200	50,579,091	6,607,891
Total Outflows	62,981,100	62,103,500	67,139,964	5,036,464
Net Increase (Decrease) - Budget Basis	\$ (3,987,300)	\$ 1,328,800	(4,045,241)	\$ (5,374,041)
Non-budgeted inflows (outflows)				
Net decrease in fair value of investments			(1,239,466)	
Asset transfers between systems (net)			436,524	
Other			8,950	
Combining Schedule Sewer I&E Fund Change in Net Position [2]			\$ (4,839,233)	

[1] As required by the Master Bond Ordinance investment earnings on I&E funds are transferred to the receiving fund on a monthly basis and are reported in the Operations Fund Budget to Actual investment earnings line item. See Schedule of Revenue Requirement Budget to Actual - Sewage Disposal Operations. This amount does not include the net change in the fair value of investments as the cash is not available until the investments mature or are sold and gains and losses are realized.

[2] 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, 2021

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 System Construction Fund had a decrease of \$11.8 million in net position which represents use of construction funds from prior periods. This was expected as it aligns with the capital funding strategy. They system experienced a negative budget variance of approximately \$4.6 million.

	Adopted Budget	Amended Budget	Actual [2]	Variance Over (Under) Amended Budget
Inflows				
Transfers from Sewer Improvement & Extension Fund	\$ 42,500,000	\$ 43,971,200	\$ 50,579,091	\$ 6,607,891
State revolving loans	33,200,000	33,200,000	17,261,319	(15,938,681)
Investment earnings [1]	497,700	27,600	23,103	(4,497)
Total Inflows	<u>76,197,700</u>	<u>77,198,800</u>	<u>67,863,513</u>	<u>(9,335,287)</u>
Outflows				
Sewer system revenue transfer out [1]	-	-	167	167
Capital projects	82,979,000	84,459,700	79,698,178	(4,761,522)
Total Outflows	<u>82,979,000</u>	<u>84,459,700</u>	<u>79,698,345</u>	<u>(4,761,355)</u>
Net Increase (Decrease) - Budget Basis	<u>\$ (6,781,300)</u>	<u>\$ (7,260,900)</u>	(11,834,832)	<u>\$ (4,573,932)</u>
Non-budgeted inflows (outflows)				
Net decrease in fair value of investments			(3,621)	
Combining Schedule Sewage Disposal Construction Fund Change in Net Position [2]			<u>\$ (11,838,453)</u>	

[1] As required by the Master Bond Ordinance investment earnings on I&E funds are transferred to the receiving fund on a monthly basis and are reported in the Operations Fund Budget to Actual investment earnings line item. The Construction funds contains a combination of revenue bonds (interest earnings stay in the fund) and I&E funds (interest earnings are transferred to the receiving fund). There were no revenue bonds proceeds remaining in the Construction funds at June 30, 2021. See Schedule of Revenue Requirement Budget to Actual - Sewage Disposal Operations. This amount does not include the net change in the fair value of investments as the cash is not available until the investments mature or are sold and gains and losses are realized.

[2] 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
June 30, 2021

	2021	2020	2019	2018	2017	2016*
Cash and investments - Unrestricted	<u>\$ 323,972,718</u>	<u>\$ 287,464,920</u>	<u>\$ 236,057,128</u>	<u>\$ 208,563,268</u>	<u>\$ 205,179,312</u>	<u>\$ 188,063,375</u>
Operating Expense						
Operating expense	\$ 328,983,415	\$ 329,870,427	\$ 342,585,175	\$ 363,629,987	\$ 336,946,731	\$ 170,401,050
Less: depreciation	(150,772,065)	(152,920,967)	(168,544,370)	(187,250,583)	(185,628,465)	(86,021,029)
Less: amortization of intangible asset	<u>(109,926)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net Operating Expense	<u>\$ 178,101,424</u>	<u>\$ 176,949,460</u>	<u>\$ 174,040,805</u>	<u>\$ 176,379,404</u>	<u>\$ 151,318,266</u>	<u>\$ 84,380,021</u>
Operating Expense per Day (365 days)	<u>\$ 487,949</u>	<u>\$ 484,793</u>	<u>\$ 476,824</u>	<u>\$ 483,231</u>	<u>\$ 414,571</u>	<u>\$ 466,188</u>
Days Cash						
Number of days cash	<u>664</u>	<u>593</u>	<u>495</u>	<u>432</u>	<u>495</u>	<u>403</u>

* 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, 2021

Note 1 – Combining and Individual Fund Schedules

The Combining and Individual 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 to pay for the wastewater system capital improvements from Sewer Improvement & Extension Fund transfers and the proceeds of sewer debt obligations and investment earnings thereon.

Note 2 – Budget to Actual Schedules

Schedule of Operating Expenses – Budget to Actual

The schedule of operating expenses for sewage disposal system operations provides the detail of the major expense categories of the operations budget compared to the actual results. With the implementation of GASB 87 by the Authority this fiscal year, there has been a change in the presentation of this schedule as the total payments made for the new warehouse lease are included in the operations budget as an expense. 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 schedule includes the actual operating expenses before depreciation and amortization for the Sewer Operations reported in the Combining Schedule of Revenues, Expenses and Changes in Net position for the Sewage Disposal Fund. The GASB 87 line represents the total lease payments made for the warehouse lease which is included in the budget as an operating lease.

Schedule of Revenue Requirement – Budget to Actual

The revenue requirement is the basis for GLWA's budget and calculating Member Partner service charges. The revenue requirement is 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 as described in the note above, in addition to cash payments for debt service, legacy pension obligations, 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

NOTES TO SUPPLEMENTARY INFORMATION For the Year Ended June 30, 2021

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 requirements 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.

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STATISTICAL SECTION

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GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

STATISTICAL SECTION TABLE OF CONTENTS

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 Sewage Disposal Fund's economic condition.

The statistical section information is presented in the following categories:

		<u>Page</u>
Financial Trends Schedules 1 through 2	Financial trends information is intended to show how the Sewage Disposal Fund's financial position has changed over time.	65
Revenue Capacity Schedules 3 through 6	Revenue capacity information is intended to show the factors affecting the Sewage Disposal Fund's ability to generate its own-source revenue.	68
Debt Capacity Information Schedules 7 through 11	Debt capacity information is intended to show the Sewage Disposal Fund's debt burden and its ability to issue additional debt.	72
Demographic and Economic Schedules 12 through 13	Demographic and economic information is intended to show the socioeconomic environment within which the Sewage Disposal Fund operates.	81
Operating Information Schedules 14 through 15	Operating information is intended to show contextual information about operations and resources to provide understanding and assessing the Sewage Disposal Fund's economic condition.	83

Sources: Unless otherwise noted, information presented in these schedules was obtained from GLWA's annual comprehensive financial reports, the prior financial reports of DWSD or other internal information systems.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SCHEDULE OF NET POSITION - SEWAGE DISPOSAL FUND

As of June 30, 2021

	2021	2020	2019	2018	2017	2016
Assets						
Current Assets						
Cash and cash equivalents	\$ 191,584,705	\$ 119,569,724	\$ 160,371,766	\$ 199,056,556	\$ 203,748,704	\$ 156,022,295
Restricted cash and cash equivalents	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	2,919,797	-	627,919	-	-	51,648
Investments	132,388,013	167,895,196	75,685,362	9,506,712	1,430,608	32,041,080
Restricted investments	28,758,582	87,066,562	33,384,445	31,790,386	31,371,834	28,843,000
Receivables						
Billed	59,552,759	56,390,056	60,549,471	50,439,450	52,234,778	48,046,934
Unbilled	24,320,796	23,861,029	24,297,140	25,200,108	24,279,170	23,037,391
Other	489,412	95,376	221,452	3,723,036	3,157,050	92,748,989
Allowance for doubtful accounts	(39,321,754)	(36,357,891)	(34,802,168)	(32,863,001)	(30,410,232)	(98,968,630)
Due from other governments	1,351,111	11,459,398	179,585	24,339,106	29,461,328	66,202,143
Due from other funds	162,368	-	12,568	3,447,927	-	65,971
Contractual obligation receivable	14,637,184	14,041,327	12,089,779	11,253,800	11,262,300	5,077,675
Loan receivable - DWSD	8,296,578	18,206,431	17,542,669	9,367,355	-	-
Prepaid items and other assets	4,143,303	3,691,723	2,801,271	1,683,659	1,089,521	407,359
Inventories	7,000,631	6,370,587	5,445,981	8,471,626	8,509,454	9,984,063
Total Current Assets	<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	2,876,374	27,014,187	62,030,778	30,001,353	128,378,837	155,488,780
Restricted investments	29,882,148	29,048,921	73,903,089	143,261,763	81,177,748	62,186,734
Contractual obligation receivable	384,718,443	399,355,626	414,766,953	335,574,500	346,828,300	366,254,075
Loan 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	-
Assets not subject to depreciation	315,474,451	300,868,836	318,574,902	271,362,100	278,286,118	295,876,258
Capital assets being depreciated, net	2,221,472,660	2,298,917,647	2,357,018,353	2,485,098,172	2,591,023,442	2,699,891,145
Intangible assets, net	4,433,681	-	-	-	-	-
Prepaid insurance on debt	11,053,199	12,030,061	13,880,254	16,931,255	18,581,897	27,822,085
Total Noncurrent Assets	<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>3,505,453,455</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	118,709,227	127,077,205	159,370,167	186,544,140	198,351,942	212,147,508
Deferred pension amounts	<u>39,574,610</u>	<u>27,368,710</u>	<u>20,347,789</u>	<u>33,369,917</u>	<u>38,462,972</u>	<u>24,376,481</u>
Total Deferred Outflows of Resources	<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>

	2021	2020	2019	2018	2017	2016
Liabilities						
Current Liabilities						
Accounts and contracts payable	\$ 32,182,085	\$ 30,838,950	\$ 38,004,322	\$ 34,077,602	\$ 27,546,558	\$ 36,152,087
Accrued salaries, wages and benefits	1,136,565	-	-	-	-	-
Other accrued liabilities	4,615,255	-	627,919	-	898,800	674,458
Due to other governments	3,750,000	1,750,000	-	47,539	35,848,573	24,225,013
Due to other funds	2,786,344	2,134,191	2,876,954	330,293	-	-
Interest payable	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	87,409,283	88,939,460	88,357,662	61,186,207	65,920,307	60,902,189
Obligation payable	436,911	416,105	396,291	377,419	359,448	342,331
Regional system lease	6,667,073	6,395,235	6,134,481	5,884,359	5,644,435	5,414,293
Accrued compensated absences	729,241	899,422	757,328	717,086	679,260	454,630
Lease payable	189,119	-	-	-	-	390,165
Claims and judgments	1,825,000	150,000	56,111	334,392	3,852,062	269,250
Total Current Liabilities	<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	2,912,505,035	3,015,182,999	3,163,394,353	3,168,566,028	3,236,016,730	3,387,291,190
Obligation payable	37,208,869	37,645,781	38,061,886	38,458,178	38,835,597	39,195,045
Regional system lease	495,956,275	502,623,348	509,018,588	515,153,064	521,037,424	526,681,859
Lease right to use asset	4,258,178	-	-	-	-	-
Accrued compensated absences	117,881	-	-	-	-	-
Accrued workers' compensation	-	-	-	-	-	4,390,938
Claims and judgments	7,500,000	7,500,000	7,500,000	7,500,000	187,500	25,914,350
Other noncurrent liabilities	5,500,000	6,417,291	6,291,681	6,003,540	5,983,201	5,912,693
Net pension liability	92,577,019	85,266,515	84,670,705	114,810,555	124,506,503	109,208,359
Total Noncurrent Liabilities	<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>3,732,539,745</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	44,046,097	47,525,546	47,982,938	46,654,836	49,257,784	-
Deferred amounts for swap terminations	18,041	35,625	165,223	189,808	214,393	238,978
Deferred capital contribution	-	5,960,000	-	-	-	-
Deferred pension amounts	-	-	-	12,994,118	11,750,654	27,805,977
Total Deferred Inflows of Resources	<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 [1]						
Net investment in capital assets	(110,660,463)	(113,359,960)	(62,382,494)	34,412,661	142,699,532	220,388,158
Restricted for debt service	90,855,751	85,803,313	117,246,259	101,996,536	107,931,677	108,793,840
Restricted for payment assistance program	6,428,815	5,233,710	4,631,494	3,308,896	3,117,744	2,052,550
Unrestricted (deficit)	<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	<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>

[1] The classification for net position for 2016 - 2018 have been revised to match the methodology used from 2019 and thereafter.

* 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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

CHANGES IN NET POSITION - SEWAGE DISPOSAL FUND

	2021	2020	2019	2018	2017	2016*
Operating Revenues						
Wholesale customer charges	\$ 267,567,816	\$ 266,003,286	\$ 272,772,460	\$ 268,978,831	\$ 263,311,745	\$ 121,106,353
Local system charges	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	95,826,900
Industrial waste charges	8,004,939	7,854,593	9,106,274	14,334,979	14,381,106	6,910,192
Pollutant surcharges	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	501,121	521,957	506,323	4,391,145	538,807	4,197,614
Total Operating Revenues	470,753,540	466,635,644	469,476,907	473,582,559	505,807,082	230,464,969
Operating Expenses						
Personnel	63,055,636	60,320,195	56,503,053	53,680,162	47,894,911	13,289,741
Contractual services	62,913,214	63,350,953	58,660,680	64,082,761	55,878,440	13,875,756
Utilities	23,921,428	23,432,981	25,147,527	26,823,299	27,191,866	12,668,942
Chemicals	7,953,995	8,672,406	8,187,033	8,073,045	9,424,428	4,006,941
Supplies and other expenses	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	(1,068,749)	(1,183,398)	(1,325,842)	(969,671)	(1,150,316)	-
Intergovernmental reimbursements	(612,181)	(1,036,758)	(713,633)	(292,965)	(101,191)	-
Centralized services	-	-	-	-	-	16,733,431
Administrative services	-	-	-	-	-	7,342,499
Depreciation	150,772,065	152,920,967	168,544,370	187,250,583	185,628,465	86,021,029
Amortization of intangible assets	109,926	-	-	-	-	-
Total Operating Expenses	328,983,415	329,870,427	342,585,175	363,629,987	336,946,731	170,401,050
Operating Income	141,770,125	136,765,217	126,891,732	109,952,572	168,860,351	60,063,919
Nonoperating Revenues (Expenses)						
Earnings on investments	2,825,144	8,959,638	10,020,017	5,266,255	2,209,872	1,089,367
Net increase (decrease) in fair value of investments	(2,334,438)	2,712,294	1,743,384	-	-	-
Interest on loan and obligations receivable	18,247,607	19,489,018	18,856,322	15,505,300	17,062,678	8,831,250
Interest expense	(135,227,647)	(155,410,235)	(159,893,300)	(161,052,102)	(159,157,152)	(82,489,347)
Amortization of debt related items and cost of issuance	(3,022,639)	(3,956,009)	(6,776,707)	(5,153,300)	(17,340,200)	(363,167)
Legacy pension expense	(14,452,504)	(12,922,789)	10,763,940	(15,988,471)	(4,504,230)	-
WRAP (Water Residential Assistance Program)	(924,247)	(1,921,938)	(1,168,664)	(2,248,980)	(1,243,006)	-
Other	(298,940)	365,964	305,723	(709,537)	(455,970)	-
Sewer lookback - MOU adjustment	-	-	(6,527,200)	-	-	-
Gain (loss) on disposal of capital assets	(241,105)	(1,266,126)	516,379	2,469,703	(42,926)	275,693
Loss on impairment of capital assets	-	-	(355,204)	-	-	-
Total Nonoperating Expenses	(135,428,769)	(143,950,183)	(132,515,310)	(161,911,132)	(163,470,934)	(72,656,204)
Income (loss) before contributions and special item	6,341,356	(7,184,966)	(5,623,578)	(51,958,560)	5,389,417	(12,592,285)
Capital Contributions	5,960,000	5,960,000	-	-	320,707	2,000,000
Special Item - MOU with DWSD	-	-	-	-	(61,478,682)	-
Change in net position	12,301,356	(1,224,966)	(5,623,578)	(51,958,560)	(55,768,558)	(10,592,285)
NET POSITION (DEFICIT), Beginning of Year	(125,167,947)	(123,943,981)	(118,319,403)	(66,360,843)	(10,592,285)	-
NET POSITION (DEFICIT), END OF YEAR	\$ (112,866,591)	\$ (125,168,947)	\$ (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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

CHARGE ADJUSTMENTS

	2022	2021	2020	2019	2018	2017	2016 [5]
Budgeted revenue requirement [1]	\$ 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	-2.3%	1.3%	2.2%	1.0%	0.3%	4.0%	4.0%
Average annual charge adjustment [2]							
Total regional system	-0.6%	2.0%	0.8%	0.1%	-0.7%	8.3%	n/a [6]
Suburban wholesale	-0.1%	1.7%	-0.1%	1.3%	1.8%	4.9%	-1.1%
Local system charge [3]	-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	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.

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

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

Schedule 4

SEWAGE DISPOSAL FUND OPERATING REVENUES/ LARGEST SEWER CUSTOMERS

	2021	2020	2019	2018	2017	2016*
Operating Revenues						
Suburban wholesale charges [1]	\$ 267,567,816	\$ 266,003,286	\$ 272,772,460	\$ 268,978,831	\$ 263,311,745	\$ 121,106,353
Local system charges	187,959,700	185,807,300	181,159,300	178,969,200	187,304,100	95,826,900
Industrial waste and surcharges	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	501,121	521,957	506,323	4,391,145	538,807	4,197,614
Total Operating Revenues	\$ 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	56.84%	57.00%	58.10%	56.80%	52.06%	52.55%
Local system charges % of total operating revenue	39.93%	39.82%	38.59%	37.79%	37.03%	41.58%
Ten Largest Wholesale Customers						
Oakland Macomb Interceptor Drainage District	\$ 70,355,029	\$ 69,870,786	\$ 77,533,200	\$ 72,816,000	\$ 69,627,600	\$ 34,541,400
Wayne County - Rouge Valley	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	45,558,000	45,264,000	44,972,400	45,751,200	45,682,800	21,410,400
Evergreen Farmington	35,084,400	34,839,600	34,578,000	33,733,200	32,179,200	15,094,200
South Macomb Sanitation District	25,000,800	24,837,600	24,672,000	24,637,200	24,120,000	11,501,400
Dearborn	19,628,400	19,502,400	19,372,800	19,628,400	19,603,200	8,049,000
Highland Park	5,708,400	5,670,000	5,614,800	5,642,400	5,818,800	2,808,600
Hamtramck	4,019,400	3,994,800	3,962,400	3,958,800	4,086,000	1,966,800
Grosse Pointe Farms	2,769,000	2,750,400	2,727,600	2,696,400	2,667,600	1,243,800
Grosse Pointe Park	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	\$ 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	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

SCHEDULE OF WHOLESALE SEWER CHARGES* **AND TOTAL REVENUE REQUIREMENT FOR THE DETROIT RETAIL CLASS**

<u>Wholesale Sewage Charges</u>	<u>Monthly Charge</u>
Oakland Macomb Interceptor District (OMID)	\$ 6,400,000
Rouge Valley	4,575,900
Oakland County - George W. Kuhn (GWK)	3,821,000
Evergreen Farmington	2,944,100
SE Macomb Sanitary District	2,097,000
Dearborn	1,646,200
Grosse Pointe Farms	232,300
Grosse Pointe Park	153,000
Melvindale	129,600
Farmington	97,200
Center Line	87,300
Allen Park	72,200
Highland Park	478,900
Hamtramck	337,000
Grosse Pointe	75,400
Harper Woods	18,500
Redford Township	22,300
Wayne County #3	4,300

Annual Detroit Wholesale Revenue Requirement \$187,959,700 - Effective January 1, 2021

* Wholesale charges went into effect January 1, 2021

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

INDUSTRIAL WASTE CONTROL CHARGES AND POLLUTANT SURCHARGES
EFFECTIVE JANUARY 1, 2021

Industrial Waste Control Charges		
Meter size - inches:	Admin Only Charge (1)	Monthly Charge (2)
5/8	\$ 0.86	\$ 3.45
3/4	\$ 1.30	\$ 5.18
1	\$ 2.16	\$ 8.63
1 1/2	\$ 4.75	\$ 18.98
2	\$ 6.90	\$ 27.60
3	\$ 12.51	\$ 50.03
4	\$ 17.25	\$ 69.00
6	\$ 25.88	\$ 103.50
8	\$ 43.13	\$ 172.50
10	\$ 60.38	\$ 241.50
12	\$ 69.00	\$ 276.00
14	\$ 86.25	\$ 345.00
16	\$ 103.50	\$ 414.00
18	\$ 120.75	\$ 483.00
20	\$ 138.00	\$ 552.00
24	\$ 155.25	\$ 621.00
30	\$ 172.50	\$ 690.00
36	\$ 189.75	\$ 759.00
48	\$ 207.00	\$ 828.00

- (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	Charge per Pound
Biochemical Oxygen Demand (BOD) for concentrations > 275 mg/l	\$ 0.502
Total Suspended Solids (TSS) for concentrations > 350 mg/l	\$ 0.510
Phosphorus (P) for concentrations > 12 mg/l	\$ 7.519
Fats, Oil and Grease (FOG) for concentrations > 100 mg/l	\$ 0.484
Septage Disposal Fee per 500 gallons of disposal	\$ 48.00

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

RATIOS OF OUTSTANDING DEBT BY TYPE

	2021	2020	2019	2018	2017	2016
Revenue bonds [1]	\$ 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	416,767,850	449,666,531	474,177,128	475,677,540	485,267,036	506,435,742
Total Sewage Disposal Fund	<u>\$ 2,999,914,318</u>	<u>\$ 3,104,122,459</u>	<u>\$ 3,251,752,015</u>	<u>\$ 3,229,752,235</u>	<u>\$ 3,301,937,037</u>	<u>\$ 3,448,193,479</u>
Total taxable value *	n/a	n/a	n/a	n/a	n/a	n/a
Total population served [2]:	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
Total debt per capita:	\$ 1,071	\$ 1,109	\$ 1,161	\$ 1,153	\$ 1,179	\$ 1,231
Per capita income [3]	\$ 53,316	\$ 50,069	\$ 54,172	\$ 52,572	\$ 50,863	\$ 48,692
Total debt as a percentage of income:	2.01%	2.21%	2.14%	2.19%	2.32%	2.53%

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

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

[3] Source: FRED Economic Data, St. Louis Fed and Michigan State University Center for Economic Analysis.

* 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.

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, 2021

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	Original Principal Amount [1]	Outstanding as of June 30, 2021	Total Future Debt [2]
Sewage Disposal System Revenue Bonds			
Senior Lien Bonds			
Sewage Disposal System Revenue Bonds (Senior), Series 1999 SRF-2	\$ 46,000,000	\$ 5,700,000	\$ 5,700,000
Sewage Disposal System Revenue Bonds (Senior), Series 1999A	33,510,118	5,675,000	5,675,000
Sewage Disposal System Senior Lien Revenue Bonds, Series 2003B	150,000,000	100,000	100,000
Sewage Disposal System Senior Lien Revenue Refunding Bonds, Series 2004A	101,435,000	14,050,000	14,050,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2006D	370,000,000	239,475,000	239,475,000
Sewage Disposal System Revenue & Revenue Refunding Senior Lien Bonds, Series 2012A	659,780,000	41,525,000	41,525,000
Sewage Disposal System Revenue Senior Lien Bonds, Series 2014C-1	123,220,000	5,000	5,000
Sewage Disposal System Revenue Senior Lien Bonds, Series 2014C-2	27,470,000	5,000	5,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014C-3	446,170,000	420,745,000	420,745,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2014C-6	143,880,000	88,900,000	88,900,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2016B	126,105,000	126,105,000	126,105,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018A	81,595,000	80,225,000	80,225,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018B	131,690,000	131,690,000	131,690,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2018C	44,180,000	41,305,000	41,305,000
Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2020A	594,930,000	594,930,000	594,930,000
	<u>3,079,965,118</u>	<u>1,790,435,000</u>	<u>1,790,435,000</u>
Second Lien Bonds			
Sewage Disposal System Second Lien Revenue Bonds, Series 2001B	110,550,000	78,895,000	78,895,000
Sewage Disposal System Revenue Second Lien Bonds, Series 2005A	273,355,000	100,000	100,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2005B	40,215,000	17,115,000	17,115,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2005C	63,160,000	100,000	100,000
Sewage Disposal System Revenue Second Lien Bonds, Series 2006B	250,000,000	100,000	100,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2014C-7	76,715,000	55,210,000	55,210,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2015C	197,660,000	197,160,000	197,160,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2016C	295,190,000	295,190,000	295,190,000
Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2020B	92,525,000	92,525,000	92,525,000
	<u>1,399,370,000</u>	<u>736,395,000</u>	<u>736,395,000</u>

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

DEBT BY LIEN
As of June 30, 2021

Continued From
Previous Page

	Original Principal Amount [1]	Outstanding as of June 30, 2021	Total Future Debt [2]
Sewage Disposal System Revenue Bonds (concluded)			
SRF Junior Lien Bonds			
Sewage Disposal System Revenue Bonds, Series 2000 SRF-1	\$ 44,197,995	\$ 5,297,995	\$ 5,297,995
Sewage Disposal System Revenue Bonds, Series 2000 SRF-2	64,401,066	7,941,066	7,941,066
Sewage Disposal System Revenue Bonds, Series 2001 SRF-1	82,200,000	19,880,000	19,880,000
Sewage Disposal System Revenue Bonds, Series 2001 SRF-2	59,850,000	14,475,000	14,475,000
Sewage Disposal System Revenue Bonds, Series 2002 SRF-1	18,985,000	2,350,000	2,350,000
Sewage Disposal System Revenue Bonds, Series 2002 SRF-2	1,545,369	190,369	190,369
Sewage Disposal System Revenue Bonds, Series 2002 SRF-3	31,549,466	7,024,466	7,024,466
Sewage Disposal System Revenue Bonds, Series 2003 SRF-1	48,520,000	14,490,000	14,490,000
Sewage Disposal System Revenue Bonds, Series 2003 SRF-2	25,055,370	6,015,370	6,015,370
Sewage Disposal System Revenue Bonds, Series 2004 SRF-1	2,910,000	685,000	685,000
Sewage Disposal System Revenue Bonds, Series 2004 SRF-2	18,353,459	4,303,459	4,303,459
Sewage Disposal System Revenue Bonds, Series 2004 SRF-3	12,722,575	2,972,575	2,972,575
Sewage Disposal System Revenue Bonds, Series 2007 SRF-1	167,540,598	82,115,598	82,115,598
Sewage Disposal System Revenue Bonds, Series 2009 SRF-1	13,970,062	6,915,062	6,915,062
Sewage Disposal System Revenue Bonds, Series 2010 SRF-1	4,214,763	2,325,763	2,325,763
Sewage Disposal System Revenue Bonds, Series 2012 SRF-1	14,950,000	11,215,000	11,215,000
Sewage Disposal System Revenue Bonds, Series 2015A SRF	79,500,000	63,145,000	63,145,000
Sewage Disposal System Revenue Bonds, Series 2015B SRF	27,175,304	21,185,304	21,185,304
Sewage Disposal System Revenue Bonds, Series 2015D SRF	15,321,478	11,716,478	11,716,478
Sewage Disposal System Revenue Bonds, Series 2016 SAW-1	10,000,000	9,210,000	9,210,000
Sewage Disposal System Revenue Bonds, Series 2016 SRF-1	15,463,628	13,333,628	13,333,628
Sewage Disposal System Revenue Bonds, Series 2016 SRF-2	48,315,683	44,245,683	44,245,683
Sewage Disposal System Revenue Bonds, Series 2017 SRF-1	33,566,682	31,246,682	31,246,682
Sewage Disposal System Revenue Bonds, Series 2018 SRF-2	17,510,000	17,510,000	17,510,000
Sewage Disposal System Revenue Bonds, Series 2020 SRF-1	28,350,000	9,728,280	28,350,000
Sewage Disposal System Revenue Bonds, Series 2020 SRF-2	3,232,000	-	3,232,000
Sewage Disposal System Revenue Bonds, Series 2021 SRF-1	12,940,000	1,550,072	12,940,000
	<u>902,340,498</u>	<u>411,067,850</u>	<u>444,311,498</u>
TOTAL SEWAGE DISPOSAL SYSTEM REVENUE BONDS	<u>\$ 5,381,675,616</u>	<u>\$ 2,937,897,850</u>	<u>\$ 2,971,141,498</u>

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

[2] Includes the full purchase contract amounts not drawn by June 30, 2021 from State Revolving Funds. Final amounts will be determined after project close-out.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SCHEDULE OF DEBT SERVICE REQUIREMENTS As of June 30, 2021

Fiscal Year Ending [1]	Senior Lien Bonds (in \$1,000s)			Second Lien Bonds (in \$1,000s)			Junior Lien Bonds (in \$1,000s)			Total (in \$1,000s)		
	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Total Debt Service as of June 30, 2021	Additional Future Junior Lien Debt Service [3]	Total Future Debt Service
2022 [2]	\$ 24,690	\$ 52,654	\$ 77,344	\$ 15,345	\$ 28,251	\$ 43,596	\$ 44,000	\$ 9,009	\$ 53,009	\$ 173,949	\$ 593	\$ 174,542
2023	65,060	63,431	128,491	17,655	33,881	51,536	44,919	7,989	52,908	232,935	781	233,716
2024	80,260	60,103	140,363	3,215	33,438	36,653	40,225	7,002	47,227	224,243	782	225,025
2025	82,615	56,483	139,098	16,035	32,923	48,958	41,126	6,087	47,213	235,269	784	236,053
2026	84,900	52,725	137,625	16,995	32,040	49,035	27,200	5,291	32,491	219,151	880	220,031
2027	90,905	49,262	140,167	21,040	31,028	52,068	24,235	4,743	28,978	221,213	1,341	222,554
2028	95,135	46,188	141,323	25,795	29,793	55,588	24,670	4,225	28,895	225,806	1,343	227,149
2029	102,270	42,719	144,989	26,640	28,415	55,055	25,175	3,698	28,873	228,917	1,344	230,261
2030	114,250	38,808	153,058	19,860	27,183	47,043	25,641	3,160	28,801	228,902	1,339	230,241
2031	108,915	35,192	144,107	32,550	25,836	58,386	15,204	2,694	17,898	220,391	1,619	222,010
2032	112,765	32,021	144,786	34,175	24,168	58,343	14,100	2,333	16,433	219,562	2,691	222,253
2033	130,570	28,236	158,806	21,910	22,766	44,676	14,470	1,983	16,453	219,935	2,688	222,623
2034	132,420	22,774	155,194	25,915	21,594	47,509	14,855	1,624	16,479	219,182	2,695	221,877
2035	53,595	18,318	71,913	112,440	18,464	130,904	15,290	1,256	16,546	219,363	2,691	222,054
2036	11,445	16,909	28,354	162,055	12,296	174,351	14,662	887	15,549	218,254	2,695	220,949
2037	11,745	16,544	28,289	169,445	4,593	174,038	7,280	557	7,837	210,164	2,689	212,853
2038	110,565	14,637	125,202	1,690	522	2,212	7,394	379	7,773	135,187	2,692	137,879
2039	114,005	11,146	125,151	1,745	461	2,206	6,542	198	6,740	134,097	2,694	136,791
2040	117,550	7,545	125,095	1,810	396	2,206	990	72	1,062	128,363	2,690	131,053
2041	23,745	5,275	29,020	1,875	330	2,205	1,010	52	1,062	32,287	2,690	34,977
2042	24,635	4,374	29,009	1,945	261	2,206	1,030	31	1,061	32,276	2,694	34,970
2043	25,545	3,438	28,983	2,015	189	2,204	1,050	11	1,061	32,248	2,499	34,747
2044	26,500	2,468	28,968	2,085	116	2,201	-	-	-	31,169	-	31,169
2045	27,275	1,463	28,738	2,160	39	2,199	-	-	-	30,937	-	30,937
2046	4,425	843	5,268	-	-	-	-	-	-	5,268	-	5,268
2047	4,645	617	5,262	-	-	-	-	-	-	5,262	-	5,262
2048	4,880	378	5,258	-	-	-	-	-	-	5,258	-	5,258
2049	5,125	128	5,253	-	-	-	-	-	-	5,253	-	5,253
2050	-	-	-	-	-	-	-	-	-	-	-	-
2051	-	-	-	-	-	-	-	-	-	-	-	-
2052	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 1,790,435	\$ 684,679	\$ 2,475,114	\$ 736,395	\$ 408,983	\$ 1,145,378	\$ 411,068	\$ 63,281	\$ 474,349	\$ 4,094,841	\$ 42,914	\$ 4,137,755

[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, 2021 are not included in the debt service requirement amounts above as they were paid on June 24, 2021.

[3] Includes principal and interest payments on undrawn SRF loans that have been authorized and unissued.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

DEBT CREDIT RATING HISTORY As of June 30, 2021

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

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. The operating expenses in the Operations Fund are paid for with the revenues that are transferred to the Operations and Maintenance Fund (bank account). See the Schedule of Operating Expenses for Water Operations – Budget to Actual and Schedule of Operating Expenses for Sewage Disposal Operations – Budget to Actual for the detail of the operating expense line item Operations and Maintenance Regional System in the GAAP basis calculation of debt service coverage. Operating expenses in the Improvement and Extension Fund (I&E) are not included in the calculation due to the nature of those expenditures, which are paid from previous years revenue set aside to reduce debt financing.

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, capital appreciation bonds and state revolving loans held on behalf of both GLWA and DWSD.

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.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

CALCULATION OF DEBT SERVICE COVERAGE - GAAP BASIS - SEWAGE DISPOSAL SYSTEM
As of June 30, 2021

Operating Revenue	
Suburban Wholesale Customers [1]	\$ 267,567,816
Industrial waste charges	8,004,939
Pollutant surcharges	<u>6,719,964</u>
Subtotal - Regional System Suburban Wholesale Customers	<u>282,292,719</u>
Detroit Customers	
Wholesale Service Charge Revenue [1]	187,959,700
Local Service Revenues [2]	<u>79,360,298</u>
Subtotal - Detroit Customers	267,319,998
Other Operating Revenue-GLWA	501,121
Other Operating and Nonoperating Revenue-DWSD	915,216
Other Nonoperating Revenue-GLWA	5,980,784
Earnings on investments less construction fund investment earnings	<u>2,802,041</u>
Total Revenue	<u>559,811,879</u>
Operating Expenses	
Operations and Maintenance Regional System	172,312,815
Operations and Maintenance transfer to Local System	69,915,700
Legacy Pension Obligations Regional System [3]	10,824,000
Legacy Pension Obligations Local System [3]	<u>2,856,000</u>
Total Operating Expenses	<u>255,908,515</u>
Pledged revenues for the year ending June 30, 2021	<u>\$ 303,903,364</u>
Principal and interest funding requirement for the year ending June 30, 2021 [4]:	
Senior Lien Bonds	\$ 119,217,128
Second Lien Bonds	<u>57,778,951</u>
Total Senior and Second Lien Bonds	176,996,079
Junior Lien Bonds	<u>53,166,797</u>
Total All Bonds	<u>\$ 230,162,876</u>
GAAP Basis Debt Service Coverage	
Senior Lien Bonds	2.55
Senior and Second Lien Bonds	1.72
All Bonds, Including SRF Junior Lien	1.32

[1] Total GLWA Regional System Wholesale Revenue reported net of bad debt allowance.

[2] Local Service Revenue reported net of bad debt allowance.

[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.

[5] At the time of the issuance of the GLWA financial report, DWSD's audited financial report had not been released. The Detroit customers (local system) amounts above reflect DWSD's management representation of preliminary financial results for the year ended June 30, 2021.

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

CALCULATION OF DEBT SERVICE COVERAGE -
RATE COVENANT BASIS - SEWAGE DISPOSAL SYSTEM
As of June 30, 2021

Receipts	
Suburban Wholesale Customers	\$ 286,580,811
Detroit Customers	
Wholesale Service Charge Revenue	187,959,700
Local Service Revenues	<u>120,251,068</u>
Subtotal - Detroit Customers	308,210,768
Earnings on investments less construction fund investment earnings	<u>2,739,425</u>
Total Revenue	<u>597,531,004</u>
Disbursements	
Operations and Maintenance Regional System	165,588,970
Operations and Maintenance transfer to Local System	69,915,700
Legacy Pension Obligations Regional System	10,824,000
Legacy Pension Obligations Local System	<u>2,856,000</u>
Total Operating Expenses	<u>249,184,670</u>
Pledged revenues for the year ending June 30, 2021	<u>\$ 348,346,334</u>
Principal and interest funding requirement for the year ending June 30, 2021 [1]:	
Senior Lien Bonds	\$ 119,217,128
Second Lien Bonds	<u>57,778,951</u>
Total Senior and Second Lien Bonds	176,996,079
Junior Lien Bonds	<u>53,166,797</u>
Total All Bonds	<u>\$ 230,162,876</u>
Rate Covenant Debt Service Coverage	
Senior Lien Bonds	2.92
Senior and Second Lien Bonds	1.97
All Bonds, Including SRF Junior Lien	1.51

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

DEBT SERVICE COVERAGE HISTORY - SEWAGE DISPOSAL SYSTEM

As of June 30, 2021

	2021	2020	2019	2018	2017	2016 [1]
GAAP Basis						
Pledged revenue	\$ 303,903,364	\$ 318,792,554	\$ 306,491,042	\$ 311,232,453	\$ 350,855,928	\$ 328,801,416
Principal and interest funding requirement [2]:						
Senior lien bonds	\$ 119,217,128	\$ 147,310,565	\$ 145,795,507	\$ 141,718,836	\$ 140,854,010	\$ 140,191,016
Second lien bonds	57,778,951	45,878,850	43,922,600	43,990,100	47,918,639	48,944,924
Total senior and second lien bonds	176,996,079	193,189,415	189,718,107	185,708,936	188,772,649	189,135,940
Junior lien bonds	53,166,797	52,593,843	49,454,156	46,571,896	45,782,165	39,434,631
Total all bonds	\$ 230,162,876	\$ 245,783,258	\$ 239,172,263	\$ 232,280,832	\$ 234,554,814	\$ 228,570,571
GAAP basis debt service coverage						
Senior lien bonds	2.55	2.16	2.10	2.20	2.49	2.35
Senior and second lien bonds	1.72	1.65	1.62	1.68	1.86	1.74
All bonds, including SRF junior lien	1.32	1.30	1.28	1.34	1.50	1.44
Rate Covenant Basis [3]						
Pledged revenue	\$ 348,346,334	\$ 316,606,247	\$ 307,746,262	\$ 289,772,284	\$ 284,557,882	
Principal and interest funding requirement [2]:						
Senior lien bonds	\$ 119,217,128	\$ 147,310,565	\$ 145,795,507	\$ 141,718,836	\$ 140,854,010	
Second lien bonds	57,778,951	45,878,850	43,922,600	43,990,100	47,918,639	
Total senior and second lien bonds	176,996,079	193,189,415	189,718,107	185,708,936	188,772,649	
Junior lien bonds	53,166,797	52,593,843	49,454,156	46,571,896	45,782,165	
Total all bonds	\$ 230,162,876	\$ 245,783,258	\$ 239,172,263	\$ 232,280,832	\$ 234,554,814	
Rate covenant debt service coverage						
Senior lien bonds	2.92	2.15	2.11	2.04	2.02	
Senior and second lien bonds	1.97	1.64	1.62	1.56	1.51	
All bonds, including SRF junior lien	1.51	1.29	1.29	1.25	1.21	

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

[3] GLWA introduced the rate covenant basis for debt service coverage in the 2020 Water and Sewer Official Statements. Historic calculations were computed as part of that official statement development.

[4] At the time of the issuance of the GLWA financial report, DWSD's audited financial report had not been released. The Detroit customers (local system) amounts above reflect DWSD's management representation of preliminary financial results for the year ended June 30, 2021.

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

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

SERVICE AREA DEMOGRAPHICS Last Ten Years

Year	Total Population (1)	Unemployment (2)	Per Capita Income (3)	Total Debt Service (5)	Debt Per Capita	Debt Service as a Percentage of Income
2021	2,800,000	4.8%	\$ 53,316 (4)	\$ 230,162,876	\$ 82.20	0.15%
2020	2,800,000	11.7%	50,069 (4)	245,641,464	87.73	0.18%
2019	2,800,000	4.3%	54,172	235,381,235	84.06	0.16%
2018	2,800,000	4.3%	52,572	232,491,813	83.03	0.16%
2017	2,800,000	4.6%	50,863	234,554,814	83.77	0.16%
2016	* 2,800,000	5.3%	48,692	228,570,571	81.63	0.17%
2015	* 2,807,000	5.9%	46,894	232,612,800	82.87	0.18%
2014	* 2,807,000	8.1%	44,718	229,611,100	81.80	0.18%
2013	* 2,807,000	9.7%	42,555	225,222,900	80.24	0.19%
2012	* 2,807,000	10.1%	42,168	203,092,300	72.35	0.17%

(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 2021 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

(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 2012-2015 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 2021			Fiscal Year 2012		
		Full- Time Employees	Rank	Percent of Total	Full- Time Employees	Rank	Percent of Total
		(a)		Employment (b)	(c)		Employment (d)
Ford Motor Co.	Automobile Manufacturer	46,000	1	2.45%	39,134	1	2.16%
FCA US LLC/Chrysler Group LLC	Automobile Manufacturer	38,744	2	2.07%	25,733	4	1.42%
University of Michigan	Public University and Health System	36,323	3	1.94%	28,525	2	1.57%
General Motors Co.	Automobile Manufacturer	32,645	4	1.74%	25,813	3	1.42%
Beaumont Health	Health Care System	25,786	5	1.38%	12,767	9	0.70%
Henry Ford Health System	Health Care System	21,369	6	1.14%	18,402	6	1.01%
U.S. Government	Federal Government	18,893	7	1.01%	19,033	5	1.05%
Rocket Companies	Holding company consisting of personal finance and consumer service brands	15,250	8	0.81%	n/a	n/a	n/a
Trinity Health	Health Care System	14,575	9	0.78%	13,828	7	0.76%
Ascension Michigan	Health Care System	12,771	10	0.68%	n/a	n/a	n/a
Detroit Medical Center	Health Care System	n/a	n/a	n/a	13,499	8	0.74%
St. John Providence Health System	Health Care System	n/a	n/a	n/a	12,649	10	0.70%
Total		<u>262,356</u>		<u>14.00%</u>	<u>209,383</u>		<u>11.53%</u>

(a) Employment data from July 2020 Crain's Detroit Business (most recent available), Largest Southeast Michigan Employers - Ranked by full-time employees

(b) Percentage base on U.S. Bureau of Labor Statistics from June 2020 of 1,875,294 for the Detroit-Warren-Dearborn, MI Metropolitan Statistical Area

(c) Employment data from July 2012 Crain's Detroit Business, Largest Metro Detroit Employers - Ranked by full-time employees

(d) Percentage base on U.S. Bureau of Labor Statistics from July 2012 of 1,813,877 for the Detroit-Warren-Dearborn, MI Metropolitan Statistical Area

GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL FUND

WASTEWATER VOLUMES (Mcf)

Fiscal Year	Total Wastewater Influent [1]	Customer Wastewater Volume [2]		"System" Volume [3]
		Metered Customers	Unmetered Customers [3]	
2021 (preliminary)	27,589,600	11,768,100	9,475,900	6,345,600
2020	30,758,900	13,714,800	9,590,200	7,453,900
2019	33,992,100	14,569,600	10,927,200	8,495,300
2018	32,038,300	13,587,800	10,487,000	7,963,500
2017	33,458,500	14,072,100	10,788,000	8,598,400
2016 *	29,177,900	12,717,100	11,288,400	5,172,400

[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.

* 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 Last Six Years

	2021	2020	2019	2018	2017	2016
Capital Asset Statistics - Sewer						
Water Resource Recovery Facility	1	1	1	1	1	1
Major Interceptors	3	3	3	3	3	3
Pump Stations [1]	9	9	9	9	9	9
Combined Sewer Overflow Facilities:						
Retention Treatment Basins	5	5	5	5	5	5
Flow-through Type Facilities	3	3	3	3	3	3
Miles of Trunk Sewers and Interceptors	195	195	195	181	181	181
GLWA Employees						
Water Operations	211	211	213	205	180	155
Sewage Disposal Operations	320	344	369	358	342	320
Centralized Services	298	302	295	276	249	217
Administrative Services	156	152	147	129	110	90
Total Employees	985	1,009	1,024	968	881	782

[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.



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Great Lakes Water Authority

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