



Audit Committee

Friday, July 17, 2020 at 8:00 a.m.

GLWater.org

Join by phone Dial-In: 313-771-3116

Conference ID: 50197058

AGENDA

Note: Binders 1 and 2 have been combined in agenda order and document was renumbered.

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. June 19, 2020 (Page 1)
 - B. June 24, 2020 Special Meeting (Page 6)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
 - None
7. NEW BUSINESS
 - A. Year-End Cash Review Status (Page 9)
 - B. FY 2020 Yearend Financial Audit Planning (Page 14)
 - C. Series Ordinance Authorizing Issuance and Sale of Water (Page 24)
Supply System Revenue Bonds
 - D. Series Ordinance Authorizing Issuance and Sale of Sewage (Page 54)
Disposal System Revenue Bonds
 - E. Proposed Policy Related to Acceptance of Gifts and Grants (Page 79)
8. REPORTS
 - A. CFO Report (Page 84)
 - B. Monthly Financial Report for April 2020 (Page 86)
 - C. Capital Finance Report (Page 87)
9. COMMUNICATIONS
10. LOOK AHEAD
 - A. Next Audit Committee Meeting: August 21, 2020 at 8:00 a.m.
11. OTHER MATTERS
12. ADJOURNMENT



Great Lakes Water Authority

735 Randolph Street
Detroit, Michigan 48226
glwater.legistar.com

Meeting Minutes - Draft

Audit Committee

Friday, June 19, 2020

8:00 AM

Telephonic Meeting
Call In Number: 1-866-528-2256
Access Code: 9169911

Telephonic Meeting

Call In Number: 1-866-528-2256 Access Code: 9169911

1. Call To Order

Chairperson Baker called the meeting to order at 8:00 a.m.

2. Quorum Call

Present: 2 - Chairperson Brian Baker, and Director Gary Brown

3. Approval of Agenda

Nicolette Bateson, Chief Financial Officer/Treasurer, requested to remove Item 7A., Proposed FY2020 Budget Amendment, from today's Agenda, as she would like to request a Special Audit Committee Meeting is scheduled for June 24, 2020 for the Committee's consideration of this item, and present to the full Board of Directors that same day (June 24, 2020, 2:00 p.m., Board of Directors Meeting).

Chairperson Baker requested a Motion to approve the Agenda as Amended.

Motion By: Gary Brown
Support By: Brian Baker
Action: Approved as Amended
The motion carried by a unanimous vote.

4. Approval of Minutes

A. [2020-200](#) Audit Committee Minutes from May 15, 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [4A Audit Committee Meeting Minutes - May 15, 2020](#)

Chairperson Baker requested a Motion to approve the May 15, 2020 Audit Committee Meeting Minutes.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business**A.** [2020-203](#) Recap: June 2020 Sewer System Bond Refunding Transaction

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [6A1 Recap - June 2020 Sewer System Bond Refunding Transaction](#)

[6A2 GLWA Board Presentation Post 2020 Sewer Bond Sale Final](#)

[6A3 RatingsDirect Bulletin GLWA Ratings](#)

[UnaffectedByCOVID19Pandemic Jun-03-2020](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2020-210](#) Proposed Budget Amendment Policy

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [6B1 Cover Memo Proposed Budget Amendment Policy 6.19.2020](#)

[6B2 Proposed Budget Amendment Policy Draft 6.19.2020](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors
Agenda of June 24, 2020

The motion carried by a unanimous vote.

7. New Business**B. [2020-212](#) Proposed FY 2021 Budget Reductions**

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7B1 Proposed FY 2021 Budget Reductions](#)
[7B2 Board Letter- Proposed FY 2021 Budget Reductions](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors

Agenda of June 24, 2020

The motion carried by a unanimous vote.

C. [2020-204](#) Report: General Retirement System Financial Report and Annual Actuarial Valuation for Year End June 30, 2019 (City of Detroit Component II)

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7C GRS Component II Annual Pension Report](#)
[7C1 GRS Audit Communication Letter](#)
[7C2 GRS Audited Financial Report](#)
[7C3 GRS GASB 67-68 Report](#)
[7C4 GRS Actuarial Valuation Report](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

8. Reports

A. [2020-205](#) CFO Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8A1 CFO Update June 2020](#)

[8A2 Forecast Update 061720](#)

[8A3 Cover sheet For 6.16.2020 Retail Receipt](#)

[8A3 For 6.16.2020 Retail Receipt Status_updated-Laptop-11134-G](#)

[8A4.1 FSA PRO FOR 0021 Evaluation Criteria - ITQ \(1\)](#)

[8A4.2 PSC GLWA WRAP presentation 6162020](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2020-206](#) Monthly Financial Report for March 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8B - GLWA Monthly Financial Report March 2020](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2020-207](#) FY 2020 Q3 Construction Work-in-Progress Report through March 31,
2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8C - FY 2020 Q3 Construction Work-in-Progress Report](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

- D. [2020-208](#) FY 2020 Wholesale Water Usage and Revenue Projections as of June 14, 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8D1 Wholesale Water Usage and Revenue Projections 6.07.2020](#)
[8D2 2020.05.28 One Water Partnership Presentation](#)

Motion By: Gary Brown
Support By: Brian Baker
Action: Received and Filed
The motion carried by a unanimous vote.

9. Communications

- A. [2020-209](#) The Procurement Pipeline for June 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [9A June 2020 Procurement Pipeline](#)

Motion By: Gary Brown
Support By: Brian Baker
Action: Received and Filed
The motion carried by a unanimous vote.

10. Look Ahead

A Special Audit Committee Meeting has been scheduled for Wednesday, June 24, 2020 at 1:00 p.m. to discuss Item 7A., the Proposed FY 2020 Budget Amendments, which was removed from today's Agenda.

The regular Audit Committee Meeting is scheduled for Friday, July 17, 2020 at 8:00 a.m.

11. Other Matters

None

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Gary Brown
Support By: Brian Baker
Action: Approved
The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 9:58 a.m.



Great Lakes Water Authority

735 Randolph Street
Detroit, Michigan 48226
glwater.legistar.com

Meeting Minutes - Draft

Audit Committee

Wednesday, June 24, 2020

1:00 PM

Telephonic Meeting

Call In: 866-528-2256

Access Code: 9169911

Telephonic Special Meeting

Call In Number: 866-528-2256 Access Code: 9169911

1. Call To Order

Chairperson Baker called the meeting to order at 1:04 p.m.

2. Quorum Call

Present: 2 - Chairperson Brian Baker, and Director Gary Brown

3. Approval of Agenda

Chairperson Baker requested a Motion to approve the Agenda.

Motion By: Gary Brown

Support: Brian Baker

Action: Approved

The motion carried unanimously.

4. Approval of Minutes

None

5. Public Comment

There were no public comments.

6. Old Business

None

7. New Business

A. [2020-222](#) Proposed FY 2020 Budget Amendments

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7A FY 2020 Budget Amendment Report as of 6.22.2020 \(Recovered\)](#)

[7A1 Addendum 1-Quarterly Budget Amendment Report FY 2020](#)

[7A2 Addendum 2-Quarterly Budget Amendment Report FY 2020](#)

[7A3 FY 2020 Budget Amendment Resolution](#)

[7A Board Letter-Proposed FY 2020 Fourth Quarter Budget Amendments](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors

Agenda of June 24, 2020

The motion carried by a unanimous vote.

8. Reports

None

9. Information**A.** [2020-223](#) Proposed Legislation Update - Senate Bill 690 Re: COVID-19 Response

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [9A Proposed Legislation Update](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

10. Look Ahead

The next Audit Committee Meeting is scheduled for Friday, July 17, 2020 at 8:00 a.m.

11. Other Matters

None

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 1:57 p.m.



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Deidre Henry, Treasury Manager
Kathy Smith-Roy, Advisor to CFO

Re: Year-End Cash Review Status

Background: The purpose of this communication is to provide the year-end cash review status pursuant to the Master Bond Ordinance (MBO), Regional System Lease Agreements and Act 94, Public Acts of Michigan, 1933 as amended. GLWA has over 70 bank accounts that are reviewed and included in the analysis of year-end cash requirements. The following individuals contribute to the calculations, estimates and review meetings to ensure compliance: Nicolette Bateson, CFO & Treasurer; Lisa Mancini, Manager, Financial Planning and Analysis; Jon Wheatley, Manager, Public Finance; Kim Garland, Manager, Reporting and Compliance; and Bart Foster, President, The Foster Group. In addition, U.S. Bank (trustee) and PFM (financial advisor) provide additional information on available cash balances, debt payment information, debt reserve calculations and future debt service. Finally, coordination also occurs with the Detroit Water & Sewerage Department financial personnel to align cash requirements as it relates to the MBO Requirements.

Analysis: Each of the funds established in Article 5 of the MBO are reviewed to verify the balances are sufficient to meet a) June 30 (close of one fiscal year) and July 1 (beginning of a new fiscal year) requirements; b) to make adjustments where necessary for differences between budgeted revenue requirement transfers and actual balances; and c) timing of cashflows. The following are the account categories and related requirement and/or methodology for establishing the year-end balances.

- (1) **Revenue Receipts** – All retail and wholesale receipts are deposited in this account before transfer to the receiving fund. The balance in this category generally represents one-to-two days of receipts. For reporting purposes this balance is added to the Receiving Fund at fiscal year-end.
- (2) **Receiving** – The year-end targeted balance is two months of required MBO transfers. The basis for the two months of revenue requirements transfers is the budgeted revenue requirements for May and June charges which are billed in June and July but not collected until July and August. This provides alignment with the MBO funding requirements and budget.

- (3) **Operation and Maintenance (O&M)** – The targeted balance for the Operating and Maintenance is 45 days (1.5 months) of MBO transfers for the subsequent fiscal year. The purpose is to provide sufficient liquidity to meet current operating cash needs including payments for accounts payable and other accrued liabilities.
- (4) **Debt Service (Senior Lien/Second Lien/SRF)** – The year-end balances reflect the amount necessary to make July 1 debt payments and October 1 State Revolving Fund (SRF) loan payments. The budgeted revenue requirement for the year may vary from the actual requirements due to investment earnings, new or refunding debt issues, and variable interest rate debt. Any excess funds are later returned to the receiving fund.
- (5) **Debt Reserve (Senior Lien/Second Lien)** – The year-end balances are computed by the municipal financial advisor team from PFM Financial Advisors LLC and reviewed by GLWA staff and financial consultant. The calculation is based on outstanding debt service and surety values as of July 1. The June 30 balances must meet requirements as defined by the Internal Revenue Service (IRS) and the MBO. Any excess funds are transferred to the debt service accounts.
- (6) **Pension Obligation** – The legacy General Retirement System payment is fixed and paid by June 30 annually. Small balances may remain relating to investment earnings and/or estimates relating to amounts set aside for future invoiced amounts for the Financial Recovery Bonds, Series 2014 B & C by the City of Detroit.
- (7) **WRAP** – The balance is based on amounts established through the budget process and revenue requirements and available for distribution to the Water Residential Assistance Program (WRAP) Administrator in support of program expenses. Investment earnings remain within the account.
- (8) **Budget Stabilization** – The balance was established by the 2018 Memorandum of Understanding (MOU). Investment earnings are transferred to the Receiving Fund. No change is needed at this time.
- (9) **Extraordinary Repair and Replacement Reserve (ER&R)** – The balance was established by the 2018 MOU and pursuant to the MBO is a function of the O&M revenue requirements. Further, per the 2018 MOU, the basis for computation is on forecasted O&M revenue requirements and is deemed sufficient to meet the ER&R MBO requirements through FY 2025. Investment earnings are transferred to the Receiving Fund. No change is needed at this time.
- (10) **Improvement and Extension (I&E)** – The revenue requirement transfers for I&E are made based on the funds available. In addition, any unrestricted funds greater than the recommended balances are transferred to the I&E Fund.

Outcome: During the FY 2020 year-end cash review, the following was noted.

- Overall, yearend balances are in alignment with GLWA’s financial plan and forecasts.
- Inherent in the yearend review process in the last few weeks of the fiscal year, it is necessary to estimate of the last several days of receipts. This is because the required bank transfers must be completed before actual June 30 cash receipts are received and accounted for. This year, collections, and timely deposit of collections paid by check, have incurred some delays as a result of the Coronavirus pandemic. This was a consideration in estimating the amount of receipts through June 30, 2020.
- Established goals and compliance requirements for the Receiving, Debt Service, Debt Reserve, Pension Obligation, WRAP, Budget Stabilization Fund and ER&R account categories were met.
- In May and June 2020, GLWA refinanced both Water and Sewer Systems bonds. These transactions included using both debt service and debt reserve funds from those accounts, therefore, no additional adjustments were necessary to the debt service or debt reserve funds.
- Estimated balances of \$3.7 million for water and \$1.7 million for sewer FY 2020 I&E Revenue Requirement are pending at June 30, 2020 and are anticipated to be transferred in the first quarter of FY 2021 after subsequent cashflow reviews.

Summary I&E Revenue Requirements FY2020

I&E Revenue Requirement Transfers Per FY20 Budget Amendment Report
 FY20 Actual I&E Revenue Requirement Transfers thru 6/25/20
 FY20 I&E Revenue Requirement transfers pending

	Water	Sewer
I&E Revenue Requirement Transfers Per FY20 Budget Amendment Report	\$ 29,456,300	\$ 20,797,600
FY20 Actual I&E Revenue Requirement Transfers thru 6/25/20	\$ 25,719,751	\$ 19,096,200
FY20 I&E Revenue Requirement transfers pending	<u>\$ 3,736,549</u>	<u>\$ 1,701,400</u>

Proposed Action: Receive and file this report.

Great Lakes Water Authority

Cash and Investment Report by Master Bond Ordinance Classification - ESTIMATE FOR JUNE 30, 2020

	Funded from revenue and other		Funded from Debt	6/30/2020
	Unrestricted	Restricted	Issuance	
Water Fund				
<u>Flow of funds (per ordinance)</u>				
Receiving fund	\$ 49,216,837 *	\$ -	\$ -	\$ 49,216,837
Operations and maintenance	32,873,502	9,735,882 **	-	42,609,384
Operations and maintenance-pension	-	178,129	-	178,129
Senior lien debt service	-	17,016,562	-	17,016,562
Senior lien bond reserve	-	-	105,350,642	105,350,642
Second & Junior lien debt service	-	28,652,052	-	28,652,052
Second & Junior lien debt reserve	-	-	48,711,818	48,711,818
Legacy Pension Obligation	-	347,883	-	347,883
Water Residential Assistance Program (WRAP)	-	4,508,344	-	4,508,344
Budget Stabilization	-	2,000,000	-	2,000,000
Extraordinary Repair and Replacement	27,426,967	-	-	27,426,967
Improvement and Extension-Regional	277,024,684	-	-	277,024,684
Subtotal - Reserves defined by ordinance	386,541,989	62,438,852	154,062,461	603,043,302
Less: Funded by surety (non-cash)	-	-	(149,601,197)	(149,601,197)
Total - Reserves defined by ordinance (net of Surety coverage)	386,541,989	62,438,852	4,461,264	453,442,105
Cash held for the benefit of DWSD	-	(189,416)	-	(189,416)
Unspent Construction Bond proceeds	-	13,886,732 ***	18,960,299	32,847,031
Total Cash, Cash Equivalents and Investments	\$ 386,541,989	\$ 76,136,168	\$ 23,421,563	\$ 486,099,720

Summary by Financial Statement Classification	Unrestricted	Restricted	Restricted	Total
		Current	Noncurrent	
Cash and cash equivalents	\$ 86,469,650	\$ 10,471,621	\$ 28,496,119	\$ 125,437,389
Cash held for the benefit of DWSD	-	(189,416)	-	(189,416)
Investments	300,072,340	45,458,886	15,320,520	360,851,746
Total Cash, Cash Equivalents and Investments	\$ 386,541,989	\$ 55,741,092	\$ 43,816,639	\$ 486,099,720

*Balance for two months required transfers

**Construction retainage and deposits

***Amount for current liabilities related to construction funds

Great Lakes Water Authority
Cash and Investment Report by Master Bond Ordinance Classification - ESTIMATE FOR JUNE 30, 2020

	Funded from Revenue and Other		Funded from Debt Issuance	6/30/2020
	Unrestricted	Restricted	Restricted	
Sewer Fund				
<u>Flow of funds (per ordinance)</u>				
Receiving Fund	\$ 66,431,213 *	\$ -	\$ -	\$ 66,431,213
Operations and Maintenance	41,786,441	10,308,517 **	-	52,094,957
Operations and maintenance-pension	-	319,276	-	319,276
Senior Lien Debt Service	-	47,965,837	-	47,965,837
Senior Lien Bond Reserve	-	-	115,954,662	115,954,662
Second & Junior lien debt service	-	44,199,562	-	44,199,562
Second & Junior lien debt reserve	-	-	49,512,273	49,512,273
Legacy Pension Obligation	-	487,204	-	487,204
Water Residential Assistance Program (WRAP)	-	6,125,044	-	6,125,044
Budget Stabilization	-	5,500,000	-	5,500,000
Extraordinary Repair and Replacement	43,859,119	-	-	43,859,119
Improvement and Extension-Regional	125,995,674	-	-	125,995,674
Subtotal - Reserves defined by ordinance	278,072,447	114,905,439	165,466,935	558,444,821
Less: Funded by surety (non-cash)	-	-	(145,205,154)	(145,205,154)
Total - Reserves defined by ordinance (net of Surety coverage)	278,072,447	114,905,439	20,261,781	413,239,667
Cash held for the benefit of DWSD	-	(10,243,500)	-	(10,243,500)
Unspent Construction Bond proceeds	-	13,075,353 ***	21,137,669	34,213,022
Total Cash, Cash Equivalents and Investments	<u>\$ 278,072,447</u>	<u>\$ 117,737,292</u>	<u>\$ 41,399,450</u>	<u>\$ 437,209,189</u>

Summary by Financial Statement Classification	Unrestricted	Restricted Current	Restricted Noncurrent	Total
	Cash and cash equivalents	\$ 113,239,921	\$ 14,997,361	\$ 33,993,798
Cash held for the benefit of DWSD	-	(10,243,500)	-	(10,243,500)
Investments	164,832,526	88,283,034	32,106,049	285,221,609
Total Cash, Cash Equivalents and Investments	<u>\$ 278,072,447</u>	<u>\$ 93,036,895</u>	<u>\$ 66,099,847</u>	<u>\$ 437,209,189</u>

*Balance for two months required transfers

**Construction retainage and deposits

***Amount for current liabilities related to construction funds



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Steve Hoover, CPA, Financial Reporting Manager

Re: FY 2020 Yearend Financial Audit Planning

Background: Annually, the Great Lakes Water Authority (GLWA) prepares a Comprehensive Annual Financial Report (CAFR) and Schedule of Expenditures of Federal Awards (SEFA) in accordance with financial accounting standards and federal guidelines. Baker Tilly Virchow Krause LLP (Baker Tilly) has been engaged to perform the GLWA annual financial audit and issue an opinion as to whether the financial statements are fairly stated in accordance with accounting standards for fiscal years ending 2019, 2020 and 2021.

Analysis: GLWA Financial Services area has been preparing for the audit by reviewing internal control walkthrough documents, reviewing vendor statements, preparing a tentative schedule for the audit, and working to close the June 2020 monthly period and related fiscal year. As we work through the yearend preparation, the following documents are being provided for your review.

1. Communication from Baker Tilly related to the timing for the FY 2020 fieldwork and audit reports
2. Annual audit engagement letter
3. Report of Audit Firm's Quality Control

Proposed Action: Receive and file this report.



Memo

To: Great Lakes Water Authority Audit Committee

From: Gwen Zech, Manager (Baker Tilly)

c.c. Jodi Dobson, Partner (Baker Tilly), Sara Schnelle, Senior Associate (Baker Tilly)

Date: July 10, 2020

Subject: Great Lakes Water Authority Audit Status and Comprehensive Annual Financial Report (CAFR)

We have prepared this memo to communicate to the audit committee our expectations regarding the timing of fieldwork, review, draft reports and issuance of the CAFR. The schedule below summarizes expected milestone dates to meet a deadline of issuance on December 18, 2020.

	Due Date Friday, December 18, 2020
All audit workpapers uploaded to portal for audit	Friday, October 2, 2020
End of Fieldwork (Including first review)	Friday, October 16, 2020
Manager level financial statement review	Friday, October 23, 2020
Draft to Jodi Dobson, Partner	Monday, October 26, 2020
Draft to concurring partner for technical review	Monday, October 26, 2020
Comments returned from GLWA management to Baker Tilly*	Friday, November 6, 2020
Draft back from detail check by Baker Tilly	Wednesday, November 11, 2020
Presentation of draft to Audit Committee	Friday, November 20, 2020
Preparation of separate CAFRs'	Monday, November 30, 2020
Presentation of draft to full Board of Directors	Thursday, December 17, 2020
Issuance of the CAFRs'	Friday, December 18, 2020

* - Comments should include everyone on team in addition to various third parties (i.e. attorneys, bond advisors, etc.). Ideally, all changes would be accumulated into one file and given to us.

The information provided here is of a general nature and is not intended to address the specific circumstances of any individual or entity. In specific circumstances, the services of a professional should be sought. Baker Tilly Virchow Krause, LLP trading as Baker Tilly is a member of the global network of Baker Tilly International Ltd., the members of which are separate and independent legal entities. © 2018 Baker Tilly Virchow Krause, LLP



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July 10, 2020

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bakertilly.com

Thank you for using Baker Tilly Virchow Krause, LLP ("Baker Tilly" or "we" or "our") as your auditors.

The purpose of this letter (the "Engagement Letter") is to confirm our understanding of the terms and objectives of our engagement and the nature of the services we will provide as independent accountants of the Great Lakes Water Authority ("you" or "your").

Service and Related Report

We will audit the financial statements of the Great Lakes Water Authority as of and for the years ended June 30, 2020 and 2021, and the related notes to the financial statements. Upon completion of our audit, we will provide the Great Lakes Water Authority with our audit report on the financial statements and supplemental information referred to below. If, for any reasons caused by or relating to the affairs or management of the Great Lakes Water Authority, we are unable to complete the audit or are unable to or have not formed an opinion, or if we determine in our professional judgment the circumstances necessitate, we may withdraw and decline to issue a report as a result of this engagement.

The following supplementary information accompanying the financial statements will also be subjected to the auditing procedures applied in our 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, and our auditor's report will provide an opinion on it in relation to the financial statements as a whole.

- > Combining and Individual Fund Schedules included within the Comprehensive Annual Financial Report

The following supplementary information will also be subjected to the auditing procedures applied in our 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, and our auditor's report will provide an opinion on it in relation to the financial statements as a whole.

- > Schedule of Expenditures of Federal Awards (if in separate document from financial statements)

Great Lakes Water Authority

July 10, 2020

Page 2

Accounting standards generally accepted in the United States of America provide for certain required supplementary information ("RSI"), such as management's discussion and analysis, to supplement the Great Lakes Water Authority's 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. As part of our engagement, we will apply certain limited procedures to the Great Lakes Water Authority's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's response to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We will 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 following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

- > Management's Discussion and Analysis
- > Defined Benefit Pension Plan Schedules

We will read the following other information accompanying the financial statements to identify any material inconsistencies with the audited financial statements; however, the other information will not be subjected to the auditing procedures applied in our audit of the financial statements and our auditor's report will not provide an opinion or any assurance on that other information:

- > Introductory Section
- > Statistical Section

Our Responsibilities and Limitations

The objective of a financial statement audit is the expression of an opinion on the financial statements. The objective also includes reporting on:

- > Internal control related to the financial statements and compliance with laws, regulations, and the provisions of contracts or grant agreements, noncompliance with which could have a direct and material effect on the financial statements in accordance with *Government Auditing Standards*.
- > Internal control related to major federal programs and an opinion (or disclaimer of opinion) on compliance with laws, regulations, and the provisions of contracts or grant agreements that could have a direct and material effect on each major program in accordance with the Single Audit Act Amendments of 1996 and OMB *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* ("Uniform Guidance").

The *Government Auditing Standards* report on internal control over financial reporting and on compliance and other matters will include a paragraph that states (i) that the purpose of the report is solely to describe the scope of testing of internal control and compliance, and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance, and (ii) that the report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. The Uniform Guidance report on internal control over compliance will include a paragraph that states that the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Great Lakes Water Authority

July 10, 2020

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We will be responsible for performing the audit in accordance with auditing standards generally accepted in the United States of America ("GAAS"); the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; the Single Audit Act Amendments of 1996; the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance, and other procedures we consider necessary to enable us to express such opinions and to render the required reports.

These standards require that we plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement, whether from (i) errors, (ii) fraudulent financial reporting, (iii) misappropriation of assets, or (iv) violations of laws or governmental regulations that are attributable to the Great Lakes Water Authority or to acts by management or employees acting on behalf of the Great Lakes Water Authority. Because the determination of abuse is subjective, *Government Auditing Standards* do not expect auditors to provide reasonable assurance of detecting abuse. Our audit will include examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit does not relieve management and the audit committee or equivalent group charged with governance of their responsibilities.

The audit will include obtaining an understanding of the Great Lakes Water Authority and its environment, including internal controls, sufficient to assess the risks of material misstatement of the financial statements and to determine the nature, timing and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify deficiencies in internal control. However, during the audit, we will communicate to management and the audit committee or equivalent group charged with governance internal control matters that are required to be communicated under professional standards. We will also inform you of any other matters involving internal control, if any, as required by *Government Auditing Standards* and the Uniform Guidance.

As required by the Uniform Guidance, we will perform tests of controls over compliance to evaluate the effectiveness of the design and operation of controls that we consider relevant to preventing or detecting material noncompliance with compliance requirements applicable to each major federal award program. However, our tests will be less in scope than would be necessary to render an opinion on those controls and, accordingly, no opinion will be expressed in our report on internal control over compliance issued pursuant to the Uniform Guidance.

We will design our audit to obtain reasonable, but not absolute, assurance of detecting misstatements due to errors or fraud that would have a material effect on the financial statements as well as other illegal acts having a direct and material effect on financial statement amounts. An audit is not designed to detect error or fraud that is immaterial to the financial statements. Our audit will not include a detailed audit of transactions, such as would be necessary to disclose errors or fraud that did not cause a material misstatement of the financial statements. It is important to recognize that there are inherent limitations in the auditing process. Audits are based on the concept of selective testing of the data underlying the financial statements, which involves judgment regarding the areas to be tested and the nature, timing, extent and results of the tests to be performed. Our audit is not a guarantee of the accuracy of the financial statements and, therefore, is subject to the limitation that material errors or fraud or other illegal acts having a direct and material financial statement impact or a direct and material effect on major federal programs, if they exist, may not be detected. Because of the characteristics of fraud, particularly those involving concealment through collusion, falsified documentation and management's ability to override controls, an audit designed and executed in accordance with GAAS and *Government Auditing Standards*, may not detect a material fraud. Further, while effective internal control reduces the likelihood that errors, fraud or other illegal acts will occur and remain undetected, it does not eliminate that possibility. For these reasons, we cannot ensure that errors, fraud or other illegal acts or noncompliance, if present, will be detected. However, we will communicate to you, as appropriate, any such matters that we identify during our audit. Also, if required by *Government Auditing Standards*, we will report known or likely fraud, illegal acts, violations of provisions of contracts or grant agreements, or abuse directly to parties outside of the Great Lakes Water Authority.

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As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Great Lakes Water Authority's compliance with the provisions of applicable laws, regulations, contracts, and agreements, including grant agreements. However, the objective of those procedures will not be to provide an opinion on overall compliance and we will not express such an opinion in our report on compliance issued pursuant to *Government Auditing Standards*.

The Uniform Guidance require that we also plan and perform the audit to obtain reasonable assurance about whether you have complied with applicable laws and regulations and the provisions of contracts and grant agreements applicable to major programs. Our procedures will consist of test of transactions and other applicable procedures described in the OMB Compliance Supplement for the types of compliance requirements that could have a direct and material effect on each of the Great Lakes Water Authority's major programs. The purpose of those procedures will be to express an opinion on your compliance with requirements applicable to each of your major programs in our report on compliance issued pursuant to the Uniform Guidance.

We are also responsible for determining that the audit committee or equivalent group charged with governance is informed about certain other matters related to the conduct of the audit, including (i) our responsibility under GAAS, (ii) an overview of the planned scope and timing of the audit, and (iii) significant findings from the audit, which include (a) our views about the qualitative aspects of your significant accounting practices, accounting estimates, and financial statement disclosures; (b) difficulties encountered in performing the audit; (c) uncorrected misstatements and material corrected misstatements that were brought to the attention of management as a result of auditing procedures; and (d) other significant and relevant findings or issues (e.g., any disagreements with management about matters that could be significant to your financial statements or our report thereon, consultations with other independent accountants, issues discussed prior to our retention as independent auditors, fraud and illegal acts, and all significant deficiencies and material weaknesses identified during the audit). Lastly, we are responsible for ensuring that the audit committee or equivalent group charged with governance receives copies of certain written communications between us and management including written communications on accounting, auditing, internal controls or operational matters and representations that we are requesting from management.

The audit will not be planned or conducted in contemplation of reliance of any specific third party or with respect to any specific transaction. Therefore, items of possible interest to a third party will not be specifically addressed and matters may exist that would be addressed differently by a third party, possibly in connection with a specific transaction.

Management's Responsibilities

The Great Lakes Water Authority's management is responsible for the financial statements referred to above. Management is also responsible for identifying government award programs and understanding and complying with the compliance requirements, and for preparation of the schedule of expenditures of federal awards in accordance with the requirements of the Uniform Guidance. In this regard, management is responsible for establishing policies and procedures that pertain to the maintenance of adequate accounting records and effective internal controls, including internal controls over compliance, and for evaluating and monitoring ongoing activities; to help ensure that appropriate goals and objectives are met; following laws and regulations; and ensuring that there is reasonable assurance that government programs are administered in compliance with applicable requirements; and ensuring that management is reliable and financial information is reliable and properly reported. Management is also responsible for implementing systems designed to achieve compliance with applicable laws, regulations, contracts, and grant agreements. Your responsibilities also include identifying significant vendor relationships in which the vendor has responsibility for program compliance and for the accuracy and completeness of that information. You are also responsible for the selection and application of accounting principles, the authorization of receipts and disbursements, the safeguarding of assets, the proper recording of transactions in the accounting records, for reporting financial information in conformity with accounting principles generally accepted in the United States of America ("GAAP"), and for compliance with applicable laws and regulations and the provisions of contracts and grant agreements.

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Management is also responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us in the management representation letter (i) about all known or suspected fraud affecting the Great Lakes Water Authority involving: (a) management, (b) employees who have significant roles in internal control over financial reporting, and (c) others where the fraud or illegal acts could have a material effect on the financial statements; and (ii) of its knowledge of any allegations of fraud or suspected fraud affecting the Great Lakes Water Authority received in communications from employees, former employees, analysts, grantors, regulators, or others. In addition, you are responsible for identifying and ensuring that the entity complies with applicable laws, regulations, contracts, agreements, and grants and for taking timely and appropriate steps to remedy fraud and noncompliance with provisions of laws, regulations, contracts or grant agreements, or abuse that we report. Additionally, as required by the Uniform Guidance, it is management's responsibility to follow up and take corrective action on reported audit findings and to prepare a summary schedule of prior audit findings and a corrective action plan. The summary schedule of prior audit findings should be available for our review before we begin fieldwork.

Management is responsible for establishing and maintaining a process for tracking the status of audit findings and recommendations. Management is also responsible for identifying for us previous financial audits, attestation engagements, performance audits or other studies related to the objectives discussed above. This responsibility includes relaying to us corrective actions taken to address significant findings and recommendations resulting from those audits, attestation engagements, performance audits or studies. You are also responsible for providing management's views on our current findings, conclusions, and recommendations, as well as your planned corrective actions for the report, and for the timing and format for providing that information.

You are responsible for the preparation of the supplementary information in conformity with GAAP. You agree to include our report on the supplementary information in any document that contains, and indicates that we have reported on, the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the representation letter that (a) you are responsible for presentation of the supplementary information in accordance with GAAP; (b) that you believe the supplementary information, including its form and content, is fairly presented in accordance with GAAP; (c) that the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and (d) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

You are responsible for preparation of the schedule of expenditures of federal awards (including notes and noncash assistance received) in conformity with the Uniform Guidance. You agree to include our report on the schedule of expenditures of federal awards in any document that contains and indicates that we have reported on the schedule of expenditures of federal awards. You also agree to make the audited financial statements readily available to intended users of the schedule of expenditures of federal awards no later than the date the schedule of expenditures of federal and the awards is issued with our report thereon. Your responsibilities include acknowledging to us in a written representation letter that (a) you are responsible for presentation of the schedule of expenditures of federal awards in accordance with the Uniform Guidance; (b) that you believe the schedule of expenditures of federal awards including its form and content, is fairly presented in accordance with the Uniform Guidance; (c) that the methods of measurement or presentation have not changed from those used in the prior year (or, if they have changed, the reasons for such changes); and (d) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the schedule of expenditures of federal awards.

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Management is responsible for (i) adjusting the financial statements to correct material misstatements and for affirming to us in a management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period under audit are immaterial, both individually and in the aggregate, to the financial statements taken as a whole, and (ii) notifying us of all material weaknesses, including other significant deficiencies, in the design or operation of your internal control over financial reporting that are reasonably likely to adversely affect your ability to record, process, summarize and report external financial data reliably in accordance with GAAP. Management is also responsible for identifying and ensuring that the Great Lakes Water Authority complies with the laws and regulations applicable to its activities.

As part of management's responsibility for the financial statements and the effectiveness of its system of internal control over financial reporting, management is responsible for making available to us, on a timely basis, all of your original accounting records and related information and for the completeness and accuracy of that information and your personnel to whom we may direct inquiries. As required by GAAS, we will make specific inquiries of management and others about the representations embodied in the financial statements and the effectiveness of internal control over financial reporting. GAAS also requires that we obtain written representations covering audited schedule of expenditures of federal awards, federal award programs, and compliance with laws, regulations, contracts and grant agreements from certain members of management. The results of our audit tests, the responses to our inquiries, and the written representations, comprise the evidential matter we intend to rely upon in forming our opinion on the financial statements.

Baker Tilly Virchow Krause, LLP is not a municipal advisor as defined in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act or under Section 15B of the Securities Exchange Act of 1934 (the "Act"). Baker Tilly Virchow Krause, LLP is not recommending an action to the Great Lakes Water Authority; is not acting as an advisor to you and does not owe a fiduciary duty pursuant to Section 15B of the Act to you with respect to the information and material contained in the deliverables issued under this engagement. Any municipal advisory services would only be performed by Baker Tilly Municipal Advisors LLC ("BTMA") pursuant to a separate engagement letter between you and BTMA. You should discuss any information and material contained in the deliverables with any and all internal and external advisors and experts that you deem appropriate before acting on this information or material.

Nonattest Services

Prior to or as part of our audit engagement, it may be necessary for us to perform certain nonattest services. For purposes of this letter, nonattest services include services that *Government Auditing Standards* refers to as nonaudit services.

None of these nonattest services constitute an audit under generally accepted auditing standards including *Government Auditing Standards*.

We will not perform any management functions or make management decisions on your behalf with respect to any nonattest services we provide.

In connection with our performance of any nonattest services, you agree that you will:

- > Continue to make all management decisions and perform all management functions, including approving all journal entries and general ledger classifications when they are submitted to you.
- > Designate an employee with suitable skill, knowledge, and/or experience, preferably within senior management, to oversee the services we perform.
- > Evaluate the adequacy and results of the nonattest services we perform.

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- > Accept responsibility for the results of our nonattest services.
- > Establish and maintain internal controls, including monitoring ongoing activities related to the nonattest function.

On a periodic basis, as needed, we will meet with you to discuss your accounting records and the management implications of your financial statements. We will notify you, in writing, of any matters that we believe you should be aware of and will meet with you upon request.

Government Auditing Standards require that we provide you with a copy of our most recent external peer review report and any subsequent peer review reports received during the period of the contract. Our most recent peer review report accompanies this letter.

This engagement is subject to the terms and conditions outlined in the professional services contract No. 1900933.

We appreciate the opportunity to be of service to you.



MOSSADAMS

Report on the Firm's System of Quality Control

September 26, 2018

To the Partners of Baker Tilly Virchow Krause, LLP and the
AICPA National Peer Review Committee

We have reviewed the system of quality control for the accounting and auditing practice of Baker Tilly Virchow Krause, LLP (the firm) applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended March 31, 2018. Our peer review was conducted in accordance with the Standards for Performing and Reporting on Peer Reviews established by the Peer Review Board of the American Institute of Certified Public Accountants (Standards).

A summary of the nature, objectives, scope, limitations of, and the procedures performed in a System Review as described in the Standards may be found at www.aicpa.org/prsummary. The summary also includes an explanation of how engagements identified as not performed or reported in conformity with applicable professional standards, if any, are evaluated by a peer reviewer to determine a peer review rating.

Firm's Responsibility

The firm is responsible for designing a system of quality control and complying with it to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. The firm is also responsible for evaluating actions to promptly remediate engagements deemed as not performed or reported in conformity with professional standards, when appropriate, and for remediating weaknesses in its system of quality control, if any.

Peer Reviewer's Responsibility

Our responsibility is to express an opinion on the design of the system of quality control and the firm's compliance therewith based on our review.

Required Selections and Considerations

Engagements selected for review included engagements performed under *Government Auditing Standards*, including compliance audits under the Single Audit Act, audits of employee benefit plans, audits performed under FDICIA, an audit of a broker-dealer, and examinations of service organizations [SOC 1 and SOC 2 engagements].

As a part of our peer review, we considered reviews by regulatory entities as communicated by the firm, if applicable, in determining the nature and extent of our procedures.

Opinion

In our opinion, the system of quality control for the accounting and auditing practice of Baker Tilly Virchow Krause, LLP applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended March 31, 2018, has been suitably designed and complied with to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Firms can receive a rating of pass, pass with deficiency(ies) or fail. Baker Tilly Virchow Krause, LLP has received a peer review rating of *pass*.

Moss Adams LLP



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 (Ordinance 2020-05)

Background: Included is the draft Great Lakes Water Authority (“GLWA”) Board letter for the July 22, 2020 Board meeting regarding the Series Ordinance for the proposed Water Supply System Drinking Water Revolving Fund (DWRf) bond issue. This series of bonds authorized by this ordinance will be sold through the state of Michigan’s DWRf program and will be used to finance the following projects:

- *GLWA Northeast Transmission Main- Phase 2A-* Designated 2020 SRF-2 Junior Lien Bonds, not to exceed \$10.0 million
- *GLWA 14 Mile Road Transmission Loop- Phase 1-* Designated 2020 SRF-3 Junior Lien Bonds, not to exceed \$10.0 million
- *DWSD Water Main Replacement-* Designated 2020-4 SRF Junior Lien Bonds, not to exceed \$20.0 million

Key Provisions for the Bonds:

- Total Not to Exceed Amount: \$40,000,000
- Maximum Coupon Rate: 2.50% (Current program rate is 2.00%)
- Bonds will be sold to the Michigan Finance Authority (MFA)

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 as presented, at its regular meeting on July 22, 2020.

..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 (Ordinance 2020-05)

..Body

Agenda of: July 22, 2020
Item No.: **2020-235**
Amount: Not to Exceed \$40,000,000

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: July 22, 2020

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 (Ordinance 2020-05)

MOTION

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approves the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

On February 26, 2020, the Great Lakes Water Authority (“GLWA”) Board of Directors approved Resolution 2020-068, “Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds in a principal amount not to exceed \$200,000,000” (the “Notice of Intent”). This is the first series of water bonds from that Notice of Intent in the amount not to exceed \$40,000,000.

The approval of the Series Ordinance presented today is the next formal step required by the GLWA Board of Directors in the bond issuance process. The Series Ordinance authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the Drinking Water Revolving Fund (DWRf) Bonds, designates the Bonds as 2020 SRF-2/3/4 Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

The three series of bonds authorized by this ordinance will be sold through the state of Michigan’s DWRf program and will be used to finance improvements to the GLWA regional water system and the Detroit Water and Sewerage Department (DWSD) local water system. The GLWA regional projects and the DWSD local project are described below:

GLWA Regional Water Projects:

Northeast Transmission Main- Phase 2A: This project will provide additional redundancy to both the Northeast and Water Works Park service areas. This is the second phase of the project and includes design, construction administration and resident project representation services. This phase will provide the technical services for Phase 2B of the project which will include construction of an 81-inch transmission main from Northeast to the I-94 expressway. This project is part of GLWA’s approved Capital Improvement Plan and is included in CIP #122003. Per the Ordinance, this series of bonds will be designated 2020 SRF-2 Junior Lien Bonds, with a loan amount not to exceed \$10,000,000.

The 2020 SRF-2 Junior Lien Bonds will be sold to the Michigan Finance Authority (MFA) in a separate series. The current program interest rate for the DWRf is 2.00% and is payable over a 20-year term. Based on the not to exceed amount for this series of \$10.0 million, GLWA could save an estimated \$3.2 million in interest costs and avoided

issuance costs, based on a similar open market revenue bond with a 30-year term and 3.00% interest rate, over the life of the 30-year bond issue.

14 Mile Road Transmission Loop- Phase 1: This project would provide a transmission main loop to the 14 Mile system to increase redundancy on this branch of the system. This is the first phase of the project and includes construction of one mile of new 24-inch parallel transmission main along 14 Mile from M-5 to west of Decker Road to reinforce the 14 Mile Transmission System. This project is part of GLWA's approved Capital Improvement Plan and is included in CIP# 122013. Per the Ordinance, this series of bonds will be designated 2020 SRF-3 Junior Lien Bonds, with a loan amount not to exceed \$10,000,000.

The 2020 SRF-3 Junior Lien Bonds will be sold to the Michigan Finance Authority (MFA) in a separate series and is payable over a 20-year term. Based on the not to exceed amount for this series of \$10.0 million, GLWA could save an estimated \$4.0 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.00% interest rate, over the life of the 30-year bond issue.

DWSD Local Water Project

This project will continue DWSD's program to improve and replace water mains throughout the City. The improvements will include water mains in the areas of McNichols Evergreen, Miller Grove, Minock Park, Rosedale Park, New Center Commons and Virginia Park. Per the Ordinance, this series of bonds will be designated 2020 SRF-4 Junior Lien Bonds, with a loan amount not to exceed \$20,000,000.

The 2020 SRF-4 Junior Lien Bonds will also be sold to the MFA in a separate series and is typically payable over a 20-year term however, DWSD qualifies for disadvantaged community status which allows for a 30-year term. Based on the not to exceed amount for this series of \$20.0 million, DWSD could save an estimated \$3.9 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.00% interest rate, over the life of the 30-year bond issue.

GLWA is the loan applicant on the DWRF loans issued on behalf of DWSD, and DWSD will be the DWRF loan recipient as determined by Michigan Department of Environment, Great Lakes, and Energy (EGLE). All project costs financed by GLWA, on behalf of DWSD, through the DWRF program and resulting principal and interest payments on the bonds will be directly allocable to the DWSD local system.

BUDGET IMPACT

The debt service on all three proposed projects is anticipated to start in FY 2021 with minimal amounts of interest due on each because of the projected draw down schedules. Debt service was included in the FY 2021 financial plan for all projects.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on July 17, 2020. The Audit Committee [7.17.2020 *pending request: recommends approval of*] the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$40,000,000 as presented.

GREAT LAKES WATER AUTHORITY
ORDINANCE NO. 2020-05

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF
WATER SUPPLY SYSTEM REVENUE BONDS IN
AN AGGREGATE AMOUNT NOT TO EXCEED \$40,000,000**

WHEREAS, pursuant to Resolution No. 2015-10-02 adopted by the Board of Directors of the Great Lakes Water Authority (the “Authority”) on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-01 (as subsequently amended through the date hereof, the “Ordinance”), which authorizes the issuance by the Authority of Water Supply System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Water Supply System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time three or more Series of SRF Junior Lien Bonds (the “2020 SRF-2/3/4 Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Regional Water System identified in the Capital Improvement Program (the “2020 SRF-2 Project” and the “2020 SRF-3 Project”) and to the Local Water System identified in the Detroit Capital Improvement Program (the “2020 SRF-4 Project”), and collectively with the 2020 SRF-2 Project and the SRF-3 Project, the “2020 SRF 2/3/4 Projects”).

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2020 SRF-2/3/4 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2020 SRF-2/3/4 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2020 SRF-2/3/4 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2020 SRF-2 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2020 SRF-2/3/4 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2020 SRF-2 Project.

(b) “2020 SRF-3 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2020 SRF 2/3/4 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2020 SRF-3 Project.

(c) “2020 SRF-4 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2020 SRF 2/3/4 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2020 SRF-4 Project.

(d) “2020 SRF-2/3/4 Junior Lien Bonds” means, collectively, the 2020 SRF-2 Junior Lien Bonds, the 2020 SRF-3 Junior Lien Bonds and the 2020 SRF-4 Junior Lien Bonds.

(e) “2020 SRF-2 Project” means improvements to the Regional Water System, including but not limited to improvements to the Northeast Water Transmission Main consisting of the construction of a transmission main from the Northeast Water Treatment Plant to the I-94 expressway.

(f) “2020 SRF-3 Project” means improvements to the Regional Water System, including but not limited to the construction of a new 24-inch parallel transmission main along 14 Mile Road in the City of Novi, the City of Walled Lake and the Charter Township of Commerce from M-5 to west of Decker Road to reinforce the 14 Mile Transmission System.

(g) “2020 SRF-4 Project” means improvements to the Local Water System, including but not limited to water main replacement in the City consisting of the replacement of water mains, including gate valves, fire hydrants and lead service lines, in the neighborhoods of McNichols-Evergreen, Miller Grove, Minock Park, Rosedale Park, New Center Commons and Virginia Park.

(h) “2020 SRF-2/3/4 Projects” means, collectively, the 2020 SRF-2 Project, the 2020 SRF-3 Project and the 2020 SRF-4 Project.

(i) “2020 SRF-2 Project Costs” means the costs of acquiring, constructing, equipping, installing, and financing the 2020 SRF-2 Project, including Issuance Costs relating to the 2020 SRF-2 Junior Lien Bonds.

(j) “2020 SRF-3 Project Costs” means the costs of acquiring, constructing, equipping, installing, and financing the 2020 SRF-3 Project, including Issuance Costs relating to the 2020 SRF-3 Junior Lien Bonds.

(k) “2020 SRF-4 Project Costs” means the costs of acquiring, constructing, equipping, installing, and financing the 2020 SRF-4 Project, including Issuance Costs relating to the 2020 SRF-4 Junior Lien Bonds.

(l) “Authorized Denomination” means any denomination as determined by an Authorized Officer in the Sale Order.

(m) “Authorized Officer” means either the Chief Executive Officer or the Chief Financial Officer.

(n) “City Authorized Officer” means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2020 SRF-2/3/4 Series Ordinance.

(o) “Interest Payment Date” means except as otherwise set forth in the Sale Order each April 1 and October 1.

(p) “Local Construction Fund, Series 2020 SRF-4” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2020 SRF-2/3/4 Series Ordinance relating to the construction of the 2020 SRF-4 Project to be paid with the proceeds of the 2020 SRF-4 Junior Lien Bonds.

(q) “Maturity Date” means such dates of maturity of the 2020 SRF-2/3/4 Junior Lien Bonds as determined in the Sale Order.

(r) “MFA” means the Michigan Finance Authority.

(s) “Person” means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body, or other entity, however organized.

(t) “Project Costs” means, collectively, the 2020 SRF-2 Project Costs, the 2020 SRF-3 Project Costs and the 2020 SRF-4 Project Costs.

(u) “Purchase Contract” means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2020 SRF-2/3/4 Junior Lien Bonds.

(v) “Regional Construction Fund, Series 2020 SRF-2” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2020 SRF-2/3/4 Series Ordinance relating to the construction of the 2020 SRF-2 Project to be paid with the proceeds of the 2020 SRF-2 Junior Lien Bonds.

(w) “Regional Construction Fund, Series 2020 SRF-3” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2020 SRF-2/3/4 Series Ordinance relating to the construction of the 2020 SRF-3 Project to be paid with the proceeds of the 2020 SRF-3 Junior Lien Bonds.

(x) “Regular Record Date” means except as otherwise set forth in the Sale Order the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

(y) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2020 SRF-2/3/4 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2020 SRF-2/3/4 Junior Lien Bonds and to complete the other transactions contemplated herein.

(z) “Supplemental Agreement” means, collectively, (1) the Supplemental Agreement among the Authority, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, with respect to the 2020 SRF-2 Junior Lien Bonds; (2) the Supplemental Agreement among the Authority, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, with respect to the 2020 SRF-3 Junior Lien Bonds and (3) the Supplemental Agreement among the City, the MFA and the State of

Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to the 2020 SRF-4 Junior Lien Bonds.

(aa) “Taxable 2020 SRF-2/3/4 Junior Lien Bonds” means any 2020 SRF-2/3/4 Junior Lien Bonds other than Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds.

(bb) “Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds” means any 2020 SRF-2/3/4 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2020 SRF-2/3/4 Projects.

(a) Approval of 2020 SRF-2 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Water System to acquire, construct and undertake the 2020 SRF-2 Project, and the 2020 SRF-2 Project is hereby approved and accepted.

(b) Approval of 2020 SRF-3 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Water System to acquire, construct and undertake the 2020 SRF-3 Project, and the 2020 SRF-3 Project is hereby approved and accepted.

(c) Approval of 2020 SRF-4 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Water System to acquire, construct and undertake the 2020 SRF-4 Project, and the 2020 SRF-4 Project is hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2020 SRF-2/3/4 Projects. The aggregate Project Costs are estimated by the Authority Board to not exceed \$40,000,000, and consist of the following:

(a) The 2020 SRF-2 Project Costs are estimated by the Authority Board to not exceed \$10,000,000 and the 2020 SRF-2 Regional Water System Project Costs are hereby approved and confirmed. The period of usefulness of the 2020 SRF-2 Project is estimated to be not less than 40 years.

(b) The 2020 SRF-3 Project Costs are estimated by the Authority Board to not exceed \$10,000,000 and the 2020 SRF-3 Project Costs are hereby approved and confirmed. The period of usefulness of the 2020 SRF-3 Project is estimated to be not less than 40 years.

(c) The 2020 SRF-4 Project Costs are estimated by the Authority Board to not exceed \$20,000,000 and the 2020 SRF-4 Project Costs are hereby approved and confirmed. The period of usefulness of the 2020 SRF-4 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2020 SRF-2/3/4 Junior Lien Bonds.

(a) Authorization of Borrowing.

(i) The Authority may borrow an amount not in excess of \$10,000,000, as is finally determined in the Sale Order, and issue the 2020 SRF-2 Junior Lien Bonds in one Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 SRF-2 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2020 SRF-2 Junior Lien Bonds authorized in this Section 5(a)(i) shall include the amount of the net original issue premium, if any.

(ii) The Authority may borrow an amount not in excess of \$10,000,000, as is finally determined in the Sale Order, and issue the 2020 SRF-3 Junior Lien Bonds in one Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 SRF-3 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2020 SRF-3 Junior Lien Bonds authorized in this Section 5(a)(ii) shall include the amount of the net original issue premium, if any.

(iii) The Authority may borrow an amount not in excess of \$20,000,000, as is finally determined in the Sale Order, and issue the 2020 SRF-4 Junior Lien Bonds in one Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 SRF-4 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2020 SRF-4 Junior Lien Bonds authorized in this Section 5(a)(iii) shall include the amount of the net original issue premium, if any

(b) Purpose of 2020 SRF-2/3/4 Junior Lien Bonds.

(i) The 2020 SRF-2 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing 2020 SRF-2 Project Costs.

(ii) The 2020 SRF-3 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing 2020 SRF-3 Project Costs.

(iii) The 2020 SRF-4 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing 2020 SRF-4 Project Costs.

(c) Priority of Lien. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

(d) Insufficient Proceeds.

(i) To the extent that proceeds of SRF-2 Junior Lien Bonds are insufficient to pay 2020 SRF-2 Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Regional Water System on hand and legally available therefor, as determined by the Authority Board. To the extent that proceeds of SRF-3 Junior Lien Bonds are insufficient to pay 2020 SRF-3 Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Regional Water System on hand and legally available therefor, as determined by the Authority Board.

(ii) To the extent that proceeds of the SRF-4 Junior Lien Bonds are insufficient to pay 2020 SRF-4 Project Costs, the insufficiency shall be paid from the proceeds of future

Additional Bonds, if any, and/or moneys of the Local Water System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of any Additional Bonds, with the concurrence of the Authority Board.

(e) Separate Series and Subseries. The 2020 SRF-2 Junior Lien Bonds are issuable at one or more times and as one or more separate subseries of Bonds in such amounts as determined in the Sale Order. The 2020 SRF-3 Junior Lien Bonds are issuable at one or more times and as one or more separate subseries of Bonds in such amounts as determined in the Sale Order. The 2020 SRF-4 Junior Lien Bonds are issuable at one or more times and as one or more separate subseries of Bonds in such amounts as determined in the Sale Order. The 2020 SRF-2 Junior Lien Bonds, the 2020 SRF-3 Junior Lien Bonds and the 2020 SRF-4 Junior Lien Bonds shall each be issued as separate Series.

(f) Taxable and Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds may be issued as Taxable 2020 SRF-2/3/4 Junior Lien Bonds or Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds, or as separate subseries of both, as set forth in the Sale Order.

(g) Source of Payment and Security. The 2020 SRF-2/3/4 Junior Lien Bonds shall be payable and secured as provided in Section 8.

(h) Applicability of Ordinance. Except as otherwise provided in this 2020 SRF-2/3/4 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2020 SRF-2/3/4 Junior Lien Bonds as if set forth in full in this 2020 SRF-2/3/4 Series Ordinance, the purpose of this 2020 SRF-2/3/4 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2020 SRF-2/3/4 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2020 SRF-2/3/4 Junior Lien Bond Details.

(a) Designation.

(1) The 2020 SRF-2 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2020-SRF-2 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2020 SRF-2/3/4 Series Ordinance. The 2020 SRF-3 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2020-SRF-3 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2020 SRF-2/3/4 Series Ordinance. The 2020 SRF-4 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2020-SRF-4 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in

the Sale Order and not inconsistent with the Ordinance or this 2020 SRF-2/3/4 Series Ordinance.

- (2) If any Series of the 2020 SRF-2/3/4 Junior Lien Bonds is not issued in 2020, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2020 SRF-2/3/4 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2020 SRF-2/3/4 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary, in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) Numbering. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:

- (1) No 2020 SRF-2/3/4 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2020 SRF-2/3/4 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2020 SRF-2/3/4 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.50% per annum. Interest on 2020 SRF-2/3/4 Junior Lien Bonds shall be payable on each Interest Payment Date.

(e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2020 SRF-2/3/4 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2020 SRF-2/3/4 Junior Lien Bonds are owned by the MFA, the 2020 SRF-2/3/4 Junior Lien Bonds are payable as to principal, redemption premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Authority by the MFA (the MFA's Depository"), and the Authority agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on the 2020 SRF-2/3/4 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is due, whether by maturity, redemption or otherwise. If the 2020 SRF-2/3/4 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2020 SRF-2/3/4 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the

Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

(f) Dating. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be dated such date as determined in the Sale Order.

(g) Reserve Requirement. There shall be no Reserve Requirement with respect to the 2020 SRF-2/3/4 Junior Lien Bonds.

(h) Exchange. The registered owner of any 2020 SRF-2/3/4 Junior Lien Bond may exchange such 2020 SRF-2/3/4 Junior Lien Bond for a new 2020 SRF-2/3/4 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2020 SRF-2/3/4 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2020 SRF-2/3/4 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2020 SRF-2/3/4 Junior Lien Bonds.

(i) Execution and Delivery of 2020 SRF-2/3/4 Junior Lien Bonds. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2020 SRF-2/3/4 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2020 SRF-2/3/4 Junior Lien Bonds. Each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2020 SRF-2/3/4 Series Ordinance:

R-__

**UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY
WATER SUPPLY SYSTEM REVENUE BOND,
SERIES 2020-SRF-__**

REGISTERED OWNER: Michigan Finance Authority

PRINCIPAL AMOUNT: \$ _____

INTEREST RATE: _____%

ORIGINAL ISSUE DATE:

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the “Issuer”), upon authorization from the Board of Directors of the Issuer (the “Board”), has issued this Bond. The Issuer, for value received, promises to pay, in lawful money of the United States of America, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above, or so much thereof as shall have been advanced to the Issuer and not prepaid or reduced pursuant to a Purchase Contract between the Issuer and the Michigan Finance Authority (the “MFA”), a Supplemental Agreement by and among the [Issuer][City of Detroit], the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy [and approved and agreed to by the Issuer], and the Order of Approval issued by the Department of Environment, Great Lakes, and Energy. The Principal Amount shall be payable on the dates and in the principal installments set forth in Schedule A attached hereto.

In the event less than the Principal Amount of this Bond is disbursed by the MFA, any portion of the Principal Amount is prepaid as provided herein, or any serial principal payment becomes due before the Issuer has received proceeds from corresponding purchased principal installments of at least a like amount, then the MFA may prepare a new serial principal installment repayment schedule which shall be presented to the Issuer and be effective upon receipt as provided in the Purchase Contract.

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on _____, 201_ and semiannually on each April 1 and October 1 thereafter (each an “Interest Payment Date”).

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the “Trustee”).

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months. During the time funds are being drawn down by the Issuer under this Bond, the MFA will periodically provide the Issuer with a statement showing the amount of principal that has been advanced and the date of each advance, which statement shall constitute prima facie evidence of the reported information; provided, that no failure on the part of the MFA to provide such a statement or to reflect a disbursement or the correct amount of a disbursement shall relieve the Issuer of its obligation to repay the outstanding principal amount actually advanced [(subject to any principal forgiveness as provided for herein)], all accrued interest thereon, and any other amount payable with respect thereto in accordance with the terms of this Bond.

In the event of a default in the payment of principal or interest hereon when due, whether at maturity, by redemption or otherwise, the amount of such default shall bear interest (the "additional interest") at a rate equal to the rate of interest that is two percent above the MFA's cost of providing funds (as determined by the MFA) to make payment on the bonds of the MFA issued to provide funds to purchase this Bond but in no event in excess of the maximum rate of interest permitted by law. The additional interest shall continue to accrue until the MFA has been fully reimbursed for all costs incurred by the MFA (as determined by the MFA) as a consequence of the Issuer's default. Such additional interest shall be payable on the interest payment date following demand of the MFA. In the event that (for reasons other than the default in the payment of any municipal obligation purchased by the MFA) the investment of amounts in the reserve account established by the MFA for the bonds of the MFA issued to provide funds to purchase this bond fails to provide sufficient available funds (together with any other funds that may be made available for such purpose) to pay the interest on outstanding bonds of the MFA issued to fund such account, the Issuer shall and hereby agrees to pay on demand only the Issuer's pro rata share (as determined by the MFA) of such deficiency as additional interest on this bond.

Notwithstanding any other provision of this Bond, so long as the MFA is the owner of this Bond, (a) this Bond is payable as to principal, premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Issuer by the MFA (the "MFA's Depository"); (b) the Issuer agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on this Bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise; in the event that the MFA's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the MFA as invoiced by the MFA an amount to recover the MFA's administrative costs and lost investment earnings attributable to that late payment; and (c) written notice of any redemption of this Bond shall be given by the Issuer and received by the MFA's Depository at least 40 days prior to the date on which redemption is to be made.

This Bond is one of a series of bonds designated "Water Supply System Revenue Bonds, Series 2020-SRF-__" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board on October 7, 2015, as

amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$40,000,000, adopted by the Board on _____, 2020 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _____, 2020 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the Pledged Assets (as defined in the Bond Ordinance), which includes the revenues of the Water System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Water System (the “Net Revenues”), and a statutory lien on the Net Revenues and Pledged Assets is hereby recognized and acknowledged. Such lien is a third lien, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first or second lien on the Pledged Assets. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a third lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity at the option of the Issuer and with the prior written consent of and upon such terms as may be required by the MFA. That portion of this Bond called for redemption shall not bear interest after the date fixed for redemption, provided funds are on hand with the Trustee to redeem the same.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE WATER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Water System shall be outstanding, such rates for service furnished by the Water System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve for Bonds other than this Bond, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Water System as are necessary to preserve the same in good repair and

working order, and to provide for such other expenditures and funds for the Water System, all as are required by the Bond Ordinance.

This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee's Certificate of Authentication hereon has been executed by the Trustee.

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IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board, and a facsimile of its corporate seal to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

GREAT LAKES WATER AUTHORITY

By: _____
Chief Executive Officer

Countersigned:

By: _____
Secretary, Board of Directors

[Seal]

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as “Water Supply System Revenue Bond, Series 2020-SRF-___”.

U.S. Bank National Association,
Trustee

By: _____

Date of Authentication: _____, 2020

ASSIGNMENT

For value received, the undersigned sells, assigns and transfers unto _____ this Bond and all rights hereunder and hereby irrevocably appoints _____ attorney to transfer this Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: _____

Signature

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

Schedule A

The principal amounts and maturity dates applicable to the Bond to which this Schedule A is attached are as follows:

Date

Amount

Based on the schedule provided above unless revised as provided in this paragraph, repayment of the Principal Amount shall be made according to such schedule until the full Principal Amount disbursed to the Issuer is repaid; provided, however, that the Issuer shall have no obligation to repay any serial principal installment for which the Issuer did not receive a disbursement of Principal Amount by the date such serial principal installment is due. In the event the Order of Approval issued by the Department of Environment, Great Lakes, and Energy (the "Order") approves a principal amount of assistance less than the amount of this Bond, the MFA shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule described above provides for payment of a total principal amount greater than the amount of assistance approved by the Order, (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the MFA or (3) of prepayment [or principal forgiveness] of the Bond, the MFA shall prepare a new payment schedule that shall be effective upon receipt by the Issuer.

END OF BOND FORM

Section 7. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2020 SRF-2/3/4 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the “Securities Depository”) and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2020 SRF-2/3/4 Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2020 SRF-2/3/4 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2020 SRF-2/3/4 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

- (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2020 SRF-2/3/4 Junior Lien Bonds,
- (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2020 SRF-2/3/4 Junior Lien Bonds, including any notice of redemption, or
- (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2020 SRF-2/3/4 Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2020 SRF-2/3/4 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2020 SRF-2/3/4 Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If 2020 SRF-2/3/4 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2020 SRF-2/3/4 Junior Lien Bonds that they be able to obtain 2020 SRF-2/3/4 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2020 SRF-2/3/4 Junior Lien Bonds in certificated form to

Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

(f) Notwithstanding any other provision of this 2020 SRF-2/3/4 Series Ordinance to the contrary, so long as any 2020 SRF-2/3/4 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:

- (1) all payments with respect to the principal, premium, if any, and interest on such 2020 SRF-2/3/4 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2020 SRF-2/3/4 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2020 SRF-2/3/4 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
- (2) if less than all of the 2020 SRF-2/3/4 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2020 SRF-2/3/4 Junior Lien Bonds or portions of 2020 SRF-2/3/4 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
- (3) all payments with respect to principal of the 2020 SRF-2/3/4 Junior Lien Bonds and premium, if any and interest on the 2020 SRF-2/3/4 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2020 SRF-2/3/4 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2020 SRF-2/3/4 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2020 SRF-2/3/4 Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2020 SRF-2/3/4 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2020 SRF-2/3/4 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2020 SRF-2/3/4 Junior Lien Bonds as follows: Such lien in favor of the 2020 SRF-2/3/4 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.

Section 9. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2020 SRF-2/3/4 Series Ordinance, all of the provisions relative to funds and accounts, their

maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. Disposition of Proceeds.

(a) Disposition of Accrued Interest and Capitalized Interest. (1) From the proceeds of the sale of the 2020 SRF-2 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 SRF-2 Junior Lien Bonds and any capitalized interest on the 2020 SRF-2 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2020 SRF-2 Junior Lien Bonds.

(2) From the proceeds of the sale of the 2020 SRF-3 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 SRF-3 Junior Lien Bonds and any capitalized interest on the 2020 SRF-3 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2020 SRF-3 Junior Lien Bonds.

(3) From the proceeds of the sale of the 2020 SRF-4 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 SRF-4 Junior Lien Bonds and any capitalized interest on the 2020 SRF-4 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2020 SRF-4 Junior Lien Bonds

(b) Construction Fund. The balance of the proceeds of each Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) Construction Fund – Regional Water System Improvements.

(1) A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2020 SRF-2 Junior Lien Bonds and designated the “Regional Construction Fund, Series 2020 SRF-2,” and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer. A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2020 SRF-3 Junior Lien Bonds and designated the “Regional Construction Fund, Series 2020 SRF-3,” and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.

(2) Moneys in the Regional Construction Fund, Series 2020 SRF-2 shall be applied solely to payment of 2020 SRF-2 Project Costs (or to the reimbursement of 2020 SRF-2 Project Costs paid by the Authority from other funds prior to the issuance of the 2020 SRF-2 Junior Lien Bonds). Moneys in the Regional Construction Fund, Series 2020 SRF-3 shall be applied solely to payment of 2020 SRF-3 Project Costs (or to the reimbursement of 2020 SRF-3 Project Costs paid by the Authority from other funds prior to the issuance of the 2020 SRF-3 Junior Lien Bonds).

(A) Payments or reimbursements for 2020 SRF-2 Project Costs and 2020 SRF -3 Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with an Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.

(B) Payment or reimbursement for 2020 SRF-2 Project Costs and 2020 SRF-3 Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to an Authorized Officer.

(b) Construction Fund – Local Water System Improvements.

(1) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2020 SRF-4 Junior Lien Bonds and designated the “Local Construction Fund, Series 2020 SRF-4,” and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.

(2) Moneys in the Local Construction Fund, Series 2020 SRF-4 shall be applied solely to payment of 2020 SRF-4 Project Costs (or to the reimbursement of 2020 SRF-4 Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2020 SRF-4 Junior Lien Bonds).

(A) Payments or reimbursements for 2020 SRF-4 Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done pursuant to and in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.

(B) Payment or reimbursement for 2020 SRF-4 Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to a City Authorized Officer.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds, that so long as any of the Tax-Exempt 2020 SRF-

2/3/4 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain, and will refrain from taking any action which would impair, the exclusion of the interest on the Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds, and to prevent Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2020 SRF-2/3/4 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2020 SRF-2/3/4 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2020 SRF-2/3/4 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Contract to the MFA.

(b) The Authority Board hereby determines that the sale of the 2020 SRF-2/3/4 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2020 SRF-2/3/4 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA’s Drinking Water Revolving Fund Program.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2020 SRF-2/3/4 Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to any Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which any Series of the 2020 SRF-2/3/4 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.

(d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2020 SRF-2/3/4 Junior Lien Bonds as required by Section 33 of Act 94.

Section 14. Delegation of Authority to and Authorization of Actions of Authorized Officers.

(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2020 SRF-2/3/4 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2020 SRF-2/3/4 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2020 SRF-2/3/4 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2020 SRF-2/3/4 Series Ordinance, on the basis of her evaluation of the maximum amount of 2020 SRF-2/3/4 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2020 SRF-2/3/4 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2020 SRF-2/3/4 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2020 SRF-2/3/4 Series Ordinance, the maturities of each Series of the 2020 SRF-2/3/4 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2020 SRF-2/3/4 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2020 SRF-2/3/4 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2020 SRF-2/3/4 Junior Lien Bonds as Additional Bonds have been satisfied.

(e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2020 SRF-2/3/4 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2020 SRF-2/3/4 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 15. Advancement of Project Costs. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2020 SRF-2/3/4 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2020 SRF-2/3/4 Junior Lien Bonds.

Section 16. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2020 SRF-2/3/4 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 17. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies

and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2020 SRF-2/3/4 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2020 SRF-2/3/4 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. 2020 SRF-2/3/4 Series Ordinance a Contract. The provisions of this 2020 SRF-2/3/4 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2020 SRF-2/3/4 Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2020 SRF-2/3/4 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2020 SRF-2/3/4 Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2020 SRF-2/3/4 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2020 SRF-2/3/4 Junior Lien Bonds.

(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2020 SRF-2/3/4 Junior Lien Bonds or other available funds.

(d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2020 SRF-2/3/4 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2020 SRF-2/3/4 Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2020 SRF-2/3/4 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2020 SRF-2/3/4 Series Ordinance. The section and paragraph headings in this 2020 SRF-2/3/4 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2020 SRF-2/3/4 Series Ordinance.

Section 21. Publication and Recordation. This 2020 SRF-2/3/4 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.

Section 22. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2020 SRF-2/3/4 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2020 SRF-2/3/4 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 22nd day of July 2020.

GREAT LAKES WATER AUTHORITY

Signed _____
Chairperson

Signed _____
Secretary

4819-0981-9073 v2 [63818-26]

Great Lakes Water Authority

Resolution 2020-235

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$40,000,000 Ordinance 2020-05

By Board Member: _____

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$40,000,000” (the “2020 SRF-2/3/4 Series Ordinance”), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-01 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016.

Whereas The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2020 SRF-2/3/4 Series Ordinance.

Now, Therefore Be It:

Resolved That the 2020 SRF-2/3/4 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2020 SRF-2/3/4 Series Ordinance in the form approved; **And Be it Further**

Resolved That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: July 22, 2020



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 (Ordinance 2020-06)

Background: Included is the draft Great Lakes Water Authority (“GLWA”) Board letter for the July 22, 2020 Board meeting regarding the Series Ordinance for the proposed Sewage Disposal System State Revolving Fund (SRF) bond issue. This series of bonds authorized by this ordinance will be sold through the state of Michigan’s CWRP program and will be used to finance the city of Detroit Water and Sewerage Department (DWSD) local sanitary sewer replacement project.

Key Provisions:

- Not to Exceed Par Amount: \$7,000,000
- Maximum Coupon Rate: 2.50% (Current program rate is 2.00%)
- Bonds will be designated 2020 SRF-2 Junior Lien Bonds
- Bonds will be sold to the Michigan Finance Authority (MFA)

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 as presented, at its regular meeting on July 22, 2020.

..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 (Ordinance 2020-06)

..Body

Agenda of: July 22, 2020
Item No.: **2020-236**
Amount: Not to Exceed \$7,000,000

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: July 22, 2020

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 (Ordinance 2020-06)

MOTION

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

On February 26, 2020, the Great Lakes Water Authority (“GLWA”) Board of Directors approved Resolution 2020-067, “Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Sewage Disposal System Revenue Bonds in a principal amount not to exceed \$75,000,000” (the “Notice of Intent”). This is the first series of sewer bonds from that Notice of Intent in the amount not to exceed \$7,000,000.

The approval of the Series Ordinance presented today is the next formal step required by the GLWA Board of Directors in the bond issuance process. The Series Ordinance authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the Clean Water Revolving Fund (CWRP) Bonds, designates the Bonds as 2020 SRF-2 Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

This series of bonds authorized by this ordinance will be sold through the state of Michigan’s CWRP program and will be used to finance the city of Detroit Water and Sewerage Department (DWSD) Project DWS-916. This project consists of improvements to the DWSD local sanitary sewer system within select residential high priority neighborhoods at Piety Hill, Virginia Park, New Center Commons, Brewster Homes and Brewster Douglas. Per the Ordinance, this series of bonds will be designated 2020 SRF-2 Junior Lien Bonds, with a loan amount not to exceed \$7,000,000.

The 2020 SRF-2 Junior Lien Bonds will be sold to the Michigan Finance Authority in a separate series. The current program interest rate for the CWRP is 2.00% and is typically payable over a 20-year term however, DWSD qualifies for disadvantaged community status which allows for a 30-year term. Based on the not to exceed amount for this series of \$7.0 million, DWSD could save an estimated \$1.4 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.00% interest rate, over the life of the 30-year bond issue.

GLWA is the loan applicant on the CWRP loans issued on behalf of DWSD, and DWSD will be the CWRP loan recipient as determined by Michigan Department of Environment, Great Lakes, and Energy (EGLE). All project costs financed by GLWA, on behalf of DWSD, through the CWRP program and resulting principal and interest payments on the bonds will be directly allocable to the DWSD local system.

BUDGET IMPACT

The debt service payments on the DWSD local project are anticipated to start on April 1, 2021 with minimal amounts of interest due, because of the projected draw down schedules. Interest expense on the DWSD loan was included in the FY 2021 Budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on July 17, 2020. The Audit Committee [7.17.2020 pending request: recommends approval of] the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$7,000,000 as presented.

GREAT LAKES WATER AUTHORITY
ORDINANCE NO. 2020-06

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF
SEWAGE DISPOSAL SYSTEM REVENUE BONDS IN
AN AGGREGATE AMOUNT NOT TO EXCEED \$7,000,000**

WHEREAS, pursuant to Resolution No. 2015-10-03 adopted by the Board of Directors of the Great Lakes Water Authority (the “Authority”) on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-02 (as subsequently amended through the date hereof, the “Ordinance”), which authorizes the issuance by the Authority of Sewage Disposal System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Sewage Disposal System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time one or more Series of SRF Junior Lien Bonds (the “2020 SRF-2 Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Local Sewer System identified in the Detroit Capital Improvement Program (the “2020 SRF-2 Project”).

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2020 SRF-2 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2020 SRF-2 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2020 SRF-2 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2020 SRF-2 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2020 SRF-2 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2020 SRF-2 Project.

(b) “2020 SRF-2 Project” means improvements to the Local Sewer System, including but not limited to the rehabilitation and replacement of sewer mains and manholes within residential neighborhoods of Piety Hill, Virginia Park, New Center Commons, Brewster Homes and Brewster Douglas in the City.

(c) “Authorized Denomination” means any denomination as determined by an Authorized Officer in the Sale Order.

(d) “Authorized Officer” means either the Chief Executive Officer or the Chief Financial Officer.

(e) “City Authorized Officer” means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2020 SRF-2 Series Ordinance.

(f) “Interest Payment Date” means except as otherwise set forth in the Sale Order each April 1 and October 1.

(g) “Local Construction Fund, Series 2020 SRF-2” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2020 SRF-2 Series Ordinance relating to the construction of the 2020 SRF-2 Project to be paid with the proceeds of the 2020 SRF-2 Junior Lien Bonds.

(h) “Maturity Date” means such dates of maturity of the 2020 SRF-2 Junior Lien Bonds as determined in the Sale Order.

(i) “MFA” means the Michigan Finance Authority.

(j) “Person” means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body, or other entity, however organized.

(k) “Project Costs” means the costs of acquiring, constructing, equipping, installing, and financing the 2020 SRF-2 Project, including Issuance Costs relating to the 2020 SRF-2 Junior Lien Bonds.

(l) “Purchase Contract” means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2020 SRF-2 Junior Lien Bonds.

(m) “Regular Record Date” means except as otherwise set forth in the Sale Order the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

(n) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2020 SRF-2 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2020 SRF-2 Junior Lien Bonds and to complete the other transactions contemplated herein.

(o) “Supplemental Agreement” means the Supplemental Agreement among the City, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to the 2020 SRF-2 Junior Lien Bonds.

(p) “Taxable 2020 SRF-2 Junior Lien Bonds” means any 2020 SRF-2 Junior Lien Bonds other than Tax-Exempt 2020 SRF-2 Junior Lien Bonds.

(q) “Tax-Exempt 2020 SRF-2 Junior Lien Bonds” means any 2020 SRF-2 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2020 SRF-2 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Sewer System to acquire, construct and undertake the 2020 SRF-2 Project, and the 2020 SRF-2 Project is hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2020 SRF-2 Project. The Project Costs are estimated by the Authority Board to not exceed \$7,000,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2020 SRF-2 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2020 SRF-2 Junior Lien Bonds.

(a) Authorization of Borrowing. The Authority may borrow an amount not in excess of \$7,000,000, as is finally determined in the Sale Order, and issue the 2020 SRF-2 Junior Lien Bonds in one Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2020 SRF-2 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2020 SRF-2 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.

(b) Purpose of 2020 SRF-2 Junior Lien Bonds. The 2020 SRF-2 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Project Costs.

(c) Priority of Lien. The 2020 SRF-2 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

(d) Insufficient Proceeds. To the extent that proceeds of SRF-2 Junior Lien Bonds are insufficient to pay Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Local Sewer System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of the issuance of any Additional Bonds, with the concurrence of the Authority Board.

(e) Taxable and Tax-Exempt 2020 SRF-2 Junior Lien Bonds. The 2020 SRF-2 Junior Lien Bonds may be issued as Taxable 2020 SRF-2 Junior Lien Bonds or Tax-Exempt 2020 SRF-2 Junior Lien Bonds, or as separate subseries of both, as set forth in the Sale Order.

(f) Source of Payment and Security. The 2020 SRF-2 Junior Lien Bonds shall be payable and secured as provided in Section 8.

(g) Applicability of Ordinance. Except as otherwise provided in this 2020 SRF-2 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2020 SRF-2 Junior Lien Bonds as if set forth in full in this 2020 SRF-2 Series Ordinance, the purpose of this 2020 SRF-2 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2020 SRF-2 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2020 SRF-2 Junior Lien Bond Details.

(a) Designation.

- (1) The 2020 SRF-2 Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2020-SRF-2 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2020 SRF-2 Series Ordinance.
- (2) If the 2020 SRF-2 Junior Lien Bonds are not issued in 2020, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2020 SRF-2 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2020 SRF-2 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary, in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) Numbering. The 2020 SRF-2 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2020 SRF-2 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:

- (1) No 2020 SRF-2 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2020 SRF-2 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2020 SRF-2 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.50% per annum. Interest on 2020 SRF-2 Junior Lien Bonds shall be payable on each Interest Payment Date.

(e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2020 SRF-2 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2020 SRF-2 Junior Lien Bonds are owned by the MFA, the 2020 SRF-2 Junior Lien Bonds are payable as to principal, redemption premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Authority by the MFA (the MFA's Depository"), and the Authority agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on the 2020 SRF-2 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is

due, whether by maturity, redemption or otherwise. If the 2020 SRF-2 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2020 SRF-2 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

(f) Dating. The 2020 SRF-2 Junior Lien Bonds shall be dated such date as determined in the Sale Order.

(g) Reserve Requirement. There shall be no Reserve Requirement with respect to the 2020 SRF-2 Junior Lien Bonds.

(h) Exchange. The registered owner of any 2020 SRF-2 Junior Lien Bond may exchange such 2020 SRF-2 Junior Lien Bond for a new 2020 SRF-2 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2020 SRF-2 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2020 SRF-2 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2020 SRF-2 Junior Lien Bonds.

(i) Execution and Delivery of 2020 SRF-2 Junior Lien Bonds. The 2020 SRF-2 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2020 SRF-2 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2020 SRF-2 Junior Lien Bonds. The 2020 SRF-2 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2020 SRF-2 Series Ordinance:

R-__

**UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND, AND WAYNE
GREAT LAKES WATER AUTHORITY
SEWAGE DISPOSAL SYSTEM REVENUE BOND,
SERIES 2020-SRF-2**

REGISTERED OWNER: Michigan Finance Authority

PRINCIPAL AMOUNT: \$ _____

INTEREST RATE: _____%

ORIGINAL ISSUE DATE:

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the “Issuer”), upon authorization from the Board of Directors of the Issuer (the “Board”), has issued this Bond. The Issuer, for value received, promises to pay, in lawful money of the United States of America, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above, or so much thereof as shall have been advanced to the Issuer and not prepaid or reduced pursuant to a Purchase Contract between the Issuer and the Michigan Finance Authority (the “MFA”), a Supplemental Agreement by and among the City of Detroit, the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy and approved and agreed to by the Issuer, and the Order of Approval issued by the Department of Environment, Great Lakes, and Energy. The Principal Amount shall be payable on the dates and in the principal installments set forth in Schedule A attached hereto.

In the event less than the Principal Amount of this Bond is disbursed by the MFA, any portion of the Principal Amount is prepaid as provided herein, or any serial principal payment becomes due before the Issuer has received proceeds from corresponding purchased principal installments of at least a like amount, then the MFA may prepare a new serial principal installment repayment schedule which shall be presented to the Issuer and be effective upon receipt as provided in the Purchase Contract.

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on _____, 20__ and semiannually on each April 1 and October 1 thereafter (each an “Interest Payment Date”).

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the “Trustee”).

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months. During the time funds are being drawn down by the Issuer under this Bond, the MFA will periodically provide the Issuer with a statement showing the amount of principal that has been advanced and the date of each advance, which statement shall constitute prima facie evidence of the reported information; provided, that no failure on the part of the MFA to provide such a statement or to reflect a disbursement or the correct amount of a disbursement shall relieve the Issuer of its obligation to repay the outstanding principal amount actually advanced [(subject to any principal forgiveness as provided for herein)], all accrued interest thereon, and any other amount payable with respect thereto in accordance with the terms of this Bond.

In the event of a default in the payment of principal or interest hereon when due, whether at maturity, by redemption or otherwise, the amount of such default shall bear interest (the "additional interest") at a rate equal to the rate of interest that is two percent above the MFA's cost of providing funds (as determined by the MFA) to make payment on the bonds of the MFA issued to provide funds to purchase this Bond but in no event in excess of the maximum rate of interest permitted by law. The additional interest shall continue to accrue until the MFA has been fully reimbursed for all costs incurred by the MFA (as determined by the MFA) as a consequence of the Issuer's default. Such additional interest shall be payable on the interest payment date following demand of the MFA. In the event that (for reasons other than the default in the payment of any municipal obligation purchased by the MFA) the investment of amounts in the reserve account established by the MFA for the bonds of the MFA issued to provide funds to purchase this bond fails to provide sufficient available funds (together with any other funds that may be made available for such purpose) to pay the interest on outstanding bonds of the MFA issued to fund such account, the Issuer shall and hereby agrees to pay on demand only the Issuer's pro rata share (as determined by the MFA) of such deficiency as additional interest on this Bond.

Notwithstanding any other provision of this Bond, so long as the MFA is the owner of this Bond, (a) this Bond is payable as to principal, premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Issuer by the MFA (the "MFA's Depository"); (b) the Issuer agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on this Bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise; in the event that the MFA's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the MFA as invoiced by the MFA an amount to recover the MFA's administrative costs and lost investment earnings attributable to that late payment; and (c) written notice of any redemption of this Bond shall be given by the Issuer and received by the MFA's Depository at least 40 days prior to the date on which redemption is to be made.

This Bond is one of a series of bonds designated "Sewage Disposal System Revenue Bonds, Series 2020-SRF-2" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-02 adopted by the Board on October 7, 2015, as

amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount not to Exceed \$7,000,000, adopted by the Board on _____, 2020 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _____, 2020 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the Pledged Assets (as defined in the Bond Ordinance), which includes the revenues of the Sewer System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Sewer System (the “Net Revenues”), and a statutory lien on the Net Revenues and Pledged Assets is hereby recognized and acknowledged. Such lien is a third lien, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first or second lien on the Pledged Assets. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a third lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity at the option of the Issuer and with the prior written consent of and upon such terms as may be required by the MFA. That portion of this Bond called for redemption shall not bear interest after the date fixed for redemption, provided funds are on hand with the Trustee to redeem the same.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE SEWER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Sewer System shall be outstanding, such rates for service furnished by the Sewer System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve for Bonds other than this Bond, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Sewer System as are necessary to preserve the same in good repair and

working order, and to provide for such other expenditures and funds for the Sewer System, all as are required by the Bond Ordinance.

This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions, and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee's Certificate of Authentication hereon has been executed by the Trustee.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board and its corporate seal or a facsimile thereof to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

GREAT LAKES WATER AUTHORITY

By: _____
Chief Executive Officer

Countersigned:

By: _____
Secretary, Board of Directors

[Seal]

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as “Sewage Disposal System Revenue Bond, Series 2020-SRF-2”.

U.S. Bank National Association,
Trustee

By: _____

Date of Authentication: _____, 2020

ASSIGNMENT

For value received, the undersigned sells, assigns and transfers unto _____ this Bond and all rights hereunder and hereby irrevocably appoints _____ attorney to transfer this Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: _____

Signature

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

Schedule A

The principal amounts and maturity dates applicable to the Bond to which this Schedule A is attached are as follows:

<u>Date</u>	<u>Amount</u>
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Based on the schedule provided above unless revised as provided in this paragraph, repayment of the Principal Amount shall be made according to such schedule until the full Principal Amount disbursed to the Issuer is repaid; provided, however, that the Issuer shall have no obligation to repay any serial principal installment for which the Issuer did not receive a disbursement of Principal Amount by the date such serial principal installment is due. In the event the Order of Approval issued by the Department of Environment, Great Lakes, and Energy (the "Order") approves a principal amount of assistance less than the amount of the Bond, the MFA shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule described above provides for payment of a total principal amount greater than the amount of assistance approved by the Order, (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the MFA or (3) of prepayment [or principal forgiveness] of the Bond, the MFA shall prepare a new payment schedule that shall be effective upon receipt by the Issuer.

END OF BOND FORM

Section 7. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2020 SRF-2 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the “Securities Depository”) and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2020 SRF-2 Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2020 SRF-2 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2020 SRF-2 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

- (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2020 SRF-2 Junior Lien Bonds,
- (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2020 SRF-2 Junior Lien Bonds, including any notice of redemption, or
- (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2020 SRF-2 Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2020 SRF-2 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2020 SRF-2 Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If 2020 SRF-2 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2020 SRF-2 Junior Lien Bonds that they be able to obtain 2020 SRF-2 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2020 SRF-2 Junior Lien Bonds in certificated form to

Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

(f) Notwithstanding any other provision of this 2020 SRF-2 Series Ordinance to the contrary, so long as any 2020 SRF-2 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:

- (1) all payments with respect to the principal, premium, if any, and interest on such 2020 SRF-2 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2020 SRF-2 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2020 SRF-2 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
- (2) if less than all of the 2020 SRF-2 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2020 SRF-2 Junior Lien Bonds or portions of 2020 SRF-2 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
- (3) all payments with respect to principal of the 2020 SRF-2 Junior Lien Bonds and premium, if any and interest on the 2020 SRF-2 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2020 SRF-2 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2020 SRF-2 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2020 SRF-2 Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2020 SRF-2 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2020 SRF-2 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2020 SRF-2 Junior Lien Bonds as follows: Such lien in favor of the 2020 SRF-2 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.

Section 9. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2020 SRF-2 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. Disposition of Proceeds.

(a) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2020 SRF-2 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2020 SRF-2 Junior Lien Bonds and any capitalized interest on the 2020 SRF-2 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2020 SRF-2 Junior Lien Bonds.

(b) Construction Fund. The balance of the proceeds of the 2020 SRF-2 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2020 SRF-2 Junior Lien Bonds and designated the "Local Construction Fund, Series 2020 SRF-2," and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer..

(b) Moneys in the Local Construction Fund, Series 2020 SRF-2 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2020 SRF-2 Junior Lien Bonds).

(1) Payments or reimbursements for Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.

(2) Payment or reimbursement for Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to a City Authorized Officer.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2020 SRF-2 Junior Lien Bonds, that so long as any of the Tax-Exempt 2020 SRF-2 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain, and will refrain from taking any action which would impair, the exclusion of the interest on the Tax-Exempt 2020 SRF-2 Junior Lien Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2020 SRF-2 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2020 SRF-2 Junior Lien Bonds, and to prevent Tax-Exempt 2020 SRF-2 Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2020 SRF-2 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2020 SRF-2 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2020 SRF-2 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Contract to the MFA.

(b) The Authority Board hereby determines that the sale of the 2020 SRF-2 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2020 SRF-2 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA’s State Revolving Fund Program.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2020 SRF-2 Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to any Series of the 2020 SRF-2 Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which any Series of the 2020 SRF-2 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.

(d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2020 SRF-2 Junior Lien Bonds as required by Section 33 of Act 94.

Section 14. Delegation of Authority to and Authorization of Actions of Authorized Officers.

(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2020 SRF-2 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2020 SRF-2 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2020 SRF-2 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2020 SRF-2 Series Ordinance, on the basis of her evaluation of the maximum amount of 2020 SRF-2 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2020 SRF-2 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2020 SRF-2 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2020 SRF-2 Series Ordinance, the maturities of each Series of the 2020 SRF-2 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2020 SRF-2 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2020 SRF-2 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2020 SRF-2 Junior Lien Bonds as Additional Bonds have been satisfied.

(e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2020 SRF-2 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2020 SRF-2 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 15. Advancement of Project Costs. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2020 SRF-2 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2020 SRF-2 Junior Lien Bonds.

Section 16. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2020 SRF-2 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 17. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2020 SRF-2 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2020 SRF-2 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. 2020 SRF-2 Series Ordinance a Contract. The provisions of this 2020 SRF-2 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2020 SRF-2 Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2020 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2020 SRF-2 Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2020 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2020 SRF-2 Junior Lien Bonds.

(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2020 SRF-2 Junior Lien Bonds or other available funds.

(d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2020 SRF-2 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2020 SRF-2 Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2020 SRF-2 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2020 SRF-2 Series Ordinance. The section and paragraph headings in this 2020 SRF-2 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2020 SRF-2 Series Ordinance.

Section 21. Publication and Recordation. This 2020 SRF-2 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.

Section 22. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2020 SRF-2 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2020 SRF-2 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 22nd day of July 2020.

GREAT LAKES WATER AUTHORITY

Signed _____
Chairperson

Signed _____
Secretary

4845-7692-0769 v2 [63818-29]

Great Lakes Water Authority

Resolution 2020-236

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$7,000,000

Ordinance 2020-06

By Board Member: _____

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$7,000,000” (the “2020 SRF-2 Series Ordinance”), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-02 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016.

Whereas The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2020 SRF-2 Series Ordinance.

Now, Therefore Be It:

Resolved That the 2020 SRF-2 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2020 SRF-2 Series Ordinance in the form approved; **And Be it Further**

Resolved That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: July 22, 2020



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Nicolette N. Bateson, CPA, Chief Financial Officer & Treasurer

Re: Grants, Gifts, and Other Resources Delegation Policy

Background: The [Articles of Incorporation](#) for the Great Lakes Water Authority (GLWA) provide authority for GLWA's Board of Directors to solicit and receive grants, gifts, and other resources as stated in Article 4 – Powers, Section B(4). Excerpts are below.

B. Except as otherwise provided in the Act or these Articles, and without limiting the generality of the foregoing paragraph (A), the Authority may do all things necessary or convenient to implement the purposes, objectives, and provisions of the Act and the purposes, objectives, and jurisdictions vested in the Authority or the Board by the Act or other law, including, but not limited to, all of the following:

(4) Solicit, receive, and accept gifts, grants, labor, loans, contributions of money, property, or other things of value, and other aid or payment from any federal, state, local, or intergovernmental government agency or from any other person or entity, public or private, upon terms and conditions acceptable to the Authority, or participate in any other way in a federal, state, local, or intergovernmental government program.

Analysis: A key driver in Board engagement in the above provision is to ensure that the commitment of GLWA resources (financial or in-kind) are appropriate and do not impact current or future budgets as well as to ensure alignment with the Board's priorities and objectives.

As a practical matter, however, engagement of the Board in all aspects of soliciting and receiving grants is problematic – largely from a timing and, in some cases, a materiality perspective. For this reason, a *Grants, Gifts, and Other Resources Delegation Policy* is proposed that bridges the intent of the Articles with the agility needed for team members to secure grants and other resources. Key elements include the following.

1. Loans are exempt from this policy as the GLWA Board has a Debt Management Policy which encompasses loans.
2. Intergovernmental agreements and other activities that are addressed in the GLWA Board Procurement Policy are exempt from this policy.
3. For the remaining activities in Article 4 – Powers, Section B(4), delegation of authority is provided to the Chief Executive Officer.
4. The delegation of authority does not preclude the CEO from seeking Board action related to the subject activities.
5. To ensure transparency and timely communication, a report will be provided to the Board, no less than quarterly related to activities subject to this policy. That report will, at a minimum, include description, type of activity, dollar amount, and status.
6. Effective date is immediate.
7. The inaugural Grants, Gifts, and Other Resources report will provide all known activity as of the effective date and be provided within the subsequent 30 days of that effective date.

A proposed policy document is attached as well as a sample report. That report includes the current Federal Emergency Management Agency (FEMA) activity related to COVID-19. Staff would like to submit the initial reimbursement request in August 2020.

Proposed Action: Recommend that the Board of Directors approve Grants, Gifts, and Other Resources Delegation Policy as presented with an immediate effective date.



PROPOSED GRANTS, GIFTS, AND OTHER RESOURCES DELEGATION POLICY

Purpose

The purpose of this Grants, Gifts, and Other Resources Delegation Policy is to define the delegation of authority for carrying out the purpose and reporting for activities identified in the Articles of Incorporation for the Great Lakes Water Authority (GLWA) to solicit and receive grants, gifts, and other resources as stated in Article 4 – Powers, Section B(4):

(4) Solicit, receive, and accept gifts, grants, labor, loans, contributions of money, property, or other things of value, and other aid or payment from any federal, state, local, or intergovernmental government agency or from any other person or entity, public or private, upon terms and conditions acceptable to the Authority, or participate in any other way in a federal, state, local, or intergovernmental government program.

Definitions

Other Resources	Labor, contributions of money, property, or other things of value, and other aid or payment from any federal, state, local, or intergovernmental government agency or from any other person or entity, public or private except for those noted in the “Exceptions” section of this policy.
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Policy

1. **Delegation of Authority:** Aside from the “Exceptions” noted below, remaining activities in Article 4 – Powers, Section B(4), delegation of authority is granted to the Chief Executive Officer.
 - a. The delegation of authority does not preclude the CEO from seeking Board action related to the subject activities.

2. **Exceptions:** The following activities are not delegated pursuant to this policy.
 - a. Loans are subject to provisions of the GLWA Board Debt Management Policy.
 - b. Intergovernmental agreements and other activities that are addressed in the GLWA Board Procurement Policy are exempt from this policy.



3. **Reporting:** To ensure transparency and timely communication, a report will be provided to the Board, no less than quarterly, documenting activities subject to this policy. That report will, at a minimum, include description, type of activity, dollar amount, compliance and/or performance requirements, if any, and status.

4. **Amendment:** This policy may be modified as needed pursuant to Audit Committee review and consideration with a recommended action to the Board of Directors for their consideration for approval.



Active Programs

Reference Number	Description	Type of Activity	Dollar Amount	Compliance and/or Performance Requirements	Status	Team Member Contract
2020-001	Federal Emergency Management Agency (FEMA) activity related to COVID-19	Federal Grant (Reimbursement Basis)	Initial submittal in August 2020 for \$1.4 million for Contractual Services (medical screening & facility cleaning of \$1.2 million) and Supplies of \$0.2 million	Federal Audit Requirements (add to existing audit program)	Ongoing	Susan Kopinski

Closed Programs

None



Financial Services Audit Committee Communication

Date: July 17, 2020

To: Great Lakes Water Authority Audit Committee

From: Nicolette N. Bateson, CPA, Chief Financial Officer & Treasurer

Re: CFO Update

This month, we provide updates to matters that have continued to evolve over the past several months.

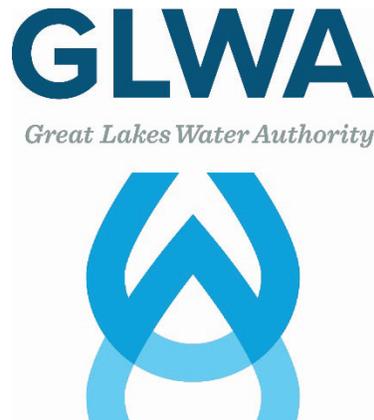
Wholesale Water Sales – This is an area of positive news since the Audit Committee last met in June. The forecasted shortfall was expected to be \$4.6 million for FY 2020. Based largely due to dry, warm weather, actual usage for the month of June 2020 was closer to 18% above budgeted amounts and related projected revenues of to be \$2.6 million (9.07%) above budgeted amounts. This means that the fiscal year total forecasted shortfall, for which the budget was amended, of *\$4.6 million will be closer to \$3 million (0.9%) below budgeted amounts with FY 2020 usage estimated to be 2.9% below budgeted amounts.*

DWSD Budget – Another area of good news is that DWSD local, retail cash receipts are slightly above a breakeven for the first 15 calendar days of July 2020. In addition, although year-end close is underway, it appears that collections in June 2020 improved thereby reducing the budget shortfall.

FY 2021+ Fiscal Restraint Measures – It is apparent that the challenges brought on by the COVID-19 pandemic are more akin to a marathon versus a sprint. As we look to the month of August, our first FEMA reimbursement for additional external costs incurred for cleaning, health screening, and supplies is at \$1.4 million. Concurrently, we are building layers into a reconstitution plan to provide for many unknowns over an undetermined period of time. This also presents additional, unknown financial challenges for which we need to be prepared. As we move into FY 2021 (and beyond) conversations with team members are underway so that we can be agile in our priorities, use of resources, and continued focus on long-term sustainability, and inherently, affordability. The planning is beginning for the next budget and five-year plan for FY 2022 which will be presented to the Audit Committee in December. As we work through that planning cycle, it provides the opportunity to perform an in-depth review of FY 2021. Communication with team members about the fiscal

restraint measures begins next week. The outcome of those efforts will be reported on a monthly basis to the Audit Committee.

Proposed Action: Receive and file this report.



Monthly Financial Report Binder

April 2020

**Presented to the
Great Lakes Water Authority
Audit Committee on July 17, 2020**

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Key Financial Metrics

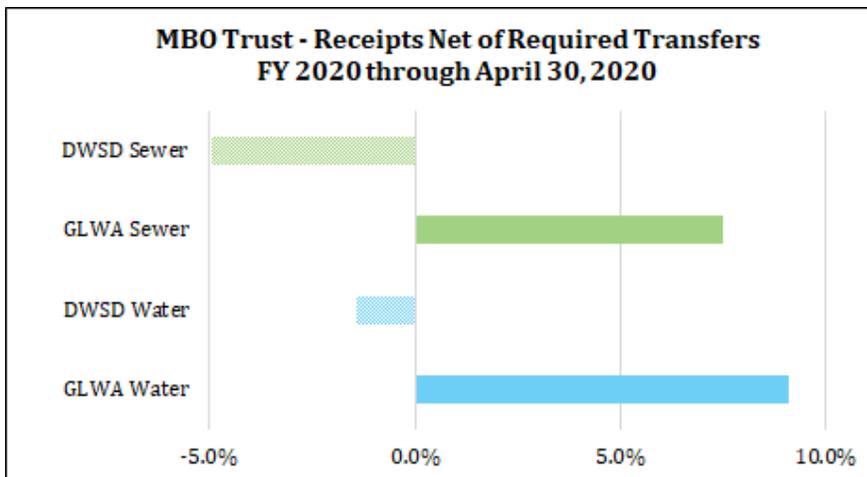
The table below presents a summary of key metrics found in this monthly financial report.

The indicators below focus on a financial risk management lens of preventing a budget shortfall. Green indicates no risk of a budget shortfall; yellow indicates a potential shortfall by year-end; and red indicates a likely budget shortfall by year-end. Each of these variances is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Looking forward, the items in red below resulted in FY 2020 Board-approved budget amendments in June 2020.

As of April 30, 2020				
Metric	FY 2020 Budget	FY 2020 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$263.0	\$257.7	-2%	40
Wholesale Water Billed Usage (mcf)	11,552,000	10,952,000	-5%	
Wholesale Sewer Billed Revenue (\$M)	\$223.2	\$223.2	0%	42
Wholesale Water Operations & Maintenance (\$M)	\$109.6	\$106.8	-3%	4
Wholesale Sewer Operations & Maintenance (\$M)	\$155.9	\$139.8	-10%	
Investment Income (\$M)	\$14.5	\$16.6	14%	31
Water Prorated Capital Spend w/SRA* (\$M)	\$90.0	\$59.0	-34%	25
Sewer Prorated Capital Spend w/SRA* (\$M)	\$101.0	\$60.0	-41%	

*SRA refers to the capital spending ratio assumption which allows capital program delivery realities to align with the financial plan.

Master Bond Ordinance (MBO) Trust Net Receipts



Net cash flow receipts are positive for GLWA Water and Sewer. This means that all legal commitments of the MBO Trust and the lease payment are fully funded to date – and that positive cash flow is available for additional capital program funding in subsequent year(s).

DWSD Water and Sewer net receipt shortfalls are \$1.1 and \$10.7 million respectively for April 2020 attributed to the impact of the COVID-19 pandemic. GLWA and DWSD staff meet regularly to discuss steps to mitigate this shortfall as outlined in the 2018 MOU. Prospective COVID-19 financial impacts are being monitored closely and are addressed in the monthly CFO Report section of the July 17, 2020 Audit Committee binder.

Questions? Contact the Office of the Chief Financial Officer at CFO@glwater.org



The Monthly Budget to Actual Analysis report includes the following three sections.

1. Revenue Requirement Budget Basis Analysis
2. Operations & Maintenance Budget – Major Budget Categories
3. Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

Revenue Requirement Budget Basis Analysis

GLWA's annual revenue requirement represents the basis for calculating Member Partner charges and aligns with the Master Bond Ordinance flow of funds categories. The budget basis is not the same as the full accrual basis used for financial reporting although the revenues and operations and maintenance expense are largely reported on an accrual basis. The primary difference between the revenue requirement budget basis to the financial reporting basis is the treatment of debt service, legacy pension obligations, and lease related activities. The Revenue Requirement Basis is foundational to GLWA's daily operations, financial plan, and of most interest to key stakeholders.

Table 1A – Water Revenue Requirement Budget and **Table 1B – Sewer Revenue Requirement Budget** presents a year-over-year budget to actual performance report. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for April 2020, the pro-rata benchmark is 83.3% (10 of 12 months of the fiscal year).

Items noted below are highlighted in gold on Tables 1A (Water) and 1B (Sewer).

1. **Revenues:** For *both* systems, FY 2020 revenues are slightly below target while the prior year's (FY 2019) revenues are either at or slightly above target. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.
2. **Investment Earnings:** For *both* systems, investment earnings are below target for FY 2020. July 2019 includes the reversal of the market adjustment from FY 2019 of \$1.6 million for the *water* system and \$0.6 million for the *sewer* system. Without these adjustments both systems would be above target for FY 2020. Detailed analysis of investment earnings activity to date can be found in the *Cash & Investment Income* section of this financial report binder.
3. **Other Revenues:** These are one-time and unusual items that do not fit an established revenue category. Both the *water* and *sewer* systems actual amount will vary from budget due to the nature of the items recorded in this category.

4. **Operations & Maintenance Expense:** Actual expenses¹ for *both* systems have variances from the pro-rata benchmark. The *water* system is slightly under the pro-rata benchmark for FY 2020 at 81.2%. The *sewer* system O&M expenses, at 74.7%, is less than the pro-rata benchmark.
5. **Debt Service:** *Both* systems are less than the pro-rata benchmark for FY 2020; the *water* system is at 80.6%; while the *sewer* system is at 81.7%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down. In addition, the monies invested in FY 2019 realized a higher return than projected. This gain was applied to the debt requirements which reduced the payments for July and August.
6. **DWSD Budget Shortfall Pending:** To the extent that the local (DWSD) system experiences budgetary shortfalls as defined by the Water & Sewer Services Agreement, the GLWA budget is impacted.² Steps to proactively detect, and ideally prevent, this shortfall scenario were put into place with the 2018 Memorandum of Understanding (dated June 27, 2018). For FY 2019, DWSD *sewer* had a shortfall through April 30, 2019, of \$12.3 million (FY 2019 ended with a small surplus). To achieve the goal of positive, net cash flows for FY 2019, DWSD reduced its *sewer* system O&M transfers in May and June. The transfers reduced were \$5,676,792 each for a total of \$11,353,584. The DWSD *water* system experienced a \$2.5 million budgetary surplus through April 30, 2019. For FY 2020, the DWSD *water* system has a budgetary shortfall of \$1.1 million and the DWSD *sewer* system has a budgetary shortfall of \$10.7 million through April 30, 2020. GLWA and DWSD staff are meeting regularly to discuss steps to mitigate this shortfall as outlined in the 2018 MOU.
7. **Improvement & Extension (I&E) Fund Transfer Pending:** The contribution to the I&E Fund is for improvements, enlargements, extensions or betterment of the Water System. Transfers to the I&E Fund from net revenues are now completed monthly.
8. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12th basis each month in accordance with the Master Bond Ordinance.
9. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

¹The tables in this analysis reflect actual amounts spent. If this analysis was on a master bond ordinance (MBO) basis, like that used for calculating debt service coverage, O&M “expense” would equal the pro-rata budget because 1/12 of the O&M budget is transferred monthly outside the MBO trust to an O&M bank account.

² As a reminder, the monthly O&M transfer for MBO purposes are at 1/12 of the budget to a DWSD O&M bank account outside the trust. Actual budget may be less than that amount providing an actual positive variance for DWSD.

Table 1A – Water Revenue Requirement Budget (year-over-year) – (\$000)

	FY2019 AMENDED BUDGET	FY 2019 THRU 4/30/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 4/30/2020	Percent Year-to- Date
Water System							
Revenues							
Suburban Wholesale Customer Charges	\$ 307,383	\$ 255,759	83.2%	\$ 309,285	\$ 309,285	\$ 252,214	81.5%
Retail Service Charges	20,181	16,890	83.7%	21,296	21,296	17,746	83.3%
Investment Earnings	9,425	8,190	86.9%	9,084	9,084	6,188	68.1%
Other Revenues	-	21	0.0%	-	-	43	0.0%
Total Revenues	\$ 336,989	\$ 280,860	83.3%	\$ 339,664	\$ 339,664	\$ 276,191	81.3%
Revenue Requirements							
Operations & Maintenance Expense	\$ 121,563	\$ 95,480	78.5%	\$ 131,491	\$ 131,491	\$ 106,789	81.2%
General Retirement System Legacy Pension	6,048	5,040	83.3%	6,048	6,048	5,040	83.3%
Debt Service	131,242	109,176	83.2%	137,558	137,558	110,872	80.6%
General Retirement System Accelerated Pension	6,268	5,224	83.3%	6,268	6,268	5,224	83.3%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	1,673	1,395	83.3%	1,698	1,698	1,415	83.3%
Lease Payment	22,500	18,750	83.3%	22,500	22,500	18,750	83.3%
Operating Reserve Deposit	-	-	0.0%	3,976	3,976	3,313	83.3%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund Transfer Pending	-	(2,479)	0.0%	-	-	1,132	0.0%
Total Revenue Requirements	\$ 336,989	\$ 272,331	80.8%	\$ 339,664	\$ 339,664	\$ 275,129	81.0%
Net Difference		\$ 8,529				\$ 1,063	
<i>Recap of Net Positive Variance</i>							
		<i>Revenue Variance</i>				\$ (6,862)	
		<i>Revenue Requirement Variance</i>				7,925	
		<i>Overall Variance</i>				\$ 1,063	

Table 1B – Sewer Revenue Requirement Budget (year-over-year) – (\$000)

	FY 2019 AMENDED BUDGET	FY 2019 THRU 4/30/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 4/30/2020	Percent Year-to- Date
Sewer System							
Revenues							
Suburban Wholesale Customer Charges	\$ 271,296	\$ 229,128	84.5%	\$ 272,324	\$ 272,324	\$ 223,910	82.2%
Retail Service Charges	181,159	151,890	83.8%	185,807	185,807	154,839	83.3%
Industrial Waste Control Charges	15,001	7,600	50.7%	13,744	13,744	6,836	49.7%
Pollutant Surcharges	-	4,686	0.0%	-	-	5,072	0.0%
Investment Earnings	6,879	8,173	118.8%	8,731	8,731	7,032	80.5%
Other Revenues	-	393	0.0%	-	-	385	0.0%
Total Revenues	\$ 474,335	\$ 401,871	84.7%	\$ 480,605	\$ 480,605	\$ 398,076	82.8%
Revenue Requirements							
Operations & Maintenance Expense	\$ 191,079	\$ 142,646	74.7%	\$ 187,057	\$ 187,057	\$ 139,771	74.7%
General Retirement System Legacy Pension	10,824	9,020	83.3%	10,824	10,824	9,020	83.3%
Debt Service	208,389	172,780	82.9%	215,739	215,739	176,306	81.7%
General Retirement System Accelerated Pension	11,621	9,684	83.3%	11,621	11,621	9,684	83.3%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	2,374	1,978	83.3%	2,403	2,403	2,003	83.3%
Lease Payment	27,500	22,917	83.3%	27,500	27,500	22,917	83.3%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund Transfer Pending	-	12,275	0.0%	-	-	10,749	0.0%
Total Revenue Requirements	\$ 474,335	\$ 390,089	82.2%	\$ 480,605	\$ 480,605	\$ 389,545	81.1%
Net Difference		\$ 11,782				\$ 8,530	
<i>Recap of Net Positive Variance</i>							
		<i>Revenue Variance</i>				\$ (2,429)	
		<i>Revenue Requirement Variance</i>				10,959	
		<i>Overall Variance</i>				\$ 8,530	

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of April 30, 2020, is 83.3% (ten months). When comparing FY 2020 to FY 2019 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, it appears that overall spending is consistent.

In addition to the four major budget categories, an internal charge cost center for employee benefits is shown in the table below. If the number is positive, it indicates that the internal cost allocation rate charges to other cost centers is not sufficient. A negative number indicates a surplus in the internal cost center. A moderate surplus is preferred as it provides a hedge for mid-year benefit program cost adjustments (premiums adjust on January 1 each year) as well as managing risk as the program is partially self-insured.

Table 2 – Operations & Maintenance Budget – Major Budget Categories – (\$000)

Major Budget Categories	FY 2019 AMENDED BUDGET	FY 2019 ACTIVITY THRU 4/30/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 ACTIVITY THRU 4/30/2020	Percent Year-to- Date
Water	\$ 66,596	\$ 58,551	87.9%	\$ 66,021	\$ 66,021	\$ 57,238	86.7%
Sewer	118,319	93,137	78.7%	115,985	115,985	87,823	75.7%
Centralized	99,045	68,396	69.1%	106,914	106,914	77,475	72.5%
Administrative	28,683	20,849	72.7%	29,628	29,628	23,151	78.1%
Employee Benefits	-	(2,807)	0.0%	-	-	873	0.0%
Total O&M Budget	\$ 312,642	\$ 238,126	76.2%	\$ 318,548	\$ 318,548	\$ 246,560	77.4%

Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

The purpose of **Table 3 – Operations & Maintenance Expense Variance Analysis** is to evaluate whether the actual spend rate within a natural cost category is in alignment with the budget. Given the effort to develop an accurate budget, a variance is a red flag of a *potential* budget amendment or misalignment of priorities.

Total: In total, the O&M expenses are at 77.4% which is reasonably within the pro-rata benchmark of 83.3%. This positive variance equates to a dollar amount of \$18.9 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is higher than the pro-rata benchmark; coming in at 85.6% through April 2020.

Utilities: The overall category is on target with the pro-rata benchmark; coming in at 84.7% through April 2020. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is higher than the benchmark, coming in at 84.9%. This increase is primarily due to the pumps being required to run longer than normal as a result of the wet weather that Michigan had been experiencing. In addition, the first three months of GLWA's fiscal year (July, August, and September) are typically peak months for the usage of electricity. June, the last month of GLWA's fiscal year, is typically a peak month as well.
- **Gas** is coming in at 82.5% which is slightly lower than the benchmark of 83.3%. A review of the accounts has confirmed that the usage is variable throughout the year.
- **Sewage service** is higher than the benchmark, coming in at 93.5%. A review of the accounts is being conducted.
- **Water service** is lower than the benchmark, coming in at 81.0%. While usage does vary throughout the year, a review of the accounts has shown that the water service bills are coming in lower for Wastewater Operations. Processing efficiencies using the new chemical building has reduced the use of potable water during wet weather events.

Chemicals: This category is on target with the pro-rata benchmark; coming in at 84.3% through April 2020.

Supplies & Other: This category is lower than the benchmark; coming in at 78.2% through April 2020. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time. A review of this category is being conducted.

Contractual Services: The overall category is on target with the pro-rata benchmark; coming in at 82.1% through April 2020. Variances in this category, when they occur, are not unexpected as the usage of contracts varies throughout the year (projects scheduled to begin during the latter half of the year as well as contracts that are on an as needed basis). Budget amendments will be processed for those projects in which the actual start dates have been delayed from that in which they were budgeted.

Capital Program Allocation: This category is slightly higher than the benchmark; coming in at 85.7% through April 2020. The amount in the Capital Program Allocation account is shown as negative as this is a "contra" account which represents an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget

Shared Services: This category is higher than the benchmark; coming in at 86.8% through April 2020. The shared services reimbursement is comprised of both labor (tracked via BigTime) and expenses, such as annual fees for software licensing. Staff from both GLWA and DWSD have been working together to evaluate and refine the budget for the shared services agreements. Based on these evaluations, adjustments have been made to both the

billings and accounting accruals to more accurately reflect the forecasted activity for FY 2020. Some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount. This accounts for the variance reported between budget and actual through April 2020. It is anticipated that shared services will be on target by year end.

Table 3 – Operations & Maintenance Expense Variance Analysis – (\$000)

Expense Categories Entity-wide	FY 2019	FY 2019	Percent	FY 2019	Percent	FY 2020 AMENDED BUDGET	PRORATED	FY 2020	Percent	PRORATED
	AMENDED BUDGET	ACTIVITY THRU 4/30/2019	Year-to- Date at 4/30/2019	ACTIVITY THRU 6/30/2019	Year-to- Date at 6/30/2019		AMENDED BUDGET (10 MONTHS)	ACTIVITY THRU 4/30/2020	Year-to- Date	BUDGET LESS FY 2020 ACTIVITY
Salaries & Wages	\$ 63,631	\$ 49,580	77.9%	\$ 59,922	82.7%	\$ 64,703	\$ 53,919	\$ 53,332	82.4%	\$ 587
Workforce Development	751	627	83.5%	794	79.0%	1,271	1,060	973	76.6%	86
Overtime	7,612	6,315	83.0%	7,554	83.6%	7,191	5,992	6,263	87.1%	(271)
Employee Benefits	23,656	20,591	87.0%	21,998	93.6%	22,465	18,721	20,089	89.4%	(1,368)
Transition Services	8,572	7,417	86.5%	8,322	89.1%	5,872	4,894	5,342	91.0%	(448)
Employee Benefits Fund	-	(2,807)	0.0%	-	0.0%	-	-	873	0.0%	(873)
<i>Personnel Costs</i>	<u>104,221</u>	<u>81,722</u>	<u>78.4%</u>	<u>98,589</u>	<u>82.9%</u>	<u>101,503</u>	<u>84,586</u>	<u>86,873</u>	<u>85.6%</u>	<u>(2,287)</u>
Electric	39,019	33,122	84.9%	39,103	84.7%	39,549	32,958	33,583	84.9%	(625)
Gas	6,631	5,983	90.2%	6,568	91.1%	5,332	4,443	4,398	82.5%	45
Sewage Service	2,491	1,734	69.6%	2,094	82.8%	1,988	1,656	1,859	93.5%	(202)
Water Service	3,648	3,030	83.1%	3,631	83.5%	3,662	3,052	2,966	81.0%	85
<i>Utilities</i>	<u>51,789</u>	<u>43,870</u>	<u>84.7%</u>	<u>51,396</u>	<u>85.4%</u>	<u>50,531</u>	<u>42,109</u>	<u>42,806</u>	<u>84.7%</u>	<u>(696)</u>
Chemicals	13,385	10,694	79.9%	13,276	80.6%	14,019	11,682	11,822	84.3%	(140)
Supplies & Other	36,226	26,224	72.4%	37,121	70.6%	34,124	28,436	26,677	78.2%	1,760
Contractual Services	100,856	85,810	85.1%	101,873	84.2%	103,975	86,646	85,393	82.1%	1,253
Capital Program Allocation	(3,356)	(2,691)	80.2%	(3,381)	79.6%	(3,122)	(2,601)	(2,676)	85.7%	75
Shared Services	(9,005)	(7,503)	83.3%	(7,139)	105.1%	(4,995)	(4,163)	(4,334)	86.8%	171
Unallocated Reserve	18,524	-	0.0%	-	0.0%	22,513	18,761	-	0.0%	18,761
Total Expenses	<u>\$ 312,642</u>	<u>\$ 238,126</u>	<u>76.2%</u>	<u>\$ 291,734</u>	<u>81.6%</u>	<u>\$ 318,548</u>	<u>\$ 265,456</u>	<u>\$ 246,560</u>	<u>77.4%</u>	<u>\$ 18,896</u>



The Basic Financial Statements report includes the following four tables.

1. Statement of Net Position - All Funds Combined
2. Statement of Revenues, Expenses and Changes in Net Position – All Funds Combined
3. Supplemental Schedule of Operations & Maintenance Expenses -All Funds Combined
4. Supplemental Schedule of Nonoperating Expenses – All Funds Combined

At a macro level GLWA has two primary funds for financial reporting purposes: *Water Fund* and *Sewage Disposal Fund*. These funds represent the combined total of four sub-funds for each system that are used internally to properly account for sources and uses of funds. Those sub-funds for each system are: *Operations & Maintenance Fund, Improvement & Extension Fund, Construction Fund, and Capital Asset Fund*.

The Comparative June 2019 basic financial statements are presented based on final audited figures.

Statement of Net Position – All Funds Combined

Explanatory notes follow the Statement of Net Position shown in Table 1 below.

Table 1 – Statement of Net Position - All Funds Combined
As of April 30, 2020
(\$000)

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2019
Assets				
Cash - unrestricted (a)	\$ 95,544	\$ 115,124	\$ 210,667	\$ 309,016
Cash - restricted (a)	51,655	59,332	110,987	261,999
Investments - unrestricted (a)	281,211	157,394	438,604	274,246
Investments - restricted (a)	130,919	195,169	326,088	185,831
Accounts Receivable	84,543	85,394	169,937	208,914
Due from (to) Other Funds (b)	3,333	5,678	9,010	2,890
Other Assets (c)	595,490	450,005	1,045,495	1,046,518
Cash Held FBO DWSD Advance (d)	-	10,126	10,126	
Capital Assets, net of Depreciation	1,319,642	2,250,906	3,570,548	3,747,784
Land	292,799	123,846	416,645	417,657
Construction Work in Process (e)	201,590	234,149	435,739	368,748
Total assets	3,056,725	3,687,122	6,743,847	6,823,603
Deferred Outflows (f)	86,601	164,534	251,135	273,596
Liabilities				
Liabilities - Short-Term (g)	145,224	179,899	325,123	321,270
Due to (from) Other Funds (b)	-	-	-	2,890
Other Liabilities (h)	2,801	6,436	9,237	9,097
Cash Held FBO DWSD (d)	1,050	-	1,050	2,807
Liabilities - Long-Term (i)	3,031,542	3,732,107	6,763,650	6,853,419
Total liabilities	3,180,617	3,918,443	7,099,060	7,189,483
Deferred Inflows (f)	60,102	57,024	117,126	108,541
Total net position (j)	\$ (97,394)	\$ (123,810)	\$ (221,203)	\$ (200,825)

Totals may be off due to rounding

In general, the Statement of Net Position - Draft reflects a mature organization with no unexpected trends. Cash balances as of April 30, 2020 are lower when compared to June 30, 2019 (highlighted in gold on Table 1). This is because of the high liquidity needs at June 30, 2019 to meet annual debt and interest payments, legacy pension obligation payments, and annual operational requirements whereas more funds are being invested as of April 30, 2020.

An ongoing challenge is the Net Position Deficit. The underlying causes took years to build (largely heavy use of debt to finance capital asset investment versus a strategic blend of debt, state revolving funds, and cash). The effect is reflected in GLWA's high debt interest expense. The GLWA is regularly updating the FY 2030 forecast which helps to provide a pathway to a positive Net Position in the future.

Footnotes to Statement of Net Position

- a. *Cash and Investments* are reported at book value. Investments at June 30, 2019 are reported at market value. The April 30, 2020 values differ from the Cash and Investment section of this Financial Report Binder due to timing of certain items recognized on a cash versus accrual basis.
- b. *Due from (to) Other Funds* and *Due to (from) Other Funds* is shown at the gross level for sub-fund activity.
- c. *Other Assets* primarily consists of the contractual obligation receivable from DWSD related to reimbursement of bonded indebtedness for local system improvements.
- d. *Cash Held FBO Advance (for benefit of) DWSD* and *Cash Held FBO DWSD* represents the net difference between DWSD retail cash received from customers and net financial commitments as outlined in the Master Bond Ordinance.
- e. *Construction Work in Process* represents the beginning balance of CWIP plus any construction spending during the fiscal year. The balance will fluctuate based on the level of spend less any capitalizations or write-offs.
- f. *Deferred Inflow* and *Deferred Outflow* relate to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- g. *Liabilities - Short-term* include accounts payable, retainage payable, and certain accrued liabilities. Some items, such as compensated absences and worker's compensation, are reviewed periodically but are only adjusted on an interim basis if there is a material change.
- h. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- i. *Liabilities - Long-term* include bonds payable, lease payable, and legacy General Retirement System pension liabilities.
- j. *Net Position Deficit* is defined by accounting standards as the residual of all other elements presented in a statement of financial position. It is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. GLWA's net deficit is largely driven by an increase in depreciation expense as a result of the increase in the acquisition valuation approach for recording

capital asset values in the opening Statement of Net Position on January 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.

Statement of Revenues, Expenses and Changes in Net Position - All Funds Combined

This statement, shown in Table 2, is presented in summary format. The accrual basis of revenues and operations and maintenance expense vary from the revenue requirement basis presented in the *Budget to Actual Analysis* and the *Wholesale Billings, Receivables & Collections* sections of the April 2020 Financial Report Binder. Prior year ending balances are provided in the June 30, 2019 column as a reference for comparative purposes. Explanatory notes follow this statement.

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position
- All Funds Combined
For the Ten Months ended April 30, 2020
(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- type Activities	Comparative June 30, 2019
Revenue						
Wholesale customer charges	\$ 257,758	93.5%	\$ 223,910	57.3%	\$ 481,668	\$ 584,172
Local system charges	17,746	6.4%	154,839	39.6%	172,586	201,341
Industrial waste charges	-	0.0%	6,836	1.7%	6,836	9,106
Pollutant surcharges	-	0.0%	5,072	1.3%	5,072	5,933
Other revenues	43	0.0%	385	0.1%	428	528
Total Revenues	\$ 275,547	100%	\$ 391,043	100%	\$ 666,590	\$ 801,079
Operating expenses						
Operations and Maintenance	106,927	38.8%	141,243	36.1%	248,169	293,863
Depreciation	107,503	39.0%	128,402	32.8%	235,905	309,115
Total operating expenses	214,430	77.8%	269,645	69.0%	484,074	602,978
Operating income	61,117	22.2%	121,399	31.0%	182,516	198,101
Total Nonoperating (revenue) expense	81,629	29.6%	121,265	31.0%	202,895	220,170
Increase/(Decrease) in Net Position	(20,512)	-7.4%	133	0.0%	(20,379)	(22,070)
Net position (deficit), beginning of year	<u>(76,882)</u>		<u>(123,943)</u>		<u>(200,825)</u>	<u>(178,755)</u>
Net position (deficit), end of year	<u>\$ (97,394)</u>		<u>\$ (123,810)</u>		<u>\$ (221,203)</u>	<u>\$ (200,825)</u>

Totals may be off due to rounding

Water Fund

- ✓ The decrease in Water Fund Net Position is \$20.5 million.
- ✓ Wholesale water customer charges of \$257.7 million account for 93.5% of Water System revenues.
- ✓ Operating expenses of \$214.4 million represent 77.8% of total operating revenue. Depreciation is the largest operating expense at \$107.5 million or 50.1% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$61.1 million or 22.2% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$74.3 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

Sewage Disposal Fund

- ✓ The increase in the Sewage Disposal Fund Net Position is \$133 thousand.
- ✓ Wholesale customer charges of \$223.9 million account for 57.3% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$154.8 million account for 39.6% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$269.6 million represent 69.0% of total operating revenue. Depreciation is the largest operating expense at \$128.4 million or 47.6% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$121.4 million or 31.0% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$99.1 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

Supplemental Schedule of Operations & Maintenance Expenses - All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown below in Table 3. This accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the April 2020 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
- All Funds Combined
For the Ten Months ended April 30, 2020
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- type Activities	Percent of Total
Operating expenses						
Personnel						
Salaries & Wages	19,867	18.6%	39,781	28.2%	59,647	24.0%
Overtime	3,668	3.4%	2,595	1.8%	6,263	2.5%
Benefits	13,716	12.8%	7,246	5.1%	20,962	8.4%
Total Personnel	\$ 37,251	34.8%	\$ 49,621	35.1%	\$ 86,873	35.0%
Utilities						
Electric	21,306	19.9%	12,276	8.7%	33,583	13.5%
Gas	891	0.8%	3,507	2.5%	4,398	1.8%
Sewage	439	0.4%	1,419	1.0%	1,859	0.7%
Water	1	0.0%	2,965	2.1%	2,966	1.2%
Total Utilities	\$ 22,638	21.2%	\$ 20,168	14.3%	\$ 42,806	17.2%
Chemicals	4,583	4.3%	7,239	5.1%	11,822	4.8%
Supplies and other	9,594	9.0%	17,083	12.1%	26,677	10.7%
Contractual services	38,634	36.1%	48,368	34.2%	87,002	35.1%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(1,716)	-1.6%	(960)	-0.7%	(2,676)	-1.1%
Shared services allocation	(4,058)	-3.8%	(276)	-0.2%	(4,334)	-1.7%
Operations and Maintenance Expenses	\$ 106,927	100.0%	\$ 141,243	100.0%	\$ 248,169	100.0%

Totals may be off due to rounding.

- ✓ Core expenses for water and sewage disposal systems are utilities (17.2% of total O&M expenses) and chemicals (4.8%).
- ✓ Personnel costs (35.0% of total O&M expenses) include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (35.1%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$6.2 million);
 - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$12.9 million); and
 - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, field, planning and other services.

Supplemental Schedule of Nonoperating Expenses – All Funds Combined

The Supplemental Schedule of Nonoperating Expenses – All Funds Combined is shown in Table 4. Explanatory notes follow this schedule.

**Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined
For the Ten Months ended April 30, 2020
(\$000)**

	<u>Water</u>	<u>Sewage Disposal</u>	<u>Total Business-type Activities</u>	<u>Comparative June 30, 2019</u>
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (18,629)	\$ (15,159)	\$ (33,788)	\$ (40,673)
Interest income DWSD Shortfall	-	(1,128)	(1,128)	(1,104)
Investment earnings	(7,348)	(6,940)	(14,288)	(26,518)
Other nonoperating revenue	(1,659)	(10)	(1,669)	(420)
Interest expense				-
Bonded debt	92,929	114,285	207,214	250,966
Lease obligation	14,567	17,805	32,372	39,264
Other obligations	4,033	1,311	5,343	6,368
Total interest expense	<u>111,529</u>	<u>133,400</u>	<u>244,930</u>	<u>296,597</u>
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	6,527
Capital Contribution	-	(5,960)	(5,960)	-
Amortization, issuance costs, debt	(13,466)	1,559	(11,907)	(3,995)
Amortization, raw water rights	2,972	-	2,972	3,567
(Gain) loss on disposal of capital assets	(1)	1,188	1,187	(81)
Loss on impairment of capital assets	-	-	-	1,025
Water Residential Assistance Program	1,010	1,392	2,402	2,024
Legacy pension expense	7,221	12,923	20,144	(16,778)
Total Nonoperating (Revenue)/Expense	<u>\$ 81,629</u>	<u>\$ 121,265</u>	<u>\$ 202,895</u>	<u>\$ 220,170</u>

Totals may be off due to rounding.

- ✓ Interest income on contractual obligation relates to the portion of the total GLWA debt obligation attributable to DWSD. This interest income offsets the total debt interest expense paid by GLWA on behalf of both entities monthly.
- ✓ Interest income DWSD shortfall represents interest from a budgetary shortfall loan from fiscal years 2016, 2017 and 2018 and is paid in accordance with the 2018 Memorandum of Understanding (MOU).
- ✓ Investment earnings in this report are reflected at book value. Any differences between the Basic Financial report and Cash and Investment section of this Financial Report binder are due to accrued interest and reversal of the market adjustment from

FY 2019. FY 2019 market value adjustments for Water and Sewer totaled of \$1.6 million and \$600 thousand, respectively.

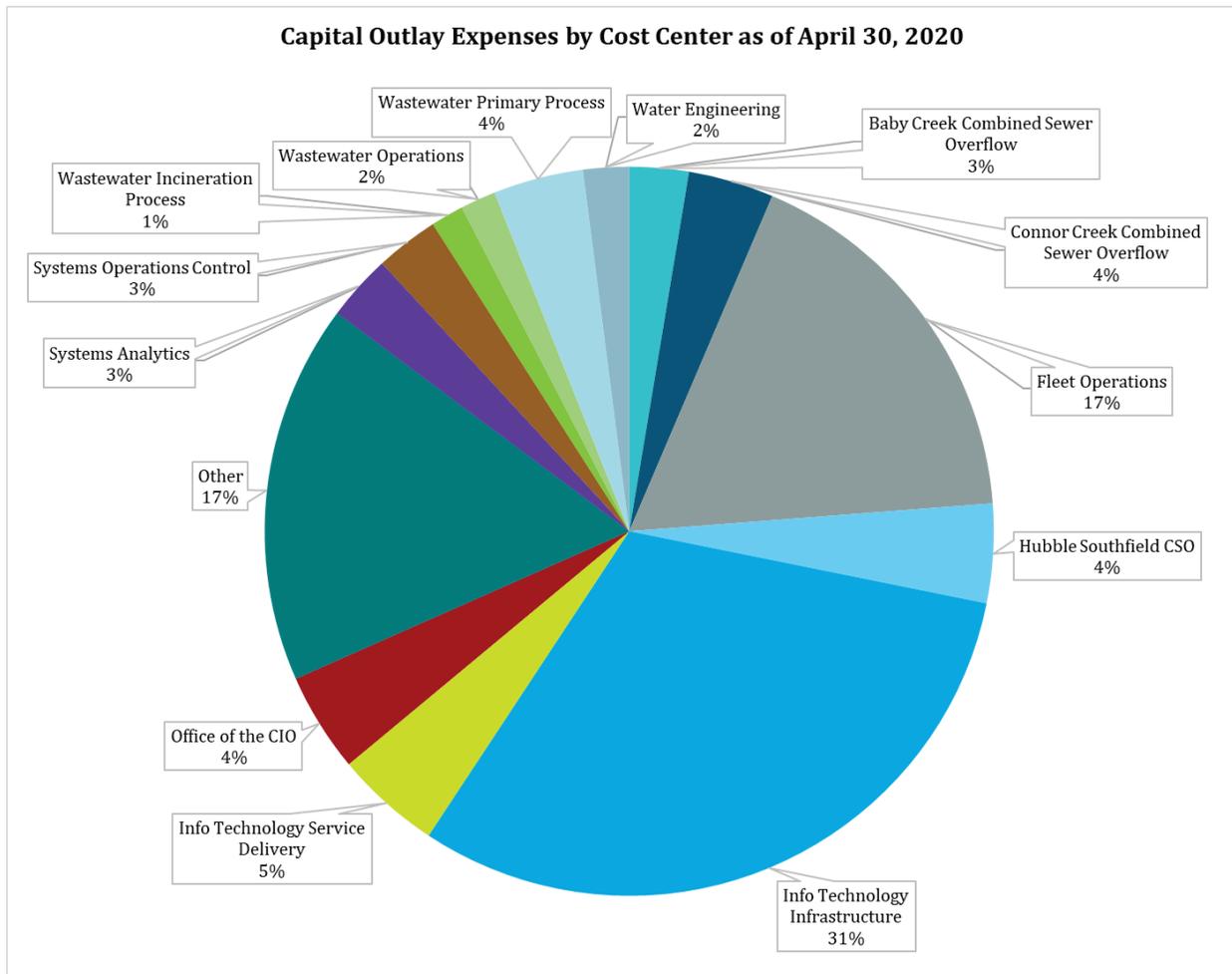
- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
 - Bonded debt;
 - Lease obligation for the regional assets from the City of Detroit; and
 - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.
- ✓ Legacy Pension expense is calculated by GLWA annually based upon information provided by the City of Detroit General Retirement System (GRS). The expense varies each year based upon benefits paid, investment earnings and changes in actuarial assumptions. The FY 2020 entry was made in April based on required reports GLWA recently received from GRS. While typically an expense, changes in actuarial assumptions caused this item to be reflected as income for the year ending June 30, 2019.
FY 2019 Item of note:
- ✓ Sewer Other Non-operating expense includes the 2018 MOU Item 8a from June 27, 2018 for a final sewer lookback adjustment for DWSD of \$6.5 million.

Financial Activity Charts

Chart 1 – Capital Outlay – Water and Sewer System Combined

Capital Outlay represents purchases of equipment, software, and small facility improvement projects. It *excludes* any capital investment which is included in the monthly construction work-in-progress report related to the Capital Improvement Program. Some items span several months so the entire cost may not have been incurred yet. In addition, items are capitalized only if they meet GLWA’s capitalization policy.

Through April 30, 2020, total capital outlay spend is \$12.4 million. Following this chart is a sample list of projects and purchases from the total spend of \$12.4 million:



Note: Due to rounding totals may not equal 100%.

Water Operations: Water Works Park South Garage renovation (\$171k); actuators (\$108k); power monitor (\$90k); submersible pressure sensor (\$83k); various Water

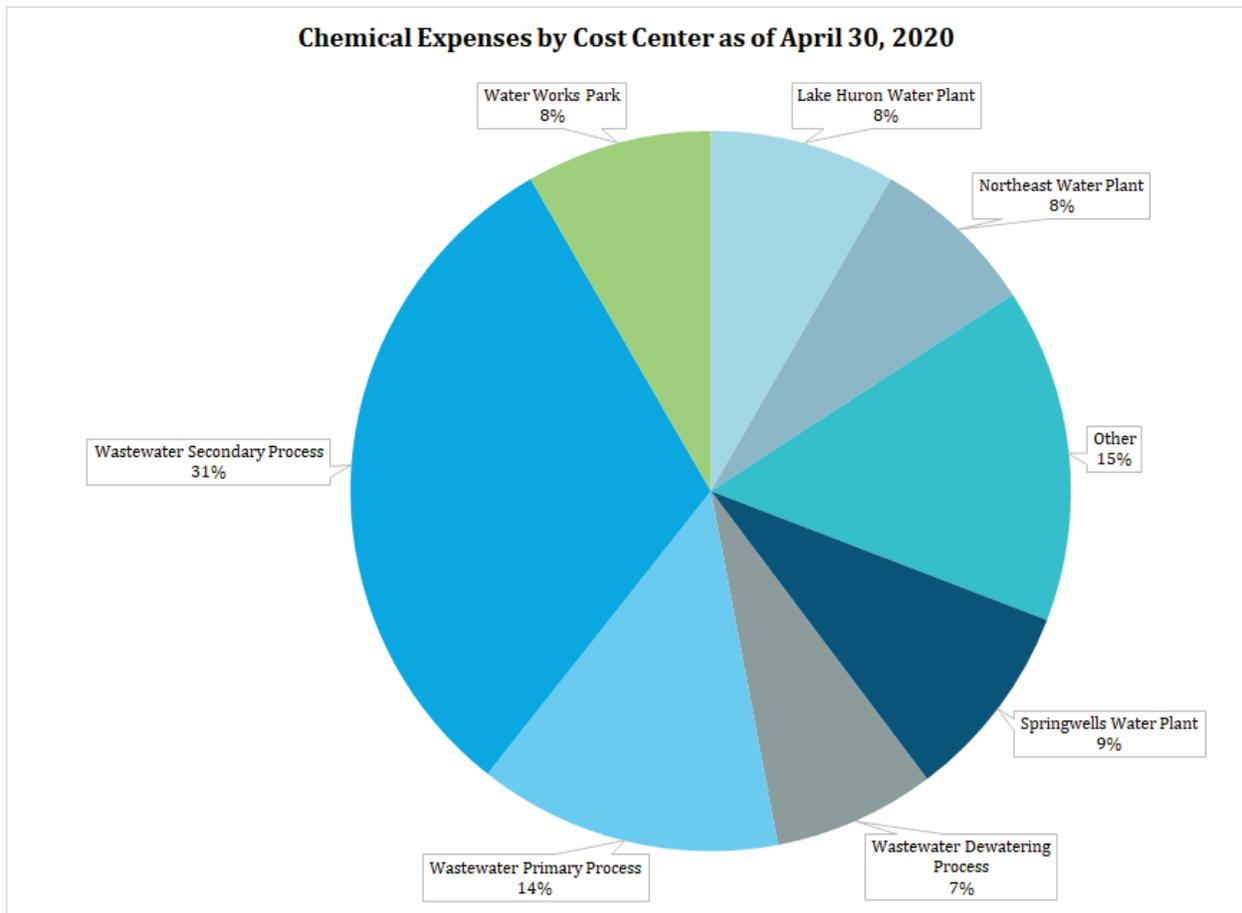
location building improvements (\$80k); low lift elevator repair (\$59k) and skid steer loader (\$44k).

Wastewater Operations: Accusonic flow meters (\$540k); pumps at various CSO's (\$267k); pinion gears (\$254k); roll off truck at Water Resource Recovery Facility (WRRF) (\$188k); chemical induction unit (\$179k); Transformer C structure at WRRF (\$143k); boilers (\$131k); chemical feed pump (\$96k); Flygt pump (\$78k); water heater for Scum building (\$76k); and skid steer loader (\$44k).

Centralized & Administrative Facilities: Low voltage wiring services (\$2.9m); trucks and vehicles (\$2.0m); IT & 17th floor renovation and furniture (\$636k); IT software (\$464k); IT computers (\$274k); Sewer meter support (\$211k); IT Hardware/software (\$187k); transmitters (\$118k); multimeter (\$91k); IT firewalls (\$82k); supplies (\$75k); and IT premium hardware support (\$74k) and vehicle up-lifting (\$56k); 'other' category expenses include: bathroom renovation (\$83k) for the Logistics and Materials team.

Chart 2 – Chemical Spend – Water and Sewer System Combined

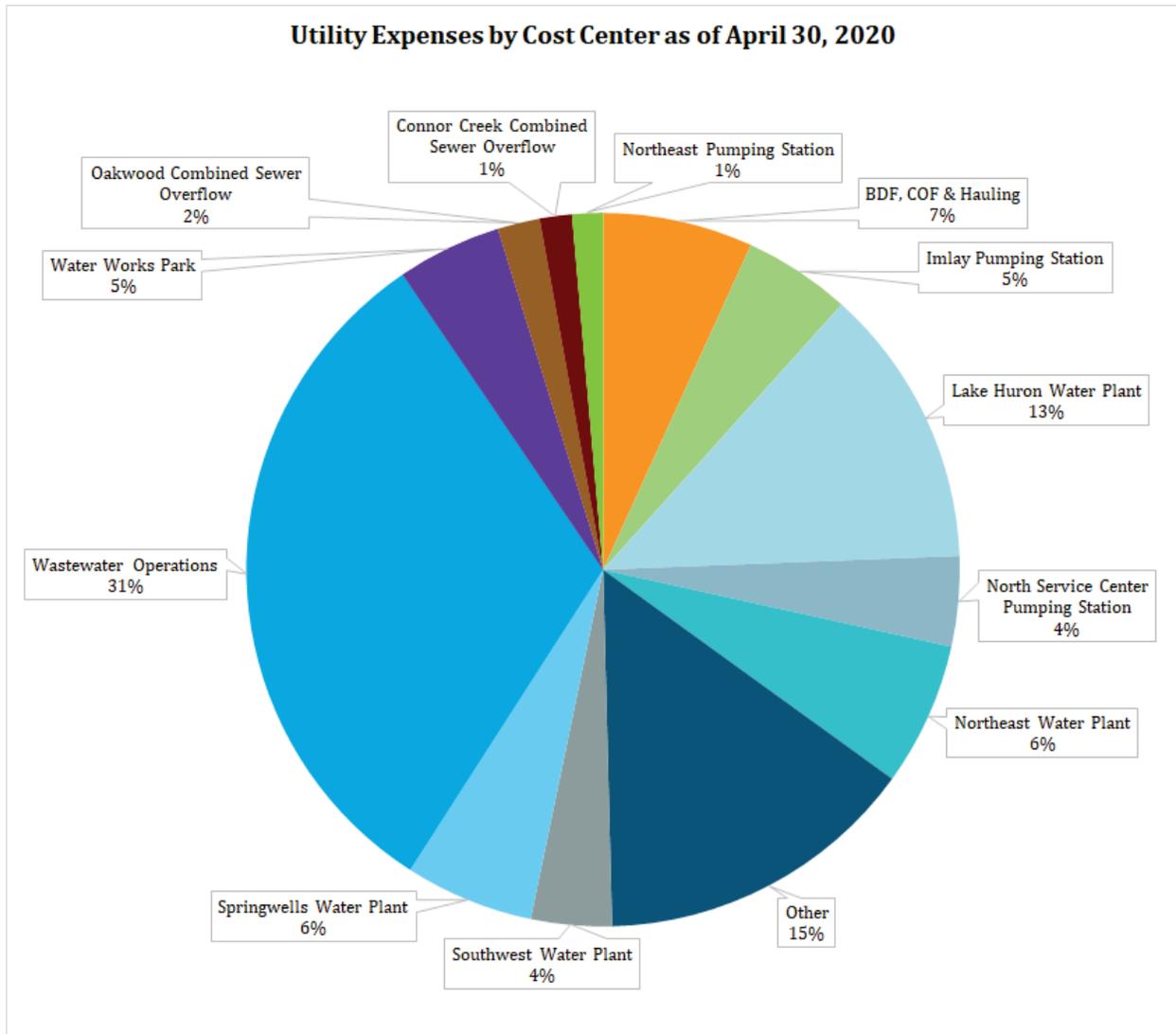
Chemical spend is \$11.8 million through April 30, 2020. The allocation is shown in the chart below and remains consistent with prior periods.



Note: "Other" includes Combined Sewer Overflow (CSO), portions of the Wastewater process and two departments from Water. Due to rounding totals may not equal 100%.

Chart 3 – Utility Spend – Water and Sewer System Combined

Utility spend is \$42.8 million through April 30, 2020. The allocation is shown in the chart below and consistent with prior periods.



Note: Due to rounding totals may not equal 100%.



Financial Operations KPI

This key performance indicator shown in **Chart 1 - Bank Reconciliation Completion Status** below provides a measure of the progress made in the month-end close process which includes bank reconciliations with a completed status at month end. Through April 30, 2020 all reconciliations are up-to-date and complete.

There were no changes in accounts from March 2020.

Chart 1 - Bank Reconciliation Completion Status

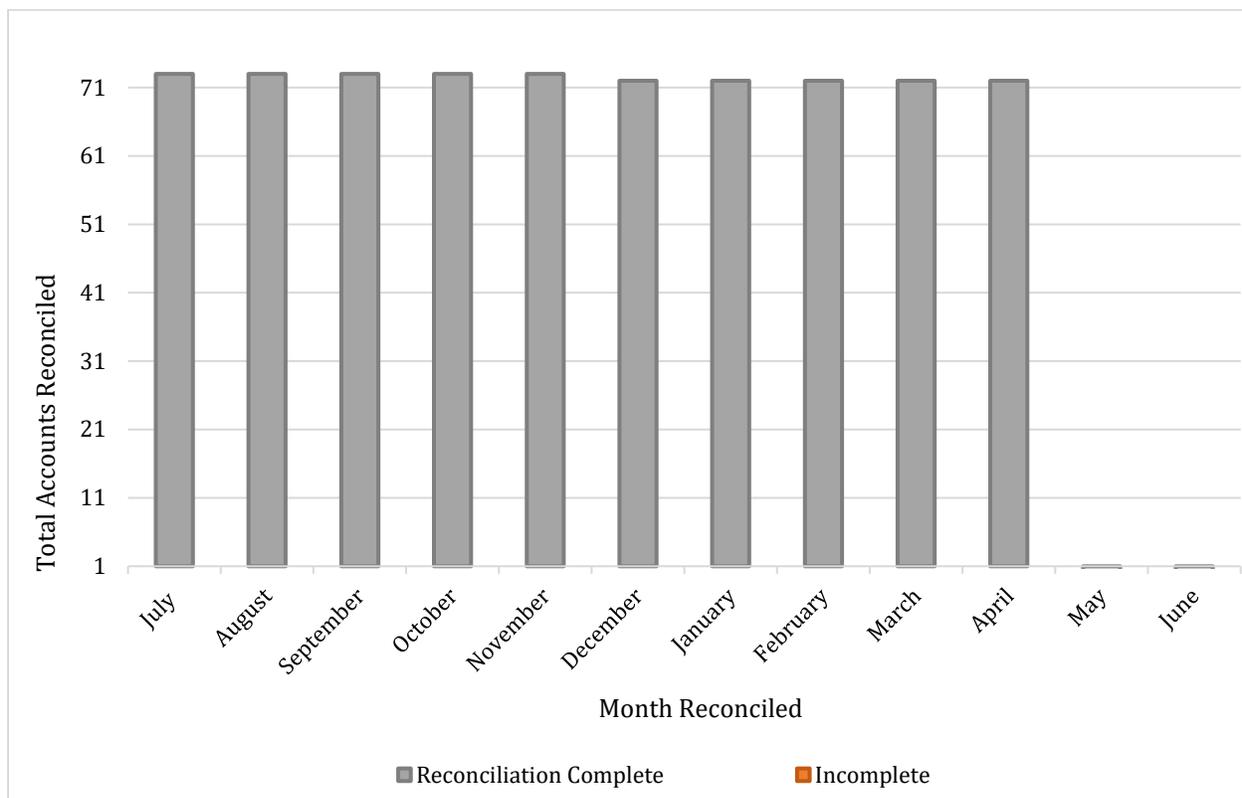


Table 1 - Fiscal Year 2020 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2019	71
New GL Cash accounts	2
Inactivated GL Cash accounts	<u>(1)</u>
Total GL Cash accounts as of April 30, 2020	<u><u>72</u></u>



The monthly Budget to Financial Statements Crosswalk includes the following.

1. Crosswalk Budget Basis to Financial Reporting Basis
2. Explanatory Notes for Crosswalk

Purpose for Crosswalk: The Great Lakes Water Authority establishes a “Revenue Requirements” budget for the purposes of establishing charges for services. The financial report is prepared in accordance with Generally Accepted Accounting Policies for enterprise funds of a local government. Because the budget and the financial statements are prepared using different basis of accounting, the crosswalk reconciles the “Net Revenue Requirement Basis” from the Budget to Actual Analysis (Table 1A and Table 1B) to the “Increase/(Decrease) in Net Position” in Table 2 of the Basic Financial Statements in the monthly Financial Report.

The Authority has a Water Master Bond Ordinance and a Sewer Master Bond Ordinance (MBO). The Ordinances provide additional security for payment of the bonds. All revenues of the system are deposited into Revenue Receipts Funds which are held in trust by a trustee. The cash is moved to multiple bank accounts monthly based on 1/12th of the budget as defined in the MBO (“the flow of funds”) for all revenue requirements except for the Debt Service monthly transfer. The Debt Service monthly requirement is computed by the trustee, U.S. Bank. The cash transfer for debt is net of investment earnings that remain in the debt service accounts to be used for debt service.

The budget is prepared on a modified cash basis. The revenue requirements are determined based upon the cash needed to meet the financial commitments as required by the Master Bond Ordinance.

- Operation & Maintenance (O&M) expenses based on an accrual basis
- O&M Legacy Pension Allocation (includes administrative fee) and Accelerated Legacy Pension Allocation (includes B&C notes obligation) based on a cash basis
- Debt Service Allocation based on a cash set aside basis to provide the cash for the debt payments on the due dates
- Lease payments based on a cash basis
- Water Residential Assistance Program based on a percentage of budgeted revenue
- Regional System Improvement & Extension Fund Allocation on a cash basis

Budget: In Table 1A and Table 1B of the Budget to Actual Analysis the ‘Revenues’ section is the accrual basis revenues that are available to meet the ‘Revenue Requirements’. The ‘Revenue Requirements’ section budget column indicates the annual cash transfers to be made.

Financial Reporting: The Authority's financial statements are prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Authority maintains its records on the accrual basis of accounting to conform to GAAP. Revenues from operations, investments and other sources are recorded when earned. Expenses (including depreciation) are recorded when incurred.

Table 1 – Crosswalk Budget Basis to Financial Reporting Basis provides a reconciliation of the “Net Difference” in Table 1A and Table 1B in the Budget to Actual Analysis report to the “Increase/(Decrease) in Net Position” in Table 2 of the Basic Financial Statements in this monthly Financial Report. Explanatory notes follow the Crosswalk shown in Table 1 below.

Table 1 – Crosswalk Budget Basis to Financial Reporting Basis (\$000)
For the Ten Months Ended April 30, 2020

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 1,062	\$ 8,531	\$ 9,593
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	9,534	17,063	26,597
Prior year pension contribution accounted for in current year (d)	(7,221)	(12,923)	(20,144)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	36,572	77,180	113,752
Accelerated pension B&C notes obligation portion (g)	147	330	477
Lease payment (h)	4,183	5,112	9,295
WRAP (i)	405	611	1,016
DWSD short term allocation (j)	1,132	10,749	11,881
Operating Reserve Deposit (j)	3,313	-	3,313
Improvement & Extension Fund (j)	22,456	17,625	40,081
Nonbudgeted financial reporting categories adjustments			
Depreciation (k)	(107,503)	(128,402)	(235,905)
Amortization (k)	10,494	(1,559)	8,935
Other nonoperating income (k)	1,660	10	1,670
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	1	(1,188)	(1,187)
Raw water rights (l)	2,094	-	2,094
Investment earnings construction fund (m)	1,159	1,034	2,193
Capital contribution (n)	-	5,960	5,960
Net Position Increase/(Decrease) per Financial Statements (b)	\$ (20,512)	\$ 133	\$ (20,379)

Table 2- Explanatory Notes for Crosswalk

- (a) Source: Budget to Actual Table 1A and Table 1B in Monthly Financial Binder
- (b) Source: Basic Financial Statements Table 2 in Monthly Financial Binder
- (c) Current year pension payments are an expense for budget purposes but not for financial reporting purposes.

- (d) Prior year pension payments are accounted for in the current year financial statements.
- (e) The administrative fee is part of the O&M Legacy Pension shown as an expense for budget purposes. For financial reporting purposes part of the administrative fee is considered prepaid based on the prior year General Retirement System audit information and therefore not an expense for the current year financial reporting. The prepaid portion is adjusted in June each year.
- (f) Debt service (principal and interest payments) are shown as an expense for budget purposes. Most of the adjustment relates to principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense variances on state revolving fund debt due to the timing of payment draws. The cash set aside basis for interest expense generally is the same as the accrual basis for financial reporting.
- (g) The accelerated pension payment includes the obligation payable for the B&C notes. The pension portion is included in item (c) above. This adjustment relates to the B&C note obligation payments. The principal and interest cash basis payments are treated as an expense for budget purposes. The principal portion is not an expense for financial reporting purposes. For financial reporting purposes interest is expensed on an accrual basis which is different from the cash basis.
- (h) The lease payment is included as an expense for budget and includes both principal and interest payments. Most of the adjustment relates to the principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense which is recorded on an accrual basis for financial reporting which is different from the cash basis.
- (i) WRAP is shown as an expense for budget purposes. For financial reporting purposes the expense is not recognized until the funds have been transferred to the WRAP administrator. The adjustment shown is the amount of current year transfers that have not been transferred to the WRAP administrator. Note that there are funds from the prior year that have not been transferred to the WRAP administrator.
- (j) The DWSD short term allocation, Operating Reserve Deposit, and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes. For FY 2020, the Sewer Improvement and Extension Fund adjustments also reflect \$1.5 million in Sewer Improvement and Extension Fund expenses relating to repairs paid for through the Sewer Improvement and Extension Fund. The Water Improvement and Extension Fund

also reflects \$138 thousand in Water Improvement and Extension expenses relating to repairs paid for through the Water Improvement and Extension Fund. These are consolidated expenses for financial reporting purposes but are not reflected in the current Operations and Maintenance budget expenses.

- (k) Certain nonoperating income and expenses are reported in financial statements only.
- (l) The water service contract with Flint includes a license for raw water rights which has been recorded as an asset and liability by the Authority. The contract provides a credit to Flint as Flint satisfies its monthly bond payment obligation to KWA. This KWA credit is treated as a noncash payment of principal and interest on the liability recorded for the raw water rights. For budget, wholesale customer charges are net of the anticipated KWA credits to Flint as that is the cash that will be received and available to meet the budgeted revenue requirements. For financial reporting basis the Flint wholesale charges are recorded at the total amount billed. When the KWA credit is issued, the receivable from Flint is reduced and the principal and interest payments on the liability for the raw water rights are recorded as a noncash transaction. Most of the adjustment shown relates to the principal reduction made for the credits applied which are not an expense for financial reporting basis.
- (m) Investment earnings from the construction fund are not shown as revenue in the budget and are shown as revenue in the financial statements. Construction fund investment earnings are excluded from the definition of revenue for budget purposes as they are used for construction costs and are not used to meet the revenue requirements in the budget.
- (n) The capital contribution is a one-time payment made to GLWA by the Oakland Macomb Interceptor Drainage District (OMIDD) as part of a contract amendment to the OMIDD Wastewater Disposal Services Contract.



The Monthly Construction Work in Progress (CWIP) Summary includes the following.

1. Water System Construction Work in Progress costs incurred to date
2. Sewer System Construction Work in Progress costs incurred to date

Construction Work in Progress

Great Lakes Water Authority (GLWA) capital improvement projects generally span two or more years due to size and complexity. Therefore, the GLWA Board of Directors adopts a five-year capital improvement plan (CIP). The CIP is a five-year, rolling plan which is updated annually and formally adopted by the GLWA Board of Directors. In addition, the Board of Directors adopts a capital spending ratio assumption (SRA) which allows the realities of capital program delivery to align with the financial plan. The SRA is an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA's control and/or delayed for nonbudgetary reasons. Those limitations, whether financial or non-financial, necessitate the SRA for budgetary purposes, despite the prioritization established.

This report presents quarterly and monthly CWIP spending against the prorated CIP in total and the CIP adjusted for the SRA. The prorated CIP is calculated by dividing the total fiscal year 2020 board-approved CIP plan by twelve equal months. It should be noted that for operational purposes, GLWA utilizes Primavera P6 for refined monthly projections for cash management and project management.

Chart 1 – Water System Construction in Work in Progress Spend

As of April 2020, the Water system incurred over \$59 million of construction costs to date. This is 49% of the fiscal year 2020 prorated total CIP through April and 66% of the financial plan which is labeled as the FY 2020 CIP w/SRA in the chart below. It is anticipated that the gap will be reduced by the end of the fiscal year.

Chart 2 – Sewer System Construction in Work in Progress Spend

As of April 2020, the Sewer system incurred over \$60 million of construction costs to date. This is 44% of the fiscal year 2020 prorated total CIP through April and 59% of the financial plan which is labeled as the FY 2020 CIP w/SRA in the chart below. It is anticipated that the gap will be reduced by the end of the fiscal year.

Chart 1 – Water System Construction Work in Progress Spend

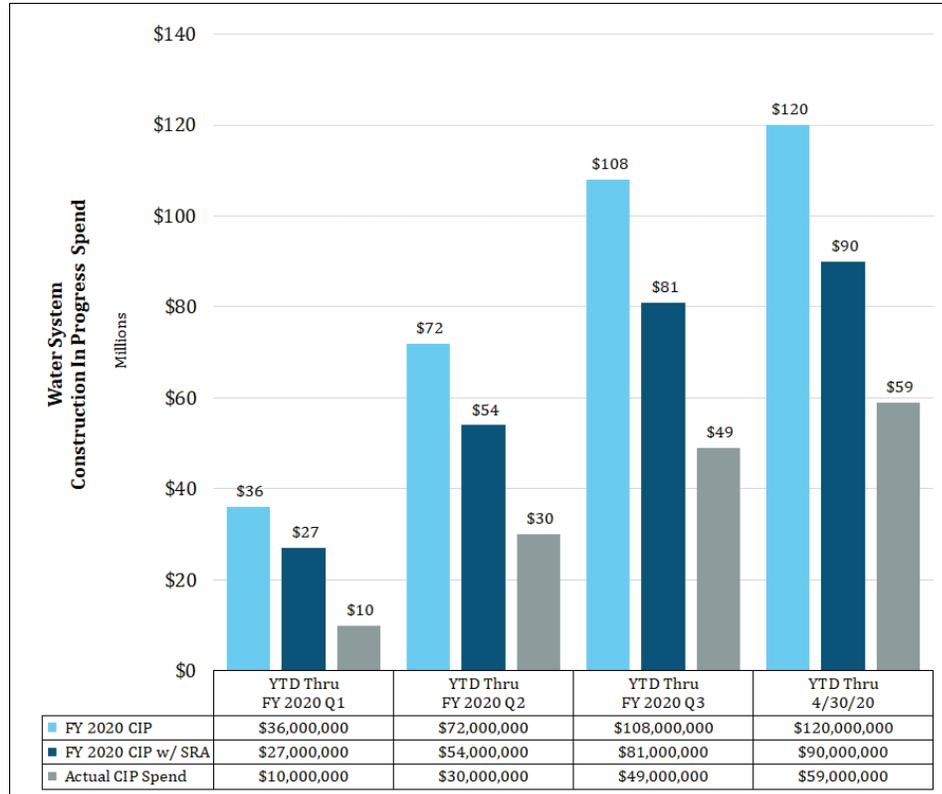
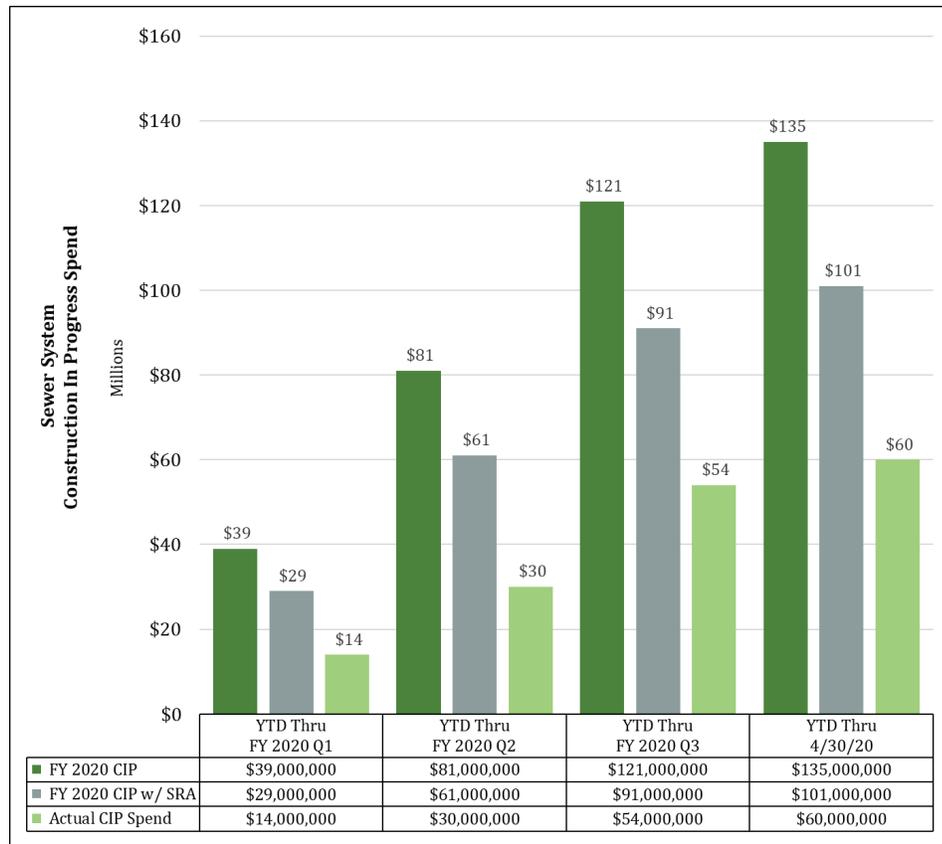


Chart 2 – Sewer System Construction Work in Progress Spend





This report includes the following.

1. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by GLWA
2. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by DWSD

MBO Transfers to Accounts Held by GLWA

GLWA Transfers: The Treasury team completes required MBO transfers on the first business day of each month. These transfers are completed in accordance with the Great Lakes Water Authority (GLWA) and Detroit Water & Sewerage Department (DWSD) budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually.

Monthly transfers for Operations & Maintenance (O&M), Pension, and Water Residential Assistance Program (WRAP) are one-twelfth of the annual, budgeted amount. Budget stabilization should not require additional funding due to new, baseline funding levels established as part of the June 2018 Memorandum of Understanding but is included to reflect historical activity. Transfers to the Extraordinary Repair & Replacement (ER&R) fund are completed annually based on budget and year-end fund status.

Table 1 - GLWA FY 2020 Water MBO Transfers reflects the required transfers for FY 2020 completed through April 1, 2020. MBO transfers for water totaling \$125.2 million have been transferred to GLWA accounts.

Table 2 - GLWA FY 2020 Sewer MBO Transfers reflects the required transfers for FY 2020 completed through April 1, 2020. MBO transfers for sewer totaling \$179.5 million have been transferred to GLWA accounts.

Table 3 - GLWA MBO Transfer History reflects historical transfers for FY 2016 through FY 2020 to date.

Table 1 – GLWA FY 2020 Water MBO Transfers

WATER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
FY 2020							
July 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
August 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
September 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
October 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
November 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
December 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
January 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
February 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
March 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
April 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
Total FY 2020	\$109,575,420	\$5,040,000	\$8,913,080	\$1,650,670	\$0	\$0	\$125,179,170

Table 2 – GLWA FY 2020 Sewer MBO Transfers

SEWER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
FY 2020							
July 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
August 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
September 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
October 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
November 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
December 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
January 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
February 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
March 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
April 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
Total FY 2020	\$155,881,000	\$9,020,000	\$12,239,590	\$2,406,080	\$0	\$0	\$179,546,670

Table 3 – GLWA MBO Transfer History

GLWA MBO Transfer History							
WATER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
Total FY 2019	121,562,604	6,048,000	10,695,696	2,061,000	-	-	140,367,300
Total FY 2020 (10 months)	109,575,420	5,040,000	8,913,080	1,650,670	-	-	125,179,170
Life to Date	\$535,632,228	\$29,210,300	\$50,898,872	\$9,931,570	\$2,686,900	\$606,000	\$628,965,870
SEWER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
Total FY 2016	\$100,865,600	\$10,838,400	\$14,025,800	\$2,523,400	\$5,591,700	\$779,600	\$134,624,500
Total FY 2017	175,858,800	10,838,400	14,026,800	2,654,400	2,654,400	-	206,032,800
Total FY 2018	191,079,396	10,824,000	14,687,496	2,760,804	-	-	219,351,696
Total FY 2019	191,079,396	10,824,000	14,687,496	2,870,992	-	-	219,461,884
Total FY 2020 (10 months)	155,881,000	9,020,000	12,239,590	2,406,080	-	-	179,546,670
Life to Date	\$814,764,192	\$52,344,800	\$69,667,182	\$13,215,676	\$8,246,100	\$779,600	\$959,017,550

MBO Required and Lease Payment Transfers to DWSD

DWSD Transfers: The GLWA Treasury team completes the required MBO transfers on the first business day of each month. These transfers are completed in accordance with the GLWA and DWSD budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually. Transfers are coordinated with other areas of GLWA Financial Services in advance of the first business day of each month. GLWA Treasury sends confirmation of transfers made to DWSD Treasury.

Monthly transfers for O&M and O&M Pension are one-twelfth of the annual, budgeted amount. The annual lease payment, as stated in the Water & Sewer Lease Agreements, is \$22,500,000 for Water and \$27,500,000 for Sewer. The monthly lease transfer is one-twelfth of the amount as stated in the Lease agreements unless otherwise designated by DWSD. Per Section 3.5 of the Lease, the Lease payment may be used for (a) bond principal and interest for Local System Improvements, (b) bond principal and interest for the City's share of common-to-all System Improvements, and (c) Local System improvements.

Table 4 - DWSD FY 2020 Water MBO Transfers reflects the required transfers for FY 2020 completed through April 1, 2020. MBO transfers for Water totaling \$48.2 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$3,548,000 of the lease payment be utilized to offset a portion of debt service of which one-twelfth is applied monthly.

Table 5 - DWSD FY 2020 Sewer MBO Transfers reflects the required transfers for FY 2020 completed through April 1, 2020. MBO transfers for Sewer totaling \$73.9 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$5,032,700 of the lease payment be utilized to offset a portion of debt service of which one-twelfth is applied monthly. DWSD has also requested that for December 2019 - June 2020, \$1 million be withheld each month from the Operations & Maintenance transfer to address FY 2020 projected shortfall in retail revenue collections. Lastly, Operations & Maintenance transfers of \$2.6 million in December 2019 and \$4.5 million in February 2020 have been returned from DWSD to address the FY 2020 projected shortfall. This return of funds adjusts the total MBO transfers through April 1, 2020 to \$66.8 million.

Table 6 - DWSD MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2020 to date.

Table 4 – DWSD FY 2020 Water MBO Transfers

WATER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Water</u>
FY 2020				
July 2019	2,888,533	356,000	1,579,333	4,823,866
August 2019	2,888,533	356,000	1,579,333	4,823,866
September 2019	2,888,533	356,000	1,579,333	4,823,866
October 2019	2,888,533	356,000	1,579,333	4,823,866
November 2019	2,888,533	356,000	1,579,333	4,823,866
December 2019	2,888,533	356,000	1,579,333	4,823,866
January 2020	2,888,533	356,000	1,579,333	4,823,866
February 2020	2,888,533	356,000	1,579,333	4,823,866
March 2020	2,888,533	356,000	1,579,333	4,823,866
April 2020	2,888,533	356,000	1,579,333	4,823,866
Total FY 2020	\$28,885,330	\$3,560,000	\$15,793,330	\$48,238,660

Table 5 – DWSD FY 2020 Sewer MBO Transfers

SEWER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Sewer</u>
FY 2020				
July 2019	5,778,625	238,000	1,872,275	7,888,900
August 2019	5,778,625	238,000	1,872,275	7,888,900
September 2019	5,778,625	238,000	1,872,275	7,888,900
October 2019	5,778,625	238,000	1,872,275	7,888,900
November 2019	5,778,625	238,000	1,872,275	7,888,900
December 2019	4,778,625	238,000	1,872,275	6,888,900
January 2020	4,778,625	238,000	1,872,275	6,888,900
February 2020	4,778,625	238,000	1,872,275	6,888,900
March 2020	4,778,625	238,000	1,872,275	6,888,900
April 2020	4,778,625	238,000	1,872,275	6,888,900
Total MBO Transfers	52,786,250	2,380,000	18,722,750	73,889,000
<u>Adjustment to MBO Transfers</u>				
December 2019	(2,600,000)	-	-	(2,600,000)
February 2020	(4,500,000)	-	-	(4,500,000)
Total FY 2020	45,686,250	\$2,380,000	\$18,722,750	66,789,000

Table 6 – DWSD MBO and Lease Payment Transfer History

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
FY 2016 *				
MBO/Lease Requirement	\$26,185,600	\$4,262,700	\$22,500,000	\$52,948,300
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	50,621,400
FY 2017				
MBO/Lease Requirement	33,596,400	4,262,400	22,500,000	60,358,800
Offset to Debt Service	-	-	-	-
Net MBO Transfer	33,596,400	4,262,400	22,500,000	60,358,800
FY 2018				
MBO/Lease Requirement	35,059,704	4,272,000	22,500,000	61,831,704
Offset to Debt Service	-	-	(1,875,000)	(1,875,000)
Net MBO Transfer	35,059,704	4,272,000	20,625,000	59,956,704
FY 2019				
MBO/Lease Requirement	35,484,300	4,272,000	22,500,000	62,256,300
Offset to Debt Service	-	-	(3,972,200)	(3,972,200)
Net MBO Transfer	35,484,300	4,272,000	18,527,800	58,284,100
FY 2020 (10 months)				
MBO/Lease Requirement	28,885,330	3,560,000	18,750,000	51,195,330
Offset to Debt Service	-	-	(2,956,670)	(2,956,670)
Net MBO Transfer	28,885,330	3,560,000	15,793,330	48,238,660
Life-to-Date				
MBO/Lease Requirement	159,211,334	20,629,100	108,750,000	288,590,434
Offset to Debt Service	-	-	(11,130,770)	(11,130,770)
Total Water	\$159,211,334	\$20,629,100	\$97,619,230	\$277,459,664
SEWER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
FY 2016 *				
MBO/Lease Requirement	\$19,774,300	\$2,861,800	\$27,500,000	\$50,136,100
Offset to Debt Service	-	-	(19,991,500)	(19,991,500)
Total MBO Transfer	19,774,300	2,861,800	7,508,500	30,144,600
FY 2017				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
Total MBO Transfer	41,535,600	2,862,000	27,500,000	71,897,600
FY 2018				
MBO/Lease Requirement	60,517,992	2,856,000	27,500,000	90,873,992
Offset to Debt Service	-	-	(9,166,664)	(9,166,664)
Total MBO Transfer	60,517,992	2,856,000	18,333,336	81,707,328
FY 2019				
MBO/Lease Requirement	56,767,920	2,856,000	27,500,000	87,123,920
Offset to Debt Service	-	-	(4,415,000)	(4,415,000)
Total MBO Transfer	56,767,920	2,856,000	23,085,000	82,708,920
FY 2020 (10 months)				
MBO/Lease Requirement	52,786,250	2,380,000	22,916,667	78,082,917
Offset to address shortfall	(7,100,000)	-	-	(7,100,000)
Offset to Debt Service	-	-	(4,193,917)	(4,193,917)
Total MBO Transfer	45,686,250	2,380,000	18,722,750	66,789,000
Life-to-Date				
MBO/Lease Requirement	231,382,062	13,815,800	132,916,667	378,114,529
Offsets	(7,100,000)	-	(37,767,081)	(44,867,081)
Total Sewer	\$224,282,062	\$13,815,800	\$95,149,586	\$333,247,448

* Note: FY 2016 lease transfer amounts shown do not include prepayment on the lease amount for the 6 months period before bifurcation.



This report includes the following:

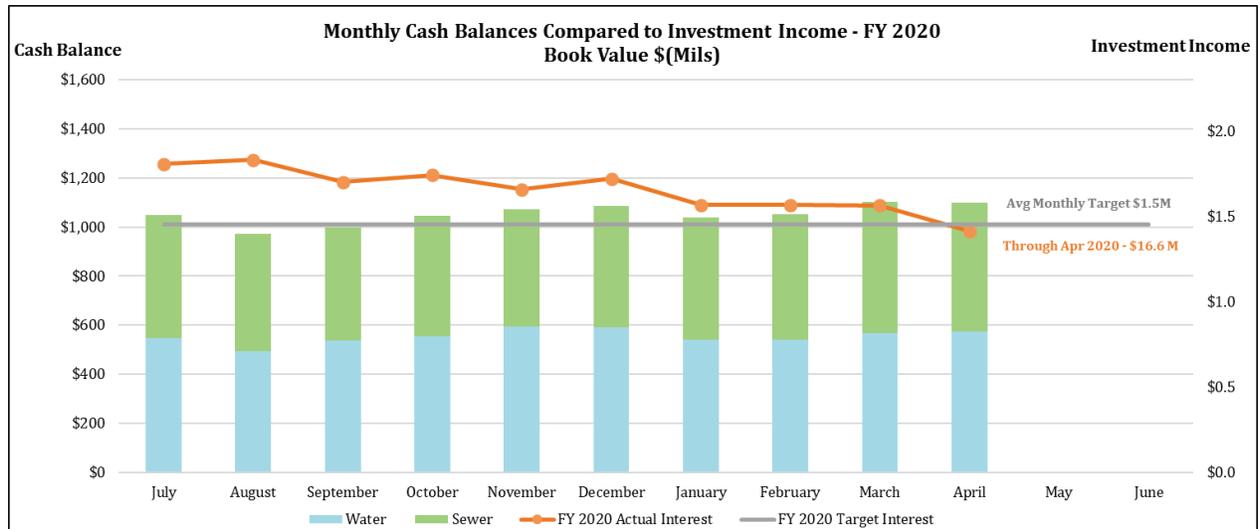
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

GLWA’s investment holdings comply with the requirements of Public Act 20 of 1948, as amended and the GLWA Investment Policy. The cash balances shown in this report include bank deposits, money market funds, a local government investment pool, U.S. Treasuries, Federal Agencies, and commercial paper.

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The cumulative investment earnings of \$16.6 million through April 2020 is 95% of the FY 2020 target of \$17.4 million.

Chart 1 - Monthly Cash Balances Compared to Investment Income - Through April 2020



\$(Mils)	July	August	September	October	November	December	January	February	March	April	May	June
Water	\$549	\$494	\$536	\$555	594	592	541	541	566	575		
Sewer	\$501	\$479	\$464	\$489	479	493	498	510	536	524		
Total	\$1,050	\$973	\$1,000	\$1,044	\$1,073	\$1,085	\$1,039	\$1,052	\$1,102	\$1,099		
Investment Income	\$1.8	\$1.8	\$1.7	\$1.7	\$1.7	\$1.7	\$1.6	\$1.6	\$1.6	\$1.4		

All amounts are unaudited unless otherwise noted.

Cash Balance Detail

Funds Held By GLWA: GLWA cash balances are held in accounts as defined by the Master Bond Ordinance. The accounts are funded by monthly transfers, as stipulated in the MBO, on the first business day of each month. The “operations and maintenance” (O&M) fund transfer amounts are based upon the annual O&M budget approved by the GLWA Board of Directors for the regional systems and by the Board of Water Commissioners for the Detroit Water & Sewerage Department (DWSD) local system budgets. The water and sewer funds held by GLWA and their purpose, as defined by the MBO, are listed below.

Funds Held Within Trust:

- Receiving – all retail and wholesale revenues collected which are distributed in subsequent month(s)
- Debt Service – funds set aside for debt service and debt reserve requirements
- Pension Obligation – funds set aside to meet GLWA’s annual funding requirements for the legacy General Retirement System Pension Plan
- Water Residential Assistance Program (WRAP) – funds set aside to be used to provide financial assistance to qualified residents throughout the local and regional water system as directed by program guidelines
- Budget Stabilization – funds held by GLWA on behalf of DWSD that can be applied against shortfalls in retail revenues
- Emergency Repair & Replacement (ER&R) – funds set aside to pay the costs for major unanticipated repairs and replacements of the local and regional systems
- Improvement & Extension (I&E) – funds set aside to be used for the improvements, enlargements and extensions of the regional system

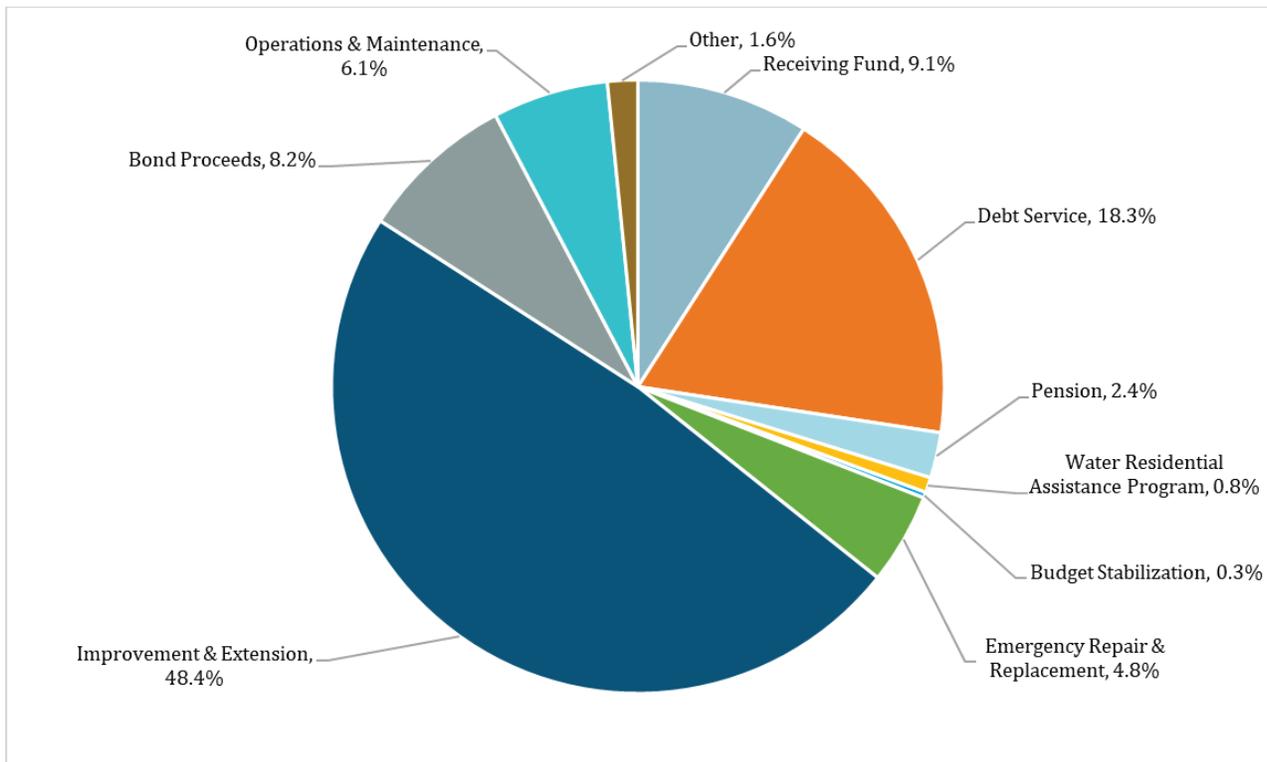
Funds Held Outside Trust:

- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors and security deposit funds held on behalf of the City of Flint

A [chart](#) depicting the follow of funds is online at glwater.org as well as the [MBO](#) documents.

Chart 2 - Cash Balances - Water Funds as of April 30, 2020 - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of April 30, 2020 is \$575 million. The allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA’s commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

Chart 2 - Cash Balances - Water Funds as of April 30, 2020

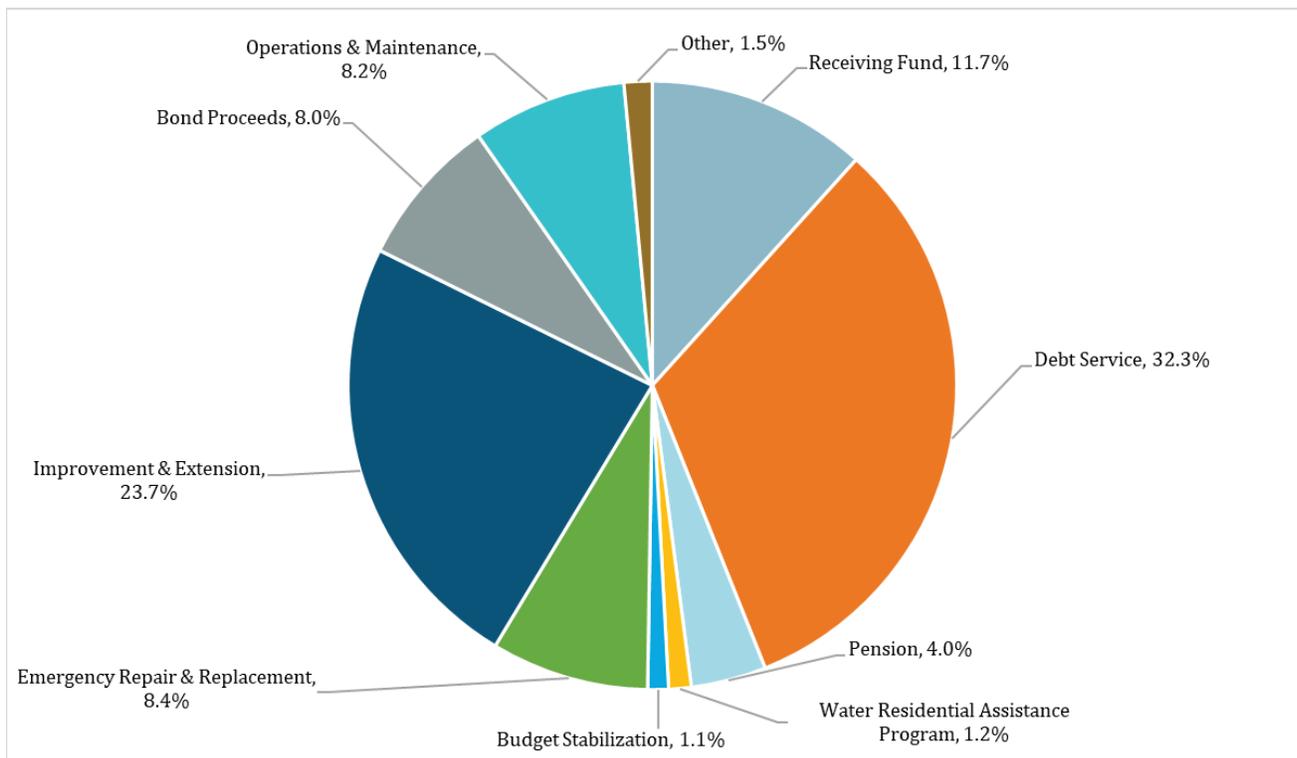


Note: Due to rounding totals may not equal 100%.

Chart 3 - Cash Balances - Sewer Funds as of April 30, 2020 - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of April 30, 2020 is \$524 million. Like the Water Funds, the allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA's commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

The pace for Sewer Funds I&E deposits has been less than budget to address a budget shortfall over multiple years by DWSD. Beginning in February 2019, DWSD began making payments which will replenish the I&E Fund.

Chart 3 - Cash Balances - Sewer Funds as of April 30, 2020



Note: Due to rounding totals may not equal 100%.



Retail Revenues, Receivables, and Collections: Pursuant to the terms of the lease agreement between the City of Detroit and the Great Lakes Water Authority (GLWA), the Detroit Water & Sewerage Department (DWSD) serves as GLWA's agent for billing activities for the City of Detroit retail customer class. All water and sewer service collections from DWSD customers are deposited in a trust account and are administered in accordance with the GLWA Master Bond Ordinance.

The Monthly Retail Revenues, Receivables, & Collections Report includes the following.

1. DWSD Retail Water Revenue Billings and Collections
2. DWSD Retail Sewer Revenue Billings and Collections
3. DWSD Retail Water & Sewer System Accounts Receivable Aging Report

Note: Wholesale customer revenues are billed by the Great Lakes Water Authority.

DWSD Retail Water Billings and Collections

Retail Billing Basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 1 - DWSD Retail Billings shows the FY 2020 water usage and billed revenue which are provided by DWSD staff. As of April 30, 2020, the DWSD usage was at 91.16% of the budget and billed revenue was at 97.15% of budget.

DWSD Retail Water Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 2 - Retail Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic.

Table 1 – FY 2020 DWSD Retail Water Billings Report

RETAIL WATER CUSTOMERS								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue (2)	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	286,871	9,909,302	34.54	267,054	9,802,572	36.71	(19,817)	(106,730)
August	288,810	9,698,584	33.58	259,489	9,601,097	37.00	(29,321)	(97,487)
September	246,846	9,159,992	37.11	228,961	8,811,834	38.49	(17,885)	(348,158)
October	228,814	8,288,490	36.22	217,031	8,578,738	39.53	(11,783)	290,248
November	218,154	8,078,402	37.03	200,432	7,879,694	39.31	(17,722)	(198,708)
December	216,372	7,975,070	36.86	201,225	7,811,106	38.82	(15,147)	(163,964)
January	228,259	8,282,968	36.29	205,993	7,981,382	38.75	(22,266)	(301,586)
February	225,150	8,294,177	36.84	196,490	7,748,377	39.43	(28,660)	(545,800)
March	222,601	8,159,386	36.65	198,483	7,755,210	39.07	(24,118)	(404,176)
April	215,049	8,120,879	37.76	191,691	7,550,074	39.39	(23,358)	(570,805)
May	230,957	8,499,721	36.80					
June	254,554	9,084,129	35.69					
Total	2,862,437	103,551,100	36.18	2,166,849	83,520,084	38.54	(210,077)	(2,447,166)
Subtotals ytd	2,376,926	85,967,250	36.17	2,166,849	83,520,084	38.54	(210,077)	(2,447,166)
Achievement of Budget				91.16%	97.15%			

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 2 – DWSD Retail Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
May	8,415,767	8,969,019	(553,252)	-6.17%
June	7,554,457	7,940,939	(386,482)	-4.87%
July	8,093,394	7,858,272	235,122	2.99%
August	8,671,848	8,692,784	(20,936)	-0.24%
September	8,610,801	9,766,449	(1,155,648)	-11.83%
October	9,619,977	9,015,400	604,577	6.71%
November	7,067,667	7,938,517	(870,850)	-10.97%
December	8,597,558	7,297,698	1,299,860	17.81%
January	9,076,091	8,158,817	917,274	11.24%
February	8,281,985	7,927,299	354,686	4.47%
March	6,948,308	8,707,578	(1,759,270)	-20.20%
April	5,956,105	8,475,657	(2,519,552)	-29.73%
Rolling, 12-Month Total	96,893,958	100,748,429		
Rolling, 12-Month Average	8,074,497	8,395,702		

DWSD Retail Sewer Billings and Collections

Retail billing basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 3 - DWSD Retail Sewer Billings shows the FY 2020 sewer billed revenue which are provided by DWSD staff. As of April 30, 2020, the DWSD usage was at 93.50% of the budget and billed revenue was at 96.86% of budget.

DWSD Retail Sewer Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 4 - DWSD Retail Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic although the twelve-month rolling average remains strong.

Table 3 - FY 2020 DWSD Retail Sewer Billings Report

RETAIL SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	251,738	28,535,420	244,810	28,049,707	(6,928)	(485,713)
August	258,984	28,327,270	246,989	28,076,649	(11,995)	(250,621)
September	255,527	26,788,442	215,119	26,430,710	(40,408)	(357,732)
October	227,141	26,444,548	238,202	27,549,787	11,061	1,105,239
November	211,617	25,759,684	188,779	24,726,161	(22,838)	(1,033,523)
December	195,192	25,905,017	186,917	24,853,335	(8,275)	(1,051,682)
January	197,099	26,341,264	190,230	24,857,510	(6,869)	(1,483,754)
February	206,164	26,312,394	187,219	24,524,288	(18,945)	(1,788,106)
March	200,672	26,467,728	186,521	24,784,918	(14,151)	(1,682,810)
April	204,606	25,894,612	180,397	24,538,664	(24,209)	(1,355,948)
May	203,480	27,185,600				
June	218,340	27,376,921				
Total	2,630,560	321,338,900	2,065,183	258,391,729	(143,557)	(8,384,650)
<i>Subtotals ytd</i>	<i>2,208,740</i>	<i>266,776,379</i>	<i>2,065,183</i>	<i>258,391,729</i>	<i>(143,557)</i>	<i>(8,384,650)</i>
<i>Achievement of Budget/Goal</i>			<i>93.50%</i>	<i>96.86%</i>		

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 4 – DWSD Retail Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
May	22,807,283	18,341,298	4,465,985	24.35%
June	20,426,151	21,461,926	(1,035,775)	-4.83%
July	20,940,157	27,332,605	(6,392,448)	-23.39%
August	23,175,643	21,746,714	1,428,929	6.57%
September	21,972,754	23,727,505	(1,754,751)	-7.40%
October	26,321,010	23,938,933	2,382,077	9.95%
November	17,546,180	20,624,039	(3,077,859)	-14.92%
December	25,889,823	19,612,154	6,277,669	32.01%
January	23,512,702	19,612,154	3,900,548	19.89%
February	22,682,982	20,624,039	2,058,943	9.98%
March	19,325,377	22,111,691	(2,786,314)	-12.60%
April	17,105,146	20,930,511	(3,825,365)	-18.28%
Rolling 12-Month Total	261,705,208	260,063,569		
Rolling, 12-Month Average	21,808,767	21,671,964		

DWSD Retail Water and Sewer Accounts Receivable Aging Report

The DWSD detailed accounts receivable aging is categorized by customer category.

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of April 30, 2020 with comparative totals from April 30, 2019.

Table 5 – DWSD Retail Accounts Receivable Aging Report – Water & Sewer Combined

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	204,480	\$ 440.89	\$ 13,001,000	\$ 6,601,000	\$ 16,347,000	\$ 54,204,000	\$ 90,153,000
			14.4%	7.3%	18.1%	60.1%	100.0%
Commercial	20,669	1,625.08	7,116,000	3,349,000	5,358,000	17,766,000	33,589,000
			21.2%	10.0%	16.0%	52.9%	100.0%
Industrial	2,146	5,634.66	4,198,000	525,000	1,595,000	5,774,000	12,092,000
			34.7%	4.3%	13.2%	47.8%	100.0%
Tax Exempt	3,443	859.64	476,000	206,000	433,000	1,845,000	2,960,000
			16.1%	7.0%	14.6%	62.4%	100.0%
Government	65,458	364.57	3,306,000	2,717,000	5,176,000	12,665,000	23,864,000
			13.9%	11.4%	21.7%	53.1%	100.0%
Drainage	34,063	799.25	1,986,000	1,477,000	4,243,000	19,519,000	27,225,000
			7.3%	5.4%	15.6%	71.7%	100.0%
Subtotal - Active Accounts	330,259	\$ 574.95	\$ 30,083,000	\$ 14,875,000	\$ 33,151,000	\$ 111,773,000	\$ 189,882,000
			15.8%	7.8%	17.5%	58.9%	100.0%
Inactive Accounts	282,487	100.80	77,000	113,000	1,119,000	27,166,000	28,474,000
			0.3%	0.4%	3.9%	95.4%	100.0%
Total	612,746	\$ 356.36	\$ 30,159,000	\$ 14,987,000	\$ 34,270,000	\$ 138,940,000	\$ 218,356,000
<i>% of Total A/R</i>			13.8%	6.9%	15.7%	63.6%	100.0%
Water Fund	232,238	181.58	\$ 6,653,000	\$ 3,169,000	\$ 5,982,000	\$ 26,366,000	\$ 42,169,000
Sewer Fund	286,453	615.06	\$ 23,507,000	\$ 11,818,000	\$ 28,288,000	\$ 112,574,000	\$ 176,187,000
Total April 30, 2020 (a)	612,746	356.36	\$ 30,159,000	\$ 14,987,000	\$ 34,270,000	\$ 138,940,000	\$ 218,356,000
Water Fund- Allowance							\$ (31,758,000)
Sewer Fund- Allowance							\$ (108,372,000)
Total April 30, 2019 Bad Debt Allowance							\$ (140,130,000)
Comparative - April 2019 (b)	592,111	312.14	\$ 26,969,000	\$ 13,485,000	\$ 31,384,000	\$ 112,985,000	\$ 184,822,000
Difference (a) - (b)	20,635	44.21	\$ 3,190,000	\$ 1,503,000	\$ 2,886,000	\$ 25,955,000	\$ 33,534,000



The Monthly Wholesale Billings, Receivables, & Collections Report includes the following.

1. Wholesale Water Billings and Collections
2. Wholesale Sewer Billings and Collections
3. City of Highland Park Billings and Collections
4. Wholesale Water & Sewer Accounts Receivable Aging Report

Wholesale Water Billings and Collections

Wholesale Water Contracts: Great Lakes Water Authority (GLWA) provides wholesale water service to 87 member-partners through a variety of service arrangements.

Service Arrangement Type

Model Contract	82
Emergency	1
Older Contracts	<u>4</u>
Total	<u>87</u>

Note: Services are provided to the Detroit Water & Sewerage Department (DWSD) via a Water and Sewer Services Agreement (WSSA). See the "Retail Revenues, Receivables, and Collections Report" section of this monthly report.

Wholesale Water Billing Basis: Beginning with FY 2016, wholesale water charges were restructured to create a more stable revenue stream by using a historical rolling average to project customer volumes which accounts for 40% of the monthly charges and 60% of the annual customer revenue requirement as a monthly fixed charge.

Table 1 - Wholesale Water Billings shows the FY 2020 water billed usage and revenues. As of April 30, 2020, the billed usage was at 94.81% of budget and billed revenue at 98.01% of budget. Billings and usage from the City of Flint are included as they were assumed in the FY 2020 Budget.

Wholesale Water Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The difference in rolling average from current year to prior year reflects the gentle downward trend in water usage over time as well as a temporary delay in receipts due to COVID-19 stay at home restrictions and the impact on member partner office hours.

Table 1 - FY 2020 Wholesale Water Billings Report

WHOLESALE WATER CUSTOMERS								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,777,138	32,544,400	18.31	1,545,631	30,356,570	19.64	(231,507)	(2,187,830)
August	1,549,587	30,383,100	19.61	1,554,426	30,501,606	19.62	4,839	118,506
September	1,368,496	28,270,400	20.66	1,257,111	27,278,750	21.70	(111,385)	(991,650)
October	1,066,653	25,351,200	23.77	1,026,086	25,007,145	24.37	(40,567)	(344,055)
November	917,034	24,049,100	26.22	905,016	23,933,012	26.44	(12,018)	(116,088)
December	1,004,420	24,714,000	24.61	983,589	24,535,948	24.95	(20,831)	(178,052)
January	1,018,192	24,861,000	24.42	945,874	24,246,312	25.63	(72,318)	(614,688)
February	893,007	23,780,800	26.63	878,794	23,689,167	26.96	(14,213)	(91,633)
March	1,008,766	24,753,300	24.54	971,559	24,450,282	25.17	(37,207)	(303,018)
April	948,751	24,262,000	25.57	884,232	23,725,074	26.83	(64,519)	(536,926)
May	1,073,966	25,549,300	23.79					
June	1,383,200	28,595,300	20.67					
Total	14,009,210	317,113,900	22.64	10,952,318	257,723,866	23.53	(599,726)	(5,245,434)
<i>Subtotals ytd</i>	<i>11,552,044</i>	<i>262,969,300</i>	<i>22.76</i>	<i>10,952,318</i>	<i>257,723,866</i>	<i>23.53</i>	<i>(599,726)</i>	<i>(5,245,434)</i>
<i>Achievement of Budget</i>				<i>94.81%</i>	<i>98.01%</i>			

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

Table 2 - Wholesale Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
May	20,749,943	30,447,581	(9,697,638)	-31.85%
June	25,676,458	21,815,013	3,861,445	17.70%
July	23,212,979	21,923,590	1,289,389	5.88%
August	28,808,254	31,920,586	(3,112,332)	-9.75%
September	28,336,152	26,037,313	2,298,839	8.83%
October	25,786,774	27,827,722	(2,040,948)	-7.33%
November	29,245,969	29,238,260	7,709	0.03%
December	23,292,382	27,720,646	(4,428,264)	-15.97%
January	25,470,795	23,430,974	2,039,821	8.71%
February	24,629,768	26,147,082	(1,517,314)	-5.80%
March	25,017,989	24,967,264	50,725	0.20%
April	17,856,644	23,045,654	(5,189,010)	-22.52%
Rolling 12-Month Total	298,084,107	314,521,685		
Rolling, 12-Month Average	24,840,342	26,210,140		

Wholesale Sewer Billings and Collections

Wholesale Sewer Contracts: GLWA provides wholesale sewer service to 18 member-partners via multiple service arrangements.

Service Arrangement Type

Model Contract	11
Emergency	0
Older Contracts	<u>7</u>
Total	<u><u>18</u></u>

Note: Services are provided to the Detroit Water & Sewerage Department via a Water and Sewer Services Agreement (WSSA). See the “Retail Revenues, Receivables, and Collections Report” section of the monthly report.

Wholesale Sewer Billing Basis: Beginning in FY 2015, the “sewer rate simplification” initiative was applied which provides for a stable revenue stream and predictability for our member partners. Wholesale sewer customers are billed a fixed monthly fee based upon the annual revenue requirement.

Table 3 - Wholesale Sewer Billings shows the FY 2020 sewer billed revenues. As of April 30, 2020, the billed revenue is at 100% of budget.

Wholesale Sewer Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA’s Master Bond Ordinance.

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The year-over-year rolling average from FY 2019 to FY 2020 remains consistent.

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received. There are several large accounts whose payments swing between the end of the current month and the beginning of the next month. April receipt activity also reflects a temporary delay in receipts due to COVID-19 stay at home restrictions and the impact on member partner office hours.

Table 3 – FY 2020 Wholesale Sewer Billings Report

WHOLESALE SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,323,183	N/A	22,323,183	N/A	-
August	N/A	22,323,183	N/A	22,323,183	N/A	-
September	N/A	22,323,183	N/A	22,323,183	N/A	-
October	N/A	22,323,183	N/A	22,323,183	N/A	-
November	N/A	22,323,183	N/A	22,323,183	N/A	-
December	N/A	22,323,183	N/A	22,323,183	N/A	-
January	N/A	22,323,183	N/A	22,323,183	N/A	-
February	N/A	22,323,183	N/A	22,323,183	N/A	-
March	N/A	22,323,183	N/A	22,323,183	N/A	-
April	N/A	22,323,183	N/A	22,323,183	N/A	-
May	N/A	22,323,183	N/A		N/A	-
June	N/A	22,323,183	N/A		N/A	-
Total		267,878,196		223,231,830		-
<i>Subtotals ytd</i>		223,231,830		223,231,830		-
<i>Achievement of Budget</i>				100.00%		

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Not tracked as part of the wholesale sewer charges.

Table 4 - Wholesale Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
May	9,284,000	15,342,700	(6,058,700)	-39.49%
June	32,639,436	28,810,500	3,828,936	13.29%
July	27,222,400	16,179,117	11,043,283	68.26%
August	35,153,500	28,384,600	6,768,900	23.85%
September	18,833,257	22,672,400	(3,839,143)	-16.93%
October	29,833,760	16,105,200	13,728,560	85.24%
November	19,428,000	28,633,300	(9,205,300)	-32.15%
December	19,999,642	24,440,000	(4,440,358)	-18.17%
January	17,121,812	26,874,927	(9,753,115)	-36.29%
February	23,284,737	13,895,100	9,389,637	67.58%
March	21,108,100	22,388,600	(1,280,500)	-5.72%
April	10,024,575	23,203,703	(13,179,128)	-56.80%
Rolling 12-Month Total	263,933,219	266,930,147		
Rolling, 12-Month Average	21,994,435	22,244,179		

City of Highland Park Billings and Collections

The City of Highland Park is provided water service pursuant to an emergency service basis. Sewer service is provided pursuant to a 1982 amended contract which indicates that the parties are guided in their legal relationship by a Michigan Supreme Court decision from 1949.

As of April 30, 2020, Highland Park had a delinquent balance of \$44.0 million, including \$34.0 million for wastewater treatment services, \$1.7 million for industrial waste control services, and \$8.3 million for water supply services.

Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2020 through April 30, 2020. Please note the numbers below reflect the month the billing was sent and not the month the service was provided. A life-to-date summary is provided as an appendix to this monthly financial report.

Table 5 - City of Highland Park Billings and Collections

	Water	Sewer	IWC	Total
May 31, 2019 Balance	7,249,174	32,411,780	1,671,312	41,332,267
June 2019 Billing	101,871	467,900	3,931	573,702
June 2019 Payments	-	(1,406,836)	-	(1,406,836)
June 30, 2019 Balance	7,351,045	31,472,844	1,675,243	40,499,132
July 2019 Billing	104,702	467,900	4,121	576,722
July 2019 Payments	-	-	-	-
July 31, 2019 Balance	7,455,746	31,940,744	1,679,363	41,075,854
August 2019 Billing	106,638	472,500	4,026	583,164
August 2019 Payments	-	-	-	-
August 31, 2019 Balance	7,562,384	32,413,244	1,683,389	41,659,018
September 2019 Billing	108,007	472,500	4,014	584,521
September 2019 Payments	-	(656,657)	-	(656,657)
September 30, 2019 Balance	7,670,391	32,229,087	1,687,403	41,586,882
October 2019 Billing	107,422	472,500	3,933	583,855
October 2019 Payments	-	-	-	-
October 31, 2019 Balance	7,777,814	32,701,587	1,691,336	42,170,737
November 2019 Billing	101,003	472,500	3,948	577,451
November 2019 Payments	-	-	-	-
November 30, 2019 Balance	7,878,817	33,174,087	1,695,284	42,748,188
December 2019 Billing	98,501	472,500	3,845	574,846
December 2019 Payments	-	-	-	-
December 31, 2019 Balance	7,977,318	33,646,587	1,699,129	43,323,034
January 2020 Billing	85,342	472,500	3,853	561,695
January 2020 Payments	-	(1,561,812)	-	(1,561,812)
January 31, 2020 Balance	8,062,660	32,557,275	1,702,982	42,322,917
February 2020 Billing	93,589	472,500	3,892	569,981
February 2020 Payments	-	-	-	-
February 28, 2020 Balance	8,156,249	33,029,775	1,706,874	42,892,898
March 2020 Billing	92,950	472,500	3,906	569,356
March 2020 Payments	-	-	-	-
March 31, 2020 Balance	8,249,199	33,502,275	1,710,780	43,462,254
April 2020 Billing	94,738	472,500	3,905	571,143
April 2020 Payments	-	-	-	-
April 30, 2020 Balance	8,343,937	33,974,775	1,714,685	44,033,397

Wholesale Water & Sewer Accounts Receivable Aging Report

The detailed accounts receivable aging is in the Appendix to this monthly report. This report reflects the wholesale receivables only and does not include DWSD.

Table 6 - Wholesale Accounts Receivable Aging Report Summary is a summary of the total, current and non-current receivables by category as of April 30, 2020. The sewer past due balance of \$4.5 million relates to a Rouge Valley invoice that was paid on May 15.

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park is the same summary *without* the past due balances for the City of Highland Park.

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA is a summary *without* the past due balances for the City of Highland Park and net of pending credits for certain Western Township Utilities Authority (WTUA). GLWA received a final agreement from Wayne County in late February to effectuate a transfer retroactive to July 1, 2018 and is working to process credits as required by the end of June 2020.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 42,938,620.95	\$ 34,782,303.97	\$ 93,657.09	\$ 93,039.60	\$ 7,969,620.29
Sewer	\$ 58,476,496.52	\$ 20,456,414.12	\$ 4,990,308.16	\$ 472,500.00	\$ 32,557,274.24
IWC	\$ 3,637,813.69	\$ 559,385.21	\$ 34,336.81	\$ 38,432.29	\$ 3,005,659.38
Pollutant Surcharge	\$ 994,231.75	\$ 849,498.91	\$ 33,191.19	\$ 24,849.87	\$ 86,691.78
Total	\$ 106,047,162.91	\$ 56,647,602.21	\$ 5,151,493.25	\$ 628,821.76	\$ 43,619,245.69
	100.00%	53.42%	4.86%	0.59%	41.13%

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 34,594,683.94	\$ 34,594,615.77	\$ 68.17	\$ -	\$ -
Sewer	\$ 24,501,722.28	\$ 19,983,914.12	\$ 4,517,808.16	\$ -	\$ -
IWC	\$ 1,923,128.99	\$ 551,574.03	\$ 30,444.74	\$ 34,579.09	\$ 1,306,531.13
Pollutant Surcharge	\$ 994,231.75	\$ 849,498.91	\$ 33,191.19	\$ 24,849.87	\$ 86,691.78
Total	\$ 62,013,766.96	\$ 55,979,602.83	\$ 4,581,512.26	\$ 59,428.96	\$ 1,393,222.91
	100.00%	90.27%	7.39%	0.10%	2.25%

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 34,594,683.94	\$ 34,594,615.77	\$ 68.17	\$ -	\$ -
Sewer	\$ 24,501,722.28	\$ 19,983,914.12	\$ 4,517,808.16	\$ -	\$ -
IWC	\$ 512,860.59	\$ 516,994.94	\$ (4,134.35)	\$ -	\$ -
Pollutant Surcharge	\$ 994,231.75	\$ 849,498.91	\$ 33,191.19	\$ 24,849.87	\$ 86,691.78
Total	\$ 60,603,498.56	\$ 55,945,023.74	\$ 4,546,933.17	\$ 24,849.87	\$ 86,691.78
	100.00%	92.31%	7.50%	0.04%	0.14%

Note: percentages vary from 100% due to rounding.



The Monthly Trust Receipts & Disbursements Report includes the following.

1. GLWA Trust Receipts & Disbursements – Net Cash Flows and Receipts
2. DWSD Trust Receipts & Disbursements – Net Cash Flows, Receipts & Loan Receivable
3. Combined System Trust Receipts & Disbursements – Net Cash Flows

GLWA Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems.

Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2020 reflects ten months of activity to date.

Water fund activity exceeded required MBO disbursements by 10% through April 30, 2020 with a historical ratio of cash receipts exceeding MBO disbursements by 14% since January 1, 2016.

Sewer fund cash receipts exceeded disbursements by 8% through April 30, 2020 with a historical ratio of cash receipts exceeding MBO disbursements by 5% since January 1, 2016. FY 2020 activity is high due in part to a one-time capital contribution of \$11.9 million by the Oakland Macomb Interceptor Drainage District in December 2019 as part of a recent contract amendment.

Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic.

Chart 2 – GLWA 12-Month Net Receipts – Sewer outlines monthly cash receipt trends across two points of reference for the regional sewer system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic.

Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Thru April 30	Life-to-Date Total
Water						
1 Receipts	\$ 149,688,711	\$ 352,941,909	\$ 338,452,001	\$ 336,594,234	\$ 275,967,675	\$1,453,644,530
2 MOU Adjustments	-	-	-	-	-	-
3 Adjusted Receipts	149,688,711	352,941,909	338,452,001	336,594,234	275,967,675	1,453,644,530
4 Disbursements	(146,256,185)	(288,777,985)	(297,064,810)	(289,230,481)	(250,876,444)	(1,272,205,905)
5 Receipts Net of Required Transfers	3,432,526	64,163,924	41,387,191	47,363,753	25,091,231	181,438,625
6 I&E Transfer	-	-	(25,739,700)	(47,695,000)	(22,593,751)	(96,028,451)
7 Net Receipts	\$ 3,432,526	\$ 64,163,924	\$ 15,647,491	\$ (331,247)	\$ 2,497,480	\$ 85,410,174
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	102%	122%	114%	116%	110%	114%
Sewer						
9 Receipts	\$ 232,377,715	\$ 469,788,882	\$ 476,269,761	\$ 467,743,744	\$ 406,285,367	\$2,052,465,469
10 MOU Adjustments	-	-	-	-	-	-
11 Adjusted Receipts	232,377,715	469,788,882	476,269,761	467,743,744	406,285,367	2,052,465,469
12 Disbursements	(219,538,325)	(441,443,340)	(458,903,335)	(453,406,636)	(375,810,279)	(1,949,101,915)
13 Receipts Net of Required Transfers	12,839,390	28,345,542	17,366,426	14,337,108	30,475,088	103,363,554
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(64,342,000)
15 DWSD Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
16 Shortfall Repayment (principal)	-	-	-	9,367,355	14,573,471	23,940,826
17 Net Receipts	\$ 11,553,924	\$ 331,008	\$ (29,444,708)	\$ 1,156,763	\$ 25,952,359	\$ 9,549,346
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	106%	106%	104%	103%	108%	105%
Combined						
19 Receipts	\$ 382,066,426	\$ 822,730,791	\$ 814,721,762	\$ 804,337,978	\$ 682,253,042	\$3,506,109,999
20 MOU Adjustments	-	-	-	-	-	-
21 Adjusted Receipts	382,066,426	822,730,791	814,721,762	804,337,978	682,253,042	3,506,109,999
22 Disbursements	(365,794,510)	(730,221,325)	(755,968,145)	(742,637,117)	(626,686,723)	(3,221,307,820)
23 Receipts Net of Required Transfers	16,271,916	92,509,466	58,753,617	61,700,861	55,566,319	284,802,179
24 I&E Transfer	-	-	(48,437,800)	(70,242,700)	(41,689,951)	(160,370,451)
25 Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
26 Shortfall Repayment	-	-	-	9,367,355	14,573,471	23,940,826
27 Net Receipts	\$ 14,986,450	\$ 64,494,932	\$ (13,797,217)	\$ 825,516	\$ 28,449,839	\$ 94,959,520
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	104%	113%	108%	108%	109%	109%

MOU Adjustments applies to DWSD and is shown here for consistency.

Chart 1 - GLWA 12-Month Net Receipts - Water

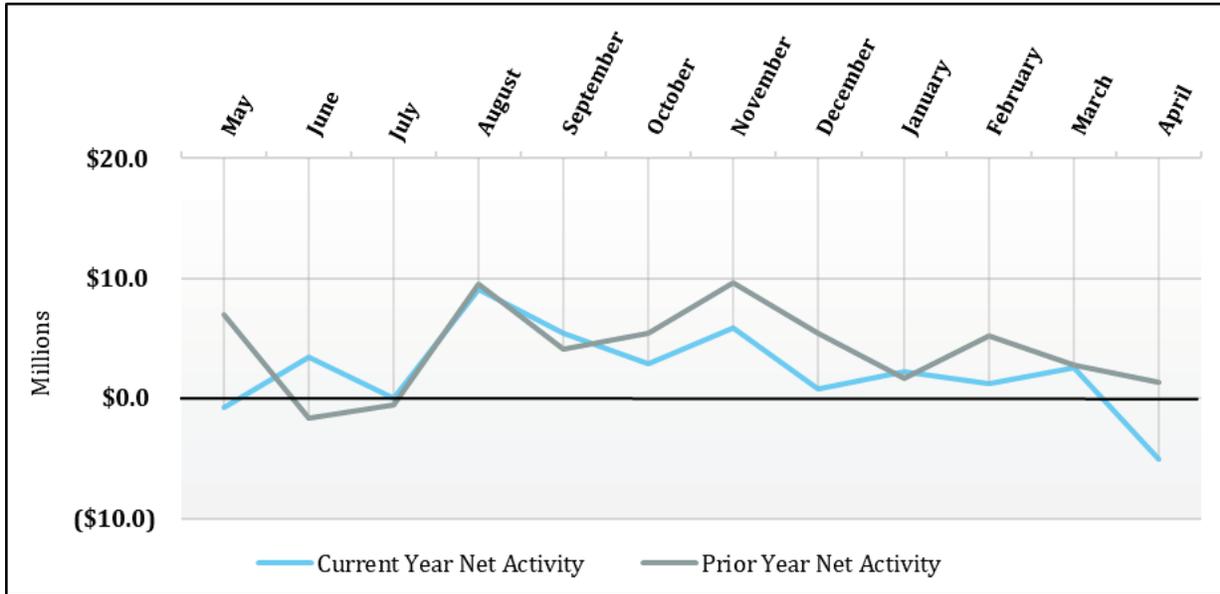
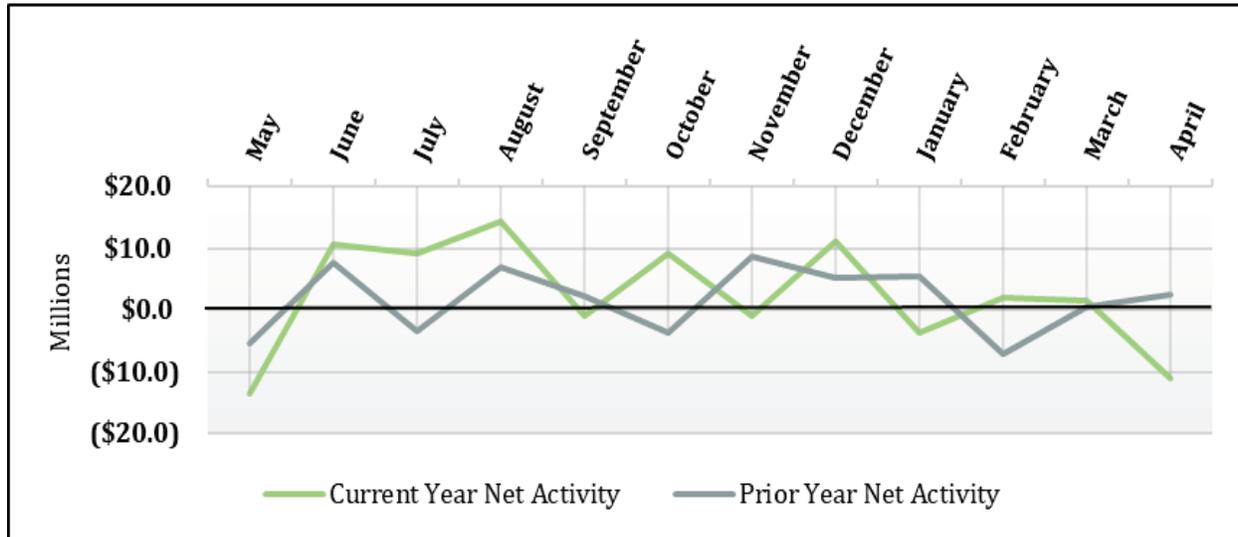


Chart 2 - GLWA 12-Month Net Receipts - Sewer



DWSD Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems.

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for DWSD since inception at January 1, 2016. Fiscal year 2020 reflects ten months of activity to date.

Water fund cash receipts fell short of required MBO disbursements by 1% through April 30, 2020 with a historical ratio of receipts exceeding disbursements by 2% since January 1, 2016.

Sewer fund cash receipts fell short of required MBO disbursements by 5% through April 30, 2020 with a historic shortfall of 6% since January 1, 2016. DWSD has recognized this issue and proactively implemented plans in December 2019 to resolve that mid-year shortfall.

On December 3, DWSD transferred \$2.6 million from Sewer Operations & Maintenance back to the Sewer Receiving Fund, with an additional \$4.5 million cash replenishment transfer to GLWA in February 2020; the DWSD Operations & Maintenance budgeted transfer request has been reduced by \$1 million each month since December 2019 to further offset future cashflow timing issues.

April cash receipts reflected the impact of the COVID-19 pandemic. Looking ahead, May and June receipts show improvement. DWSD and GLWA management are closely monitoring these balances and developing plans to address any yearend shortfall resulting from this unforeseen pandemic.

Table 3 – FY 2017 DWSD Loan Receivable - Sewer provides an activity summary of loan receivable established under the terms of the April 2018 MOU addressing the cash shortfall from FY 2016 and FY 2017.

Table 4 – FY 2017 DWSD Loan Receivable Payments - Sewer provides an activity summary of loan receivable payments to date on the FY 2017 Sewer Loan Receivable including the interest on the loan. This payment is transferred directly to GLWA Sewer Improvement & Extension fund monthly.

The Reconciliation Committee monitors this balance and repayment progress as part of its quarterly meetings.

Table 5 – FY 2018 DWSD Loan Receivable - Sewer provides an activity summary of loan receivable established under the terms of the April 2018 MOU addressing the cash shortfall from FY 2018.

Table 6 – FY 2018 DWSD Loan Receivable Payments - Sewer provides an activity summary of loan receivable payments to date on the FY 2018 Sewer Loan Receivable including the interest on the loan. This payment is transferred directly to GLWA Sewer Improvement & Extension fund monthly.

The Reconciliation Committee monitors this balance and repayment progress as part of its quarterly meetings.

Table 7 – Total DWSD Loan Receivable Balance – Sewer provides a combined summary of the FY 2017 and FY 2018 loan receivable total remaining balance due through the period reported.

Chart 3 – DWSD 12-Month Net Receipts – Water outlines monthly activity trends across two points of reference for the local water system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic.

Chart 4 – DWSD 12-Month Net Receipts – Sewer outlines monthly activity trends across two points of reference for the local sewer system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts. Receipts for April 2020 are low as anticipated due to the impacts of the COVID-19 pandemic.

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Thru April 30	Life-to-Date Total
Water						
1 Receipts	\$ 26,201,881	\$ 96,451,105	\$ 101,233,147	\$ 99,868,219	\$ 80,953,156	\$ 404,707,508
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	44,647,981	96,451,105	101,233,147	99,868,219	80,953,156	423,153,608
4 Disbursements	(47,809,552)	(93,066,144)	(93,049,457)	(97,694,600)	(82,085,410)	(413,705,163)
5 Receipts Net of Required Transfers	(3,161,571)	3,384,961	8,183,690	2,173,619	(1,132,254)	9,448,445
6 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
7 Net Receipts	\$ (3,161,571)	\$ 3,384,961	\$ 8,183,690	\$ (6,233,461)	\$ (1,132,254)	\$ 1,041,365
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	93%	104%	109%	102%	99%	102%
Sewer						
9 Receipts	\$ 65,256,734	\$ 233,723,367	\$ 242,104,791	\$ 265,339,797	\$ 218,490,716	\$1,024,915,405
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	121,011,834	233,723,367	242,104,791	271,866,997	218,490,716	1,087,197,705
12 Disbursements	(122,297,300)	(261,963,973)	(266,217,825)	(271,018,306)	(229,239,235)	(1,150,736,639)
13 Receipts Net of Required Transfers	(1,285,466)	(28,240,606)	(24,113,034)	848,691	(10,748,519)	(63,538,934)
14 I&E Transfer	-	-	-	-	-	-
15 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	53,413,034
16 Net Receipts (a)	\$ -	\$ (226,072)	\$ -	\$ 848,691	\$ (10,748,519)	\$ (10,125,900)
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	99%	89%	91%	100%	95%	94%
Combined						
18 Receipts	\$ 91,458,615	\$ 330,174,472	\$ 343,337,938	\$ 365,208,016	\$ 299,443,872	\$1,429,622,913
19 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
20 Adjusted Receipts	165,659,815	330,174,472	343,337,938	371,735,216	299,443,872	1,510,351,313
21 Disbursements	(170,106,852)	(355,030,117)	(359,267,282)	(368,712,906)	(311,324,645)	(1,564,441,802)
22 Receipts Net of Required Transfers	(4,447,037)	(24,855,645)	(15,929,344)	3,022,310	(11,880,773)	(54,090,489)
23 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
24 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	53,413,034
25 Net Receipts	\$ (3,161,571)	\$ 3,158,889	\$ 8,183,690	\$ (5,384,770)	\$ (11,880,773)	\$ (9,084,535)
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	97%	93%	96%	101%	96%	97%

(a) The \$226,072 difference in FY 2017 is due to the June IWC payment from DWSD that was not past due at yearend and the \$12,272 rounding difference on the loan receivable.

Note 1: The \$29,300,000 for the DWSD loan receivable balance is calculated as follows.

(1,285,466)	FY 2016 Shortfall
(28,240,606)	FY 2017 Shortfall
(29,526,072)	Subtotal
238,264	June IWC not due until July
(29,287,808)	FY 2017 Shortfall-to-Date

29,300,000 FY 2017 Shortfall-to-Date, Rounded

Table 3 – FY 2017 DWSD Loan Receivable - Sewer

Date	Transaction	Amount	Balance
06/30/19	Record FY 16 and FY 17 Loan Receivable		29,300,000
02/08/19	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	24,664,538
02/22/19	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	22,310,770
04/15/19	Loan Receivable Payment (for the month of Apr)	789,990	21,520,780
05/08/19	Loan Receivable Payment (for the month of May)	792,705	20,728,075
06/07/19	Loan Receivable Payment (for the month of June)	795,430	19,932,645
07/05/19	Loan Receivable Payment (for the month of July)	798,164	19,134,480
08/08/19	Loan Receivable Payment (for the month of August)	800,908	18,333,572
09/06/19	Loan Receivable Payment (for the month of September)	803,661	17,529,911
10/02/19	Loan Receivable Payment (for the month of October)	806,424	16,723,487
11/04/19	Loan Receivable Payment (for the month of November)	809,196	15,914,291
12/03/19	Loan Receivable Payment (for the month of December)	811,978	15,102,314
01/06/20	Loan Receivable Payment (for the month of January)	814,769	14,287,545
02/04/20	Loan Receivable Payment (for the month of February)	817,570	13,469,975
03/03/20	Loan Receivable Payment (for the month of March)	820,380	12,649,595
04/15/20	Loan Receivable Payment (for the month of April)	823,200	11,826,395
		17,473,605	11,826,395

Table 4 – FY 2017 DWSD Loan Receivable Payments - Sewer

Date	Transaction	Principal	Interest	Total Paid
02/08/19	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	564,636	5,200,098
02/22/19	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	246,280	2,600,049
04/15/19	Loan Receivable Payment (for the month of Apr)	789,990	76,693	866,683
05/08/19	Loan Receivable Payment (for the month of May)	792,705	73,978	866,683
06/07/19	Loan Receivable Payment (for the month of June)	795,430	71,253	866,683
07/05/19	Loan Receivable Payment (for the month of July)	798,164	68,518	866,683
08/08/19	Loan Receivable Payment (for the month of August)	800,908	65,775	866,683
09/06/19	Loan Receivable Payment (for the month of September)	803,661	63,022	866,683
10/02/19	Loan Receivable Payment (for the month of October)	806,424	60,259	866,683
11/04/19	Loan Receivable Payment (for the month of November)	809,196	57,487	866,683
12/03/19	Loan Receivable Payment (for the month of December)	811,978	54,705	866,683
01/06/20	Loan Receivable Payment (for the month of January)	814,769	51,914	866,683
02/04/20	Loan Receivable Payment (for the month of February)	817,570	49,113	866,683
03/03/20	Loan Receivable Payment (for the month of March)	820,380	46,303	866,683
04/15/20	Loan Receivable Payment (for the month of April)	823,200	43,483	866,683
		17,473,605	1,593,420	19,067,025

Table 5 – FY 2018 DWSD Loan Receivable - Sewer

Date	Transaction	Amount	Balance
06/30/19	Record FY 18 Loan Receivable		24,113,034
07/15/19	Loan Receivable Payment (for the month of July)	638,978	23,474,056
08/08/19	Loan Receivable Payment (for the month of August)	640,686	22,833,370
09/06/19	Loan Receivable Payment (for the month of September)	642,400	22,190,970
10/02/19	Loan Receivable Payment (for the month of October)	644,118	21,546,852
11/04/19	Loan Receivable Payment (for the month of November)	645,840	20,901,012
12/03/19	Loan Receivable Payment (for the month of December)	647,567	20,253,445
01/06/20	Loan Receivable Payment (for the month of January)	649,299	19,604,146
02/04/20	Loan Receivable Payment (for the month of February)	651,035	18,953,111
03/03/20	Loan Receivable Payment (for the month of March)	652,776	18,300,335
04/15/20	Loan Receivable Payment (for the month of April)	654,522	17,645,813
		6,467,221	17,645,813

Table 6 – FY 2018 DWSD Loan Receivable Payments - Sewer

Date	Transaction	Principal	Interest	Total Paid
07/15/19	Loan Receivable Payment (for the month of July)	638,978	64,482	703,460
08/08/19	Loan Receivable Payment (for the month of August)	640,686	62,774	703,460
09/06/19	Loan Receivable Payment (for the month of September)	642,400	61,060	703,460
10/02/19	Loan Receivable Payment (for the month of October)	644,118	59,342	703,460
11/04/19	Loan Receivable Payment (for the month of November)	645,840	57,620	703,460
12/03/19	Loan Receivable Payment (for the month of December)	647,567	55,893	703,460
01/06/20	Loan Receivable Payment (for the month of January)	649,299	54,161	703,460
02/04/20	Loan Receivable Payment (for the month of February)	651,035	52,425	703,460
03/03/20	Loan Receivable Payment (for the month of March)	652,776	50,684	703,460
04/15/20	Loan Receivable Payment (for the month of April)	654,522	48,938	703,460
		6,467,221	567,379	7,034,600

Table 7 – Total DWSD Loan Receivable Balance – Sewer

Date	FY17 Loan Balance	FY18 Loan Balance	Total
06/30/18	29,300,000	-	29,300,000
07/31/18	29,300,000	-	29,300,000
08/31/18	29,300,000	-	29,300,000
09/30/18	29,300,000	-	29,300,000
10/31/18	29,300,000	-	29,300,000
11/30/18	29,300,000	-	29,300,000
12/31/18	29,300,000	-	29,300,000
01/31/19	29,300,000	-	29,300,000
02/29/19	24,664,538	-	24,664,538
03/31/19	22,310,770	-	22,310,770
04/30/19	21,520,780	-	21,520,780
05/31/19	20,728,075	-	20,728,075
06/30/19	19,932,645	24,113,034	44,045,679
07/31/19	19,134,480	23,474,056	42,608,537
08/31/19	18,333,572	22,833,370	41,166,942
09/30/19	17,529,911	22,190,970	39,720,881
10/31/19	16,723,487	21,546,852	38,270,340
11/30/19	15,914,291	20,901,012	36,815,303
12/31/19	15,102,314	20,253,445	35,355,759
01/31/20	14,287,545	19,604,146	33,891,691
02/29/20	13,469,975	18,953,111	32,423,086
03/31/20	12,649,595	18,300,335	30,949,930
04/30/20	11,826,395	17,645,813	29,472,208

Chart 3 – DWSD 12-Month Net Receipts - Water

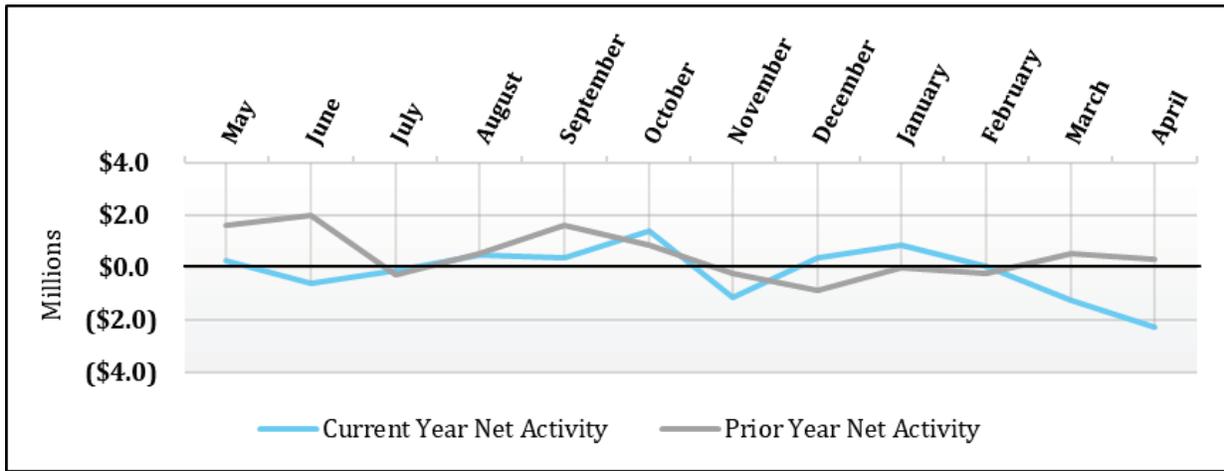
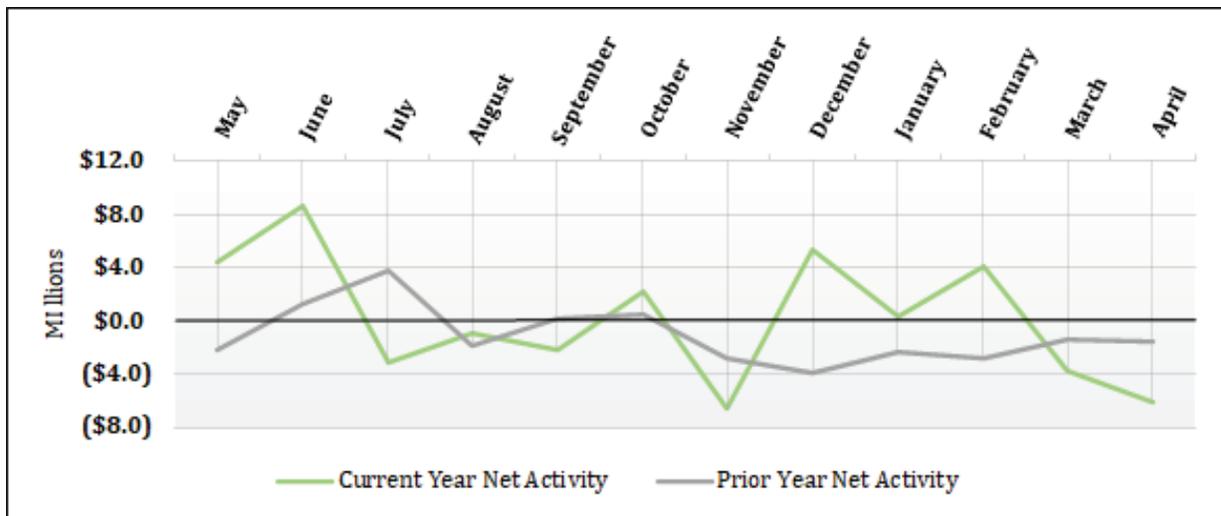


Chart 4 – DWSD 12-Month Net Receipts - Sewer



Combined System Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

Table 8 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2020 reflects ten months of activity to date.

Water fund cash receipts exceeded required MBO disbursements by 7% through April 30, 2020 with a historical ratio of cash receipts exceeding MBO disbursements by 11% since January 1, 2016.

Sewer fund cash receipts exceeded required MBO disbursements by 3% through April 30, 2020 and with a historical ratio of cash receipts exceeding MBO disbursements by 1% since January 1, 2016.

Table 8 – Combined Net Cash Flows from Trust Receipts & Disbursements

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Thru April 30	Life-to-Date Total
Water						
1 Receipts	\$ 175,890,592	\$ 449,393,014	\$ 439,685,148	\$ 436,462,453	\$ 356,920,831	\$ 1,858,352,038
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	194,336,692	449,393,014	439,685,148	436,462,453	356,920,831	1,876,798,138
4 Disbursements	(194,065,737)	(381,844,129)	(390,114,267)	(386,925,081)	(332,961,854)	(1,685,911,068)
5 Receipts Net of Required Transfers	270,955	67,548,885	49,570,881	49,537,372	23,958,977	190,887,070
6 I&E Transfer	-	-	(25,739,700)	(56,102,080)	(22,593,751)	(104,435,531)
7 Net Receipts	\$ 270,955	\$ 67,548,885	\$ 23,831,181	\$ (6,564,708)	\$ 1,365,226	\$ 86,451,539
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	100%	118%	113%	113%	107%	111%
Sewer						
9 Receipts	\$ 297,634,449	\$ 703,512,249	\$ 718,374,552	\$ 733,083,541	\$ 624,776,083	\$ 3,077,380,874
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	353,389,549	703,512,249	718,374,552	739,610,741	624,776,083	3,139,663,174
12 Disbursements	(341,835,625)	(703,407,313)	(725,121,160)	(724,424,942)	(605,049,514)	(3,099,838,554)
13 Receipts Net of Required Transfers	11,553,924	104,936	(6,746,608)	15,185,799	19,726,569	39,824,620
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(64,342,000)
15 Shortfall Advance	-	-	-	-	-	-
16 Shortfall Repayment (principal)	-	-	-	9,367,355	14,573,471	23,940,826
17 Net Receipts	\$ 11,553,924	\$ 104,936	\$ (29,444,708)	\$ (7,361,901)	\$ 15,203,840	\$ (576,553)
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	103%	100%	99%	102%	103%	101%
Combined						
19 Receipts	\$ 473,525,041	\$ 1,152,905,263	\$ 1,158,059,700	\$ 1,169,545,994	\$ 981,696,914	\$ 4,935,732,912
20 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
21 Adjusted Receipts	547,726,241	1,152,905,263	1,158,059,700	1,176,073,194	981,696,914	5,016,461,312
22 Disbursements	(535,901,362)	(1,085,251,442)	(1,115,235,427)	(1,111,350,023)	(938,011,368)	(4,785,749,622)
23 Receipts Net of Required Transfers	11,824,879	67,653,821	42,824,273	64,723,171	43,685,546	230,711,690
24 I&E Transfer	-	-	(48,437,800)	(78,649,780)	(41,689,951)	(168,777,531)
25 Shortfall Advance	-	-	-	-	-	-
26 Shortfall Repayment	-	-	-	9,367,355	14,573,471	23,940,826
27 Net Receipts	\$ 11,824,879	\$ 67,653,821	\$ (5,613,527)	\$ (4,559,254)	\$ 16,569,066	\$ 85,874,986
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	102%	106%	104%	106%	105%	105%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$188,900.73	\$188,900.73	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$69,866.30	\$69,866.30	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$52,133.72	\$52,065.55	\$68.17	\$0.00	\$0.00
BERLIN TOWNSHIP	\$115,553.12	\$115,553.12	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$281,241.88	\$281,241.88	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$23,020.65	\$23,020.65	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$25,278.20	\$25,278.20	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$1,579,645.98	\$1,579,645.98	\$0.00	\$0.00	\$0.00
CENTER LINE	\$38,778.19	\$38,778.19	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$333,645.68	\$333,645.68	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$598,523.69	\$598,523.69	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$263,973.67	\$263,973.67	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,663,164.83	\$1,663,164.83	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$305,583.95	\$305,583.95	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$129,199.85	\$129,199.85	\$0.00	\$0.00	\$0.00
ECORSE	\$120,907.31	\$120,907.31	\$0.00	\$0.00	\$0.00
FARMINGTON	\$80,244.10	\$80,244.10	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$673,698.12	\$673,698.12	\$0.00	\$0.00	\$0.00
FERNDALE	\$175,719.16	\$175,719.16	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$212,048.53	\$212,048.53	\$0.00	\$0.00	\$0.00
FLINT	\$319,893.21	\$319,893.21	\$0.00	\$0.00	\$0.00
FRASER	\$193,232.24	\$193,232.24	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$135,981.74	\$135,981.74	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$55,502.33	\$55,502.33	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$171,805.59	\$171,805.59	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$112,734.64	\$112,734.64	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$45,188.66	\$45,188.66	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$112,771.54	\$112,771.54	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$67,516.51	\$67,516.51	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$128,147.80	\$128,147.80	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$122,715.93	\$122,715.93	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$120,570.01	\$120,570.01	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$8,343,937.01	\$187,688.20	\$93,588.92	\$93,039.60	\$7,969,620.29
HURON TOWNSHIP	\$116,732.12	\$116,732.12	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$106,849.41	\$106,849.41	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,272.67	\$1,272.67	\$0.00	\$0.00	\$0.00
INKSTER	\$199,093.98	\$199,093.98	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$23,827.99	\$23,827.99	\$0.00	\$0.00	\$0.00
LAPEER	\$243,169.77	\$243,169.77	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$46,435.82	\$46,435.82	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$194,653.33	\$194,653.33	\$0.00	\$0.00	\$0.00
LIVONIA	\$1,728,294.21	\$1,728,294.21	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$1,877,210.63	\$1,877,210.63	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$3,041.84	\$3,041.84	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELVINDALE	\$104,699.72	\$104,699.72	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$29,063.70	\$29,063.70	\$0.00	\$0.00	\$0.00
NOCWA	\$3,386,729.78	\$3,386,729.78	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$66,833.63	\$66,833.63	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$441,579.33	\$441,579.33	\$0.00	\$0.00	\$0.00
NOVI	\$676,322.09	\$676,322.09	\$0.00	\$0.00	\$0.00
OAK PARK	\$233,522.28	\$233,522.28	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$9,309.95	\$9,309.95	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$82,775.71	\$82,775.71	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$336,836.46	\$336,836.46	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$259,271.83	\$259,271.83	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$61,380.04	\$61,380.04	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$142,239.38	\$142,239.38	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$22,599.55	\$22,599.55	\$0.00	\$0.00	\$0.00
ROMEO	\$37,940.88	\$37,940.88	\$0.00	\$0.00	\$0.00
ROMULUS	\$697,004.28	\$697,004.28	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$214,858.47	\$214,858.47	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$15,799.32	\$15,799.32	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,043,745.83	\$1,043,745.83	\$0.00	\$0.00	\$0.00
SOCWA	\$3,507,281.29	\$3,507,281.29	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$18,336.25	\$18,336.25	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$181,063.07	\$181,063.07	\$0.00	\$0.00	\$0.00
ST. CLAIR COUNTY-GREENWOOD T	\$98,569.37	\$98,569.37	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$262,866.98	\$262,866.98	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,140,375.38	\$1,140,375.38	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$55,396.97	\$55,396.97	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,374.76	\$18,374.76	\$0.00	\$0.00	\$0.00
TAYLOR	\$377,020.96	\$377,020.96	\$0.00	\$0.00	\$0.00
TRENTON	\$139,925.63	\$139,925.63	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,047,260.74	\$1,047,260.74	\$0.00	\$0.00	\$0.00
UTICA	\$42,745.28	\$42,745.28	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$541,210.50	\$541,210.50	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$37,572.08	\$37,572.08	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$62,247.87	\$62,247.87	\$0.00	\$0.00	\$0.00
WARREN	\$819,597.52	\$819,597.52	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$147,336.82	\$147,336.82	\$0.00	\$0.00	\$0.00
WAYNE	\$534,911.16	\$534,911.16	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,571,393.36	\$1,571,393.36	\$0.00	\$0.00	\$0.00
WESTLAND	\$986,888.88	\$986,888.88	\$0.00	\$0.00	\$0.00
WIXOM	\$189,177.93	\$189,177.93	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$263,028.38	\$263,028.38	\$0.00	\$0.00	\$0.00
YCUA	\$1,631,820.90	\$1,631,820.90	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$42,938,620.95	\$34,782,303.97	\$93,657.09	\$93,039.60	\$7,969,620.29

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$86,099.50	\$86,099.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,903,300.00	\$2,903,300.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$74,500.00	\$74,500.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$229,200.00	\$229,200.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$332,900.00	\$332,900.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$18,300.00	\$18,300.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$33,974,774.24	\$472,500.00	\$472,500.00	\$472,500.00	\$32,557,274.24
MELVINDALE	\$127,908.16	\$127,800.00	\$108.16	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,772,000.00	\$3,772,000.00	\$0.00	\$0.00	\$0.00
OMID	\$5,852,314.62	\$5,852,314.62	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$9,027,000.00	\$4,513,500.00	\$4,513,500.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,069,800.00	\$2,069,800.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$8,400.00	\$4,200.00	\$4,200.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$58,476,496.52	\$20,456,414.12	\$4,990,308.16	\$472,500.00	\$32,557,274.24

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,532.83	\$1,532.83	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$10,865.01	\$10,865.01	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$1,883.00	\$1,883.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$366.73	\$366.73	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,004.82	\$3,004.82	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$949.78	\$949.78	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,128.42	\$7,128.42	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$739,218.80	\$18,126.94	\$18,126.94	\$18,126.94	\$684,837.98
CENTER LINE	\$3,501.68	\$3,501.68	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$11,676.21	\$11,676.21	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$8,466.90	\$8,466.90	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,540.55	\$3,540.55	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$2,626.26	\$2,626.26	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$24,533.73	\$24,533.73	\$0.00	\$0.00	\$0.00
DEARBORN	\$70,293.86	\$70,293.86	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$9,188.53	\$9,188.53	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$101.40	\$101.40	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EASTPOINTE	\$6,163.43	\$6,163.43	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$4,715.10	\$4,715.10	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$7,023.64	\$7,023.64	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,502.41	\$1,502.41	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$1,985.75	\$1,985.75	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$2,247.70	\$2,247.70	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,458.95	\$2,458.95	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$3,968.12	\$3,968.12	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$3,734.90	\$3,734.90	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,034.74	\$3,034.74	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$6,095.83	\$6,095.83	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,714,684.70	\$7,811.18	\$3,892.07	\$3,853.20	\$1,699,128.25
HUNTINGTON WOODS	\$272.09	\$272.09	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$2,326.70	\$2,326.70	\$0.00	\$0.00	\$0.00
INKSTER	\$10,572.64	\$10,572.64	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$763.88	\$763.88	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,336.79	\$1,336.79	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$618.54	\$618.54	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$38,212.59	\$38,212.59	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$196.04	\$196.04	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$6,577.48	\$6,577.48	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$1,816.75	\$1,816.75	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$177,363.16	\$4,348.37	\$4,348.37	\$4,348.37	\$164,318.05
NOVI	\$16,734.38	\$16,734.38	\$0.00	\$0.00	\$0.00
OAK PARK	\$13,016.38	\$13,016.38	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$94.64	\$94.64	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$ (426.49)	\$0.00	\$ (426.49)	\$0.00	\$0.00
OXFORD TOWNSHIP	\$ (961.61)	\$ (961.61)	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,196.52	\$1,196.52	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$260.26	\$260.26	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$ (3,707.86)	\$0.00	\$ (3,707.86)	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$493,686.44	\$12,103.78	\$12,103.78	\$12,103.78	\$457,375.10
REDFORD TOWNSHIP	\$12,307.74	\$12,307.74	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$17,521.92	\$17,521.92	\$0.00	\$0.00	\$0.00
ROMULUS	\$880.49	\$880.49	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$13,820.82	\$13,820.82	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,170.17	\$13,170.17	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,032.80	\$12,032.80	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$27,100.84	\$27,100.84	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,711.24	\$3,711.24	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$11,476.79	\$11,476.79	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$30,092.14	\$30,092.14	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$365.04	\$365.04	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$35,593.09	\$35,593.09	\$0.00	\$0.00	\$0.00
UTICA	\$2,854.41	\$2,854.41	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$3,511.82	\$3,511.82	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,358.76	\$1,358.76	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADMI	\$2,934.38	\$2,934.38	\$0.00	\$0.00	\$0.00
WAYNE	\$4,770.87	\$4,770.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,094.14	\$6,094.14	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) F	\$225.63	\$225.63	\$0.00	\$0.00	\$0.00
WESTLAND	\$21,547.50	\$21,547.50	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$3,637,813.69	\$559,385.21	\$34,336.81	\$38,432.29	\$3,005,659.38

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$10,849.46	\$8,679.57	\$2,169.89	\$0.00	\$0.00
A & R PACKING CO., LLC	\$4,612.62	\$4,612.62	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$256.03	\$256.03	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$51.61	\$51.61	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$43,969.21	\$20,351.11	\$12,524.90	\$11,093.20	\$0.00
ALEXANDER & HORNING	\$5,373.96	\$5,373.96	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$21,938.89	\$21,938.89	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$684.70	\$684.70	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$16,533.05	\$0.00	\$0.00	\$0.00	\$16,533.05
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$228.43	\$228.43	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$17,697.48	\$17,697.48	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$4.33	\$4.33	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$1,288.08	\$1,288.08	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$80.43	\$80.43	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$6.43	\$6.43	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$29,590.03	\$29,590.03	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$54.07	\$54.07	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$5,247.77	\$4,812.57	\$435.20	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$(51.62)	\$0.00	\$(51.62)	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CADILLAC STRAITS BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CAPITAL REPRODUCTIONS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$31,288.79	\$31,288.79	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,681.64	\$35.38	\$35.39	\$20.91	\$1,589.96
CINTAS CORP. - MACOMB TWP.	\$49,317.82	\$49,317.82	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$26.86	\$17.12	\$9.74	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$6.80	\$6.80	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$2,023.98	\$2,023.98	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$1,046.27	\$1,046.27	\$0.00	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$9,048.27	\$9,048.27	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$379.93	\$379.93	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE	\$6,563.83	\$6,563.83	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$8,193.79	\$8,193.79	\$0.00	\$0.00	\$0.00
DETROIT BEER CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$31.32	\$14.24	\$8.54	\$8.54	\$0.00
DETRONIC INDUSTRIES, INC.	\$64.43	\$64.43	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$59,571.94	\$23,805.70	\$17,041.53	\$9,441.01	\$9,283.70
DIVERSIFIED CHEM TECH. INC.	\$150.40	\$71.86	\$78.54	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,563.34	\$3,563.34	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,431.41	\$1,431.41	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$42.00	\$0.00	\$0.00	\$42.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$7,496.11	\$7,496.11	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMPF	\$181.55	\$0.00	\$0.00	\$181.55	\$0.00
ENVIROSOLIDS, L.L.C.	\$49,464.77	\$25,899.09	\$0.00	\$0.00	\$23,565.68

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$1,888.06	\$1,888.06	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$11,331.33	\$11,331.33	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$201.44	\$201.44	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$6,732.44	\$6,732.44	\$0.00	\$0.00	\$0.00
FORD NEW MODEL PROGRAM	\$643.73	\$643.73	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$443.54	\$282.39	\$161.15	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$ (1,890.28)	\$ (1,890.28)	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$13,022.84	\$13,022.84	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (16.01)	\$0.00	\$0.00	\$0.00	\$ (16.01)
GRANITE CITY FOOD & BREWERY	\$53.43	\$0.00	\$0.00	\$53.43	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (85.95)	\$0.00	\$0.00	\$ (85.95)	\$0.00
GREAT BARABOO BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$4,570.13	\$927.34	\$433.90	\$476.44	\$2,732.45
HENKEL CORPORATION	\$302.94	\$175.02	\$0.00	\$127.92	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOME STYLE FOOD INC.	\$193.44	\$193.44	\$0.00	\$0.00	\$0.00
HOMEGROWN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$1,043.09	\$1,043.09	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$585.96	\$585.96	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$5,161.43	\$5,161.43	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$487.34	\$487.34	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$556.41	\$556.41	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$1,515.73	\$1,515.73	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$9.66	\$3.22	\$0.00	\$1.61	\$4.83
J & G FOOD PRODUCTS, INC.	\$42.70	\$42.70	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$81.07	\$0.00	\$0.00	\$40.69	\$40.38
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$1,189.98	\$1,189.98	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$1,171.24	\$1,171.24	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$90.75	\$90.75	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$2,859.95	\$2,859.95	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$2,826.18	\$2,826.18	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$2,828.02	\$564.56	\$263.46	\$182.81	\$1,817.19

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MCNICHOLS POLISHING & ANODIZ	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$142.30	\$142.30	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$818.73	\$818.73	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$237.45	\$237.45	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$97,241.85	\$97,241.85	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$2,260.57	\$2,260.57	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$476.44	\$476.44	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MILANO BAKERY	\$1,387.97	\$1,387.97	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,739.49	\$2,739.49	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$48.36	\$5.58	\$0.70	\$5.93	\$36.15
MOTOR CITY BREWING WORKS	\$1,313.13	\$0.00	\$0.00	\$178.07	\$1,135.06
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEA	\$30.90	\$30.90	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$285.76	\$285.76	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$626.39	\$626.39	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$39,703.57	\$39,703.57	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$65.92	\$65.92	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PINE TREE ACRES, INC.	\$78,610.12	\$78,610.12	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$270.35	\$270.35	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$1,073.41	\$1,073.41	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$50.71	\$50.71	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$388.73	\$388.73	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$1,180.47	\$0.00	\$0.00	\$1,180.47	\$0.00
ROCHESTER MILLS BEER COMPANY	\$285.99	\$0.00	\$0.00	\$285.99	\$0.00
ROCHESTER MILLS PROD BREWERY	\$1,253.77	\$0.00	\$0.00	\$1,253.77	\$0.00
ROYAL OAK BREWERY	\$(885.14)	\$0.00	\$0.00	\$0.00	\$(885.14)
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$73.73	\$73.73	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$1,034.82	\$0.00	\$0.00	\$100.35	\$934.47
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$14.52	\$14.52	\$0.00	\$0.00	\$0.00
SUPERNATURAL SPIRITS & BREWI	\$75.08	\$0.00	\$0.00	\$75.08	\$0.00
SWEETHEART BAKERY, INC.	\$2,187.71	\$158.30	\$79.87	\$79.87	\$1,869.67
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOM LAUNDRY CLEANERS	\$6.90	\$6.90	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$62.66	\$0.00	\$0.00	\$21.00	\$41.66

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$184,681.65	\$184,681.65	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$2,628.40	\$2,628.40	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$62,642.01	\$62,642.01	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,078.52	\$2,078.52	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$6.94	\$6.94	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$530.34	\$530.34	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$992.01	\$992.01	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$3,833.88	\$3,833.88	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$4,964.87	\$4,964.87	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$3,118.59	\$3,118.59	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$5,327.30	\$5,327.30	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$5,313.45	\$5,313.45	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (36.26)	\$0.00	\$0.00	\$0.00	\$ (36.26)
WIGLEY'S MEAT PROCESS	\$540.72	\$540.72	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$822.47	\$822.47	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$162.22	\$162.22	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$5,096.66	\$5,096.66	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,504.40	\$2,504.40	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WOODWARD AVENUE BREWERS	\$85.18	\$0.00	\$0.00	\$85.18	\$0.00
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$994,231.75	\$849,498.91	\$33,191.19	\$24,849.87	\$86,691.78

City of Highland Park Billings and Collections

	<u>Water</u>	<u>Sewer</u>	<u>IWC</u>	<u>Cumulative Total</u>
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	<u>(65,652)</u>	<u>(2,206,211)</u>	<u>-</u>	<u>(2,271,863)</u>
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	<u>-</u>	<u>(1,612,633)</u>	<u>-</u>	<u>(1,612,633)</u>
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	<u>-</u>	<u>(1,444,623)</u>	<u>-</u>	<u>(1,444,623)</u>
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	<u>-</u>	<u>(2,022,335)</u>	<u>-</u>	<u>(2,022,335)</u>
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	<u>-</u>	<u>(2,309,186)</u>	<u>-</u>	<u>(2,309,186)</u>
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	<u>-</u>	<u>(4,108,108)</u>	<u>-</u>	<u>(4,108,108)</u>
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings (12 Months)	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments (12 Months)	<u>-</u>	<u>(5,241,583)</u>	<u>-</u>	<u>(5,241,583)</u>
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings (10 Months)	992,892	4,720,400	39,442	5,752,734
FY 2020 Payments (10 Months)	<u>-</u>	<u>(2,218,469)</u>	<u>-</u>	<u>(2,218,469)</u>
				-
Balance as of April 30, 2020	<u>\$ 8,343,937</u>	<u>\$ 33,974,775</u>	<u>\$ 1,714,685</u>	<u>\$ 44,033,397</u>



Capital Finance Report
for the Month Ended April 30, 2020

The Capital Finance Report includes the following.

1. Current Year Budget to Actual
2. Historical Activity
3. Look Ahead Forecast

Background: The strategic financial goals for the Great Lakes Water Authority are to be positioned as a solid AA category credit by meeting or exceeding rating agency criteria thereby reducing the cost of capital and, ultimately, the charges for regional water and sewer infrastructure.

The path to becoming a solid AA credit is based upon rebalancing debt financing with revenue generated capital (also known as pay-as-you-go) to fund the capital improvement plan (CIP) for large construction projects as well as capital outlay for equipment and other assets. By reducing the portion of annual revenue dollars that are dedicated to debt service, the following types of metrics used by rating agencies will improve.

Operating Margin	Free Cash as a Percentage of Depreciation
Debt Service Coverage	Net Position
Debt to Operating Revenue	Debt/Asset Ratio

At least annually, GLWA compares these metrics compared to prior years and to peer utilities. While progress continues to be made, a maximum debt financing approach compounded in decades past coupled with material swap termination fees in the 2011/2012 era increased the predecessor entity's debt to a very high level compared to peers.

To reduce GLWA bonded debt service over time, an annual, incremental amount is budgeted to increase Improvement & Extension (I&E) funds. In addition, realized positive budget variances are also transferred to the I&E Fund to fund future capital improvements without increasing the debt burden.

The Master Bond Ordinances (MBO) define the I&E funds as being established within the MBO Trust for use in improving, enlarging, extending, or bettering the regional water and sewer systems.

Note: *This report is for the regional system only. The MBOs also establish similar funds for the local Detroit Water & Sewerage Department water and sewer systems. Capital program activities for DWSD are reported in their annual, audited financial statements.*

Purpose of this Report: This is the inaugural Capital Finance Report. Beginning FY 2021, this report will be presented to the Audit Committee bi-annually. This report delivers on the promise of transparency by presenting historical information to provide context, current year information to share timely and relevant data, and long-term financial plans to

demonstrate GLWA’s strategic financial goal of reducing overall debt financing by utilizing accumulated I&E funds.

Current Year Budget to Actual

The budgeted sources of activity in the I&E funds are largely transfers in from the operating fund from current year revenue requirement collections and budgetary operating savings from current or prior years. Budgeted uses are for capital outlay and transfers for large capital improvement projects.

Table 1 - Water and Sewer Improvement & Extension Fund FY 2020 Budget to Actual below summarizes activity to date through April 30, 2020. Explanatory notes follow the table.

	Water			Sewer			
	Adopted Budget	Actual thru April 2020	Key %'s	Adopted Budget	Actual thru April 2020	Key %'s	
Sources							
1	Revenue Requirement (Budgeted) Transfers	\$ 30,125,500	\$ 22,593,751	75%	\$ 25,461,600	\$ 19,096,200	75%
2	Pending Amendment - DWSD Shortfall	-	(1,132,254)		-	(10,748,519)	
3	Cumulative Optimization	-	-		-	-	
4	Unrealized Market Value Adjustment	-	(921,838)		-	(88,883)	
Total Sources		<u>30,125,500</u>	<u>20,539,659</u>	68%	<u>25,461,600</u>	<u>8,258,798</u>	32%
Uses							
5	Transfers for CIP	45,000,000	-	0%	-	-	
Capital Uses							
6	Contractual Services	-	138,289		-	1,470,853	
7	Supplies & Other Expenses	-	-		-	-	
8	Capital Outlay	<u>10,125,300</u>	<u>6,033,980</u>	60%	<u>20,122,200</u>	<u>3,578,818</u>	18%
Total Capital Uses		<u>10,125,300</u>	<u>6,172,269</u>		<u>20,122,200</u>	<u>5,049,671</u>	
Total Uses		<u>55,125,300</u>	<u>6,172,269</u>	11%	<u>20,122,200</u>	<u>5,049,671</u>	25%
Increase (Decrease) in Reserves		<u>\$ (24,999,800)</u>	<u>\$ 14,367,390</u>		<u>\$ 5,339,400</u>	<u>\$ 3,209,127</u>	

Sources of Improvement & Extension Funding:

1. Revenue Requirement (Budgeted) Transfers: Revenue Requirement transfers are budgeted annual transfers to support an increasing level of revenue financed capital over time.
2. Pending Amendment – DWSD Shortfall: To the extent that the DWSD’s revenue collections are less than financial commitments pursuant to the leases and MBO, GLWA provides interim funding to cure any shortfall. Repayments terms and conditions are outlined in a 2018 Memorandum of Understanding (MOU).

3. Cumulative Optimization: Cumulative Optimization reflects an annual, yearend transfer of operational savings achieved in the current fiscal year and is in addition to budgeted revenue requirement transfers.
4. Unrealized Market Value Adjustments: Investment earnings in the I&E Fund are transferred to the general operating fund to reduce the burden on charges revenues. The amount on this line is amount is an accounting recognition of unrealized adjustments to the market value of investments in the I&E Fund.

Uses of Improvement & Extension Funding:

5. Transfers for CIP Capital Uses Contractual Services: This is a strategic use of I&E funds using pay-go rather than debt for large CIP projects.
6. Contractual Services: These expenses relate to other system improvements that do not meet capitalization thresholds.
7. Supplies & Other Expenses: These expenses relate to other system improvements that do not meet capitalization thresholds.
8. Capital Outlay: Reflects assets with a useful life of less than 20 years (generally non-construction capital outlay such as machinery, equipment, vehicles, and systems).

Budget to Actual Commentary: Budgeted transfers from revenue requirements are made monthly. As we move toward the end of the fiscal year, this amount may be adjusted to accommodate the DWSD budget shortfall and/or forecasted GLWA revenue and expense variance from the GLWA adopted budget. The budgeted transfer to fund the Water System CIP has not been required to date based upon the CIP spend rate. Amounts not spent this year carryforward to the subsequent year. Capital outlay (including contractual services) have a favorable variance. Some delays in projected spending have occurred to address other organizational priorities related to the COVID-19 pandemic.

Historical Activity

Improvement & Extension funds activity began with the stand-up of the GLWA on January 1, 2016 with the transfer of opening balances. Historically, budgeted transfers were completed annually after the close of the external audit, then as cash trends improved, and now as routine activities are in place. Beginning in December 2020, transfers are completed monthly after confirming available cash balances.

Tables 2 and 3 present a historical analysis of the I&E Fund activity beginning with GLWA's first twelve-month fiscal year (FY 2017) through current interim fiscal year reporting (April 2020).

Table 2 - Water Improvement & Extension Fund Rollforward summarizes the year-over-year sources and uses of monies within the Water I&E fund as reported in the Combining Statements of the GLWA Comprehensive Annual Financial Reports. Both tables reflect a steady increase of funds for use in the CIP.

This table also compares the fund Net Position to the ending cash balance. Due to the nature of activity in this fund, most of the variance between Net Position and Cash Balance is outstanding accounts payable at yearend.

Table 2 – Water Improvement & Extension Fund Rollforward

Water Improvement & Extension Fund	FY 2017	FY 2018	FY 2019	FY 2020 (thru April 30)	Cumulative Total
Sources					
Revenue Requirement Transfers	\$ 21,958,800	\$ 25,739,700	\$ 39,133,600	\$ 22,593,751	\$ 109,425,851
Cumulative Optimization ¹	88,141,200	21,000,000	8,561,400	-	117,702,600
Unrealized Market Value Adjustment	(207,919)	-	2,314,180	(921,838)	1,184,423
Total Sources	109,892,081	46,739,700	50,009,180	21,671,913	228,312,874
Uses					
Contractual Services	-	-	2,107,743	138,289	2,246,032
Supplies & Other Expenses	147,884	-	-	-	147,884
Capital Outlay	858,305	1,984,317	5,849,231	6,033,980	14,725,833
Subtotal Capital Uses	1,006,189	1,984,317	7,956,974	6,172,269	17,119,749
DWSD Shortfall	-	-	-	1,132,254	1,132,254
Total Uses	1,006,189	1,984,317	7,956,974	7,304,523	18,252,003
Increase (Decrease) in Reserve	\$ 108,885,892	\$ 44,755,383	\$ 42,052,206	\$ 14,367,390	\$ 210,060,871
Net Position, beginning of year	66,834,234	175,720,126	220,475,509	262,527,715	
Net Position, end of year	\$ 175,720,126	\$ 220,475,509	\$ 262,527,715	\$ 276,895,105	
Cash Balance	\$ 175,901,463	\$ 220,818,636	\$ 264,713,314	\$ 278,288,750	

¹ This represents activity for FY 2017 and previous fiscal years.

Table 3 – Water Improvement & Extension Fund Uses Detail provides a listing of the specific categories and/or projects that were funded by I&E funds for FY 2017, FY 2018, FY 2019, and FY 2020 through April 30, 2020 by type of expense.

Water System - Use of Funds

	FY 2017	FY 2018	FY 2019	FY 2020 (thru April)	Cumulative Total
Capital Outlay	\$ 858,305	\$ 1,984,317	\$ 5,849,231	\$ 6,033,980	\$ 14,725,833
Machinery & Equipment	584,918	170,843	2,599,084	519,116	3,873,960
CIP Project 314001 - Security Improvements			910,972	2,432,581	3,343,553
Site Improvements		1,253,835	1,945,596		3,199,431
Capital Outlay: In Progress				2,435,776	2,435,776
Vehicles		507,007	143,393	450,065	1,100,465
Leasehold Improvements	71,150	37,631	233,677	25,511	367,969
Building		15,000	16,509	170,932	202,441
Vehicle	133,287				133,287
Furniture	68,950				68,950
Contractual Services			\$ 2,107,743	\$ 138,289	\$ 2,246,032
Project 170502 - Water Main Assessment			1,094,429	138,289	1,232,718
Condition Assessment			1,009,064		1,009,064
Contract 1803703 - Building Assessment			4,250		4,250
Supplies and Other Expenses	\$ 147,884				\$ 147,884
Leasehold Improvements	147,884				147,884
Grand Total	\$ 1,006,189	\$ 1,984,317	\$ 7,956,974	\$ 6,172,269	\$ 17,119,749

Table 4 – Water Improvement & Extension Fund Asset Categories provides a cumulative recap of the above for FY 2017, FY 2018, FY 2019, and FY 2020 through April 30, 2020. The CIP largely includes security improvements to facilities. Based on the nature of capital items directly funded by I&E, the second highest category is machinery and equipment.

Water System - Use of Funds

	Total FY 2017 to FY 2020 (thru April)	% of Total
CIP	4,576,271	26.73%
Machinery & Equipment	3,873,960	22.63%
Site Improvements	3,199,431	18.69%
Capital Outlay: In Progress	2,435,776	14.23%
Vehicles	1,233,752	7.21%
Condition Assessment	1,013,314	5.92%
Leasehold Improvements	515,853	3.01%
Building	202,441	1.18%
Furniture	68,950	0.40%
Grand Total	\$ 17,119,749	100%

Table 5 – Sewer Improvement & Extension Fund below summarizes the year-over-year sources and uses of monies within the Sewer Improvement and Extension fund as reported in the Combining Statements of the GLWA Comprehensive Annual Financial Reports. Both tables reflect a steady increase of funds for use in the CIP.

This table also compares the fund Net Position to the ending cash balance. Due to the nature of activity in this fund, most of the variance between Net Position and Cash Balance is outstanding accounts payable at yearend.

Sewer Improvement & Extension Fund	FY 2017	FY 2018	FY 2019	FY 2020 (thru April 30)	Cumulative Total
Sources					
Revenue Requirement Transfer	\$ -	\$ 22,698,100	\$ 14,028,400	\$ 19,096,200	\$ 55,822,700
DWSD Loan Repayment	-	-	10,471,597	15,701,430	81,995,727
Cumulative Optimization	-	-	8,519,300	-	34,692,327
Transfers from Insurance Proceeds, Sale of Property	-	8,136,115	2,771,520	-	19,426,935
Unrealized Market Value Adjustment	(191,099)	-	633,168	(88,883)	11,260,821
Total Sources	(191,099)	30,834,215	36,423,985	34,708,746	101,775,848
Uses					
Contractual Services	-	-	21,000	1,470,853	1,491,853
Capital Outlay	19,110,580	4,740,820	10,889,201	3,578,818	38,319,419
Subtotal Capital Uses	19,110,580	4,740,820	10,910,201	5,049,671	39,811,272
DWSD Shortfall	49,600,000	-	-	10,748,519	60,348,519
Total Uses	68,710,580	4,740,820	10,910,201	15,798,190	100,159,791
Increase (Decrease) in Reserve	\$ (68,901,679)	\$ 26,093,395	\$ 25,513,784	\$ 18,910,556	\$ 1,616,057
Net Position, beginning of year	111,739,293	42,837,614	68,931,009	94,444,793	
Net Position, end of year	\$ 42,837,614	\$ 68,931,009	\$ 94,444,793	\$ 113,355,350	
Cash Balance	\$ 43,351,603	\$ 62,452,793	\$ 96,701,199	\$ 124,074,954	

All amounts are unaudited unless otherwise noted.

Table 6 – Sewer Improvement & Extension Fund Uses Detail provides a listing of the specific categories and/or projects that were funded by I&E funds for FY 2017, FY 2018, FY 2019, and FY 2020 through April 30, 2020 by type of expense.

Sewer System - Use of Funds

	FY 2017	FY 2018	FY 2019	FY 2020 (thru April)	Cumulative Total
Capital Outlay	\$ 19,110,580	\$ 4,740,820	\$ 10,889,200	\$ 3,697,719	\$ 38,438,319
Fire Remediation	17,005,860	2,227,852	193,871		19,427,582
Machinery & Equipment	1,061,867	2,140,758	6,529,549	1,689,628	11,421,802
CIP Project 216007 - WRRF DTE 3rd Feed			2,405,283	129,827	2,535,110
Vehicle	919,937	364,562	269,001	450,065	2,003,564
Capital Outlay: In Progress				1,164,602	1,164,602
Building			667,788	736	668,524
Site Improvements			442,585	9,905	452,490
Leasehold Improvements	69,212	7,648	278,198		355,059
Contract CS-272 - Capital Program Management				252,957	252,957
CIP Project 314001 - Security Improvements			102,924		102,924
Furniture	53,705				53,705
Contractual Services			\$ 21,000	\$ 1,351,952	\$ 1,372,952
Contract CS-299 - CSO Facility Needs Assessment				1,351,952	1,351,952
Contract 1803703 - Building Assessment			21,000		21,000
Total Use of Funds	\$ 19,110,580	\$ 4,740,820	\$ 10,910,200	\$ 5,049,671	\$ 39,811,271

Table 7 – Sewer Improvement & Extension Fund Asset Categories provides a recap of the above for FY 2017, FY 2018, FY 2019, and FY 2020 through April 30, 2020 on a cumulative basis. The largest category of expense was remediation and related improvements from a fire event in March 2016. Based on the nature of capital items directly funded by I&E, the second highest category is machinery and equipment.

Sewer System - Use of Funds

	Total FY 2017 to FY 2020 (thru April)	% of Total
Fire Remediation	\$ 19,427,582	48.8%
Machinery & Equipment	11,421,802	28.7%
CIP	2,890,991	7.3%
Vehicle	2,003,564	5.0%
Condition Assessment	1,372,952	3.4%
Capital Outlay In Progress	1,164,602	2.9%
Building	668,524	1.7%
Site Improvements	452,490	1.1%
Leasehold Improvements	355,059	0.9%
Furniture	53,705	0.1%
Grand Total	\$ 39,811,271	100.0%

Look-Ahead Forecast

GLWA’s strategic plans include a strategic asset management program, a capital improvement plan with a ten-year forecast and an overall ten-year financial plan. As it relates to the I&E Funds, the target balance is no less than \$90 million in each system to ensure reliable funding while strategically evaluating the best timing for new debt issuances.

Table 8 - Water Improvement & Extension Fund Projections highlights that over the ten-year forecast, the water system financial plan provides for \$1.593 billion in capital improvements. Just over 55% of the improvements are expected to be funded with debt while 45% would be funded with I&E Funds. Variances from that plan would be driven by changes in the capital spending pace, opportunities to leverage low-cost state revolving fund dollars, and unforeseeable events.

GLWA Wholesale System Capital Improvement Program Financing Plan (\$ millions)

Line No.	Fiscal Year Ended June 30,												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Financing Requirements													
1	Budgeted Capital Outlay	10.1	17.9	13.8	5.4	5.5	4.7	4.8	4.9	5.0	5.1	5.2	82.4
2	Major Capital Improvement Program (a)	83.8	110.7	134.9	151.4	159.6	144.9	151.0	157.9	154.1	131.7	130.5	1,510.6
3	Total Financing Requirements	94.0	128.6	148.7	156.8	165.1	149.6	155.8	162.8	159.1	136.8	135.7	1,593.0
Application of Financing Sources													
20	I&E Funds - Budgeted Capital Outlay	10.1	17.9	13.8	5.4	5.5	4.7	4.8	4.9	5.0	5.1	5.2	82.4
21	I&E Funding of Debt Eligible Projects	50.0	75.0	85.0	55.0	42.5	45.0	47.5	52.5	55.0	60.0	62.5	630.0
22	Project Expenditures from Construction Funds	33.8	35.7	49.9	96.4	117.1	99.9	103.5	105.4	99.1	71.7	68.0	880.6
23	Total Financing Sources Applied	94.0	128.6	148.7	156.8	165.1	149.6	155.8	162.8	159.1	136.8	135.7	1,593.0

Table 9 - Water Improvement & Extension Fund Capital Funding Year-end Projections shows that presently, GLWA is materially above the \$90 million target for I&E year-end cash balance. The financial plan encompasses spending down the existing I&E Funds. The last market transaction for water system bonds was in 2016 in the amount of \$226 million. The next new money market bond transaction is projected for FY 2023 for an estimated amount of \$220 million.

Line No.	Fiscal Year Ended June 30,												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Financing Sources Available for Future Requirements													
24	Improvement & Extension Funds (g)	236.2	172.8	116.2	93.5	91.7	91.5	90.7	91.0	90.9	92.3	92.5	92.5
25	Construction Bond Funds (h)	72.5	50.0	17.1	146.7	49.4	133.6	50.0	147.0	52.6	118.0	51.3	51.3
26	Financing Sources Available for Future Req'ts	308.7	222.8	133.3	240.1	141.1	225.1	140.7	238.0	143.5	210.2	143.8	143.8

Table 10 - Sewer Improvement & Extension Capital Funding Projections highlights that over the ten-year forecast, the sewer system financial plan provides for \$1.549 billion in capital improvements. Slightly over 33% of the improvements are expected to be funded with debt while 67% would be funded with I&E Funds. Variances from that plan would be driven by changes in the capital spending pace, opportunities to leverage low-cost state revolving fund dollars, and unforeseeable events.

Line No.	Fiscal Year Ended June 30,												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Financing Requirements													
1	Budgeted Capital Outlay	20.1	20.5	15.8	9.8	10.4	14.8	15.1	15.4	15.7	16.0	16.3	169.8
2	Major Capital Improvement Program (a)	94.8	83.0	84.6	105.6	152.4	129.0	134.3	135.6	137.5	154.7	167.2	1,378.7
3	Total Financing Requirements	114.9	103.5	100.4	115.4	162.8	143.7	149.4	151.0	153.2	170.7	183.5	1,548.5
Financing Sources													
Application of Financing Sources													
20	I&E Funds - Budgeted Capital Outlay	20.1	20.5	15.8	9.8	10.4	14.8	15.1	15.4	15.7	16.0	16.3	169.8
21	I&E Funding of Debt Eligible Projects	25.0	50.0	35.0	55.0	70.0	85.0	85.0	92.5	105.0	125.0	125.0	852.5
22	Project Expenditures from Construction Funds	69.8	33.0	49.6	50.6	82.4	44.0	49.3	43.1	32.5	29.7	42.2	526.2
23	Total Financing Sources Applied	114.9	103.5	100.4	115.4	162.8	143.7	149.4	151.0	153.2	170.7	183.5	1,548.5

All amounts are unaudited unless otherwise noted.

Table 11 - Sewer Improvement & Extension Fund Capital Funding Year-end Projections shows that presently, GLWA is within the \$90 million target for I&E year-end cash balance. The last market transaction for water system bonds was in 2014 as the predecessor entity (DWSD) in the amount of \$150 million. The next new money market bond transaction is projected for FY 2023 for an estimated amount of \$150 million.

Line No.	Fiscal Year Ended June 30,												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Financing Sources Available for Future Requirements													
24	Improvement & Extension Funds (g)	94.5	88.9	96.0	92.7	89.8	90.9	90.7	91.2	90.1	89.0	90.1	90.1
25	Construction Bond Funds (h)	53.4	54.2	20.2	133.9	52.9	99.0	50.8	83.6	52.2	93.8	52.7	52.7
26	Financing Sources Available for Future Req'ts	148.0	143.1	116.2	226.6	142.6	189.9	141.5	174.9	142.3	182.8	142.7	142.7