

# GLWA

*Great Lakes Water Authority*



## Water 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 WATER 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 Water Fund of the Great Lakes Water Authority (Water Fund), as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Water 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 Water 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 Water 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 Water 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 Water Fund and do not purport to, and do not, present fairly the financial position of the Great Lakes Water Authority, as of June 30, 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 Water Fund has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. Our opinion on the financial statements is not affected by this missing information. We note the significant financial events of the Water Fund are included in the Management's Discussion and Analysis of the Great Lakes Water Authority's Annual Comprehensive Financial Report.

#### *Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Water Fund's financial statements. The 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 Water 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 Water 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 WATER FUND

## STATEMENT OF NET POSITION

As of June 30, 2021

With Comparative Amounts at June 30, 2020

	2021	2020
<b>Assets</b>		
Current Assets		
Cash and cash equivalents	\$ 162,766,427	\$ 88,786,996
Restricted cash and cash equivalents	65,677,030	39,304,453
Restricted cash for the benefit of DWSD	3,144,400	1,544,529
Investments	190,541,958	305,653,818
Restricted investments	2,932,400	30,900,352
Receivables, net	67,284,676	61,382,764
Due from other governments	11,889,748	20,343,238
Due from sewage disposal fund	2,786,344	2,134,191
Contractual obligation receivable	16,558,716	15,620,163
Prepaid items and other assets	7,601,239	6,458,613
Inventories	794,521	636,621
Total Current Assets	531,977,459	572,765,738
Noncurrent Assets		
Restricted cash and cash equivalents	2,519,127	20,491,397
Restricted investments	8,651,762	10,770,585
Contractual obligation receivable	552,093,376	554,942,283
Prepaid lease	11,250,000	11,250,000
Assets not subject to depreciation	498,010,970	418,996,654
Capital assets being depreciated, net	1,324,554,087	1,390,129,473
Intangible assets, net	94,219,373	97,786,037
Prepaid insurance on debt	7,304,243	7,958,703
Total Noncurrent Assets	2,498,602,938	2,512,325,132
Total Assets	3,030,580,397	3,085,090,870
<b>Deferred Outflows of Resources</b>		
Deferred charge on refunding	44,677,823	47,358,590
Deferred pension amounts	22,112,642	15,292,494
Total Deferred Outflows of Resources	66,790,465	62,651,084

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



	<u>2021</u>	<u>2020</u>
<b>Liabilities</b>		
Current Liabilities		
Accounts and contracts payable	\$ 53,039,330	\$ 43,231,679
Accrued salaries, wages and benefits	4,892,033	5,321,864
Other accrued liabilities	6,958,556	5,357,056
Due to other governments	15,693,993	18,282,254
Due to sewage disposal fund	162,368	-
Interest payable	36,621,768	30,887,915
Current portion of		
Revenue bonds and loans	32,500,450	33,058,615
Raw water rights obligation	2,734,246	2,624,820
Obligation payable	194,242	184,992
Regional system leases	5,454,878	5,232,465
Other liabilities	3,123,843	5,331,161
Total Current Liabilities	<u>161,375,707</u>	<u>149,512,821</u>
Noncurrent Liabilities		
Revenue bonds and loans	2,407,391,624	2,459,730,737
Raw water rights obligation	95,361,056	98,095,302
Obligation payable	16,542,293	16,736,534
Regional system leases	405,782,406	411,237,284
Other liabilities	4,138,780	4,840,615
Net pension liability	51,728,179	47,643,374
Total Noncurrent Liabilities	<u>2,980,944,338</u>	<u>3,038,283,846</u>
Total Liabilities	<u>3,142,320,045</u>	<u>3,187,796,667</u>
<b>Deferred Inflows of Resources</b>		
Deferred gain on refunding	52,250,187	56,283,953
Deferred amounts for swap terminations	66,164	70,890
Total Deferred Inflows of Resources	<u>52,316,351</u>	<u>56,354,843</u>
<b>Net Position</b>		
Net investment in capital assets	(191,352,010)	(237,858,820)
Restricted for debt service	23,688,943	19,479,656
Restricted for payment assistance program	4,614,294	3,754,368
Unrestricted (deficit)	<u>65,783,239</u>	<u>118,215,240</u>
<b>TOTAL NET POSITION</b>	<u>\$ (97,265,534)</u>	<u>\$ (96,409,556)</u>

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

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## GREAT LAKES WATER AUTHORITY WATER 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
<b>Operating Revenues</b>		
Wholesale customer charges	\$ 322,423,768	\$ 312,701,777
Local system charges	21,925,500	21,295,500
Other revenues	265,822	256,300
Total Operating Revenues	344,615,090	334,253,577
<b>Operating Expenses</b>		
Operating expenses before depreciation and amortization		
Personnel	43,889,495	43,946,225
Contractual services	40,410,811	46,097,405
Utilities	28,828,226	27,719,754
Chemicals	6,028,141	5,569,437
Supplies and other expenses	9,158,990	12,034,192
Capital adjustment	-	26,780
Capital program allocation	(2,123,060)	(2,164,003)
Intergovernmental reimbursements	(2,554,511)	(696,952)
Total operating expenses before depreciation and amortization	123,638,092	132,532,838
Depreciation	123,271,541	127,183,228
Amortization of intangible assets	3,566,664	3,566,664
Total Operating Expenses	250,476,297	263,282,730
<b>Operating Income</b>	94,138,793	70,970,847
<b>Nonoperating Revenues (Expenses)</b>		
Earnings on investments	4,215,105	10,485,467
Net increase (decrease) in fair value of investments	(3,446,187)	3,259,307
Interest on loan and obligations receivable	25,474,904	22,945,866
Interest expense	(128,257,367)	(133,537,621)
Amortization of debt related items and cost of issuance	15,988,278	14,258,569
Legacy pension expense	(8,075,457)	(7,220,716)
WRAP (Water Residential Assistance Program)	(593,206)	(1,393,179)
Other	(176,909)	2,186,331
Loss on disposal of capital assets	(123,932)	(50,760)
Loss on impairment of capital assets	-	(1,432,027)
Total Nonoperating Expenses	(94,994,771)	(90,498,763)
<b>Change in net position</b>	(855,978)	(19,527,916)
NET POSITION (DEFICIT), Beginning of Year	(96,409,556)	(76,881,640)
<b>NET POSITION (DEFICIT), END OF YEAR</b>	\$ (97,265,534)	\$ (96,409,556)

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

# GREAT LAKES WATER AUTHORITY WATER FUND

## STATEMENT OF CASH FLOWS For the Year Ended June 30, 2021 With Comparative Amounts for the Year Ended June 30, 2020

	2021	2020
<b>Cash Flows From Operating Activities</b>		
Cash received from customers	\$ 332,140,177	\$ 323,266,850
Cash received from intergovernmental reimbursements	10,417,372	11,758,901
Cash payments for intergovernmental services provided	(2,554,512)	(696,948)
Cash payments to suppliers for goods and services	(89,693,756)	(85,358,704)
Cash payments for employee services	(41,372,179)	(39,888,623)
Cash payments to other governments for obligation payable	(875,508)	(875,508)
Cash payments for WRAP	(593,206)	(1,393,179)
Cash payments for GLWA share pension agreement	(11,440,800)	(11,440,800)
Nonoperating cash received	1,740	1,656,349
Cash received for DWSD nonoperating pension	4,427,400	4,427,386
Cash paid for DWSD nonoperating pension	(4,427,393)	(4,427,393)
Cash received for DWSD WRAP	654,800	282,500
Cash payments for DWSD WRAP	(1,416,056)	(326,193)
Cash received (paid) for DWSD budgetary surplus (shortfall)	1,356,365	(934,683)
Principal payments received on obligation receivable	14,834,700	14,171,800
Interest received on obligation receivable	27,037,200	22,259,510
Payments for bond issuance costs on DWSD debt	(20,328)	(180,078)
Payments of state revolving fund loan proceeds to DWSD	(15,741,109)	(6,791,655)
Net Cash Provided by Operating Activities	222,734,907	225,509,532
<b>Cash Flows From Noncapital Financing Activities</b>		
Proceeds from long-term debt for DWSD	-	202,231
Proceeds from state revolving fund loans for DWSD	15,741,109	6,791,655
Principal payments	(14,834,700)	(14,171,800)
Interest payments	(24,641,858)	(22,492,842)
Net Cash Used in Noncapital Financing Activities	(23,735,449)	(29,670,756)
<b>Cash Flows From Capital and Related Financing Activities</b>		
Proceeds from sale of assets	29,271	1,626
Proceeds from issuance of long-term refunding debt for COI	-	891,881
Proceeds from state revolving fund loans	20,186,528	9,292,751
Payment to bond refunding escrow agent	-	(18,503,190)
Payment of bond issuance costs	(128,602)	(822,549)
Principal payments on bonds	(56,545,300)	(43,198,200)
Principal payments on regional system leases	(5,232,465)	(5,019,121)
Interest payments	(93,163,708)	(108,672,382)
Purchase of capital assets	(126,703,053)	(75,299,288)
Net Cash Used in Capital and Related Financing Activities	(261,557,329)	(241,328,472)

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

	<u>2021</u>	<u>2020</u>
<b>Cash Flows From Investing Activities</b>		
Investment purchases	\$ (179,484,109)	\$ (426,509,200)
Investment maturities	321,542,000	361,480,123
Interest received	<u>4,479,589</u>	<u>8,593,385</u>
Net Cash Used in Investing Activities	<u>146,537,480</u>	<u>(56,435,692)</u>
<b>Net change in cash and cash equivalents</b>	83,979,609	(101,925,388)
CASH AND CASH EQUIVALENTS, Beginning of Year	<u>150,127,375</u>	<u>252,052,763</u>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<u>\$ 234,106,984</u>	<u>\$ 150,127,375</u>
<b>STATEMENT OF NET POSITION CLASSIFICATION OF CASH</b>		
Cash and cash equivalents	\$ 162,766,427	\$ 88,786,996
Restricted cash and cash equivalents	65,677,030	39,304,453
Restricted cash for the benefit of DWSD	3,144,400	1,544,529
Noncurrent restricted cash and cash equivalents	<u>2,519,127</u>	<u>20,491,397</u>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<u>\$ 234,106,984</u>	<u>\$ 150,127,375</u>
<b>NONCASH OPERATING ACTIVITIES</b>		
Credits given on billings-Flint KWA obligation	<u>\$ (6,652,253)</u>	<u>\$ (6,652,348)</u>
Interest income obligation receivable premium amortization	<u>\$ (785,463)</u>	<u>\$ (141,568)</u>
<b>NONCASH FINANCING AND INVESTMENT ACTIVITIES</b>		
Net proceeds deposited into an escrow account for refunding	<u>\$ -</u>	<u>\$ 375,510,909</u>
Bond proceeds to DWSD construction account	<u>\$ -</u>	<u>\$ 99,531,655</u>
Decrease in raw water rights obligation	<u>\$ 2,624,820</u>	<u>\$ 2,520,997</u>
Interest paid for raw water rights obligation	<u>\$ 4,027,433</u>	<u>\$ 4,122,851</u>
Change in unrealized gain on investments	<u>\$ 6,705,494</u>	<u>\$ 853,201</u>
Amortization expense	<u>\$ 16,116,880</u>	<u>\$ 16,193,326</u>

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

**GREAT LAKES WATER AUTHORITY WATER FUND**STATEMENT OF CASH FLOWS  
For the Year Ended June 30, 2021  
With Comparative Amounts for the Year Ended June 30, 2020

	2021	2020
<b>Reconciliation of Operating Income to Net</b>		
<b>Cash Provided by Operating Activities:</b>		
Operating income	\$ 94,138,793	\$ 70,970,847
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	123,271,541	127,183,228
Amortization of intangible assets	3,566,664	3,566,664
Credits for raw water rights	(6,652,253)	(6,652,348)
Miscellaneous nonoperating income	1,740	1,656,349
Legacy pension expense and administrative fee	(8,254,106)	(7,437,758)
WRAP (Water Residential Assistance Program)	(593,206)	(1,393,179)
Loan forgiveness pass-through to DWSD	(2,031,300)	(4,711,944)
Bond proceeds for DWSD treated as noncash (1)	-	99,783,785
Interest income on contractual obligation receivable	25,474,904	22,945,866
Interest expense on obligation payable	(690,516)	(699,338)
Changes in:		
Receivables	(5,824,289)	(3,441,388)
Due from other governments	8,375,867	10,467,357
Due from other funds	(652,153)	742,763
Contractual obligation receivable	1,910,354	(87,752,359)
Prepaid items and other assets (excludes investing item)	(1,712,553)	(850,534)
Inventories	(157,900)	(250,009)
Accounts and contracts payable (excludes capital items)	(352,968)	2,675,138
Accrued salaries, wages and benefits	(429,831)	1,037,644
Other accrued liabilities (excludes capital items)	1,601,500	(1,124,614)
Due to other governments (excludes non-capital financing)	(2,588,261)	2,318,320
Due to other funds	162,368	(12,568)
Obligation payable including accrued interest	(184,992)	(176,170)
Accrued compensated absences	(154,380)	455,703
Accrued workers' compensation	78,983	(40,646)
Claims and judgments	(2,072,500)	(117,500)
Other noncurrent liabilities	(761,256)	(43,693)
Net pension liability and deferred items	(2,735,343)	(3,590,084)
<b>NET CASH PROVIDED BY OPERATING ACTIVITIES</b>	<b>\$ 222,734,907</b>	<b>\$ 225,509,532</b>

(1) Represents bond proceeds for DWSD local system and DWSD share of underwriting costs from 2020 bond transaction that were paid directly by the bond trustee to the underwriter and the DWSD construction fund.

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

## **NOTES TO FINANCIAL STATEMENTS**

# GREAT LAKES WATER AUTHORITY WATER FUND

## INDEX TO NOTES TO FINANCIAL STATEMENTS

As of and for the Year Ended June 30, 2021

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# GREAT LAKES WATER AUTHORITY WATER FUND

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

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## **NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

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

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

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

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

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 WATER FUND

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

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

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### ***BASIS OF PRESENTATION***

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

### ***BASIS OF ACCOUNTING***

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

#### ***Due from and Due to Other Governments***

The due from other governments includes amounts owed to the Authority by DWSD for shared services, 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 shared services.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

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#### 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.

#### 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 water 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 13, 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.

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

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

# GREAT LAKES WATER AUTHORITY WATER FUND

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

---

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

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

#### 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 17.

#### 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.
- The Authority holds a customer deposit for \$3,750,000 plus interest earned net of bank fees.

#### 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 12 for the details on revenue bonds and loans.

#### Raw Water Rights Obligation

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

#### 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 water and sewage disposal systems. See "Obligation Payable – City of Detroit 2014 Financial Recovery Bonds" in Note 12.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

---

#### Regional System Leases

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

#### Other Liabilities

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

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

#### Net Pension Liability

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

#### Deferred Inflows of Resources

In addition to liabilities, the statement of net position includes a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net 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, and deferred amounts on swap terminations 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.

#### 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.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

---

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 water. The local system charges are the charges to the City of Detroit under the Water and Sewer Services Agreement (WSSA), dated June 12, 2015. Wholesale customer charges are shown net of bad debt expense of \$2,928,444 for the Water Fund.

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

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

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

#### 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 Obligations Receivable

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

#### Amortization of Debt Related Items and Cost of Issuance

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

#### Legacy Pension Expense

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

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

---

#### Centralized Services and Administrative Services

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

#### **Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the 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.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

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### ***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)

### ***Reclassifications***

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

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## NOTE 2 – BUDGETARY INFORMATION

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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.



# GREAT LAKES WATER AUTHORITY WATER FUND

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

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### NOTE 2 – BUDGETARY INFORMATION (cont.)

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In the Regional System leases, the City acknowledges that all local water 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 Water Contract requires that GLWA provide wholesale customers with written notice of a proposed charge, meet to review the proposed charge, and the underlying data used to calculate the charge not less than 30 calendar days prior to a public hearing. Further, the contract requires that a public hearing be held no less than 120 days prior to the date that proposed charges take effect.

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

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### NOTE 3 – CASH DEPOSITS AND INVESTMENTS

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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 Water Fund at June 30, 2021 are reported in the financial statements as follows:

#### **Statement of Net Position**

Cash and cash equivalents	\$ 162,766,427
Restricted cash and cash equivalents	65,677,030
Restricted cash for the benefit of DWSD	3,144,400
Investments	190,541,958
Restricted investments	2,932,400
Noncurrent restricted cash and cash equivalents	2,519,127
Noncurrent restricted investments	<u>8,651,762</u>

Total \$ 436,233,104

#### **Cash Deposits and Investments**

Bank deposits – checking and savings accounts	\$ 65,733,048
Money market accounts	168,373,936
Investments in securities	<u>202,126,120</u>

Total \$ 436,233,104

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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## NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

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### ***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 \$234,106,984 for the water fund. The bank balance of the water fund deposits and money market accounts was \$238,929,703 of which \$211,532,590 was uninsured and uncollateralized.

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

### ***INVESTMENTS***

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

	Water Fund	Standard & Poors Rating	Weighted Maturity In Years
U.S. treasury notes	\$ 81,862,317	AA+	1.46
U.S. government agencies	109,917,212	AA+	1.23
Commercial paper	<u>10,346,591</u>	A1	0.42
Total	<u>\$ 202,126,120</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.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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## NOTE 3 – CASH DEPOSITS AND INVESTMENTS (cont.)

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### **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 Water Fund had greater than 5% of its total investment portfolio concentrated as follows:

<u>Investment Type</u>	<u>Issuer</u>	<u>% of Portfolio</u>
U.S. government agencies	Federal National Mortgage Association	14.99%
U.S. government agencies	Federal Home Loan Bank	14.44
U.S. government agencies	Federal Home Loan Mortgage Company	19.79

### **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	\$ 81,862,317
U.S. government agencies	109,917,212
Commercial paper	<u>10,346,591</u>
Total	<u>\$ 202,126,120</u>

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

# GREAT LAKES WATER AUTHORITY WATER FUND

## NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended 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.

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	Total
	Unrestricted	Restricted	Restricted	
Receiving fund	\$ 60,370,963 *	\$ -	\$ -	\$ 60,370,963
Operations and maintenance	33,201,497	14,180,745 **	-	47,382,242
Operations and maintenance - pension	-	183,850	-	183,850
Senior lien debt service	-	22,250,292	-	22,250,292
Senior lien bond reserve	-	-	102,815,334	102,815,334
Second and junior lien debt service	-	31,635,226	-	31,635,226
Second and junior lien debt reserve	-	-	48,781,471	48,781,471
Pension obligation	-	359,316	-	359,316
Water residential assistance program (WRAP)	-	4,614,294	-	4,614,294
Budget stabilization	-	1,998,190	-	1,998,190
Extraordinary repair and replacement	27,525,996	-	-	27,525,996
Improvement and extension – regional	204,998,873	-	-	204,998,873
<b>Subtotal – Reserves Defined by Ordinance</b>	<b>326,097,329</b>	<b>75,221,913</b>	<b>151,596,805</b>	<b>552,916,047</b>
Less: Funded by surety (noncash)	-	-	(147,038,399)	(147,038,399)
<b>Total – Reserves Defined by Ordinance (net of surety coverage)</b>	<b>326,097,329</b>	<b>75,221,913</b>	<b>4,558,406</b>	<b>405,877,648</b>
Cash held for the benefit of DWSD	-	3,144,400	-	3,144,400
Construction fund	27,211,056	-	-	27,211,056
<b>Total Cash, Cash Equivalents and Investments Water Fund</b>	<b>\$ 353,308,385</b>	<b>\$ 78,366,313</b>	<b>\$ 4,558,406</b>	<b>\$ 436,233,104</b>

\*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 WATER 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	\$ 78,366,313
From debt issuance	4,558,406
Amounts payable to liabilities and debt	<u>(54,621,482)</u>
Restricted Net Position	<u>\$ 28,303,237</u>
Restricted net position for:	
Debt service	\$ 23,688,943
Payment assistance program	<u>4,614,294</u>
Total Restricted Net Position	<u>\$ 28,303,237</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	\$ 162,766,427	\$ 65,677,030	\$ 2,519,127	\$ 230,962,584
Cash held for the benefit of DWSD	-	3,144,400	-	3,144,400
Investments	<u>190,541,958</u>	<u>2,932,400</u>	<u>8,651,762</u>	<u>202,126,120</u>
Total	<u>\$ 353,308,385</u>	<u>\$ 71,753,830</u>	<u>\$ 11,170,889</u>	<u>\$ 436,233,104</u>

### NOTE 5 – RECEIVABLES

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

Receivables, net:	
Billed	\$ 48,694,817
Unbilled	30,066,884
Other	<u>85,494</u>
Subtotal	78,847,195
Allowance for doubtful accounts	<u>(11,562,519)</u>
Total Receivables, net	<u>\$ 67,284,676</u>

# GREAT LAKES WATER AUTHORITY WATER 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	\$ 14,901,436
DWSD-Unbilled shared services	(3,922,099)
DWSD-Accrued interest on obligation receivable	163,387
State of Michigan FEMA	<u>747,024</u>
 Total Due From Other Governments	 <u>\$ 11,889,748</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:

	<u>Water Fund - Due from Sewage Disposal Fund</u>	<u>Sewage Disposal Fund - Due from Water Fund</u>	<u>Total Due To</u>
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 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 \$2,313,683,761 for the Water Fund.

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

# GREAT LAKES WATER AUTHORITY WATER FUND

## NOTES TO FINANCIAL STATEMENTS As of and for the Year Ended June 30, 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	Debt Forgiveness	Ending Balance	Due Within One Year
Obligation Receivable						
Bifurcated debt	\$ 398,319,700	\$ -	\$ (14,478,800)	\$ -	\$ 383,840,900	\$ 15,168,000
New money bonds	136,320,000	-	-	-	136,320,000	-
State revolving funds	<u>15,531,678</u>	<u>15,741,109</u>	<u>(355,901)</u>	<u>(2,031,300)</u>	<u>28,885,586</u>	<u>652,056</u>
Total	550,171,378	15,741,109	(14,834,701)	(2,031,300)	549,046,486	15,820,056
Deferred amounts for:						
Unamortized premiums	<u>\$ 20,391,068</u>	<u>\$ -</u>	<u>\$ (785,462)</u>	<u>\$ -</u>	<u>\$ 19,605,606</u>	<u>\$ 738,660</u>
Total Obligation Receivable	<u><u>570,562,446</u></u>	<u><u>15,741,109</u></u>	<u><u>(15,620,163)</u></u>	<u><u>(2,031,300)</u></u>	<u><u>568,652,092</u></u>	<u><u>16,558,716</u></u>

The current obligation receivable payment schedule is as follows:

Year Ended June 30	Principal	Interest	Total
2022	\$ 15,820,056	\$ 25,722,698	\$ 41,542,754
2023	17,055,800	24,988,406	42,044,206
2024	19,506,500	24,206,842	43,713,342
2025	20,420,100	23,305,212	43,725,312
2026	21,358,300	22,360,440	43,718,740
2027 - 2031	122,579,900	96,004,298	218,584,198
2032 - 2036	153,447,896	64,747,196	218,195,092
2037 - 2041	84,475,900	30,405,004	114,880,904
2042 - 2046	76,584,467	15,770,592	92,355,059
2047 - 2050	<u>17,797,567</u>	<u>1,704,427</u>	<u>19,501,994</u>
Total	<u><u>\$ 549,046,486</u></u>	<u><u>\$ 329,215,115</u></u>	<u><u>\$ 878,261,601</u></u>

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 9 – CAPITAL ASSETS

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

	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
<b>Nondepreciable capital assets</b>					
Land	\$ 34,166,736	\$ 1,000	\$ -	\$ -	\$ 34,167,736
Easements	258,632,397	-	-	357,808	258,990,205
Construction in progress	126,197,521	129,834,610	-	(51,179,102)	204,853,029
<b>Total Nondepreciable Assets</b>	<b>418,996,654</b>	<b>129,835,610</b>	<b>-</b>	<b>(50,821,294)</b>	<b>498,010,970</b>
<b>Depreciated capital assets</b>					
Site improvements	83,676,052	-	-	378,128	84,054,180
Buildings and structures	584,306,009	166,940	-	7,874,003	592,346,952
Infrastructure	654,216,242	-	-	13,900,717	668,116,959
Machinery and equipment	681,905,655	4,890,652	(717,244)	28,394,174	714,473,237
Vehicles	3,217,111	1,929,580	(77,179)	-	5,069,512
Leasehold improvements	8,061,657	71,196	-	274,272	8,407,125
<b>Total Depreciable Assets</b>	<b>2,015,382,726</b>	<b>7,058,368</b>	<b>(794,423)</b>	<b>50,821,294</b>	<b>2,072,467,965</b>
<b>Less: Accumulated depreciation</b>					
Site improvements	(39,924,460)	(7,681,207)	-	-	(47,605,667)
Buildings and structures	(145,619,970)	(26,041,140)	-	-	(171,661,110)
Infrastructure	(170,788,435)	(38,594,598)	-	-	(209,383,033)
Machinery and equipment	(267,221,864)	(50,126,065)	534,302	-	(316,813,627)
Vehicles	(1,634,806)	(281,331)	76,614	-	(1,839,523)
Leasehold improvements	(63,718)	(547,200)	-	-	(610,918)
<b>Total Accumulated Depreciation</b>	<b>(625,253,253)</b>	<b>(123,271,541)</b>	<b>610,916</b>	<b>-</b>	<b>(747,913,878)</b>
<b>Total Depreciated Capital Assets, Net</b>	<b>1,390,129,473</b>	<b>(116,213,173)</b>	<b>(183,507)</b>	<b>50,821,294</b>	<b>1,324,554,087</b>
<b>Intangible asset – raw water rights</b>					
	106,999,919	-	-	-	106,999,919
<b>Less: Accumulated amortization</b>	<b>(9,213,882)</b>	<b>(3,566,664)</b>	<b>-</b>	<b>-</b>	<b>(12,780,546)</b>
<b>Total Intangible Assets, Net</b>	<b>97,786,037</b>	<b>(3,566,664)</b>	<b>-</b>	<b>-</b>	<b>94,219,373</b>
<b>Net Capital Assets</b>	<b>\$ 1,906,912,164</b>	<b>\$ 10,055,773</b>	<b>\$ (183,507)</b>	<b>\$ -</b>	<b>\$ 1,916,784,430</b>



# GREAT LAKES WATER AUTHORITY WATER FUND

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

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### NOTE 9 – CAPITAL ASSETS (cont.)

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#### **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.

#### **RAW WATER RIGHTS ASSET**

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

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

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### NOTE 10 – OTHER ACCRUED LIABILITIES

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

Cash held for the benefit of DWSD	\$ 3,144,400
Customer deposit	<u>3,814,156</u>
Total Other Accrued Liabilities	<u>\$ 6,958,556</u>

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### NOTE 11– DUE TO OTHER GOVERNMENTS

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

Shared services	<u>\$ 15,693,993</u>
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# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 12 – LONG-TERM DEBT

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

	Beginning Balance	Increase	Decrease	Debt Forgiveness	Ending Balance	Due Within One Year
Bonds and Loans						
Revenue bonds	\$ 2,261,935,000	\$ -	\$ (69,425,000)	\$ -	\$ 2,192,510,000	\$ 14,390,000
Notes from direct borrowings and direct placements - State revolving loan	39,318,264	35,927,637	(1,955,000)	(2,031,300)	71,259,601	2,998,056
Total Bonds and Loans	2,301,253,264	35,927,637	(71,380,000)	(2,031,300)	2,263,769,601	17,388,056
Deferred amounts for:						
Unamortized premiums	200,499,211	-	(16,779,986)	-	183,719,225	16,248,084
Unamortized discounts	(8,963,123)	-	1,366,371	-	(7,596,752)	(1,135,690)
Total Bonds and Loans, Net	2,492,789,352	35,927,637	(86,793,615)	(2,031,300)	2,439,892,074	32,500,450
Other Debt						
Raw water rights obligation	100,720,122	-	(2,624,820)	-	98,095,302	2,734,246
Obligation payable	16,921,526	-	(184,991)	-	16,736,535	194,242
Total	\$ 2,610,431,000	\$ 35,927,637	\$ (89,603,426)	\$ (2,031,300)	\$ 2,554,723,911	\$ 35,428,938

As of June 30, 2021, aggregate debt service requirements of the Authority's fixed rate bonds and loans were as follows.

Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct Placements		Total
	Principal	Interest	Principal	Interest	
2022	\$ 14,390,000	\$ 85,258,042	\$ 2,998,056	\$ 1,485,190	\$ 104,131,288
2023	69,395,000	100,051,172	4,793,700	1,432,497	175,672,369
2024	76,930,000	96,484,833	5,260,000	1,327,848	180,002,681
2025	82,590,000	92,746,039	5,192,665	1,219,158	181,747,862
2026	86,340,000	88,879,460	5,100,000	1,111,932	181,431,392
2027-2031	500,015,000	376,763,776	20,063,761	4,194,249	901,036,786
2032-2036	613,885,000	239,487,152	14,767,059	2,278,230	870,417,441
2037-2041	389,735,000	116,376,037	7,064,051	1,143,042	514,318,130
2042-2046	282,770,000	53,041,549	4,215,667	494,999	340,522,215
2047-2050	76,460,000	3,558,750	1,804,642	68,019	81,891,411
Total	\$ 2,192,510,000	\$ 1,252,646,810	\$ 71,259,601	\$ 14,755,164	\$ 3,531,171,575

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 WATER FUND

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

### NOTE 12 – LONG-TERM DEBT (cont.)

#### REVENUE 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
<b>Water Fund</b>						
Series 2003A	1/30/03	\$ 234,805,000	5.00%	7/01/34	\$ 100,000	\$ 100,000
Series 2003B	1/30/03	172,945,000	5.00%	7/01/34	100,000	100,000
Series 2005B	5/14/08	194,900,000	5.25%	7/01/35	100,000	100,000
Series 2006A	8/16/06	280,000,000	5.00%	7/01/34	100,000	100,000
Series 2006B	4/01/09	120,000,000	6.25%	7/01/36	100,000	100,000
Series 2011B	12/22/11	17,195,000	5.00%	7/01/21	575,000	-
Series 2011C	12/22/11	103,890,000	5.00%	7/01/21	1,020,000	-
Series 2014D-1	9/04/14	206,540,000	5.00%	7/01/22-37	112,450,000	44,190,000
Series 2014D-2	9/04/14	188,455,000	5.00%	7/01/23-28	188,455,000	136,925,000
Series 2014D-4	9/04/14	307,645,000	5.00%	7/01/29-34	209,360,000	209,360,000
Series 2014D-6	9/04/14	65,425,000	5.00%	7/01/22-36	51,570,000	43,690,000
Series 2015D-1	12/15/15	89,430,000	5.00%	7/01/22-35	75,200,000	69,275,000
Series 2015D-2	12/15/15	37,235,000	5.00%	7/01/34	37,235,000	37,235,000
Series 2016A	10/27/16	88,000,000	5.00%	7/01/21-46	88,000,000	87,970,000
Series 2016B	10/27/16	163,830,000	5.00%	7/01/21-46	163,830,000	163,800,000
Series 2016C	10/27/16	443,930,000	5.00-5.25%	7/01/22-35	443,930,000	367,685,000
Series 2016D	10/27/16	222,045,000	4.00-5.00%	7/01/24-36	222,045,000	217,380,000
Series 2018A	10/3/18	155,595,000	5.00%	7/01/21-29	135,245,000	-
Series 2020A	5/12/20	42,445,000	5.00%	7/1/24-49	42,445,000	35,685,000
Series 2020B	5/12/20	43,135,000	5.00%	7/1/24-49	43,135,000	36,265,000
Series 2020C**	5/12/20	377,515,000	1.684-3.473%	7/1/22-41	377,515,000	317,530,000
Total Revenue Bonds Payable					<u>\$ 2,192,510,000</u>	

\*\* Taxable bond

#### Refunded Debt

In prior years, the Authority's Water Fund defeased certain bonds by placing the proceeds of new bonds in and 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 \$366,025,000. These defeased bonds include the following revenue bonds: \$289,605,000 Series 2011A, \$2,295,000 Series 2011B and \$74,125,000 of Series 2011C. 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. These bonds were called July 1, 2021.

#### STATE REVOLVING LOANS PAYABLE

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

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 12 – LONG-TERM DEBT (cont.)

The Authority's Water Fund received direct borrowing loans from the State of Michigan Revolving Loan Fund totaling \$35,927,637 of which \$2,031,300 has been forgiven during the year ended June 30, 2021. The water loans forgiven and \$15,741,108 of the proceeds of the Water Fund loans were a pass through to DWSD, the subrecipient of the loans. The remaining proceeds of the Water Fund loans were used to pay costs of acquiring, constructing extensions, and making certain repairs and improvements to the regional water system.

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 2005 SRF-1	9/22/05	\$ 13,805,164	2.125%	10/01/21-26	\$ 4,605,164
Series 2005 SRF-2	9/22/05	8,891,730	2.125%	10/01/21-26	2,906,730
Series 2006 SRF-1	9/21/06	5,180,926	2.125%	10/01/21-26	1,715,926
Series 2008 SRF-1	9/29/08	2,590,941	2.50%	10/01/21-28	845,941
Series 2016 SRF-1	9/16/16	8,273,168	2.50%	4/01/22-48	7,663,168
Series 2016 SRF-2	9/16/16	3,393,543	2.50%	4/01/22-48	3,138,543
Series 2017 SRF-1	6/23/17	5,807,931	2.50%	10/1/21-48	5,502,931
Series 2019 SRF-1	6/7/19	8,330,000	2.00%	10/1/21-39	7,764,051
Series 2019 SRF-2	8/30/19	29,950,000	2.00%	4/1/23-34	15,778,733
Series 2019 SRF-3	8/30/19	11,788,056	2.00%	10/1/21-42	7,683,723
Series 2020 SRF-1	7/31/20	20,538,700	2.00%	4/1/23-36	7,718,196
Series 2020 SRF-2	8/28/20	9,000,000	2.00%	10/1/23-24	567,665
Series 2020 SRF-3	8/28/20	8,960,000	2.00%	10/1/22-34	5,368,830
Series 2020 SRF-4	9/30/20	12,153,050	2.00%	-	-
Series 2021 SRF-1	6/21/21	11,940,000	1.875%	-	-
Total State Revolving Loans Payable					<u>\$ 71,259,601</u>

### **PLEDGES OF FUTURE REVENUE**

The Authority has pledged assets to secure the repayment of the revenue bonds and State of Michigan revolving fund loans. The Water System bonds and loans are paid solely from the net revenues of the Water System. Net revenues are defined in the Great Lakes Water Authority Water Master Bond Ordinances as all revenues except those transferred to the Operation and Maintenance funds. These revenues are further defined to include the revenues from the Retail Customers who are serviced under the Water and Sewer Services Agreement with the City of Detroit which are reported in the financial statements of the City of Detroit Water and Sewerage Department. The pledged revenues calculation for the fiscal year ending June 30, 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 Water System debt is to provide funding for various water treatment and transmission capital improvements, refund certain water revenue bonds, pay termination amounts for interest rate swap agreements and fund reserve requirements. The term of pledge commitment for the water bonds is 2050.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 12 – LONG-TERM DEBT (cont.)

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

Remaining principal and interest requirement	\$	3,531,171,575
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)	\$	179,214,379
Pledged revenue for the year ending June 30, 2021	\$	246,588,264
Pledged revenue collected as a percentage of funding requirement		138%

#### **DEBT RATINGS**

In March 2020, Standard & Poor's Global Ratings Services affirmed the ratings on the water system senior lien debt of AA- and the water system second lien debt of A+ and assigned a stable outlook. Moody's Investor Services upgraded the ratings on the water 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 water system senior lien debt by one notch to A+ and second lien debt by one notch to an A 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 water system SRF bonds.

#### **RAW WATER RIGHTS OBLIGATION**

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

The future credits to be issued are detailed below:

Year Ended June 30	Principal	Interest	Total
2022	\$ 2,734,246	\$ 3,919,206	\$ 6,653,452
2023	2,845,282	3,806,495	6,651,777
2024	2,963,619	3,689,208	6,652,827
2025	3,085,994	3,567,008	6,653,002
2026	3,212,750	3,439,803	6,652,553
2027 - 2031	18,161,001	15,099,718	33,260,719
2032 – 2036	22,226,263	11,034,794	33,261,057
2037 - 2041	27,203,739	6,059,461	33,263,200
2042 - 2046	15,662,408	989,106	16,651,514
Total	<u>\$ 98,095,302</u>	<u>\$ 51,604,799</u>	<u>\$ 149,700,101</u>

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 12 – 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	\$ 26,540,080	4.00% and variable	4/1/44	\$ 15,556,025
Series 2014-C	3,829,794	5.00%	6/30/27	1,180,510
Total				<u>\$ 16,736,535</u>

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### **NOTE 12 – LONG-TERM DEBT (cont.)**

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	\$ 194,242	\$ 681,267	\$ 875,509
2023	203,954	671,554	875,508
2024	214,151	661,357	875,508
2025	1,002,661	650,649	1,653,310
2026	1,013,904	608,294	1,622,198
2027 - 2031	3,996,210	2,494,325	6,490,535
2032 - 2036	3,889,008	2,006,728	5,895,736
2037 - 2041	3,889,008	1,400,043	5,289,051
2042 - 2044	2,333,397	280,009	2,613,406
Total	\$ 16,736,535	\$ 9,454,226	\$ 26,190,761

### **INTEREST EXPENSE**

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

Revenue bonds and loans	\$ 106,298,918
Regional System Lease	17,249,352
Raw water rights obligation	4,018,581
Obligation payable	690,516
Total Interest Expense	\$ 128,257,367

### **NOTE 13 – REGIONAL SYSTEMS LEASES PAYABLE AND RELATED PREPAID LEASE**

On January 1, 2016, the Authority effectuated lease agreements with the City for the regional water and sewage disposal systems for a term of 40 years, to be extended automatically to coincide with the final maturity of any bonds issued to finance improvements to the regional or local sewage disposal systems. The agreements collectively provide for an annual lease payment of \$50 million. Currently, \$22,500,000 is allocated to the Water Fund. The lease for the water system provides service to the wholesale customers and the retail water customers of the City up to the point of connection to the local water system facilities of the City. In addition, the lease provides 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.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

Amounts reported as a liability at year-end represent the net present value of all future lease payments. Changes in the Regional System lease payable for the year ended June 30, 2021 were as follows:

Beginning Balance	Increase	Decrease	Ending Balance	Amount due Within One Year*
\$ 416,469,749	\$ -	\$ (5,232,465)	\$ 411,237,284	\$ 5,454,878

\* 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.

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

Year Ended June 30	Principal	Interest	Total
2022	\$ 5,454,878	\$ 17,045,122	\$ 22,500,000
2023	5,686,745	16,813,255	22,500,000
2024	5,928,467	16,571,533	22,500,000
2025	6,180,464	16,319,536	22,500,000
2026	6,443,173	16,056,827	22,500,000
2027 - 2031	36,564,374	75,935,626	112,500,000
2032 - 2036	45,024,777	67,475,223	112,500,000
2037 - 2041	55,442,781	57,057,219	112,500,000
2042 - 2046	68,271,342	44,228,658	112,500,000
2047 - 2051	84,068,224	28,431,776	112,500,000
2052 - 2056	92,172,059	9,077,941	101,250,000
Total	\$ 411,237,284	\$ 365,012,716	\$ 776,250,000

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, \$11,250,000 is recorded in the Water Fund.



# GREAT LAKES WATER AUTHORITY WATER FUND

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

### **NOTE 14– 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
Compensated Absences	\$ 4,936,186	\$ 3,752,801	\$ (3,907,181)	\$ 4,781,806	\$ 2,768,026
Workers' Compensation	251,834	337,010	(258,027)	330,817	255,817
Claims and Judgements	2,222,500	-	(2,072,500)	150,000	100,000
WRAP payable	761,256	-	(761,256)	-	-
Cash held for the benefit of DWSD budget stabilization	2,000,000	-	-	2,000,000	-
<b>Total</b>	<b>\$ 10,171,776</b>	<b>\$ 4,089,811</b>	<b>\$ (6,998,964)</b>	<b>\$ 7,262,623</b>	<b>\$ 3,123,843</b>

#### ***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 \$2,665,000 for the Water 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 15 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 15 for discussion of risk of loss and insurance coverages.

#### ***Cash Held for the Benefit of DWSD Budget Stabilization***

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

# GREAT LAKES WATER AUTHORITY WATER FUND

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

### NOTE 15 – RISK MANAGEMENT/SELF-INSURANCE PROGRAMS

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

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

Coverage	Coverage Limits	Maximum Retention Per Occurrence
Aviation	\$5,000,000	\$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 WATER FUND

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

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

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### ***Medical and prescription drug insurance***

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

	<u>2021</u>	<u>2020</u>
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 (See Note 14).

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

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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>

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### NOTE 16 – DEFINED CONTRIBUTION PENSION PLANS

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#### **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 WATER FUND

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

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### **NOTE 17 – NET PENSION LIABILITY (SPECIAL FUNDING SITUATION)**

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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](http://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 WATER FUND

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

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

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*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 both water and sewer employees, until 2023. Pursuant to the Regional System leases, the Authority is obligated to pay its allocable share of such liability. The portion allocated to the Authority is \$31,916,200 for fiscal year 2021. This includes a contribution to the GRS pension plan of \$10,810,800 for the Water Fund. The contribution was made subsequent to the measurement date and has been recorded as a deferred outflow. It also includes an administrative fee of \$1,757,500, with \$630,000 paid by the Water Fund. Part of the administrative fee is considered a prepayment based on actual administrative expenses incurred by the plan as reported in the other supplemental information of the audited financial report of the GRS Plan.

Subsequent to 2023, DWSD and the Authority will be responsible for paying their allocable share of any additional amounts that are actuarially determined to be payable. An estimate of the 2024 contribution was included in the GRS annual actuarial valuation of Component II dated June 30, 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 \$2.4 million to \$3.1 million allocated to the Water 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 WATER FUND

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

### **NOTE 17 – 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%
	100%		5.21%
Inflation			1.85%
Investment Rate of Return			7.06%

*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 Water Fund's share of the net pension liability are summarized as follows:

Total pension liability	\$ 182,181,063
Plan fiduciary net position	(130,452,884)
Net Pension Liability	\$ 51,728,179

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2020	\$ 184,323,353	\$ 136,679,979	\$ 47,643,374
Changes for the year:			
Interest	13,006,533	-	13,006,533
Difference between expected and actual experience	(3,679,680)	-	(3,679,680)
Changes in assumptions	4,696,986	-	4,696,986
Employer contributions	-	10,810,800	(10,810,800)
Net investment income	-	(1,295,521)	1,295,521
Benefit payments, including refunds of employee contributions	(16,166,129)	(16,166,129)	-
Other changes	-	423,755	(423,755)
Net changes	(2,142,290)	(6,227,095)	4,084,805
Balances at June 30, 2021	\$ 182,181,063	\$ 130,452,884	\$ 51,728,179

*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	\$ 62,747,320	\$ 51,728,179	\$ 42,293,557

*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 of \$8,075,457 for the Water 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	\$ 11,301,842	\$ -	\$ 11,301,842
Employer contributions to the plan subsequent to the measurement date	10,810,800	-	10,810,800
Total	\$ 22,112,642	\$ -	\$ 22,112,642



# GREAT LAKES WATER AUTHORITY WATER FUND

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

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

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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	\$	2,237,034	
2023		3,231,455	
2024		3,593,248	
2025		<u>2,240,105</u>	
Total	\$	<u>11,301,842</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.

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### **NOTE 18 – COMMITMENTS AND CONTINGENCIES**

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#### ***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 \$932.5 million with a 75% spend rate assumption of \$699.3 million for the Water 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 \$306 million for the Water Fund.

#### ***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 WATER FUND

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

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### NOTE 18 – COMMITMENTS AND CONTINGENCIES (cont.)

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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 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 \$150,000 for the Water Fund, which is included in the accompanying financial statements, for the potential outcome of such claims or the amount of potential damages in the event of an unfavorable outcome for each of the above contingencies. The Authority's management believes that any differences in reserved amounts and final settlement, after consideration of claims covered by insurance, resulting from such litigation will not materially impact the Authority's financial position or results of operations.

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

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### NOTE 19 – NET INVESTMENT IN CAPITAL ASSETS

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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	\$ 498,010,970
Capital assets being depreciated, net	1,324,554,087
Intangible asset – net	<u>94,219,373</u>
Total Capital Assets and Intangible Asset	<u>1,916,784,430</u>
Less: Related Debt	
Total debt, net (Note 12)	2,439,892,074
Less: Portion of bonds used for SWAP termination agreements	(168,439,817)
Less: Obligation receivable-local share of debt (Note 8)	(568,652,092)
Deferred charge on refunding	(44,677,823)
Deferred gain on refunding	52,250,187
Capital portion of regional system lease	299,668,609
Lease obligation-raw water rights (Note 12)	<u>98,095,302</u>
Total Related Debt	<u>2,108,136,440</u>
Net Investment in Capital Assets	<u>\$ (191,352,010)</u>

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

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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## **NOTE 20 – SUBSEQUENT EVENTS**

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### ***JUNIOR LIEN REVENUE BONDS***

The Authority received an order of approval from EGLE in August 2021, for \$12.8 million for local water system improvements and in September 2021, for \$104.7 million for regional system improvements. These orders of approvals are part of the \$128 million SRF Junior Lien Water Supply System Revenue Bonds (Ordinance No. 2021-03) 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.

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**REQUIRED SUPPLEMENTARY INFORMATION**

**GREAT LAKES WATER AUTHORITY WATER FUND**

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

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

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

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

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 WATER 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**	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800	\$ 10,810,800
Actual contribution	10,810,800	10,810,800	10,810,800	10,810,800	10,810,800	10,810,800
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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

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

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 WATER FUND

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

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

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#### *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 WATER FUND

## COMBINING SCHEDULE OF NET POSITION - WATER FUND

As of June 30, 2021

	Water Operations	Water Improvement and Extension	Water Construction Fund	Water Total
<b>Assets</b>				
<b>Current Assets</b>				
Cash and cash equivalents	\$ 93,595,948	\$ 46,953,111	\$ 22,217,368	\$ 162,766,427
Restricted cash and cash equivalents	55,325,792	550,243	9,800,995	65,677,030
Restricted cash for the benefit of DWSD	3,144,400	-	-	3,144,400
Investments	27,502,507	158,045,763	4,993,688	190,541,958
Restricted investments	2,932,400	-	-	2,932,400
Receivables				
Billed	48,694,817	-	-	48,694,817
Unbilled	30,066,884	-	-	30,066,884
Other	85,494	-	-	85,494
Allowance for doubtful accounts	(11,562,519)	-	-	(11,562,519)
Due from other governments	11,889,748	-	-	11,889,748
Due from other funds	1,539	1,680,681	1,104,124	2,786,344
Due from other water funds	270,834	6,892,952	1,374,237	8,538,023
Contractual obligation receivable	16,558,716	-	-	16,558,716
Prepaid items and other assets	7,105,660	495,579	-	7,601,239
Inventories	794,521	-	-	794,521
<b>Total Current Assets</b>	<b>286,406,741</b>	<b>214,618,329</b>	<b>39,490,412</b>	<b>540,515,482</b>
<b>Noncurrent Assets</b>				
Restricted cash and cash equivalents	2,519,127	-	-	2,519,127
Restricted investments	8,651,762	-	-	8,651,762
Contractual obligation receivable	552,093,376	-	-	552,093,376
Prepaid lease	11,250,000	-	-	11,250,000
Assets not subject to depreciation	498,010,970	-	-	498,010,970
Capital assets being depreciated, net	1,324,554,087	-	-	1,324,554,087
Intangible assets, net	94,219,373	-	-	94,219,373
Prepaid insurance on debt	7,304,243	-	-	7,304,243
<b>Total noncurrent assets</b>	<b>2,498,602,938</b>	<b>-</b>	<b>-</b>	<b>2,498,602,938</b>
<b>Total Assets</b>	<b>2,785,009,679</b>	<b>214,618,329</b>	<b>39,490,412</b>	<b>3,039,118,420</b>
<b>Deferred outflows of resources</b>				
Deferred charge on refunding	44,677,823	-	-	44,677,823
Deferred pension amounts	22,112,642	-	-	22,112,642
<b>Total Deferred Outflows of Resources</b>	<b>66,790,465</b>	<b>-</b>	<b>-</b>	<b>66,790,465</b>

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

	Water Operations	Water Improvement and Extension	Water Construction Fund	Water Total
<b>Liabilities</b>				
Current Liabilities				
Accounts and contracts payable	\$ 20,488,920	\$ 5,768,630	\$ 26,781,780	\$ 53,039,330
Accrued salaries, wages and benefits	4,892,033	-	-	4,892,033
Other accrued liabilities	6,958,556	-	-	6,958,556
Due to other governments	15,693,993	-	-	15,693,993
Due to other funds	162,368	-	-	162,368
Due to other water funds	6,892,952	1,374,237	270,834	8,538,023
Interest payable	36,621,768	-	-	36,621,768
Current portion of:				
Revenue bonds and loans	32,500,450	-	-	32,500,450
Raw water rights obligatin	2,734,246	-	-	2,734,246
Obligation payable	194,242	-	-	194,242
Regional system lease	5,454,878	-	-	5,454,878
Accrued compensated absences	2,768,026	-	-	2,768,026
Accrued workers' compensation	255,817	-	-	255,817
Claims and judgments	100,000	-	-	100,000
Total Current Liabilities	<u>135,718,249</u>	<u>7,142,867</u>	<u>27,052,614</u>	<u>169,913,730</u>
Noncurrent Liabilities				
Revenue bonds and loans	2,407,391,624	-	-	2,407,391,624
Raw water rights obligation	95,361,056	-	-	95,361,056
Obligation payable	16,542,293	-	-	16,542,293
Regional system lease	405,782,406	-	-	405,782,406
Accrued compensated absences	2,013,780	-	-	2,013,780
Accrued workers' compensation	75,000	-	-	75,000
Claims and judgments	50,000	-	-	50,000
Other liabilities	2,000,000	-	-	2,000,000
Net pension liability	51,728,179	-	-	51,728,179
Total Noncurrent Liabilities	<u>2,980,944,338</u>	<u>-</u>	<u>-</u>	<u>2,980,944,338</u>
Total Liabilities	<u>3,116,662,587</u>	<u>7,142,867</u>	<u>27,052,614</u>	<u>3,150,858,068</u>
<b>Deferred Inflows of Resources</b>				
Deferred gain on refunding	52,250,187	-	-	52,250,187
Deferred amounts for swap terminations	66,164	-	-	66,164
Total Deferred Inflows of Resources	<u>52,316,351</u>	<u>-</u>	<u>-</u>	<u>52,316,351</u>
<b>Net Position</b>				
Net investment in capital assets	(203,789,808)	-	12,437,798	(191,352,010)
Restricted for debt service	23,688,943	-	-	23,688,943
Restricted for payment assistance program	4,614,294	-	-	4,614,294
Unrestricted (deficit)	<u>(141,692,223)</u>	<u>207,475,462</u>	<u>-</u>	<u>65,783,239</u>
<b>TOTAL NET POSITION</b>	<u>\$ (317,178,794)</u>	<u>\$ 207,475,462</u>	<u>\$ 12,437,798</u>	<u>\$ (97,265,534)</u>

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

## GREAT LAKES WATER AUTHORITY WATER FUND

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

For the Year Ended June 30, 2021

	Water Operations	Water Improvement and Extension	Water Construction Fund	Water Total
<b>Operating Revenues</b>				
Wholesale customer charges	\$ 322,423,768	\$ -	\$ -	\$ 322,423,768
Local system charges	21,925,500	-	-	21,925,500
Other revenues	<u>265,822</u>	<u>-</u>	<u>-</u>	<u>265,822</u>
Total Operating Revenues	<u>344,615,090</u>	<u>-</u>	<u>-</u>	<u>344,615,090</u>
<b>Operating Expenses</b>				
Operating expenses before depreciation and amortization				
Personnel	43,889,495	-	-	43,889,495
Contractual services	35,468,574	4,942,237	-	40,410,811
Utilities - gas	1,070,887	-	-	1,070,887
Utilities - electric	27,311,611	-	-	27,311,611
Utilities - sewage	444,282	-	-	444,282
Utilities - water	1,446	-	-	1,446
Chemicals	6,028,141	-	-	6,028,141
Supplies and other expenses	9,158,990	-	-	9,158,990
Capital program allocation	(2,123,060)	-	-	(2,123,060)
Intergovernmental reimbursements	<u>(2,409,511)</u>	<u>(145,000)</u>	<u>-</u>	<u>(2,554,511)</u>
Total Operating Expenses Before Depreciation and Amortization	118,840,855	4,797,237	-	123,638,092
Depreciation	123,271,541	-	-	123,271,541
Amortization of intangible assets	<u>3,566,664</u>	<u>-</u>	<u>-</u>	<u>3,566,664</u>
Total Operating Expenses	<u>245,679,060</u>	<u>4,797,237</u>	<u>-</u>	<u>250,476,297</u>
<b>Operating Income (Loss)</b>	<u>98,936,030</u>	<u>(4,797,237)</u>	<u>-</u>	<u>94,138,793</u>
<b>Nonoperating Revenues (Expenses)</b>				
Earnings on investments	656,239	3,539,066	19,800	4,215,105
Net decrease in fair value of investments	(510,538)	(2,931,504)	(4,145)	(3,446,187)
Interest on loan and obligations receivable	25,474,904	-	-	25,474,904
Interest expense	(128,257,367)	-	-	(128,257,367)
Amortization of debt related items and cost of issuance	15,988,278	-	-	15,988,278
Legacy pension expense	(8,075,457)	-	-	(8,075,457)
WRAP (Water Residential Assistance Program)	(593,206)	-	-	(593,206)
Other	(176,909)	-	-	(176,909)
Capital outlay	136,427,149	(11,893,172)	(124,533,977)	-
Loss on disposal of capital assets	<u>(123,932)</u>	<u>-</u>	<u>-</u>	<u>(123,932)</u>
Total Nonoperating Revenues (Expenses)	<u>40,809,161</u>	<u>(11,285,610)</u>	<u>(124,518,322)</u>	<u>(94,994,771)</u>
<b>Income (Loss) Before Transfers</b>	139,745,191	(16,082,847)	(124,518,322)	(855,978)
<b>Transfer in</b>	4,626,673	35,375,375	116,150,221	156,152,269
<b>Transfer out</b>	<u>(55,582,216)</u>	<u>(100,569,683)</u>	<u>(370)</u>	<u>(156,152,269)</u>
<b>Change in net position</b>	88,789,648	(81,277,155)	(8,368,471)	(855,978)
NET POSITION (DEFICIT), Beginning of Year	<u>(405,968,442)</u>	<u>288,752,617</u>	<u>20,806,269</u>	<u>(96,409,556)</u>
<b>NET POSITION (DEFICIT), END OF YEAR</b>	<u>\$ (317,178,794)</u>	<u>\$ 207,475,462</u>	<u>\$ 12,437,798</u>	<u>\$ (97,265,534)</u>

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

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

# GREAT LAKES WATER AUTHORITY WATER FUND

## SCHEDULE OF INTERFUND RECEIVABLES AND PAYABLES

For the Year Ended June 30, 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	19,271	435,250	649,603	1,104,124
<b>TOTALS</b>	<b>\$ 19,271</b>	<b>\$ 2,117,470</b>	<b>\$ 649,603</b>	<b>\$ 2,786,344</b>

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

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

**GREAT LAKES WATER AUTHORITY WATER FUND**

SCHEDULE OF OPERATING EXPENSES FOR WATER OPERATIONS - 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
<b>Operating Expenses</b>							
Personnel	\$ 72,461,431	\$ 73,336,792	\$ (25,876,915)	\$ 47,459,877	\$ 43,889,495	\$ 3,570,382	7.52%
Contractual services	79,428,425	76,555,052	(31,896,344)	44,658,708	35,468,574	9,190,134	20.58%
Utilities	26,405,424	28,859,024	(130,820)	28,728,204	28,828,226	(100,022)	-0.35%
Chemicals	5,053,900	6,023,900	-	6,023,900	6,028,141	(4,241)	-0.07%
Supplies and other expenses	24,379,546	19,226,760	(7,681,670)	11,545,090	9,158,990	2,386,100	20.67%
Capital program allocation	(2,121,915)	(2,120,769)	-	(2,120,769)	(2,123,060)	2,291	-0.11%
Intergovernmental reimbursements	(3,074,700)	(4,173,824)	-	(4,173,824)	(2,409,511)	(1,764,313)	42.27%
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	3,864,889	3,741,365	(1,735,251)	2,006,114	-	2,006,114	100.00%
<b>TOTAL OPERATING EXPENSES</b>							
<b>BUDGET BASIS</b>	<u>\$ 137,127,300</u>	<u>\$ 134,127,300</u>	<u>\$ -</u>	<u>\$ 134,127,300</u>	<u>\$ 118,840,855</u>	<u>\$ 15,286,445</u>	11.40%

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

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



## GREAT LAKES WATER AUTHORITY WATER FUND

### SCHEDULE OF REVENUE REQUIREMENT BUDGET TO ACTUAL - WATER 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 Water Operations experienced a positive variance of approximately \$13.6 million.

	2021 Adopted Budget	2021 Amended Budget	2021 Actual	Variance Over (Under) Amended Budget
<b>Revenues</b>				
Revenue from Charges				
Suburban Wholesale Customers [1]	\$ 314,252,200	\$ 317,033,600	\$ 315,771,515	\$ (1,262,085)
Local system charges	22,555,400	21,925,500	21,925,500	-
Total Revenue from Charges	<u>336,807,600</u>	<u>338,959,100</u>	<u>337,697,015</u>	<u>(1,262,085)</u>
Other Revenue [2]	-	229,000	267,562	38,562
Investment earnings [3]	4,834,400	3,955,700	4,195,305	239,605
<b>Total Revenues</b>	<u>\$ 341,642,000</u>	<u>\$ 343,143,800</u>	<u>\$ 342,159,882</u>	<u>\$ (983,918)</u>
<b>Revenue Requirements</b>				
Operations and Maintenance [4]	\$ 137,127,300	\$ 134,127,300	\$ 118,840,855	\$ (15,286,445)
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	-
Debt Service	143,189,900	137,436,000	138,100,407	664,407
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	-
Water Residential Assistance Program Contribution	1,669,400	1,669,400	1,669,400	-
Contribution to Operating Reserves	876,600	-	-	-
Regional System Lease	22,500,000	22,500,000	22,500,000	-
Transfer to the Improvement & Extension Fund	23,962,500	35,094,800	35,094,800	-
<b>Total Revenue Requirements</b>	<u>\$ 341,642,000</u>	<u>\$ 343,143,800</u>	<u>\$ 328,521,762</u>	<u>\$ (14,622,038)</u>
<b>Revenue Requirement Variance</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 13,638,120</u>	<u>\$ 13,638,120</u>

[1] Revenue from Charges - Suburban Wholesale Customers presented in this schedule differs from those presented on the Statement of Revenues, Expenses and Changes in Net position due to \$6,652,253 of revenue which was credited for the KWA debt service which is a non-cash transaction that is the lease payment on the raw water rights.

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

[3] Investment earnings excludes construction fund.

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

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

# GREAT LAKES WATER AUTHORITY WATER FUND

## SCHEDULE OF REVENUE 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

\$ 13,638,120

### Budgetary categories adjustments to financial reporting basis

Pension delayed accounting election adjustments	
Current year pension transfers/ payments recorded as deferral	10,810,800
Prior year pension contribution accounted for in current year	(8,075,457)
Administrative prepaid adjustment	451,351
Debt service	57,276,393
Accelerated pension and B&C notes obligation	184,984
Regional system lease	5,250,648
Water Residential Assistance Program (WRAP)	1,076,194
Improvement & Extension fund transfers	35,094,800

### Nonbudgeted financial reporting categories adjustments

Depreciation and amortization	(126,838,205)
Amortization - debt related	15,988,278
Improvement & Extension operating expenses	(4,797,237)
Gain (loss) on disposal of capital assets	(123,932)
Raw water rights obligation	2,633,672
Investment earnings for construction fund	19,800
Investment earnings unrealized gain (loss)	<u>(3,446,187)</u>

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

\$ (855,978)

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

**GREAT LAKES WATER AUTHORITY WATER FUND**

WATER IMPROVEMENT AND EXTENSION FUND - BUDGET TO ACTUAL  
For the Year Ended June 30, 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 Water I&E Fund. The Water System I&E Fund experienced a decrease of \$81.3 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 positive budget variance of approximately \$12.5 million.

	<u>Adopted Budget</u>	<u>Amended Budget</u>	<u>Actual [2]</u>	Variance Over (Under) Amended Budget
<b>Inflows</b>				
Revenue transfers	\$ 23,962,500	\$ 35,094,800	\$ 35,094,800	\$ -
Operating transfer	-	-	1,000	1,000
Investment earnings [1]	-	3,048,400	3,539,066	490,666
<b>Total Inflows</b>	<u>23,962,500</u>	<u>38,143,200</u>	<u>38,634,866</u>	<u>491,666</u>
<b>Outflows</b>				
Capital spending other (net operating expenses)	-	4,922,800	4,797,237	(125,563)
Capital outlay	17,892,000	10,559,100	11,893,172	1,334,072
Water system revenue transfer out [1]	-	3,048,400	3,898,841	850,441
Revenue financed capital - transfer to Water Construction Fund	75,000,000	110,077,200	95,963,693	(14,113,507)
<b>Total Outflows</b>	<u>92,892,000</u>	<u>128,607,500</u>	<u>116,552,943</u>	<u>(12,054,557)</u>
<b>Net Increase (Decrease) - Budget Basis</b>	<u>\$ (68,929,500)</u>	<u>\$ (90,464,300)</u>	(77,918,077)	<u>\$ 12,546,223</u>
<b>Non-budgeted inflows (outflows)</b>				
Net decrease in fair value of investments			(2,931,504)	
Asset transfers between systems (net)			(436,524)	
Other			8,950	
<b>Combining Schedule Water I&amp;E Fund Change in Net Position [2]</b>			<u>\$ (81,277,155)</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. See Schedule of Revenue Requirement Budget to Actual - Water 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 - Water Fund. Information in this schedule is based on activity in the Water Improvement and Extension Fund.

## GREAT LAKES WATER AUTHORITY WATER FUND

### WATER 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 Water Construction Fund. The Water System Construction Fund had a decrease of \$8.4 million in net position which represents use of construction funds from prior periods. This was expected as it aligns with the capital funding strategy. The system experienced a negative budget variance of approximately \$0.8 million.

	Adopted Budget	Amended Budget	Actual [2]	Variance Over (Under) Amended Budget
<b>Inflows</b>				
Transfers from Water Improvement & Extension Fund	\$ 75,000,000	\$ 110,077,200	\$ 95,963,693	\$ (14,113,507)
State revolving loans	12,365,800	12,365,800	20,186,528	7,820,728
Investment earnings [1]	820,400	26,800	19,800	(7,000)
<b>Total Inflows</b>	<b>88,186,200</b>	<b>122,469,800</b>	<b>116,170,021</b>	<b>(6,299,779)</b>
<b>Outflows</b>				
Water system revenue transfer out [1]	-	-	370	370
Capital projects	110,673,000	129,984,400	124,533,977	(5,450,423)
<b>Total Outflows</b>	<b>110,673,000</b>	<b>129,984,400</b>	<b>124,534,347</b>	<b>(5,450,053)</b>
<b>Net Increase (Decrease) - Budget Basis</b>	<b>\$ (22,486,800)</b>	<b>\$ (7,514,600)</b>	<b>(8,364,326)</b>	<b>\$ (849,726)</b>
Non-budgeted inflows (outflows)				
Net decrease in fair value of investments			(4,145)	
<b>Combining Schedule Water Construction Fund Change in Net Position [2]</b>			<b>\$ (8,368,471)</b>	

[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 - Water 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 - Water Fund. Information in this schedule is based on activity in the Water Construction Fund.

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

**GREAT LAKES WATER AUTHORITY WATER FUND**

SCHEDULE OF DAYS CASH - LIQUIDITY  
June 30, 2021

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016*</u>
Cash and investments - Unrestricted	\$ 353,308,385	\$ 394,440,814	\$ 347,204,928	\$ 317,089,746	\$ 267,335,558	\$ 167,292,572
<b>Operating Expense</b>						
Operating expense	\$ 250,476,297	\$ 263,282,730	\$ 263,959,730	\$ 254,602,752	\$ 245,868,861	\$ 120,841,204
Less: depreciation	(123,271,541)	(127,183,228)	(140,571,120)	(143,991,815)	(144,137,912)	(71,295,545)
Less: amortization of intangible asset	<u>(3,566,664)</u>	<u>(3,566,664)</u>	<u>(3,566,664)</u>	<u>(2,080,554)</u>	<u>-</u>	<u>-</u>
Net Operating Expense	\$ 123,638,092	\$ 132,532,838	\$ 119,821,946	\$ 108,530,383	\$ 101,730,949	\$ 49,545,659
<b>Operating Expense per Day (365 days)</b>	\$ 338,734	\$ 363,104	\$ 328,279	\$ 297,344	\$ 278,715	\$ 273,733
<b>Days Cash</b>						
Number of days cash	<u>1,043</u>	<u>1,086</u>	<u>1,058</u>	<u>1,066</u>	<u>959</u>	<u>611</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 WATER FUND

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

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### **Note 1 – Combining and Individual Fund Schedules**

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

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

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

**Water Construction Fund** – This fund is used to pay for water system capital improvements from Water Improvement & Extension Fund transfers and the proceeds of water 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 the water system operations provides the detail of the major expense categories of the operations budget compared to the actual results.

The schedule includes the actual operating expenses before depreciation and amortization for the Water Operations reported in the Combining Schedule of Revenues, Expenses and Changes in Net position for the Water Fund.

#### ***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, 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 Water System. The legal level of budgetary control is at this level. Administratively, the budget may be modified within these categories. Modifications to the budget beyond those established levels would be presented to the Audit Committee, and subsequently to the Board.

# GREAT LAKES WATER AUTHORITY WATER FUND

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

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## **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 WATER FUND

## STATISTICAL SECTION TABLE OF CONTENTS

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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 Water Fund's economic condition.

The statistical section information is presented in the following categories:

		<b><u>Page</u></b>
<b>Financial Trends Schedules 1 through 2</b>	Financial trends information is intended to show how the Water Fund's financial position has changed over time.	62
<b>Revenue Capacity Schedules 3 through 5</b>	Revenue capacity information is intended to show the factors affecting the Water Fund's ability to generate its own-source revenue.	65
<b>Debt Capacity Information Schedules 6 through 10</b>	Debt capacity information is intended to show the Water Fund's debt burden and its ability to issue additional debt.	68
<b>Demographic and Economic Schedules 11 through 12</b>	Demographic and economic information is intended to show the socioeconomic environment within which the Water Fund operates.	76
<b>Operating Information Schedules 13 through 14</b>	Operating information is intended to show contextual information about operations and resources to provide understanding and assessing the Water Fund's economic condition.	78

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 WATER FUND**

SCHEDULE OF NET POSITION - WATER FUND  
As of June 30, 2021

	2021	2020	2019	2018	2017	2016
<b>Assets</b>						
<b>Current Assets</b>						
Cash and cash equivalents	\$ 162,766,427	\$ 88,786,996	148,643,793	\$ 310,085,221	\$ 266,483,138	\$ 155,712,891
Restricted cash and cash equivalents	65,677,030	39,304,453	68,564,311	51,097,342	60,753,268	53,028,844
Restricted cash for the benefit of DWSD	3,144,400	1,544,529	2,690,397	8,418,827	288,378	10,430
Investments	190,541,958	305,653,818	198,561,135	7,004,525	852,420	11,579,681
Restricted investments	2,932,400	30,900,352	1,468,148	1,234,954	1,169,187	27,818,000
Receivables						
Billed	48,694,817	38,769,605	38,336,701	38,272,740	36,459,563	37,629,170
Unbilled	30,066,884	31,032,237	26,144,348	29,229,709	29,539,433	32,307,945
Other	85,494	214,997	916,074	5,850	1,300	21,899,046
Allowance for doubtful accounts	(11,562,519)	(8,634,075)	(7,455,747)	(6,221,815)	(4,941,777)	(25,040,612)
Due from other governments	11,889,748	20,343,238	30,063,571	23,588,754	21,327,713	41,486,157
Due from other funds	2,786,344	2,134,191	2,876,954	330,293	-	-
Contractual obligation receivable	16,558,716	15,620,163	14,328,368	13,560,086	12,076,942	6,851,584
Prepaid items and other assets	7,601,239	6,458,613	5,647,661	3,265,972	2,437,047	2,183,690
Inventories	794,521	636,621	386,612	-	-	-
<b>Total Current Assets</b>	<u>531,977,459</u>	<u>572,765,738</u>	<u>531,172,326</u>	<u>479,872,458</u>	<u>426,446,612</u>	<u>365,466,826</u>
<b>Noncurrent Assets</b>						
Restricted cash and cash equivalents	2,519,127	20,491,397	32,154,262	18,261,706	177,939,494	5,460,942
Restricted investments	8,651,762	10,770,585	77,075,423	150,436,225	20,530,374	42,841,345
Contractual obligation receivable	552,093,376	554,942,283	468,481,719	477,039,443	483,604,380	466,317,666
Prepaid lease	11,250,000	11,250,000	11,250,000	11,250,000	11,250,000	-
Assets not subject to depreciation	498,010,970	418,996,654	467,830,218	434,684,895	452,185,674	415,558,090
Capital assets being depreciated, net	1,324,554,087	1,390,129,473	1,390,765,435	1,499,118,693	1,587,291,603	1,728,054,410
Intangible asset - raw water rights, net	94,219,373	97,786,037	101,352,701	104,919,365	-	-
Prepaid insurance on debt	7,304,243	7,958,703	8,754,897	13,002,376	14,112,324	20,831,496
<b>Total Noncurrent Assets</b>	<u>2,498,602,938</u>	<u>2,512,325,132</u>	<u>2,557,664,655</u>	<u>2,708,712,703</u>	<u>2,746,913,849</u>	<u>2,679,063,949</u>
<b>Total Assets</b>	<u>3,030,580,397</u>	<u>3,085,090,870</u>	<u>3,088,836,981</u>	<u>3,188,585,161</u>	<u>3,173,360,461</u>	<u>3,044,530,775</u>
<b>Deferred Outflows of Resources</b>						
Deferred charge on refunding	44,677,823	47,358,590	82,508,971	94,431,823	99,294,499	116,511,949
Deferred pension amounts	22,112,642	15,292,494	11,369,496	18,645,719	21,491,506	13,620,562
<b>Total Deferred Outflows of Resources</b>	<u>66,790,465</u>	<u>62,651,084</u>	<u>93,878,467</u>	<u>113,077,542</u>	<u>120,786,005</u>	<u>130,132,511</u>

	2021	2020	2019	2018	2017	2016
<b>Liabilities</b>						
Current Liabilities						
Accounts and contracts payable	\$ 53,039,330	\$ 43,231,679	36,657,714	\$ 33,754,534	\$ 36,751,842	\$ 49,474,527
Accrued salaries, wages and benefits	4,892,033	5,321,864	4,284,220	4,734,956	3,190,038	2,887,280
Other accrued liabilities	6,958,556	5,357,056	6,481,670	12,679,692	1,353,816	875,796
Due to other governments	15,693,993	18,282,254	15,963,934	11,935,868	25,393,813	13,668,890
Due to other funds	162,368	-	12,568	3,447,927	-	65,971
Interest payable	36,621,768	30,887,915	40,325,682	39,322,324	39,329,322	37,226,125
Current portion of:						
Revenue bonds and loans	32,500,450	33,058,615	29,244,447	20,569,843	23,393,905	35,650,167
Raw water rights obligation	2,734,246	2,624,820	2,520,996	2,999,458	-	-
Obligation payable	194,242	184,992	176,183	167,794	159,803	152,193
Regional system lease	5,454,878	5,232,465	5,019,121	4,814,476	4,618,174	4,429,876
Accrued compensated absences	2,768,026	2,981,827	2,430,828	2,212,326	2,157,888	1,784,746
Accrued workers' compensation	255,817	176,834	217,480	228,239	25,000	395,788
Claims and judgments	100,000	2,172,500	2,290,000	2,195,000	-	4,494,694
Total Current Liabilities	<u>161,375,707</u>	<u>149,512,821</u>	<u>145,624,843</u>	<u>139,062,437</u>	<u>136,373,601</u>	<u>151,106,053</u>
Noncurrent Liabilities						
Revenue bonds and loans	2,407,391,624	2,459,730,737	2,467,177,447	2,545,529,255	2,606,465,431	2,488,824,632
Raw water rights obligation	95,361,056	98,095,302	100,720,123	103,241,118	-	-
Obligation payable	16,542,293	16,736,534	16,921,526	17,097,709	17,265,503	17,425,306
Regional system lease	405,782,406	411,237,284	416,469,750	421,488,871	426,303,346	430,921,520
Accrued compensated absences	2,013,780	1,954,359	2,049,655	2,174,506	2,288,125	3,511,934
Accrued workers' compensation	75,000	75,000	75,000	75,000	225,000	3,562,536
Claims and judgments	50,000	50,000	50,000	50,000	75,000	-
Other noncurrent liabilities	2,000,000	2,761,256	2,804,949	2,634,471	2,582,076	2,710,092
Net pension liability	51,728,179	47,643,374	47,310,460	64,151,352	69,569,044	61,021,079
Total Noncurrent Liabilities	<u>2,980,944,338</u>	<u>3,038,283,846</u>	<u>3,053,578,910</u>	<u>3,156,442,282</u>	<u>3,124,773,525</u>	<u>3,007,977,099</u>
Total Liabilities	<u>3,142,320,045</u>	<u>3,187,796,667</u>	<u>3,199,203,753</u>	<u>3,295,504,719</u>	<u>3,261,147,126</u>	<u>3,159,083,152</u>
Deferred Inflows of Resources						
Deferred gain on refunding	52,250,187	56,283,953	60,317,719	59,252,431	62,822,646	-
Deferred amounts for swap terminations	66,164	70,890	75,616	80,342	85,068	4,134,908
Deferred pension amounts	-	-	-	7,260,572	6,565,776	15,536,821
Total Deferred Inflows of Resources	<u>52,316,351</u>	<u>56,354,843</u>	<u>60,393,335</u>	<u>66,593,345</u>	<u>69,473,490</u>	<u>19,671,729</u>
Net Position [1]						
Net investment in capital assets	(191,352,010)	(237,858,820)	(166,485,092)	(84,133,546)	(2,321,309)	90,778,518
Restricted for debt service	23,688,943	19,479,656	29,731,576	23,239,368	26,194,280	69,797,836
Restricted for payment assistance program	4,614,294	3,754,368	3,369,875	2,462,214	2,218,373	1,451,598
Unrestricted (deficit)	65,783,239	118,215,240	56,502,001	(2,003,397)	(62,565,494)	(166,119,547)
<b>TOTAL NET POSITION</b>	<u>\$ (97,265,534)</u>	<u>\$ (96,409,556)</u>	<u>\$ (76,881,640)</u>	<u>\$ (60,435,361)</u>	<u>\$ (36,474,150)</u>	<u>\$ (4,091,595)</u>

[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 WATER FUND

## CHANGES IN NET POSITION - WATER FUND

	2021	2020	2019	2018	2017	2016*
<b>Operating Revenues</b>						
Wholesale customer charges	\$ 322,423,768	\$ 312,701,777	\$ 311,399,136	\$ 323,117,344	\$ 331,115,131	\$ 160,777,169
Local system charges	21,925,500	21,295,500	20,181,400	15,130,600	15,490,300	6,833,500
Bad debt recovery	-	-	-	-	5,107,125	-
Other revenues	265,822	256,300	21,340	64,200	37,388	54,863
<b>Total Operating Revenues</b>	<b>344,615,090</b>	<b>334,253,577</b>	<b>331,601,876</b>	<b>338,312,144</b>	<b>351,749,944</b>	<b>167,665,532</b>
<b>Operating Expenses</b>						
Personnel	43,889,495	43,946,225	42,085,546	41,845,295	38,261,393	8,301,022
Contractual services	40,410,811	46,097,405	43,083,078	35,794,549	34,257,419	3,304,113
Utilities	28,828,226	27,719,754	26,247,858	26,871,081	28,469,603	12,368,557
Chemicals	6,028,141	5,569,437	5,088,827	4,804,768	5,340,753	2,444,543
Supplies and other expenses	9,158,990	12,034,192	11,797,279	9,543,615	7,982,562	1,440,644
Capital adjustment	-	26,780	-	-	-	-
Capital program allocation	(2,123,060)	(2,164,003)	(2,054,913)	(713,779)	(977,762)	-
Intergovernmental reimbursements	(2,554,511)	(696,952)	(6,425,729)	(9,615,146)	(11,603,019)	-
Centralized services	-	-	-	-	-	18,494,851
Administrative services	-	-	-	-	-	3,191,929
Depreciation	123,271,541	127,183,228	140,571,120	143,991,815	144,137,912	71,295,545
Amortization of intangible asset	3,566,664	3,566,664	3,566,664	2,080,554	-	-
<b>Total Operating Expenses</b>	<b>250,476,297</b>	<b>263,282,730</b>	<b>263,959,730</b>	<b>254,602,752</b>	<b>245,868,861</b>	<b>120,841,204</b>
<b>Operating Income</b>	<b>94,138,793</b>	<b>70,970,847</b>	<b>67,642,146</b>	<b>83,709,392</b>	<b>105,881,083</b>	<b>46,824,328</b>
<b>Nonoperating Revenues (Expenses)</b>						
Earnings on investments	4,215,105	10,485,467	12,348,295	6,129,530	1,832,918	392,031
Net increase (decrease) in fair value of investments	(3,446,187)	3,259,307	2,406,106	-	-	-
Interest on loan and obligations receivable	25,474,904	22,945,866	22,921,380	23,351,220	25,269,750	12,231,250
Interest expense	(128,257,367)	(133,537,621)	(136,704,033)	(139,343,204)	(132,434,945)	(65,958,095)
Amortization of debt related items and cost of issuance	15,988,278	14,258,569	10,771,937	13,837,585	2,403,018	2,418,891
Legacy pension expense	(8,075,457)	(7,220,716)	6,014,441	(8,933,691)	(2,516,776)	-
WRAP (Water Residential Assistance Program)	(593,206)	(1,393,179)	(855,455)	(1,506,554)	(884,327)	-
Other	(176,909)	2,186,331	114,136	(544,813)	1,117,704	-
Gain (loss) on disposal of capital assets	(123,932)	(50,760)	(435,095)	(6,225)	(207,900)	-
Loss on impairment of capital assets	-	(1,432,027)	(670,137)	(654,451)	(31,499)	-
<b>Total Nonoperating Expenses</b>	<b>(94,994,771)</b>	<b>(90,498,763)</b>	<b>(84,088,425)</b>	<b>(107,670,603)</b>	<b>(105,452,057)</b>	<b>(50,915,923)</b>
<b>Income (loss) before special item</b>	<b>(855,978)</b>	<b>(19,527,916)</b>	<b>(16,446,279)</b>	<b>(23,961,211)</b>	<b>429,026</b>	<b>(4,091,595)</b>
<b>Special Item - MOU with DWSD</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(32,811,581)</b>	<b>-</b>
<b>Change in net position</b>	<b>(855,978)</b>	<b>(19,527,916)</b>	<b>(16,446,279)</b>	<b>(23,961,211)</b>	<b>(32,382,555)</b>	<b>(4,091,595)</b>
NET POSITION (DEFICIT), Beginning of Year	(96,409,556)	(76,881,640)	(60,435,361)	(36,474,150)	(4,091,595)	-
<b>NET POSITION (DEFICIT), END OF YEAR</b>	<b>\$ (97,265,534)</b>	<b>\$ (96,409,556)</b>	<b>\$ (76,881,640)</b>	<b>\$ (60,435,361)</b>	<b>\$ (36,474,150)</b>	<b>\$ (4,091,595)</b>

\* 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 WATER FUND

## CHARGE ADJUSTMENTS

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

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

[2] Average annual charge adjustment percentages is the required charge adjustment required when calculating revenue with the prior year existing charges, usage projections and any other specific individual contract requirements.

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

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

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

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

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 WATER FUND**

Schedule 4

WATER FUND OPERATING REVENUES/ LARGEST WATER CUSTOMERS

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

[1] Net of bad debt expense.

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

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

\* GLWA began operations on January 1, 2016. The data for 2016 is for the six months of activity through June 30, 2016. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.



## GREAT LAKES WATER AUTHORITY WATER FUND

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

Community Name	Fixed Monthly \$/mo	Commodity \$/Mcf	Community Name	Fixed Monthly \$/mo	Commodity \$/Mcf
Allen Park	\$ 122,400	\$ 7.80	Mayfield Township	\$ 2,500	\$ 23.10
Almont, Village of	12,200	10.52	Melvindale	33,600	6.23
Ash Township	42,400	8.28	New Haven, Village of	20,500	6.74
Belleville	16,000	9.77	North Oakland County Water Authority	1,143,600	10.22
Berlin Township	37,400	11.41	Northville, City	46,100	11.72
Brownstown Township	187,400	10.82	Northville Township	290,100	16.95
Bruce Township	15,900	68.40	Novi	468,800	12.69
Canton Township	527,600	12.17	Oak Park	71,700	6.03
Center Line	23,900	6.23	Oakland County Drain Commission	4,300	3.29
Chesterfield Township	217,600	10.33	Plymouth, City	55,500	10.24
Clinton Township	390,100	7.79	Plymouth Township	229,900	11.31
Commerce Township	183,400	14.50	Redford Township	165,300	8.04
Dearborn	539,900	7.24	River Rouge	34,800	7.54
Dearborn Heights	189,200	7.70	Riverview	45,000	7.82
Eastpointe	80,600	6.15	Rockwood	14,400	11.56
Ecorse	78,800	4.31	Romeo	13,000	18.18
Farmington	52,300	9.24	Romulus	216,400	8.23
Farmington Hills	460,900	10.20	Roseville	138,700	5.91
Ferndale	52,300	6.19	Royal Oak Township	10,500	7.15
Flat Rock	70,500	9.18	Shelby Township	724,600	15.15
Flint (1)	572,300	8.76	Southeastern Oakland County Water Authority	1,192,900	7.58
Fraser	63,200	8.51	South Rockwood	6,000	9.92
Garden City	87,900	8.30	Southgate	114,600	7.90
Gibraltar	17,300	8.33	St. Clair County-Burtchville Township	16,800	18.67
Grosse Ile Township	57,300	11.65	St. Clair County-Greenwood Energy Center	24,000	12.83
Grosse Pointe Park	76,700	11.04	St. Clair Shores	158,300	6.68
Grosse Pointe Shores	33,900	13.60	Sterling Heights	785,000	10.99
Grosse Pointe Woods	73,700	9.13	Sumpter Township	34,500	9.64
Hamtramck	40,900	5.39	Sylvan Lake	12,100	15.11
Harper Woods	42,500	6.76	Taylor	241,400	7.24
Harrison Township	79,100	6.82	Trenton	86,700	8.10
Hazel Park	38,200	5.98	Troy	700,800	12.14
Highland Park	60,300	4.61	Utica	29,800	9.34
Huron Township	76,000	10.09	Van Buren Township	177,200	11.14
Imlay City	74,600	13.52	Walled Lake	41,700	10.64
Imlay Township	800	39.44	Warren	530,000	6.89
Inkster	63,800	5.45	Washington Township	116,900	12.49
Keego Harbor	15,500	12.35	Wayne	159,500	13.38
Lapeer	80,300	11.84	West Bloomfield Township	538,000	16.29
Lenox Township	15,300	8.21	Westland	321,700	7.80
Lincoln Park	115,900	6.12	Wixom	127,600	13.73
Livonia	594,800	9.92	Woodhaven	86,700	11.91
Macomb Township	653,000	16.03	Ypsilanti Community Utilities Authority	540,900	8.76
Madison Heights	99,400	6.82			

Annual Detroit Wholesale Revenue Requirement \$21,925,500 - Effective January 1, 2021

\* Wholesale charges went into effect January 1, 2021 per GLWA Board of Director's action taken at their regular meeting held September 23, 2020.

(1) Net fixed monthly charge will include \$554,400 monthly credits for KWA debt service

## GREAT LAKES WATER AUTHORITY WATER FUND

## RATIOS OF OUTSTANDING DEBT BY TYPE

	2021	2020	2019	2018	2017	2016
Revenue bonds [1]	\$ 2,368,632,473	\$ 2,453,471,088	\$ 2,466,561,092	\$ 2,540,663,196	\$ 2,612,607,101	\$ 2,507,091,038
State revolving loans	71,259,601	39,318,264	29,860,802	25,435,902	17,252,235	17,383,761
Total	<u>\$ 2,439,892,074</u>	<u>\$ 2,492,789,352</u>	<u>\$ 2,496,421,894</u>	<u>\$ 2,566,099,098</u>	<u>\$ 2,629,859,336</u>	<u>\$ 2,524,474,799</u>
Total taxable value *	n/a	n/a	n/a	n/a	n/a	n/a
Total population served [2]:	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000
Total debt per capita:	\$ 642	\$ 656	\$ 657	\$ 675	\$ 692	\$ 664
Per capita income [3]	\$ 53,316	\$ 50,069	\$ 54,172	\$ 52,572	\$ 50,863	\$ 48,692
Total debt as a percentage of income:	1.20%	1.31%	1.21%	1.28%	1.36%	1.36%

[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 WATER FUND

DEBT BY LIEN  
As of June 30, 2021

	Original Principal Amount [1]	Outstanding as of June 30, 2021	Total Future Debt [2]
<b>Water Supply System Revenue Bonds</b>			
Senior Lien Bonds			
Water Supply System Revenue Senior Lien Bonds, Series 2003A	\$ 234,805,000	\$ 100,000	\$ 100,000
Water Supply System Revenue Senior Lien Bonds, Series 2005B	194,900,000	100,000	100,000
Water Supply System Revenue Senior Lien Bonds, Series 2006A	280,000,000	100,000	100,000
Water Supply System Revenue Senior Lien Bonds, Series 2011B	17,195,000	575,000	575,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2011C	103,890,000	1,020,000	1,020,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-1	206,540,000	112,450,000	112,450,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-2	188,455,000	188,455,000	188,455,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2014D-4	307,645,000	209,360,000	209,360,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2015D-1	89,430,000	75,200,000	75,200,000
Water Supply System Revenue Senior Lien Bonds, Series 2016A	88,000,000	88,000,000	88,000,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2016C	443,930,000	443,930,000	443,930,000
Water Supply System Revenue Senior Lien Bonds, Series 2020A	42,445,000	42,445,000	42,445,000
Water Supply System Revenue Refunding Senior Lien Bonds, Series 2020C	377,515,000	377,515,000	377,515,000
	<u>2,574,750,000</u>	<u>1,539,250,000</u>	<u>1,539,250,000</u>
Second Lien Bonds			
Water Supply System Revenue Second Lien Bonds, Series 2003B	172,945,000	100,000	100,000
Water Supply System Revenue Second Lien Bonds, Series 2006B	120,000,000	100,000	100,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2014D-6	65,425,000	51,570,000	51,570,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2015D-2	37,235,000	37,235,000	37,235,000
Water Supply System Revenue Second Lien Bonds, Series 2016B	163,830,000	163,830,000	163,830,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2016D	222,045,000	222,045,000	222,045,000
Water Supply System Revenue Refunding Second Lien Bonds, Series 2018A	155,595,000	135,245,000	135,245,000
Water Supply System Revenue Second Lien Bonds, Series 2020B	43,135,000	43,135,000	43,135,000
	<u>980,210,000</u>	<u>653,260,000</u>	<u>653,260,000</u>
SRF Junior Lien Bonds			
Water Supply System Revenue Bonds, Series 2005 SRF-1	13,805,164	4,605,164	4,605,164
Water Supply System Revenue Bonds, Series 2005 SRF-2	8,891,730	2,906,730	2,906,730
Water Supply System Revenue Bonds, Series 2006 SRF-1	5,180,926	1,715,926	1,715,926
Water Supply System Revenue Bonds, Series 2008 SRF-1	2,590,941	845,941	845,941
Water Supply System Revenue Bonds, Series 2016 SRF-1	8,273,168	7,663,168	7,663,168
Water Supply System Revenue Bonds, Series 2016 SRF-2	3,393,543	3,138,543	3,138,543
Water Supply System Revenue Bonds, Series 2017 SRF-1	5,807,931	5,502,931	5,502,931
Water Supply System Revenue Bonds, Series 2019 SRF-1	8,330,000	7,764,051	8,330,000
Water Supply System Revenue Bonds, Series 2019 SRF-2	29,950,000	15,778,733	29,950,000
Water Supply System Revenue Bonds, Series 2019 SRF-3	11,788,056	7,683,723	11,788,056
Water Supply System Revenue Bonds, Series 2020 SRF-1	20,538,700	7,718,196	20,538,700
Water Supply System Revenue Bonds, Series 2020 SRF-2	9,000,000	567,665	9,000,000
Water Supply System Revenue Bonds, Series 2020 SRF-3	8,960,000	5,368,830	8,960,000
Water Supply System Revenue Bonds, Series 2020 SRF-4	12,153,050	-	12,153,050
Water Supply System Revenue Bonds, Series 2021 SRF-1	11,940,000	-	11,940,000
	<u>160,603,209</u>	<u>71,259,601</u>	<u>139,038,209</u>
<b>TOTAL WATER SUPPLY SYSTEM REVENUE BONDS</b>	<u>\$ 3,715,563,209</u>	<u>\$ 2,263,769,601</u>	<u>\$ 2,331,548,209</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 WATER 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]	\$ 1,600	\$ 55,823	\$ 57,423	\$ 12,790	\$ 29,435	\$ 42,225	\$ 2,998	\$ 1,485	\$ 4,483	\$ 104,131	\$ 1,316	\$ 105,447
2023	53,890	69,103	122,993	15,505	30,948	46,453	4,794	1,432	6,226	175,672	1,644	177,316
2024	60,290	66,341	126,631	16,640	30,144	46,784	5,260	1,328	6,588	180,003	1,640	181,643
2025	64,210	63,477	127,687	18,380	29,269	47,649	5,193	1,219	6,412	181,748	2,304	184,052
2026	67,040	60,553	127,593	19,300	28,326	47,626	5,100	1,112	6,212	181,431	2,511	183,942
2027	70,060	57,313	127,373	20,265	27,336	47,601	5,203	1,005	6,208	181,182	2,507	183,689
2028	73,525	53,954	127,479	21,280	26,299	47,579	3,660	912	4,572	179,630	2,508	182,138
2029	76,770	50,472	127,242	22,345	25,208	47,553	3,746	836	4,582	179,377	2,513	181,890
2030	80,490	46,668	127,158	23,460	24,063	47,523	3,685	759	4,444	179,125	2,508	181,633
2031	84,380	42,659	127,039	27,440	22,791	50,231	3,770	683	4,453	181,723	2,508	184,231
2032	88,510	38,439	126,949	28,810	21,384	50,194	3,845	604	4,449	181,592	2,511	184,103
2033	92,825	34,004	126,829	30,255	20,051	50,306	3,935	524	4,459	181,594	2,515	184,109
2034	86,695	29,565	116,260	42,150	18,585	60,735	3,208	443	3,651	180,646	3,310	183,956
2035	94,960	25,043	120,003	39,930	16,735	56,665	2,050	376	2,426	179,094	4,539	183,633
2036	107,100	20,010	127,110	2,650	15,671	18,321	1,729	331	2,060	147,491	4,890	152,381
2037	15,790	17,046	32,836	120,120	12,600	132,720	1,460	294	1,754	167,310	5,187	172,497
2038	55,135	15,607	70,742	1,600	9,557	11,157	1,495	261	1,756	83,655	5,197	88,852
2039	61,740	13,368	75,108	1,675	9,475	11,150	1,525	228	1,753	88,011	5,190	93,201
2040	63,910	11,160	75,070	1,760	9,389	11,149	1,494	195	1,689	87,908	5,262	93,170
2041	66,160	8,874	75,034	1,845	9,299	11,144	1,090	166	1,256	87,434	5,695	93,129
2042	67,190	6,530	73,720	1,940	9,205	11,145	1,115	140	1,255	86,120	4,638	90,758
2043	17,905	4,901	22,806	31,660	8,365	40,025	896	117	1,013	63,844	3,042	66,886
2044	18,805	3,984	22,789	33,245	6,742	39,987	720	97	817	63,593	2,703	66,296
2045	19,740	3,020	22,760	34,910	5,038	39,948	730	79	809	63,517	1,987	65,504
2046	20,725	2,008	22,733	36,650	3,249	39,899	755	61	816	63,448	1,988	65,436
2047	21,765	946	22,711	38,485	1,371	39,856	769	42	811	63,378	1,983	65,361
2048	2,550	339	2,889	2,590	344	2,934	787	23	810	6,633	1,978	8,611
2049	2,680	208	2,888	2,725	211	2,936	248	3	251	6,075	1,981	8,056
2050	2,810	71	2,881	2,855	71	2,926	-	-	-	5,807	1,979	7,786
2051	-	-	-	-	-	-	-	-	-	-	1,977	1,977
2052	-	-	-	-	-	-	-	-	-	-	1,459	1,459
<b>Total</b>	<b>\$ 1,539,250</b>	<b>\$ 801,486</b>	<b>\$ 2,340,736</b>	<b>\$ 653,260</b>	<b>\$ 451,161</b>	<b>\$ 1,104,421</b>	<b>\$ 71,260</b>	<b>\$ 14,755</b>	<b>\$ 86,015</b>	<b>\$ 3,531,172</b>	<b>\$ 91,970</b>	<b>\$ 3,623,142</b>

[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 WATER FUND

### DEBT CREDIT RATING HISTORY As of June 30, 2021

Debt Type	2021	2020	2019	2018	2017	2016
Standards & Poor's						
Senior Lien	AA-	AA-	AA-	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 WATER FUND**

## CALCULATION OF DEBT SERVICE COVERAGE - OVERVIEW

As of June 30, 2021

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The Authority has pledged Net Revenues of the water system 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 WATER FUND

### CALCULATION OF DEBT SERVICE COVERAGE - GAAP BASIS - WATER SYSTEM

As of June 30, 2021

Operating Revenue	
Suburban Wholesale Customers [1]	\$ 315,771,515
Detroit Customers	
Wholesale Service Charge Revenue [1]	21,925,500
Local Service Revenues [2]	<u>67,464,986</u>
Subtotal - Detroit Customers	89,390,486
Other Operating Revenue-GLWA	265,822
Other Operating and Nonoperating Revenue-DWSD	1,958,151
Other Nonoperating Revenue-GLWA	1,740
Earnings on investments less construction fund investment earnings	<u>4,195,305</u>
Total Revenue	<u>411,583,019</u>
Operating Expenses	
Operations and Maintenance Regional System	118,840,855
Operations and Maintenance transfer to Local System	35,833,900
Legacy Pension Obligations Regional System [3]	6,048,000
Legacy Pension Obligations Local System [3]	<u>4,272,000</u>
Total Operating Expenses	<u>164,994,755</u>
<b>Pledged revenues for the year ending June 30, 2021</b>	<b><u>\$ 246,588,264</u></b>
<b>Principal and interest funding requirement for the year ending June 30, 2021 [4]:</b>	
Senior Lien Bonds	\$ 123,798,304
Second Lien Bonds	<u>51,731,158</u>
Total Senior and Second Lien Bonds	175,529,462
Junior Lien Bonds	<u>3,684,917</u>
Total All Bonds	<b><u>\$ 179,214,379</u></b>
<b>GAAP Basis Debt Service Coverage</b>	
Senior Lien Bonds	<b>1.99</b>
Senior and Second Lien Bonds	<b>1.40</b>
All Bonds, Including SRF Junior Lien	<b>1.38</b>

[1] Total GLWA Regional System Wholesale Revenue reported net of bad debt allowance and \$6,652,253 for the KWA debt service credits.

[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

[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 WATER FUND

### CALCULATION OF DEBT SERVICE COVERAGE - RATE COVENANT BASIS - WATER SYSTEM

As of June 30, 2021

<hr/>	
Receipts	
Suburban Wholesale Customers	\$ 310,032,178
Detroit Customers	
Wholesale Service Charge Revenue	21,925,500
Local Service Revenues	<u>80,141,924</u>
Subtotal - Detroit Customers	102,067,424
Earnings on investments less construction fund investment earnings	<u>4,684,353</u>
Total Revenue	<u>416,783,955</u>
Disbursements	
Operations and Maintenance Regional System	124,167,627
Operations and Maintenance transfer to Local System	35,833,900
Legacy Pension Obligations Regional System	6,048,000
Legacy Pension Obligations Local System	<u>4,272,000</u>
Total Operating Expenses	<u>170,321,527</u>
<b>Pledged revenues for the year ending June 30, 2021</b>	<b><u>\$ 246,462,428</u></b>
<b>Principal and interest funding requirement for the year ending June 30, 2021 [1]:</b>	
Senior Lien Bonds	\$ 123,798,304
Second Lien Bonds	<u>51,731,158</u>
Total Senior and Second Lien Bonds	175,529,462
Junior Lien Bonds	<u>3,684,917</u>
Total All Bonds	<b><u>\$ 179,214,379</u></b>
<b>Rate Covenant Debt Service Coverage</b>	
Senior Lien Bonds	<b>1.99</b>
Senior and Second Lien Bonds	<b>1.40</b>
All Bonds, Including SRF Junior Lien	<b>1.38</b>

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



## GREAT LAKES WATER AUTHORITY WATER FUND

## DEBT SERVICE COVERAGE HISTORY - WATER SYSTEM

As of June 30, 2021

	2021	2020 [4]	2019	2018	2017	2016 [1]
<b>GAAP Basis</b>						
Pledged revenue	<u>\$ 246,588,264</u>	<u>\$ 242,657,047</u>	<u>\$ 243,712,390</u>	<u>\$ 271,314,197</u>	<u>\$ 282,545,208</u>	<u>\$ 276,399,904</u>
Principal and interest funding requirement [2]:						
Senior lien bonds	\$ 123,798,304	\$ 122,318,928	\$ 119,230,820	\$ 127,687,420	\$ 134,234,660	\$ 128,177,999
Second lien bonds	51,731,158	47,849,350	46,214,385	42,852,813	38,990,023	41,178,843
Total senior and second lien bonds	175,529,462	170,168,278	165,445,205	170,540,233	173,224,683	169,356,842
Junior lien bonds	3,684,917	2,700,795	2,521,249	2,009,658	1,785,328	1,781,683
Total all bonds	<u>\$ 179,214,379</u>	<u>\$ 172,869,073</u>	<u>\$ 167,966,454</u>	<u>\$ 172,549,891</u>	<u>\$ 175,010,011</u>	<u>\$ 171,138,525</u>
GAAP basis debt service coverage						
Senior lien bonds	1.99	1.98	2.04	2.12	2.10	2.16
Senior and second lien bonds	1.40	1.43	1.47	1.59	1.63	1.63
All bonds, including SRF junior lien	1.38	1.40	1.45	1.57	1.61	1.62
<b>Rate Covenant Basis [3]</b>						
Pledged revenue	<u>\$ 246,462,428</u>	<u>\$ 237,025,827</u>	<u>\$ 254,119,800</u>	<u>\$ 264,608,700</u>	<u>\$ 272,268,900</u>	
Principal and interest funding requirement [2]:						
Senior lien bonds	\$ 123,798,304	\$ 122,318,928	\$ 119,230,820	\$ 127,687,420	\$ 134,234,660	
Second lien bonds	51,731,158	47,849,350	46,214,385	42,852,813	38,990,023	
Total senior and second lien bonds	175,529,462	170,168,278	165,445,205	170,540,233	173,224,683	
Junior lien bonds	3,684,917	2,700,795	2,521,249	2,009,658	1,785,328	
Total all bonds	<u>\$ 179,214,379</u>	<u>\$ 172,869,073</u>	<u>\$ 167,966,454</u>	<u>\$ 172,549,891</u>	<u>\$ 175,010,011</u>	
Rate covenant debt service coverage						
Senior lien bonds	1.99	1.94	2.13	2.07	2.03	
Senior and second lien bonds	1.40	1.39	1.54	1.55	1.57	
All bonds, including SRF junior lien	1.38	1.37	1.51	1.53	1.56	

[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] Second and SRF Junior Lien values were restated due to a calculation error. Debt Service Coverage amounts presented may differ slightly from last year's Annual Comprehensive Financial Report.

[5] At the time of the issuance of the GLWA financial report, DWSD's audited financial report had not been released. The 2021 GAAP Basis debt service coverage was calculated using 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 WATER 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	3,800,000	4.8%	\$ 53,316 (4)	\$ 179,214,379 (4)	\$ 47.16	0.09%
2020	3,800,000	11.7%	50,069	172,869,073	45.49	0.09%
2019	3,800,000	4.3%	54,172	162,377,261	42.73	0.08%
2018	3,800,000	4.3%	52,572	172,549,890	45.41	0.09%
2017	3,800,000	4.6%	50,863	175,010,012	46.06	0.09%
2016	* 3,800,000	5.3%	48,692	171,138,525	45.04	0.09%
2015	* 3,800,000	5.9%	46,894	178,923,900	47.09	0.10%
2014	* 3,800,000	8.1%	44,718	182,464,900	48.02	0.11%
2013	* 3,800,000	9.7%	42,555	172,458,800	45.38	0.11%
2012	* 3,800,000	10.1%	42,168	153,524,200	40.40	0.10%

(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 WATER 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 Employment (b)	Full- Time Employees	Rank	Percent of Total Employment (d)
		(a)			(c)		
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%
<b>Total</b>		<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 WATER FUND

### PRODUCED AND BILLED WATER VOLUMES

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

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

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

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

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

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

\* GLWA assumed operations on January 1, 2016. Data for 2016 includes six months of operation under DWSD and six months of operation under GLWA. This schedule is being built prospectively. Ultimately, 10 years of data will be presented.

## GREAT LAKES WATER AUTHORITY WATER FUND

ADDITIONAL SUMMARY STATISTICS  
Last Six Years

	2021	2020	2019	2018	2017	2016
<b>Capital Asset Statistics - Water</b>						
Water Treatment Plants	5	5	5	5	5	5
Intake Facilities	3	3	3	3	3	3
Booster Pumping Stations	19	19	19	19	19	19
Water Storage Reservoirs	32	32	32	32	32	32
Miles of Transmission Lines	816	816	816	803	803	803
<b>GLWA Employees</b>						
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
<b>Total Employees</b>	<b>985</b>	<b>1,009</b>	<b>1,024</b>	<b>968</b>	<b>881</b>	<b>782</b>

[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.



We are  
***One water.***



**GLWA**  
*Great Lakes Water Authority*

**Financial Services Area**  
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