



**Audit Committee Meeting**  
**Monday, July 25, 2022 at 8:00 a.m.**  
[www.glwater.org](http://www.glwater.org)

**[Join Zoom Meeting](#)**

Meeting ID: **826 4598 4388** Passcode: **067660**

US Toll-free: **888 788 0099** or **877 853 5247**

**AGENDA**

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
  - A. May 27, 2022 (Page 1)
  - B. June 7, 2022 (Page 7)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
7. NEW BUSINESS
  - A. *Presentation:* 10-Year Forecast Update (Page 10)
  - B. *Presentation:* 2022 Bond Transaction Briefing (Page 42)
  - C. *Action Item:* Expanded Authorization on Debt Policy Provisions (Page 58)
  - D. *Action Item:* Resolution Regarding Approval of Series Ordinance (Page 63)  
Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 (Ordinance 2022-06)
  - E. *Action Item:* Resolution Regarding Approval of Series Ordinance (Page 92)  
Authorizing Issuance and Sale of Sewage Disposal System Revenue and Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 (Ordinance 2022-07)
  - F. *Action Item:* Authorizing Publication of Notice of Intent to Issue (Page 121)  
Water Supply and Sewage Disposal System Revenue Bonds
  - G. *Action Item:* Resolution Regarding Approval of Series Ordinance (Page 131)  
Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 (Ordinance 2022-05)
  - H. Audit Engagement Letter and Timeline (Page 156)
  - I. Update: Economic Outlook Task Force (Page 166)
  - J. Update: DWSD's Lifeline Plan – WRAP Impact (Page 188)
  - K. Consent Letter Related to 2022 Bond Transaction (Page 200)

Note: Binders 1, 2 & 3 have been combined and PDF was renumbered.

PDF pages 31-43 are 11x17,  
PDF pages 169-183 are 8.5x14

8. REPORTS

- A. CFO Report (Page 203)
- B. Monthly Financial Report for March 2022 (Page 208)
- C. Monthly Financial Report for April 2022 (Page 209)
- D. Business Inclusion and Diversity Program Year in Review (Page 210)
- E. Quarterly Gifts, Grants & Other Resources Report (Page 219)
- F. Quarterly CWIP Report (Page 229)
- G. Quarterly Debt Report (Page 253)

9. COMMUNICATIONS

- A. *The Procurement Pipeline* for June 2022 (Page 268)
- B. *The Procurement Pipeline* for July 2022 (Page 270)

10. LOOK AHEAD

- A. Next Audit Committee Meeting: August 26, 2022 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

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Friday, May 27, 2022

8:00 AM

Zoom Telephonic Meeting

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#### Zoom Telephonic Meeting

Join Zoom Meeting Here:

[https://glwater.zoom.us/j/89249757345?](https://glwater.zoom.us/j/89249757345?pwd=cnhFeUhORWZbHBQSU9PSUtVHhZPZz09)  
[pwd=cnhFeUhORWZbHBQSU9PSUtVHhZPZz09](https://glwater.zoom.us/j/89249757345?pwd=cnhFeUhORWZbHBQSU9PSUtVHhZPZz09)

Join By Telephone:

888 788 0099 US Toll-free

877 853 5247 US Toll-free

Meeting ID: 892 4975 7345

Passcode: 829151

#### 1. Call To Order

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

#### 2. Quorum Call

**Present:** 3 - Chairperson Brian Baker, Director Gary Brown, and Director Jaye Quadrozzi

#### 3. Approval of Agenda

Nicolette Bateson, Chief Financial Officer/Treasurer, requested to move Item 8.E. (Quarterly Investment Report) to Item 7.D.

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

Motion By: Jaye Quadrozzi

Support: Gary Brown

Action: Approved as Amended

The motion carried unanimously.

#### 4. Approval of Minutes

**[2022-204](#)** Minutes of April, 22, 2022**Sponsors:** Nicolette Bateson**Indexes:** Finance**Attachments:** [4A April 22, 2022 Audit Committee Meeting Minutes](#)

Chairperson Baker requested a Motion to Approve the April 22, 2022 Audit Committee Meeting Minutes.

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Approved

The motion carried by a unanimous vote.

**[2022-207](#)** Minutes of May 6, 2022**Sponsors:** Nicolette Bateson**Indexes:** Finance**Attachments:** [4B May 6, 2022 Audit Committee Special Meeting Minutes](#)

Chairperson Baker requested a Motion to Approve the May 6, 2022 Audit Committee Special Meeting Minutes.

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Approved

The motion carried by a unanimous vote.

**5. Public Comment**

There were no public comments.

**6. Old Business****A. [2022-208](#) Water Residential Assistance Program Funding Reallocation****Sponsors:** Nicolette Bateson**Indexes:** Finance**Attachments:** [6A1 2022-208 WRAP Tables 1-4](#)  
[6A2 WRAP Funding Reallocation Letter - Wayne Metro](#)  
[6A3 Quarterly WRAP Report thru 3.31.2022](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

**B. [2022-209](#) Water Residential Assistance Program Changes**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

**7. New Business****A. [2022-210](#) Resolution to Adopt the City of Detroit Water and Sewerage Department Water Main Replacement - FY 2023 Drinking Water State Revolving Fund (DWSRF) Project Plan**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [7A0 AC Memo - Request to Approve DWSD DWSRF Project Plan](#)

[7A2 Resolution- Approval of DWSD DWSRF Project Plan](#)

[7A3 DWSD - DWSRF Project Plan \(WS-732, WS-733\)](#)

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

**B. [2022-211](#) 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 2022-03)**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [7B0 AC Memo - Approval of Series Ordinance 2022-03- Water Supply System](#)

[7B2 Series Ordinance \(2022 SRF 2 4 Quarter DWRF\)](#)

[7B3 Resolution Approving 2022 SRF-2 Ordinance \(DWRF\)](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

C. [2022-212](#) **Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$66,000,000 (Ordinance 2022-04)**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [7C1 AC Memo - Approval of Series Ordinance 2022-04- Sewer Disposal System](#)  
[7C3 Series Ordinance \(2022-SRF-2 GLWA Sewer\)](#)  
[7C4 Resolution Approving 2022-2 SRF Series Ordinance \(Sewer\) 5742-01](#)

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

D. [2022-217](#) **Quarterly Investment Report**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8E1 Quarterly Investment Report Cover Memo March 2022](#)  
[8E2 GLWA Quarterly Report March 2022 Final](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

## 8. Reports

A. [2022-213](#) **CFO Report**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8A1 CFO Report May 2022rev](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

**Note:** A Special Audit Committee Meeting has been scheduled for Tuesday, June 7, 2022, at 8:00 a.m. to review FY 2022 third quarter budget amendments.

**B.**     [2022-214](#)     Monthly Financial Report for February 2022

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8B February 2022 Financial Report\\_Tagetik](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

**C.**     [2022-215](#)     Business Inclusion and Diversity Program Update

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8C Business Inclusion and Diversity Program Update](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

**D.**     [2022-216](#)     Quarterly WRAP Report

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8D1 Quarterly WRAP Report thru 3.31.2022](#)

[8D2 Appendix A - Quarterly WRAP Performance Metrics Report](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

**E.**     [2022-218](#)     Qualified Financial Institution Review

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8F1 Cover Memo Qualified Financial Institution Review May 2022](#)

[8F2 PFM Approved Broker List Q1 2022](#)

**Motion By:** Jaye Quadrozzi

**Support By:** Gary Brown

**Action:** Received and Filed

The motion carried by a unanimous vote.

**F. [2022-219](#) Annual Pension Report**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [8G Annual Pension Report Binder](#)

**Motion By:** Gary Brown

**Support By:** Brian Baker

**Action:** Received and Filed

The motion carried by a unanimous vote.

**9. Communications****A. [2022-220](#) The Procurement Pipeline for May 2022**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [9A The Procurement Pipeline for May 2022](#)

**No Action Taken**

**10. Look Ahead**

A Special Audit Committee Meeting has been scheduled for Tuesday, June 7, 2022 at 8:00 a.m.

The next regular Audit Committee Meeting is scheduled for Friday, June 24, 2022 at 8:00 a.m.

**11. Other Matters**

**There were no other matters.**

**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 9:26 a.m.**



# Great Lakes Water Authority

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

## Meeting Minutes - Draft

### Audit Committee

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Tuesday, June 7, 2022

8:00 AM

Zoom Telephonic Meeting

Join Zoom Meeting Here:

[https://glwater.zoom.us/j/89146872012?](https://glwater.zoom.us/j/89146872012?pwd=M1Nlc2RrVWthR3VhdXdUUDVNQms1UT09)

pwd=M1Nlc2RrVWthR3VhdXdUUDVNQms1UT09

Join By Telephone:

US Toll-Free

888 788 0099

877 853 5247

Meeting ID: 891 4687 2012

Passcode: 449018

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### Audit Committee Special Meeting

#### Zoom Telephonic Meeting

Join Zoom Meeting Here:

[https://glwater.zoom.us/j/89146872012?](https://glwater.zoom.us/j/89146872012?pwd=M1Nlc2RrVWthR3VhdXdUUDVNQms1UT09)

pwd=M1Nlc2RrVWthR3VhdXdUUDVNQms1UT09

Join By Telephone:

US Toll-Free

888 788 0099

877 853 5247

Meeting ID: 891 4687 2012

#### 1. Call To Order

Chairperson Baker called the meeting to order at 7:59 a.m.

#### 2. Quorum Call

**Present:** 3 - Chairperson Brian Baker, Director Gary Brown, and Director Jaye Quadrozzi

#### 3. Approval of Agenda

Chairperson Baker requested a Motion to Approve the Agenda.

Motion By: Gary Brown

Support By: Jaye Quadrozzi

Action: Approved

The motion carried by a unanimous vote.

**4. Approval of Minutes**

None

**5. Public Comment**

There were no public comments.

**6. Old Business**

None

**7. New Business**

**A. [2022-239](#) Proposed Resolution Adopting the Budget Amendments through the Third Quarter of FY 2022**

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [7A FY 2022 Third Quarter Budget Amendment Report](#)  
[7A1 Addendums FY 2022 Third Quarter Budget Amendment Report](#)  
[7A2 FY 2022 Third Quarter Budget Amendment Resolution](#)

**Motion By:** Gary Brown

**Support By:** Jaye Quadrozzi

**Action:** Recommended for Approval to the Board of Directors

**Agenda of June 22, 2022**

The motion carried by a unanimous vote.

**8. Reports**

None

**9. Communications**

None

**9. Look Ahead**

The next Audit Committee Meeting is scheduled for Friday, June 24, 2022 at 8:00 a.m.

**11. Other Matters**

There were no other matters.



## 12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 8:18 a.m.



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Presentation: 10-Year Forecast Update

**Background:** The Great Lakes Water Authority (GLWA) utilizes a ten-year forecast as a way to inform current decisions by evaluating the long-term impact as well as to guide a sustainable path forward in making operational and capital decisions balance with public health needs and member partner expectations. The ten-year forecast is updated at least annually.

**Analysis:** The ten-year forecast has been updated in preparing for an upcoming revenue bond transaction. The GLWA administration has worked closely with The Foster Group who has compiled the ten-year forecast report (attached) based upon assumptions and parameters provided by GLWA Administration. In addition, GLWA administration and The Foster Group have worked closely with the Detroit Water & Sewerage Department (DWSD) Chief Financial Officer, DWSD Finance staff, and their consultant (Stantec) to obtain an updated DWSD forecast to incorporate required financial plan information that aligns with the GLWA Master Bond Ordinance as well as the agreements between the GLWA and DWSD related regional water and sewer lease and services agreements.

**Proposed Action:** Receive and file this report.

# Audit Committee Briefing: Feasibility Report Forecasts for Series 2022 Bonds

*July 25, 2022*



# Overview / Agenda

- Modifications to FY 2023 Budget Assumptions
- Long-Term Financial Plan Assumptions
- Executive Summary Forecast Observations

# Modifications to FY 2023 Budget

- Forecast uses FY 2023 Modified Budget as “Springboard” for future projections
- Representation of FY 2023 in the forecast differs from FY 2023 Approved Budget
  - ✓ *Analysis in the forecasts is designed to align with proposed 1<sup>st</sup> Quarter Amendments for FY 2023 Budget*
  - ✓ *See slides 4 and 5 for more info*

# Modifications to FY 2023 Budget

- Modifications to treatment of Highland Park in FY 2023 Charges
- Impact of new economic conditions on:
  - ✓ *Operating Expense Requirements;*
  - ✓ *Expected Investment Earnings;*
  - ✓ *Expected Interest Requirements on Bonds;*
  - ✓ *CIP Levels and Financing Requirements*
- Strategic Bond Structuring



# Assumed Modifications to FY 2023 Budget - \$ *millions*

	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
Remove HP Bad Debt Recovery from Charges	(1.26)	(5.42)	(6.67)
Include Highland Park Paymens per Order	NA	3.02	3.02
Recognize Increased Investment Earnings	<u>6.38</u>	<u>7.77</u>	<u>14.15</u>
<b>Total Revenue Impacts</b>	<b>5.12</b>	<b>5.38</b>	<b>10.49</b>
Recognize Increased Operating Expenses	NA	10.77	10.77
Changes in Debt Service Assumptions (a)	0.72	3.36	4.08
WRAP Contribution Adjustment	(0.06)	(0.27)	(0.33)
Adjustment to I&E Contribution	<u>4.46</u>	<u>(8.48)</u>	<u>(4.02)</u>
<b>Total Revenue Requirement Impacts</b>	<b>5.12</b>	<b>5.38</b>	<b>10.49</b>
 <u>(a) Capital Financing Plan Changes</u>			
Change Capital Spend Rate to 100% *	83.96	72.06	156.02
Series 2022 Bond Sale Size	40.00	80.00	120.00

*\* Figures reflect combined total of FY 2023 & FY 2024  
Strategic Bond Structuring offsets higher interest rate*

# Long-Term Financial Plan Assumptions

- “Top Line” Revenue Requirement Increases of 4% annually starting in FY 2024
  - ✓ *Prior forecasts used 3.0% for Water and 2.5% for Sewer*
- Annual O&M increases of 3% starting in FY 2024
  - ✓ *Prior forecasts used 2.0%*
- Strategic application of SRF eligible projects
  - ✓ *Forecast does not contemplate availability of any (beyond SRF) subsidized funding for Regional System CIP*
- Biennial issuance of revenue bonds in “odd number” FYs (2025, 2027, 2029, 2031)



# Executive Summary Forecast Observations

- Sewer Forecast continues to produce more favorable metrics than Water
  - ✓ *Primarily due to the scale of the CIPs relative to the overall Revenue of the Systems*
  - ✓ *Ratio of Average Annual CIP to Annual Revenue:*
    - Water = 55%
    - Sewer = 32%
  - ✓ *Sewer forecast indicates possibility of all “pay go” CIP Funding starting in FY 2030*
- DWSD Local System Forecast provides at least 1.0 x Local System Debt Service Coverage in all years in forecast

# Executive Summary Forecast Observations

## GLWA Financial Plan Summary (\$ millions)

### Executive Summary Metrics

	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>Total</u>
<u>Water Supply System</u>											
Charge Adjustment		2.1%	4.0%	4.0%	4.0%	4.1%	4.1%	4.1%	4.1%	4.1%	
Projected Revenue	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0	
Projected Expenses	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0	
Net Revenues	216.3	219.8	230.1	240.8	252.1	265.4	279.3	293.9	309.1	325.0	
Contribution to I&E	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7	
Projected Cash Balance	243.5	243.4	244.2	243.5	243.1	243.4	243.4	244.0	244.0	243.5	
Capital Improvements *	209.8	238.8	232.0	184.3	158.5	228.4	228.5	179.3	176.4	153.5	1,989.6
New Bond Sales **	225.0	0.0	215.0	0.0	325.0	0.0	350.0	0.0	260.0	0.0	1,375.0
SRF Loan Proceeds **	126.8	110.2	57.8	47.7	0.0	0.0	0.0	0.0	0.0	0.0	342.6
Reg Syst Debt Svc Covg **	1.39	1.37	1.36	1.34	1.29	1.31	1.29	1.29	1.29	1.32	
Total Debt Svc Covg ***	1.32	1.32	1.31	1.29	1.26	1.27	1.25	1.24	1.24	1.26	
<u>Sewage Disposal System</u>											
Charge Adjustment		2.9%	4.1%	4.0%	4.0%	4.1%	4.1%	4.0%	4.0%	3.9%	
Projected Revenue	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1	
Projected Expenses	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1	
Net Revenues	291.9	300.0	314.0	328.6	343.9	362.0	381.0	400.8	421.4	443.0	
Contribution to I&E	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6	
Projected Cash Balance	271.7	271.8	271.6	271.8	271.1	271.7	271.9	322.3	342.1	423.9	
Capital Improvements *	144.4	144.4	173.9	192.6	166.4	141.6	181.1	161.0	121.7	123.5	1,550.5
New Bond Sales **	225.0	0.0	115.0	0.0	225.0	0.0	0.0	0.0	0.0	0.0	565.0
SRF Loan Proceeds **	36.6	63.0	73.6	25.9	0.0	0.0	0.0	0.0	0.0	0.0	199.1
Debt Service Coverage **	1.35	1.35	1.45	1.48	1.46	1.46	1.53	1.65	1.76	1.84	
Total Debt Svc Covg ***	1.30	1.32	1.41	1.43	1.44	1.43	1.49	1.58	1.67	1.74	

\* Includes Budgeted Capital Outlay

\*\* Regional System contribution only

\*\*\* Consolidated Regional System and Local System



**GLWA**

*Great Lakes Water Authority*

**TFG**  
**THE FOSTER GROUP**

The Foster Group, LLC  
12719 Wenonga Lane  
Leawood, KS 66209

Bart Foster, President  
Cell: (913) 530-6240  
[bfoster@fostergroupllc.com](mailto:bfoster@fostergroupllc.com)

MEMORANDUM

GLWA Financial Forecast Update  
Series 2022 Bond Sale Planning

July 20, 2022

To: Nicolette Bateson

From: Bart Foster

This memorandum is intended to introduce updated long-term financial plan forecasts for the GLWA Water and Sewer funds. These forecasts have been prepared to support the upcoming revenue bond transactions designed to secure funding for GLWA's capital improvement programs. The material presented herein updates that originally presented in similar documents published on October 15, 2021, December 15, 2021, and March 29, 2022. Those documents focused on forecasts to support the Fiscal Year 2023 budget and charges. This document is focused on forecasts to support the issuance of the Series 2022 Bonds in the coming weeks.

The March 29, 2022 version of the forecast aligned with the FY 2023 budget and charges, as approved by the Board on February 23, 2022. The forecast exhibits in that document fully aligned with the five-year budget schedules in the approved budget, and becomes the "plan of record" upon which to utilize for this update. The preparation of this forecast update reflects developments subsequent to formal approval of the FY 2023 budget and charges.

On June 2, 2022 the Board approved an adjusted schedule of water and sewer service charges for FY 2023 that removed amounts originally included to fund expected non-payment by the City of Highland Park. This action had the impact of lowering budgeted revenues by approximately \$1.25 million for the Water System and \$5.4 million for the Sewer System. The approved budget has not yet been modified and will be adjusted via a first quarter budget amendment. The depictions of the FY 2023 budgeted amounts in this forecast update reflect these adjustments. They also reflect initial estimates of additional changes being considered, including increased investment earnings, increased operating expenses, initial updated estimated debt service requirements, and related impacts on other elements in the budget. The specific adjustments are documented herein – and it is our understanding and intent to represents such adjustments as items for consideration in the formal first quarter budget amendments.

These updated projections reflect forecasted financial results for a ten-year projection period (*Fiscal Year 2023 through Fiscal Year 2032*) for GLWA's capital and operating financial requirements. Separate exhibits are designed to summarize forecasts for both the Water Fund and the Sewer Fund. These forecast summaries are presented in similar format to prior published work products we have prepared in various forums, which largely focused on

revenue requirements (reflected as either “budget” or “cash” basis) in a manner that aligns with requirements of the GLWA Master Bond Ordinances (MBO’s). We have also included forecast exhibits that illustrate projected “GAAP basis” results, and forecasted “Net Position” of both utilities.

This version of the forecast report also includes budget and forecast information for the DWSD Local System into the comprehensive forecast. We have coordinated development of that material with the DWSD Finance Team and are confident that we have accurately reflected a reasonable depiction of the long term plan for the Local System.

This forecast document embraces a forecasting approach and format that we’ve utilized for several years, and readers should find the general exhibits and discussion familiar. It has been used in support of GLWA revenue bond issues and annual budgeting and charge setting. Many of the exhibits will be included in our Feasibility Reports included in the Official Statements for the upcoming revenue bond transactions.

#### FY 2023 Budget Modifications

Compared to the FY 2023 budget approved in February, the representation of FY 2023 revenues and revenue requirements in this forecast reflects the changes summarized below.

#### **Assumed Modifications to Approved FY 2023 Budget (\$ millions)**

	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
Remove HP Bad Debt Recovery from Charges	(1.26)	(5.42)	(6.67)
Include Highland Park Payments per Order	NA	3.02	3.02
Recognize Increased Investment Earnings	<u>6.38</u>	<u>7.77</u>	<u>14.15</u>
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Adjustment to I&E Contribution	<u>4.46</u>	<u>(8.48)</u>	<u>(4.02)</u>
<b>Total Revenue Requirement Impacts</b>	<b>5.12</b>	<b>5.38</b>	<b>10.49</b>
<u>(a) Capital Financing Plan Changes</u>			
Change Capital Spend Rate to 100% *	83.96	72.06	156.02
Series 2022 Bond Sale Size	40.00	80.00	120.00

*\* Figures reflect combined total of FY 2023 & FY 2024  
Strategic Bond Structuring offsets higher interest rate*

- Removal of amounts related to forecasted Highland Park bad debt expense from amounts included in charges to other customers.
  - *As noted above, the Board formally took this action on June 2, 2020. This action had the impact of lowering budgeted revenues by approximately \$1.25 million for the Water System and \$5.4 million for the Sewer System.*

- Inclusion of expected Sewer Revenue from Highland Park.
  - *The FY 2023 budget presumed no payments from Highland Park. Payments partially in compliance with the recent Judge's order have been experienced in recent months. We've included approximately \$3 million of annual Sewer revenue from Highland Park. This amount equates to 75% of the total annual amounts based on our understanding of the Judge's order.*
- Increased investment earnings.
  - *Based on updated estimates from PFM the FY 2023 estimated (unrestricted) investment earnings included in this forecast represent increases of approximately \$6.4 million for the Water System and \$7.7 million for the Sewer System.*
- Increased Sewer Operation and Maintenance Expense.
  - *GLWA amended the FY 2022 Sewer O&M Budget to reflect recently experienced cost escalations due to inflation. The FY 2023 O&M amount in this forecast assumes a like increase of approximately \$10.8 million.*
  - *At this point we have not increased the Water O&M estimate for FY 2023.*
  - *However, we have increased the expected inflationary impacts in subsequent years to reflect 3% inflation throughout the 10-year forecast period.*
- Modified Capital Spend Rate (CSR) Assumption.
  - *The approved FY 2023 budget supported a capital financing plan that contained Capital Spend Rate Assumptions of 80% for Water and 75% for Sewer. In recognition of inflationary project cost increases related to material prices and supply chain issues we have increased the Capital Spend Rate assumption to 100% for both Systems. We have not made any modifications to the approved CIPs.*
- Increased 2022 Bond Sale Sizing
  - *As a result of anticipated larger capital needs noted above, the size of the upcoming transactions have been increased from "par values" of \$190 million for the Water System and \$150 million for the Sewer System to \$225 million for both Systems.*
  - *We've also forecasted larger participation in SRF funding than was included in the approved FY 2023 budget plan.*
  - *This financing plan is designed for the 2022 Bonds to provide 24 to 30 months of debt financed capital improvements.*
- Strategic Debt Structuring for 2022 Bonds
  - *The FY 2023 budget plan included a simplified "level debt service" assumption regarding the 2022 Bonds. This forecast contains more strategic structuring to take advantages of debt service "headroom" in FYs 2035 and 2036 for both*

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*Systems. As a result the short term debt service requirements of larger than planned transactions can be somewhat mitigated. However . . .*

- *We've also forecasted a higher assumed borrowing rate than included in the FY 2023 budget plan, up from 4.25% to 5.0%.*
- *As a combined result, compared to the approved FY 2023 budget the projected FY 2023 debt service is approximately \$700k higher for the Water System and \$3.4 million for the Sewer System.*
- Adjusted Beginning Balances
  - *The prior version of the forecasts started with an initial year of FY 2022. In this version the initial year is FY 2023, and we have adjusted the "beginning balances" in each of the pertinent funds based on our review of preliminary year end financial reports.*

The adjusted FY 2023 figures resulting from these modifications become the springboard for projections for subsequent years in the forecast period. The forecast produces the executive summary metrics for the 10-year forecast period summarized below.

GLWA Financial Plan Summary (\$ millions)  
*Executive Summary Metrics*

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<u>Water Supply System</u>											
Charge Adjustment		2.1%	4.0%	4.0%	4.0%	4.1%	4.1%	4.1%	4.1%	4.1%	
Projected Revenue	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0	
Projected Expenses	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0	
Net Revenues	216.3	219.8	230.1	240.8	252.1	265.4	279.3	293.9	309.1	325.0	
Contribution to I&E	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7	
Projected Cash Balance	243.5	243.4	244.2	243.5	243.1	243.4	243.4	244.0	244.0	243.5	
Capital Improvements *	209.8	238.8	232.0	184.3	158.5	228.4	228.5	179.3	176.4	153.5	1,989.6
New Bond Sales **	225.0	0.0	215.0	0.0	325.0	0.0	350.0	0.0	260.0	0.0	1,375.0
SRF Loan Proceeds **	126.8	110.2	57.8	47.7	0.0	0.0	0.0	0.0	0.0	0.0	342.6
Reg Syst Debt Svc Covg **	1.39	1.37	1.36	1.34	1.29	1.31	1.29	1.29	1.29	1.32	
Total Debt Svc Covg ***	1.32	1.32	1.31	1.29	1.26	1.27	1.25	1.24	1.24	1.26	
<u>Sewage Disposal System</u>											
Charge Adjustment		2.9%	4.1%	4.0%	4.0%	4.1%	4.1%	4.0%	4.0%	3.9%	
Projected Revenue	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1	
Projected Expenses	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1	
Net Revenues	291.9	300.0	314.0	328.6	343.9	362.0	381.0	400.8	421.4	443.0	
Contribution to I&E	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6	
Projected Cash Balance	271.7	271.8	271.6	271.8	271.1	271.7	271.9	322.3	342.1	423.9	
Capital Improvements *	144.4	144.4	173.9	192.6	166.4	141.6	181.1	161.0	121.7	123.5	1,550.5
New Bond Sales **	225.0	0.0	115.0	0.0	225.0	0.0	0.0	0.0	0.0	0.0	565.0
SRF Loan Proceeds **	36.6	63.0	73.6	25.9	0.0	0.0	0.0	0.0	0.0	0.0	199.1
Debt Service Coverage **	1.35	1.35	1.45	1.48	1.46	1.46	1.53	1.65	1.76	1.84	
Total Debt Svc Covg ***	1.30	1.32	1.41	1.43	1.44	1.43	1.49	1.58	1.67	1.74	

\* Includes Budgeted Capital Outlay

\*\* Regional System contribution only

\*\*\* Consolidated Regional System and Local System

Note that, consistent with prior forecast versions, the Water CIP continues to create relatively more financing pressure on the forecast than does the Sewer CIP. As a result the Water System forecast contains continuation of significant debt financing, while mostly “pay go” capital financing is forecasted for the Sewer System towards the end of the ten year period. This fundamental difference in the Water and Sewer Forecasts is highlighted throughout this memorandum and in the accompanying exhibits.

#### Forecast Introduction and Exhibits

As noted earlier, several of these exhibits will be included in our Feasibility Reports as part of the Official Statements for the upcoming revenue bond transactions. Review of these forecasts is ongoing, and this material should be considered “**Preliminary**”. We encourage stakeholders to review these forecasts with that understanding in mind. In addition, our formally published forecasts always carry this caveat:

*In conducting our studies and formulating our projections and opinions contained herein, we reviewed the books, records, agreements, capital improvement programs and other information produced by the Authority as we deemed necessary. While we consider such books, records, and other documents to be reliable, we have not verified the accuracy of these documents. The projections set forth herein are intended as “forward-looking statements”. Actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur.*

Having said all that, let’s review the updated forecasts. First, in addition to the modified assumptions for FY 2023 noted above, an introduction of the core executive summary assumptions we’ve incorporated into the analysis.

#### 1. Capital financing forecast policy:

- *Fund all Major CIP expenditures via Construction Fund, which is sourced by:*
  - SRF loans
  - Transfers from I&E
  - Bond Proceeds
  - Investment Earnings on Bond Proceeds
- *CIP funding source priority:*
  - Identify short lived CIP projects that should be financed by I&E (currently estimated at 10% of total CIP);
  - Apply “confirmed” SRF resources to specific projects<sup>1</sup>; then
  - Spend existing I&E Funds until they reach policy minimum (\$90 million);

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<sup>1</sup> In prior forecasts “confirmed” SRF projects were limited to those for which GLWA Board had formally passed ordinances and intent to issue. The forecast policy has been updated to include as “confirmed” all projects that have been approved on the State’s Project Priority List. And we have anticipated additional participation.



- Do not rely on annual deposits to I&E to finance CIP until subsequent year(s);
  - Issue debt to finance remainder of annual capital requirements;
  - Plan biennial bond sales in amounts that result in moderate “carryover” balances at end of 2<sup>nd</sup> year<sup>2</sup>
- *Apply Capital Spend Rate Assumption to ALL elements noted above, including:*
  - Total annual requirements;
  - Estimated short lived projects;
  - Scheduled SRF reimbursements
- ***Note that, other than continued SRF participation, this forecast does not contemplate availability of any subsidized funding for Regional System capital improvements***
- 2. “Top Line” increases in annual revenue requirements starting in FY 2024 of:
  - *4.0% for the Water System (up from 3.0%);*
  - *4.0% for the Sewer System (up from 2.5%)*
- 3. Total GLWA / DWSD “Legacy Pension Obligation” annual payments reduce from \$45.4 million to \$10.0 million starting in FY 2024, and all amounts are treated as a non-operating expense after FY 2023.

The forecasted financial results resulting from our application of these assumptions are summarized in the attached exhibits, and briefly introduced below. The exhibit page number references are consistent between the separate Water (W) and Sewer (S) page numbers.

1. Forecasted CIP Financing Plan
  - Illustrates forecasted plan resulting from application of CIP financing policy noted above. Note the relatively larger need for forecasted additional Water bond sales compared to Sewer due to the relatively larger Water CIP requirements. The Sewer forecast anticipates being able to “pay go” all ***known and projected*** CIP Financing starting in FY 2030, with no forecasted new bond sales after FY 2027.
2. Forecasted ***Regional System*** CIP Financing Plan Table
  - Same as 1, in tabular form. ***These tables are included in our preliminary Feasibility Reports.***
3. Forecasted Application of CIP Funding Sources
  - Illustrates growing utilization of I&E monies to finance annual capital improvements, particularly for Sewer. The Sewer picture exhibits steady growth – sufficient to fully fund the CIP and exceed the \$90 million policy minimum by the end of the forecast period.
  - ***At the bottom of the exhibit, we’ve included a metric that identifies the amount of spend from, and deposit to, the I&E Funds as a percentage of total annual CIP. We note that once the existing I&E reserves are spent down to***

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<sup>2</sup> The Series 2022 Bonds are designed to provide financing through FY 2024, with the “biennial cycle” continuing starting in FY 2025.

***the targeted balance of \$90 million, the amounts deposited to the I&E Funds annually basically match the amounts spent from the I&E Funds. Again, the current level, and the growth, in this metric is more favorable for Sewer than Water.***

4. Forecasted **Local System** CIP Financing Plan Table

- The current ten-year Local Water System CIP in this table reflects amounts that DWSD has indicated are appropriate for the Authority to consider for planning purposes. The program is estimated to be funded with a combination of existing balances in the Local System Construction Fund and the Detroit Improvement and Extension Account of the Improvement and Extension Fund, draws on loans from the State Drinking Water Revolving Fund, and annual transfers of Lease Payments and revenues from Retail Water Customers to the Detroit Improvement and Extension Account of the Improvement and Extension Fund. DWSD does not expect that any capital financing will require any additional bonds issued by the Authority until Fiscal Year 2029. The projected financing plan anticipates that minor portions of the annual Lease Payments will be applied to debt service during a few years of the forecast period. In most other years, the forecast anticipates that revenues for the Local System will be sufficient to not require any use of the Lease Payment for debt service, and will actually provide sufficient amounts to make annual transfers to the Detroit Improvement and Extension Account of the Improvement and Extension Fund. ***These tables are included in our preliminary Feasibility Reports.***
- The Local System business plan forecast (which is not included in this package) provides “Local System Debt Service Coverage” ratios of 1.0 or greater throughout the forecast period.

5. Revenue Requirement Financing Plan

- Graphical depiction of the “business plan” assuming annual top line revenue requirement growth of 4.0% for both systems and 3% O&M growth rate assumption for the balance of the forecast period. Note the relatively stable transfers to Water I&E compared to the rapid growth in the Sewer amounts.

6. Wholesale System Revenue Requirement Financing Plan Table

- Same as 4, in tabular form consistent with published Feasibility Reports. Note we do not include this schedule in Feasibility Reports. The business plan summarized in those reports reflect . . .

7. Consolidated System Revenue Requirement Financing Plan Table

- This schedule combines the “business plan” for the Regional Systems and the Local Systems, and depicts all of the forecasted activity under the Trust established by the Master Bond Ordinances. ***These tables are included in our preliminary Feasibility Reports.***

8. Forecasted Fund Balance Summary

- Illustrates “non-restricted” liquidity balances and debt service coverage (as computed for the Regional System portion).
  - \* *Note that the targeted and forecasted balances reflect a “Working Capital Reserve” that is designed to reflect an Operating Fund reserve*

*balance equivalent to 105 days of annual Operations and Maintenance Expense plus 60 days of scheduled transfers to all other MBO Funds.*

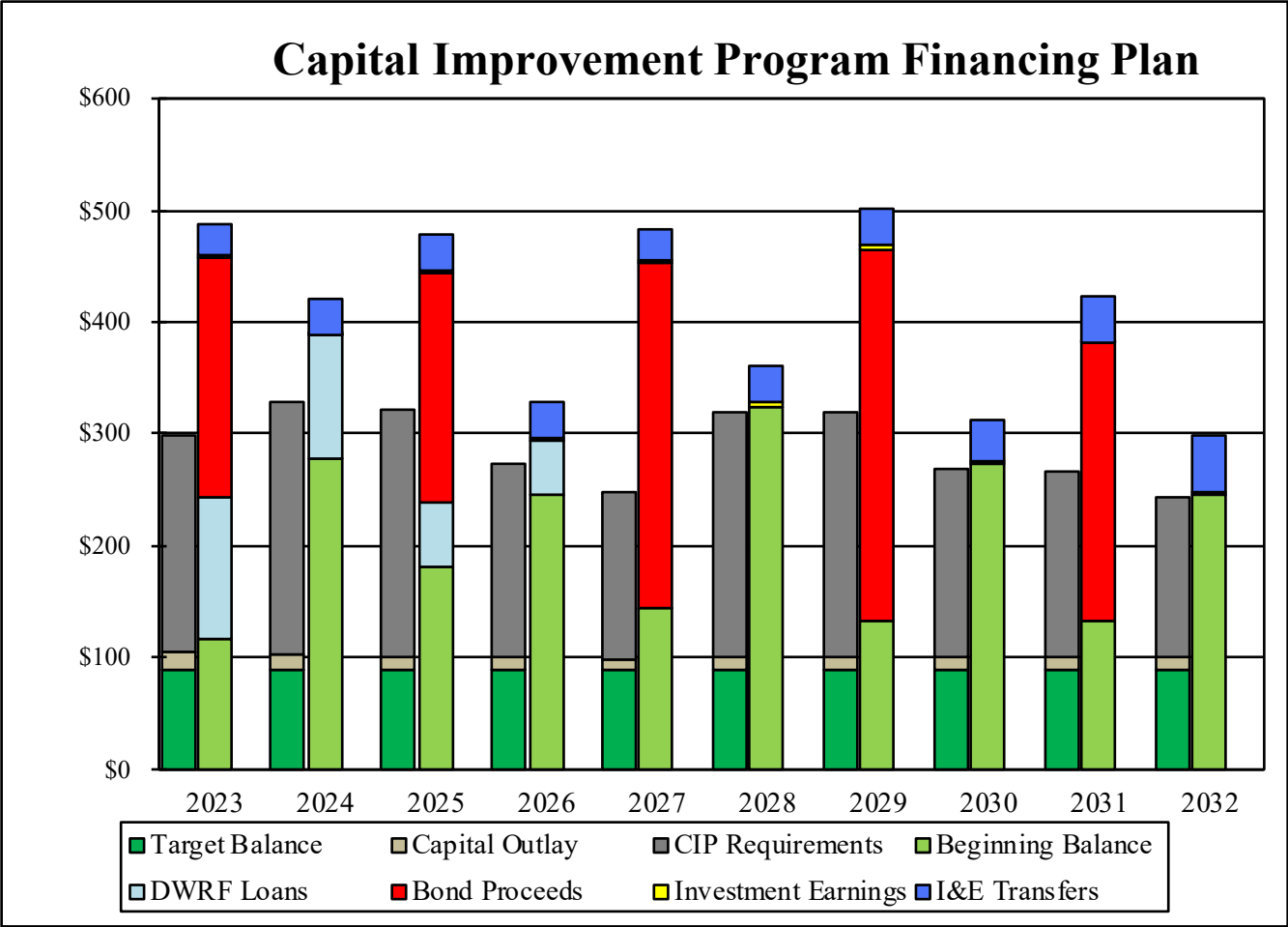
- Shows forecasted reduction of existing I&E balances to policy minimums for both systems, with Sewer increasing towards the end of the forecast period.
    - \* *Note that if full “pay go” status of the Sewer CIP is achieved it may be appropriate to reduce the top line revenue growth assumption in the forecast.*
  - Debt service coverage provided by Regional System net revenues is relatively stable for Water and gradually increasing for Sewer.
9. Projected Cash and Investment Balances – Wholesale System Table
- Same as 6, in tabular form. ***These tables are included in our preliminary Feasibility Reports.***
  - Documents forecasted “Days Cash on Hand” metric
10. Relative Revenue Requirement Distribution
- Illustrates “where each \$ of revenue goes” with respect to revenue requirements. Again, note the reduction in debt service, and corresponding increase in I&E bottom line transfers for Sewer, while the Water bottom line contribution is fairly constant as the relative debt service portion increases.
11. I&E Flow of Funds Forecast
- Illustrates draw down of existing balances to fund CIP requirements, maintenance of the \$90 million policy minimums, and the growth in annual transfers from revenues, particularly for Sewer.
12. GAAP Basis Income Statement Forecast
- Presents forecast of changes in, and level of, net position as reported on a GAAP Basis for forecast purposes.
  - As has been discussed in prior deliberations, the reductions in net position reported for both funds since GLWA’s inception have (in part) been related to an accelerated level of depreciation expense associated with the valuation of acquired and leased assets.
  - Due to the accelerated depreciation structure, many of the acquired assets will be fully depreciated in the next few years, and the annual depreciation expense is projected to decrease.
  - As a result the GAAP basis change in net position is projected to increase during the forecast period, and result in positive cumulative net position metrics by FY 2027 for both systems, and to continue to grow thereafter.
  - We note that there are other “non cash revenue requirement” elements that impact the GAAP basis results, many of which are difficult to project. These include statements of liabilities associated with long term liabilities.
  - ***These tables are included in our preliminary Feasibility Reports.***

We are hopeful that this executive summary presentation provides a platform for comprehensive understanding of the GLWA financial planning policies and assumptions as applied in the development of the preliminary forecast for the Series 2022 Bonds. Much of

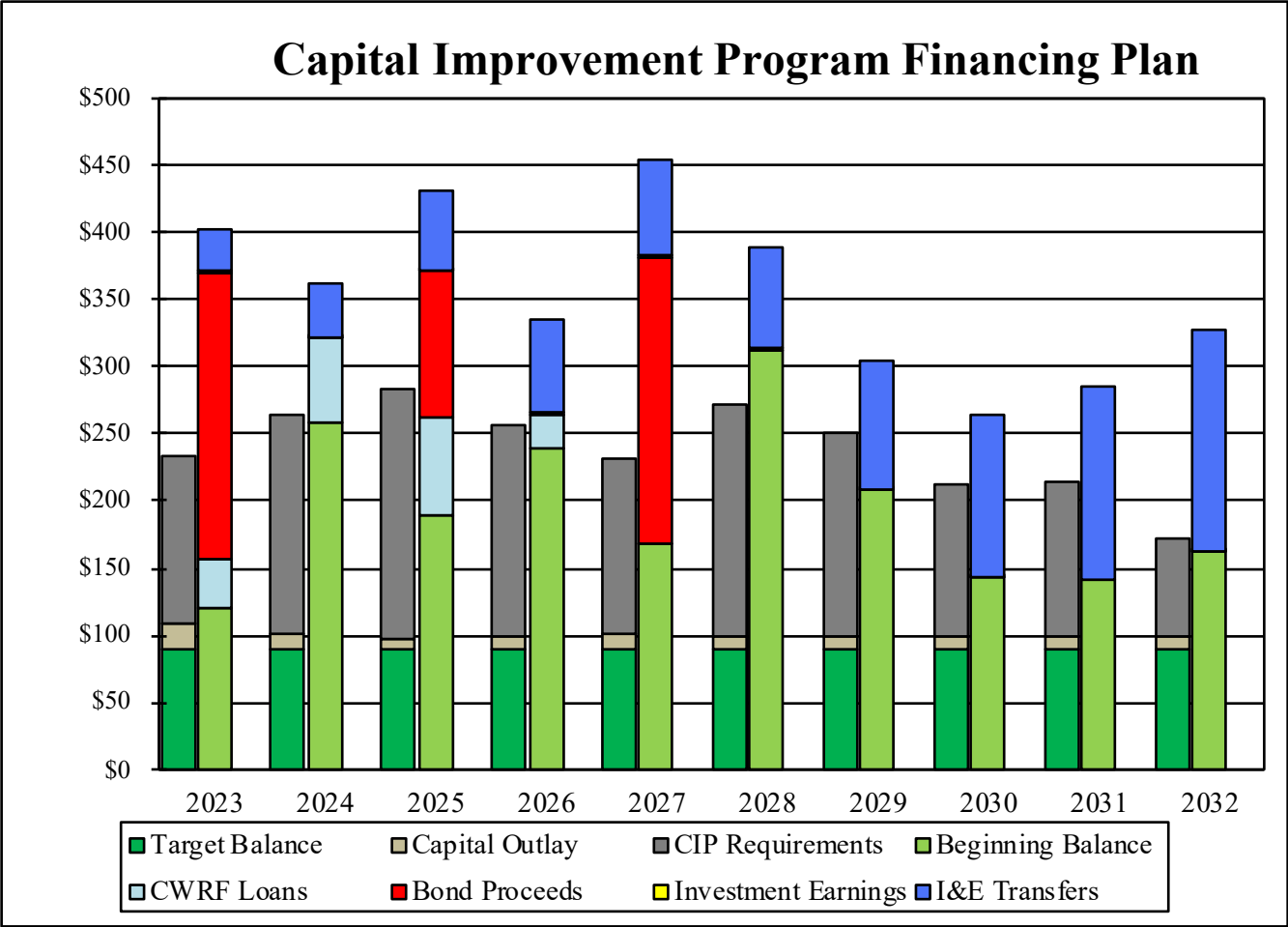
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this narrative, and several of the exhibits, will be included in our preliminary Feasibility Report that will be published in the coming days.



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<strong>Requirements</strong>										
Target Balance	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Capital Outlay	15.5	13.4	10.4	9.6	9.0	10.0	10.0	10.0	10.0	10.0
CIP Requirement	194.4	225.4	221.6	174.7	149.5	218.4	218.5	169.3	166.4	143.5
Total	299.8	328.8	322.0	274.3	248.5	318.4	318.5	269.3	266.4	243.5
<strong>Sources</strong>										
Beginning Balance	117.5	277.9	182.1	246.5	144.0	324.9	132.8	273.9	133.5	246.5
DWRf Loans	126.8	110.2	57.8	47.7	-	-	-	-	-	-
Bond Proceeds	213.8	-	204.3	-	308.8	-	332.5	-	247.0	-
Investment Earnings	0.9	1.2	2.1	1.4	2.1	2.6	3.0	1.9	2.1	1.4
I&E Transfers	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7
Total Sources	487.7	420.9	478.5	328.3	483.5	361.2	502.4	312.7	423.0	297.6
End Balance	277.9	182.1	246.5	144.0	324.9	132.8	273.9	133.5	246.5	144.1



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<strong>Requirements</strong>										
Target Balance	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Capital Outlay	18.4	11.6	8.1	8.7	10.3	10.0	10.0	10.0	10.0	10.0
CIP Requirement	125.9	162.3	184.5	157.7	131.3	171.1	151.0	111.7	113.5	72.8
Total	234.4	263.9	282.6	256.4	231.6	271.1	251.0	211.7	213.5	172.8
<strong>Sources</strong>										
Beginning Balance	120.3	258.2	188.8	239.3	168.4	312.5	208.6	143.4	142.3	162.1
CWRf Loans	36.6	63.0	73.6	25.9	-	-	-	-	-	-
Bond Proceeds	213.8	-	109.3	-	213.8	-	-	-	-	-
Investment Earnings	1.0	0.9	0.9	1.0	1.2	1.4	0.9	0.7	-	0.0
I&E Transfers	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
Total Sources	402.5	362.8	431.9	334.8	454.1	389.7	304.3	264.0	285.6	326.7
End Balance	258.2	188.8	239.3	168.4	312.5	208.6	143.4	142.3	162.1	243.9

Water Table 4a											
GLWA Wholesale System Capital Improvement Program Financing Plan (\$ millions)											
Line No.	Fiscal Year Ended June 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Financing Requirements</b>											
1	Budgeted Capital Outlay	15.5	13.4	10.4	9.6	9.0	10.0	10.0	10.0	10.0	107.9
2	Major Capital Improvement Program (a)	<u>194.4</u>	<u>225.4</u>	<u>221.6</u>	<u>174.7</u>	<u>149.5</u>	<u>218.4</u>	<u>218.5</u>	<u>169.3</u>	<u>166.4</u>	<u>1,881.7</u>
3	Total Financing Requirements	209.8	238.8	232.0	184.3	158.5	228.4	228.5	179.3	176.4	1,989.6
<b>Financing Sources</b>											
<u>Construction Fund</u>											
4	Beginning Balance (b)	23.0	186.6	90.9	154.5	52.7	234.0	41.6	182.6	41.7	23.0 (g)
5	State Drinking Water Revolving Fund Loans	142.2	125.3	73.0	65.8	9.0	9.0	9.0	9.0	9.0	460.4
6	Less: Transfer to DWSD Constr. Fund	<u>(15.4)</u>	<u>(15.1)</u>	<u>(15.2)</u>	<u>(18.1)</u>	<u>(9.0)</u>	<u>(9.0)</u>	<u>(9.0)</u>	<u>(9.0)</u>	<u>(9.0)</u>	<u>(117.8)</u>
7	Net State DWRF Financing for Authority	126.8	110.2	57.8	47.7	-	-	-	-	-	342.6
8	Transfers from Water Constr. Bond Fund (Line 2)	214.6	1.2	206.4	1.4	310.9	2.6	335.5	1.9	249.1	1,325.0
9	Transfers from Water I&E Fund (Line 26)	<u>16.5</u>	<u>18.3</u>	<u>21.1</u>	<u>23.7</u>	<u>20.0</u>	<u>23.4</u>	<u>23.9</u>	<u>26.5</u>	<u>30.3</u>	<u>243.9</u>
10	Total Construction Fund Sources	381.0	316.3	376.1	227.3	383.5	260.0	401.1	211.0	196.3	1,934.5
11	Uses - Major CIP Expenditures (Line 2)	<u>194.4</u>	<u>225.4</u>	<u>221.6</u>	<u>174.7</u>	<u>149.5</u>	<u>218.4</u>	<u>218.5</u>	<u>169.3</u>	<u>166.4</u>	<u>1,881.7</u>
12	Ending Balance	186.6	90.9	154.5	52.7	234.0	41.6	182.6	41.7	154.8	52.8 (h)
<b>Subsidiary Capital Financing Funds</b>											
<u>Construction Bond Fund</u>											
13	Beginning Balance (b)	-	-	-	-	-	-	-	-	-	- (g)
Bond Proceeds											
14	Water System Revenue Bonds (c)	225.0	-	215.0	-	325.0	-	392.1	-	296.8	1,453.9
15	Less: Transfer to DWSD Const. Fund (e)	-	-	-	-	-	-	(40.0)	-	(35.0)	(75.0)
16	Less: Issuance Expenses (f)	<u>(11.3)</u>	<u>-</u>	<u>(10.8)</u>	<u>-</u>	<u>(16.3)</u>	<u>-</u>	<u>(19.6)</u>	<u>-</u>	<u>(14.8)</u>	<u>(72.7)</u>
17	Net Bond Proceeds Available	213.8	-	204.3	-	308.8	-	332.5	-	247.0	1,306.3
18	Investment Income	<u>0.9</u>	<u>1.2</u>	<u>2.1</u>	<u>1.4</u>	<u>2.1</u>	<u>2.6</u>	<u>3.0</u>	<u>1.9</u>	<u>2.1</u>	<u>18.8</u>
19	Total Construction Bond Fund Sources	214.6	1.2	206.4	1.4	310.9	2.6	335.5	1.9	249.1	1,325.0
20	Less: Transfer to GLWA Construction Fund	<u>(214.6)</u>	<u>(1.2)</u>	<u>(206.4)</u>	<u>(1.4)</u>	<u>(310.9)</u>	<u>(2.6)</u>	<u>(335.5)</u>	<u>(1.9)</u>	<u>(249.1)</u>	<u>(1,325.0)</u>
21	Ending Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 (h)
<u>GLWA Regional System Improvement and Extension Account</u>											
22	Beginning Balance (b)	94.5	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	94.5 (g)
23	Transfers from Water Receiving Fund	<u>28.8</u>	<u>31.5</u>	<u>32.3</u>	<u>32.7</u>	<u>28.6</u>	<u>33.7</u>	<u>34.0</u>	<u>37.0</u>	<u>40.3</u>	<u>348.5</u>
24	Total I&E Fund Sources	123.3	122.8	123.4	124.7	119.9	124.6	125.2	128.2	132.1	443.0
25	Less: Capital Outlay (Line 1)	<u>(15.5)</u>	<u>(13.4)</u>	<u>(10.4)</u>	<u>(9.6)</u>	<u>(9.0)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(107.9)</u>
26	Less: Transfer to GLWA Construction Fund	<u>(16.5)</u>	<u>(18.3)</u>	<u>(21.1)</u>	<u>(23.7)</u>	<u>(20.0)</u>	<u>(23.4)</u>	<u>(23.9)</u>	<u>(26.5)</u>	<u>(30.3)</u>	<u>(243.9)</u>
27	Ending Balance	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	91.8	91.3 (h)
28	Combined Ending Balance of Capital Funds	277.9	182.1	246.5	144.0	324.9	132.8	273.9	133.5	246.5	144.1 (h)

(a) From Table 1.

(b) Estimated balance available June 30, 2022 (applies only to Fiscal Year 2023).

(c) Par value for future bonds.

(d) Reserved

(e) Includes amounts to provide funding to the DWSD CIP.

(f) Assumes amounts will be required from bond proceeds to fund debt service reserve fund.

(g) Total column reflects estimated balance available June 30, 2022.

(h) Total column reflects estimated balance available June 30, 2032.

Sewer Table 4a											
GLWA Wholesale System Capital Improvement Program Financing Plan (\$ millions)											
Line No.	Fiscal Year Ended June 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Financing Requirements</b>											
1	Budgeted Capital Outlay	18.4	11.6	8.1	8.7	10.3	10.0	10.0	10.0	10.0	107.1
2	Major Capital Improvement Program (a)	<u>125.9</u>	<u>162.3</u>	<u>184.5</u>	<u>157.7</u>	<u>131.3</u>	<u>171.1</u>	<u>151.0</u>	<u>111.7</u>	<u>113.5</u>	<u>1,381.8</u>
3	Total Financing Requirements	144.4	173.9	192.6	166.4	141.6	181.1	161.0	121.7	123.5	1,488.9
<b>Financing Sources</b>											
<u>Construction Fund</u>											
4	Beginning Balance (b)	16.0	166.4	97.0	147.7	76.7	221.4	116.9	51.4	0.0	16.0 (g)
5	State Clean Water Revolving Fund Loans	47.7	71.9	83.4	31.9	13.5	13.5	13.5	13.5	13.5	315.9
6	Less: Transfer to DWSD Constr. Fund	<u>(11.1)</u>	<u>(8.9)</u>	<u>(9.8)</u>	<u>(6.0)</u>	<u>(13.5)</u>	<u>(13.5)</u>	<u>(13.5)</u>	<u>(13.5)</u>	<u>(13.5)</u>	<u>(116.8)</u>
7	Net State CWRWF Financing for Authority	36.6	63.0	73.6	25.9	-	-	-	-	-	199.1
8	Transfers from Sewer Constr. Bond Fund (Line 2)	214.8	0.9	110.2	1.0	215.0	1.4	0.9	0.7	-	544.8
9	Transfers from Sewer I&E Fund (Line 27)	<u>25.0</u>	<u>29.0</u>	<u>51.5</u>	<u>59.8</u>	<u>61.1</u>	<u>65.1</u>	<u>84.6</u>	<u>59.6</u>	<u>113.5</u>	<u>622.0</u>
10	Total Construction Fund Sources	292.4	259.3	332.2	234.3	352.8	288.0	202.4	111.7	113.5	1,381.8
11	Uses - Major CIP Expenditures (Line 2)	125.9	162.3	184.5	157.7	131.3	171.1	151.0	111.7	113.5	1,381.8
12	Ending Balance	166.4	97.0	147.7	76.7	221.4	116.9	51.4	-	-	0.0 (h)
<b>Subsidiary Capital Financing Funds</b>											
<u>Construction Bond Funds</u>											
13	Beginning Balance (b)	-	-	-	-	-	-	-	-	-	- (g)
Bond Proceeds											
14	Sewer System Revenue Bonds (c)	225.0	-	115.0	-	225.0	-	26.3	-	-	591.3
15	Less: Transfer to DWSD Const. Fund (e)	-	-	-	-	-	-	(25.0)	-	-	(25.0)
16	Less: Issuance Expenses (f)	<u>(11.3)</u>	<u>-</u>	<u>(5.8)</u>	<u>-</u>	<u>(11.3)</u>	<u>-</u>	<u>(1.3)</u>	<u>-</u>	<u>-</u>	<u>(29.6)</u>
17	Net Bond Proceeds Available	213.8	-	109.3	-	213.8	-	-	-	-	536.8
18	Investment Income	<u>1.0</u>	<u>0.9</u>	<u>0.9</u>	<u>1.0</u>	<u>1.2</u>	<u>1.4</u>	<u>0.9</u>	<u>0.7</u>	<u>-</u>	<u>8.0</u>
19	Total Constr. Bond Fund Sources	214.8	0.9	110.2	1.0	215.0	1.4	0.9	0.7	-	544.8
20	Less: Transfer to GLWA Construction Fund	<u>(214.8)</u>	<u>(0.9)</u>	<u>(110.2)</u>	<u>(1.0)</u>	<u>(215.0)</u>	<u>(1.4)</u>	<u>(0.9)</u>	<u>(0.7)</u>	<u>-</u>	<u>(544.8)</u>
21	Ending Balance	-	-	-	-	-	-	-	-	-	- (h)
<u>GLWA Regional System Improvement and Extension Account</u>											
22	Beginning Balance (b)	104.3	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	104.3 (g)
23	Transfers from Sewer Receiving Fund	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	868.7
24	Other Sources - DWSD Loan Receivable Pmts	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
25	Total I&E Fund Sources	135.2	132.4	151.1	160.2	162.5	166.8	186.5	211.9	285.6	973.0
26	Less: Capital Outlay (Line 1)	<u>(18.4)</u>	<u>(11.6)</u>	<u>(8.1)</u>	<u>(8.7)</u>	<u>(10.3)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(10.0)</u>	<u>(107.1)</u>
27	Less: Transfer to GLWA Construction Fund	<u>(25.0)</u>	<u>(29.0)</u>	<u>(51.5)</u>	<u>(59.8)</u>	<u>(61.1)</u>	<u>(65.1)</u>	<u>(84.6)</u>	<u>(59.6)</u>	<u>(113.5)</u>	<u>(622.0)</u>
28	Ending Balance	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	162.1	243.9 (h)
29	Combined Ending Balance of Capital Funds	258.1	188.8	239.3	168.5	312.5	208.6	143.3	142.3	162.1	243.9 (h)

(a) From Table 1.

(b) Estimated balance available June 30, 2022 (applies only to Fiscal Year 2023).

(c) Par value for future bonds.

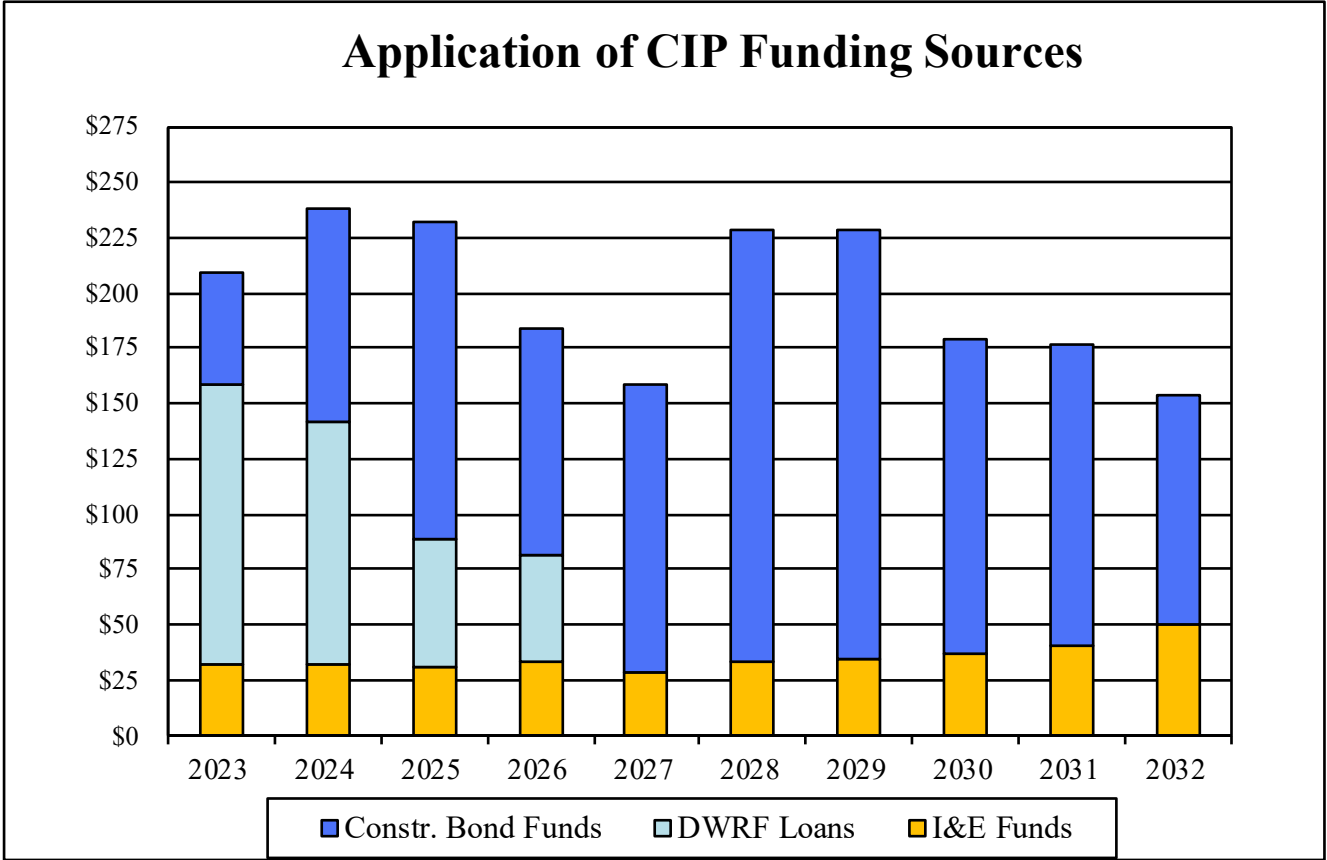
(d) Reserved

(e) Includes amounts to provide funding to the DWSD CIP.

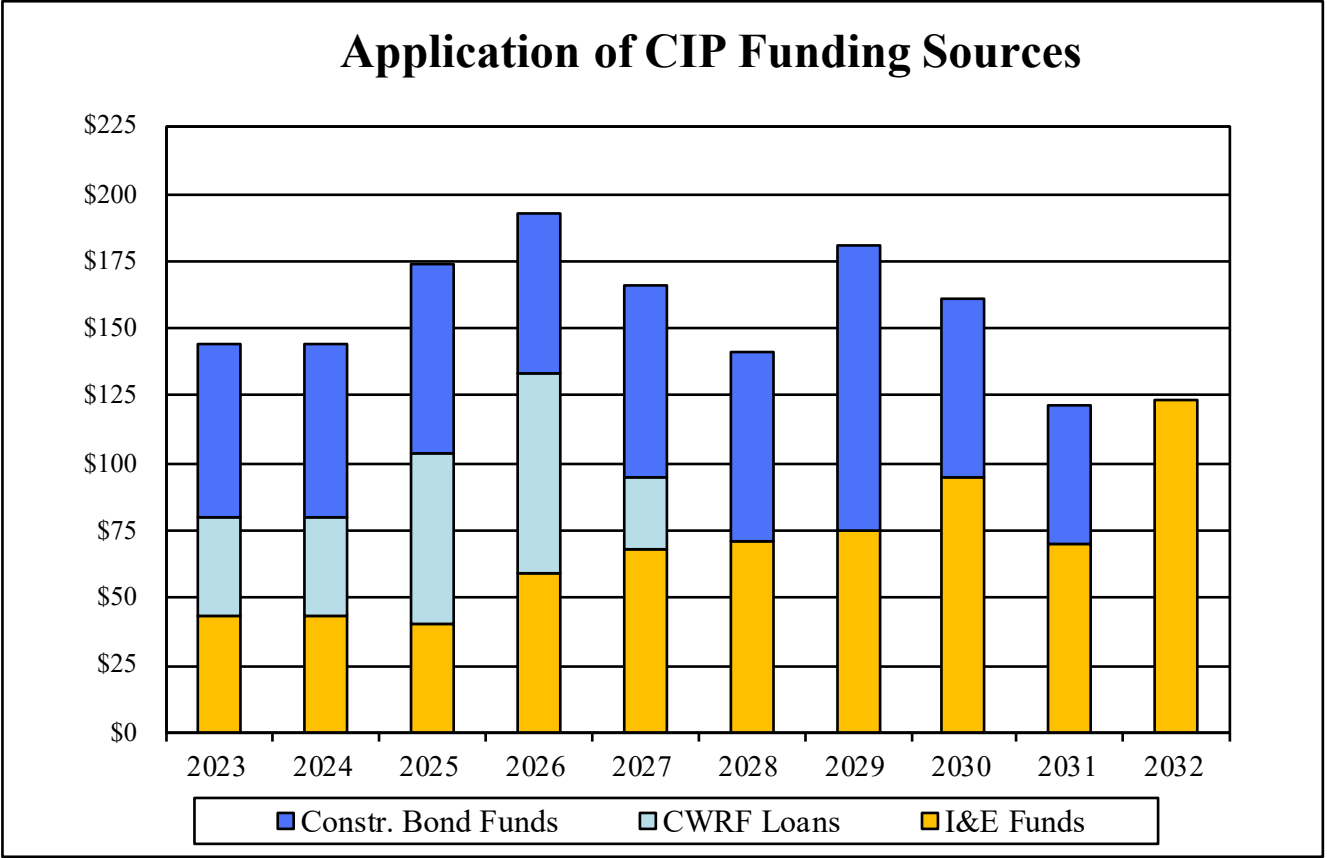
(f) Assumes amounts will be required from bond proceeds to fund debt service reserve fund.

(g) Total column reflects estimated balance available June 30, 2022.

(h) Total column reflects estimated balance available June 30, 2032.



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
I&E Funds	32.0	31.7	31.5	33.4	29.0	33.4	33.9	36.5	40.3	50.2
DWRF Loans	126.8	110.2	57.8	47.7	-	-	-	-	-	-
Constr. Bond Funds	51.0	96.9	142.7	103.2	129.6	194.9	194.6	142.8	136.1	103.3
I&E <i>Spend</i> % of Total	15%	13%	14%	18%	18%	15%	15%	20%	23%	33%
I&E <i>Deposit</i> % of Tot	14%	13%	14%	18%	18%	15%	15%	21%	23%	32%



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
I&E Funds	43.4	43.4	40.6	59.6	68.4	71.4	75.1	94.6	69.6	123.5
CWRP Loans	36.6	36.6	63.0	73.6	25.9	-	-	-	-	-
Constr. Bond Funds	64.3	64.3	70.3	59.5	72.0	70.2	106.0	66.4	52.1	-
I&E <i>Spend</i> % of Total	30%	30%	23%	31%	41%	50%	41%	59%	57%	100%
I&E <i>Deposit</i> % of Tot	21%	28%	34%	36%	43%	54%	52%	75%	118%	133%

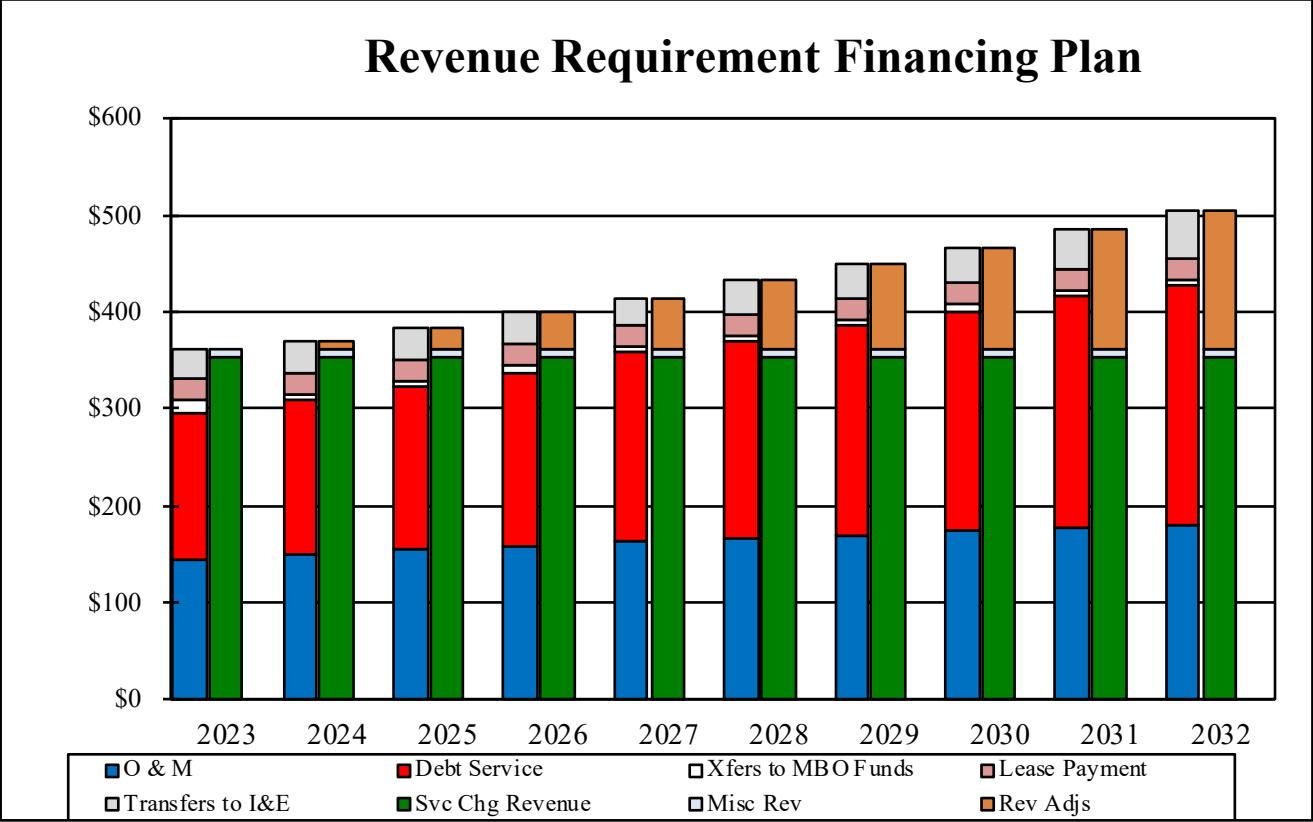
Water Table 4b  
DWSD Retail System Capital Improvement Program Financing Plan (\$ millions)

Line No.	Fiscal Year Ended June 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Financing Requirements</b>											
1	DWSD Local System CIP	49.5	50.1	51.7	57.3	50.0	50.0	50.0	50.0	50.0	508.6
<b>Financing Sources</b>											
<u>DWSD Local System Improvement and Extension Account</u>											
2	Beginning Balance (a)	45.0	48.4	51.0	74.7	59.2	43.5	27.5	30.2	30.9	28.0 45.0 (e)
3	Deposits from Lease Payment (b)	19.6	22.5	22.5	22.5	22.5	22.5	21.8	20.5	18.7	215.6
4	Deposits from DWSD Local System Revenues	-	2.3	1.2	1.3	2.7	2.5	1.2	-	-	11.2
5	Subtotal - Improvement & Extension Fund	64.6	73.2	74.7	98.4	84.5	68.5	51.2	51.9	51.5	46.7 271.9
<u>Construction Bond Funds</u>											
6	Beginning Balance (a)	70.0	52.3	39.6	-	-	-	-	20.1	0.1	17.6 70.0 (e)
7	Net Bond Proceeds	-	-	-	-	-	-	40.0	-	35.0	- 75.0
8	State Drinking Water Revolving Fund Loans	15.4	15.1	15.2	18.1	9.0	9.0	9.0	9.0	9.0	117.8
9	Grant Reimbursements	-	-	-	-	-	-	-	-	-	0.0
10	Investment Income	0.2	0.1	-	-	-	-	0.1	0.0	0.0	0.0 0.4
11	Subtotal - Construction Bond Funds	85.6	67.5	54.8	18.1	9.0	9.0	49.1	29.1	44.1	26.6 263.2
12	<b>Total Financing Sources Available</b>	150.1	140.7	129.5	116.5	93.5	77.5	100.2	81.0	95.6	73.3 535.0
<b>Application of Financing Sources</b>											
13	Project Expenditures from I&E Funds	16.2	22.2	0.0	39.2	41.0	41.0	21.0	23.5	23.5	248.6
14	Project Expenditures from Construction Funds	33.3	27.9	54.8	18.1	9.0	9.0	29.0	26.5	26.5	263.1
15	<b>Total Financing Sources Applied</b>	49.5	50.1	54.8	57.3	50.0	50.0	50.0	50.0	50.0	511.7
<b>Financing Sources Available for Future Requirements</b>											
16	Improvement & Extension Fund (c)	48.4	51.0	74.7	59.2	43.5	27.5	30.2	30.9	28.0	23.2 23.2 (f)
17	Construction Bond Funds (d)	52.3	39.6	-	-	-	-	20.1	0.1	17.6	0.1 0.1 (f)
18	<b>Financing Sources Available for Future Req'ts</b>	100.6	90.6	74.7	59.2	43.5	27.5	50.2	31.0	45.6	23.3 23.3 (f)
(a) Estimated allocated balance available June 30, 2022. (applies only to FY 2023).											
(b) Total Lease Payment											
less: Lease Payment applied to Debt Service											
Net Lease Payment transferred to Local I&E Account											
(c) Line 5 minus Line 13.											
(d) Line 11 minus Line 14.											
(e) Total column reflects estimated balance available June 30, 2022.											
(f) Total column reflects estimated balance available June 30, 2032.											

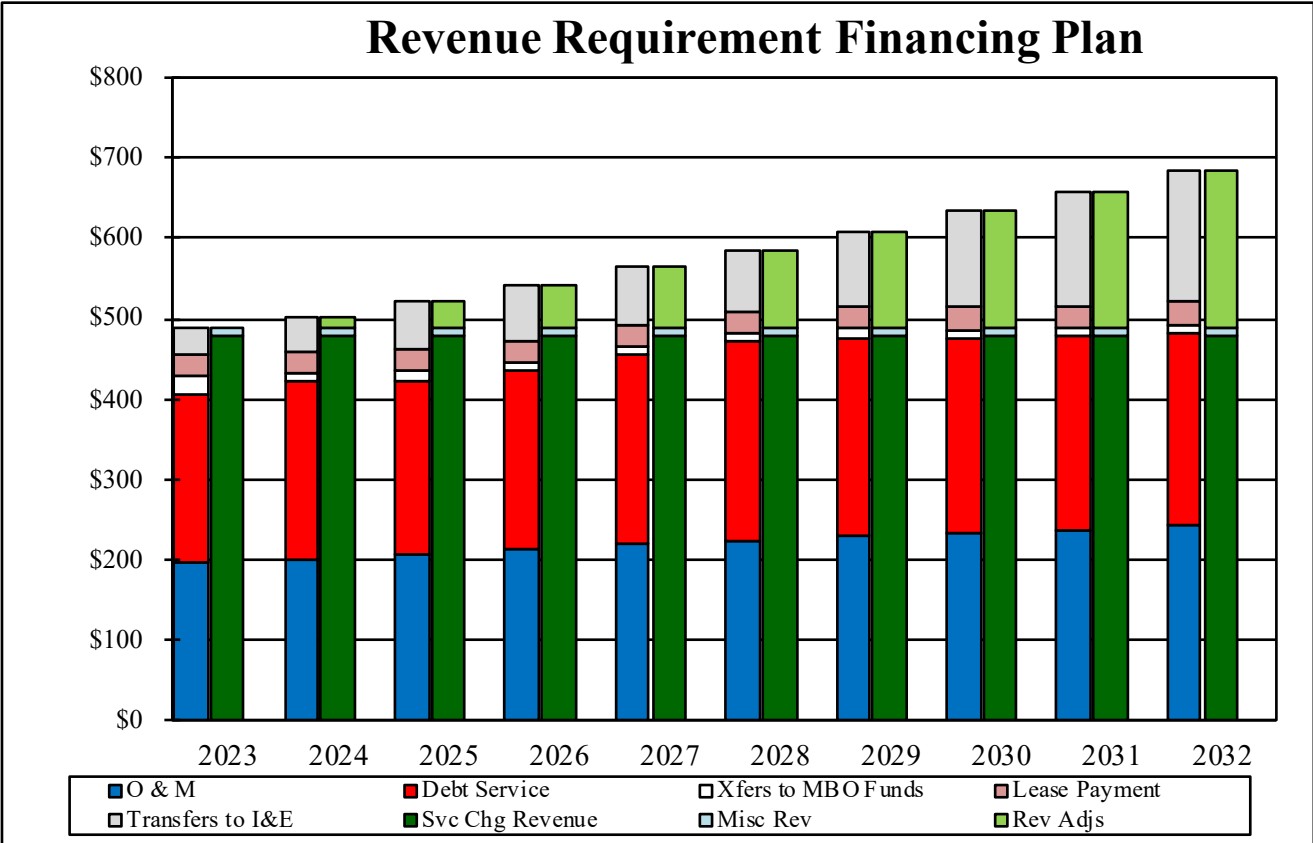
Sewer Table 4b  
DWSD Retail System Capital Improvement Program Financing Plan (\$ millions)

Line No.	Fiscal Year Ended June 30,										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Financing Requirements</b>											
1	DWSD Local System CIP	41.8	50.1	51.7	57.3	45.0	45.0	45.0	45.0	45.0	470.9
<b>Financing Sources</b>											
<u>DWSD Local System Improvement and Extension Account</u>											
2	Beginning Balance (a)	20.0	32.2	34.0	29.7	12.4	14.6	15.8	27.5	37.1	33.1 20.0 (e)
3	Deposits from Lease Payment (b)	23.1	27.5	27.5	27.2	27.5	27.5	27.5	27.5	26.6	269.4
4	Deposits from DWSD Local System Revenues	-	1.6	0.5	-	6.2	5.2	3.2	1.1	-	- 17.7
5	Subtotal - Improvement & Extension Fund	43.1	61.3	62.0	56.9	46.1	47.3	46.5	56.1	64.6	59.6 307.1
<u>Construction Bond Funds</u>											
6	Beginning Balance (a)	50.0	30.3	16.3	6.8	0.0	0.0	0.0	12.5	0.0	0.0 50.0 (e)
7	Net Bond Proceeds	-	-	-	-	-	-	25.0	-	-	- 25.0
8	State Clean Water Revolving Fund Loans	4.5	0.4	3.0	6.0	9.0	9.0	9.0	9.0	9.0	67.9
9	Grant Reimbursements	6.6	8.5	6.8	-	4.5	4.5	4.5	4.5	4.5	48.8
10	Investment Income	0.1	0.0	-	-	-	-	0.0	-	-	- 0.1
11	Subtotal - Construction Bond Funds	61.2	39.2	26.1	12.8	13.5	13.5	38.5	26.0	13.5	13.5 191.9
12	<b>Total Financing Sources Available</b>	104.3	100.5	88.2	69.7	59.6	60.8	85.0	82.1	78.1	73.2 499.0
<b>Application of Financing Sources</b>											
13	Project Expenditures from I&E Funds	10.9	27.3	32.4	44.5	31.5	31.5	19.0	19.0	31.5	31.5 279.0
14	Project Expenditures from Construction Funds	30.9	22.8	19.3	12.8	13.5	13.5	26.0	26.0	13.5	13.5 191.9
15	<b>Total Financing Sources Applied</b>	41.8	50.1	51.7	57.3	45.0	45.0	45.0	45.0	45.0	470.9
<b>Financing Sources Available for Future Requirements</b>											
16	Improvement & Extension Fund (c)	32.2	34.0	29.7	12.4	14.6	15.8	27.5	37.1	33.1	28.1 28.1 (f)
17	Construction Bond Funds (d)	30.3	16.3	6.8	0.0	0.0	0.0	12.5	0.0	0.0	0.0 0.0 (f)
18	<b>Total Financing Sources Available for Future Req'ts</b>	62.5	50.4	36.5	12.4	14.6	15.8	40.0	37.1	33.1	28.2 28.2 (f)
(a) Estimated allocated balance available June 30, 2022. (applies only to FY 2023).											
(b) Total Lease Payment											
less: Lease Payment applied to Debt Service											
Net Lease Payment transferred to Local I&E Account											
(c) Line 5 minus Line 13.											
(d) Line 11 minus Line 14.											
(e) Total column reflects estimated balance available June 30, 2022.											
(f) Total column reflects estimated balance available June 30, 2032.											





	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUE										
Svc. Chg. Revenue	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7
Charge Adjustments		2.1%	4.0%	4.0%	4.0%	4.1%	4.1%	4.1%	4.1%	4.1%
Revenue from Adjs		7.5	22.0	37.0	52.7	69.3	86.5	104.3	122.9	142.4
Other	7.5	7.9	8.1	8.4	8.6	8.7	8.8	8.9	9.0	8.9
Total Revenue	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0
BUDGET										
O&M Expense	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
Debt Service	151.1	160.5	169.2	179.5	194.9	203.3	216.8	228.3	240.1	246.6
Xfers to MBO Funds	14.0	5.3	6.1	6.1	6.0	6.0	6.0	6.1	6.2	6.2
Lease Payment	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Transfers to I&E	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7
Total BUDGET	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUE										
Svc. Chg. Revenue	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4
Charge Adjustments		2.9%	4.1%	4.0%	4.0%	4.1%	4.1%	4.0%	4.0%	3.9%
Revenue from Adjs		13.6	33.8	54.4	75.9	98.4	122.1	146.1	170.9	196.1
Other	9.3	9.6	9.5	9.6	9.8	9.8	9.6	9.9	10.5	11.6
Total Revenue	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1
BUDGET										
O&M Expense	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
Debt Service	209.0	222.7	216.3	221.6	235.1	248.4	248.2	242.8	240.1	240.3
Xfers to MBO Funds	24.6	9.0	10.8	10.9	10.6	10.4	10.4	10.5	10.5	10.6
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Transfers to I&E	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
Total BUDGET	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Water Table 5a  
Wholesale System Revenue Requirement Financing Plan (\$ millions)

Line No.	Item	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Revenue (a)</b>											
1	Operating Revenue Under Existing Charges	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7	353.7
<b>Projected Revenue from Adjustments</b>											
2	FY 2024: 2.1%		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
3	FY 2025: 4.0%			14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
4	FY 2026: 4.0%				15.0	15.0	15.0	15.0	15.0	15.0	15.0
5	FY 2027: 4.0%					15.7	15.7	15.7	15.7	15.7	15.7
6	FY 2028: 4.1%						16.6	16.6	16.6	16.6	16.6
7	FY 2029: 4.1%							17.1	17.1	17.1	17.1
8	FY 2030: 4.1%								17.9	17.9	17.9
9	FY 2031: 4.1%									18.6	18.6
10	FY 2032: 4.1%										19.5
11	Total Projected Revenue from Water Charges	353.7	361.2	375.7	390.7	406.4	423.0	440.2	458.0	476.6	496.1
12	Other Revenue	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	Non-Operating Revenue	7.3	7.7	7.9	8.2	8.5	8.5	8.6	8.7	8.8	8.7
14	<b>Total Revenue Available</b>	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0
<b>Revenue Requirements</b>											
15	Transfer to GLWA Regional O&M Account	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
16	Transfer to GLWA Pension O&M Account	6.0	-	-	-	-	-	-	-	-	-
17	Total O&M Expense	150.9	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
18	Debt Service Allocation - Regional System	151.1	160.5	169.2	179.5	194.9	203.3	216.8	228.3	240.1	246.6
19	Non-Operating Portion of Pension Obligation	5.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
20	B & C Note Non-Operating Payments	0.9	0.9	1.7	1.6	1.4	1.3	1.3	1.2	1.2	1.2
21	Transfer to Pension Obligation Payment Fund	6.3	3.4	4.2	4.1	4.0	3.8	3.8	3.8	3.7	3.7
22	Transfer to WRAP Fund	1.7	1.9	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.5
23	Lease Payment to DWSD Local System	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
24	Transfer to GLWA Regional I&E Account	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7
25	<b>Total Revenue Requirements</b>	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0
26	Indicated Balance (Deficiency)	-	-	-	-	-	-	-	-	-	-
27	Projected Debt Service Coverage Ratio (Regional)	1.39	1.37	1.36	1.34	1.29	1.31	1.29	1.29	1.29	1.32
28	Net Revenues (14) - (17)	210.3	219.8	230.1	240.8	252.1	265.4	279.3	293.9	309.1	325.0
29	Revenues Remaining after Debt Service (28)-(18)	59.2	59.3	60.9	61.4	57.1	62.1	62.5	65.6	69.0	78.4
30	Applied to MBO Reserve Funds (21,22)	(8.0)	(5.3)	(6.1)	(6.1)	(6.0)	(6.0)	(6.0)	(6.1)	(6.2)	(6.2)
31	Applied as Lease Payment to DWSD (23)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)
32	Available for I&E Fund (28) - (31,32,33)	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7

(a) From Table 3. Based on application of FY 2023 charges for 2023 through 2032.

Sewer Table 5a  
Wholesale System Revenue Requirement Financing Plan (\$ millions)

Line No.	Item	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Revenue (a)</b>												
1	Operating Revenue Under Existing Charges	470.2	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4	477.4
<b>Projected Revenue from Adjustments</b>												
2	FY 2023: 0.0%		-	-	-	-	-	-	-	-	-	-
3	FY 2024: 2.9%			13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
4	FY 2025: 4.1%				20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
5	FY 2026: 4.0%					20.7	20.7	20.7	20.7	20.7	20.7	20.7
6	FY 2027: 4.0%						21.5	21.5	21.5	21.5	21.5	21.5
7	FY 2028: 4.1%							22.5	22.5	22.5	22.5	22.5
8	FY 2029: 4.1%								23.7	23.7	23.7	23.7
9	FY 2030: 4.0%									24.1	24.1	24.1
10	FY 2031: 4.0%										24.7	24.7
11	FY 2032: 3.9%											25.3
12	Total Operating Revenue	470.2	477.4	491.1	511.2	531.9	553.4	575.8	599.5	623.5	648.3	673.6
13	Other Revenue	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
14	Non-Operating Revenue	1.9	8.9	9.2	9.1	9.2	9.4	9.4	9.2	9.5	10.1	11.2
15	<b>Total Revenue Available</b>	472.6	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1
<b>Revenue Requirements</b>												
16	Transfer to GLWA Regional O&M Account	191.9	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
17	Transfer to GLWA Pension O&M Account	10.8	10.8	-	-	-	-	-	-	-	-	-
18	Total O&M Expense	202.7	205.6	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
19	Debt Service Allocation - Regional System	204.4	209.0	222.7	216.3	221.6	235.1	248.4	248.2	242.8	240.1	240.3
20	Non-Operating Portion of Pension Obligation	9.7	9.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
21	B & C Note Non-Operating Payments	2.0	2.0	2.0	3.7	3.6	3.3	2.9	2.9	2.8	2.7	2.7
22	Transfer to Pension Obligation Payment Fund	11.6	11.6	6.5	8.2	8.2	7.8	7.4	7.4	7.3	7.2	7.2
23	Transfer to WRAP Fund	2.4	2.1	2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.3	3.4
24	Lease Payment to DWSD Local System	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
25	Transfer to GLWA Regional I&E Account	24.0	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
26	<b>Total Revenue Requirements</b>	472.6	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1
27	Indicated Balance (Deficiency)	-	-	-	-	-	-	-	-	-	-	-
28	Projected Debt Service Coverage Ratio (Regional)	1.32	1.35	1.35	1.45	1.48	1.46	1.46	1.53	1.65	1.76	1.84
29	Net Revenues (15) - (18)	269.9	281.1	300.0	314.0	328.6	343.9	362.0	381.0	400.8	421.4	443.0
30	Revenues Remaining after Debt Service (29)-(19)	65.5	72.1	77.2	97.7	107.0	108.8	113.6	132.7	157.9	181.3	202.7
31	Applied to MBO Reserve Funds (22,23)	(14.0)	(13.7)	(9.0)	(10.8)	(10.9)	(10.6)	(10.4)	(10.4)	(10.5)	(10.5)	(10.6)
32	Applied as Lease Payment to DWSD (24)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)
33	Available for I&E Fund (29) - (30,31,32)	24.0	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6

(a) From Table 3. Based on application of FY 2022 charges for 2022 through 2032.

Water Table 5

Combined Wholesale and Retail System Financing Plan and Debt Service Coverage (\$ millions)

Line No.		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Fiscal Year Ended June 30,											
Revenue (a)											
1	Regional System Wholesale Service Revenue (a)	353.7	361.2	375.7	390.7	406.4	423.0	440.2	458.0	476.6	496.1
2	Local System Retail Service Revenue - Detroit (b)	88.2	90.3	91.7	93.1	97.4	98.9	100.5	102.1	103.8	105.5
3	Total Projected Revenue from Water Charges	441.9	451.5	467.4	483.8	503.8	522.0	540.7	560.2	580.4	601.6
4	Miscellaneous Operating Revenue	4.1	4.3	4.3	4.4	4.4	4.5	4.5	4.5	4.6	4.6
5	Total Operating Revenue	445.9	455.7	471.7	488.2	508.3	526.4	545.2	564.7	585.0	606.1
6	Non-Operating Revenue	7.3	7.7	7.9	8.2	8.5	8.5	8.6	8.7	8.8	8.7
7	Total Revenue Available	453.3	463.4	479.6	496.5	516.7	534.9	553.8	573.4	593.7	614.9
Revenue Requirements											
8	Transfer to GLWA Regional O&M Account	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
9	Transfer to DWSD Local O&M Account	42.6	43.7	44.9	46.2	47.4	48.7	50.1	51.4	52.9	54.3
10	Transfer to GLWA Pension O&M Account	6.0	-	-	-	-	-	-	-	-	-
11	Transfer to DWSD Pension O&M Account	4.3	-	-	-	-	-	-	-	-	-
12	Total O&M Expense	197.7	192.9	198.6	204.4	210.5	215.0	219.7	224.4	229.3	234.3
Debt Service - Bond Interest and Redemption Deposits											
Senior Lien Bonds											
13	Outstanding Bonds	128.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1
14	The 2022 GLWA Bonds	8.4	11.3	11.6	11.6	11.6	12.2	12.2	12.2	12.2	12.2
15	Future Bonds (assumed Sr. Lien)	-	-	5.4	10.8	22.1	30.2	44.9	55.4	68.1	76.0
16	Total Senior Lien Debt Service	136.5	140.4	146.1	151.5	162.8	171.6	186.3	196.7	209.4	217.4
Second Lien Bonds											
17	Outstanding Bonds	47.2	48.1	48.1	48.1	48.1	48.1	48.1	50.9	50.9	50.9
18	The 2022 GLWA Bonds	-	-	-	-	-	-	-	-	-	-
19	Total Second Lien Debt Service	47.2	48.1	48.1	48.1	48.1	48.1	48.1	50.9	50.9	50.9
20	Subtotal Debt Service	183.7	188.5	194.2	199.6	210.9	219.7	234.4	247.6	260.3	268.3
21	SRF Junior Lien Bonds	10.2	17.1	20.9	26.0	31.8	31.9	32.4	32.9	33.4	34.0
22	Total Debt Service	193.9	205.6	215.1	225.6	242.7	251.6	266.7	280.5	293.7	302.3
23	Non-Operating Portion of Pension Obligation	9.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
24	B & C Note Non-Operating Payments	1.5	1.5	2.8	2.8	2.5	2.2	2.2	2.1	2.1	2.0
25	Transfer to Pension Obligation Payment Fund	10.7	5.8	7.1	7.1	6.8	6.5	6.5	6.4	6.4	6.3
26	Transfer to WRAP Fund	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5
27	Lease Payment - Transfer to Detroit Local I&E	19.6	22.5	22.5	22.5	22.5	22.5	22.5	21.8	20.5	18.7
Transfers to I&E Fund to Finance Capital Improvements											
28	Transfer to GLWA Regional I&E Account	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7
29	Transfer to DWSD Local I&E Account	-	2.3	1.2	1.3	2.7	2.5	1.2	-	-	-
30	Total Transfers to I&E Fund	28.8	33.9	33.5	34.0	31.3	36.2	35.2	37.0	40.3	49.7
31	Operating Reserves	-	-	-	-	-	-	-	-	-	-
32	Total Revenue Requirements	453.3	463.4	479.6	496.5	516.7	534.9	553.8	573.4	593.7	614.9
33	Indicated Balance (Deficiency)	-	-	-	-	-	-	-	-	-	-
Debt Service Coverage Projections											
34	Senior Lien for Rate Covenant Purposes	1.87	1.93	1.92	1.93	1.88	1.86	1.79	1.77	1.74	1.75
35	Second Lien for Rate Covenant Purposes	1.39	1.44	1.45	1.46	1.45	1.46	1.43	1.41	1.40	1.42
36	SRF Junior Lien for Rate Covenant Purposes	1.32	1.32	1.31	1.29	1.26	1.27	1.25	1.24	1.24	1.26
37	Net Revenues (7) - (12)	255.5	270.5	281.0	292.0	306.3	319.9	334.1	349.0	364.4	380.6
38	Revenues Remaining after Debt Service (37)-(22)	61.6	64.9	65.9	66.5	63.6	68.3	67.4	68.5	70.7	78.3
39	Applied to MBO Reserve Funds (25,26)	(13.2)	(8.5)	(9.9)	(10.0)	(9.8)	(9.6)	(9.7)	(9.7)	(9.8)	(9.9)
40	Applied as Lease Payment to DWSD I&E Acct (27)	(19.6)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(22.5)	(21.8)	(20.5)	(18.7)
41	Applied to Operating Reserves (31)	-	-	-	-	-	-	-	-	-	-
42	Available for I&E Fund Accounts (38) - (39,40,41)	28.8	33.9	33.5	34.0	31.3	36.2	35.2	37.0	40.3	49.7

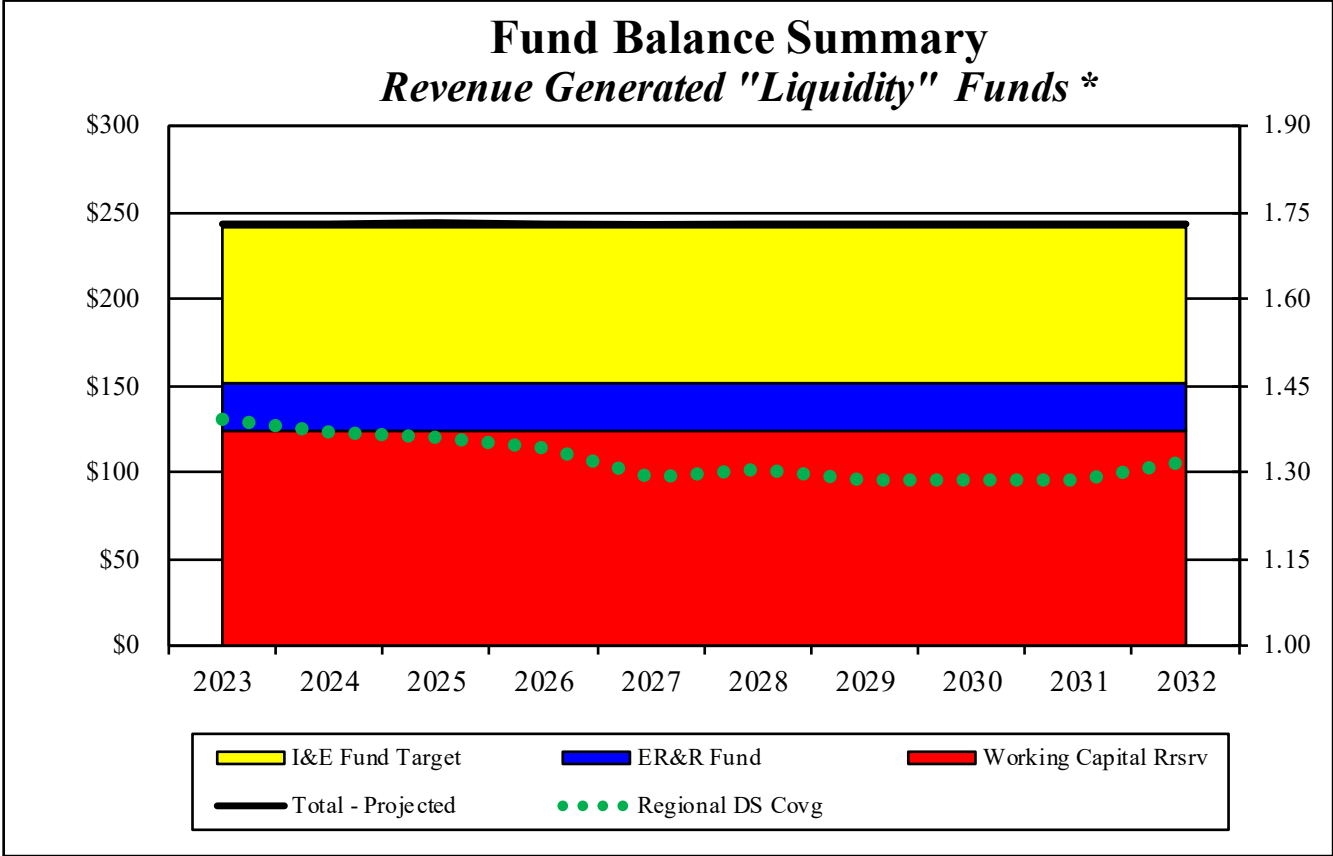
(a) Assumes increases in wholesale charges to meet annual revenue requiremet increases of 4.0%.  
(b) Assumes annual account growth rate of 0.25%, annual sales reductions of 2%, and annual rate increaes of 4.0%.

Sewer Table 5

Combined Wholesale and Retail System Financing Plan and Debt Service Coverage (\$ millions)

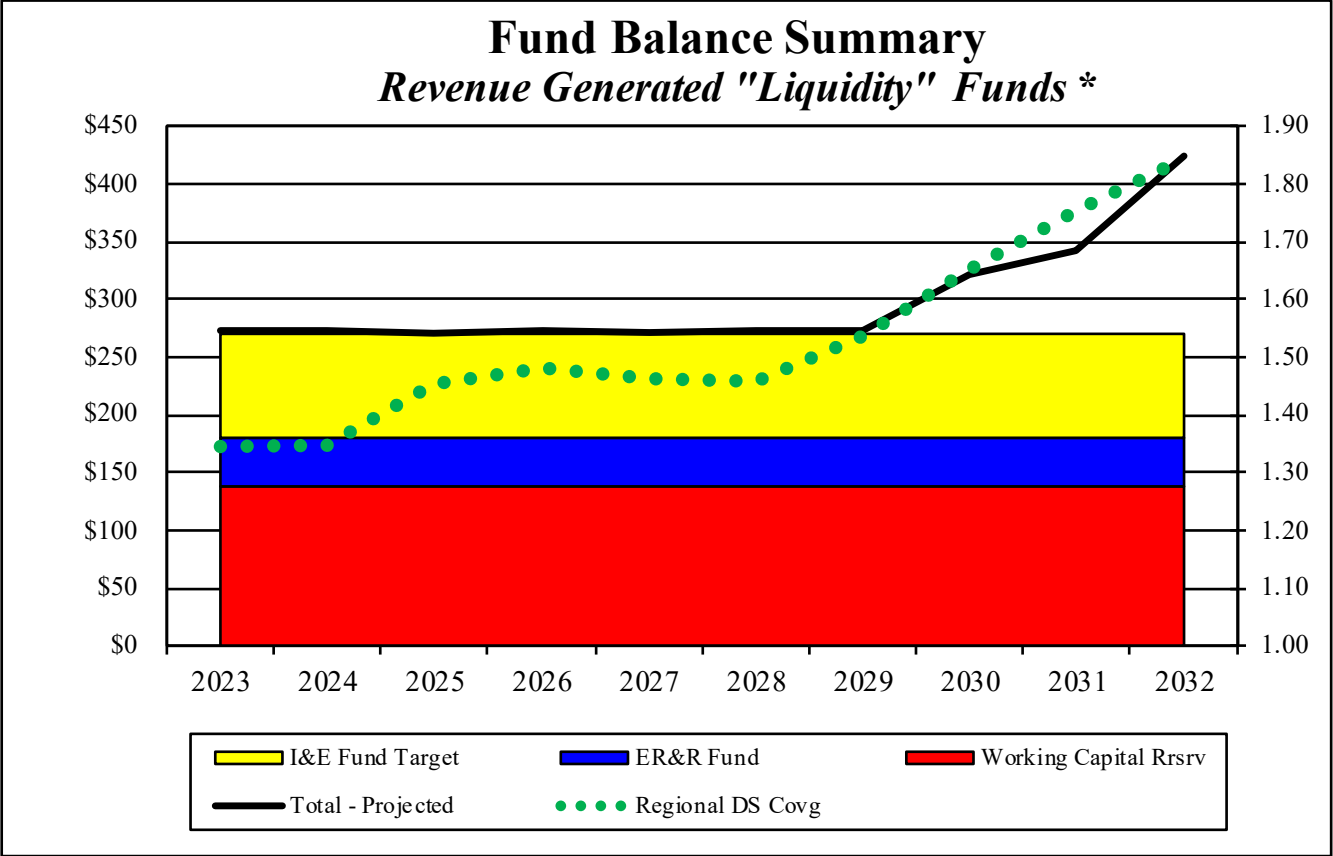
Line No.		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	<b>Revenue (a)</b>										
1	Regional System Wholesale Service Revenue (a)	477.4	491.1	511.2	531.9	553.4	575.8	599.5	623.5	648.3	673.6
2	Local System Retail Service Revenue - Detroit (b)	78.6	81.7	82.3	83.0	91.0	91.9	92.6	93.5	94.6	95.8
3	Total Projected Revenue from Sewer Charges	556.0	572.8	593.5	614.9	644.4	667.7	692.1	717.1	742.8	769.3
4	Miscellaneous Operating Revenue	8.0	8.3	8.5	8.7	8.8	8.9	9.1	9.2	9.3	9.4
5	Total Operating Revenue	564.0	581.1	602.1	623.6	653.2	676.6	701.1	726.3	752.2	778.8
6	Non-Operating Revenue	8.9	9.2	9.1	9.2	9.4	9.4	9.2	9.5	10.1	11.2
7	<b>Total Revenue Available</b>	573.0	590.3	611.1	632.8	662.6	686.1	710.4	735.8	762.3	790.0
	<b>Revenue Requirements</b>										
8	Transfer to GLWA Regional O&M Account	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
9	Transfer to DWSD Local O&M Account	51.4	52.8	54.2	55.7	57.1	58.7	60.3	61.9	63.5	65.2
10	Transfer to GLWA Pension O&M Account	10.8	-	-	-	-	-	-	-	-	-
11	Transfer to DWSD Pension O&M Account	2.9	-	-	-	-	-	-	-	-	-
12	Total O&M Expense	259.9	253.4	260.9	268.5	276.4	282.3	288.4	294.6	300.9	307.3
	<b>Debt Service - Bond Interest and Redemption Deposits</b>										
	Senior Lien Bonds										
13	Outstanding Bonds	143.6	141.7	140.3	142.4	143.6	147.5	155.6	146.1	146.7	161.2
14	The 2022 Bonds	8.4	11.3	11.3	11.3	11.3	12.3	12.3	12.3	12.3	12.3
15	Future Bonds (assumed Sr. Lien)	-	-	2.9	7.5	13.1	22.1	22.8	23.8	23.8	23.8
16	Total Senior Lien Debt Service	152.1	152.9	154.4	161.2	168.0	181.9	190.6	182.2	182.8	197.3
	Second Lien Bonds										
17	Outstanding Bonds	36.7	49.4	49.5	52.6	56.3	55.8	47.6	59.2	59.2	45.2
18	The 2022 Bonds	-	-	-	-	-	-	-	-	-	-
19	Total Second Lien Debt Service	36.7	49.4	49.5	52.6	56.3	55.8	47.6	59.2	59.2	45.2
20	Subtotal Debt Service	188.8	202.3	203.9	213.8	224.2	237.6	238.2	241.4	242.0	242.5
21	SRF Junior Lien Bonds	52.2	52.7	44.7	40.3	43.5	43.9	44.4	37.3	34.7	35.0
22	Total Debt Service	241.0	255.0	248.6	254.1	267.7	281.5	282.6	278.8	276.6	277.4
23	Non-Operating Portion of Pension Obligation	12.2	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
24	B & C Note Non-Operating Payments	2.5	2.5	4.7	4.6	4.1	3.7	3.6	3.5	3.5	3.4
25	Transfer to Pension Obligation Payment Fund	14.7	8.2	10.4	10.3	9.8	9.4	9.3	9.2	9.2	9.1
26	Transfer to WRAP Fund	3.4	3.9	4.0	4.1	4.2	4.4	4.5	4.7	4.8	5.0
27	Lease Payment - Transfer to Detroit Local I&E	23.1	27.5	27.5	27.2	27.5	27.5	27.5	27.5	27.5	26.6
	<b>Transfers to I&amp;E Fund to Finance Capital Improvements</b>										
28	Transfer to GLWA Regional I&E Account	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
29	Transfer to DWSD Local I&E Account	-	1.6	0.5	-	6.2	5.2	3.2	1.1	-	-
30	Total Transfers to I&E Fund	30.9	42.3	59.8	68.6	76.9	80.9	98.0	121.0	143.3	164.6
31	Operating Reserves	-	-	-	-	-	-	-	-	-	-
32	<b>Total Revenue Requirements</b>	573.0	590.3	611.1	632.8	662.6	686.1	710.4	735.8	762.3	790.0
33	Indicated Balance (Deficiency)	-	-	-	-	-	-	-	-	-	-
	<b>Debt Service Coverage Projections</b>										
34	<b>Senior Lien for Rate Covenant Purposes</b>	<b>2.06</b>	<b>2.20</b>	<b>2.27</b>	<b>2.26</b>	<b>2.30</b>	<b>2.22</b>	<b>2.21</b>	<b>2.42</b>	<b>2.52</b>	<b>2.45</b>
35	<b>Second Lien for Rate Covenant Purposes</b>	<b>1.66</b>	<b>1.66</b>	<b>1.72</b>	<b>1.70</b>	<b>1.72</b>	<b>1.70</b>	<b>1.77</b>	<b>1.83</b>	<b>1.91</b>	<b>1.99</b>
36	<b>SRF Junior Lien for Rate Covenant Purposes</b>	<b>1.30</b>	<b>1.32</b>	<b>1.41</b>	<b>1.43</b>	<b>1.44</b>	<b>1.43</b>	<b>1.49</b>	<b>1.58</b>	<b>1.67</b>	<b>1.74</b>
37	Net Revenues (7) - (12)	313.1	336.8	350.2	364.3	386.2	403.7	422.0	441.2	461.4	482.6
38	Revenues Remaining after Debt Service (37)-(22)	72.1	81.8	101.7	110.2	118.5	122.2	139.3	162.4	184.7	205.2
39	Applied to MBO Reserve Funds (25,26)	(18.1)	(12.0)	(14.4)	(14.4)	(14.0)	(13.8)	(13.8)	(13.9)	(14.0)	(14.0)
40	Applied as Lease Payment to DWSD I&E Acct (27)	(23.1)	(27.5)	(27.5)	(27.2)	(27.5)	(27.5)	(27.5)	(27.5)	(27.5)	(26.6)
41	Applied to Operating Reserves (31)	-	-	-	-	-	-	-	-	-	-
42	Available for I&E Fund Accounts (38) - (39,40,41)	30.9	42.3	59.8	68.6	76.9	80.9	98.0	121.0	143.3	164.6

(a) Assumes increases in wholesale charges to meet annual revenue requiremet increases of 4.0%.  
(b) Assumes annual account growth rate of 0.25%, annual sales reductions of 2%, and annual rate increaes of 4.0%.



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<u>Fund Balance Minimums</u>										
Working Capital Rrsr	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0
ER&R Fund	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
I&E Fund Target	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total - Minimums	241.5	241.5	241.5	241.5	241.5	241.5	241.5	241.5	241.5	241.5
<u>Projections</u>										
Working Capital Rrsr	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0
ER&R Fund	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
I&E Fund	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	91.8	91.3
Total - Projected	243.5	243.4	244.2	243.5	243.1	243.4	243.4	244.0	244.0	243.5
Projected > Minimum	2.0	1.9	2.7	2.0	1.6	1.9	1.9	2.5	2.5	2.0
Regional DS Covg	1.39	1.37	1.36	1.34	1.29	1.31	1.29	1.29	1.29	1.32

\* Revenue Generated Funds only. Excludes Debt Service Reserve & Construction Funds (Bond Generated) & "Pass Thru" Funds such as Debt Service Payment Funds, WRAP, etc.



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<u>Fund Balance Minimums</u>										
Working Capital Rrsr	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
ER&R Fund	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
I&E Fund Target	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total - Minimums	270.0	270.0	270.0	270.0	270.0	270.0	270.0	270.0	270.0	270.0
<u>Projections</u>										
Working Capital Rrsr	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
ER&R Fund	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
I&E Fund	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	162.1	243.9
Total - Projected	271.7	271.8	271.6	271.8	271.1	271.7	271.9	322.3	342.1	423.9
Projected > Minimum	1.7	1.8	1.6	1.8	1.1	1.7	1.9	52.3	72.1	153.9
Regional DS Covg	1.35	1.35	1.45	1.48	1.46	1.46	1.53	1.65	1.76	1.84

\* Revenue Generated Funds only. Excludes Debt Service Reserve & Construction Funds (Bond Generated) & "Pass Thru" Funds such as Debt Service Payment Funds, WRAP, etc.



Water Table 6

Projected Cash and Investment Fund Balances - Wholesale System (\$ millions) (a)

Line No.	Fiscal Year Ended June 30,									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<u>Working Capital Reserve (b)</u>										
1	Beginning Balance	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0
2	Deposit from Operations	-	-	-	-	-	-	-	-	-
3	Ending Balance	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0
<u>Budget Stabilization Fund (a)</u>										
4	Beginning Balance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	Deposits / (Withdrawals)	-	-	-	-	-	-	-	-	-
6	Ending Balance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<u>ER&amp;R Fund (a)</u>										
7	Beginning Balance	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
8	Transfers In	-	-	-	-	-	-	-	-	-
9	Ending Balance	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
<u>I&amp;E Fund (c)</u>										
10	Beginning Balance	94.5	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8
11	Budgeted Capital Outlay	(15.5)	(13.4)	(10.4)	(9.6)	(9.0)	(10.0)	(10.0)	(10.0)	(10.0)
12	Transfer to Construction Fund	(16.5)	(18.3)	(21.1)	(23.7)	(20.0)	(23.4)	(23.9)	(26.5)	(30.3)
13	Subtotal prior to Revenue Transfer	62.5	59.6	59.7	58.6	62.4	57.5	57.3	54.8	51.4
14	Deposits from Revenues (c)	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3
15	Ending Balance	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	91.3
<u>Total Revenue Generated Funds (d)</u>										
16	Beginning Balance	248.7	245.5	245.4	246.2	245.5	245.1	245.4	245.4	246.0
17	Net Sources and Uses	(3.2)	(0.1)	0.8	(0.6)	(0.4)	0.2	0.1	0.5	0.0
18	Ending Balance	245.5	245.4	246.2	245.5	245.1	245.4	245.4	246.0	245.5
19	<b>Days Cash on Hand (e)</b>	<b>614</b>	<b>595</b>	<b>580</b>	<b>562</b>	<b>544</b>	<b>534</b>	<b>524</b>	<b>515</b>	<b>494</b>
<u>Other Funds</u>										
20	Bond Reserve (excludes Surety)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
21	Construction Bond Fund	-	-	-	-	-	-	-	-	-
22	Construction Fund	186.6	90.9	154.5	52.7	234.0	41.6	182.6	41.7	154.8
23	Total Funds	436.6	340.8	405.2	302.7	483.6	291.5	432.6	292.2	405.2
24	Subtotal w/o Construction Funds	250.0	249.9	250.7	250.0	249.6	249.9	250.5	250.5	250.0

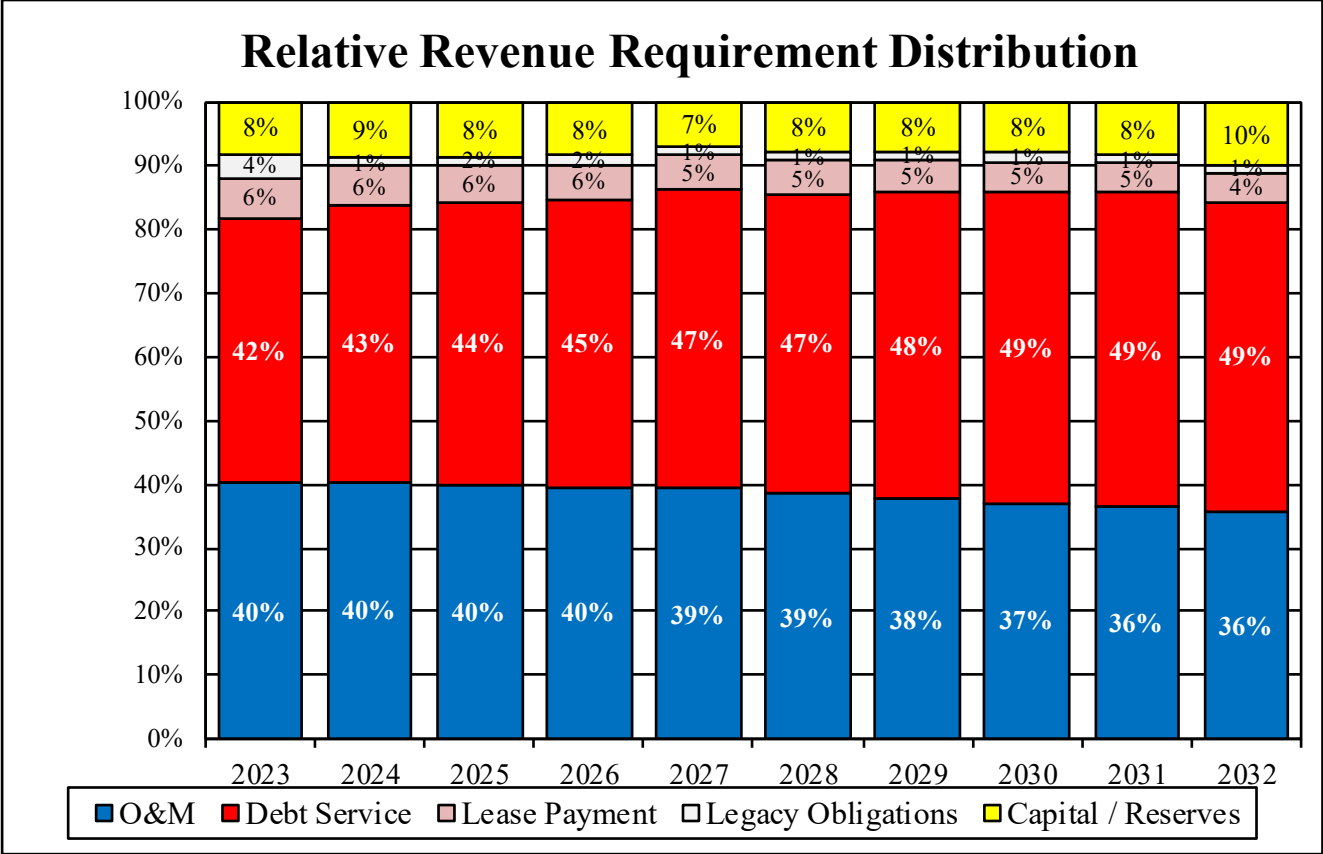
(a) Technically includes "Combined System" amounts held by GLWA.  
(b) Represents Operating Reserve and amounts maintained in the Receiving Fund for subsequent MBO transfers.  
(c) Only includes GLWA Regional I&E Account. Does not include Lease Payment transferred to DWSD Local I&E Account.  
(d) Excludes MBO Funds that are funded and assumed to be fully expended each year, such as the Bond Interest and Redemption I the Pension Obligation Payment Fund, and the WRAP Fund.  
(e) Excludes Budget Stabilization Fund amounts from Line 6.

Sewer Table 6

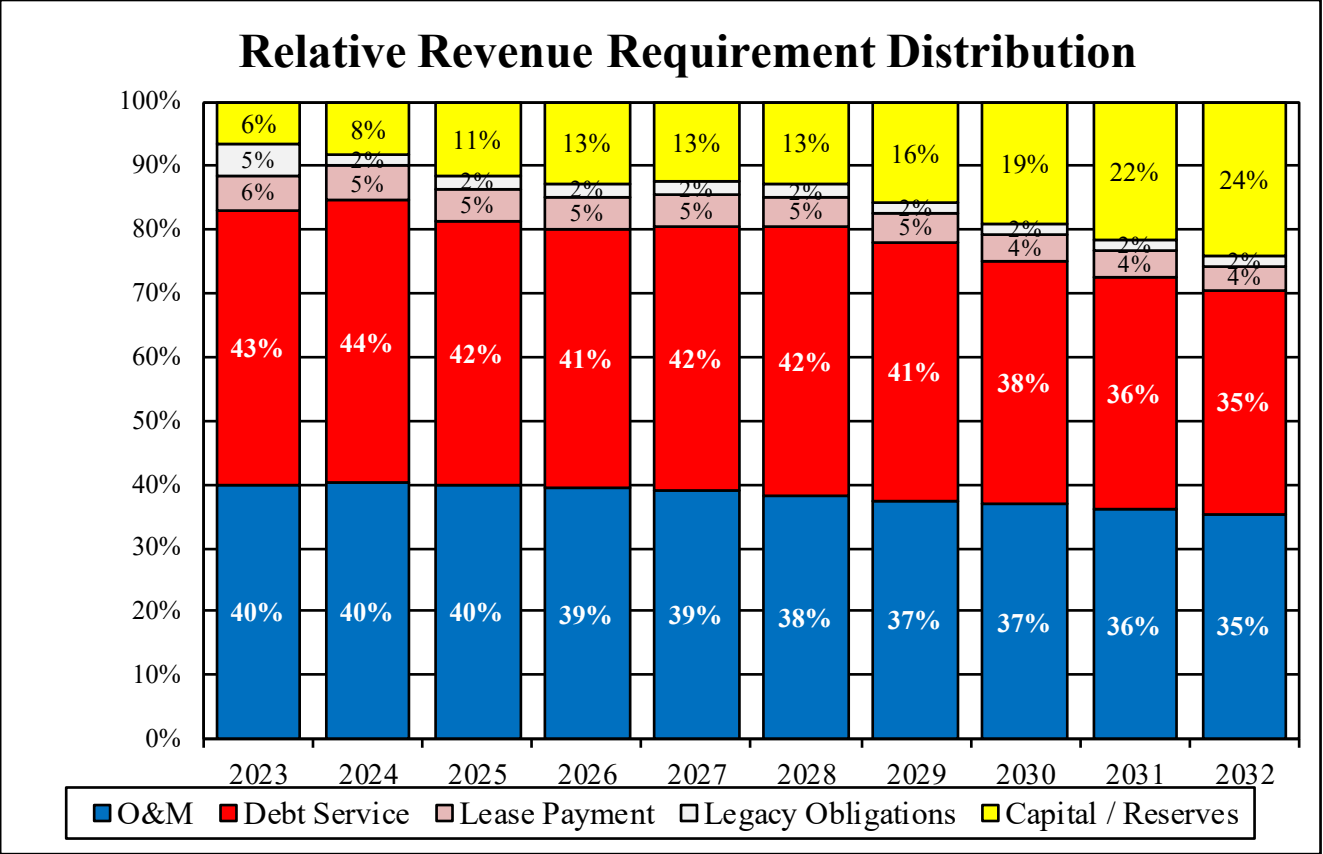
Projected Cash and Investment Fund Balances - Wholesale System (\$ millions) (a)

Line No.	Fiscal Year Ended June 30,									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<u>Working Capital Reserve (b)</u>										
1	Beginning Balance	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
2	Deposit from Operations	-	-	-	-	-	-	-	-	-
3	Ending Balance	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
<u>Budget Stabilization Fund (a)</u>										
4	Beginning Balance	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5	Deposits / (Withdrawals)	-	-	-	-	-	-	-	-	-
6	Ending Balance	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
<u>ER&amp;R Fund (a)</u>										
7	Beginning Balance	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
8	Transfers In	-	-	-	-	-	-	-	-	-
9	Ending Balance	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
<u>I&amp;E Fund (c)</u>										
10	Beginning Balance	104.3	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3
11	Budgeted Capital Outlay	(18.4)	(11.6)	(8.1)	(8.7)	(10.3)	(10.0)	(10.0)	(10.0)	(10.0)
12	Transfer to Construction Fund	(25.0)	(29.0)	(51.5)	(59.8)	(61.1)	(65.1)	(84.6)	(59.6)	(113.5)
13	Subtotal prior to Revenue Transfer	60.9	51.1	32.3	23.1	20.4	16.0	(2.9)	22.3	18.8
14	Deposits from Revenues (c)	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3
15	Other Deposits (d)	-	-	-	-	-	-	-	-	-
16	Ending Balance	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	162.1
<u>Total Revenue Generated Funds (e)</u>										
17	Beginning Balance	289.3	276.7	276.8	276.6	276.8	276.1	276.7	276.9	327.3
18	Net Sources and Uses	(12.6)	0.1	(0.2)	0.2	(0.7)	0.7	0.2	50.4	19.8
19	Ending Balance	276.7	276.8	276.6	276.8	276.1	276.7	276.9	327.3	347.1
20	<b>Days Cash on Hand (f)</b>	<b>509</b>	<b>494</b>	<b>480</b>	<b>466</b>	<b>451</b>	<b>443</b>	<b>435</b>	<b>506</b>	<b>526</b>
<u>Other Funds</u>										
21	Bond Reserve (excludes Surety)	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
22	Construction Bond Fund	-	-	-	-	-	-	-	-	-
23	Construction Fund	166.4	97.0	147.7	76.7	221.4	116.9	51.4	0.0	0.0
24	Total Funds	973.2	889.3	924.9	840.3	969.8	858.1	784.4	853.9	894.2
25	Subtotal w/o Construction Funds	806.8	792.3	777.2	763.7	748.3	741.2	733.0	853.8	894.1

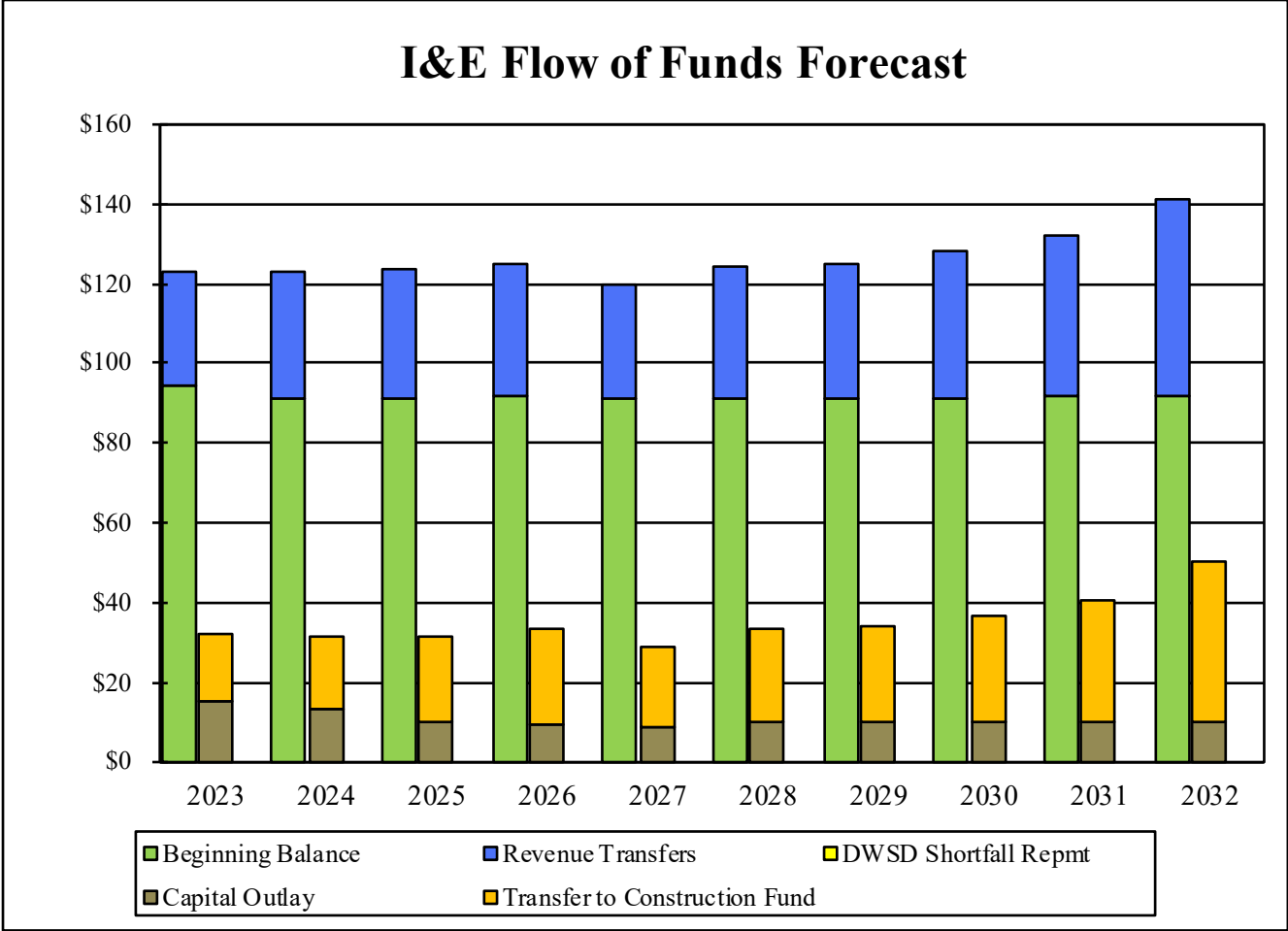
(a) Technically includes "Combined System" amounts held by GLWA.  
(b) Represents Operating Reserve and amounts maintained in the Receiving Fund for subsequent MBO transfers.  
(c) Only includes GLWA Regional I&E Account. Does not include Lease Payment transferred to DWSD Local I&E Account.  
(d) Repayment of DWSD loan receivable.  
(e) Excludes MBO Funds that are funded and assumed to be fully expended each year, such as the Bond Interest and Redemption Fun the Pension Obligation Payment Fund, and the WRAP Fund.  
(f) Excludes Budget Stabilization Fund amounts from Line 6.



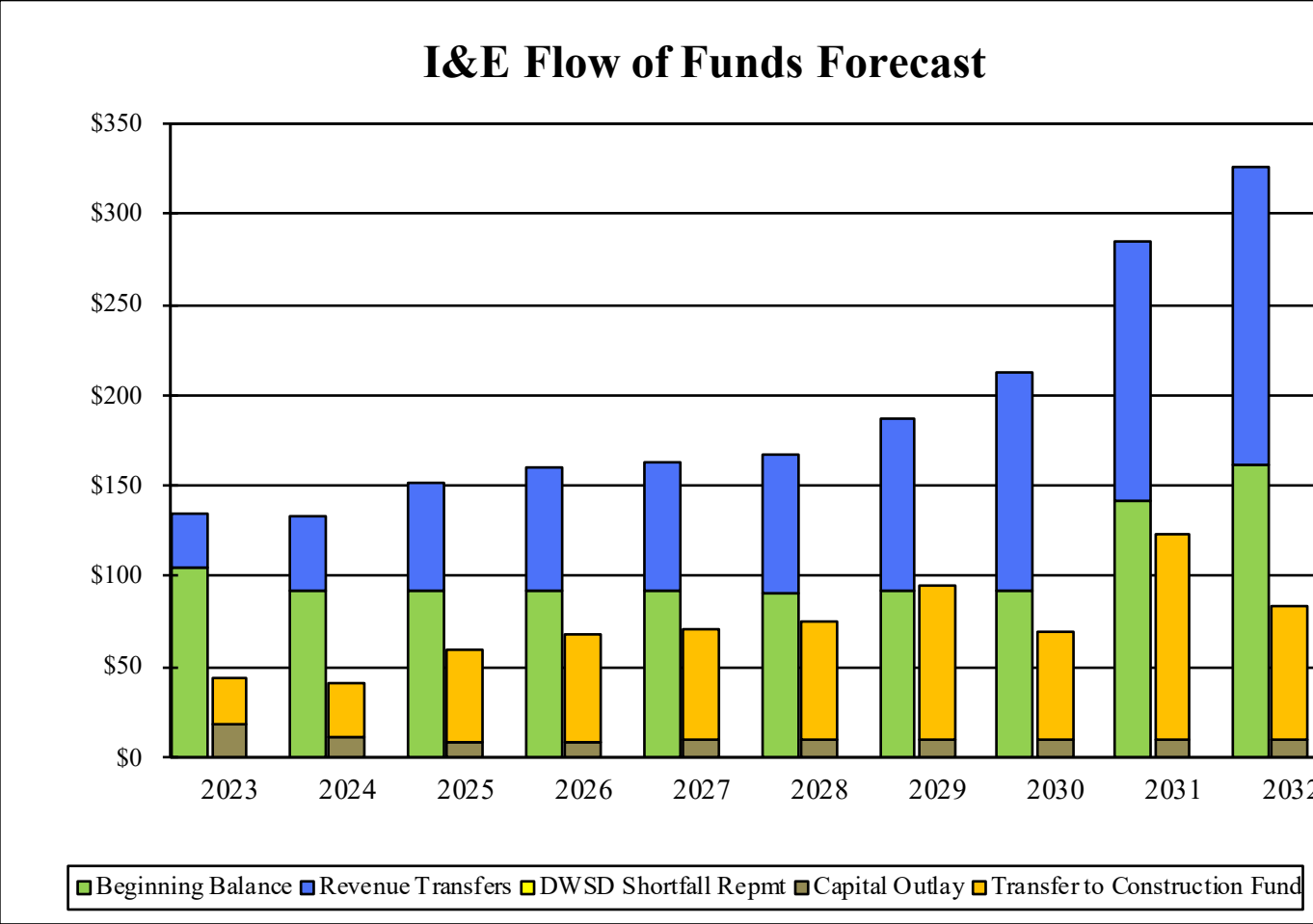
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
O&M	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
Debt Service	151.1	160.5	169.2	179.5	194.9	203.3	216.8	228.3	240.1	246.6
Lease Payment	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Legacy Obligations	14.0	5.3	6.1	6.1	6.0	6.0	6.0	6.1	6.2	6.2
Capital / Reserves	28.8	31.5	32.3	32.7	28.6	33.7	34.0	37.0	40.3	49.7
Total	361.2	369.0	383.8	399.1	415.1	431.7	449.0	466.9	485.6	505.0



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
O&M	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
Debt Service	209.0	222.7	216.3	221.6	235.1	248.4	248.2	242.8	240.1	240.3
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Legacy Obligations	24.6	9.0	10.8	10.9	10.6	10.4	10.4	10.5	10.5	10.6
Capital / Reserves	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
Total	486.7	500.6	520.7	541.5	563.1	585.7	609.1	633.5	658.8	685.1

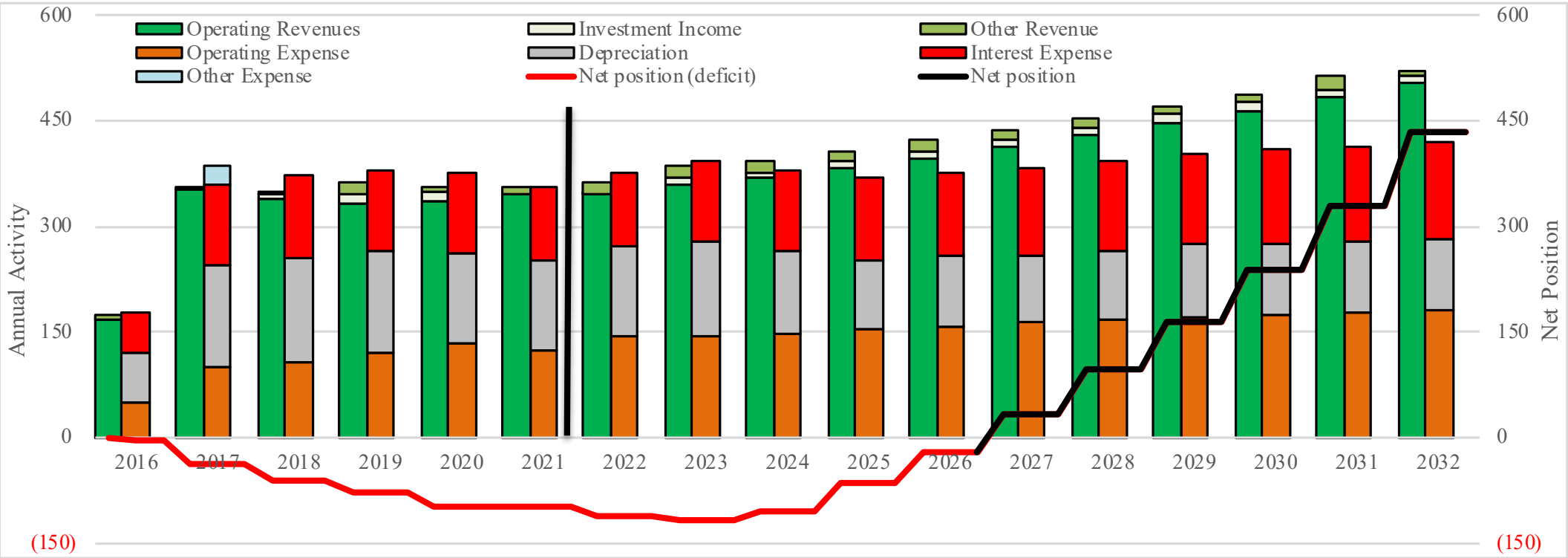


	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
Beginning Balance	94.5	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	91.8
Capital Outlay	(15.5)	(13.4)	(10.4)	(9.6)	(9.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
Transfer to Constr	(16.5)	(18.3)	(21.1)	(23.7)	(20.0)	(23.4)	(23.9)	(26.5)	(30.3)	(40.2)
Initial Balance	62.5	59.6	59.7	58.6	62.4	57.5	57.3	54.8	51.4	41.6
Revenue Transfers	<u>28.8</u>	<u>31.5</u>	<u>32.3</u>	<u>32.7</u>	<u>28.6</u>	<u>33.7</u>	<u>34.0</u>	<u>37.0</u>	<u>40.3</u>	<u>49.7</u>
Ending Balance	91.3	91.2	92.0	91.3	90.9	91.2	91.2	91.8	91.8	91.3



	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
Beginning Balance	104.3	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	162.1
Capital Outlay	(18.4)	(11.6)	(8.1)	(8.7)	(10.3)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
Transfer to Constr	(25.0)	(29.0)	(51.5)	(59.8)	(61.1)	(65.1)	(84.6)	(59.6)	(113.5)	(72.8)
Initial Balance	60.9	51.1	32.3	23.1	20.4	16.0	(2.9)	22.3	18.8	79.3
Revenue Transfers	30.9	40.7	59.3	68.6	70.7	75.8	94.8	120.0	143.3	164.6
DWSD Shortfall Repmt	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Ending Balance	91.7	91.8	91.6	91.8	91.1	91.7	91.9	142.3	162.1	243.9

Water Supply System - Reported and Forecasted Statement of Changes in Net Position (\$ millions)



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Act.	Act.	Act.	Act.	Act.	Act.	Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
1 Total operating revenues	167.7	351.7	338.3	331.6	334.3	344.6	344.1	360.5	368.0	382.5	397.6	413.3	429.9	447.0	464.9	483.5	502.9
2 Operating expenses	49.5	101.7	108.5	119.8	132.5	123.6	143.9	144.8	149.2	153.7	158.3	163.0	166.3	169.6	173.0	176.5	180.0
3 Depreciation/Amortization	71.3	144.1	146.1	144.1	130.7	126.8	128.9	135.0	117.2	98.5	99.2	96.9	99.4	104.3	103.8	101.5	103.1
4 Total operating expenses	120.8	245.9	254.6	264.0	263.3	250.5	272.9	279.9	266.4	252.2	257.5	259.9	265.7	273.9	276.8	277.9	283.1
5 Operating income	46.8	105.9	83.7	67.6	71.0	94.1	71.2	80.6	101.6	130.3	140.0	153.3	164.1	173.1	188.1	205.5	219.8
<b>Nonoperating revenue (expenses)</b>																	
6 Earnings on investments	0.4	1.8	6.1	14.8	13.7	0.8	1.9	8.2	8.9	10.0	9.6	10.6	11.1	11.7	10.6	10.9	10.1
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(114.2)	(111.3)	(106.3)	(103.9)	(111.3)	(113.3)	(117.3)	(118.7)	(122.2)	(125.5)	(130.0)	(134.0)	(135.1)	(135.7)
8 Other Non-Operating	5.2	6.4	4.4	15.3	7.0	10.5	17.1	16.5	15.6	15.3	14.4	13.3	12.1	12.1	11.2	10.1	8.9
9 Special Item	0.0	(32.8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Change in net position	(4.1)	(32.4)	(24.0)	(16.4)	(19.5)	(0.9)	(13.7)	(5.9)	12.8	38.3	45.3	55.1	61.8	66.8	75.8	91.4	103.1
10 Net position (deficit), beginning of yea	0.0	(4.1)	(36.5)	(60.4)	(76.9)	(96.4)	(97.3)	(110.9)	(116.9)	(104.1)	(65.7)	(20.4)	34.7	96.5	163.3	239.2	330.6
11 Net position (deficit), end of year	(4.1)	(36.5)	(60.4)	(76.9)	(96.4)	(97.3)	(110.9)	(116.9)	(104.1)	(65.7)	(20.4)	34.7	96.5	163.3	239.2	330.6	433.7



Sewage Disposal System - Reported and Forecasted Statement of Changes in Net Position (\$ millions)



	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Est.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>
1 Total operating revenues	230.5	505.8	473.6	469.5	466.6	470.8	470.7	477.8	491.5	511.6	532.3	553.8	576.2	599.9	623.9	648.7	674.0
2 Operating expenses	84.4	151.3	176.4	174.0	176.9	178.1	191.9	194.8	200.7	206.7	212.9	219.3	223.7	228.1	232.7	237.3	242.1
3 Depreciation/Amortization	86.0	185.6	187.3	168.5	152.9	150.9	156.5	161.2	151.4	140.7	138.1	128.1	131.5	135.0	131.6	120.8	115.7
4 Total operating expenses	170.4	336.9	363.6	342.6	329.9	329.0	348.4	356.1	352.0	347.4	350.9	347.4	355.2	363.1	364.3	358.1	357.8
5 Operating income	60.1	168.9	110.0	126.9	136.8	141.8	122.3	121.8	139.4	164.2	181.3	206.4	221.0	236.7	259.7	290.5	316.1
<b>Nonoperating revenue (expenses)</b>																	
6 Earnings on investments	1.1	2.2	5.3	11.8	11.7	0.5	1.9	10.0	10.1	10.0	10.2	10.6	10.8	10.1	10.2	10.1	11.2
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(136.8)	(132.6)	(112.6)	(108.8)	(113.6)	(113.7)	(112.4)	(109.9)	(110.8)	(111.2)	(105.7)	(100.3)	(94.5)	(88.7)
8 Other Non-Operating	(17.2)	(51.7)	(46.9)	(7.5)	(17.1)	(17.4)	(25.2)	(25.3)	(26.0)	(26.4)	(26.7)	(27.0)	(27.4)	(27.2)	(27.0)	(27.6)	(28.2)
9 Special Item	0.0	(61.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Change in net position	(12.6)	(55.8)	(50.0)	(5.6)	(1.2)	12.3	(9.7)	(7.1)	9.8	35.4	54.9	79.1	93.3	113.9	142.5	178.5	210.4
10 Net position (deficit), beginning of yea	0.0	(12.6)	(68.4)	(118.3)	(123.9)	(125.2)	(112.9)	(122.6)	(129.8)	(119.9)	(84.5)	(29.6)	49.5	142.8	256.7	399.2	577.7
11 Net position (deficit), end of year	(12.6)	(68.4)	(118.3)	(123.9)	(125.2)	(112.9)	(122.6)	(129.8)	(119.9)	(84.5)	(29.6)	49.5	142.8	256.7	399.2	577.7	788.1



## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Presentation: 2022 Bond Transaction Update

**Background:** Consistent with the ten-year financial forecast for the Great Lakes Water Authority (GLWA), the process for a bond transaction is underway to secure funding for capital improvement program needs as well as seek refunding savings within certain parameters.

**Analysis:** Attached is Series 2022 Transaction Update from GLWA's financial Advisor, PFM Financial Advisors, LLC. Representatives from PFM will be in attendance at the Audit Committee to review the presentation.

**Proposed Action:** Receive and file this report.



# Series 2022 Transaction Update

July 25, 2022

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PFM Financial Advisors LLC

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555 Briarwood Circle  
Suite 333  
Ann Arbor, MI 48108

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734.994.9710  
[pfm.com](http://pfm.com)



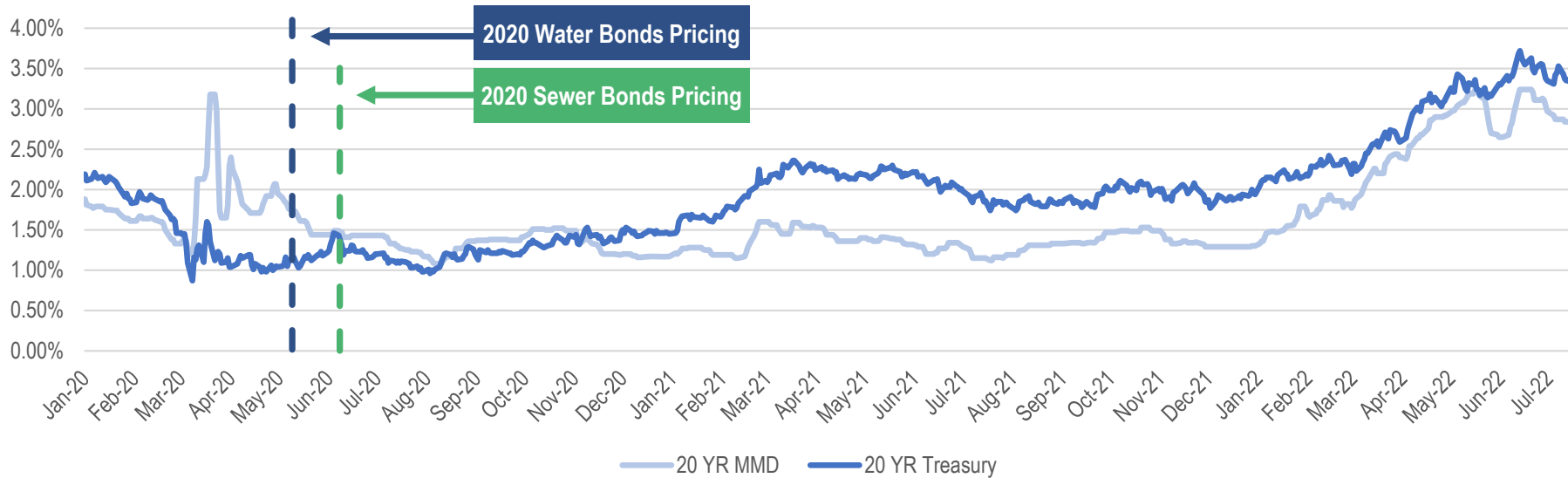
## Agenda

- I. Municipal Market Update
- II. Series 2022 Transaction and Plan of Finance
- III. Series 2022 Transaction Schedule

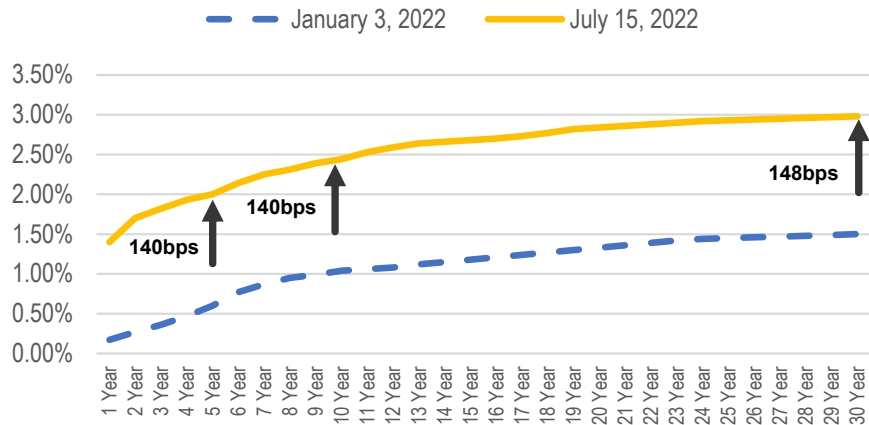


# **I. Municipal Market Update**

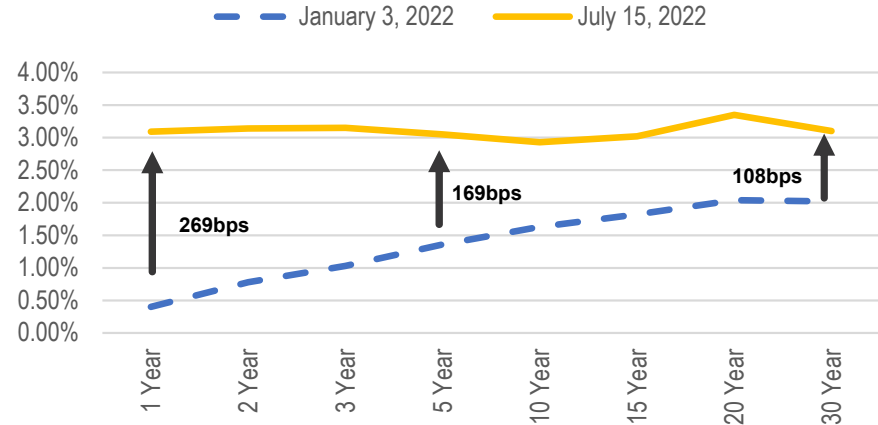
## Interest rates have risen since early 2022



### Tax-Exempt Yield Curve Comparison

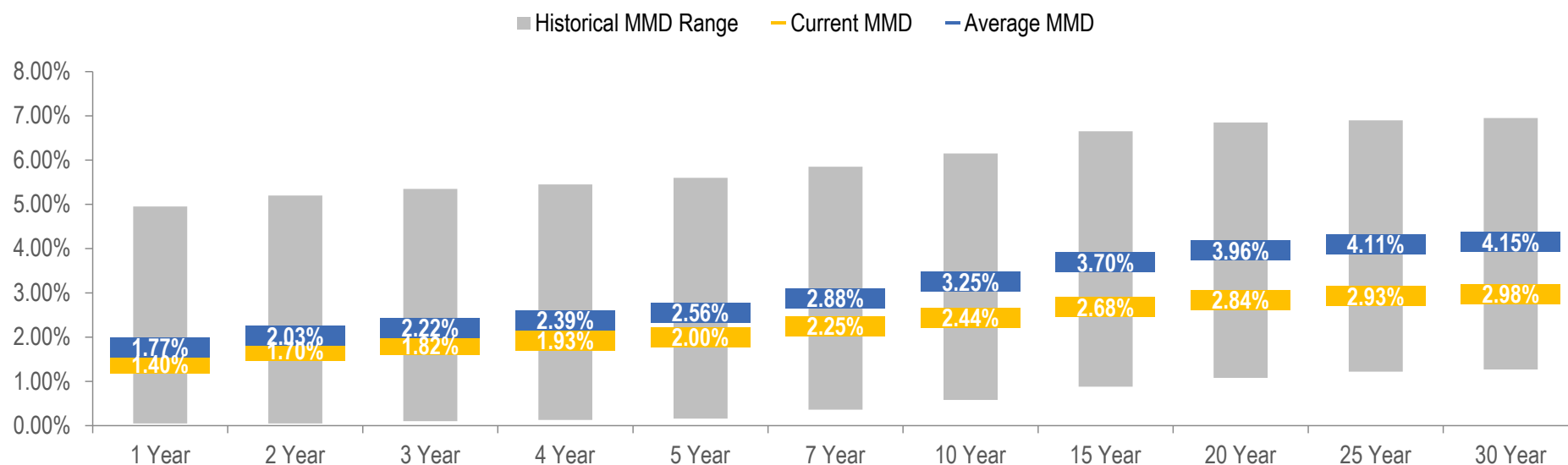


### Taxable Yield Curve Comparison



## ...but long-term tax-exempt rates remain historically low and attractive for issuers

30 Year History of AAA MMD Rate Position  
(July 15, 1992 to July 15, 2022)

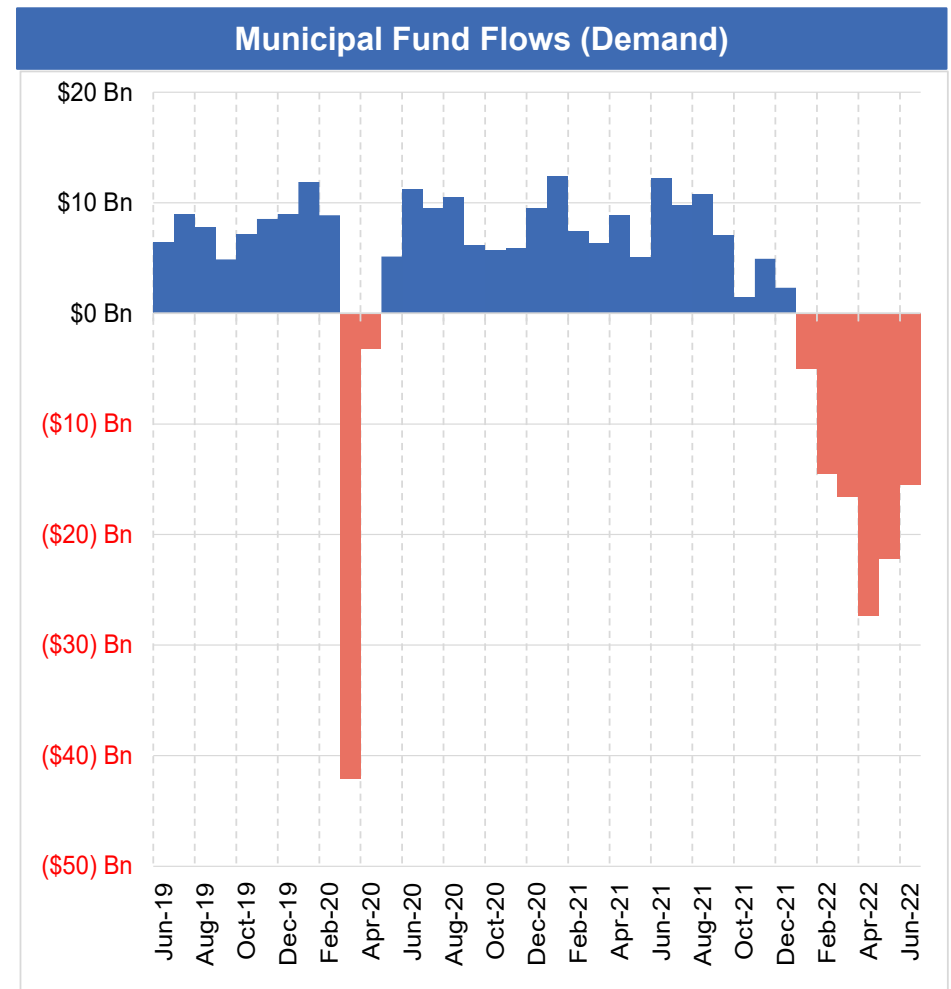
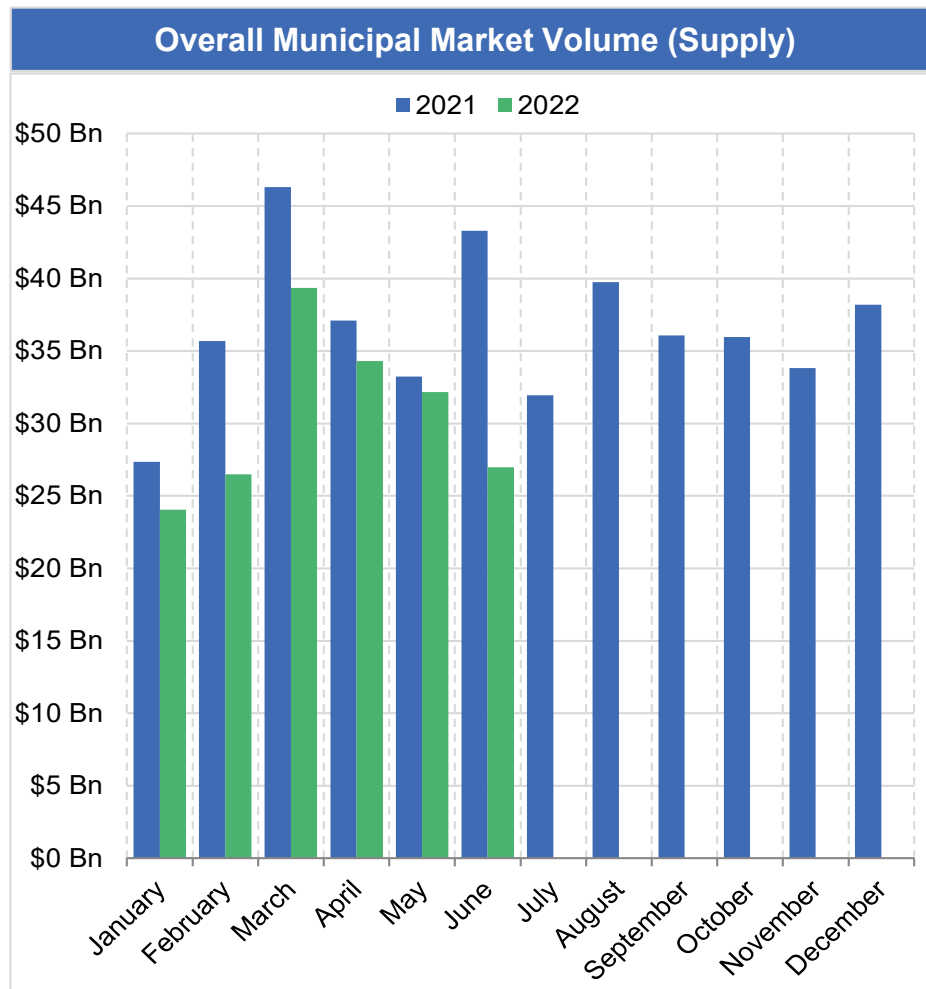


Statistic	1 Year	2 Year	3 Year	4 Year	5 Year	7 Year	10 Year	15 Year	20 Year	25 Year	30 Year
7/15/2022	1.40%	1.70%	1.82%	1.93%	2.00%	2.25%	2.44%	2.68%	2.84%	2.93%	2.98%
Average	1.77%	2.03%	2.22%	2.39%	2.56%	2.88%	3.25%	3.70%	3.96%	4.11%	4.15%
Spread to Avg.	-0.37%	-0.33%	-0.40%	-0.46%	-0.56%	-0.63%	-0.81%	-1.02%	-1.12%	-1.18%	-1.17%
Minimum	0.05%	0.05%	0.10%	0.13%	0.16%	0.36%	0.58%	0.88%	1.08%	1.22%	1.27%
Spread to Min.	1.35%	1.65%	1.72%	1.80%	1.84%	1.89%	1.86%	1.80%	1.76%	1.71%	1.71%
Maximum	4.95%	5.20%	5.35%	5.45%	5.60%	5.85%	6.15%	6.65%	6.85%	6.90%	6.95%
Spread to Max.	-3.55%	-3.50%	-3.53%	-3.52%	-3.60%	-3.60%	-3.71%	-3.97%	-4.01%	-3.97%	-3.97%
Percent of Market Days Lower	47.86%	49.94%	48.53%	45.70%	43.80%	40.44%	33.74%	28.51%	25.46%	22.59%	22.28%

**Tax-exempt interest rates have only been lower  
20-30% of the time for long-term borrowings**

## Recent volatility has caused outflows from municipal bond funds; new issue municipal supply remains lower than this time last year

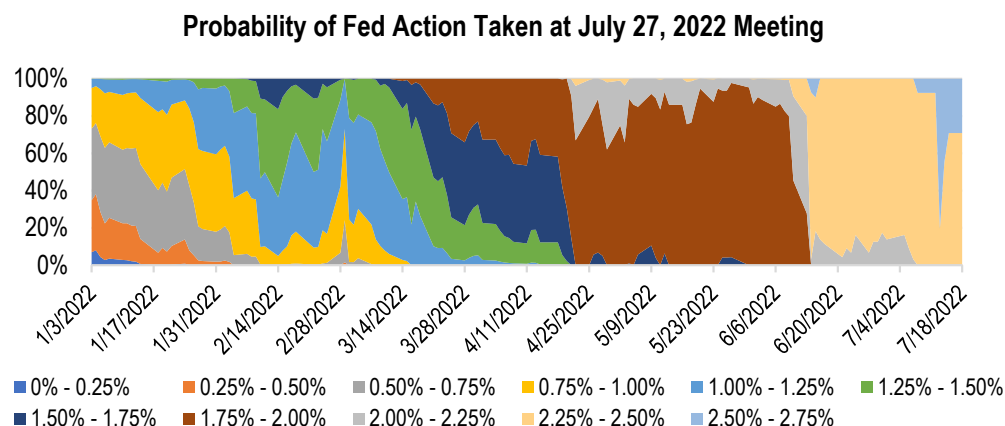
- New issuance volume was down by 37% year-over-year in June, year-to-date new issuance volume was 18% lower than 2021 issuance through June.





## Short-term interest rates are projected to rise

- At the June 15, 2022 FOMC meeting, the committee raised the target range for federal funds by 75bps to 1.50% - 1.75%
- The committee stated that it “...anticipates ongoing increases in the target range will be appropriate.”
- In addition, the committee stated it will continue to reduce the size of its balance sheet through open market operations



Bond Yield Forecast (As of July 18, 2022)										
Average Forecasts	Current	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24
30-Year UST	3.15 %	3.34 %	3.42 %	3.41 %	3.40 %	3.31 %	3.27 %	3.43 %	3.41 %	3.50 %
10-Year UST	2.99 %	3.25 %	3.31 %	3.30 %	3.24 %	3.16 %	3.10 %	3.27 %	3.23 %	3.30 %
5-Year UST	3.09 %	3.30 %	3.34 %	3.30 %	3.22 %	3.06 %	2.95 %	3.13 %	3.09 %	3.16 %
2-Year UST	3.17 %	3.31 %	3.41 %	3.42 %	3.29 %	3.12 %	3.01 %	3.15 %	3.06 %	3.09 %
3M SOFR	2.48 %	2.84 %	3.30 %	3.45 %	3.45 %	3.21 %	2.97 %	2.72 %	2.67 %	2.54 %
Fed Funds Target Rate (Upper)	1.75 %	3.00 %	3.55 %	3.65 %	3.60 %	3.45 %	3.25 %	3.10 %	2.95 %	2.85 %
Fed Funds Target Rate (Lower)	1.50 %	2.74 %	3.28 %	3.42 %	3.37 %	3.17 %	2.99 %	2.83 %	2.70 %	2.59 %

Source: Bloomberg; Federal Reserve press release dated June 15, 2022; CME FedWatch Tool



## **II. Series 2022 Transaction and Plan of Finance**



## Overview of Transaction and Plan of Finance

- ◆ GLWA plans to issue approximately \$225 million of new money proceeds for each of the Water and the Sewer systems to fund regional Capital Improvement Program projects
  - New money is planned to be issued as long-term fixed-rate debt on a combination of the Senior and Second liens
  - Preliminary structure calls for a smoothing of the existing debt profile to create generally overall level debt service with a 30 year final maturity
  - Issuance split between Senior and Second liens will be optimized to account for market conditions and optimize reserve fund releases, reduce programmatic interest costs, and effectively utilize both Senior and Second lien capacity
- ◆ Additionally, GLWA contemplates a small refunding of certain currently callable Sewer system debt maturing on 7/1/2023
  - Although refunding component creates fairly modest savings of ~2%, this debt (call date 7/1/2022) has become a wasting asset, with a refunding now likely representing the only opportunity to generate savings prior to maturity
  - Flexibility is included within Series Ordinance to refund a larger universe of bonds if interest rates fall materially prior to pricing
- ◆ Full transaction team has been assembled, with Siebert Cisneros Shank & Co. and Goldman Sachs & Co. appointed to lead the underwriting group as the senior bookrunning manager and the co-senior manager, respectively
- ◆ GLWA and transaction team will engage with all three rating agencies over next several weeks to request assignment of credit ratings (current ratings are A1/A2, AA-/A+, A+/A from Moodys, S&P, Fitch)



## Series 2022 – Transaction Participants

Transaction Role	Firm
<b>Issuer</b>	<ul style="list-style-type: none"> <li>Great Lakes Water Authority</li> </ul>
<b>Financial Advisor</b>	<ul style="list-style-type: none"> <li>PFM Financial Advisors LLC</li> </ul>
<b>Bond Counsel</b>	<ul style="list-style-type: none"> <li>Dickinson Wright, PLLC</li> </ul>
<b>Trustee and Escrow Agent</b>	<ul style="list-style-type: none"> <li>U.S. Bank, N.A.</li> </ul>
<b>Feasibility Consultant</b>	<ul style="list-style-type: none"> <li>The Foster Group</li> </ul>
<b>Senior Bookrunning Manager</b>	<ul style="list-style-type: none"> <li>Siebert Williams Shank &amp; Co., LLC</li> </ul>
<b>Co-Senior Manager</b>	<ul style="list-style-type: none"> <li>Goldman Sachs &amp; Co. LLC</li> </ul>
<b>Co-Managing Underwriters</b>	<ul style="list-style-type: none"> <li>Citigroup Global Markets Inc.</li> <li>J.P. Morgan Securities LLC</li> <li>Loop Capital Markets LLC</li> <li>Morgan Stanley &amp; Co. LLC</li> <li>Ramirez &amp; Co., Inc.</li> <li>Wells Fargo Securities</li> </ul>
<b>Underwriter's Counsel</b>	<ul style="list-style-type: none"> <li>Kutak Rock, LLP</li> </ul>
<b>Auditor</b>	<ul style="list-style-type: none"> <li>Baker Tilly Virchow Krause, LLP</li> </ul>

## Series 2022 – Preliminary New Money Sources and Uses

### Issuance Summary

- Generates total proceeds of \$225 million for each the Water and Sewerage systems
- Basic structure shown assumes a 50 / 50 split between Senior and Second Lien issuance but will be optimized dependent on market conditions and final needs
- Preliminary DSRF releases / deposits are incorporated
  - DSRF releases / deposits will change based on market conditions and optimized structure

### Assumptions

- Interest rates as of July 15, 2022
- 5% coupon structure
- Structured for level overall debt service over 30 years
- Assumes par call on 7/1/2032
- Assumes 30-year final maturity

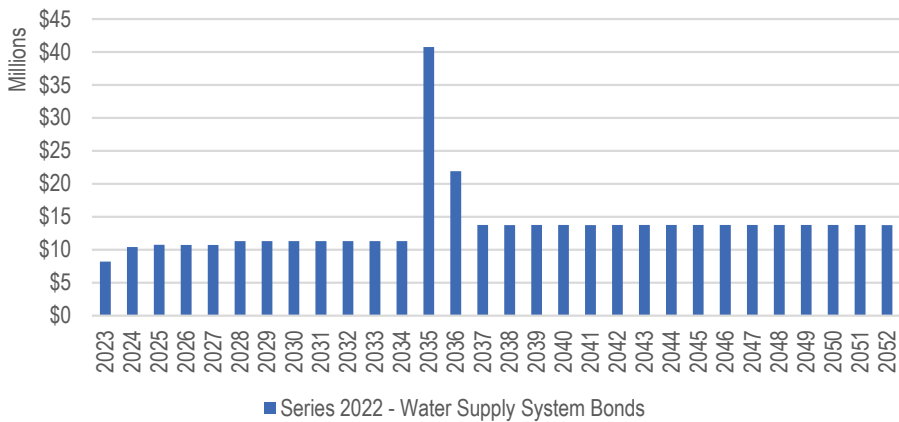
Water Supply System: New Money Borrowing			
	Senior	Second	Aggregate
Delivery Date:	9/13/2022	9/13/2022	8/1/2022
Call Date:	7/1/2032	7/1/2032	7/1/2032
Final Maturity:	7/1/2052	7/1/2052	7/1/2052
<b>Sources (\$)</b>			
Par Amount	99,665,000	105,250,000	204,915,000
Premium	12,407,426	12,393,316	24,800,741
Reserve Fund Release	1,127,123	-	1,127,123
<b>Total Sources</b>	<b>113,199,549</b>	<b>117,643,316</b>	<b>230,842,865</b>
<b>Uses (\$)</b>			
Project Fund	112,500,000	112,500,000	225,000,000
Reserve Fund Deposit	-	4,404,741	4,404,741
COI / Underwriter's Discount	699,549	738,575	1,438,124
<b>Total Uses</b>	<b>113,199,549</b>	<b>117,643,316</b>	<b>230,842,865</b>
<b>Statistics</b>			
Arbitrage Yield (%):	3.51%	3.51%	3.51%
True Interest Cost (%):	4.09%	4.14%	4.12%
Weighted Average Life (yrs.):	20.19	20.19	20.19
PV of 0.01% Change in Interest Rates (\$)	87,222	91,297	178,519

Sewage Disposal System: New Money Borrowing			
	Senior	Second	Aggregate
Delivery Date:	9/13/2022	9/13/2022	8/1/2022
Call Date:	7/1/2032	7/1/2032	7/1/2032
Final Maturity:	7/1/2052	7/1/2052	7/1/2052
<b>Sources (\$)</b>			
Par Amount	96,155,000	96,480,000	192,635,000
Premium	11,427,203	10,865,380	22,292,583
Reserve Fund Release	5,591,879	5,833,121	11,425,001
<b>Total Sources</b>	<b>113,174,082</b>	<b>113,178,502</b>	<b>226,352,584</b>
<b>Uses (\$)</b>			
Project Fund	112,500,000	112,500,000	225,000,000
Reserve Fund Deposit	-	-	-
COI / Underwriter's Discount	674,082	678,502	1,352,584
<b>Total Uses</b>	<b>113,174,082</b>	<b>113,178,502</b>	<b>226,352,584</b>
<b>Statistics</b>			
Arbitrage Yield (%):	3.58%	3.58%	3.58%
True Interest Cost (%):	4.18%	4.23%	4.21%
Weighted Average Life (yrs.):	22.33	22.33	22.33
PV of 0.01% Change in Interest Rates (\$)	83,717	83,480	167,197

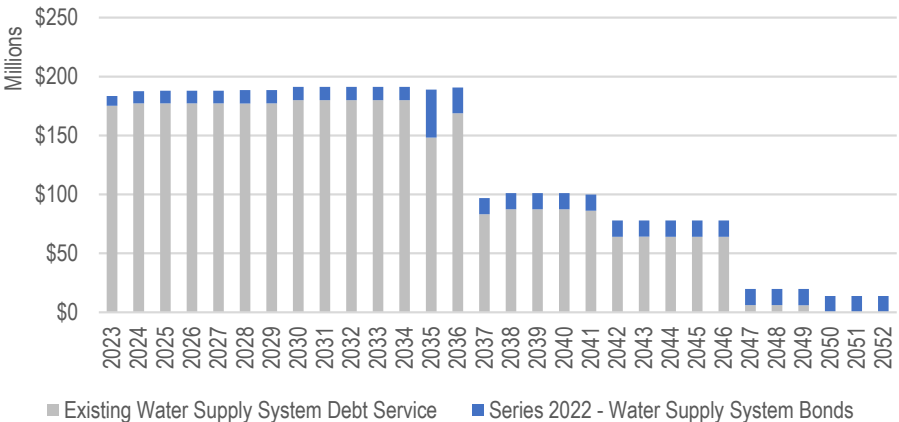
Note: Preliminary, subject to change; Tables may not add exactly due to rounding to nearest dollar. Debt Service Reserve Fund releases shown are preliminary, and may differ depending on market conditions and the final structure.

# Preliminary New Money Amortization

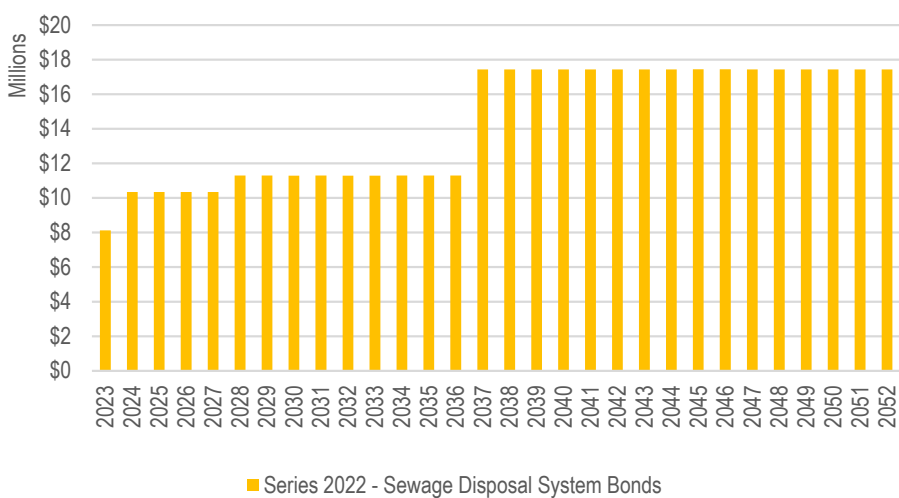
Series 2022 – Water Supply System Bonds



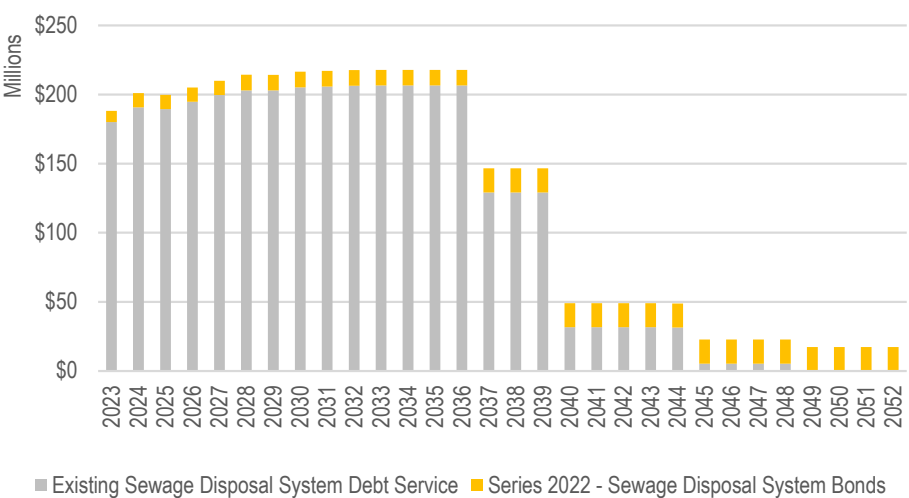
Aggregate Water Supply System



Series 2022 – Sewage Disposal System Bonds



Aggregate Sewage Disposal System



Note: Preliminary, subject to change based on market conditions

## Tax-Exempt Current Refunding – Sewer System

### Savings Summary

- About \$340 thousand in gross cash flow savings can be achieved (>\$330 thousand present value)
- Will be a wasting asset if left outstanding

### Refunding Candidates

- Includes all currently refundable fixed rate bonds

### Assumptions

- Uninsured, matched lien refunding
- Interest rates as of July 15, 2022
- Savings structured for level savings
- Contribution of accrued interest from DS fund
- Debt service reserve fund releases / deposits will be structured in conjunction with new money
- 5% Coupon Structure
- Non-Callable Structure
- PV at Arbitrage Yield

### Sewer System – Senior Lien Current Refunding

Delivery Date:	9/13/2022
Call Date:	n/a
Refunding Par (\$):	17,660,000
Current Refunded Par (\$):	17,985,000
NPV Savings (\$):	334,255
NPV Savings as % :	1.86%
Arbitrage Yield (%):	2.15%
TIC (%) :	2.19%
WAM:	0.80 yrs
Refunded Bonds WAM:	0.80 yrs
PV of 0.01% Change in Interest Rates (\$)	1,589

Bond Year	Net Prior Debt Service (\$)	Refunding Debt Service (\$)	Total Savings (\$)
7/1/2023	17,704,400	18,366,400	338,000
<b>Total</b>	<b>17,704,400</b>	<b>18,366,400</b>	<b>338,000</b>

Note: Preliminary, subject to change based on market conditions



## **III. Series 2022 Transaction Schedule**





## Preliminary Transaction Calendar

Expected Timing	Event
July 25	■ Audit Committee Consideration of Series Ordinances and Resolutions
July 27	■ Board Consideration of Series Ordinances and Resolutions
August 3 to 8	■ Rating Agency Meetings
August 19	■ Receive Ratings
August 22	■ Post POS & Investor Roadshow
August 30	■ Bond Transaction Pricing
September 13	■ Bond Transaction Closing
September 23	■ Update to Audit Committee on Financing

July 2022						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August 2022						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September 2022						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Note: Schedule subject to change based on market conditions



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Expanded Authorization on Debt Policy Provisions

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter and related attachments.

**Proposed Action:** Audit Committee recommends that the Great Lakes Water Authority Board approve Expanded Authorization on Debt Policy Provisions for the 2022 Bond Series Transaction as outlined below:

- a) Authority to refund the July 1, 2023 maturity of the Sewer Series 2012A bonds in the amount of \$18.0 million to the extent that it produces positive savings, even if less than the 2.5% threshold specified in the policy; this action acknowledges that there are no foreseeable opportunities to otherwise refund these bonds and that securing some savings is preferred over securing no savings.
- b) Authority to apply a level debt service structure as referenced in the GLWA debt policy. Specifically, authorize GLWA to structure the 2022 Water System and Sewer System transactions to smooth the existing debt profiles and create a generally overall level debt service structure, when considered together with existing debt service.
- c) Authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

## DRAFT for Audit Committee Review Only

..Title

### **Expanded Authorization on Debt Policy Provisions for the 2022 Bond Series Transaction**

..Body

Agenda of: July 27, 2022

Item No.: **2022-309**

Amount: N/A

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey P.E.  
Interim Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE:** **Expanded Authorization on Debt Policy Provisions for the 2022 Bond Series Transaction**

### **MOTION**

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer\Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approve Expanded Authorization on Debt Policy Provisions for the 2022 Bond Series Transaction as outlined below:**

- a) Authority to refund the July 1, 2023 maturity of the Sewer Series 2012A bonds in the amount of \$18.0 million to the extent that it produces positive savings, even if less than the 2.5% threshold specified in the policy; this action acknowledges that there are no foreseeable opportunities to otherwise refund these bonds and that securing some savings is preferred over securing no savings.

- b) Authority to apply a level debt service structure as referenced in the GLWA debt policy. Specifically, authorize GLWA to structure the 2022 Water System and Sewer System transactions to smooth the existing debt profiles and create a generally overall level debt service structure, when considered together with existing debt service.
- c) Authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

See attached presentation from PFM Financial Advisors LLC (PFM) and accompanying memo from PFM related to Debt Management Policy & Series 2022 Bond Structuring dated July 20, 2022.

### **JUSTIFICATION**

1. The outcome of the recommendations by PFM are to achieve additional savings July 1, 2023 maturity of the Sewer Series 2012A bonds in the amount of \$18.0 million to the extent that it produces positive savings, even if less than the 2.5% threshold specified in the policy. This action acknowledges that there are no foreseeable opportunities to otherwise refund these bonds and that securing some savings is preferred over securing no savings.
2. Utilize a desired level debt service structure as identified in the GLWA debt policy that also aligns with GLWA's ten-year financial forecast. Specifically, GLWA intends to structure the 2022 Water System and Sewer System transactions to smooth the existing debt profiles and create a generally overall level debt service structure, when considered together with existing debt service.

### **BUDGET IMPACT**

Potential savings on existing bonds and favorable rate on new money bonds.

### **COMMITTEE REVIEW**

This matter was reviewed by the Audit Committee at its meeting on July 25, 2022. The Audit Committee recommended that the GLWA Board [insert].



# Memorandum

**Date:** July 20, 2022

**To:** Great Lakes Water Authority ("GLWA")  
Nicolette Bateson, Chief Financial Officer

**From:** PFM Financial Advisors LLC ("PFM")  
Eric Brown, Director

**RE:** Debt Management Policy & Series 2022 Bond Structuring

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The GLWA Board adopted a Debt Management Policy at the December 9, 2015 meeting that establishes guidelines for the structuring of debt and selection of refunding candidates. PFM provides this memorandum to memorialize our recommendations on two specific issues addressed within the Debt Management Policy as they relate to the Series 2022 transaction.

**First, the Debt Management Policy specifies a minimum present value savings threshold of 2.5% of refunded bond principal amount.** The specific text contained within the policy follows:

***"Debt Service Savings.** GLWA establishes a minimum present value savings threshold of 2.5% of the refunded bond principal amount. The present value savings will be net of all costs related to the refinancing. If present value savings are less than 2.5%, GLWA may consider the option value captured as a percent of total savings. If the present value savings are less than 2.5%, GLWA may opt to complete a refunding. A structure which takes savings on an upfront or deferred basis must be explicitly approved by GLWA. Aggregate debt service installment requirements for both the additional bonds and the current bonds of equal and higher priority lien must be less in the current fiscal year and each fiscal year thereafter until maturity following the refunding. "*

In the case of the Series 2022 transaction, PFM recommends proceeding with the refunding of a small \$18.0 million maturity of the Sewer Series 2012A bonds that matures on July 1, 2023 to the extent that it produces positive savings, even if less than the 2.5% threshold specified in the policy. Under current market conditions this maturity produces approximately 1.9% savings as a percentage of the refunded principal amount. PFM's recommendation is made on the following basis:

- Given a final maturity date of 7/1/2023 there is an extremely limited window remaining to achieve any savings at all and the Series 2022 transaction represents the only planned public debt issuance for GLWA prior to the maturity of this debt.
- Potential savings are minimal as a result of only 12 months between the call date and the maturity date of this debt.



- With a call date of 7/1/2022 and a 5% coupon payment, possible savings associated with the call option irreversibly declines in value over time.

**Second, the Debt Management Policy provides potentially unclear guidance on new money debt structuring.** The specific text contained within the policy is as follows:

***“Debt Service Structure.** Debt issuance will be planned to achieve relatively level debt service while still matching debt service to the useful life of facilities. GLWA will avoid the use of bullet or balloon maturities except in those instances where these maturities serve to make existing overall debt service level. “*

In the case of the Series 2022 transaction, the recommended structure aligns with that policy. Specifically, GLWA intends to structure the Water and Sewer transactions to smooth the existing debt profiles and create a generally overall level debt service structure, when considered together with existing debt service. While this structure results in a weighted average maturity somewhat higher than an alternative where the Series 2022 debt is structured as level debt service without regard to existing debt, the useful lives of these long-dated assets are expected to exceed the weighted average maturity of the debt. The planned structure complies with the Debt Management Policy quoted above and has been incorporated within the draft Feasibility Reports developed by The Foster Group and presented to the Audit Committee. An overall level debt service structure is common within the water and wastewater sectors, and PFM has no concerns about its marketability. Based on our understanding of GLWA's goals, PFM believes that this structure is appropriate and our recommendation is to proceed on this basis.



## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Kim Garland, CPA, Financial Services Area Chief of Staff

**Re:** Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 (Ordinance 2022-06)

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter.

**Proposed Action:** Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution for the Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 as presented.

## DRAFT for Audit Committee Review Only

### ..Title

**Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 (Ordinance 2022-06)**

### ..Body

Agenda of: July 27, 2022  
Item No.: **2022-310**  
Amount: Not to Exceed \$735,000,000

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey, P.E.  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 (Ordinance 2022-06)**

### **MOTION**

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer\Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approves the resolution regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.



## **BACKGROUND**

In order for the Great Lakes Water Authority (“GLWA”) to proceed with the issuance of new money bonds to support regional capital plan improvements and refunding of various outstanding water supply system bonds for the purpose of achieving annual debt service savings, the GLWA Board must approve the included resolution approving the Series Ordinance.

The Series Ordinance sets forth the guidelines for the New Money and Refunding Bonds and authorizes the Chief Executive Officer of the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Bond Purchase Agreement, within the parameters set forth in the Series Ordinance.

## **JUSTIFICATION**

New Money Portion: The authorized amount for the New Money Bonds is for an aggregate principal amount not to exceed \$300,000,000 for the regional water system.

Refunding Portion: At this time, the financial metrics do not support a refunding transaction for the water supply system. In the event that market conditions change whereby refunding savings could be achieved that align with the GLWA debt policy, the series ordinance is in place for an estimated amount of potential refunding candidates. The authorized amount for the Refunding Bonds is presented for an aggregate principal amount of not to exceed \$435,000,000. The final par amount of the Refunding Bonds will be determined at the time of pricing and is based on current bond market pricing levels, issuance costs and the par amount of the bonds to be refunded as determined by the savings level achieved.

### **Key Provisions:**

- Not to Exceed Par Amount: \$735 million (\$300 million for new money, \$435 million for refunding)
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Equal to or greater than 5.00% of principal amount of bonds to be refunded

The amounts in the series ordinance differ from those presented by the feasibility consultant and bond consultants. This reflects the range of possible outcomes from the transaction in the current market. The higher values in the series ordinance allow for the

possibility of improved market conditions and the opportunity for refunding savings. A summary of these differences was shared at the July 25, 2022 GLWA Audit Committee meeting is included with this letter as Attachment 1. *While the approval of the resolution gives GLWA the authorization to issue refunding bonds, GLWA does not intend to proceed with the refunding unless market conditions become favorable when it comes time to price the bonds in alignment with the GLWA Debt Policy.*

### **BUDGET IMPACT**

No savings resulting from potential Water Refunding Bonds have not been included in the FY 2023 budget or ten-year financial plan. If savings are achieved as a result of the potential refunding, a budget amendment may be required for FY 2023 depending on the final pricing and savings structure on the bonds.

### **COMMITTEE REVIEW**

This matter was reviewed by the GLWA Audit Committee at its meeting on July 25, 2022. The Audit Committee *[insert action]* the resolution for Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$735,000,000 as presented.

## 2022-310 Attachment 1

**Series 2022 Bond Transaction(s) Crosswalk - Water  
(in Millions)**

	Feasibility Study <u>Forecast</u>	Preliminary Plan of <u>Finance</u>	Series <u>Ordinance</u>
<b><u>Water New Money</u></b>			
<b><u>Senior Lien</u></b>			
Par Amount	225.0	99.7	NA
Net Premium/Reserves	<u>(11.2)</u>	<u>12.8</u>	<u>NA</u>
Proceeds	213.8	112.5	NA
<b><u>Second Lien</u></b>			
Par Amount	0.0	105.3	NA
Net Premium/Reserves	<u>0.0</u>	<u>7.3</u>	<u>NA</u>
Proceeds	0.0	112.5	NA
<b><u>Water Aggregate New Money</u></b>			
Par Amount	225.0	204.9	300.0
Net Premium/Reserves	<u>(11.2)</u>	<u>20.1</u>	<u>0.0</u>
Proceeds	213.8	225.0	300.0
<b><u>Water Refunding*</u></b>			
Par Amount	0.0	0.0	435.0
Net Premium/Reserves	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Proceeds	0.0	0.0	435.0
<b><u>Water Aggregate</u></b>			
Par Amount	225.0	204.9	735.0
Net Premium/Reserves	<u>(11.2)</u>	<u>20.1</u>	<u>NA</u>
Proceeds	213.8	225.0	735.0

\* At this time, the financial metrics do not support a refunding transaction for the water supply system. In the event market conditions change whereby refunding savings could be achieved that align with the GLWA debt policy, the series ordinance is in place for an estimated amount of potential refunding candidates.

GREAT LAKES WATER AUTHORITY  
ORDINANCE NO. 2022-06

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF  
WATER SUPPLY SYSTEM REVENUE AND REVENUE REFUNDING  
BONDS IN A PRINCIPAL AMOUNT NOT TO EXCEED \$735,000,000**

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 one or more Series of Bonds to provide moneys (i) to refund a portion of the Outstanding Bonds (the “Bonds To Be Refunded”) and cause the Bonds To Be Refunded to be defeased in accordance with the Ordinance and (ii) to pay all or part of the costs of the hereinafter described improvements, enlargements, extensions and repairs to the Regional Water System.

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 “2022 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2022 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2022 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) “2022 Bonds” means, collectively, the 2022 New Money Bonds and the 2022 Refunding Bonds authorized by Section 3 of this 2022 Series Ordinance.

(b) “2022 New Money Bonds” means those 2022 Bonds issued for the purpose of paying, reimbursing and/or refinancing Project Costs.

(c) “2022 Project” means a portion of the improvements, enlargements, extensions and repairs to the Regional Water System identified in the Capital Improvement Program, all as more fully described in the Sale Order.

(d) “2022 Refunding Bonds” means those 2022 Bonds, if any, issued for the purpose of refunding the Bonds To Be Refunded and paying Refunding Costs.

(e) “2022 Reserve Requirement” means the sum of the 2022 Senior Lien Reserve Requirement and the 2022 Second Lien Reserve Requirement.

(f) “2022 Second Lien Bonds” means collectively, the 2022 Second Lien New Money Bonds and the 2022 Second Lien Refunding Bonds.

(g) “2022 Second Lien New Money Bonds” means those 2022 New Money Bonds, if any, issued as Second Lien Bonds as provided in this 2022 Series Ordinance.

(h) “2022 Second Lien Refunding Bonds” means those 2022 Refunding Bonds, if any, issued as Second Lien Bonds as provided in this 2022 Series Ordinance.

(i) “2022 Second Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Second Lien Bond Reserve Account at least equal to the Reserve Requirement for the Second Lien Bond Reserve Account immediately upon the issuance of the 2022 Second Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2022 Second Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Second Lien Bond Reserve Account.

(j) “2022 Senior Lien Bonds” means collectively, the 2022 Senior Lien New Money Bonds and the 2022 Senior Lien Refunding Bonds.

(k) “2022 Senior Lien New Money Bonds” means those 2022 New Money Bonds, if any, issued as Senior Lien Bonds as provided in this 2022 Series Ordinance.

(l) “2022 Senior Lien Refunding Bonds” means those 2022 Refunding Bonds, if any, issued as Senior Lien Bonds as provided in this 2022 Series Ordinance.

(m) “2022 Senior Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Senior Lien Bond Reserve Account at least equal to the Reserve Requirement for the Senior Lien Bond Reserve Account immediately upon the issuance of the 2022 Senior Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2022 Senior Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Senior Lien Bond Reserve Account.

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

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

(p) “Continuing Disclosure Undertaking” means the continuing disclosure undertaking or undertakings with respect to the 2022 Bonds to be entered into by the Authority pursuant to the Rule.

(q) “Escrow Agreement” shall have the meaning set forth in Section 11 of this 2022 Series Ordinance.

(r) “Escrow Deposit” means cash or Government Obligations, or a combination of cash and Government Obligations, at least sufficient to discharge the lien of the Pledged Assets securing the Bonds To Be Refunded in accordance with Section 1001 of the Ordinance.

(s) “Fitch” means Fitch Ratings, Inc., and any successor rating agency.

(t) “Interest Payment Date” means except as otherwise determined in the Sale Order each January 1 and July 1, or such other dates and commencing as set forth in the Sale Order.

(u) “Maturity Date” means such dates of maturity of the 2022 Bonds as determined in the Sale Order.

(v) “Moody’s” means Moody’s Investors Service, Inc., and any successor rating agency.

(w) “Official Statement” means the final disclosure document with respect to the 2022 Bonds.

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

(y) “Preliminary Official Statement” means the preliminary disclosure document with respect to the 2022 Bonds.

(z) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2022 Project, including Issuance Costs relating to the 2022 New Money Bonds.

(aa) “Purchase Agreement” means the bond purchase agreement between the Authority and the Underwriter providing for the sale of the 2022 Bonds.

(bb) “Refunding Costs” means the costs of refunding the Bonds To Be Refunded, including, to the extent authorized in the Sale Order, the amount of the Escrow Deposit, and funding of the 2022 Reserve Requirement and Issuance Costs relating to the 2022 Refunding Bonds.

(cc) “Regular Record Date” means the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

(dd) “Rule” means Rule 15c2-12 promulgated by the United States Securities and Exchange Commission under the Securities and Exchange Act of 1934, as amended.

(ee) “S&P” means S&P Global Ratings, and any successor rating agency.

(ff) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2022 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2022 Bonds and to complete the other transactions contemplated herein.

(gg) “Securities Depository” means (i) The Depository Trust Company and its successors and assigns, if any, or (ii) any other securities depository which agrees to follow the procedures required to be followed by a securities depository in connection with the 2022 Bonds and which is selected by the Authority as provided in Section 6.

(hh) “Taxable 2022 Bonds” means any 2022 Bonds other than Tax-Exempt 2022 Bonds.

(ii) “Tax-Exempt 2022 Bonds” means any 2022 Bonds that are Tax-Exempt Bonds.

(jj) “Underwriter” means Siebert Williams Shank & Co., LLC, on behalf of itself and such underwriters as may be named in the Purchase Agreement.

Section 3. Authorization of 2022 Bonds.

(a) Authorization of Borrowing.

- (1) The Authority may borrow (A) an aggregate principal amount not in excess of \$435,000,000, in the case of 2022 Refunding Bonds, and (B) an aggregate principal amount not in excess of \$300,000,000, in the case of 2022 New Money Bonds, all as is finally determined in the Sale Order, and issue 2022 Bonds at one or more times and in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2022 Senior Lien Bonds and/or 2022 Second Lien Bonds, all as finally determined in the Sale Order.

(b) Purpose of 2022 Bonds. The 2022 Bonds shall be issued as Additional Bonds for the purpose of (1) in the case of 2022 Refunding Bonds, refunding the Bonds To Be Refunded and paying Refunding Costs and (2) in the case of 2022 New Money Bonds, paying, reimbursing and/or refinancing Project Costs, and may in each case include amounts necessary to satisfy the 2022 Reserve Requirement and paying the costs of a Credit Facility.

(c) Limitation on Issuance of 2022 Refunding Bonds. No 2022 Refunding Bonds shall be issued unless:

- (1) The proceeds thereof (exclusive of accrued interest), together with other moneys available to the Authority under the Ordinance, are sufficient to provide the Escrow Deposit after payment of the 2022 Reserve Requirement and Issuance Costs relating to the 2022 Refunding Bonds set forth in the Sale Order.
- (2) Concurrently with or prior to the delivery of the 2022 Refunding Bonds, an Authorized Officer gives notice to the Trustee to call for redemption at the applicable redemption price all of the Bonds To Be Refunded on the dates

set forth in the Escrow Agreement. In such notice, an Authorized Officer may direct that the notice of redemption to be given by the Trustee to the Holders of the Bonds To Be Refunded pursuant to Section 303 of the Ordinance shall be given prior to the delivery of the 2022 Refunding Bonds and that such notice of redemption be conditioned upon the delivery of the 2022 Refunding Bonds and the funding of the Escrow Deposit. As provided in Section 303 of the Ordinance, if such conditions in the notice of redemption are not satisfied on or before the date fixed for redemption, then the notice of redemption shall be canceled and of no further force or effect.

(d) Insufficient Proceeds. To the extent that proceeds of the 2022 New Money 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 Regional Water System on hand and legally available therefor, as determined by the Authority Board.

(e) Priority of Lien. The 2022 Bonds shall be issued as Senior Lien Bonds and/or Second Lien Bonds, as set forth in the Sale Order.

(f) Separate Series. The 2022 Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2022 Refunding Bonds and the 2022 New Money Bonds shall not be included in the same Series and shall be issued as separate Series.

(g) Taxable and Tax-Exempt 2022 Bonds. The 2022 Bonds may be issued as Taxable 2022 Bonds or Tax-Exempt 2022 Bonds, or as separate Series of both, as determined in the Sale Order.

(h) Source of Payment and Security. The 2022 Bonds shall be payable and secured as provided in Section 5.

(i) Applicability of Ordinance. Except as otherwise provided in this 2022 Series Ordinance or the Sale Order, all of the provisions of the Ordinance shall apply to the 2022 Bonds as if set forth in full in this 2022 Series Ordinance, the purpose of this 2022 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2022 Bonds for the purposes set forth herein.

#### Section 4. 2022 Bond Details.

(a) Designation.

- (1) The 2022 Bonds shall bear the designations Water Supply System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[A/B/C/D] and shall include the Series designation and such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2022 Series Ordinance.



- (2) If the 2022 Bonds are not issued in 2022, an Authorized Officer is authorized in his or her discretion to re-designate the year and Series designation of the 2022 Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of the 2022 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 2022 Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2022 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 July 1, or such other date as set forth in a 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 limitations applicable to Taxable 2022 Bonds in Section 4(j) hereof and the following limitations:

- (1) No 2022 Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) 2022 Bonds shall only be issued with principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2022 Bonds or portions thereof shall bear interest at such fixed rate or rates as determined in the Sale Order not in excess of the maximum rate permitted by law. Interest on the 2022 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 2022 Bonds shall be payable in lawful money of the United States. The principal of and premium, if any, on the 2022 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 2022 Bonds shall be dated such date or dates as determined in the Sale Order.

(g) Reserve Requirement. The 2022 Reserve Requirement, if any, with respect to each Series of the 2022 Bonds shall be satisfied by a deposit into the appropriate Bond Reserve Account of a portion of the proceeds of such Series of 2022 Bonds, funds already on deposit in the appropriate Bond Reserve Account or the provision of a Credit Facility in the same amount and with a credit rating at the time of issuance of such Series of 2022 Bonds not less than the credit rating of such Series of 2022 Bonds, or any combination of the foregoing. The amounts, if any, required to be deposited in the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account to cause the amounts on deposit therein to be at least equal to the Reserve

Requirement for the Senior Lien Bonds and the Reserve Requirement for the Second Lien Bonds, respectively, shall be set forth in the Sale Order.

(h) Exchange. The registered owner of any 2022 Bond may exchange such 2022 Bond for a new 2022 Bond or Bonds of the same Series, interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2022 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 2022 Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2022 Bonds.

(i) Execution and Delivery of 2022 Bonds. The 2022 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 2022 Bonds to the Underwriter upon receiving the purchase price therefor in lawful money of the United States.

(j) Selection of Taxable 2022 Bonds for Redemption. Pursuant to Section 303 of the Ordinance, when Taxable 2022 Bonds are to be redeemed in part, an Authorized Officer shall specify to the Trustee the Series designation and maturity of the Taxable 2022 Bonds from which 2022 Bonds or portions of 2022 Bonds to be redeemed shall be selected. Subject to the Authorized Officer's specification, the particular Taxable 2022 Bonds or portions of Taxable 2022 Bonds to be redeemed will be selected by the Trustee by lot; provided, however, that the Trustee shall select Taxable 2022 Bonds to be redeemed on the basis of a pro rata pass-through distribution of principal in accordance with DTC procedures and provided that, so long as the Taxable 2022 Bonds are held in book-entry form the selection for redemption of such Taxable 2022 Bonds will be made in accordance with the operational arrangements of DTC then in effect and, if the DTC operational arrangements do not allow for redemption on the basis of a pro-rata pass-through distribution of principal, the Taxable 2022 Bonds will be selected for redemption, in accordance with DTC procedures, by lot. The portion of any Taxable 2022 Bonds to be redeemed in part shall be in the principal amount of \$5,000 or any integral multiple thereof.

(k) Form of 2022 Bonds. The 2022 Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by an Authorized Officer within the parameters of this 2022 Series Ordinance:

R-\_\_

**UNITED STATES OF AMERICA  
STATE OF MICHIGAN  
COUNTIES OF MACOMB, OAKLAND AND WAYNE  
GREAT LAKES WATER AUTHORITY**

**WATER SUPPLY SYSTEM [REVENUE] [REVENUE REFUNDING]  
[SENIOR LIEN] [SECOND LIEN] BOND, SERIES 2022[\_\_]**

REGISTERED OWNER:

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, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above in lawful money of the United States of America. Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate per annum set forth above, and shall be payable on \_\_\_\_\_ 1, 20\_\_ and semiannually on each July 1 and January 1 thereafter (each an “Interest Payment Date”) in lawful money of the United States of America.

Principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank Trust Company, National Association, as Trustee under the Bond 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.

This Bond is one of a series of bonds designated “Water Supply System Revenue [Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[\_\_]” 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 and Revenue Refunding Bonds in a Principal Amount not to Exceed \$\_\_\_\_\_, adopted by the Board on \_\_\_\_\_, 2022 (the “Series Ordinance”), and (vi) a Sale Order of an Authorized Officer of the Issuer dated \_\_\_\_\_, 2022 (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 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 (as defined in the Bond Ordinance) (the “Pledged Assets”) is hereby recognized and acknowledged. Such lien is a [first] [second] lien[, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first 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 [first] [second] 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 to the extent, and as provided in, the Sale Order.

**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, 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 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 one of the bonds designated by the Issuer as “Water Supply System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[ ]”.

U.S. Bank Trust Company, National Association,  
Trustee

By: \_\_\_\_\_

Date of Authentication: \_\_\_\_\_, 2022

## 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.

END OF BOND FORM



Section 5. Payment of 2022 Bonds; Confirmation of Statutory Lien.

(a) The 2022 Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2022 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 2022 Bonds as follows:

- (1) Such lien in favor of the 2022 Senior Lien Bonds shall be a first lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Senior Lien Bonds.
- (2) Such lien in favor of the 2022 Second Lien Bonds shall be a second lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Second Lien Bonds.

Section 6. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2022 Bonds pursuant to the indirect ownership system maintained by the Securities Depository and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2022 Bonds is shown on books of the Securities Depository.

(b) Initially, one fully-registered bond for each maturity of each Series of 2022 Bonds, in the aggregate principal amount of such maturity, shall be issued in the name of Cede & Co., as nominee of the Securities Depository, for the benefit of the Participants in the Book-Entry Only System. While the 2022 Bonds are 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 2022 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 2022 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 2022 Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2022 Bonds only to or upon the order of the Securities Depository, 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 2022 Bonds to the extent of the sum or sums so paid.

(d) If (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 2022 Bonds that they be able to obtain 2022 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 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 2022 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 2022 Series Ordinance to the contrary, so long as any 2022 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 2022 Bond and all notices of redemption, tender and otherwise with respect to such 2022 Bond shall be made and given, respectively, to the Securities Depository as provided in the blanket issuer letter of representations between the Authority and the Securities Depository;
- (2) if less than all of the 2022 Bonds of the same type of any maturity are to be redeemed, then the particular 2022 Bonds or portions of 2022 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 2022 Bonds and premium, if any and interest on the 2022 Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2022 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 2022 Bond pursuant to the procedures of the Securities Depository.

## Section 7. Credit Facility.

(a) An Authorized Officer is authorized to negotiate and obtain a Credit Facility with respect to the 2022 Bonds, if the Authorized Officer determines that it is in the best interest of the Authority. An Authorized Officer is further authorized to renegotiate the terms of any outstanding Credit Facility, if the Authorized Officer determines that it is in the best interest of the Authority.

(b) An Authorized Officer is authorized to pay the cost of any such Credit Facility from the proceeds of the 2022 Bonds or any other funds legally available therefor.

(c) An Authorized Officer is authorized to make such covenants and agreements of the Authority as shall be necessary or appropriate in any agreement with the Credit Entity providing such Credit Facility.

Section 8. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2022 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 9. Disposition of Proceeds.

(a) 2022 Senior Lien New Money Bonds.

- (1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2022 Senior Lien New Money Bonds there shall be immediately deposited in the Senior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2022 Senior Lien New Money Bonds and, to the extent provided in the Sale Order, any capitalized interest on the 2022 Senior Lien New Money Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Debt Service Account for payment of the next maturing interest payment on the 2022 Senior Lien New Money Bonds.
- (2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Senior Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account, if any, at least equal to the 2022 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Senior Lien New Money Bonds or any other funds legally available therefor.
- (3) Construction Fund. The balance of the proceeds of the 2022 Senior Lien New Money Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 10.

(b) 2022 Second Lien New Money Bonds.

- (1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2022 Second Lien New Money Bonds there shall be immediately deposited in the Second Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2022 Second Lien New Money Bonds and, to the extent provided in the Sale Order, any capitalized interest on the 2022 Second Lien New Money Bonds,

and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Debt Service Account for payment of the next maturing interest payment on the 2022 Second Lien New Money Bonds.

- (2) Second Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Second Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account, if any, at least equal to the 2022 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Second Lien New Money Bonds or any other funds legally available therefor.
- (3) Construction Fund. The balance of the proceeds of the 2022 Second Lien New Money Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 10.

(c) 2022 Senior Lien Refunding Bonds.

- (1) Disposition of Accrued Interest: From the proceeds of the sale of the 2022 Senior Lien Refunding Bonds there shall be immediately deposited in the Senior Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2022 Senior Lien Refunding Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2022 Senior Lien Refunding Bonds.
- (2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Senior Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account at least equal to the 2022 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Senior Lien Refunding Bonds or any other funds legally available therefor.
- (3) Issuance Costs: As provided in the Sale Order, a portion of the proceeds from the sale of the 2022 Senior Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.
- (4) Escrow Deposit: As provided in the Sale Order, the balance of the proceeds from the sale of the 2022 Senior Lien Refunding Bonds shall be used to acquire Government Obligations, which together with any remaining

balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

(d) 2022 Second Lien Refunding Bonds.

- (1) Disposition of Accrued Interest: From the proceeds of the sale of the 2022 Second Lien Refunding Bonds there shall be immediately deposited in the Second Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2022 Second Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2022 Second Lien Refunding Bonds.
- (2) Second Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Second Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account at least equal to the 2022 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Second Lien Refunding Bonds or any other funds legally available therefor.
- (3) Issuance Costs: As provided in the Sale Order, a portion of the proceeds from the sale of the 2022 Second Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.
- (4) Escrow Deposit: As provided in the Sale Order, the balance of the proceeds from the sale of the 2022 Second Lien Refunding Bonds shall be used to acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

Section 10. Construction Fund. A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2022 New Money Bonds and designated the “Construction Fund, Series 2022,” and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.

(a) Moneys in the Construction Fund, Series 2022 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority from other funds prior to the issuance of the 2022 New Money Bonds).

- (1) Payments or reimbursement 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 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 pursuant to and 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 an Authorized Officer.

Section 11. Escrow Fund; Escrow Agreement.

(a) Establishment of Escrow Fund. The Escrow Deposit shall be held in or credited to an account designated as the “Great Lakes Water Authority Water Supply System Revenue Refunding Bonds Series 2022 Escrow Fund” (the “Escrow Fund”) pursuant to an escrow agreement (the “Escrow Agreement”).

(b) Escrow Agreement.

- (1) An Authorized Officer is authorized to enter into the Escrow Agreement on behalf of the Authority with U.S. Bank Trust Company, National Association as “Escrow Trustee.”
- (2) The Escrow Agreement:
  - a) shall be in the form and substance customary for refunding escrow agreements;
  - b) may permit any balance after paying the principal (and premium, if any) and interest on the Bonds To Be Refunded to be applied to any lawful purpose of the Water System if such use will not, in the opinion of Bond Counsel, impair the exclusion of interest on the 2022 Refunding Bonds that are Tax-Exempt 2022 Bonds from gross income for federal income tax purposes; and
  - c) shall otherwise be in the best interests of the Authority as determined by an Authorized Officer, as conclusively established by his or her execution of the Escrow Agreement.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2022 Bonds that so long as any of the Tax-Exempt 2022 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 2022 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 2022 Bonds and moneys deemed to be proceeds of Tax-Exempt 2022 Bonds, and to prevent the Tax-Exempt 2022 Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Preliminary and Final Official Statements.

(a) An Authorized Officer shall assist in the preparation of the Preliminary Official Statement and is authorized to deem the portions of the Preliminary Official Statement relating to the 2022 Bonds and the Authority “final” for purposes of the Rule.

(b) The Preliminary Official Statement with such changes and additions as an Authorized Officer shall approve shall constitute the final Official Statement, and an Authorized Officer is authorized to execute the final Official Statement on behalf of the Authority approved by him or her with such changes as the Authorized Officer may authorize.

(c) Such final Preliminary Official Statement and final Official Statement and other offering materials satisfactory to an Authorized Officer are authorized to be distributed by the Underwriter in conjunction with the offering and sale of the 2022 Bonds.

Section 14. Continuing Disclosure. Unless otherwise set forth in the Sale Order because of an exemption from the Rule, the 2022 Bonds shall be subject to the Rule, and an Authorized Officer is authorized to execute and deliver the Continuing Disclosure Undertaking in form and substance customary for continuing disclosure undertakings entered into pursuant to the Rule.

Section 15. Sale of 2022 Bonds; Purchase Agreement.

(a) The 2022 Bonds shall be sold by negotiated sale to the Underwriter pursuant to a Purchase Agreement or Agreements 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 2022 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Agreement or Agreements.

(b) The Authority Board hereby determines that the sale of the 2022 Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2022 Bonds to be sold in the most efficient manner so as to result in the lowest possible borrowing costs to the Authority.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the Underwriter to purchase the 2022 Bonds subject to the following limitations:

- (1) The interest rate coupon with respect to the 2022 Bonds shall not exceed 6.00%.
- (2) The purchase price of the 2022 Bonds shall not be less than 98% of the principal amount thereof.

- (3) The Underwriter's discount with respect to the 2022 Bonds or the compensation to be paid to the Underwriter shall not exceed 0.40% of the principal amount of the 2022 Bonds.
- (4) The present value of the savings (net of Issuance Costs) to be realized by the issuance of the 2022 Refunding Bonds shall be equal to or greater than 5% of the principal amount of the Bonds To Be Refunded.

(d) An Authorized Officer is authorized to determine if the Purchase Agreement shall provide for liquidated damages and if so, the amount thereof, and if the purchaser of the 2022 Bonds is required to provide a good faith check and if so, the amount thereof.

(e) 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 2022 New Money Bonds as required by Section 33 of Act 94.

Section 16. 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 2022 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2022 Series Ordinance, an Authorized Officer shall determine the Bonds To Be Refunded (from the Outstanding Bonds) and aggregate principal amount of 2022 Refunding Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2022 Series Ordinance. An Authorized Officer shall also determine and establish, in accordance with this 2022 Series Ordinance, the maturities of the 2022 Refunding Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities, and the redemption provisions for the 2022 Refunding Bonds.

(c) In addition to determinations authorized elsewhere in this 2022 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2022 New Money Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2022 Series Ordinance, on the basis of his or her evaluation of the maximum amount of 2022 New Money Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2022 New Money Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the type or types of 2022 New Money Bonds to be issued, whether to issue the 2022 New Money Bonds as Senior Lien Bonds or Second Lien Bonds and if in one or more Series, and the redemption provisions for the 2022 New Money Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2022 Series Ordinance, the maturities of the 2022 New Money



Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(d) 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 his or her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2022 Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2022 Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(e) 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 2022 Bonds as Additional Bonds have been satisfied.

(f) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2022 Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2022 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 17. [Reserved.]

Section 18. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2022 Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 19. 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, letters of representation, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2022 Bonds and otherwise give effect to the transactions contemplated by this 2022 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 20. 2022 Series Ordinance a Contract. The provisions of this 2022 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2022 Bond.

Section 21. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2022 Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2022 Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2022 Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2022 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 2022 Bonds or other available funds.

(d) An Authorized Officer is authorized to engage other consultants, including, without limitation, verification agents or other parties as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2022 Bonds and to pay the fees and expenses thereof from the proceeds of the 2022 Bonds or other available funds.

Section 22. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2022 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 2022 Series Ordinance. The section and paragraph headings in this 2022 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2022 Series Ordinance.

Section 23. Publication and Recordation. This 2022 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 24. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2022 Series Ordinance are, to the extent of such conflict, repealed.

Section 25. Effective Date. This 2022 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 27th day of July, 2022.

GREAT LAKES WATER AUTHORITY

Signed \_\_\_\_\_  
Chairperson

Signed \_\_\_\_\_  
Secretary

4876-9174-6339 v5 [63818-42]

**Great Lakes Water Authority**

**Resolution 2022-310**

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System  
Revenue and Revenue Refunding Bonds in an Amount not to Exceed \$735,000,000  
Ordinance 2022-06**

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 Water Supply System Revenue and Revenue Refunding Bonds in an Amount not to Exceed \$735,000,000” (the “2022 Water 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, August 10, 2016 and February 12, 2020 (as amended, the “Master Water Bond Ordinance”).

**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 2022 Water Series Ordinance.

**Now, Therefore Be It:**

**Resolved** That the 2022 Water Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2022 Water 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 27, 2022



## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Kim Garland, CPA, Financial Services Area Chief of Staff

**Re:** Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 (Ordinance 2020-07)

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter.

**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 and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 as presented.

## DRAFT for Audit Committee Review Only

### ..Title

**Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue and Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 (Ordinance 2022-07)**

### ..Body

Agenda of: July 27, 2022  
Item No.: **2022-311**  
Amount: Not to Exceed \$730,000,000

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey, P.E.  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 (Ordinance 2022-07)**

### **MOTION**

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer\Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approve the resolution regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue and Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

## **BACKGROUND**

In order for the Great Lakes Water Authority (“GLWA”) to proceed with the issuance of new money bonds to support regional capital plan improvements and refunding of various outstanding sewage disposal system bonds for the purpose of achieving annual debt service savings, the GLWA Board must approve the included resolution approving the Series Ordinance.

The Series Ordinance sets forth the guidelines for the New Money and Refunding Bonds and authorizes the Chief Executive Officer of the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Bond Purchase Agreement, within the parameters set forth in the Series Ordinance.

## **JUSTIFICATION**

New Money Portion: The authorized amount for the New Money Bonds is for an aggregate principal amount not to exceed \$270,000,000 for the regional sewage disposal system.

Refunding Portion: The authorized amount for the Refunding Bonds is for an aggregate principal amount of not to exceed \$460,000,000. The final par amount of the Refunding Bonds will be determined at the time of pricing and is based on current bond market pricing levels, issuance costs and the par amount of the bonds to be refunded as determined by the savings level achieved.

### **Key Provisions:**

- Not to Exceed Par Amount: \$730 million (\$270 million for new money, \$460 million for refunding)
- Maximum Coupon Rate: 6.00%
- Minimum Purchase Price: 98% of principal amount of bonds
- Maximum Underwriter Discount: 0.40% of principal amount of bonds
- Present Value Savings: Greater than 0% of principal for bonds refunded not more than 90 days prior to the redemption date of the bonds and Greater than 5.00% of principal amount of bonds to be refunded more than 90 days prior to redemption of the bonds

The amounts in the series ordinance differ from those presented by the feasibility consultant and bond consultants. This reflects the range of possible outcomes from the transaction in the current, volatile market. The higher values in the series ordinance allow for the possibility of improved market conditions and the opportunity for refunding savings.

A summary of these differences was shared at the July 25 GLWA Audit Committee meeting and is included with this Board Letter as Attachment 1. *While the approval of the resolution gives GLWA the authorization to issue refunding bonds, GLWA does not intend to proceed with the refunding unless market conditions become more favorable when it comes time to price the bonds in alignment with the GLWA Debt Policy.*

### **BUDGET IMPACT**

Savings resulting from the potential Sewer Refunding Bonds have not been included in the FY 2023 budget or ten-year financial plan. If savings are achieved as a result of the potential refunding, a budget amendment may be required for FY 2023 depending on the final pricing and savings structure on the bonds.

### **COMMITTEE REVIEW**

This matter was reviewed by the GLWA Audit Committee at its meeting on July 25, 2022. The Audit Committee *[insert action]* the resolution for the Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue and Revenue Refunding Bonds in a Principal Amount Not to Exceed \$730,000,000 as presented.

## 2022-311 Attachment 1

**Series 2022 Bond Transaction(s) Crosswalk - Sewer  
(in Millions)**

	Feasibility Study <u>Forecast</u>	Preliminary Plan of <u>Finance</u>	Series <u>Ordinance</u>
<b><u>Sewer New Money</u></b>			
<u>Senior Lien</u>			
Par Amount	225.0	96.2	NA
Net Premium/Reserves	<u>(11.2)</u>	<u>16.3</u>	<u>NA</u>
Proceeds	213.8	112.5	NA
<u>Second Lien</u>			
Par Amount	0.0	96.5	NA
Net Premium/Reserves	<u>0.0</u>	<u>16.0</u>	<u>NA</u>
Proceeds	0.0	112.5	NA
<b><u>Sewer Aggregate New Money</u></b>			
Par Amount	225.0	192.6	270.0
Net Premium/Reserves	<u>(11.2)</u>	<u>32.4</u>	<u>NA</u>
Proceeds	213.8	225.0	270.0
<b><u>Sewer Refunding*</u></b>			
Par Amount	0.0	17.7	460.0
Net Premium/Reserves	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Proceeds	0.0	17.7	460.0
<b><u>Sewer Aggregate</u></b>			
Par Amount	225.0	210.3	730.0
Net Premium/Reserves	<u>(11.2)</u>	<u>32.4</u>	<u>0.0</u>
Proceeds	213.8	242.7	730.0

\* At this time, the financial metrics do not support a large refunding transaction for the sewage disposal system. In the event market conditions change whereby additional refunding savings could be achieved that align with the GLWA debt policy, the series ordinance is in place for an estimated amount of potential refunding candidates.



GREAT LAKES WATER AUTHORITY  
ORDINANCE NO. 2022-07

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF  
SEWAGE DISPOSAL SYSTEM REVENUE AND REVENUE REFUNDING  
BONDS IN A PRINCIPAL AMOUNT NOT TO EXCEED \$730,000,000**

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 Bonds to provide moneys (i) to refund a portion of the Outstanding Bonds (the “Bonds To Be Refunded”) and cause the Bonds To Be Refunded to be defeased in accordance with the Ordinance and (ii) to pay all or part of the costs of the hereinafter described improvements, enlargements, extensions and repairs to the Regional Sewer System.

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 “2022 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2022 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2022 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) “2022 Bonds” means, collectively, the 2022 New Money Bonds and the 2022 Refunding Bonds authorized by Section 3 of this 2022 Series Ordinance.

(b) “2022 New Money Bonds” means those 2022 Bonds issued for the purpose of paying, reimbursing and/or refinancing Project Costs.

(c) “2022 Project” means a portion of the improvements, enlargements, extensions and repairs to the Regional Sewer System identified in the Capital Improvement Program, all as more fully described in the Sale Order.

(d) “2022 Refunding Bonds” means those 2022 Bonds, if any, issued for the purpose of refunding the Bonds To Be Refunded and paying Refunding Costs.

(e) “2022 Reserve Requirement” means the sum of the 2022 Senior Lien Reserve Requirement and the 2022 Second Lien Reserve Requirement.

(f) “2022 Second Lien Bonds” means collectively, the 2022 Second Lien New Money Bonds and the 2022 Second Lien Refunding Bonds.

(g) “2022 Second Lien New Money Bonds” means those 2022 New Money Bonds, if any, issued as Second Lien Bonds as provided in this 2022 Series Ordinance.

(h) “2022 Second Lien Refunding Bonds” means those 2022 Refunding Bonds, if any, issued as Second Lien Bonds as provided in this 2022 Series Ordinance.

(i) “2022 Second Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Second Lien Bond Reserve Account at least equal to the Reserve Requirement for the Second Lien Bond Reserve Account immediately upon the issuance of the 2022 Second Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2022 Second Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Second Lien Bond Reserve Account.

(j) “2022 Senior Lien Bonds” means collectively, the 2022 Senior Lien New Money Bonds and the 2022 Senior Lien Refunding Bonds.

(k) “2022 Senior Lien New Money Bonds” means those 2022 New Money Bonds, if any, issued as Senior Lien Bonds as provided in this 2022 Series Ordinance.

(l) “2022 Senior Lien Refunding Bonds” means those 2022 Refunding Bonds, if any, issued as Senior Lien Bonds as provided in this 2022 Series Ordinance.

(m) “2022 Senior Lien Reserve Requirement” means such amount, if any, as is determined in the Sale Order to be the amount necessary to make the amount on deposit in the Senior Lien Bond Reserve Account at least equal to the Reserve Requirement for the Senior Lien Bond Reserve Account immediately upon the issuance of the 2022 Senior Lien Bonds after taking into consideration such provision as is made for the Reserve Requirement from proceeds of the 2022 Senior Lien Bonds and other funds and Credit Facilities on deposit or to be deposited in the Senior Lien Bond Reserve Account.

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

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

(p) “Continuing Disclosure Undertaking” means the continuing disclosure undertaking or undertakings with respect to the 2022 Bonds to be entered into by the Authority pursuant to the Rule.

(q) “Escrow Agreement” shall have the meaning set forth in Section 11 of this 2022 Series Ordinance.

(r) “Escrow Deposit” means cash or Government Obligations, or a combination of cash and Government Obligations, at least sufficient to discharge the lien of the Pledged Assets securing the Bonds To Be Refunded in accordance with Section 1001 of the Ordinance.

(s) “Fitch” means Fitch Ratings, Inc., and any successor rating agency.

(t) “Interest Payment Date” means except as otherwise determined in the Sale Order each January 1 and July 1, or such other dates and commencing as set forth in the Sale Order.

(u) “Maturity Date” means such dates of maturity of the 2022 Bonds as determined in the Sale Order.

(v) “Moody’s” means Moody’s Investors Service, Inc., and any successor rating agency.

(w) “Official Statement” means the final disclosure document with respect to the 2022 Bonds.

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

(y) “Preliminary Official Statement” means the preliminary disclosure document with respect to the 2022 Bonds.

(z) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2022 Project, including Issuance Costs relating to the 2022 New Money Bonds.

(aa) “Purchase Agreement” means the bond purchase agreement between the Authority and the Underwriter providing for the sale of the 2022 Bonds.

(bb) “Refunding Costs” means the costs of refunding the Bonds To Be Refunded, including, to the extent authorized in the Sale Order, the amount of the Escrow Deposit, and funding of the 2022 Reserve Requirement and Issuance Costs relating to the 2022 Refunding Bonds.

(cc) “Regular Record Date” means the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

(dd) “Rule” means Rule 15c2-12 promulgated by the United States Securities and Exchange Commission under the Securities and Exchange Act of 1934, as amended.

(ee) “S&P” means S&P Global Ratings, and any successor rating agency.

(ff) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2022 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2022 Bonds and to complete the other transactions contemplated herein.

(gg) “Securities Depository” means (i) The Depository Trust Company and its successors and assigns, if any, or (ii) any other securities depository which agrees to follow the procedures required to be followed by a securities depository in connection with the 2022 Bonds and which is selected by the Authority as provided in Section 6.

(hh) “Taxable 2022 Bonds” means any 2022 Bonds other than Tax-Exempt 2022 Bonds.

(ii) “Tax-Exempt 2022 Bonds” means any 2022 Bonds that are Tax-Exempt Bonds.

(jj) “Underwriter” means Siebert Williams Shank & Co., LLC, on behalf of itself and such underwriters as may be named in the Purchase Agreement.

Section 3. Authorization of 2022 Bonds.

(a) Authorization of Borrowing.

- (1) The Authority may borrow (A) an aggregate principal amount not in excess of \$460,000,000, in the case of 2022 Refunding Bonds, and (B) an aggregate principal amount not in excess of \$270,000,000, in the case of 2022 New Money Bonds, all as is finally determined in the Sale Order, and issue 2022 Bonds at one or more times and in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2022 Senior Lien Bonds and/or 2022 Second Lien Bonds, all as finally determined in the Sale Order.

(b) Purpose of 2022 Bonds. The 2022 Bonds shall be issued as Additional Bonds for the purpose of (1) in the case of 2022 Refunding Bonds, refunding the Bonds To Be Refunded and paying Refunding Costs and (2) in the case of 2022 New Money Bonds, paying, reimbursing and/or refinancing Project Costs, and may in each case include amounts necessary to satisfy the 2022 Reserve Requirement and paying the costs of a Credit Facility.

(c) Limitation on Issuance of 2022 Refunding Bonds. No 2022 Refunding Bonds shall be issued unless:

- (1) The proceeds thereof (exclusive of accrued interest), together with other moneys available to the Authority under the Ordinance, are sufficient to provide the Escrow Deposit after payment of the 2022 Reserve Requirement and Issuance Costs relating to the 2022 Refunding Bonds set forth in the Sale Order.
- (2) Concurrently with or prior to the delivery of the 2022 Refunding Bonds, an Authorized Officer gives notice to the Trustee to call for redemption at the applicable redemption price all of the Bonds To Be Refunded on the dates

set forth in the Escrow Agreement. In such notice, an Authorized Officer may direct that the notice of redemption to be given by the Trustee to the Holders of the Bonds To Be Refunded pursuant to Section 303 of the Ordinance shall be given prior to the delivery of the 2022 Refunding Bonds and that such notice of redemption be conditioned upon the delivery of the 2022 Refunding Bonds and the funding of the Escrow Deposit. As provided in Section 303 of the Ordinance, if such conditions in the notice of redemption are not satisfied on or before the date fixed for redemption, then the notice of redemption shall be canceled and of no further force or effect.

(d) Insufficient Proceeds. To the extent that proceeds of the 2022 New Money 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 Regional Sewer System on hand and legally available therefor, as determined by the Authority Board.

(e) Priority of Lien. The 2022 Bonds shall be issued as Senior Lien Bonds and/or Second Lien Bonds, as set forth in the Sale Order.

(f) Separate Series. The 2022 Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2022 Refunding Bonds and the 2022 New Money Bonds shall not be included in the same Series and shall be issued as separate Series.

(g) Taxable and Tax-Exempt 2022 Bonds. The 2022 Bonds may be issued as Taxable 2022 Bonds or Tax-Exempt 2022 Bonds, or as separate Series of both, as determined in the Sale Order.

(h) Source of Payment and Security. The 2022 Bonds shall be payable and secured as provided in Section 5.

(i) Applicability of Ordinance. Except as otherwise provided in this 2022 Series Ordinance or the Sale Order, all of the provisions of the Ordinance shall apply to the 2022 Bonds as if set forth in full in this 2022 Series Ordinance, the purpose of this 2022 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2022 Bonds for the purposes set forth herein.

#### Section 4. 2022 Bond Details.

(a) Designation.

- (1) The 2022 Bonds shall bear the designations Sewage Disposal System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[A/B/C/D] and shall include the Series designation and such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2022 Series Ordinance.

- (2) If the 2022 Bonds are not issued in 2022, an Authorized Officer is authorized in his or her discretion to re-designate the year and Series designation of the 2022 Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of the 2022 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 2022 Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2022 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 July 1, or such other date as set forth in a 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 limitations applicable to Taxable 2022 Bonds in Section 4(j) hereof and the following limitations:

- (1) No 2022 Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) 2022 Bonds shall only be issued with principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2022 Bonds or portions thereof shall bear interest at such fixed rate or rates as determined in the Sale Order not in excess of the maximum rate permitted by law. Interest on the 2022 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 2022 Bonds shall be payable in lawful money of the United States. The principal of and premium, if any, on the 2022 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 2022 Bonds shall be dated such date or dates as determined in the Sale Order.

(g) Reserve Requirement. The 2022 Reserve Requirement, if any, with respect to each Series of the 2022 Bonds shall be satisfied by a deposit into the appropriate Bond Reserve Account of a portion of the proceeds of such Series of 2022 Bonds, funds already on deposit in the appropriate Bond Reserve Account or the provision of a Credit Facility in the same amount and with a credit rating at the time of issuance of such Series of 2022 Bonds not less than the credit rating of such Series of 2022 Bonds, or any combination of the foregoing. The amounts, if any, required to be deposited in the Senior Lien Bond Reserve Account and the Second Lien Bond Reserve Account to cause the amounts on deposit therein to be at least equal to the Reserve

Requirement for the Senior Lien Bonds and the Reserve Requirement for the Second Lien Bonds, respectively, shall be set forth in the Sale Order.

(h) Exchange. The registered owner of any 2022 Bond may exchange such 2022 Bond for a new 2022 Bond or Bonds of the same Series, interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2022 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 2022 Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2022 Bonds.

(i) Execution and Delivery of 2022 Bonds. The 2022 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 2022 Bonds to the Underwriter upon receiving the purchase price therefor in lawful money of the United States.

(j) Selection of Taxable 2022 Bonds for Redemption. Pursuant to Section 303 of the Ordinance, when Taxable 2022 Bonds are to be redeemed in part, an Authorized Officer shall specify to the Trustee the Series designation and maturity of the Taxable 2022 Bonds from which 2022 Bonds or portions of 2022 Bonds to be redeemed shall be selected. Subject to the Authorized Officer's specification, the particular Taxable 2022 Bonds or portions of Taxable 2022 Bonds to be redeemed will be selected by the Trustee by lot; provided, however, that the Trustee shall select Taxable 2022 Bonds to be redeemed on the basis of a pro rata pass-through distribution of principal in accordance with DTC procedures and provided that, so long as the Taxable 2022 Bonds are held in book-entry form the selection for redemption of such Taxable 2022 Bonds will be made in accordance with the operational arrangements of DTC then in effect and, if the DTC operational arrangements do not allow for redemption on the basis of a pro-rata pass-through distribution of principal, the Taxable 2022 Bonds will be selected for redemption, in accordance with DTC procedures, by lot. The portion of any Taxable 2022 Bonds to be redeemed in part shall be in the principal amount of \$5,000 or any integral multiple thereof.

(k) Form of 2022 Bonds. The 2022 Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by an Authorized Officer within the parameters of this 2022 Series Ordinance:

R-\_\_

**UNITED STATES OF AMERICA  
STATE OF MICHIGAN  
COUNTIES OF MACOMB, OAKLAND AND WAYNE  
GREAT LAKES WATER AUTHORITY**

**SEWAGE DISPOSAL SYSTEM [REVENUE] [REVENUE REFUNDING]  
[SENIOR LIEN] [SECOND LIEN] BOND, SERIES 2022[\_\_]**

REGISTERED OWNER:

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, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above in lawful money of the United States of America. Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate per annum set forth above, and shall be payable on \_\_\_\_\_ 1, 20\_\_ and semiannually on each July 1 and January 1 thereafter (each an “Interest Payment Date”) in lawful money of the United States of America.

Principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank Trust Company, National Association, as Trustee under the Bond 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.

This Bond is one of a series of bonds designated “Sewage Disposal System Revenue [Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[\_\_]” 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 and Revenue Refunding Bonds in a Principal Amount not to Exceed \$\_\_\_\_\_, adopted by the Board on \_\_\_\_\_, 2022 (the “Series Ordinance”), and (vi) a Sale Order of an Authorized Officer of the Issuer dated \_\_\_\_\_, 2022 (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 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 (as defined in the Bond Ordinance) (the “Pledged Assets”) is hereby recognized and acknowledged. Such lien is a [first] [second] lien[, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first 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 [first] [second] 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 to the extent, and as provided in, the Sale Order.

**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, 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.

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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 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 one of the bonds designated by the Issuer as “Sewage Disposal System [Revenue] [Revenue Refunding] [Senior Lien] [Second Lien] Bonds, Series 2022[\_\_\_]”.

U.S. Bank Trust Company, National Association,  
Trustee

By: \_\_\_\_\_

Date of Authentication: \_\_\_\_\_, 2022

## 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.

END OF BOND FORM

Section 5. Payment of 2022 Bonds; Confirmation of Statutory Lien.

(a) The 2022 Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2022 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 2022 Bonds as follows:

- (1) Such lien in favor of the 2022 Senior Lien Bonds shall be a first lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Senior Lien Bonds.
- (2) Such lien in favor of the 2022 Second Lien Bonds shall be a second lien of equal standing and Priority of Lien with all issued, to be issued and outstanding Second Lien Bonds.

Section 6. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2022 Bonds pursuant to the indirect ownership system maintained by the Securities Depository and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2022 Bonds is shown on books of the Securities Depository.

(b) Initially, one fully-registered bond for each maturity of each Series of 2022 Bonds, in the aggregate principal amount of such maturity, shall be issued in the name of Cede & Co., as nominee of the Securities Depository, for the benefit of the Participants in the Book-Entry Only System. While the 2022 Bonds are 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 2022 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 2022 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 2022 Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2022 Bonds only to or upon the order of the Securities Depository, 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 2022 Bonds to the extent of the sum or sums so paid.

(d) If (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 2022 Bonds that they be able to obtain 2022 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 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 2022 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 2022 Series Ordinance to the contrary, so long as any 2022 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 2022 Bond and all notices of redemption, tender and otherwise with respect to such 2022 Bond shall be made and given, respectively, to the Securities Depository as provided in the blanket issuer letter of representations between the Authority and the Securities Depository;
- (2) if less than all of the 2022 Bonds of the same type of any maturity are to be redeemed, then the particular 2022 Bonds or portions of 2022 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 2022 Bonds and premium, if any and interest on the 2022 Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2022 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 2022 Bond pursuant to the procedures of the Securities Depository.

#### Section 7. Credit Facility.

(a) An Authorized Officer is authorized to negotiate and obtain a Credit Facility with respect to the 2022 Bonds, if the Authorized Officer determines that it is in the best interest of the Authority. An Authorized Officer is further authorized to renegotiate the terms of any outstanding Credit Facility, if the Authorized Officer determines that it is in the best interest of the Authority.

(b) An Authorized Officer is authorized to pay the cost of any such Credit Facility from the proceeds of the 2022 Bonds or any other funds legally available therefor.

(c) An Authorized Officer is authorized to make such covenants and agreements of the Authority as shall be necessary or appropriate in any agreement with the Credit Entity providing such Credit Facility.

Section 8. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2022 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 9. Disposition of Proceeds.

(a) 2022 Senior Lien New Money Bonds.

- (1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2022 Senior Lien New Money Bonds there shall be immediately deposited in the Senior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2022 Senior Lien New Money Bonds and, to the extent provided in the Sale Order, any capitalized interest on the 2022 Senior Lien New Money Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Debt Service Account for payment of the next maturing interest payment on the 2022 Senior Lien New Money Bonds.
- (2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Senior Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account, if any, at least equal to the 2022 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Senior Lien New Money Bonds or any other funds legally available therefor.
- (3) Construction Fund. The balance of the proceeds of the 2022 Senior Lien New Money Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 10.

(b) 2022 Second Lien New Money Bonds.

- (1) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2022 Second Lien New Money Bonds there shall be immediately deposited in the Second Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2022 Second Lien New Money Bonds and, to the extent provided in the Sale Order, any capitalized interest on the 2022 Second Lien New Money Bonds,



and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Debt Service Account for payment of the next maturing interest payment on the 2022 Second Lien New Money Bonds.

- (2) Second Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Second Lien New Money Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account, if any, at least equal to the 2022 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Second Lien New Money Bonds or any other funds legally available therefor.
- (3) Construction Fund. The balance of the proceeds of the 2022 Second Lien New Money Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 10.

(c) 2022 Senior Lien Refunding Bonds.

- (1) Disposition of Accrued Interest: From the proceeds of the sale of the 2022 Senior Lien Refunding Bonds there shall be immediately deposited in the Senior Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2022 Senior Lien Refunding Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Senior Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2022 Senior Lien Refunding Bonds.
- (2) Senior Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Senior Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Senior Lien Bond Reserve Account at least equal to the 2022 Senior Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Senior Lien Refunding Bonds or any other funds legally available therefor.
- (3) Issuance Costs: As provided in the Sale Order, a portion of the proceeds from the sale of the 2022 Senior Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.
- (4) Escrow Deposit: As provided in the Sale Order, the balance of the proceeds from the sale of the 2022 Senior Lien Refunding Bonds shall be used to acquire Government Obligations, which together with any remaining

balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

(d) 2022 Second Lien Refunding Bonds.

- (1) Disposition of Accrued Interest: From the proceeds of the sale of the 2022 Second Lien Refunding Bonds there shall be immediately deposited in the Second Lien Bond and Interest Redemption Fund an amount equal to any accrued interest received on the delivery of the 2022 Second Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the Second Lien Bond and Interest Redemption Fund for payment of the next maturing interest payment on the 2022 Second Lien Refunding Bonds.
- (2) Second Lien Bond Reserve Account Deposit. If required as provided in Section 4(g) of this 2022 Series Ordinance, from the proceeds of the 2022 Second Lien Refunding Bonds, there shall next be applied an amount as set forth in the Sale Order to be deposited to the Second Lien Bond Reserve Account at least equal to the 2022 Second Lien Reserve Requirement after taking into account any Credit Facility or Credit Facilities to be acquired with the proceeds of the 2022 Second Lien Refunding Bonds or any other funds legally available therefor.
- (3) Issuance Costs: As provided in the Sale Order, a portion of the proceeds from the sale of the 2022 Second Lien Refunding Bonds shall be applied to the payment of Issuance Costs upon submission of proper documentation to an Authorized Officer.
- (4) Escrow Deposit: As provided in the Sale Order, the balance of the proceeds from the sale of the 2022 Second Lien Refunding Bonds shall be used to acquire Government Obligations, which together with any remaining balance of such proceeds in the form of cash, shall constitute all or part of the Escrow Deposit to be held in the Escrow Fund.

Section 10. Construction Fund. A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2022 New Money Bonds and designated the “Construction Fund, Series 2022,” and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.

(a) Moneys in the Construction Fund, Series 2022 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority from other funds prior to the issuance of the 2022 New Money Bonds).

- (1) Payments or reimbursement 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 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 pursuant to and 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 an Authorized Officer.

Section 11. Escrow Fund; Escrow Agreement.

(a) Establishment of Escrow Fund. The Escrow Deposit shall be held in or credited to an account designated as the “Great Lakes Water Authority Sewage Disposal System Revenue Refunding Bonds Series 2022 Escrow Fund” (the “Escrow Fund”) pursuant to an escrow agreement (the “Escrow Agreement”).

(b) Escrow Agreement.

- (1) An Authorized Officer is authorized to enter into the Escrow Agreement on behalf of the Authority with U.S. Bank Trust Company, National Association as “Escrow Trustee.”
- (2) The Escrow Agreement:
  - a) shall be in the form and substance customary for refunding escrow agreements;
  - b) may permit any balance after paying the principal (and premium, if any) and interest on the Bonds To Be Refunded to be applied to any lawful purpose of the Sewer System if such use will not, in the opinion of Bond Counsel, impair the exclusion of interest on the 2022 Refunding Bonds that are Tax-Exempt 2022 Bonds from gross income for federal income tax purposes; and
  - c) shall otherwise be in the best interests of the Authority as determined by an Authorized Officer, as conclusively established by his or her execution of the Escrow Agreement.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2022 Bonds that so long as any of the Tax-Exempt 2022 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 2022 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 2022 Bonds and moneys deemed to be proceeds of Tax-Exempt 2022 Bonds, and to prevent the Tax-Exempt 2022 Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Preliminary and Final Official Statements.

(a) An Authorized Officer shall assist in the preparation of the Preliminary Official Statement and is authorized to deem the portions of the Preliminary Official Statement relating to the 2022 Bonds and the Authority “final” for purposes of the Rule.

(b) The Preliminary Official Statement with such changes and additions as an Authorized Officer shall approve shall constitute the final Official Statement, and an Authorized Officer is authorized to execute the final Official Statement on behalf of the Authority approved by him or her with such changes as the Authorized Officer may authorize.

(c) Such final Preliminary Official Statement and final Official Statement and other offering materials satisfactory to an Authorized Officer are authorized to be distributed by the Underwriter in conjunction with the offering and sale of the 2022 Bonds.

Section 14. Continuing Disclosure. Unless otherwise set forth in the Sale Order because of an exemption from the Rule, the 2022 Bonds shall be subject to the Rule, and an Authorized Officer is authorized to execute and deliver the Continuing Disclosure Undertaking in form and substance customary for continuing disclosure undertakings entered into pursuant to the Rule.

Section 15. Sale of 2022 Bonds; Purchase Agreement.

(a) The 2022 Bonds shall be sold by negotiated sale to the Underwriter pursuant to a Purchase Agreement or Agreements 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 2022 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Agreement or Agreements.

(b) The Authority Board hereby determines that the sale of the 2022 Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2022 Bonds to be sold in the most efficient manner so as to result in the lowest possible borrowing costs to the Authority.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the Underwriter to purchase the 2022 Bonds subject to the following limitations:

- (1) The interest rate coupon with respect to the 2022 Bonds shall not exceed 6.00%.
- (2) The purchase price of the 2022 Bonds shall not be less than 98% of the principal amount thereof.

- (3) The Underwriter's discount with respect to the 2022 Bonds or the compensation to be paid to the Underwriter shall not exceed 0.40% of the principal amount of the 2022 Bonds.
- (4) The present value of the savings (net of Issuance Costs) to be realized by the issuance of any 2022 Refunding Bonds issued not more than ninety (90) days prior to the redemption date of the Bonds To Be Refunded by such 2022 Refunding Bonds shall be greater than 0% of the principal amount of the Bonds To Be Refunded.
- (5) The present value of the savings (net of Issuance Costs) to be realized by the issuance of any 2022 Refunding Bonds issued more than ninety (90) days prior to the redemption date of the Bonds To Be Refunded by such 2022 Refunding Bonds shall be greater than 5% of the principal amount of the Bonds To Be Refunded.

(d) An Authorized Officer is authorized to determine if the Purchase Agreement shall provide for liquidated damages and if so, the amount thereof, and if the purchaser of the 2022 Bonds is required to provide a good faith check and if so, the amount thereof.

(e) 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 2022 New Money Bonds as required by Section 33 of Act 94.

Section 16. 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 2022 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2022 Series Ordinance, an Authorized Officer shall determine the Bonds To Be Refunded (from the Outstanding Bonds) and aggregate principal amount of 2022 Refunding Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2022 Series Ordinance. An Authorized Officer shall also determine and establish, in accordance with this 2022 Series Ordinance, the maturities of the 2022 Refunding Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities, and the redemption provisions for the 2022 Refunding Bonds.

(c) In addition to determinations authorized elsewhere in this 2022 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2022 New Money Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2022 Series Ordinance, on the basis of his or her evaluation of the maximum amount of 2022 New Money Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2022 New Money Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the type or types of 2022 New Money Bonds to be issued, whether to issue the 2022 New Money Bonds as Senior Lien Bonds or Second Lien Bonds and if in one or more Series, and the redemption provisions for the 2022 New Money Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2022 Series Ordinance, the maturities of the 2022 New Money Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(d) 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 his or her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2022 Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2022 Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(e) 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 2022 Bonds as Additional Bonds have been satisfied.

(f) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2022 Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2022 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 17. [Reserved.]

Section 18. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2022 Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 19. 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, letters of representation, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2022 Bonds and otherwise give effect to the transactions contemplated by this 2022 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 20. 2022 Series Ordinance a Contract. The provisions of this 2022 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2022 Bond.

Section 21. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2022 Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2022 Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2022 Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2022 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 2022 Bonds or other available funds.

(d) An Authorized Officer is authorized to engage other consultants, including, without limitation, verification agents or other parties as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2022 Bonds and to pay the fees and expenses thereof from the proceeds of the 2022 Bonds or other available funds.

Section 22. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2022 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 2022 Series Ordinance. The section and paragraph headings in this 2022 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2022 Series Ordinance.

Section 23. Publication and Recordation. This 2022 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 24. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2022 Series Ordinance are, to the extent of such conflict, repealed.

Section 25. Effective Date. This 2022 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 27th day of July, 2022.

GREAT LAKES WATER AUTHORITY

Signed \_\_\_\_\_  
Chairperson

Signed \_\_\_\_\_  
Secretary

**Great Lakes Water Authority**

**Resolution 2022-311**

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal  
System Revenue and Revenue Refunding Bonds in an Amount not to Exceed \$730,000,000  
Ordinance 2022-07**

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 and Revenue Refunding Bonds in an Amount not to Exceed \$730,000,000” (the “2022 Sewer 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, August 10, 2016 and February 12, 2020 (as amended, the “Master Sewer Bond Ordinance”).

**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 2022 Sewer Series Ordinance.

**Now, Therefore Be It:**

**Resolved** That the 2022 Sewer Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2022 Sewer 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 27, 2022





## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Kim Garland, CPA, Financial Services Area Chief of Staff

**Re:** Authorizing Publication of Notice of Intent to Issue Water Supply and Sewage Disposal System Revenue Bonds

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter.

**Proposed Action:** The GLWA Audit Committee recommends approval of the Resolutions Authorizing Publication of Notice of Intent to Issue Water Supply and Sewage Disposal System Revenue Bonds to the GLWA Board of Directors at its meeting on July 27, 2022.

## DRAFT for Audit Committee Review Only

### ..Title

### **Resolutions Authorizing Publication of Notice of Intent to Issue Water Supply System and Sewage Disposal System Revenue Bonds**

### ..Body

Agenda of: July 27, 2022  
Item No.: **2022-312**  
Amount: Not to Exceed \$900,000,000

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey, P.E.  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE: Resolutions Authorizing Publication of Notice of Intent to Issue Water Supply System and Sewage Disposal System Revenue Bonds**

### **MOTION**

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer//Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approve the Resolutions Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds of \$250,000,000 and Sewage Disposal System Revenue Bonds of \$650,000,000 in an Amount Not to Exceed \$900,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

While the GLWA is presently preparing for a 2022 bond transaction, it is also time to look to authorization for future transactions, particularly related to state revolving fund loan programs. This process begins with the publication of the Notice of Intent (NOI) to Issue

Water Supply System Revenue Bonds and Sewage Disposal System Revenue Bonds. The NOI is required pursuant to Section 33 of Public Act 94 of 1933 to begin the 45-day referendum period. “If within 45 days after the publication of the notice a petition, signed by not less than 10% or 15,000 of the registered electors, whichever is less, residing within the limits of the borrower, is filed with the clerk, or other recording officer, of the borrower, requesting a referendum upon the question of the issuance of the bonds, then the bonds shall not be issued until approved by the vote of a majority of the electors of the borrower qualified to vote and voting on the bonds at a general or special election.” If the 45-day referendum period expires without a petition requesting a referendum, then the Authority may authorize and issue such bonds.

### **JUSTIFICATION**

Included with this memo are proposed resolutions authorizing the publication of Notice of Intent to issue water supply and sewage disposal system revenue bonds in the amounts of \$250 million and \$650 million respectively. This authorization would provide for continued funding for improvements to the system in two important ways.

1. Support the current GLWA and DWSD FY 2023 projects submitted for State Revolving Fund consideration, and;
2. Allow for the use of additional federal infrastructure funds that may flow through the State Revolving Fund program and therefore be subject to notice of intent requirements.

### **BUDGET IMPACT**

The debt service payments on local and regional SRF projects approved for FY 2023 funding would not begin until FY 2024 with minimal amounts of interest due, because of the projected draw down schedules. Estimates of this minimal interest expense on the approved loans would be included in the FY 2024 – FY 2025 biennial budget. It is difficult to determine the impact of federal infrastructure funds at this time as criteria, available funds, and the nature of the distributions (loan, grant, etc.) are still under review at the State level.

### **COMMITTEE REVIEW**

This matter was reviewed by the GLWA Audit Committee at its meeting on July 25, 2022. The Audit Committee *[pending action]* that the GLWA Board of Directors *[pending action]* the Resolutions Authorizing Publication of Notice of Intent to Issue Water Supply System

Revenue Bonds of \$250,000,000 and Sewage Disposal System Revenue Bonds of \$650,000,000 in an Amount Not to Exceed \$900,000,000 as presented.

**Great Lakes Water Authority**  
**Resolution 2022-312**  
**RE: Authorizing Publication of Notice of Intent**  
**to Issue Water Supply System Revenue Bonds**

By Board Member: \_\_\_\_\_

**Whereas** The Great Lakes Water Authority (the “Authority”) is authorized to issue revenue bonds pursuant to the provisions of Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”) for the purpose of paying all or part of the costs of purchasing, acquiring, constructing, improving, enlarging, extending and repairing the Water System as defined in the Regional Water Supply System Lease, dated June 12, 2015, between the City of Detroit and the Authority; and

**Whereas** The Authority intends to issue one or more series of revenue bonds for the purposes hereinafter set forth; and

**Whereas** Section 33 of Act 94 requires the publication of a notice of intent to issue bonds at least 45 days prior to the issuance of such bonds.

**Now, Therefore Be It:**

**Resolved** That the Chief Financial Officer and Treasurer is hereby instructed to cause the publication of a notice of intent to issue bonds with respect to the hereinafter-described bonds once in the *Detroit Free Press* or the *Detroit News*, so as to be prominently displayed therein, and it is hereby found that each such newspaper has general circulation in the territory of the Authority; **And Be it Further**

**Resolved** That the notice of intent to issue bonds shall be in substantially the following form with such necessary or desirable changes as may be approved by the Chief Financial Officer and Treasurer, her approval to be conclusively evidenced by the publication of the notice of intent to issue bonds:

NOTICE OF INTENT TO ISSUE WATER SUPPLY SYSTEM  
REVENUE BONDS BY THE GREAT LAKES WATER AUTHORITY

TO THE ELECTORS OF THE CHARTER COUNTY OF MACOMB, THE COUNTY OF OAKLAND AND THE CHARTER COUNTY OF WAYNE:

NOTICE IS HEREBY GIVEN, that the Great Lakes Water Authority (the "Authority"), a municipal authority organized and existing under the provisions of Act No. 233, Public Acts of Michigan, 1955, as amended, intends to issue its water supply system revenue bonds in one or more series in the aggregate principal amount of not to exceed \$250,000,000 for the purpose of paying all or part of the cost of acquiring and constructing facilities, replacements, extensions, improvements and repairs to the City of Detroit's water supply system (the "Water System"), which Water System is described and defined in the Regional Water Supply System Lease dated June 12, 2015, between the City of Detroit (the "City") and the Authority (the "Lease"). As set forth in the Lease, the Water System consists of (i) the Regional Water System, which is that portion of the Water System that provides water service to wholesale customers thereof and to individual customers within and outside the City ("Retail Water Customers") that receive water service directly from the hereinafter described Local Water System up to the point of connection to the Local Water System and (ii) the Local Water System, which is that portion of the Water System that provides service directly to Retail Water Customers. Pursuant to the Lease, the City has leased the Regional Water System to the Authority for a period of forty (40) years and the Authority is authorized to issue revenue bonds under Act No. 94, Public Acts of Michigan, 1933, as amended ("Act 94") for the foregoing purposes.

The bonds of each series will mature in not to exceed forty (40) years after the original issuance date of the respective series of bonds, and will bear interest at rates to be determined upon the sale thereof but in no event to exceed such rates as may be permitted by law.

SOURCE OF PAYMENT OF REVENUE BONDS

The bonds will be issued under and pursuant to the provisions of Act 94 and a resolution or ordinance of the Board of Directors of the Authority and will be payable from the net revenues of the Water System and any improvements, enlargements and extensions thereto, and a statutory lien on said revenues will be established by said resolution or ordinance. The Authority will covenant and agree to fix and maintain, or cause to be fixed and maintained, at all times while any of the bonds shall be outstanding such rates and charges for service furnished by the Water System as shall be sufficient to provide for payment of the necessary expenses of operation, maintenance and administration of the Water System and of the principal of and interest on the bonds when due, and to provide for such other expenditures, accounts and funds for the Water System as are required by the resolution or ordinance authorizing the issuance of bonds.

### RIGHT TO PETITION FOR REFERENDUM

This notice is given, by order of the Board of Directors of the Authority, to and for the benefit of the electors of the Charter County of Macomb, the County of Oakland and the Charter County of Wayne (collectively, the “Authority District”) in order to inform them of their right to petition for a referendum upon the question of the issuance of the aforesaid bonds. The bonds will be issued, without submitting such a question to a vote of the electors, unless within 45 days after the date of publication of this notice, a petition requesting a referendum upon such question, signed by not less than 15,000 of the registered electors residing in the Authority District shall have been filed with the Secretary of the Authority. The address of the Secretary of the Authority is 735 Randolph, Detroit, Michigan 48226. In the event that such a petition is filed, the bonds will not be issued unless and until the issuance thereof shall have been approved by the vote of a majority of the electors of the Authority District qualified to vote and voting thereon at a general or special election.

### FURTHER INFORMATION

Further information relative to the issuance of said bonds, the Lease and the subject matter of this notice may be secured at the office of the Chief Financial Officer and Treasurer of the Great Lakes Water Authority, 735 Randolph, Room 1608, Detroit, Michigan 48226.

This notice is given pursuant to the provisions of Section 33 of Act 94.

Nicolette N. Bateson  
Chief Financial Officer and Treasurer  
Great Lakes Water Authority

### **And Be it Further**

**Resolved** That it is hereby determined that the foregoing form of notice of intent to issue bonds and the manner of publication so directed are adequate notice to the electors of the constituent public corporations of the Authority and are well calculated to inform them of the intention of the Authority to issue the revenue bonds, the source of payment therefor, and the right of referendum on the revenue bonds; **And Be it Further**

**Resolved** That all resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.

Adopted by the Great Lakes Water Authority Board on: \_\_\_\_\_, 2022

4877-2310-2757 v1 [63818-1]

**Great Lakes Water Authority**  
**Resolution 2022-312**  
**RE: Authorizing Publication of Notice of Intent**  
**to Issue Sewage Disposal System Revenue Bonds**

By Board Member: \_\_\_\_\_

**Whereas** The Great Lakes Water Authority (the “Authority”) is authorized to issue revenue bonds pursuant to the provisions of Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”) for the purpose of paying all or part of the costs of purchasing, acquiring, constructing, improving, enlarging, extending and repairing the Sewer System as defined in the Regional Sewage Disposal System Lease, dated June 12, 2015, between the City of Detroit and the Authority; and

**Whereas** The Authority intends to issue one or more series of revenue bonds for the purposes hereinafter set forth; and

**Whereas** Section 33 of Act 94 requires the publication of a notice of intent to issue bonds at least 45 days prior to the issuance of such bonds.

**Now, Therefore Be It:**

**Resolved** That the Chief Financial Officer and Treasurer is hereby instructed to cause the publication of a notice of intent to issue bonds with respect to the hereinafter-described bonds once in the *Detroit Free Press* or the *Detroit News*, so as to be prominently displayed therein, and it is hereby found that each such newspaper has general circulation in the territory of the Authority; **And Be it Further**

**Resolved** That the notice of intent to issue bonds shall be in substantially the following form with such necessary or desirable changes as may be approved by the Chief Financial Officer and Treasurer, her approval to be conclusively evidenced by the publication of the notice of intent to issue bonds:



NOTICE OF INTENT TO ISSUE SEWAGE DISPOSAL SYSTEM  
REVENUE BONDS BY THE GREAT LAKES WATER AUTHORITY

TO THE ELECTORS OF THE CHARTER COUNTY OF MACOMB, THE COUNTY OF OAKLAND AND THE CHARTER COUNTY OF WAYNE:

NOTICE IS HEREBY GIVEN, that the Great Lakes Water Authority (the "Authority"), a municipal authority organized and existing under the provisions of Act No. 233, Public Acts of Michigan, 1955, as amended, intends to issue its sewage disposal system revenue bonds in one or more series in the aggregate principal amount of not to exceed \$650,000,000 for the purpose of paying all or part of the cost of acquiring and constructing facilities, replacements, extensions, improvements and repairs to the City of Detroit's sewage disposal system (the "Sewer System"), which Sewer System is described and defined in the Regional Sewage Disposal System Lease dated June 12, 2015, between the City of Detroit (the "City") and the Authority (the "Lease"). As set forth in the Lease, the Sewer System consists of (i) the Regional Sewer System, which is that portion of the Sewer System that provides sewer service to wholesale customers thereof and to individual customers within and outside the City ("Retail Sewer Customers") that receive sewer service directly from the hereinafter described Local Sewer System up to the point of connection to the Local Sewer System and (ii) the Local Sewer System, which is that portion of the Sewer System that provides service directly to Retail Sewer Customers. Pursuant to the Lease, the City has leased the Regional Sewer System to the Authority for a period of forty (40) years and the Authority is authorized to issue revenue bonds under Act No. 94, Public Acts of Michigan, 1933, as amended ("Act 94") for the foregoing purposes.

The bonds of each series will mature in not to exceed forty (40) years after the original issuance date of the respective series of bonds, and will bear interest at rates to be determined upon the sale thereof but in no event to exceed such rates as may be permitted by law.

SOURCE OF PAYMENT OF REVENUE BONDS

The bonds will be issued under and pursuant to the provisions of Act 94 and a resolution or ordinance of the Board of Directors of the Authority and will be payable from the net revenues of the Sewer System and any improvements, enlargements and extensions thereto, and a statutory lien on said revenues will be established by said resolution or ordinance. The Authority will covenant and agree to fix and maintain, or cause to be fixed and maintained, at all times while any of the bonds shall be outstanding such rates and charges for service furnished by the Sewer System as shall be sufficient to provide for payment of the necessary expenses of operation, maintenance and administration of the Sewer System and of the principal of and interest on the bonds when due, and to provide for such other expenditures, accounts and funds for the Sewer System as are required by the resolution or ordinance authorizing the issuance of bonds.

RIGHT TO PETITION FOR REFERENDUM

This notice is given, by order of the Board of Directors of the Authority, to and for the benefit of the electors of the Charter County of Macomb, the County of Oakland and the Charter County of Wayne (collectively, the “Authority District”) in order to inform them of their right to petition for a referendum upon the question of the issuance of the aforesaid bonds. The bonds will be issued, without submitting such a question to a vote of the electors, unless within 45 days after the date of publication of this notice, a petition requesting a referendum upon such question, signed by not less than 15,000 of the registered electors residing in the Authority District shall have been filed with the Secretary of the Authority. The address of the Secretary of the Authority is 735 Randolph, Detroit, Michigan 48226. In the event that such a petition is filed, the bonds will not be issued unless and until the issuance thereof shall have been approved by the vote of a majority of the electors of the Authority District qualified to vote and voting thereon at a general or special election.

FURTHER INFORMATION

Further information relative to the issuance of said bonds, the Lease and the subject matter of this notice may be secured at the office of the Chief Financial Officer and Treasurer of the Great Lakes Water Authority, 735 Randolph, Room 1608, Detroit, Michigan 48226.

This notice is given pursuant to the provisions of Section 33 of Act 94.

Nicolette N. Bateson  
Chief Financial Officer and Treasurer  
Great Lakes Water Authority

**And Be it Further**

**Resolved** That it is hereby determined that the foregoing form of notice of intent to issue bonds and the manner of publication so directed are adequate notice to the electors of the constituent public corporations of the Authority and are well calculated to inform them of the intention of the Authority to issue the revenue bonds, the source of payment therefor, and the right of referendum on the revenue bonds; **And Be it Further**

**Resolved** That all resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.

Adopted by the Great Lakes Water Authority Board on: \_\_\_\_\_, 2022

4880-2614-1221 v1 [63818-1]



## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Nicholas Fedewa, CPA, Acting Public Finance Manager

**Re:** Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 (Ordinance 2022-05)

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter.

**Proposed Action:** The GLWA Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution for the Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 for 5741-01 In-System Storage Device and Dam Remote and Valve Remote Evaluation and Rehabilitation.

## DRAFT for Audit Committee Review Only

### ..Title

**Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 (Ordinance 2022-05)**

### ..Body

Agenda of: July 27, 2022  
Item No.: **2022-313**  
Amount: Not to Exceed \$21,000,000

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey, P.E.  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 (Ordinance 2022-05)**

### **MOTION**

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer & Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approves the resolution related to the Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 as presented**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

## DRAFT for Audit Committee Review Only

### **BACKGROUND**

There are two elements to the background related to this resolution: financing considerations and the project being funded.

#### *Financing Considerations*

The amount being financed with revenue bonds via the Clean Water State Revolving Fund (CWSRF) Bonds is within authorized GLWA limits. 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 Sewerage 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 and is in the amount not to exceed \$21,000,000.

The proposed action authorizes the bonds to be issued. 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 CWSRF Bonds, designates the Bonds as 2022 SRF-3 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.

#### *Project Considerations*

Project Plan Approval - On May 26, 2021, the GLWA Board of Directors conducted a [public hearing](#) related to In-System Storage Device and Dam Remote and Valve Remote Evaluation and Rehabilitation FY 2022 State Revolving Fund (SRF) Project. Subsequent to that public hearing, the Board adopted the [project plan](#).

### **JUSTIFICATION**

This series of bonds authorized by this ordinance will be sold through the state of Michigan’s CWSRF program (Project #5741-01) for a Regional Sewer System project involving the In-System Storage Device and Dam Remote and Valve Remote Evaluation and Rehabilitation. This project is comprised of the evaluation and rehabilitation of twenty-nine (29) of the In-System Storage Devices (ISD), Dam Remote (DR), and Valve

## DRAFT for Audit Committee Review Only

Remote (VR) sites within the City of Detroit. These sites, which average 20 years in age, have undergone only minor repairs since the original construction.

The 2022 SRF-3 Junior Lien Bonds will be sold to the Michigan Finance Authority. The current program interest rate for the CWSRF is 1.875% for 20-year and 2.125% for 30-year loans. Based on the not to exceed amount for this series of \$21,000,000.

### **BUDGET IMPACT**

The debt service payments on the GLWA Regional project are anticipated to start on April 1, 2023 with minimal amounts of interest due, because of the projected draw down schedules. An estimate for debt service on the loan will be included in the biennial FY 2024 Water Budget as well as GLWA's current ten-year forecast.

### **COMMITTEE REVIEW**

This matter was reviewed by the GLWA Audit Committee at its meeting on July 25, 2022. The Audit Committee *[insert action]* of the resolution for the Approval of Series Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Amount Not to Exceed \$21,000,000 as presented.

GREAT LAKES WATER AUTHORITY  
ORDINANCE NO. 2022-05

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF  
SEWAGE DISPOSAL SYSTEM REVENUE BONDS IN  
AN AGGREGATE AMOUNT NOT TO EXCEED \$21,000,000**

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 “2022 SRF-3 Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Regional Sewer System identified in the Capital Improvement Program (the “2022 SRF-3 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 “2022 SRF-3 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2022 SRF-3 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2022 SRF-3 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) “2022 SRF-3 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2022 SRF-3 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2022 SRF-3 Project.

(b) “2022 SRF-3 Project” means improvements to the Regional Sewer System, including but not limited to in-system storage device improvements, dam and valve evaluation and rehabilitation, project improvements related to restoration (streets, rights-of-way and easements), as well as all work, equipment and appurtenances necessary or incidental to such improvements.

(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. In accordance with Resolution 2021-330 adopted by the Authority Board on August 11, 2021, references herein to Chief Executive Officer shall be deemed to include any duly appointed Interim Chief Executive Officer.

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

(f) “Maturity Date” means such dates of maturity of the 2022 SRF-3 Junior Lien Bonds as determined in the Sale Order.

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

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

(i) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2022 SRF-3 Project, including Issuance Costs relating to the 2022 SRF-3 Junior Lien Bonds.

(j) “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 2022 SRF-3 Junior Lien Bonds.

(k) “Regional Construction Fund, Series 2022 SRF-3” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2022 SRF-3 Series Ordinance relating to the construction of the 2022 SRF-3 Project to be paid with the proceeds of the 2022 SRF-3 Junior Lien Bonds.

(l) “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.

(m) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2022 SRF-3 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2022 SRF-3 Junior Lien Bonds and to complete the other transactions contemplated herein.

(n) “Supplemental Agreement” means 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 2022 SRF-3 Junior Lien Bonds.

(o) “Taxable 2022 SRF-3 Junior Lien Bonds” means any 2022 SRF-3 Junior Lien Bonds other than Tax-Exempt 2022 SRF-3 Junior Lien Bonds.

(p) “Tax-Exempt 2022 SRF-3 Junior Lien Bonds” means any 2022 SRF-3 Junior Lien Bonds that are Tax-Exempt Bonds.



Section 3. Approval of 2022 SRF-3 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Sewer System to acquire, construct and undertake the 2022 SRF-3 Project, and the 2022 SRF-3 Project is hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2022 SRF-3 Project. The Project Costs are estimated by the Authority Board to be \$18,000,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2022 SRF-3 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2022 SRF-3 Junior Lien Bonds.

(a) Authorization of Borrowing. The Authority may borrow an amount not in excess of \$21,000,000, as is finally determined in the Sale Order, and issue the 2022 SRF-3 Junior Lien Bonds in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2022 SRF-3 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2022 SRF-3 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.

(b) Purpose of 2022 SRF-3 Junior Lien Bonds. The 2022 SRF-3 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Project Costs.

(c) Priority of Lien. The 2022 SRF-3 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

(d) Insufficient Proceeds. To the extent that proceeds of SRF-3 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 Regional Sewer System on hand and legally available therefor, as determined by the Authority Board.

(e) Taxable and Tax-Exempt 2022 SRF-3 Junior Lien Bonds. The 2022 SRF-3 Junior Lien Bonds may be issued as Taxable 2022 SRF-3 Junior Lien Bonds or Tax-Exempt 2022 SRF-3 Junior Lien Bonds, or as separate subseries of both, as set forth in the Sale Order.

(f) Source of Payment and Security. The 2022 SRF-3 Junior Lien Bonds shall be payable and secured as provided in Section 8.

(g) Applicability of Ordinance. Except as otherwise provided in this 2022 SRF-3 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2022 SRF-3 Junior Lien Bonds as if set forth in full in this 2022 SRF-3 Series Ordinance, the purpose of this 2022 SRF-3 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2022 SRF-3 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2022 SRF-3 Junior Lien Bond Details.

(a) Designation.

- (1) The 2022 SRF-3 Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2022-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 2022 SRF-3 Series Ordinance.
- (2) If the 2022 SRF-3 Junior Lien Bonds are not issued in 2022, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2022 SRF-3 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2022 SRF-3 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds are owned by the MFA, the 2022 SRF-3 Junior Lien Bonds are payable as to principal, redemption premium, if any, and interest at U.S. Bank Trust Company, National Association, 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds.

(h) Exchange. The registered owner of any 2022 SRF-3 Junior Lien Bond may exchange such 2022 SRF-3 Junior Lien Bond for a new 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds.

(i) Execution and Delivery of 2022 SRF-3 Junior Lien Bonds. The 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2022 SRF-3 Junior Lien Bonds. The 2022 SRF-3 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 2022 SRF-3 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 2022-SRF-3**

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, the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy 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 Trust Company, 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 U.S. Bank Trust Company, National Association, 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 2022-SRF-3" 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 \$ \_\_\_\_\_, adopted by the Board on \_\_\_\_\_, 2022 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated \_\_\_\_\_, 2022 (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.

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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 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 2022-SRF-3”.

U.S. Bank Trust Company, National Association,  
Trustee

By:\_\_\_\_\_

Date of Authentication: \_\_\_\_\_, 2022

### 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 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds that they be able to obtain 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Series Ordinance to the contrary, so long as any 2022 SRF-3 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 2022 SRF-3 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
- (2) if less than all of the 2022 SRF-3 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2022 SRF-3 Junior Lien Bonds or portions of 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds and premium, if any and interest on the 2022 SRF-3 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2022 SRF-3 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 2022 SRF-3 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2022 SRF-3 Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2022 SRF-3 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds as follows: Such lien in favor of the 2022 SRF-3 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 2022 SRF-3 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 2022 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 2022 SRF-3 Junior Lien Bonds and any capitalized interest on the 2022 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 2022 SRF-3 Junior Lien Bonds.

(b) Construction Fund. The balance of the proceeds of the 2022 SRF-3 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 Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2022 SRF-3 Junior Lien Bonds and designated the "Construction Fund, Series 2022 SRF-3," and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.

(b) Moneys in the Construction Fund, Series 2022 SRF-3 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority from other funds prior to the issuance of the 2022 SRF-3 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 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.

(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 an Authorized Officer.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2022 SRF-3 Junior Lien Bonds, that so long as any of the Tax-Exempt 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2022 SRF-3 Junior Lien Bonds, and to prevent Tax-Exempt 2022 SRF-3 Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2022 SRF-3 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to any Series of the 2022 SRF-3 Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which any Series of the 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2022 SRF-3 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2022 SRF-3 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2022 SRF-3 Series Ordinance, on the basis of her evaluation of the maximum amount of 2022 SRF-3 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2022 SRF-3 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2022 SRF-3 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2022 SRF-3 Series Ordinance, the maturities of each Series of the 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2022 SRF-3 Series Ordinance, as determined by such officials executing and delivering the foregoing items.



Section 18. 2022 SRF-3 Series Ordinance a Contract. The provisions of this 2022 SRF-3 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2022 SRF-3 Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 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 2022 SRF-3 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2022 SRF-3 Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2022 SRF-3 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 2022 SRF-3 Series Ordinance. The section and paragraph headings in this 2022 SRF-3 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2022 SRF-3 Series Ordinance.

Section 21. Publication and Recordation. This 2022 SRF-3 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 2022 SRF-3 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2022 SRF-3 Series Ordinance shall be effective upon adoption.

Adopted and signed on the \_\_\_\_ day of \_\_\_\_\_, 2022.

GREAT LAKES WATER AUTHORITY

Signed \_\_\_\_\_  
Chairperson

Signed \_\_\_\_\_  
Secretary

4856-7566-9284 v2 [63818-44]

**Great Lakes Water Authority**

**Resolution 2022-313**

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal  
System Revenue Bonds in an Amount not to Exceed \$21,000,000  
Ordinance 2022-05**

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 Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$21,000,000” (the “2022 SRF-3 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, August 10, 2016 and February 12, 2020.

**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 2022 SRF-3 Series Ordinance.

**Now, Therefore Be It:**

**Resolved** That the 2022 SRF-3 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2022 SRF-3 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: \_\_\_\_\_, 2022



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Steve Hoover, CPA, Financial Reporting Manager

**Re:** Annual Financial Audit Update

**Background:** Annually, the Great Lakes Water Authority (GLWA) prepares an Annual Comprehensive Financial Report (ACFR) 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 2022, 2023 and 2024.

**Analysis:** GLWA Financial Services area has been preparing for the fiscal year ending June 30, 2022 audit by reviewing internal control walkthrough documents, reviewing vendor statements, preparing a tentative schedule for the audit, and working on preliminary close of the June 2022 period.

Before the auditors begin the annual fieldwork, the Audit Committee is presented with the draft engagement letter. Attached is the FY 2022 engagement letter draft from Baker Tilly to assist in understanding the full scope of Baker Tilly and GLWA management responsibilities associated with this year's annual financial audit.

Also is attached communication from Baker Tilly related to the timing for the release of this year's audit report.

**Proposed Action:** Receive and file this report.



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July 15, 2022

Great Lakes Water Authority  
735 Randolph Street, 15th Floor  
Detroit, MI 48226

Thank you for using Baker Tilly US, LLP (Baker Tilly, we, 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 (Client, you, 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, 2022 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)

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 report does not include reporting on key audit matters.

### **Our Responsibilities and Limitations**

The objective of a financial statement audit is the expression of an opinion on the financial statements. We will be responsible for performing that audit in accordance with auditing standards generally accepted in the United States of America (GAAS). 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 caused by error or fraud. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. A misstatement is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user based 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.

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.

As part of an audit in accordance with GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We will also:

- > Identify and assess the risks of material misstatement of the financial statements and supplemental information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- > Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements and supplemental information that we have identified during the audit.
- > Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements and supplemental information, including the disclosures, and whether the financial statements and supplemental information represent the underlying transactions and events in a manner that achieves fair presentation.
- > Conclude, based on the audit evidence obtained, whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time.

Because of the inherent limitations of an audit, together with the inherent limitations of internal controls, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS. 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 or those charged with governance of their responsibilities. Our audit is limited to the period covered by our audit and does not extend to any later periods during which we are not engaged as auditor.

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 those 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.

Tests of controls may be performed to test the effectiveness of certain controls that we consider relevant to preventing and detecting errors and fraud that are material to the financial statements and to preventing and detecting misstatements resulting from illegal acts and other noncompliance matters that have a direct and material effect on the financial statements. Our tests, if performed, will be less in scope than would be necessary to render an opinion on internal control and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to *Government Auditing Standards*.

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.

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.

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 requires 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 those charged with governance are 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 those charged with governance receive 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**

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 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.

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 our audit process, we will request from management and, when appropriate, those charge with governance written confirmation concerning representations made to us in connection with the audit.

Baker Tilly 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 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.
- > 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.

Great Lakes Water Authority

July 15, 2022  
Page 7

Baker Tilly and the Great Lakes Water Authority acknowledge that, at the time of the execution of this Engagement Letter, federal, state and local governments, both domestic and foreign, have restricted travel and/or the movement of their citizens due to the ongoing and evolving situation around COVID-19. In addition, like many organizations and companies in the United States and around the globe, Baker Tilly has restricted its employees from travel and onsite work, whether at a client facility or Baker Tilly facility, to protect the health of both Baker Tilly and its clients' employees. Accordingly, to the extent that any of the services described in this Engagement Letter requires or relies on personnel to travel and/or perform work onsite, then Baker Tilly and the Great Lakes Water Authority acknowledge and agree that when the performance of such work depends on physical access to Client's facilities, then such work may be supplanted with alternative procedures, or may be delayed, significantly or indefinitely and/or suspended at Baker Tilly's discretion. Baker Tilly and the Great Lakes Water Authority agree to provide the other with prompt written notice in the event any of the onsite services described herein, such as inventory observations and other procedures, will need to be supplanted, rescheduled and/or suspended. Baker Tilly and the Great Lakes Water Authority also acknowledge and agree that any delays or workarounds due to the situation surrounding COVID-19 may increase the cost of the services described herein. Baker Tilly will obtain the Great Lakes Water Authority's prior written approval for any increase in the cost of Baker Tilly services that may result from the situation surrounding COVID-19.

*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.2104125.

We appreciate the opportunity to be of service to you.

If there are any questions regarding this Engagement Letter, please contact Jodi Dobson, the engagement partner on this engagement who is responsible for the overall supervision and review of the engagement and determining that the engagement has been completed in accordance with professional standards. Jodi Dobson is available at 608 240 2469, or at [jodi.dobson@bakertilly.com](mailto:jodi.dobson@bakertilly.com).

Sincerely,

BAKER TILLY US, LLP

*Baker Tilly US, LLP*

The services and terms as set forth in this Engagement Letter are agreed to by:

---

Official's Name

---

Official's Signature

---

Title

---

Date



## Report on the Firm's System of Quality Control

October 28, 2021

To the Partners of Baker Tilly US, LLP and the  
National Peer Review Committee

We have reviewed the system of quality control for the accounting and auditing practice of Baker Tilly US, LLP (the firm) applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended March 31, 2021. 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](http://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; audits of broker-dealers; 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 US, LLP applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended March 31, 2021, 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 US, LLP has received a peer review rating of *pass*.

*Moss Adams LLP*



# Memo

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To: Great Lakes Water Authority Audit Committee

From: Gwen Zech, Senior Manager (Baker Tilly)

c.c. Jodi Dobson, Partner (Baker Tilly)

Date: July 25, 2022

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

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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 ACFR. The schedule below summarizes expected milestone dates to meet a deadline of issuance on December 16, 2022.

	<b>Due Date</b> <b>Friday, December 16, 2022</b>
All audit workpapers uploaded to portal for audit	<b>Friday, September 30, 2022</b>
End of Fieldwork (Including first review)	<b>Friday, October 14, 2022</b>
Senior Manager level financial statement review	<b>Friday, October 21, 2022</b>
Draft to Jodi Dobson, Partner	<b>Monday, October 24, 2022</b>
Draft to concurring partner for technical review	<b>Tuesday, October 25, 2022</b>
Comments returned from GLWA management to Baker Tilly*	<b>Friday, November 4, 2022</b>
Draft back from detail check by Baker Tilly	<b>Wednesday, November 9, 2022</b>
Presentation of draft to Audit Committee	<b>Friday, November 18, 2022</b>
Preparation of separate ACFRs'	<b>Friday, December 2, 2022</b>
Presentation of draft to full Board of Directors	<b>Wednesday, December 14, 2022</b>
Issuance of the ACFRs'	<b>Friday, December 16, 2022</b>

\* - 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 US, 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 US, LLP



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Update: Economic Outlook Task Force

**Background:** In July 2021, the administration for the Great Lakes Water Authority (GLWA) began conversations with vendors, analysts, supply chain experts, and others to better understand the potential impact of global and economic conditions on GLWA's capital and operating budgets. In September 2021, Public Sector Consultants was engaged to work with the GLWA Procurement team, the GLWA Capital Improvement Planning team, and other stakeholders to conduct an economic analysis and identify impacts on the annual capital improvement plan. This effort is known as the Economic Outlook Task Force (EOTF). An outcome of that effort is to identify and facilitate cost- and risk-control strategies with other large utilities in the region.

Work began earlier in 2022 to shape the effort. GLWA is not alone in this concern. An interesting point of reference is a report from Standard & Poors', *Inflation Could Weigh on U.S. Not-For-Profit Utilities' Credit Ratings* dated February 24, 2022 (attached).

**Analysis:** The EOTF has prepared an update (attached) on this effort and will be present at the Audit Committee meeting to discuss.

**Proposed Action:** Receive and file this report.



# Economic Outlook Task Force Updates

**Presented to: GLWA Board of Directors Audit Committee**

Monday, July 25, 2022

Public Sector Consultants

# Rising Cost Pressures Call for Analysis & Action

## Executive Summary

- **Current Situation:**

- **Supply constraints + sharp increases in demand** = unprecedented cost increases for most organizations across the country
  - Steel is up 97% since July 2020; chlorine is up 53% (and continuing to climb)
- **GLWA's Capital and O&M costs increasing**

- **Difficult choices:**

- Find efficiencies
- Delay projects / reduce scope
- Increase rates



# To Assess the Impact of Rising Costs, GLWA Formed the Economic Outlook Task Force

- **Three Goals:**
  - A. Understand the current situation for GLWA's Capital and O&M spending
  - B. Predict likely scenarios in the short run (12 months) and the medium term (3 to 5 years)
  - C. Recommend approaches to mitigate costs/supply pressures
- **Desired Outcomes:**
  - Review research and interview summaries to provide commentary and guidance on potential approaches to most likely base, high and low scenarios.

# Data, Benchmarking and Forecasting to Guide GLWA's Decision Making

- **Approach:**

- Review economic data and forecasting models for the specific Materials and Labor used by GLWA
- Add formal benchmarking with other organizations
  - Water Utilities, Industry Associations, and other large organizations in Southeast Michigan

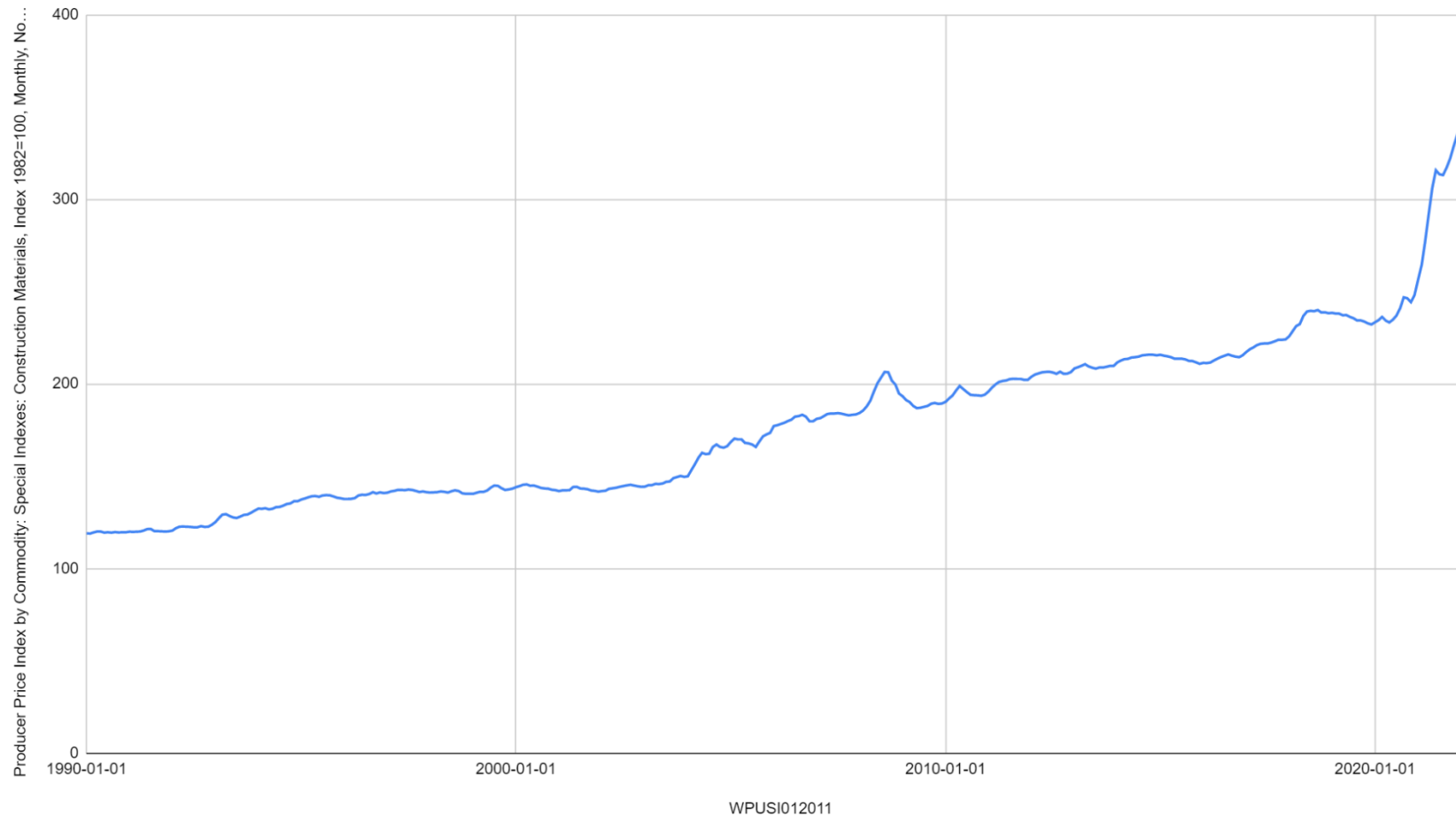
As we bring these tasks together over the coming months, the information can be incorporated into GLWA's spending plans

# How the Task Force Intends to Assess Rising Cost Impacts on GLWA

- **Objective:** Analyze trends and forecasts in key labor and material categories
- **Approach:**
  1. **Trend Analysis**
    - ✓ Identification and initial review of macro and building-specific indices
    - ✓ Identification and initial review of cost pressures and prices for several key material and labor categories
    - ❑ Confirm the full list of material and labor types for analysis
    - ❑ Conduct trend and cost pressure analysis
  2. **Scenario Development**
    - ❑ Analyze cost pressure data to identify relevant cost pressure historical trends
    - ❑ Review and highlight projections and forecasts from industry experts
    - ❑ Develop scenarios for how cost pressures could behave over the short- (1-year) and medium-term (3-5)

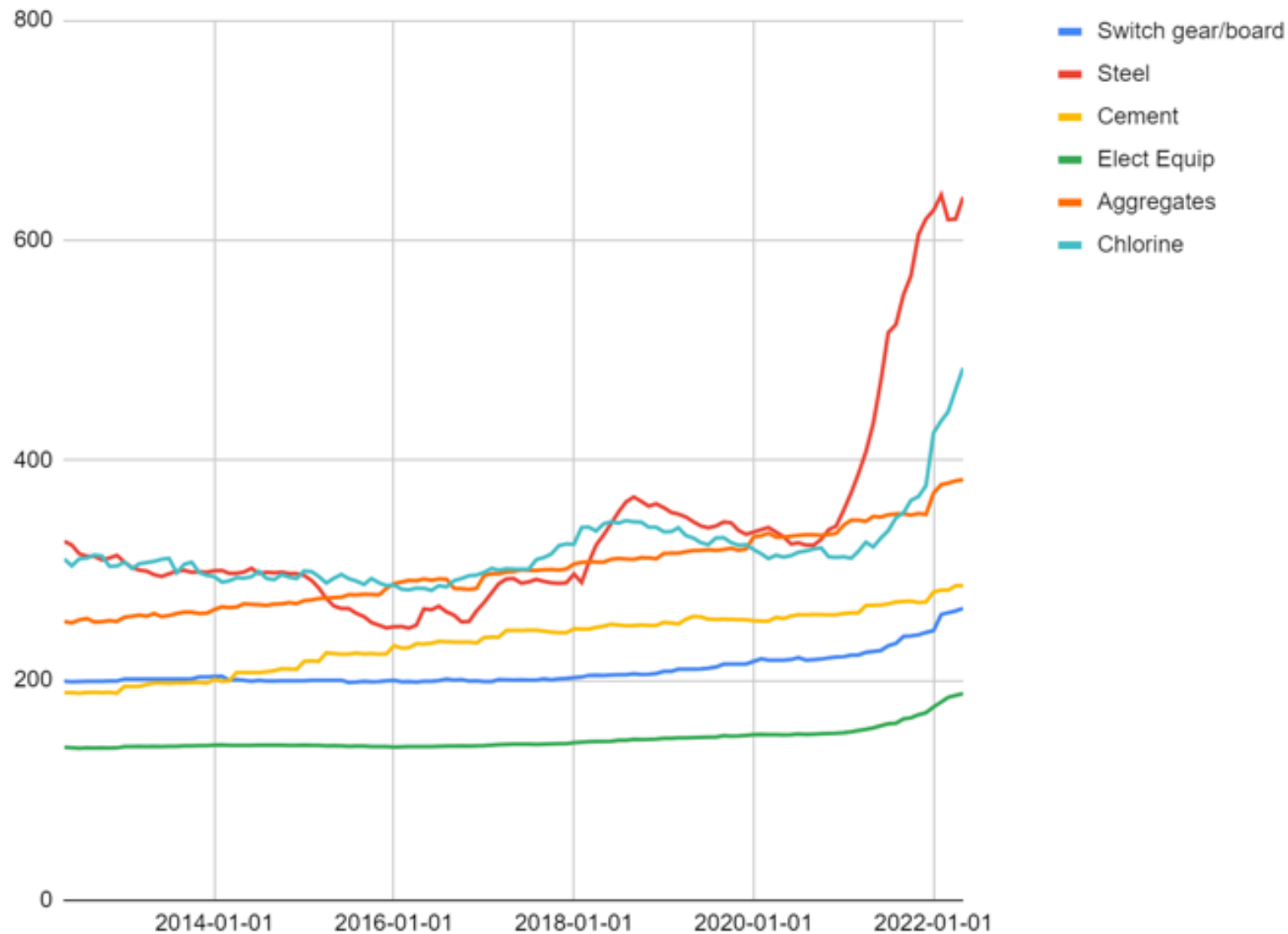
# Materials: Construction Materials Producer Price Index (PPI) Increased by ~50% since January 2020

Construction PPI by Month 1990-2022

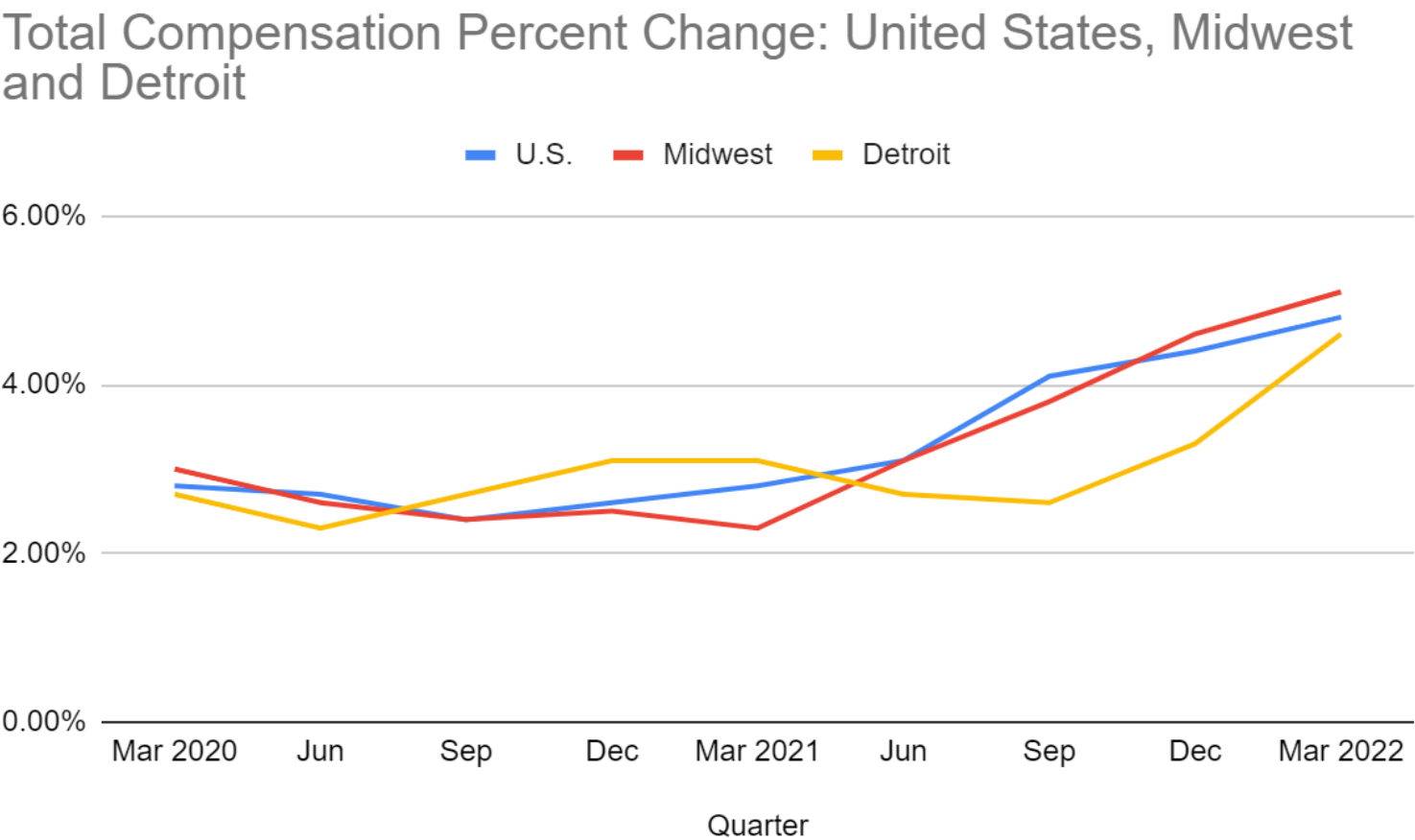


WPUSI012011

# Materials: Individual Commodities PPI; Sharp Increases in Steel, Chlorine



# Labor: Employment Cost Index (Private Industry Workers)



Source: Employment Cost Index, Bureau of Labor Statistics (BLS)

# Understanding What Other Organizations are Seeing & How They are Responding to Cost Pressures

## Benchmarking: Key Informant Interviews

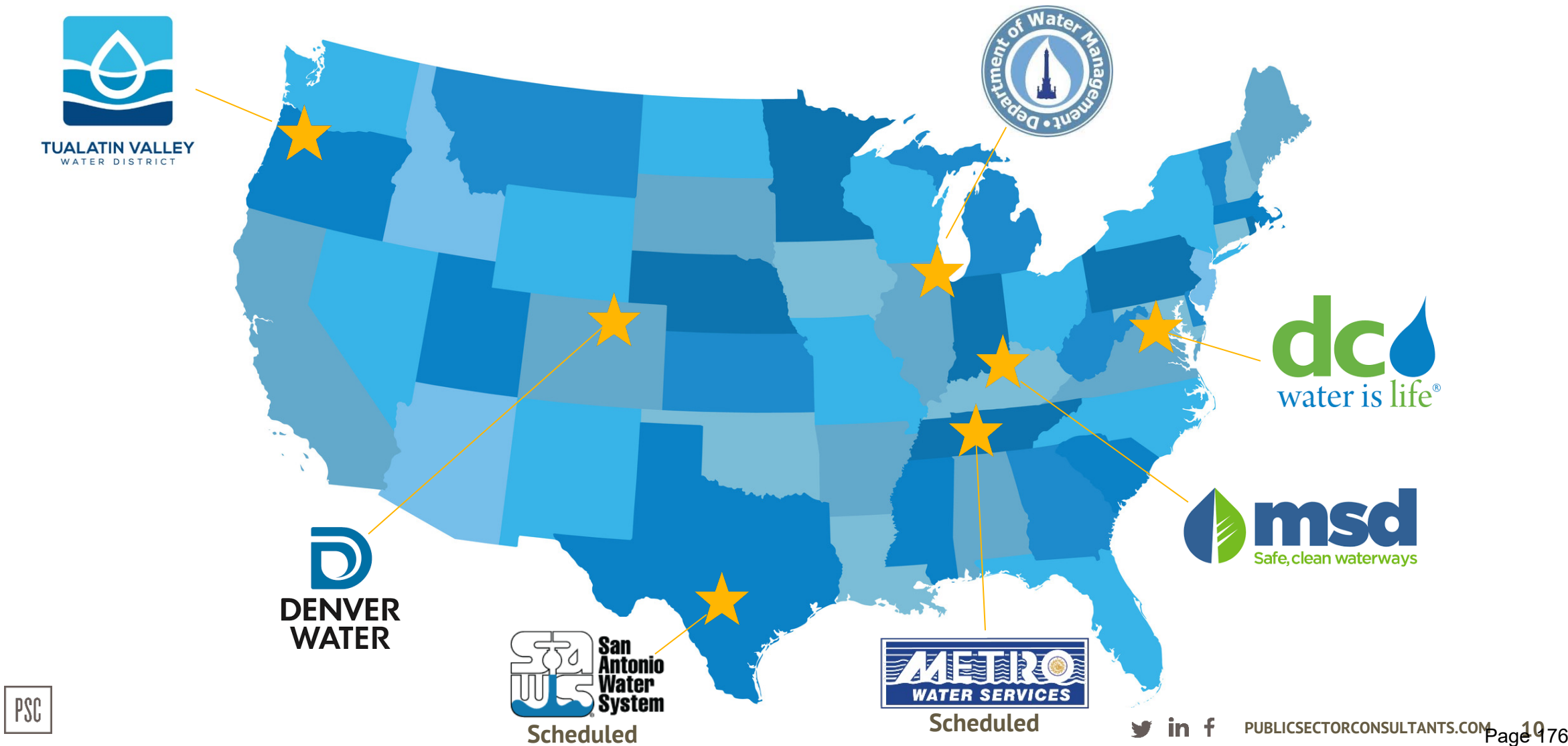
- **Objective:**

- To obtain peer industry and regional information on cost pressures and mitigation strategies

- **Organizations:**

- Peer Water & Wastewater utilities across the US
- Michigan public utilities
- Capital-intensive organizations in SE Michigan
- Industry Associations

# Interviews with Peer Water & Wastewater Utilities





## Convening Roundtable Discussion with Regional Finance, Procurement and Capital Leaders

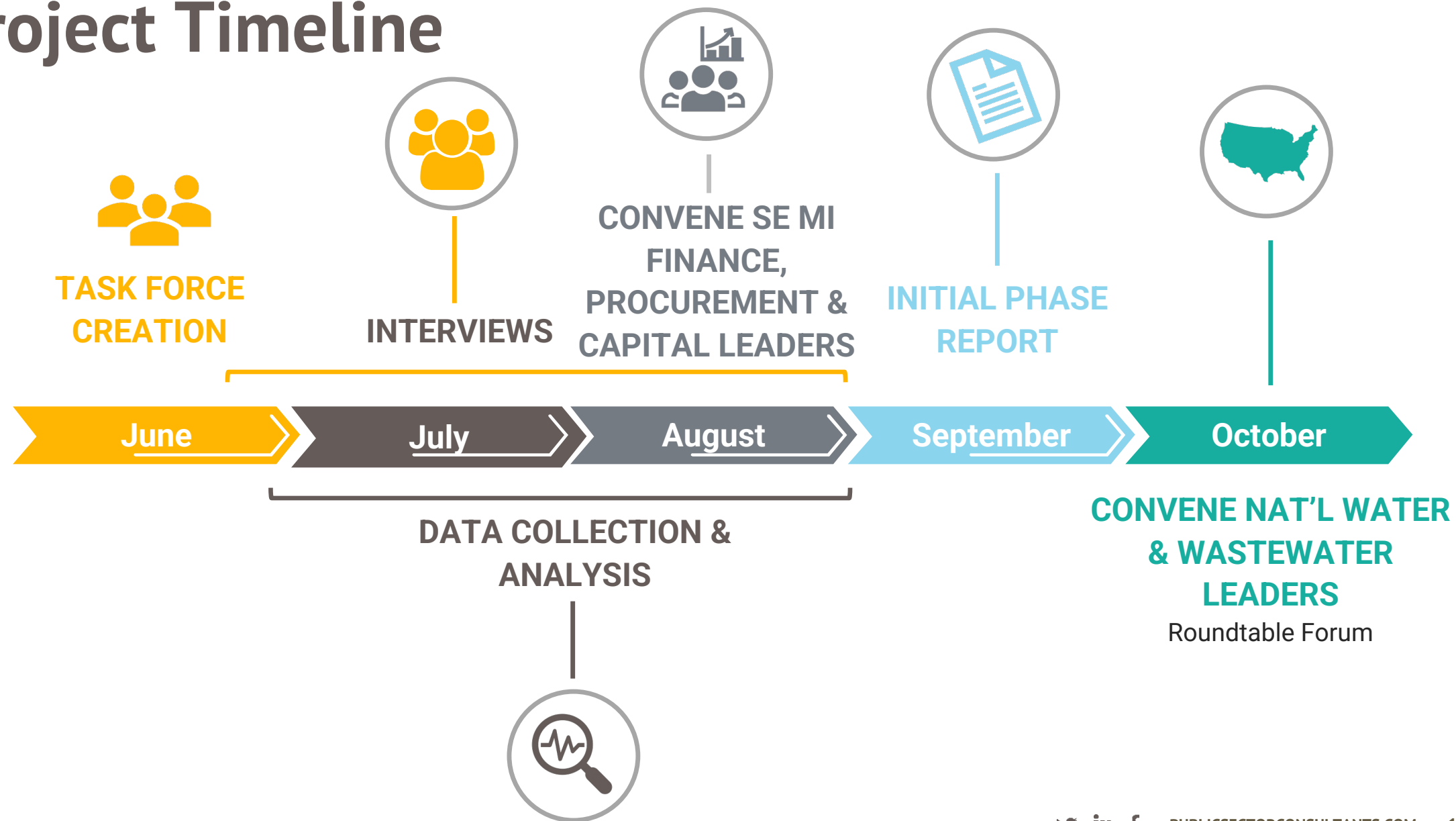
- **Invitees from:**
  - City of Detroit
  - DWSD
  - Macomb County
  - Wayne County
  - Oakland County

## Interview Approach & Desired Outcomes

### Focus:

- What are they seeing?
- What are they doing about it now?
- What longer-term strategies are they considering?
- Identify common issues and trends
- Develop benchmark data
- Discuss findings with participants and peers

# Project Timeline



# Economic Outlook Task Force

- **Project Team:**

- GLWA
- Public Sector Consultants
- PMA Consultants
- PFM Financial Advisors LLC
- The Foster Group
- Bridgeport Consulting



# Economic Outlook Task Force Next Steps

- Complete interviews and data analysis
- Convene roundtable of Finance, Procurement & Capital leaders from Southeast Michigan
- Deliver initial phase report
- Convene roundtable of Water & Wastewater leaders from peer utilities

# Seeking the Committee's Feedback

- Reactions
- Questions
- Advice for the Task Force

# Inflation Could Weigh On U.S. Not-For-Profit Utilities' Credit Ratings

February 24, 2022

## Key Takeaways

- Inflation--which has reached levels not seen in decades--can adversely influence utilities' operating costs, add to the material and labor costs underlying capital projects, amplify borrowing needs, and expose utilities to higher borrowing costs.
- The effects of inflation are manifest in consumers' utility bills and expensive utility bills add to the other growing pressures on consumers' pocketbooks.
- Inflation can sap some of the benefits not-for-profit utilities derive from autonomous ratemaking authority if it is the catalyst for consumer and political resistance to utility retail rate adjustments needed to maintain a sound alignment among revenues, expenses, and debt service in the face higher operating and capital costs.

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Most of the not-for-profit water, sewer, natural gas, public power, and electric cooperative utilities to which S&P Global Ratings assigns ratings have autonomous ratemaking authority. When assigning ratings to these utilities, a key positive consideration is the capacity of their ratemaking frameworks to help preserve sound financial margins by facilitating timely management responses to increasing operating, capital, and financing costs. Nevertheless, it is our view that if inflation creates a need for significant retail rate increases at a time when consumers are facing a panoply of other substantial cost increases that weigh on their wallets, those pressures can engender consumer and political resistance to proposals to increase utilities' retail rates. When utilities face opposition to rate increases needed to address rising costs, such barriers can erode financial performance and translate into negative rating actions if they weaken key financial credit metrics. In addition, inflation that drives rate increases that outpace wage growth can aggravate affordability, which could increase social risks from an ESG perspective and adversely influence credit ratings even if the rate increases shore up credit metrics.

## Inflation Has Reached A Multi-Decade High

In its most recent monthly consumer price index (CPI) release covering a broad basket of commodities, products, and services, the U.S. Bureau of Labor Statistics (BLS) reported that the CPI for the 12 months through January 2022 rose 7.5%. This increase represented the largest

## Inflation Could Weigh On U.S. Not-For-Profit Utilities' Credit Ratings

12-month increase since the period ending February 1982. Although average hourly earnings for most workers rose 6% year-over-year, inflation erodes some of the benefits of higher wages.

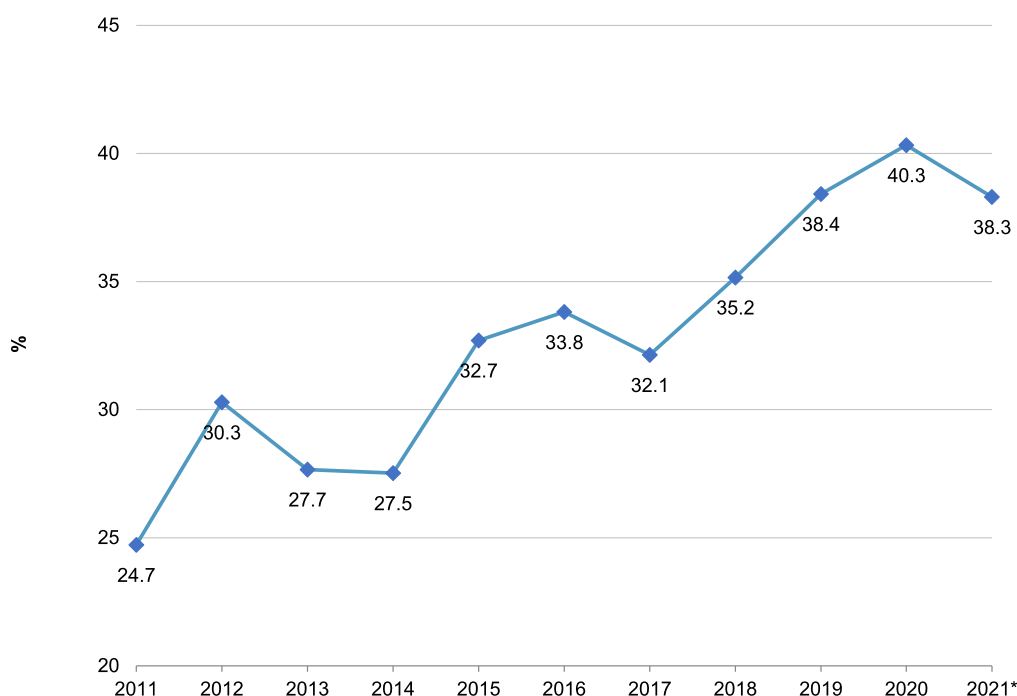
Notably, electricity and natural gas commodities exhibited significantly more pronounced inflation than the CPI basket's historically high 7.5% average. Through January 2022, the 12-month CPI for natural gas rose 23.9% and the index for electricity rose 10.7%. By comparison, water and sewer services exhibited a below average 4% increase. But, as discussed below, that average masks operational and cost differences across these utility systems.

## Not-For-Profit Utilities Are Facing Heightened Exposures

Natural gas is a key input for electricity production and heavily influences retail electricity prices. A decade of low natural gas prices and retirements of coal generation units led to a large increase in natural gas's contributions to electricity generation in the U.S. In 2021, natural gas accounted for 38% of U.S. utility-scale electricity production through November, up from 25% in 2011 (see chart 1). Electric utilities' increasing reliance on natural gas to produce electricity compounds the effects of the commodity's recent price increases in the second half of 2021.

Chart 1

### Natural Gas As % Of U.S. Utility Scale Electric Generation



\*11 months. Source: Energy Information Administration

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Although the BLS report shows that in 2021, water and sewer ratepayers fared better than electric ratepayers with only a 4% nationwide average increase during the 12-month period, they and their utilities are not immune to the prevailing outside inflationary pressures. Water and sewer

ratepayers are also electric utility ratepayers and will feel the cumulative effect of inflation across all their utility bills, along with increased spending on food, housing, services, and more. Moreover, customers of those water and sewer systems whose operations have particularly energy intensive requirements for pumping, treatment, or processes such as desalination, will potentially be exposed to cost increases far greater than the 4% national average BLS cites. On average, electricity costs represent 25% to 30% of water and sewer utilities' operating and maintenance expenses and the Environmental Protection Agency (EPA) reports that electricity costs can represent as much as 40% of water utilities' operating costs.

## **Hedging Arrangements Are Helping Insulate Electric Utilities And Their Customers From Higher Costs**

At many utilities, hedging arrangements that locked in gas and purchased power prices at more moderate pre-inflationary levels have helped shield utilities and their customers from commodities' pronounced price increases. Although hedging arrangements can help insulate exposure to upward pressure on market prices of natural gas and power purchases, the effects of inflation on other operating, capital, and borrowing costs remain. Moreover, hedging arrangements are typically short- to intermediate-term arrangements and of staggered durations. Therefore, we expect that as utilities renew these contracts at prevailing prices, they could need to raise retail rates to capture elevated operating costs in order to preserve financial metrics.

## **The Compounding Effects Of Capital Spending, Regulations, Drought, Extreme Weather, And Financing Needs**

Water, sewer, gas, and electric utilities are highly capital-intensive enterprises. Sustaining operational reliability requires significant investments to maintain or replace aging infrastructure and respond to customer growth. Along with inflation, increasingly stringent emissions regulations in the electric sector and clean water regulations in the water sector add to cost pressures, as do projects that mitigate drought conditions and strengthen weather resilience, along with traditional capital spending needs. The confluence of these costs can contribute to upward pressure on customers' utility bills and create constraints on affordability and erode the ratemaking flexibility that is integral to credit quality.

Both due to more rigorous regulations and the public's increasing focus on environmental issues, electric utilities are reducing reliance on generation that emits greenhouse gases. They are doing this by investing in clean generation and transmission that facilitates the transition. These investments add to the cost pressures electric utilities and their consumers face.

U.S. water and sewer utilities also face significant investment needs as they address the sector's aging infrastructure, increasing regulatory requirements, and climate-related resiliency projects. For example, the EPA's 2021 revisions to its lead and copper rule is expected to trigger \$30 billion in funding needs. Within the sector, we also expect increased spending on nationwide treatment upgrades in response to enacted and anticipated federal and state contaminant regulations. S&P Global Ratings believes that for these utilities, operational reliability and regulatory compliance require that they replace aging treatment plants and distribution and collection systems. There are an estimated \$32 billion in consent decree related costs, which underscores the urgency and magnitude of the infrastructure needs in the sector. In addition, climate change considerations increase system exposure to physical and environmental risks which will require significant infrastructure hardening as well as supply redundancy to meet water scarcity considerations.



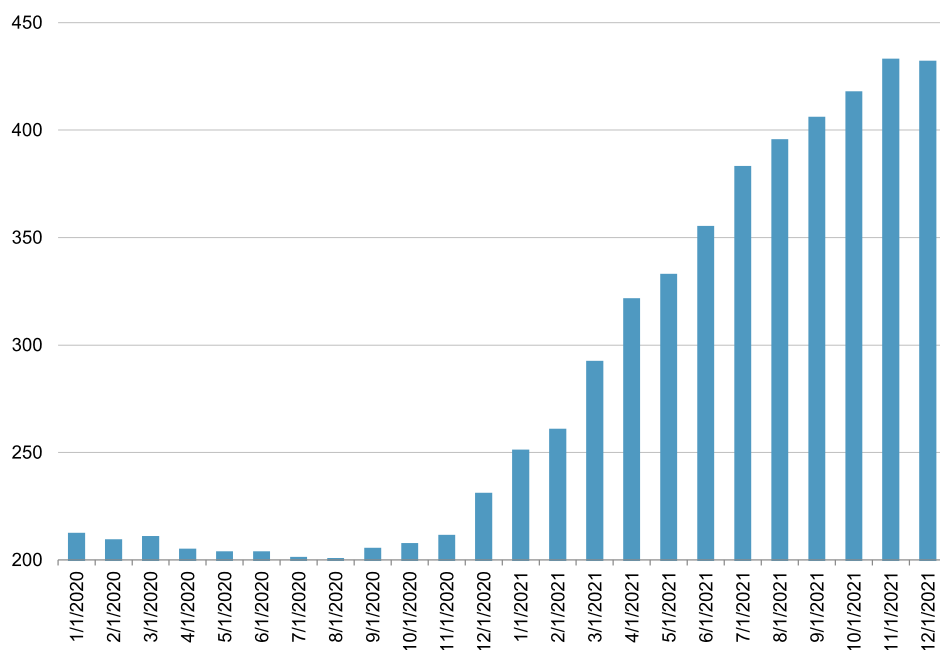
## Inflation Could Weigh On U.S. Not-For-Profit Utilities' Credit Ratings

The costs of building materials, such as iron and steel, that are necessary for implementing capital programs that align with operational integrity and regulatory compliance have increased markedly over the past two years, as have labor costs (chart 2).

Chart 2

### U.S. Producer Price Index: Iron and Steel

Jan. 1, 2020 - Dec. 1, 2021



Source: Federal Reserve Economic Data

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## Borrowing Costs Are About To Increase

As the Federal Reserve raises interest rates in an effort to control inflation, not-for-profit utilities that rely heavily on debt financing for capital projects--as their generally high debt to capitalization ratios indicate--will face financing costs that could be significantly higher than those in recent years. S&P Global's economists believe the Federal Reserve is poised to implement six rate hikes in 2022. Moreover, we see the potential for sizable rate increases, including the likelihood of a 50-basis-point increase. (See "Economic Research: U.S. Real-Time Data: Solid Job Gains, Surging Prices Fuel The Fed's Policy Rocket," Feb. 11, 2022).

## Regulatory Compliance Costs Add To The Burden

To migrate electric generation fleets to cleaner resources, we anticipate that in addition to direct financing of new generation and transmission, many public power and electric cooperative utilities will rely extensively on power purchase agreements (PPA) to add wind, solar, and storage

**Inflation Could Weigh On U.S. Not-For-Profit Utilities' Credit Ratings**

resources. We foresee a significant use of PPAs because these not-for-profit utilities need to partner with taxable entities to garner the monetary benefits of the federal investment tax credits and production tax benefits associated with renewable generation. Due to their not-for-profit status, public power and electric cooperative utilities would not be able to monetize the tax credits if they were to directly invest in renewable resources. Nevertheless, we believe that outsourcing the development of these resource additions will not shield public power or electric cooperative utilities from inflationary construction and financing costs. We expect any higher costs for materials and financing will be baked into developers' prices for power sales agreements with not-for-profit utilities.

Water and sewer utilities will continue to rely heavily on direct investment to meet infrastructure and regulatory requirements. Over the past five years, water and sewer debt has averaged \$30 billion a year, with growth outpacing the municipal market. While federal investment may temper public debt issuance, we believe it will bolster infrastructure spending, given the nature of the mandates and the age of the infrastructure nationally.

**What We Are Watching**

There are many manifestations of inflationary impacts on public power utilities, electric cooperatives, gas distribution utilities, and water and sewer utilities. Persistent inflationary cost pressures can negatively influence ratings if they whittle financial metrics by eroding retail rate affordability and ratemaking flexibility in the face of increased operating, capital, and borrowing costs. Consequently, S&P Global Ratings continues to monitor the effects of inflation to identify utilities whose ratings could be vulnerable to the prevailing inflationary environment.

This report does not constitute a rating action.

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## **Financial Services Audit Committee Communication**

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Madison Merzlyakov, Affordability & Assistance Manager

**Re:** DWSD's Lifeline Plan – WRAP Impact

**Background & Analysis:** See attached draft Great Lakes Water Authority ("GLWA") Board letter and related attachments.

**Proposed Action:** The Audit Committee recommends that the Great Lakes Water Authority Board of Directors approve the use of Water Residential Assistance Program Funds for the Detroit Water & Sewerage Department Lifeline Plan with quarterly reporting of the plan's progress to the Audit Committee.

## DRAFT for Audit Committee Review Only

### ..Title

#### **Water Residential Assistance Program Funding for DWSD Lifeline Pilot Plan**

### ..Body

Agenda of: July 27, 2022

Item No.: **2022-XXX**

Amount: N/A

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey P.E.  
Interim Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 25, 2022

**RE:** **Water Residential Assistance Program (WRAP) Funding for  
New DWSD Lifeline Pilot Plan**

### **MOTION**

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approves the use of Water Residential Assistance Program Funds for the Detroit Water & Sewerage Department Lifeline Plan with quarterly reporting of the plan's progress to the GLWA Audit Committee; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

The Detroit Water & Sewerage Department (DWSD) recently announced an income-based water affordability pilot plan called the Detroit Lifeline Plan. The plan was approved by the Detroit Board of Water Commissioners (BOWC) on June 28, 2022. The plan will

offer qualifying customers an inclining block rate structure for water usage providing a lower water rate up to 4,500 gallons per month. Income-qualifying households will pay as little as \$18 per month total for water, sewerage, and drainage costs and no more than \$56 per month. Attached is the presentation that was provided and approved by the Detroit BOWC.

In his presentation to the BOWC, DWSD Director Gary Brown indicated that federal, state, and regional dollars will be used to fund the plan. DWSD plans to leverage Water Residential Assistance Program (WRAP) dollars to help fund a portion of the plan. WRAP is funded through one half of one percent (0.5%) of budgeted revenues, with DWSD contributing an additional one half of one percent (0.5%) for a total of one percent for the City of Detroit. The GLWA Board of Directors also recently approved a reallocation of unused or uncommitted WRAP funds to the City of Detroit in the amount of \$2.8 million. Currently, WRAP funding is used for bill credits, arrearage payments and conservation measures.

### **JUSTIFICATION**

GLWA and DWSD are leaders in exploring new affordability and assistance program designs to leverage existing, limited funding. The direction that DWSD has outlined with the Lifeline Plan is consistent with many of the changes that GLWA presented to the Board in June 2022 for WRAP beginning in FY 2023. Both of the new approaches focus on individual household needs and are consistent with the intent of the WRAP funding. The details of the programs differ largely due to logistical and technology issues.

The following outlines key elements of both plans. *Note that DWSD will use its WRAP appropriation for the Lifeline Plan pilot. Other member partner communities will follow the GLWA WRAP plan.*

#### **Effective Date**

Lifeline Plan: FY 2023

WRAP (New Design): FY 2023

#### **Income Eligibility**

Lifeline Plan: Yes

WRAP (New Design): Yes

### **Bill Payment Based on Income**

Lifeline Plan: Yes – Flat dollar bill limited to \$18, \$43, or \$56 monthly depending on income eligibility

WRAP (New Design): Yes – Flat dollar assistance payment based on relative average residential bill by community and household income to determine the level of payment assistance

### **Administration Considerations**

Lifeline Plan:

- One utility with one billing system
- Requires manual account adjustment by utility
- Separate Lifeline Plan team established by Wayne Metro under the GLWA contract

WRAP (New Design):

- 100+ utilities with differing billing systems and processes
- Administered by multiple service delivery partners

### **Funding**

Lifeline Plan:

- 0.5% GLWA Revenues plus
- 0.5% DWSD Revenues, for a total of 1.0%
- Plus reallocation of previous years' unspent funds from other GLWA service areas
- Leverages other state and federal sources coordinated by Wayne Metro

WRAP (New Design):

- 0.5% GLWA Revenues
- Complements other state and federal assistance programs available from Wayne Metro and other respective community action agencies depending on resident's location

### **Other Benefits Available (although prioritized use of funding sources may vary)**

Lifeline Plan: Bill payment, arrearage assistance & conservation measures

WRAP (New Design): Bill payment, arrearage assistance & conservation measures

### **BUDGET IMPACT**

This item does not impact the budget.

### **COMMITTEE REVIEW**

This matter was presented to the GLWA Audit Committee at its July 25, 2022, meeting. The Audit Committee *[insert action]* that the Great Lakes Water Authority Board of Directors approve the use of Water Residential Assistance Program Funds for the Detroit Water & Sewerage Department Lifeline Plan with quarterly reporting of the plan's progress to the Audit Committee.

### **SHARED SERVICES IMPACT**

No impact at this time.



# DWSD LIFELINE PLAN

*Detroit's First Water Affordability Plan*

Gary Brown, Director  
Detroit Water & Sewerage Department



Water & Sewerage  
Department



## Introduction to the DWSD Lifeline Plan

- For the first time ever in Detroit, DWSD is introducing an income-based water affordability plan.
- Developed in partnership with community advocates and water affordability experts.
- Advocates have long said water should be 1.8% of the average household income.
- Offers qualifying customers a fixed monthly rate that meets the standard recommended by water affordability experts and erases past debt – for good!

## Here's How It Works

- The average Detroit household uses between 2,300 and 3,000 gallons of water per month (three people).
- The **DWSD Lifeline Plan** provides income-eligible enrolled Detroiters up to 4,500 gallons of water every month at a **fixed rate** based on their household income.
- Three Tiers:
  - If you receive SNAP/FAP benefits – You pay **\$18 a month** for water, sewer and drainage services; that's about 60 cents a day!
  - If you are a low-income household (non-SNAP/FAP) – You pay **\$43 a month**
  - If you are a moderate-income household (non-SNAP/FAP) – You pay **\$56 a month**
- The program is funded by regional, state and federal dollars.
- **The total bill will be 1.8% of average monthly household income for each tier.** This is a standard set by community advocates and water affordability experts.
- The **DWSD Lifeline Plan** starts July 1 – call Wayne Metro to enroll!

# Expanded Outreach Directly Targeting Eligible Residents

- We are building an inclusive **coalition of community leaders and activists** who will directly engage with income-eligible Detroiters to educate them on the **DWSD Lifeline Plan** and get them enrolled.
- Our coalition includes nonprofits and other organizations:
  - ✓ Detroit Action
  - ✓ Hydrate Detroit
  - ✓ We the People (Detroit Chapter)
  - ✓ Wayne Metro
  - ✓ Detroit's faith-based community
- Coalition members will:
  - Receive funding from DWSD to conduct door-to-door outreach (directly or water bill credit).
  - Community organizations and partners will receive a stipend for every person they refer who enrolls in the DWSD Lifeline Plan and stays in the program for at least 90 days.
  - DWSD will partner with organizations to host quarterly **DWSD Lifeline Fairs**.
- Continue to use **Human Fliers to canvass neighborhoods** based on a map with DWSD billing data and Census tracts to ensure we reach all eligible households (started in May).

## Encouraging Conservation and Repairing Water Leaks

- If residential customer's water usage goes **above 4,500 gallons per month**, then water bill will reflect a charge in addition to the capped Lifeline rate.
  - Often due to issues like faulty plumbing and leaky/running toilets.
  - DWSD, in coordination with Wayne Metro, will invest **\$10 Million per year for the next five years** to help low-income residential customers **repair leaks in their homes and keep their water usage under 4,500 gallons per month** to maintain the DWSD Lifeline rate.
- Customers can **monitor their real-time water usage** through:
  - An existing mobile-friendly DWSD Customer Service Portal.
  - Access to mobile device and/or Wi-Fi service via a collaboration with Wayne Metro and other partners.
  - Automated calls from the DWSD billing system when their usage nears 3,000 gallons.

# Increased Water Shutoff Prevention

- No Detroit resident will face a water shutoff if enrolled in the **DWSD Lifeline Plan** or the 10/30/50 Plan.
- DWSD will continue to work with Wayne Metro and our partners to ensure we're offering eligible Detroiters the help they need.
  - The 2,500 households currently enrolled in WRAP will be auto-enrolled in the new plan.
  - The 19,000-plus households who were previously in WRAP can immediately qualify.
  - Focus on low-income neighborhoods based on Census tracts.
- For households at-risk of a water shutoff:
  - Clear notice on DWSD bill
  - Door hanger notice
  - Personal outreach with sign-up at your doorstep!
  - 90-120 days of outreach effort per customer
- **DWSD Lifeline Plan** will help thousands of Detroit residents and has the potential to be a national model.



# Tap Into the Lifeline Plan



**313-386-9727**



**[waynometro.org/wrap](http://waynometro.org/wrap)**



**[detroitmi.gov/DWSD](http://detroitmi.gov/DWSD)**



**DWSDDetroit**



**DetroitWaterDep**



**DWSDwater**



**Water & Sewerage  
Department**





## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Kim Garland, CPA, Financial Services Area Chief of Staff

**Re:** Consent Letter Related to 2022 Bond Transaction

**Background:** The Great Lakes Water Authority (“GLWA”) is preparing documents for a 2022 bond transaction as outlined the Audit Committee binder for the July 25, 2022 meeting.

**Analysis:** It is required as part of the development of the official statement that GLWA obtain a consent letter from its external audit firm. This allows GLWA to include the June 30, 2021 audited financial statements within the preliminary and final official statements. There are limited procedures performed by the auditors as part of this process which assists the auditors in obtaining a level of assurance that no significant changes have occurred that would materially change the information presented in the June 30, 2021 financial reports as of the date of the official statement.

A copy of the draft consent letter is included with this memo for Audit Committee review.

**Proposed Action:** Receive and file this report.



July 19, 2022

Nicolette Bateson, CPA  
Chief Financial Officer/Treasurer  
Great Lakes Water Authority  
735 Randolph  
Detroit, MI 48226

Dear Ms. Bateson:

We are pleased to submit this letter which summarizes those services we propose to render to Great Lakes Water Authority.

### **Services and Related Report**

We have previously audited the statement of net position of the Great Lakes Water Authority (the "Company") as of June 30, 2021, and the related statements of revenues, expenses and changes in net position, and cash flows for the year then ended June 30, 2021, and issued our audit report thereon dated December 8, 2021. Subsequent to the issuance of our report, we have been informed by management that such basic financial statements and financial statement schedules are to be included in the official statement for the fiscal year 2023 bond issuance, and have been requested by management to provide written agreement for the inclusion of the auditors' report with the basic financial statements in the offering document.

We will provide written agreement with respect to the inclusion of our report in the official statement containing our opinions as to whether (i) the basic financial statements, taken as a whole, are fairly presented based on accounting principles generally accepted in the United States of America, and (ii) the financial statement schedules, if applicable, present fairly in all material respects, the information set forth therein.

### **Our Responsibilities and Limitations**

As required by auditing standards generally accepted in the United States of America we will request certain written representations from management as of an appropriate date to confirm oral representations given to us and to indicate and document the continuing appropriateness of such representations and reduce the possibility of misunderstanding concerning matters that are the subject of the representations.

### **Management's Responsibilities**

Management is responsible for making all financial records and related information available to us and for the accuracy and completeness of that information.

### **Other Documents**

The documentation for this engagement, including the workpapers, is the property of Baker Tilly US, LLP ("Baker Tilly") and constitutes confidential information. We may have a responsibility to retain the documentation for a period of time sufficient to satisfy any applicable legal or regulatory requirements for records retention. If we are required by law, regulation or professional standards to make certain documentation available to regulators, the Company hereby authorizes us to do so.

Nicolette Bateson, CPA, Chief Financial Officer/Treasurer  
Great Lakes Water Authority

July 19, 2022  
Page 2

### Timing and Fees

Completion of our work is subject to, among other things, (i) appropriate cooperation from Company personnel, including timely preparation of necessary schedules, (ii) timely responses to our inquiries and (iii) timely communication of all significant accounting and financial reporting matters. When and if for any reason the Company is unable to provide such schedules, information and assistance, Baker Tilly and you may mutually revise the fee to reflect additional services, if any, required of us to complete the engagement. Delays in the completion of our engagement beyond the date that was originally contemplated may require us to perform additional procedures which will likely result in additional fees. Revisions to the scope of our work will be communicated to you and may be set forth in the form of an "Amendment to Existing Engagement Letter." In addition, if we discover compliance issues that require us to perform additional procedures and/or provide assistance with these matters, fees at our standard hourly rates apply.

Invoices for these fees will be rendered as work progresses and are payable on presentation. A charge of 1.5% per month shall be imposed on accounts not paid within thirty (30) days of receipt of our statement for services provided. In accordance with our firm policies, work may be suspended if your account becomes thirty (30) days or more overdue and will not be resumed until your account is paid in full. If we elect to terminate our services for nonpayment, our engagement will be deemed to have been completed upon written notice of termination, even if we have not completed our engagement. You will be obligated to compensate us for all time expended and to reimburse us for all expenditures through the date of termination.

Our professional fees for our services will be \$1,500, consistent with our existing agreement.

### Terms and Conditions

The terms of our contract dated July 18, 2022 pertaining to resolution of disagreements, limitations on damages and indemnification, and other matters pertain to this engagement.

We appreciate the opportunity to be of service to you. If there are any questions regarding this Engagement Letter, please contact Jodi Dobson, the engagement partner on this engagement who is responsible for the overall supervision and review of the engagement and determining that the engagement has been completed in accordance with professional standards. Jodi Dobson is available at 608 240 2469.

Sincerely,

BAKER TILLY US, LLP

*Baker Tilly US, LLP*

This letter correctly sets forth the understanding of Great Lakes Water Authority.

ACCEPTED BY:

\_\_\_\_\_  
Official's Name

\_\_\_\_\_  
Official's Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** CFO Update

This month's binder covers many of the initiatives underway. There is one item of good news below...

### **GLWA Receives GFOA Budget Award for the Fourth Consecutive Year!**

On Wednesday, July 20, 2022, the Government Finance Officers Association (GFOA) notified GLWA that we received the Distinguished Budget Presentation Award for the biennial fiscal period beginning July 1, 2022.

The final [FY 2023 & FY 2024 Biennial Budget & Five Year Forecast](#) is posted on the GLWA website.

Many, many thanks to the talented Financial Services Area team for preparing a high-quality document that provides both high level and detailed information. That outcome is achievable because of many cross-functional team members throughout GLWA that are active participants in the budget process throughout the year!

July 19, 2022

Nicolette Bateson  
Chief Financial Officer & Treasurer  
Great Lakes Water Authority  
735 Randolph Suite 1608  
Detroit, MI 48226

Dear Ms. Bateson:

We are pleased to inform you, based on the examination of your budget by a panel of independent reviewers, that your budget document has been awarded the Distinguished Budget Presentation Award from Government Finance Officers Association (GFOA) for the current fiscal period. This award is the highest form of recognition in governmental budgeting. Its attainment represents a significant achievement by your organization.

The Distinguished Budget Presentation Award is valid for one year. To continue your participation in the program, it will be necessary to submit your next annual budget document to GFOA within 90 days of the proposed budget's submission to the legislature or within 90 days of the budget's final adoption. Information about how to submit an application for the Distinguished Budget Program application is posted on GFOA's website.

Each program participant is provided with confidential comments and suggestions for possible improvements to the budget document. Your comments are enclosed. We urge you to carefully consider the suggestions offered by our reviewers as you prepare your next budget.

When a Distinguished Budget Presentation Award is granted to an entity, a Certificate of Recognition for Budget Presentation is also presented to the individual(s) or department designated as being primarily responsible for its having achieved the award. Enclosed is a Certificate of Recognition for Budget Preparation for:

#### **Financial Services Area**

Continuing participants will receive a brass medallion that will be mailed separately. First-time recipients will receive an award plaque within eight to ten weeks. Enclosed is a camera-ready reproduction of the award for inclusion in your next budget. If you reproduce the camera-ready image in your next budget, it should be accompanied by a statement indicating continued compliance with program criteria. The following standardized text should be used:

Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to **Great Lakes Water Authority, Michigan**, for its Annual Budget for the fiscal year beginning **July 01, 2022**. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

A press release is enclosed.

Upon request, GFOA can provide a video from its Executive Director congratulating your specific entity for winning the Budget Award.

We appreciate your participation in this program, and we sincerely hope that your example will encourage others in their efforts to achieve and maintain excellence in governmental budgeting. The most current list of award recipients can be found on GFOA's website at [www.gfoa.org](http://www.gfoa.org). If we can be of further assistance, please contact the Technical Services Center at (312) 977-9700.

Sincerely,

A handwritten signature in black ink, reading "Michele Mark Levine". The signature is written in a cursive, flowing style.

Michele Mark Levine  
Director, Technical Services Center

Enclosure

## FOR IMMEDIATE RELEASE

July 19, 2022

**For more information, contact:**

**Technical Services Center**

**Phone: (312) 977-9700**

**Fax: (312) 977-4806**

**E-mail: [budgetawards@gfoa.org](mailto:budgetawards@gfoa.org)**

(Chicago, Illinois)--Government Finance Officers Association is pleased to announce that **Great Lakes Water Authority, Michigan**, has received GFOA's Distinguished Budget Presentation Award for its budget.

The award represents a significant achievement by the entity. It reflects the commitment of the governing body and staff to meeting the highest principles of governmental budgeting. In order to receive the budget award, the entity had to satisfy nationally recognized guidelines for effective budget presentation. These guidelines are designed to assess how well an entity's budget serves as:

- a policy document
- a financial plan
- an operations guide
- a communications device

Budget documents must be rated "proficient" in all four categories, and in the fourteen mandatory criteria within those categories, to receive the award.

When a Distinguished Budget Presentation Award is granted to an entity, a Certificate of Recognition for Budget Presentation is also presented to the individual(s) or department designated as being primarily responsible for having achieved the award. This has been presented to **Financial Services Area**.

There are over 1,700 participants in the Budget Awards Program. The most recent Budget Award recipients, along with their corresponding budget documents, are posted quarterly on GFOA's website. Award recipients have pioneered efforts to improve the quality of budgeting and provide an excellent example for other governments throughout North America.

*Government Finance Officers Association (GFOA) advances excellence in government finance by providing best practices, professional development, resources and practical research for more than 22,500 members and the communities they serve.*



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Great Lakes Water Authority  
Michigan**

For the Fiscal Year Beginning

**July 01, 2022**

*Christopher P. Morill*

**Executive Director**

**GLWA**

*Great Lakes Water Authority*



# **Monthly Financial Report Binder**

**March 2022**

**Presented to the  
Great Lakes Water Authority  
Audit Committee on July 25, 2022**



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## Key Financial Metrics

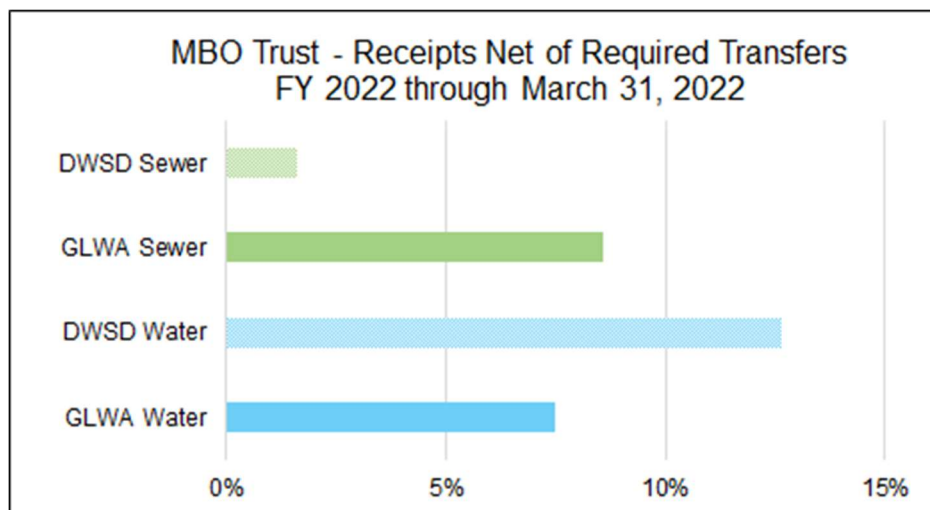
The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows: No Risk (green) - Potential (yellow) - Likely (red)

Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information. To address the wholesale water revenue shortfall, a first quarter budget amendment was approved for \$2.4 million. Capital spend is less than the total Capital Improvement Plan (CIP); an amendment is under consideration.

As of March 31, 2022					
Metric	FY 2022 Budget	FY 2022 Amended Budget	FY 2022 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$247.1	\$244.7	\$242.8	-1%	47
Wholesale Water Billed Usage (mcf)	10,242,000	10,022,000	9,814,000	-2%	
Wholesale Sewer Billed Revenue (\$M)	\$203.5	\$203.5	\$203.5	0%	49
Wholesale Water Operations & Maintenance (\$M)	\$108.0	\$108.0	\$97.5	-10%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$136.0	\$136.0	\$140.6	3%	
Investment Income (\$M)	\$2.3	\$2.9	\$2.7	-5%	36
Water Prorated Capital Spend w/SRA* (\$M)	\$101.0	\$101.0	\$118.0	17%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$62.3	\$60.0	\$48.6	-19%	29

\*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 (page 30)



Net cash flow receipts remain positive for GLWA Water and Sewer. This means that all legal commitments of the MBO Trust and the lease payment are fully funded – and that positive cash flow is available for additional capital

program funding in subsequent year(s). DWSD Water reports a surplus of \$9.8 million and DWSD Sewer reports a surplus of \$3.5 million of net receipts over disbursements through March 2022. On August 26, 2021, the DWSD Board of Water Commissioners proactively adopted budget amendments to address potential shortfalls for FY 2022. These budget amendments are reflected in this March 2022 report.

The current DWSD loan receivable balance for fiscal year 2018 is \$2.1 million.

### **Budget to Actual Analysis (page 3)**

- FY 2022 information includes the second quarter budget amendments which were approved by the GLWA Board on April 27, 2022, but not the proposed third quarter budget amendments.
- The total Revenue Requirements are on target through March 2022.
- The total overall Operations & Maintenance expenses are at 73.2% of budget through March 2022 which is reasonable within the pro-rata benchmark of 75.0%. The sewer system O&M expenses, however, are at 77.6%, which is higher than the benchmark. The water system O&M expenses are at 67.7%.

### **Basic Financial Statements (page 9)**

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for March 2022 is \$64.9 million for the Water fund (25.1% of total revenues) and \$96.2 million for the Sewer fund (27.0 % of total revenues).
- Water Net Position decreased by \$ 3.7 million, and Sewage Disposal Net Position decreased by \$ 0.7 million for the year to date through March 2022.

### **Capital Improvement Plan Financial Summary (page 27)**

- Water systems exceed the 75% Capital Spend Ratio assumption.
- Sewer systems also exceed the 75% Capital Spend Ratio assumption.

### **Master Bond Ordinance Transfers (page 30)**

- For March, transfers of \$13.6 million and \$17.6 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for March, transfers of \$3.2 million and \$7.4 million were completed for the DWSD Water and Sewer funds, respectively.

### **Cash Balances & Investment Income (page 36)**

- Total cash & investments are \$440 million in the Water fund and \$463 million in the Sewer fund.
- Total, combined, cumulative, FY 2022 investment income through March is \$2.7 million.

### **DWSD Retail Revenues, Receivables & Collections (page 40)**

- Water usage through March 31, 2022 is at 110.02% and revenues at 100.94% of budget.
- Sewer usage through March 31, 2022 is at 105.28% and revenues at 100.36% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$41.9 million over the prior year.
- Past dues over 180 days make up 68.9% of the total accounts receivable balance. The current bad debt allowance covers 102.3% of past dues over 60 days.

### **GLWA Wholesale Billing, Receivables & Collections (page 46)**

- GLWA accounts receivable past due balance net of Highland Park is 9.47% of the total accounts receivable balance, with the majority of that balance related to one water account dispute currently under discussion.
- The Highland Park past due balance is \$53.5 million. It includes \$41.1 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$10.6 million for water supply services. Highland Park recently made a payment of \$1.7 million on June 3.

**Questions?** Contact the Office of the Chief Financial Officer at [CFO@glwater.org](mailto: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

The FY 2022 information presented in these sections includes the second quarter budget amendments approved by the GLWA Board on April 27, 2022, but not the proposed third quarter budget amendments.

## 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 March 2022, the pro-rata benchmark is 75.0% (9 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 2022 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.

Water revenues presented in Table 1A differ from those presented in *Table 2 – Statement of Revenues, Expenses and Changes in Net Position* found in the *Basic Financial Statement* section of this report. Water Revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract as documented in Appendix A-2 of the [Flint Water Agreement](#). Through March 31, 2022, these payments total \$4.9 million for FY 2022.

2. **Investment Earnings:** Investment earnings is slightly above the pro-rata benchmark for FY 2022 for the *water* system at 75.8%; while the *sewer* system is below the pro-rata benchmark at 63.4%. 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. The *water* system is higher than the pro-rata benchmark, at 247.1%, due to the receipt of a liquid aluminum sulfate settlement for estimated overcharges (\$354,000). This settlement will be included in the 3<sup>rd</sup> quarter budget amendment.
4. **Operations & Maintenance Expense:** Actual expenses<sup>1</sup> for *both* systems have variances from the pro-rata benchmark. The *water* system is below the pro-rata benchmark for FY 2022 at 67.7%. The *sewer* system O&M expenses, at 77.6%, is above the pro-rata benchmark.
5. **Debt Service:** For both systems, debt service is on target with the pro-rata benchmark for FY 2022; the *water* system is at 75.1%; while the *sewer* system is at 75.3%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down.
6. **Operating Reserve Deposit:** GLWA has established a target balance in the O&M Fund of 45 days of operating expense which works in tandem with the I&E Funds to provide liquidity to the utility. Adequate funding is in place to meet this requirement; therefore, it is expected that additional transfers to this reserve will not be required in FY 2022.
7. **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.<sup>2</sup> 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 2021, DWSD management successfully implemented a formal plan to end the year with positive net cash flows for both the DWSD *water* system and the DWSD *sewer* system. For FY 2022, neither the DWSD *water* system nor the DWSD *sewer* system have budgetary shortfalls through March 31, 2022. GLWA and DWSD staff are meeting regularly to discuss steps to mitigate shortfalls, when they occur, as outlined in the 2018 MOU.
8. **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.
9. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12<sup>th</sup> basis each month in accordance with the Master Bond Ordinance.
10. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

<sup>1</sup>The 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.

<sup>2</sup> As a reminder, the monthly O&M transfer for MBO purposes is 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)**

	FY2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 3/31/2022	Percent Year-to- Date
<b>Water System</b>							
<b>Revenues</b>							
Suburban Wholesale Customer Charges	\$ 317,034	\$ 237,680	75.0%	\$ 321,111	\$ 318,711	\$ 237,680	74.6%
Retail Service Charges	21,926	16,575	75.6%	21,697	21,697	16,273	75.0%
Investment Earnings	3,956	3,476	87.9%	1,047	1,924	1,459	75.8%
Other Revenues	229	266	116.1%	175	291	719	247.1%
<b>Total Revenues</b>	<b>\$ 343,144</b>	<b>\$ 257,998</b>	<b>75.2%</b>	<b>\$ 344,031</b>	<b>\$ 342,623</b>	<b>\$ 256,132</b>	<b>74.8%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 134,127	\$ 91,455	68.2%	\$ 143,934	\$ 143,934	\$ 97,452	67.7%
General Retirement System Legacy Pension	6,048	4,536	75.0%	6,048	6,048	4,536	75.0%
Debt Service	137,436	104,667	76.2%	135,481	135,121	101,508	75.1%
General Retirement System Accelerated Pension	6,268	4,701	75.0%	6,268	6,268	4,701	75.0%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	1,669	1,252	75.0%	1,706	1,706	1,279	75.0%
Regional System Lease	22,500	16,875	75.0%	22,500	22,500	16,875	75.0%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall Pending Improvement & Extension Fund Transfer Pending	-	1,321	0.0%	-	-	-	0.0%
	35,095	22,376	63.8%	28,094	27,046	20,337	75.2%
<b>Total Revenue Requirements</b>	<b>\$ 343,144</b>	<b>\$ 247,183</b>	<b>72.0%</b>	<b>\$ 344,031</b>	<b>\$ 342,623</b>	<b>\$ 246,689</b>	<b>72.0%</b>
<b>Net Difference</b>		<b>\$ 10,814</b>				<b>\$ 9,443</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 640				\$ (836)	
Revenue Requirement Variance		10,175				10,278	
Overall Variance		<b>\$ 10,814</b>				<b>\$ 9,443</b>	

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

	FY 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 3/31/2022	Percent Year-to- Date
<b>Sewer System</b>							
<b>Revenues</b>							
Suburban Wholesale Customer Charges	\$ 272,454	\$ 202,414	74.3%	\$ 272,130	\$ 266,730	\$ 204,270	76.6%
Retail Service Charges	187,960	141,418	75.2%	188,662	188,662	141,497	75.0%
Industrial Waste Control Charges	7,685	5,973	77.7%	9,025	8,325	6,218	74.7%
Pollutant Surcharges	6,108	4,580	75.0%	4,189	4,189	3,738	89.2%
Investment Earnings	2,778	2,261	81.4%	1,023	1,876	1,189	63.4%
Other Revenues	2,195	373	17.0%	400	490	378	77.2%
<b>Total Revenues</b>	<b>\$ 479,179</b>	<b>\$ 357,018</b>	<b>74.5%</b>	<b>\$ 475,429</b>	<b>\$ 470,272</b>	<b>\$ 357,290</b>	<b>76.0%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 182,296	\$ 121,477	66.6%	\$ 181,300	\$ 181,300	\$ 140,598	77.6%
General Retirement System Legacy Pension	10,824	8,118	75.0%	10,824	10,824	8,118	75.0%
Debt Service	201,780	153,430	76.0%	207,210	204,985	154,297	75.3%
General Retirement System Accelerated Pension	11,621	8,716	75.0%	11,621	11,621	8,716	75.0%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	2,415	1,811	75.0%	2,358	2,358	1,769	75.0%
Regional System Lease	27,500	20,625	75.0%	27,500	27,500	20,625	75.0%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall Pending Improvement & Extension Fund Transfer Pending	-	4,278	0.0%	-	-	-	0.0%
	42,743	31,162	72.9%	34,617	31,685	25,335	80.0%
<b>Total Revenue Requirements</b>	<b>\$ 479,179</b>	<b>\$ 349,617</b>	<b>73.0%</b>	<b>\$ 475,429</b>	<b>\$ 470,272</b>	<b>\$ 359,457</b>	<b>76.4%</b>
<b>Net Difference</b>		<b>\$ 7,401</b>				<b>\$ (2,167)</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ (2,366)				\$ 4,586	
Revenue Requirement Variance		9,767				(6,753)	
Overall Variance		<b>\$ 7,401</b>				<b>\$ (2,167)</b>	



## Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of March 31, 2022, is 75.0% (nine months). When comparing FY 2022 to FY 2021 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, the overall spending is higher in FY 2022, especially in the Sewer category.

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 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 3/31/2022	Percent Year-to- Date
Water	\$ 70,820	\$ 50,263	71.0%	\$ 74,813	\$ 74,813	\$ 56,746	75.9%
Sewer	114,975	77,143	67.1%	111,971	111,971	88,711	79.2%
Centralized	100,339	65,289	65.1%	103,846	103,846	68,909	66.4%
Administrative	30,290	20,177	66.6%	34,603	34,603	23,708	68.5%
Employee Benefits	-	60	0.0%	-	-	(24)	0.0%
<b>Total O&amp;M Budget</b>	<b>\$ 316,424</b>	<b>\$ 212,931</b>	<b>67.3%</b>	<b>\$ 325,234</b>	<b>\$ 325,234</b>	<b>\$ 238,050</b>	<b>73.2%</b>

*Totals may be off due to rounding*

## 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 overall O&M expenses are at 73.2% which is reasonably within the pro-rata benchmark of 75.0%. This positive variance equates to a dollar amount of \$5.9 million. The expense category commentary is provided below for items highlighted on Table 3.

**Personnel Costs:** The overall category is under the pro-rata benchmark; coming in at 72.2% through March 2022.

**Utilities:** The overall category is higher than the pro-rata benchmark; coming in at 86.7% through March 2022. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is higher than the pro-rata benchmark, coming in at 83.2%. 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. Increased demand charges for the Conner Creek Pumping Station and increased usage/charges at the WRRF are the leading drivers for this increase.
- **Gas** is coming in at 94.7% which is higher than the benchmark of 75.0%. The cost of natural gas per BTU has increased 125% since July 2021. In addition, increased production at the Biosolids Dryer Facility (BDF) and wastewater incineration has led to an increase in natural gas usage.
- **Sewage service** is higher than the benchmark, coming in at 88.6%. Increased usage is being reported at the WRRF (in part due to bills being received for actual meter readings when in the past the bills had been estimated), the Biosolids Dryer Facility (BDF), and the Southwest Water Plant.
- **Water service** is higher than the benchmark, coming in at 115.1%. As meters have been repaired or replaced at the WRRF, the billings that previously reported estimated readings have been replaced with actual readings. The actual readings are coming in higher than the estimated billings.

**Chemicals:** This category is higher than the pro-rate benchmark; coming in at 81.1% through March 2022. While variances within this category are not unexpected as usage varies throughout the year, the increase in chemical costs is the primary driver for this variance.

**Supplies & Other:** This category is lower than the benchmark; coming in at 61.2% through March 2022. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, variances are not unexpected.

**Contractual Services:** The category is slightly lower than the pro-rata benchmark; coming in at 74.0% through March 2022. 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 lower than the benchmark; coming in at 55.6% through March 2022. 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 lower than the benchmark; coming in at 63.6% through March 2022. 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 reflect the forecasted activity more accurately for FY 2022. A second quarter budget amendment was entered to adjust the shared services budget to this revised FY 2022 forecast. In addition, it is important to note that some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount.

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

Expense Categories	FY 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date at 3/31/2021	FY 2021 ACTIVITY THRU 6/30/2021	Percent Year-to- Date at 6/30/2021	FY 2022 AMENDED BUDGET	FY 2022 PRORATED BUDGET (9 MONTHS)	FY 2022 ACTIVITY THRU 3/31/2022	Percent Year-to- Date 3/31/2022	FY 2022 PRORATED BUDGET LESS FY 2022
<b>Entity-wide</b>										
Salaries & Wages	\$ 67,306	\$ 48,974	72.8%	\$ 64,910	75.4%	\$ 70,564	\$ 52,923	\$ 48,578	68.8%	\$ 4,345
Workforce Development	895	632	70.7%	829	76.2%	977	733	588	60.2%	145
Overtime	7,537	5,620	74.6%	7,365	76.3%	6,904	5,178	6,094	88.3%	(917)
Employee Benefits	26,806	19,626	73.2%	25,448	77.1%	26,811	20,108	19,213	71.7%	895
Transition Services	8,557	6,158	72.0%	8,392	73.4%	8,652	6,489	7,753	89.6%	(1,264)
Employee Benefits Fund	-	60	0.0%	-	0.0%	-	-	(24)	0.0%	24
<b>Personnel Costs</b>	<b>111,100</b>	<b>81,070</b>	<b>73.0%</b>	<b>106,945</b>	<b>75.8%</b>	<b>113,908</b>	<b>85,431</b>	<b>82,203</b>	<b>72.2%</b>	<b>3,228</b>
Electric	41,554	31,308	75.3%	41,982	74.6%	39,676	29,757	33,001	83.2%	(3,244)
Gas	5,924	4,237	71.5%	5,706	74.3%	5,566	4,174	5,273	94.7%	(1,099)
Sewage Service	2,297	1,375	59.9%	2,075	66.3%	2,079	1,559	1,843	88.6%	(283)
Water Service	2,608	1,939	74.3%	2,987	64.9%	3,120	2,340	3,591	115.1%	(1,251)
<b>Utilities</b>	<b>52,383</b>	<b>38,858</b>	<b>74.2%</b>	<b>52,749</b>	<b>73.7%</b>	<b>50,441</b>	<b>37,831</b>	<b>43,708</b>	<b>86.7%</b>	<b>(5,877)</b>
Chemicals	14,362	10,525	73.3%	13,982	75.3%	17,515	13,136	14,199	81.1%	(1,063)
Supplies & Other	35,595	20,885	58.7%	31,216	66.9%	37,083	27,812	22,679	61.2%	5,133
Contractual Services	99,977	67,284	67.3%	92,020	73.1%	106,793	80,095	79,053	74.0%	1,042
Capital Program Allocation	(3,447)	(2,277)	66.1%	(3,192)	71.3%	(3,471)	(2,603)	(1,930)	55.6%	(673)
Shared Services	(4,512)	(3,414)	75.7%	(2,567)	133.0%	(2,929)	(2,197)	(1,862)	63.6%	(334)
Unallocated Reserve	10,966	-	0.0%	-	0.0%	5,894	4,421	-	0.0%	4,421
<b>Total Expenses</b>	<b>\$ 316,424</b>	<b>\$ 212,931</b>	<b>67.3%</b>	<b>\$ 291,153</b>	<b>73.1%</b>	<b>\$ 325,234</b>	<b>\$ 243,925</b>	<b>\$ 238,050</b>	<b>73.2%</b>	<b>\$ 5,875</b>
<i>Totals may be off due to rounding</i>										



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 June 2021 comparative amounts shown in the tables below 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 March 31, 2022**  
**(\$000)**

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2021
<b>Assets</b>				
Cash - unrestricted (a)	\$ 150,995	\$ 194,463	\$ 345,459	\$ 354,351
Cash - restricted (a)	22,557	20,678	43,235	162,646
Investments - unrestricted (a)	139,071	106,522	245,593	322,930
Investments - restricted (a)	105,534	158,093	263,628	70,225
Accounts Receivable	85,969	51,518	137,488	165,059
Due from (to) Other Funds (b)	(4,092)	4,092	-	-
Other Assets (c)	680,309	425,056	1,105,365	1,098,362
Capital Assets, net of Depreciation	1,257,230	2,150,676	3,407,906	3,546,027
Land	293,897	124,377	418,274	417,512
Construction Work in Process (e)	299,342	194,491	493,834	395,973
<b>Total assets</b>	<b>3,030,813</b>	<b>3,429,968</b>	<b>6,460,781</b>	<b>6,533,085</b>
<b>Deferred Outflows (f)</b>	<b>52,094</b>	<b>129,304</b>	<b>181,398</b>	<b>225,074</b>
<b>Liabilities</b>				
Liabilities - Liabilities-ST	143,785	162,472	306,257	329,279
Due to (from) Other Funds (b)	-	-	-	-
Other Liabilities (h)	1,779	5,004	6,783	7,500
Cash Held FBO DWSD (d)	18,525	10,695	29,219	6,064
Liabilities - Long-Term (i)	2,949,872	3,416,286	6,366,158	6,529,068
<b>Total liabilities</b>	<b>3,113,961</b>	<b>3,594,456</b>	<b>6,708,417</b>	<b>6,871,911</b>
<b>Deferred Inflows (f)</b>	<b>69,938</b>	<b>78,400</b>	<b>148,338</b>	<b>96,380</b>
<b>Total net position (j)</b>	<b>\$ (100,992)</b>	<b>\$ (113,585)</b>	<b>\$ (214,577)</b>	<b>\$ (210,132)</b>
<i>Totals may be off due to rounding</i>				

In general, the Statement of Net Position reflects a mature organization with no unexpected trends.

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 2032 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 market value. Investments at June 30, 2021 are also reported at market value. The March 31, 2022 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 Other Funds* and *Due to Other Funds* are shown at gross 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 mainly 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 only adjusted in the interim 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 because 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 March 2022 Financial Report Binder. Prior year ending balances are provided in the June 30, 2021 column as a reference for comparative purposes. Explanatory notes follow this statement.

Water revenues presented below in Table 2 differ from those presented in *Table 1A – Water Revenue Requirement Budget* found in the *Budget to Actual Analysis* section of this report because water revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights.

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position**  
**– All Funds Combined**  
**For the Nine Months ended March 31, 2022**  
**(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- Type Activities	Comparative June 30, 2021
<b>Revenue</b>						
Wholesale customer charges	\$ 242,572	93.6%	\$ 204,270	57.4%	\$ 446,842	\$ 589,992
Local system charges	16,273	6.3%	141,497	39.7%	157,770	209,885
Industrial waste charges		0.0%	6,218	1.7%	6,218	8,005
Pollutant surcharges		0.0%	3,738	1.0%	3,738	6,720
Other revenues	267	0.1%	358	0.1%	625	767
<b>Total Revenues</b>	<b>259,112</b>	<b>100.0%</b>	<b>356,082</b>	<b>100.0%</b>	<b>615,194</b>	<b>815,369</b>
<b>Operating expenses</b>						
Operations and Maintenance	99,056	38.2%	142,586	40.0%	241,642	301,740
Depreciation	92,440	35.7%	116,931	32.8%	209,371	274,044
Amortization of intangible assets	2,675	1.0%	330	0.1%	3,005	3,677
<b>Total operating expenses</b>	<b>194,171</b>	<b>74.9%</b>	<b>259,847</b>	<b>73.0%</b>	<b>454,019</b>	<b>579,460</b>
<b>Operating Income</b>	<b>64,941</b>	<b>25.1%</b>	<b>96,235</b>	<b>27.0%</b>	<b>161,175</b>	<b>235,909</b>
<b>Total Nonoperating (revenue) expense</b>	<b>68,668</b>	<b>26.5%</b>	<b>96,953</b>	<b>27.2%</b>	<b>165,620</b>	<b>224,464</b>
<b>Increase/(Decrease) in Net Position</b>	<b>(3,727)</b>	<b>-1.4%</b>	<b>(718)</b>	<b>-0.2%</b>	<b>(4,445)</b>	<b>11,445</b>
Net Position (deficit), beginning of year	(97,266)		(112,867)		(210,132)	(221,578)
<b>Net position (deficit), end of year</b>	<b>\$ (100,992)</b>		<b>\$ (113,585)</b>		<b>\$ (214,577)</b>	<b>\$ (210,132)</b>
<i>Totals may be off due to rounding</i>						

## Water Fund

- ✓ The decrease in Water Fund Net Position is \$3.7 million.
- ✓ Wholesale water customer charges of \$242.6 million account for 93.6% of Water System revenues.
- ✓ Operating expenses of \$194.2 million represent 74.9% of total operating revenue. Depreciation is the largest operating expense at \$92.4 million or 47.6% of operating expense.
- ✓ Amortization of intangible assets represents activity for raw water rights.
- ✓ Operating income after operating expenses (including depreciation) equals \$64.9 million or 25.1% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$58.9 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

## Sewage Disposal Fund

- ✓ The decrease in the Sewage Disposal Fund Net Position is \$0.7 million.
- ✓ Wholesale customer charges of \$204.3 million account for 57.4% 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 \$141.5 million account for 39.7% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$259.8 million represent 73.0% of total operating revenue. Depreciation is the largest operating expense at \$116.9 million or 45.0% of total operating expense.
- ✓ Amortization of intangible assets represents activity for a warehouse lease.
- ✓ Operating income after operating expenses (including depreciation) equals \$96.2 million or 27.0% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$68.6 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 March 2022 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses  
– All Funds Combined  
For the Nine Months ended March 31, 2022  
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- Type Activities	Percent of Total
<b>Operating Expenses</b>						
Personnel						
Salaries & Wages	16,513	16.7%	40,406	28.3%	56,919	23.6%
Overtime	3,876	3.9%	2,219	1.6%	6,094	2.5%
Benefits	13,239	13.4%	5,951	4.2%	19,190	7.9%
Total Personnel	<b>\$ 33,628</b>	<b>33.9%</b>	<b>\$ 48,575</b>	<b>34.1%</b>	<b>\$ 82,203</b>	<b>34.0%</b>
<b>Utilities</b>						
Electric	20,046	20.2%	12,955	9.1%	33,001	13.7%
Gas	1,088	1.1%	4,185	2.9%	5,273	2.2%
Sewage	581	0.6%	1,262	0.9%	1,843	0.8%
Water	4	0.0%	3,587	2.5%	3,591	1.5%
Total Utilities	<b>\$ 21,719</b>	<b>21.9%</b>	<b>\$ 21,989</b>	<b>15.4%</b>	<b>\$ 43,708</b>	<b>18.1%</b>
Chemicals	5,613	5.7%	8,587	6.0%	14,199	5.9%
Supplies and other	6,765	6.8%	15,716	11.0%	22,481	9.3%
Contractual services	34,323	34.7%	48,775	34.2%	83,098	34.4%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(1,201)	-1.2%	(729)	-0.5%	(1,930)	-0.8%
Intergovernmental Agreement	(187)	-0.2%	(68)	0.0%	(255)	-0.1%
Shared services allocation	(1,604)	-1.6%	(259)	-0.2%	(1,862)	-0.8%
<b>Operations and Maintenance Expenses</b>	<b>\$ 99,056</b>	<b>100.0%</b>	<b>\$ 142,586</b>	<b>100.0%</b>	<b>\$ 241,643</b>	<b>100.0%</b>

Totals may be off due to rounding

- ✓ Core expenses for water and sewage disposal systems are utilities (18.1% of total O&M expenses) and chemicals (5.9% of total O&M expenses).
- ✓ Personnel costs (34.0% 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 (34.4%) includes:
  - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$7.0 million);
  - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$12.6 million); and
  - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, field, planning and other services.
- ✓ The Capital Program Allocation, Intergovernmental Agreement and Shared Services Allocation are shown as negative amounts because they are 'contra' expense accounts representing offsets to associated costs in other Operations and Maintenance expense categories.

## 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 Nine Months ended March 31, 2022**  
**(\$000)**

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2021
<b>Nonoperating (Revenue)/Expense</b>				
Interest income contractual obligation	\$ (18,799)	\$ (12,759)	\$ (31,557)	\$ (43,087)
Interest income DWSD Shortfall	-	(134)	(134)	(635)
Investment earnings	(1,469)	(1,197)	(2,666)	(7,040)
Net incr (decr) in fair value of invstmt	1,500	1,006	2,505	5,781
Other nonoperating revenue	(452)	(20)	(472)	476
Interest Expense				
Bonded debt	77,663	81,370	159,033	218,857
Lease obligation	12,791	15,634	28,425	38,332
Other obligations	3,368	1,253	4,622	6,296
Total interest expense	93,823	98,257	192,080	263,485
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	-
Capital Contribution	-	34	34	(5,960)
Amortization, issuance costs, debt	(11,382)	1,851	(9,532)	(12,966)
(Gain) loss on disposal of capital assets	(15)	332	317	365
Loss on impairment of capital assets	-	-	-	-
Water Residential Assistance Program	474	655	1,129	1,517
Legacy pension expense	4,988	8,927	13,915	22,528
<b>Total Nonoperating (Revenue)/Expense</b>	<b>68,668</b>	<b>96,953</b>	<b>165,620</b>	<b>224,464</b>

*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. FY 2020 market value adjustments for Water and Sewer totaled \$4.9 million and \$3.3 million, respectively.



FY 2021 market value adjustments for Water and Sewer totaled \$1.5 million and \$1.0 million, respectively.

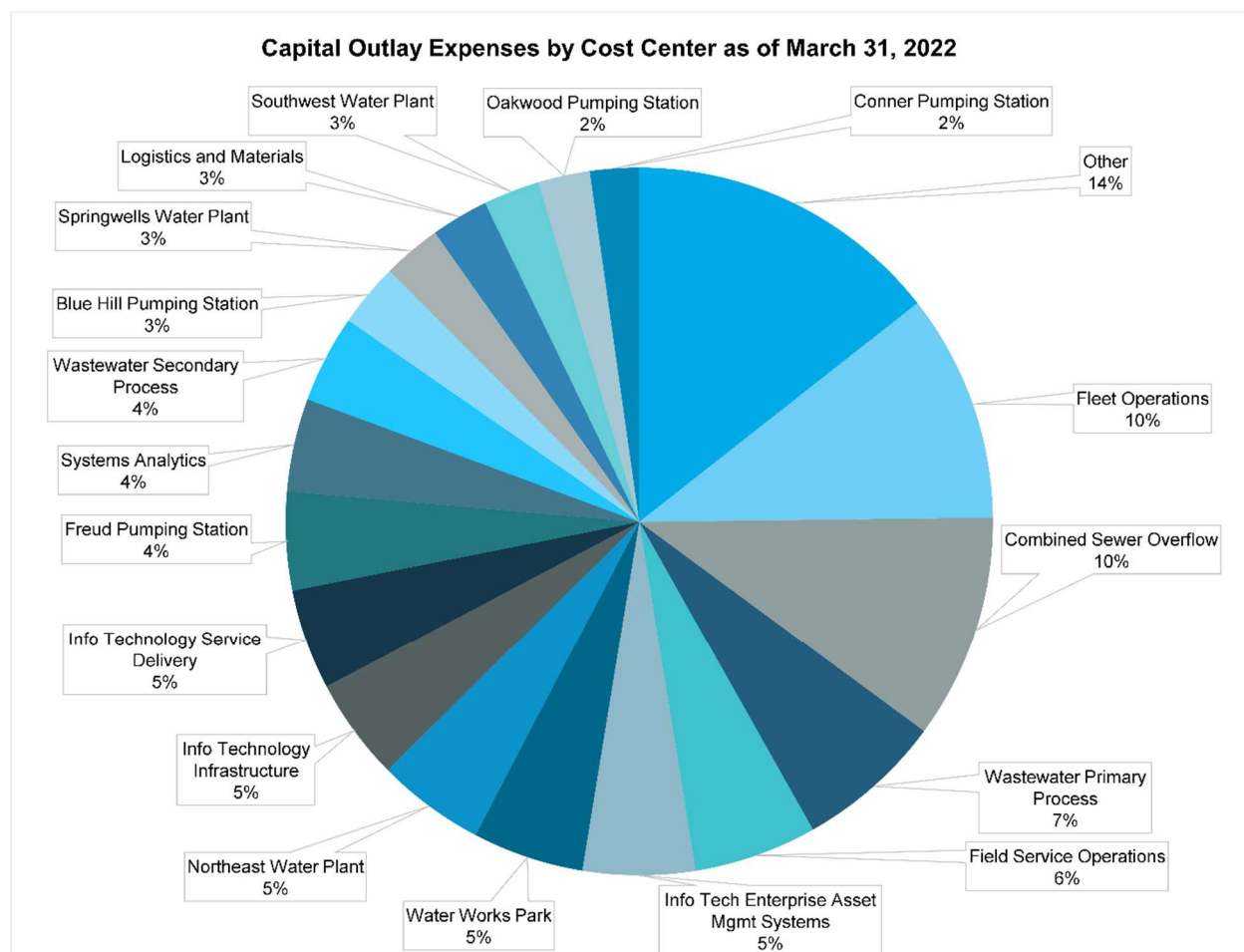
- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
  - Bonded debt;
  - Lease obligation for the regional assets from the City of Detroit; and
  - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.
- ✓ The FY 2021 capital contribution in Nonoperating (revenue) expense represents one-half of an \$11.92 million payment made by Oakland Macomb Interceptor Drainage District (OMIDD). The payment was part of an amendment to the OMIDD Wastewater Disposal Services Contract and was split between FY 2020 and FY 2021 based on budgeted revenue requirements for those respective years.

## 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 March 31, 2022, total capital outlay spend is \$7.6 million. Following this chart is a sample list of projects and purchases from the total spend of \$7.6 million:



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

**Water Operations:** 14 Mile Water Main Assessment (\$350k); Turbidimeter at Northeast Water Plant (\$216k); high pressure water tank (\$174k); Water Works Park furniture (\$132k); power inverter (\$85k); Southwest Water Plant furniture (\$75k); buoy system

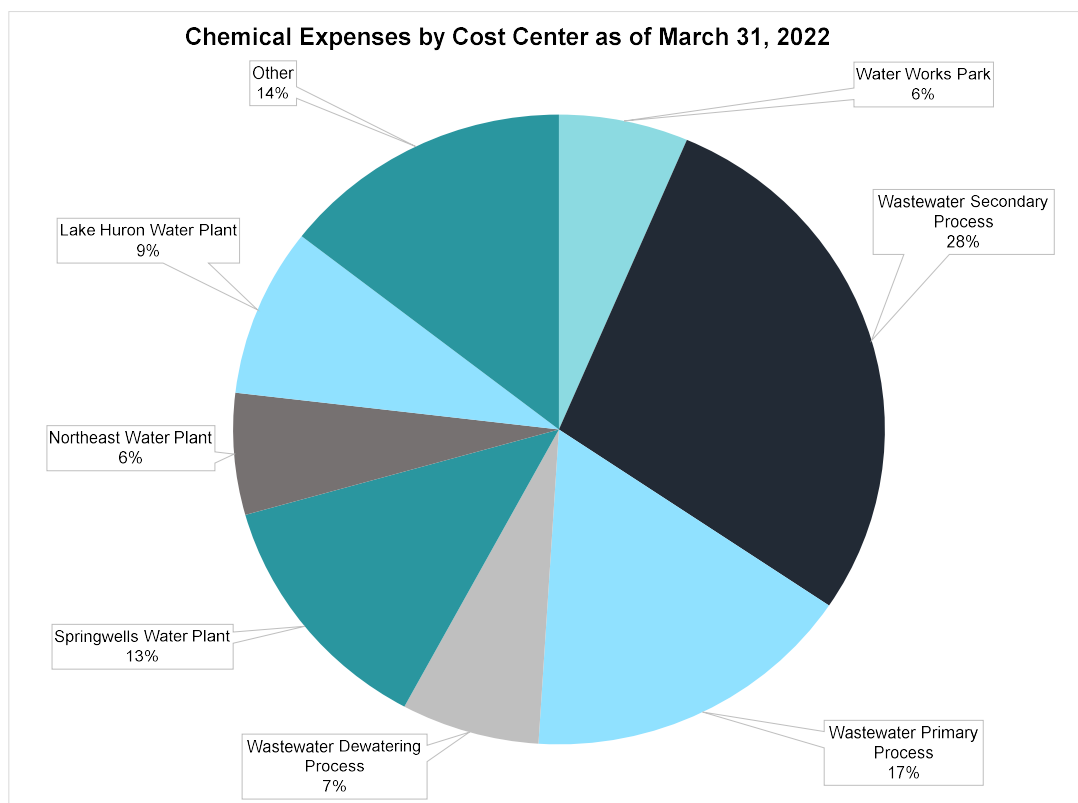
(\$56k); excitation motor retrofit (\$42k); vacuum regulator (\$40k) and steam generator (\$39k).

**Wastewater Operations:** PQM Meters for CSO Facilities (\$787k); wastewater pump (\$347k); pull out assembly refurbishment (\$300k); Freud electric backup service installation (\$245k); flygt pump (\$182k); B-houses (\$167k); Main Lift Pump emergency repair (\$139k); multiple pump station circuit breakers (\$104k); sewer pump (\$81k); effluent channel stop-logs (\$80k); water champ (\$65k); Leib CSO accusonic flow meters (\$60k); Freud meter station (\$57k); rotork repairs (\$50k); 150 gallon day tank (\$40k); metering pump (\$33k) and pump service (32k).

**Centralized & Administrative Facilities:** Trucks and vehicles (\$795k); IT software (\$663k); IT computers and hardware (\$350k); sewer meter support (\$325k); Rialto Security (\$199k); chemical monitoring equipment (\$78k); Water Works Park UPS system (\$76k) and power meters (\$42k).

### Chart 2 – Chemical Expenses – Water and Sewer System Combined

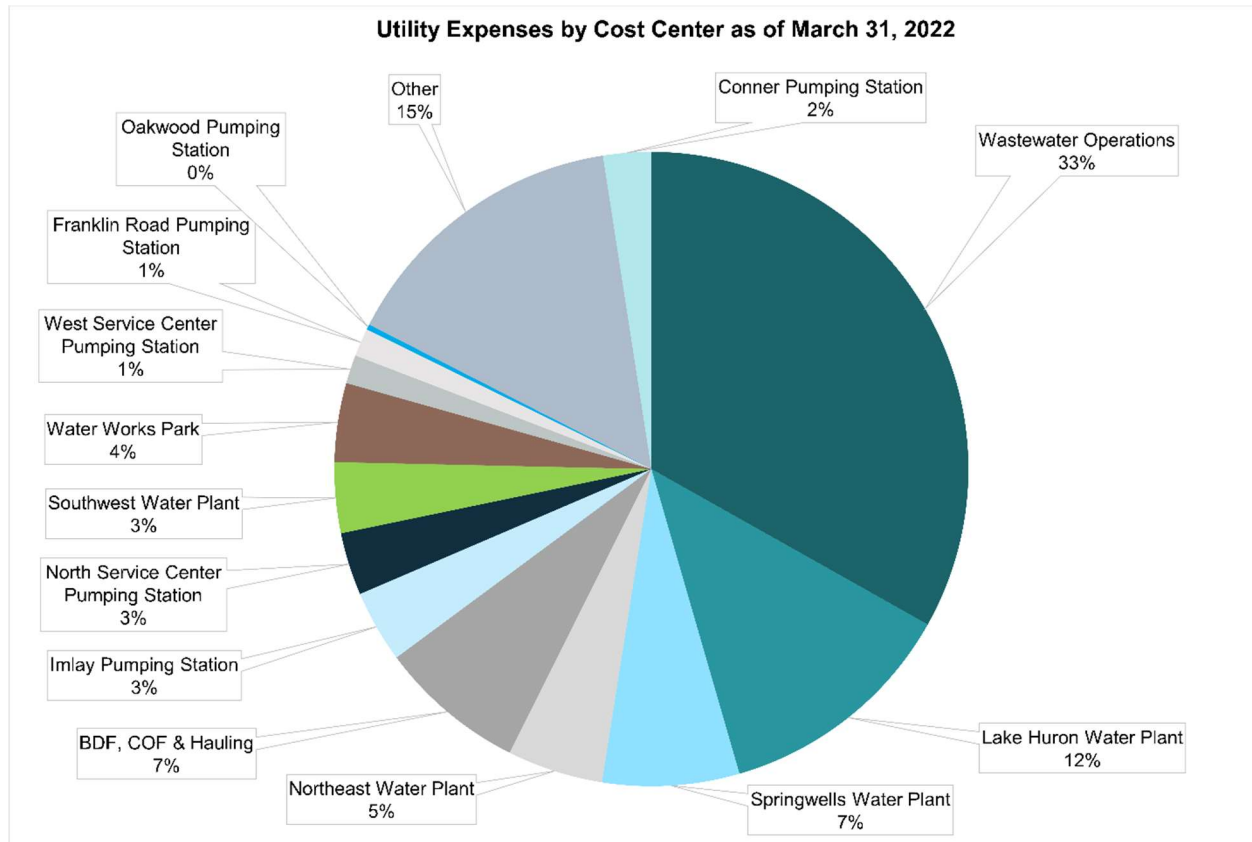
Chemical expenses are \$14.2 million through March 31, 2022. The allocation is shown in the chart below and remains consistent with prior periods.



**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 Expenses – Water and Sewer System Combined

Utility expenses are \$43.7 million through March 31, 2022. The allocation is shown in the chart below and consistent with prior periods.



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

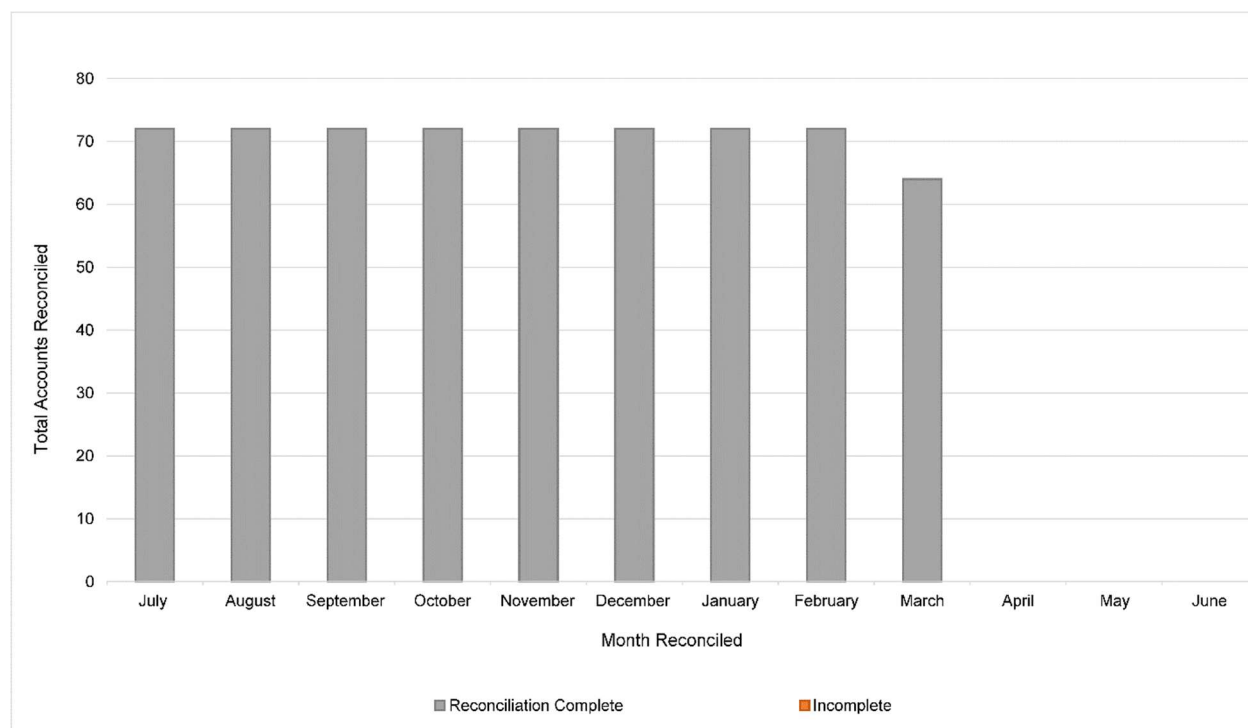


## Financial Operations KPI

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 March 31, 2022 all reconciliations are up-to-date and complete.

There was a reduction of 8 accounts since February 2022.

**Chart 1 – Bank Reconciliation Completion Status**



**Table 1 – Fiscal Year 2022 GL Cash Account Rollforward**

Total GL Cash accounts as of July 1, 2021	72
New GL Cash accounts	0
Inactivated GL Cash accounts	(8)
Total GL Cash accounts as of March 31, 2022	<u>64</u>

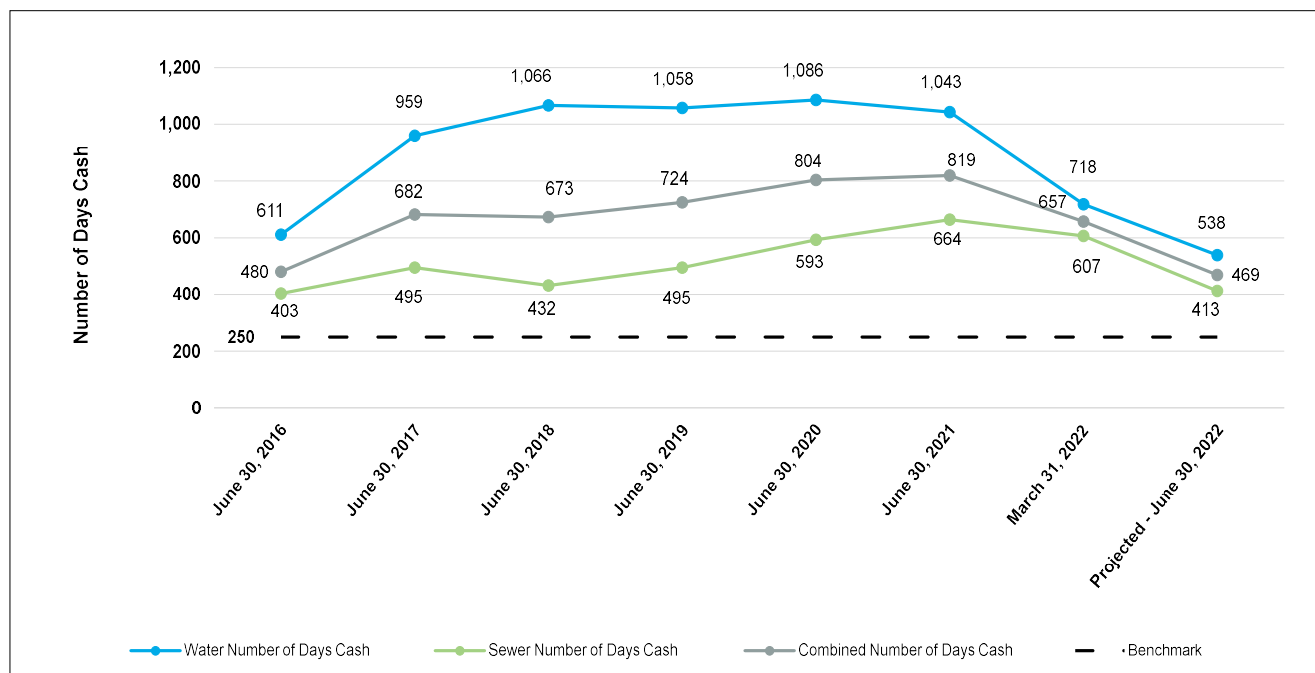


## Financial Operations KPI - Liquidity

This key performance indicator shown in **Chart 1 – Historical Schedule of Days Cash on Hand – Liquidity – Regional System** and **Table 1 – Schedule of Days Cash on Hand – Liquidity – Regional System** below provides a measure of a utility's ability to meet expenses, cope with emergencies and navigate business interruptions. Liquidity is one of several key metrics monitored by bond rating agencies reflecting an organization's financial strength. A best practice benchmark for this key performance indicator is greater than 250 days cash on hand as shown by the dashed line in Chart 1 below.

Both GLWA Water and Sewer funds continue to exceed this target with Water at 718 and Sewer at 607 days cash on hand as of March 31, 2022. These balances remain strong for the regional system in large part due to the need to fund CIP projects with I&E funds but drop in the FY 2022 projection as these funds are depleted and GLWA transitions to a planned bond issue. The FY 2022 projection is calculated based on values from the GLWA FY 2022 – 2026 Budget & Five-Year Plan.

**Chart 1 – Historical Schedule of Days Cash on Hand – Liquidity – Regional System**



**Note:** The GLWA Annual Comprehensive Financial Reports are the source of all historic data referenced. Refer to these reports for detailed calculations by fiscal year.

**Table 1 – Schedule of Days Cash on Hand – Liquidity – Regional System**

	June 30, 2021	March 31, 2022	Projected June 30, 2022
<b>Water Fund</b>			
Cash and Investments - Unrestricted	\$ 353,308,000	\$ 290,066,000	\$ 217,600,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 250,476,000	\$ 207,300,000	\$ 276,400,000
Less: Depreciation (a)	(123,272,000)	(94,000,000)	(125,333,000)
Less: Amortization of Intangible Asset (a)	(3,567,000)	(2,675,000)	(3,567,000)
Net Operating Expense	\$ 123,638,000	\$ 110,625,000	\$ 147,500,000
<b>Operating Expense per Day</b>	\$ 339,000	\$ 404,000	\$ 404,000
<b>Days Cash</b>			
Number of Days Cash	1,043	718	538
<b>Sewage Disposal Fund</b>			
Cash and Investments - Unrestricted	\$ 323,973,000	\$ 300,985,000	\$ 205,000,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 328,983,000	\$ 246,075,000	\$ 328,100,000
Less: Depreciation (a)	(150,772,000)	(110,100,000)	(146,800,000)
Less: Amortization of Intangible Asset (a)	(110,000)	-	-
Net Operating Expense	\$ 178,101,000	\$ 135,975,000	\$ 181,300,000
<b>Operating Expense per Day</b>	\$ 488,000	\$ 496,000	\$ 497,000
<b>Days Cash</b>			
Number of Days Cash	664	607	413
<b>Combined</b>			
Cash and Investments - Unrestricted	\$ 677,281,000	\$ 591,051,000	\$ 422,600,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 579,460,000	\$ 453,375,000	\$ 604,500,000
Less: Depreciation (a)	(274,044,000)	(204,100,000)	(272,133,000)
Less: Amortization of Intangible Asset (a)	(3,677,000)	(2,675,000)	(3,567,000)
Net Operating Expense	\$ 301,740,000	\$ 246,600,000	\$ 328,800,000
<b>Operating Expense per Day</b>	\$ 827,000	\$ 900,000	\$ 901,000
<b>Days Cash</b>			
Number of Days Cash	819	657	469
<i>Totals may be off due to rounding</i>			

(a) Current year expenses are expressed as a proration of the annual budget for the purposes of this metric.



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 Difference” 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 1/12<sup>th</sup> 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 Nine Months Ended March 31, 2022**

	Water	Sewer	Total
<b>Net Revenue Requirement Budget Variance (a)</b>	\$ 9,443	\$ (2,167)	\$ 7,276
<b>Budgetary categories adjustments to financial reporting basis</b>			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	8,581	15,357	23,938
Prior year pension contribution accounted for in current year (d)	(4,988)	(8,927)	(13,915)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	42,644	85,686	128,330
Accelerated pension B&C notes obligation portion (g)	146	328	474
Regional System lease (h)	4,084	4,991	9,075
Right to use lease - warehouse (h)		100	100
WRAP (i)	805	1,114	1,919
DWSD short term allocation (j)	-	-	-
Improvement & Extension Fund transfers (j)	20,337	25,335	45,672
<b>Nonbudgeted financial reporting categories adjustments</b>			
Depreciation and amortization (k)	(95,115)	(117,261)	(212,376)
Amortization - debt related (k)	11,382	(1,851)	9,531
Other nonoperating income (k)	-	-	-
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	15	(332)	(317)
Raw water rights obligation (l)	2,040	-	2,040
Investment earnings for construction fund (m)	10	7	17
Interest for Subscription Based Information Tech Arrangements	(6)	(6)	(12)
Interest on DWSD note receivable (n)	-	134	134
Investment earnings unrealized gain/loss (o)	(1,500)	(1,006)	(2,506)
Improvement & extension fund operating expenses (p)	(1,605)	(2,186)	(3,791)
Capital Contribution (q)	-	(34)	(34)
	-	-	-
<b>Net Position Increase/(Decrease) per Financial Statements (b)</b>	<b>\$ (3,727)</b>	<b>\$ (718)</b>	<b>\$ (4,445)</b>

**Table 2 - Explanatory Notes for Crosswalk**

- (a) Source: Budget to Actual Table 1A and Table 1B in Monthly Financial Report
- (b) Source: Basic Financial Statements Table 2 in Monthly Financial Report
- (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 and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes.
- (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) Interest on the DWSD note receivable is budgeted as part of the Sewer improvement and extension fund and is transferred directly to that fund as payments are made.
- (o) Unrealized gains and losses are recorded annually as required for financial reporting purposes but do not reflect actual investment earnings and are not included in cash basis reporting.
- (p) For FY 2022, the Water Improvement and Extension fund reflects \$1.6 million, and the Sewer Improvement and Extension fund reflects \$2.3 million in expenses relating to repairs paid for through the Water and Sewer Improvement and Extension funds, respectively. These are consolidated expenses for financial reporting purposes but are not reflected in the current Operations and Maintenance budget expenses. In addition, GLWA enters interlocal agreements with other local governments to coordinate projects and services and reduce overlapping expense. Many of these agreements relate to current capital improvement projects. Where another local government reimburses GLWA for direct expenses associated with a capital improvement project financed using improvement and extension funds, those reimbursements received under the agreement are transferred back to the Improvement and Extension fund.



The Monthly Capital Improvement Plan Financial Summary includes the following.

1. Water System Capital Improvement Plan Spend Incurred to date
2. Sewer System Capital Improvement Plan Spend Incurred to date

## **Capital Improvement Plan Financial Summary**

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.

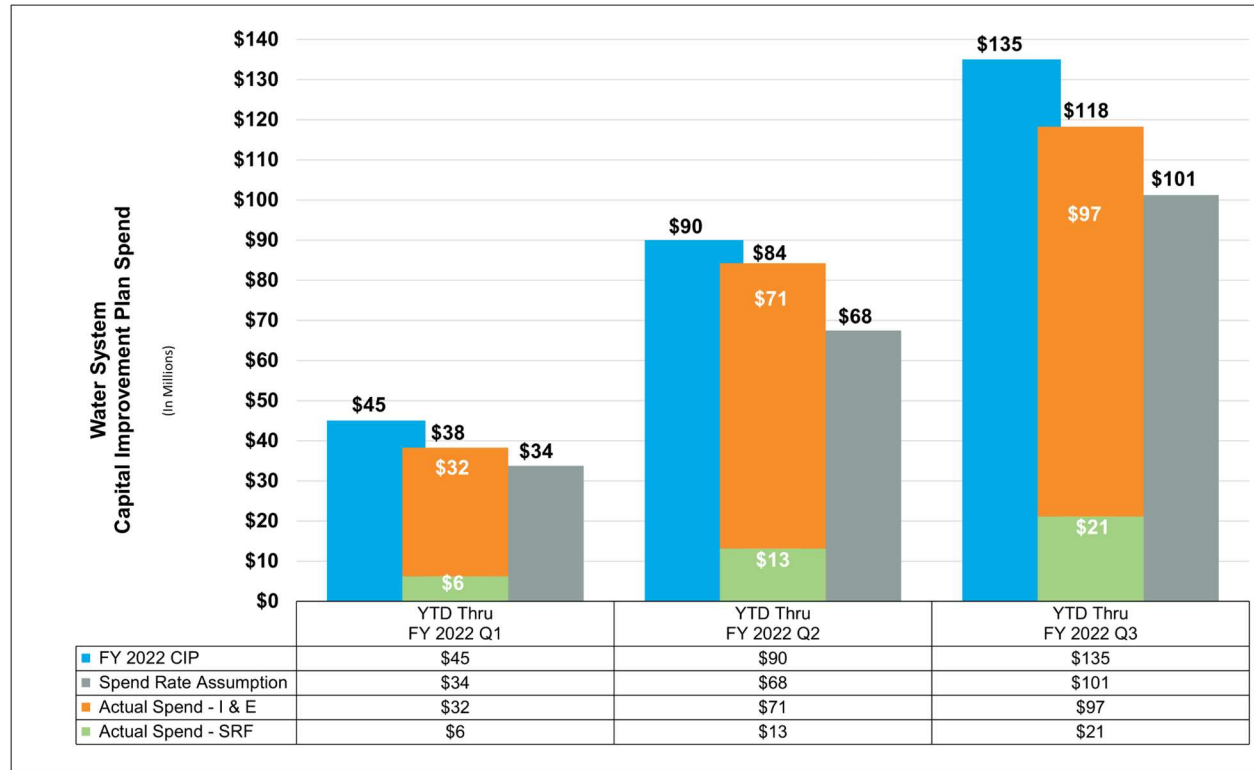
This report presents quarterly and monthly CIP spending against the prorated CIP in total and the CIP adjusted for the SRA. The prorated CIP is calculated by dividing the total fiscal year 2022 board-approved CIP plan by twelve equal months. It should be noted that for operational purposes, GLWA utilizes Primavera P6 for refined monthly projections for cash management and project management.

Beginning January 1, 2021, GLWA has intentionally depleted Bond funds and has moved to solely using I&E and State Revolving Loans to fund CIP expenditures to lower the cost of debt. It is expected that the I&E funds will be sufficient to fund the capital program through FY 2022. A bond transaction is planned for the first quarter of FY 2023.

### Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date

As of March 2022, the Water system incurred over \$118 million of construction costs to date. This is 88% of the fiscal year 2022 CIP through March and 117% of the financial plan which is labeled as the FY 2022 CIP w/SRA in the chart below.

### Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date



## Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date

As of March 2022, the Sewer system incurred nearly \$49 million of construction costs to date. This is 61% of the fiscal year 2022 CIP through March and 81% of the financial plan which is labeled as the FY 2022 CIP w/SRA in the chart below.

### Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date







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 2022 Water MBO Transfers** reflects the required transfers for FY 2022 completed through March 1, 2022. MBO transfers for water totaling \$122.3 million have been transferred to GLWA accounts.

**Table 2 – GLWA FY 2022 Sewer MBO Transfers** reflects the required transfers for FY 2022 completed through March 1, 2022. MBO transfers for sewer totaling \$158.0 million have been transferred to GLWA accounts.

**Table 3 – GLWA MBO Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 1 – GLWA FY 2022 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
<b>FY 2022</b>							
July 2021	\$ 11,994,483	\$504,000	\$921,308	\$198,050	-	-	\$13,617,841
August 2021	11,994,483	504,000	921,308	198,050	-	-	13,617,841
September 2021	11,994,483	504,000	831,488	198,050	-	-	13,528,021
October 2021	11,994,483	504,000	921,308	198,050	-	-	13,617,841
November 2021	11,994,483	504,000	861,308	198,050	-	-	13,557,841
December 2021	11,994,483	504,000	891,308	198,050	-	-	13,587,841
January 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
February 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
March 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
<b>Total FY 2022</b>	<b>\$ 107,950,347</b>	<b>\$4,536,000</b>	<b>\$8,021,952</b>	<b>\$1,782,450</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$122,290,749</b>

**Table 2 – GLWA FY 2022 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
<b>FY 2022</b>							
July 2021	\$ 15,108,317	\$902,000	\$1,223,950	\$322,392	-	-	\$17,556,659
August 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
September 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
October 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
November 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
December 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
January 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
February 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
March 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
<b>Total FY 2022</b>	<b>\$135,974,853</b>	<b>\$8,118,000</b>	<b>\$11,015,550</b>	<b>\$2,901,528</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$158,009,931</b>

**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	126,840,204	6,048,000	10,695,683	1,980,804	-	-	145,564,691
Total FY 2021	134,127,300	6,048,000	10,695,700	2,324,200	-	-	153,195,200
Total FY 2022 (9 months)	107,950,347	4,536,000	8,021,952	1,782,450	-	-	122,290,749
<b>Life to Date</b>	<b>\$794,974,659</b>	<b>\$40,802,300</b>	<b>\$71,399,127</b>	<b>\$14,368,354</b>	<b>\$2,686,900</b>	<b>\$606,000</b>	<b>\$924,837,340</b>
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	181,925,800	10,824,000	14,687,517	2,887,300	-	-	210,324,617
Total FY 2021	182,296,000	10,824,000	14,687,500	3,764,300	-	-	211,571,800
Total FY 2022 (9 months)	135,974,853	8,118,000	11,015,550	2,901,528	-	-	158,009,931
<b>Life to Date</b>	<b>\$1,159,079,845</b>	<b>\$73,090,800</b>	<b>\$97,818,159</b>	<b>\$20,362,724</b>	<b>\$8,246,100</b>	<b>\$779,600</b>	<b>\$1,359,377,228</b>

All amounts are unaudited unless otherwise noted.



## 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 2022 Water MBO Transfers** reflects the required transfers for FY 2022 completed through March 1, 2022. MBO transfers for Water totaling \$32.9 million have been transferred to accounts held by DWSD. For FY 2022, DWSD originally requested that \$6,690,600 of the lease payment be utilized to offset a portion of debt service. Beginning with the October transfers, DWSD amended budget required an additional portion of the lease payment be directed to offset debt service. A calculation correction which will be made in April 2022 will result in a revised lease payment offset of \$8,925,400 for FY 2022.

**Table 5 – DWSD FY 2022 Sewer MBO Transfers** reflects the required transfers for FY 2022 completed through March 1, 2022. MBO transfers for Sewer totaling \$69.4 million have been transferred to accounts held by DWSD. For FY 2022, DWSD has requested that \$5,529,300 of the lease payment be utilized to offset a portion of debt service.

**Table 6 – DWSD Water MBO and Lease Payment Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 7 – DWSD Sewer MBO and Lease Payment Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 4 – DWSD FY 2022 Water MBO Transfers**

	<b>WATER</b>			
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Water</u>
<b>FY 2022</b>				
July 2021	\$2,887,383	\$356,000	\$1,317,450	\$4,560,833
August 2021	2,887,383	356,000	1,317,450	4,560,833
September 2021	2,887,383	356,000	1,317,450	4,560,833
October 2021	2,369,650	356,000	479,983	3,205,633
November 2021	2,369,650	356,000	479,983	3,205,633
December 2021	2,369,650	356,000	479,983	3,205,633
January 2022	2,369,650	356,000	479,983	3,205,633
February 2022	2,369,650	356,000	479,983	3,205,633
March 2022	2,369,650	356,000	479,983	3,205,633
<b>Total FY 2022</b>	<b>\$22,880,049</b>	<b>\$3,204,000</b>	<b>\$6,832,248</b>	<b>\$32,916,297</b>

**Table 5 – DWSD FY 2022 Sewer MBO Transfers**

	<b>SEWER</b>			
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Sewer</u>
<b>FY 2022</b>				
July 2021	\$5,769,417	\$238,000	\$2,291,667	\$8,299,084
August 2021	5,769,417	238,000	2,291,667	8,299,084
September 2021	5,769,417	238,000	2,291,667	8,299,084
October 2021	4,888,083	238,000	2,291,667	7,417,750
November 2021	4,888,083	238,000	2,291,667	7,417,750
December 2021	4,888,083	238,000	2,291,667	7,417,750
January 2022	4,888,083	238,000	2,291,667	7,417,750
February 2022	4,888,083	238,000	2,291,667	7,417,750
March 2022	4,888,083	238,000	2,291,667	7,417,750
<b>Total FY 2022</b>	<b>\$46,636,749</b>	<b>\$2,142,000</b>	<b>\$20,625,003</b>	<b>\$69,403,752</b>

**Table 6 – DWSD Water MBO and Lease Payment Transfer History**

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
<b>FY 2016 *</b>				
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
<b>FY 2017</b>				
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
<b>FY 2018</b>				
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
<b>FY 2019</b>				
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
<b>FY 2020</b>				
MBO/Lease Requirement	34,662,400	4,272,000	22,500,000	61,434,400
Offset to Debt Service	-	-	(3,548,000)	(3,548,000)
Net MBO Transfer	34,662,400	4,272,000	18,952,000	57,886,400
<b>FY 2021</b>				
MBO/Lease Requirement	35,833,900	4,272,000	22,500,000	62,605,900
Offset to Debt Service	-	-	(8,278,300)	(8,278,300)
Net MBO Transfer	35,833,900	4,272,000	14,221,700	54,327,600
<b>FY 2022 (9 months)</b>				
MBO/Lease Requirement	22,880,049	3,204,000	16,875,000	42,959,049
Offset to Debt Service	-	-	(10,042,752)	(10,042,752)
Net MBO Transfer	22,880,049	3,204,000	6,832,248	32,916,297
<b>Life-to-Date</b>				
MBO/Lease Requirement	223,702,353	28,817,100	151,875,000	404,394,453
Offsets	-	-	(30,043,152)	(30,043,152)
<b>Total Water</b>	<b>223,702,353</b>	<b>28,817,100</b>	<b>121,831,848</b>	<b>374,351,301</b>

**Table 7 – DWSD Sewer MBO and Lease Payment Transfer History**

<b>SEWER</b>				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
<b>FY 2016 *</b>				
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)
<b>Total MBO Transfer</b>	<b>19,774,300</b>	<b>2,861,800</b>	<b>7,508,500</b>	<b>30,144,600</b>
<b>FY 2017</b>				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
<b>Total MBO Transfer</b>	<b>41,535,600</b>	<b>2,862,000</b>	<b>27,500,000</b>	<b>71,897,600</b>
<b>FY 2018</b>				
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)
<b>Total MBO Transfer</b>	<b>60,517,992</b>	<b>2,856,000</b>	<b>18,333,336</b>	<b>81,707,328</b>
<b>FY 2019</b>				
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)
<b>Total MBO Transfer</b>	<b>56,767,920</b>	<b>2,856,000</b>	<b>23,085,000</b>	<b>82,708,920</b>
<b>FY 2020</b>				
MBO/Lease Requirement	62,343,500	2,856,000	27,500,000	92,699,500
Offset to address shortfall	(7,100,000)	-	-	(7,100,000)
Offset to Debt Service	-	-	(5,032,700)	(5,032,700)
<b>Total MBO Transfer</b>	<b>55,243,500</b>	<b>2,856,000</b>	<b>22,467,300</b>	<b>80,566,800</b>
<b>FY 2021</b>				
MBO/Lease Requirement	69,915,700	2,856,000	27,500,000	100,271,700
Offset to Debt Service	-	-	(3,257,200)	(3,257,200)
<b>Total MBO Transfer</b>	<b>69,915,700</b>	<b>2,856,000</b>	<b>24,242,800</b>	<b>97,014,500</b>
<b>FY 2022 (9 months)</b>				
MBO/Lease Requirement	46,636,749	2,142,000	20,625,003	69,403,752
Offset to Debt Service	-	-	-	-
<b>Total MBO Transfer</b>	<b>46,636,749</b>	<b>2,142,000</b>	<b>20,625,003</b>	<b>69,403,752</b>
<b>Life-to-Date</b>				
MBO/Lease Requirement	357,491,761	19,289,800	185,625,003	562,406,564
Offsets	(7,100,000)	-	(41,863,064)	(48,963,064)
<b>Total Sewer</b>	<b>350,391,761</b>	<b>19,289,800</b>	<b>143,761,939</b>	<b>513,443,500</b>

\* 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

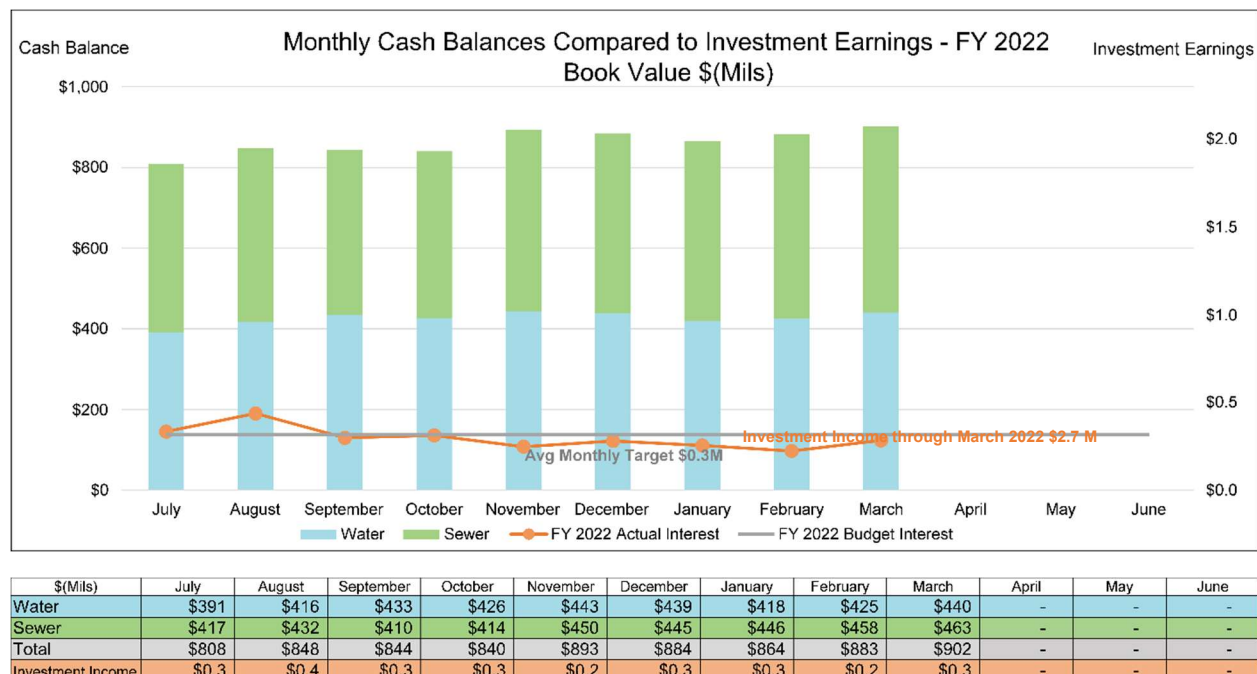
## Monthly Cash Balances Compared to Investment Income

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. For the month of March 2022, GLWA earned investment income of \$0.3 million and the cumulative FY 2022 earnings through March 2022 is \$2.7 million. Total investment income reported includes earnings from revenue requirement funds as well as construction bond funds.

GLWA continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment income while meeting the objectives of safety and liquidity.

**Chart 1 – Monthly Cash Balances Compared to Investment Income – Through March 2022**





## 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:***

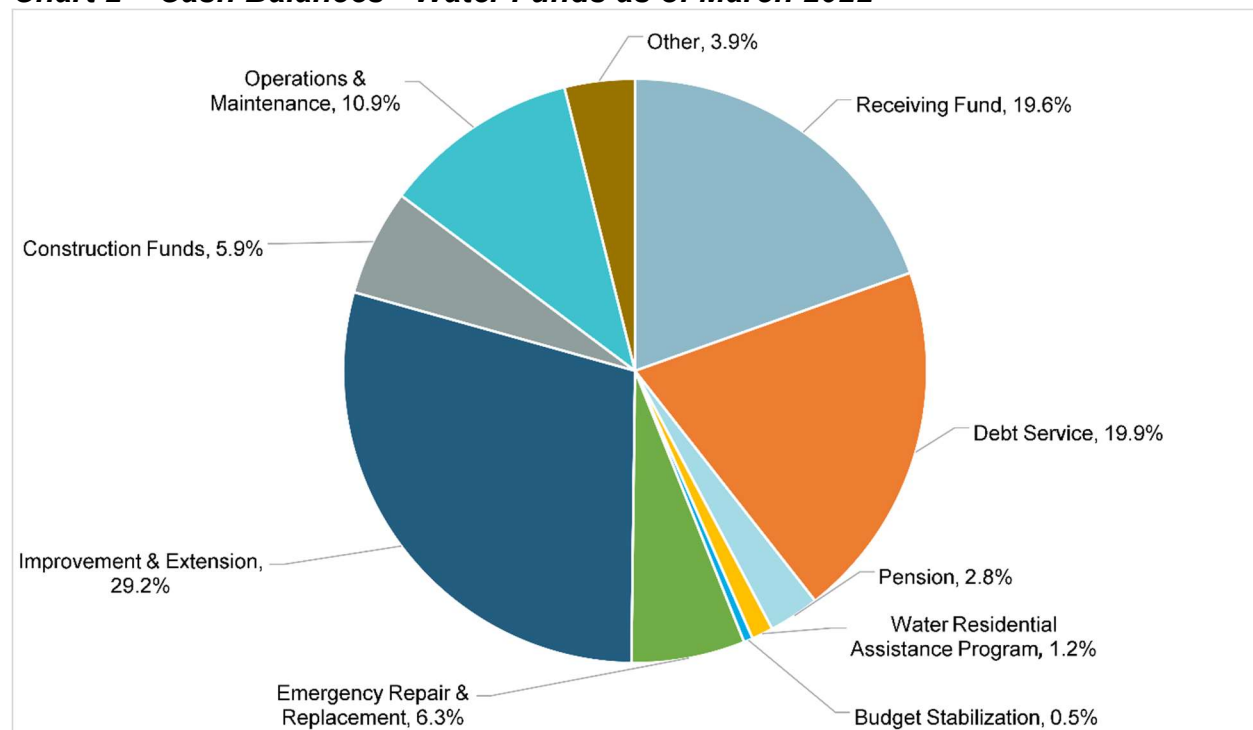
- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors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

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

**Chart 2 – Cash Balances - Water Funds as of March 2022** - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of March 31, 2022 is \$440 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.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds supplemented with SRF low-interest loan funding will be sufficient to fund the capital program through FY 2022. A bond transaction is currently planned for the first quarter of FY 2023.

**Chart 2 – Cash Balances - Water Funds as of March 2022**

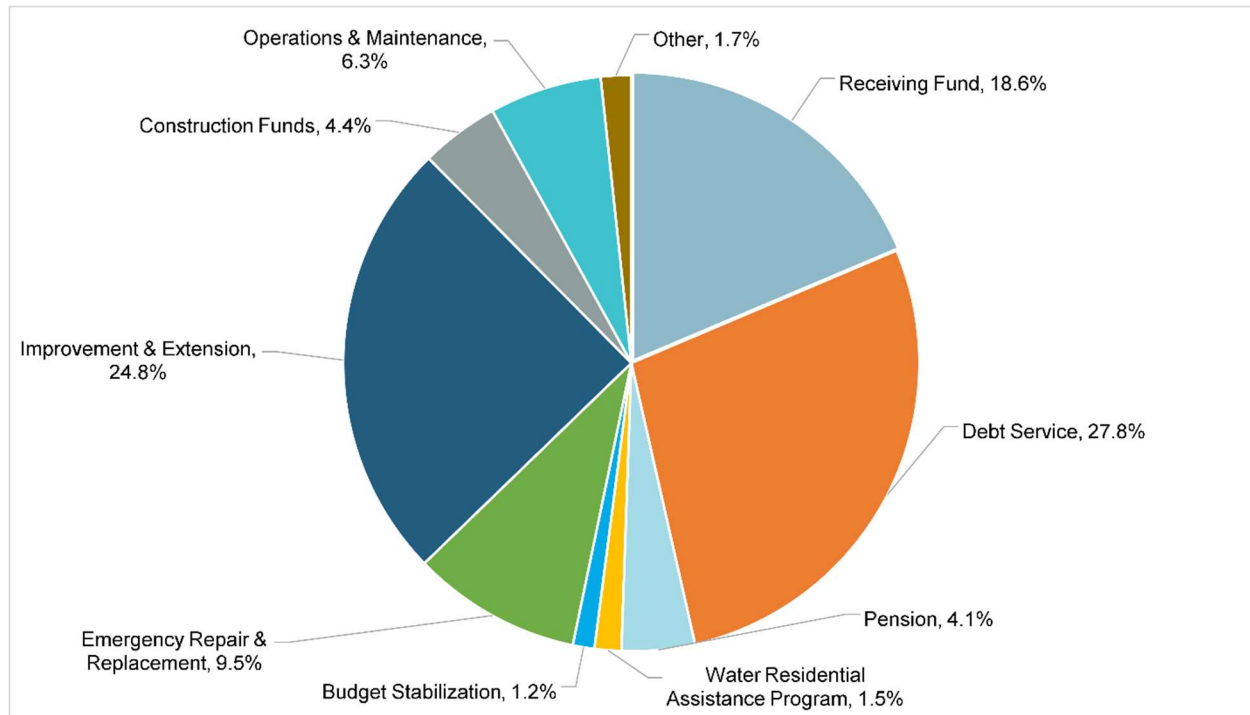


**Note:** Due to rounding totals may not equal 100%.

**Chart 3 – Cash Balances - Sewer Funds as of March 2022** - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of March 31, 2022 is \$463 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.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds supplemented with SRF low-interest loan funding will be sufficient to fund the capital program through FY 2022. A bond transaction is currently planned for the first quarter of FY 2023.

**Chart 3 – Cash Balances - Sewer Funds as of March 2022**



**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 2022 water usage and billed revenue which are provided by DWSD staff. As of March 31, 2022, the DWSD usage was at 110.02% of the budget and billed revenue was at 100.94% 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.

**Table 1 – DWSD Retail Water Billing**

RETAIL WATER CUSTOMERS								
Month (1)	FY 2022 - Original Budget		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	245,000	9,963,800	266,704	10,064,683	21,704	100,883	265,796	9,747,518
August	235,000	9,697,500	264,644	9,994,589	29,644	297,089	250,308	9,378,385
September	210,000	9,032,500	232,348	9,169,300	22,348	136,800	218,840	8,544,457
October	195,000	8,633,500	204,290	8,422,092	9,290	(211,408)	197,362	7,978,833
November	195,000	8,633,500	209,830	8,544,611	14,830	(88,889)	194,648	7,952,436
December	195,000	8,633,500	204,072	8,442,152	9,072	(191,348)	197,125	7,985,955
January	190,000	8,500,500	221,369	8,819,430	31,369	318,930	190,289	7,827,536
February	190,000	8,500,500	204,489	8,438,300	14,489	(62,200)	191,180	7,895,496
March	200,080	8,768,700	233,190	9,221,716	33,110	453,016	205,631	8,242,563
April	210,000	9,032,500					214,288	8,438,333
May	210,000	9,032,500					214,232	8,519,154
June	240,000	9,830,500					243,301	9,249,694
<b>Total</b>	<b>2,515,080</b>	<b>108,259,500</b>	<b>2,040,936</b>	<b>81,116,873</b>	<b>185,856</b>	<b>752,873</b>	<b>2,583,000</b>	<b>101,760,360</b>
<b>Subtotals ytd</b>	<b>1,855,080</b>	<b>80,364,000</b>	<b>2,040,936</b>	<b>81,116,873</b>	<b>185,856</b>	<b>752,873</b>		
<b>Achievement of Budget</b>			<b>110.02%</b>	<b>100.94%</b>				

(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
April	7,536,272	5,956,105	1,580,167	26.53%
May	7,365,204	8,109,469	(744,265)	-9.18%
June	8,917,831	7,821,791	1,096,040	14.01%
July	8,387,705	8,017,490	370,215	4.62%
August	8,588,507	7,135,456	1,453,051	20.36%
September	8,041,683	9,031,966	(990,283)	-10.96%
October	8,512,614	9,079,199	(566,585)	-6.24%
November	7,926,331	10,803,009	(2,876,678)	-26.63%
December	8,121,586	7,409,888	711,698	9.60%
January	6,919,040	7,884,889	(965,849)	-12.25%
February	10,156,126	6,426,553	3,729,573	58.03%
March	11,093,125	8,458,827	2,634,298	31.14%
<b>Rolling, 12-Month Total</b>	<b>101,566,024</b>	<b>96,134,642</b>		
<b>Rolling, 12-Month Average</b>	<b>8,463,835</b>	<b>8,011,220</b>		

## 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 2022 sewer billed revenue which are provided by DWSD staff. As of March 31, 2022, the DWSD usage was at 105.28% of the budget and billed revenue was at 100.36% 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.

**Table 3 - DWSD Retail Sewer Billings**

RETAIL SEWER CUSTOMERS								
Month (1)	FY 2022 - Original Budget		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	233,100	30,779,300	219,791	29,462,804	(13,309)	(1,316,496)	252,929	29,802,377
August	225,700	30,357,000	249,522	31,231,624	23,822	874,624	240,390	29,261,344
September	198,500	28,805,000	215,748	29,401,234	17,248	596,234	206,880	27,232,400
October	186,000	28,091,700	190,483	27,936,280	4,483	(155,420)	188,816	26,230,683
November	186,000	28,091,700	194,135	28,032,939	8,135	(58,761)	184,240	25,933,888
December	186,000	28,091,700	189,283	27,836,982	3,283	(254,718)	187,397	26,628,891
January	178,700	27,675,200	203,526	28,493,782	24,826	818,582	179,115	26,098,738
February	184,600	28,011,800	189,525	27,837,984	4,925	(173,816)	185,696	26,370,674
March	192,030	28,435,800	212,176	29,032,277	20,146	596,477	197,486	27,090,940
April	199,600	28,867,800					203,684	27,447,662
May	200,100	28,896,300					204,107	27,765,537
June	228,500	30,516,800					231,627	29,058,129
<b>Total</b>	<b>2,398,830</b>	<b>346,620,100</b>	<b>1,864,189</b>	<b>259,265,906</b>	<b>93,559</b>	<b>926,706</b>	<b>2,462,367</b>	<b>328,921,263</b>
<b>Subtotals ytd</b>	<b>1,770,630</b>	<b>258,339,200</b>	<b>1,864,189</b>	<b>259,265,906</b>		<b>926,706</b>		
<b>Achievement of Budget/Goal</b>			<b>105.28%</b>	<b>100.36%</b>				

(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
April	21,196,170	17,105,146	4,091,024	23.92%
May	21,888,687	23,639,652	(1,750,965)	-7.41%
June	32,508,249	22,558,827	9,949,422	44.10%
July	24,185,252	20,652,159	3,533,093	17.11%
August	25,036,198	22,395,220	2,640,978	11.79%
September	22,635,796	26,463,387	(3,827,591)	-14.46%
October	25,119,240	26,683,109	(1,563,869)	-5.86%
November	23,505,249	28,730,139	(5,224,890)	-18.19%
December	24,880,743	22,856,217	2,024,526	8.86%
January	23,020,491	22,057,276	963,215	4.37%
February	24,495,922	22,777,467	1,718,455	7.54%
March	29,410,086	25,002,508	4,407,578	17.63%
<b>Rolling 12-Month Total</b>	297,882,083	280,921,107		
<b>Rolling, 12-Month Average</b>	24,823,507	23,410,092		

## 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 monthly sales, total receivables, bad debt allowance and net Water and Sewer receivables as of March 31, 2022 with comparative totals from June 30, 2021 and June 30, 2020. This table does not include past due accounts that have been transferred to the City of Detroit for collection as tax liens.

The table provides a comparison of days in accounts receivable calculated as net receivables divided by daily sales and confirms that over time days in AR is declining due in large part to a consistent practice of recognizing past due amounts over 60 days as bad debt expense. To the extent this allowance is adjusted, and bad debt expense is recognized in the DWSD budget, it does not impact GLWA.

**Table 6** is a summary of the total, current and non-current Water and Sewer receivables by category as of March 31, 2022 with comparative totals from March 31, 2021. This table does not include past due accounts that have been transferred to the City of Detroit for collection as tax liens.

The Total Balance and Total Bad Debt Allowance as of March 31, 2022 are reflective of the values in both the Table 5 Summary and Table 6 breakdown.

**Table 5 – DWSD Retail Accounts Receivable Aging Report – Summary**

Summary					
Period Ending	Monthly Sales	Receivables			Days in AR (1)
		Total	Allowance	Net	
June 30, 2020	\$ 33,061,000	\$ 213,846,000	\$ (142,882,000)	\$ 70,964,000	64
June 30, 2021	\$ 36,335,000	\$ 248,055,000	\$ (200,146,000)	\$ 47,909,000	40
March 31, 2022	\$ 36,468,000	\$ 277,624,000	\$ (236,551,000)	\$ 41,073,000	34
Totals may be off due to rounding					

(1) Days in AR is calculated as net receivables divided by daily sales (monthly sales/30 days)



**Table 6 – DWSD Retail Accounts Receivable Aging Report – Water & Sewer Combined**

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	209,784	\$ 713.90	\$ 13,722,000	\$ 8,852,000	\$ 24,549,000	\$ 102,642,000	\$ 149,765,000
			9.2%	5.9%	16.4%	68.5%	100.0%
Commercial	21,050	1,322.76	7,334,000	3,458,000	4,991,000	12,061,000	27,844,000
			26.3%	12.4%	17.9%	43.3%	100.0%
Industrial	3,476	4,053.10	4,551,000	903,000	1,817,000	6,817,000	14,089,000
			32.3%	6.4%	12.9%	48.4%	100.0%
Tax Exempt	3,840	759.33	515,000	168,000	532,000	1,701,000	2,916,000
			17.6%	5.8%	18.2%	58.3%	100.0%
Government	55,774	351.99	2,337,000	447,000	3,134,000	13,714,000	19,632,000
			11.9%	2.3%	16.0%	69.9%	100.0%
Drainage	40,829	728.79	2,479,000	1,434,000	4,870,000	20,972,000	29,756,000
			8.3%	4.8%	16.4%	70.5%	100.0%
Subtotal - Active Accounts	334,753	\$ 728.90	\$ 30,939,000	\$ 15,262,000	\$ 39,892,000	\$ 157,908,000	\$ 244,002,000
			12.7%	6.3%	16.3%	64.7%	100.0%
Inactive Accounts	310,519	108.28	33,000	98,000	205,000	33,286,000	33,622,000
			0.1%	0.3%	0.6%	99.0%	100.0%
<b>Total</b>	<b>645,272</b>	<b>\$ 430.24</b>	<b>\$ 30,972,000</b>	<b>\$ 15,360,000</b>	<b>\$ 40,097,000</b>	<b>\$ 191,194,000</b>	<b>\$ 277,624,000</b>
% of Total A/R			11.2%	5.5%	14.4%	68.9%	100.0%
Water Fund	233,546	223.11	\$ 6,742,000	\$ 2,551,000	\$ 6,956,000	\$ 35,857,000	\$ 52,107,000
Sewer Fund	270,813	832.74	\$ 24,230,000	\$ 12,809,000	\$ 33,141,000	\$ 155,337,000	\$ 225,517,000
<b>Total March 31, 2022 (a)</b>	<b>645,272</b>	<b>430.24</b>	<b>\$ 30,972,000</b>	<b>\$ 15,360,000</b>	<b>\$ 40,097,000</b>	<b>\$ 191,194,000</b>	<b>\$ 277,624,000</b>
Water Fund- Allowance							\$ (44,021,000)
Sewer Fund- Allowance							\$ (192,529,000)
<b>Total Bad Debt Allowance</b>							<b>\$ (236,551,000)</b>
Comparative - March 2021 (b)	628,774	374.96	\$ 27,191,000	\$ 13,422,000	\$ 39,696,000	\$ 155,458,000	\$ 235,767,000
Difference (a) - (b)	16,498	55.28	\$ 3,781,000	\$ 1,938,000	\$ 402,000	\$ 35,736,000	\$ 41,857,000



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	84
Emergency	1
Older Contracts	2
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 2022 water billed usage and revenues. As of March 31, 2022, the billed usage was at 95.19% of the original plan and billed revenue at 98.04% of the original plan. Billings and usage from the City of Flint are included as they were assumed in the FY 2022 Budget.

This table also reflects the positive impact of approved FY 2022 budget amendments and known billing adjustments on the original plan.

**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. Current year collections are trending slightly above prior year for the twelve-month period ending March 31, 2022.

**Table 1 – FY 2022 Wholesale Water Billings Report**

WHOLESALE WATER CHARGES								
Month (1)	FY 2022 Charges (3)		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	1,677,100	33,302,700	1,342,686	29,642,785	(334,414)	(3,659,915)	1,862,791	33,583,619
August	1,509,200	31,598,500	1,417,142	30,604,230	(92,058)	(994,270)	1,622,324	31,230,027
September	1,316,400	29,141,000	1,298,750	29,065,588	(17,650)	(75,412)	1,313,440	27,836,560
October	1,034,000	26,280,800	1,006,217	26,123,483	(27,783)	(157,317)	1,070,660	25,454,840
November	896,800	25,001,500	905,525	25,117,181	8,725	115,681	956,542	24,390,303
December	972,100	25,612,000	958,879	25,542,432	(13,221)	(69,568)	981,770	24,600,202
January	972,000	25,650,800	979,803	25,791,405	7,803	140,805	969,483	25,235,130
February	884,400	24,852,700	875,553	24,800,493	(8,847)	(52,207)	920,467	24,794,259
March	979,500	25,678,200	963,825	25,592,186	(15,675)	(86,014)	1,001,073	25,450,418
April	914,000	25,117,700					954,308	25,140,003
May	1,059,200	26,721,900					1,181,186	27,569,969
June	1,374,300	30,029,900					1,424,230	30,066,884
<b>Total</b>	<b>13,589,000</b>	<b>328,987,500</b>	<b>9,748,380</b>	<b>242,279,782</b>	<b>(493,120)</b>	<b>(4,838,218)</b>	<b>14,258,274</b>	<b>325,352,214</b>
Subtotals ytd	10,241,500	247,118,000	9,748,380	242,279,782	(493,120)	(4,838,218)		
Achievement of Original Plan			95.19%	98.04%				
1st Quarter Budget Amendments	(220,000)	(2,400,000)			220,000	2,400,000		
Billing Adjustments			65,470	544,190	65,470	544,190		
Revised Subtotal	10,021,500	244,718,000	9,813,850	242,823,972	(207,650)	(1,894,028)		
Achievement of Amended Plan			97.93%	99.23%				

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

(2) Water Revenues differ from Table 1A because amounts are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract in Table 1A

(3) Charges are based on the approved FY 2022 water supply system charge schedule.

**Table 2 - Wholesale Water Collections**

Water				
Month	Current Year	Prior Year	Variance	Ratio
April	23,545,123	17,856,644	5,688,479	31.86%
May	24,878,479	24,811,582	66,897	0.27%
June	25,403,968	27,098,783	(1,694,815)	-6.25%
July	23,709,847	25,080,575	(1,370,728)	-5.47%
August	31,668,492	26,241,018	5,427,474	20.68%
September	23,849,618	26,078,015	(2,228,397)	-8.55%
October	29,212,277	29,292,690	(80,413)	-0.27%
November	25,265,770	32,218,822	(6,953,052)	-21.58%
December	25,302,369	29,609,061	(4,306,692)	-14.55%
January	31,280,599	20,716,948	10,563,651	50.99%
February	24,919,847	25,694,176	(774,329)	-3.01%
March	22,123,572	20,854,506	1,269,066	6.09%
<b>Rolling 12-Month Total</b>	<b>311,159,961</b>	<b>305,552,820</b>		
<b>Rolling, 12-Month Average</b>	<b>25,929,997</b>	<b>25,462,735</b>		



## 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	7
Total	<u>18</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 2022 sewer billed revenue. As of March 31, 2022 the billed revenue is at 100.00% of the original plan.

**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 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. Current year collections are trending above prior year for the twelve-month period ending March 31, 2022.

**Table 3 – FY 2022 Wholesale Sewer Billings Report**

WHOLESALE SEWER CHARGES								
Month (1)	FY 2022 Charges		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
August	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
September	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
October	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
November	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
December	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
January	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
February	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
March	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
April	N/A	22,615,000	N/A		N/A		N/A	22,633,025
May	N/A	22,615,000	N/A		N/A		N/A	22,633,025
June	N/A	22,615,000	N/A		N/A		N/A	22,633,025
<b>Total</b>		271,380,000		203,535,000		-		269,737,248
Subtotals ytd		203,535,000		203,535,000		-		
Achievement of Budget				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
April	28,128,933	10,024,575	18,104,358	180.60%
May	15,972,800	21,189,047	(5,216,247)	-24.62%
June	28,523,650	28,598,467	(74,817)	-0.26%
July	21,842,125	22,297,737	(455,612)	-2.04%
August	22,191,725	25,354,280	(3,162,555)	-12.47%
September	26,706,558	19,593,613	7,112,945	36.30%
October	22,176,058	16,853,983	5,322,075	31.58%
November	16,534,758	18,966,208	(2,431,450)	-12.82%
December	21,765,958	25,232,649	(3,466,691)	-13.74%
January	26,436,258	25,968,849	467,409	1.80%
February	23,937,258	16,872,900	7,064,358	41.87%
March	24,713,158	22,368,124	2,345,034	10.48%
<b>Rolling 12-Month Total</b>	278,929,239	253,320,432		
<b>Rolling, 12-Month Average</b>	23,244,103	21,110,036		

## 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 March 31, 2022, Highland Park had a delinquent balance of \$53.5 million, including \$41.1 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$10.6 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 2022 through March 31, 2022. 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
April 30, 2021 Balance	9,525,014	36,072,775	1,761,645	47,359,434
May 2021 Billing	94,839	478,900	4,065	577,804
May 2021 Payments	-	-	-	-
May 31, 2021 Balance	9,619,853	36,551,675	1,765,710	47,937,238
June 2021 Billing	99,337	478,900	4,053	582,290
June 2021 Payments	-	-	-	-
June 30, 2021 Balance	9,719,190	37,030,575	1,769,763	48,519,528
July 2021 Billing	102,730	478,900	3,972	585,602
July 2021 Payments	-	-	-	-
July 31, 2021 Balance	9,821,920	37,509,475	1,773,735	49,105,130
August 2021 Billing	109,067	446,400	4,067	559,534
August 2021 Payments	-	-	-	-
August 31, 2021 Balance	9,930,987	37,955,875	1,777,802	49,664,664
September 2021 Billing	110,440	446,400	4,062	560,902
September 2021 Payments	-	-	-	-
September 30, 2021 Balance	10,041,427	38,402,275	1,781,864	50,225,566
October 2021 Billing	109,853	446,400	4,053	560,306
October 2021 Payments	-	-	-	-
October 31, 2021 Balance	10,151,280	38,848,675	1,785,917	50,785,872
November 2021 Billing	103,417	446,400	4,069	553,886
November 2021 Payments	-	-	-	-
November 30, 2021 Balance	10,254,697	39,295,075	1,789,986	51,339,758
December 2021 Billing	100,908	446,400	4,075	551,383
December 2021 Payments	-	-	-	-
December 31, 2021 Balance	10,355,605	39,741,475	1,794,061	51,891,141
January 2022 Billing	96,633	446,400	4,002	547,035
January 2022 Payments	-	-	-	-
January 31, 2022 Balance	10,452,238	40,187,875	1,798,063	52,438,176
February 2022 Billing	97,203	446,400	4,002	547,605
February 2022 Payments	-	-	-	-
February 28, 2022 Balance	10,549,441	40,634,275	1,802,065	52,985,781
March 2022 Billing	96,540	446,400	4,000	546,940
March 2022 Payments	-	-	-	-
March 31, 2022 Balance	10,645,981	41,080,675	1,806,065	53,532,721

## 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 March 31, 2022.

**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. One member partner contract dispute accounts for \$4.77 million of the current water past due balance. The remaining water past due accounts were paid in early March.

Pollutant surcharge past dues generally consist of smaller account holders that GLWA staff continue to communicate with. The pollutant surcharge balance over 105 days is related to a bankruptcy that is pending further court action.

**Table 6 - Wholesale Accounts Receivable Aging Report Summary**

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 53,499,060.58	\$ 37,747,309.35	\$ 1,613,584.71	\$ 826,226.30	\$ 13,311,940.22
Sewer	\$ 53,868,959.56	\$ 13,234,684.40	\$ 446,400.00	\$ 446,400.00	\$ 39,741,475.16
IWC	\$ 2,303,228.87	\$ 497,513.46	\$ 11,654.22	\$ 4,074.54	\$ 1,789,986.65
Pollutant Surcharge	\$ 467,761.76	\$ 416,137.21	\$ 21,134.13	\$ 673.57	\$ 29,816.85
Total	\$ 110,139,010.77	\$ 51,895,644.42	\$ 2,092,773.06	\$ 1,277,374.41	\$ 54,873,218.88
	100.00%	47.12%	1.90%	1.16%	49.82%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 42,853,079.98	\$ 37,553,566.24	\$ 1,516,951.79	\$ 725,318.49	\$ 3,057,243.46
Sewer	\$ 12,788,284.40	\$ 12,788,284.40	\$ -	\$ -	\$ -
IWC	\$ 497,163.54	\$ 489,511.29	\$ 7,652.25	\$ -	\$ -
Pollutant Surcharge	\$ 467,761.76	\$ 416,137.21	\$ 21,134.13	\$ 673.57	\$ 29,816.85
Total	\$ 56,606,289.68	\$ 51,247,499.14	\$ 1,545,738.17	\$ 725,992.06	\$ 3,087,060.31
	100.00%	90.53%	2.73%	1.28%	5.45%

**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. Fiscal year 2022 reflects nine months of activity to date.

Water fund receipts exceeded required disbursements by 8% through March 31, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 13% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 9% through March 31, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 6% since July 1, 2017.

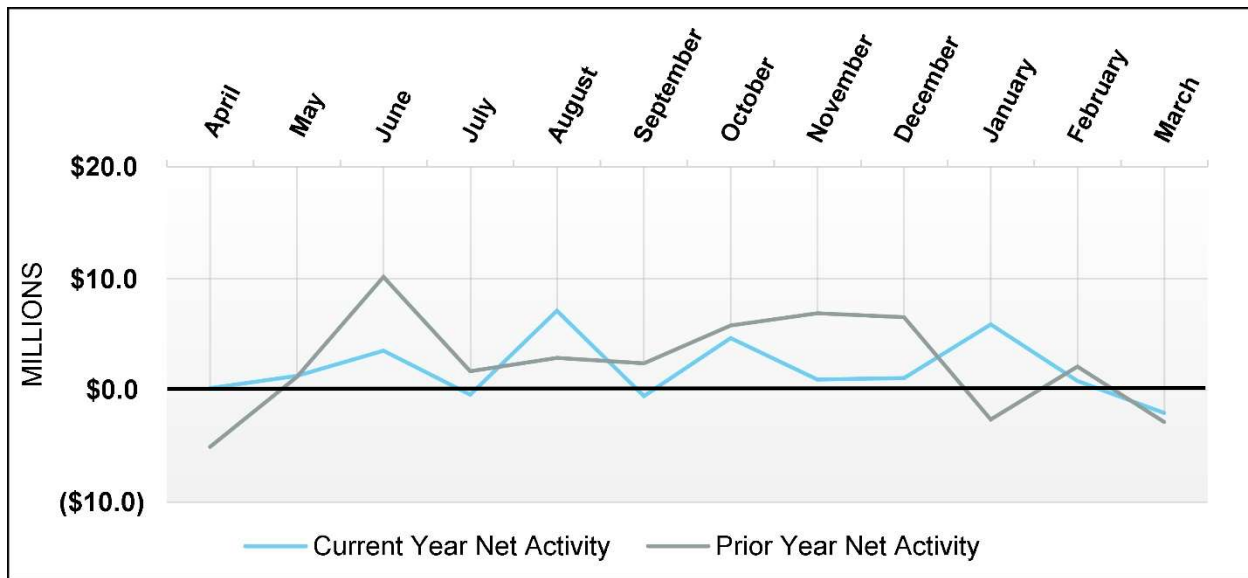
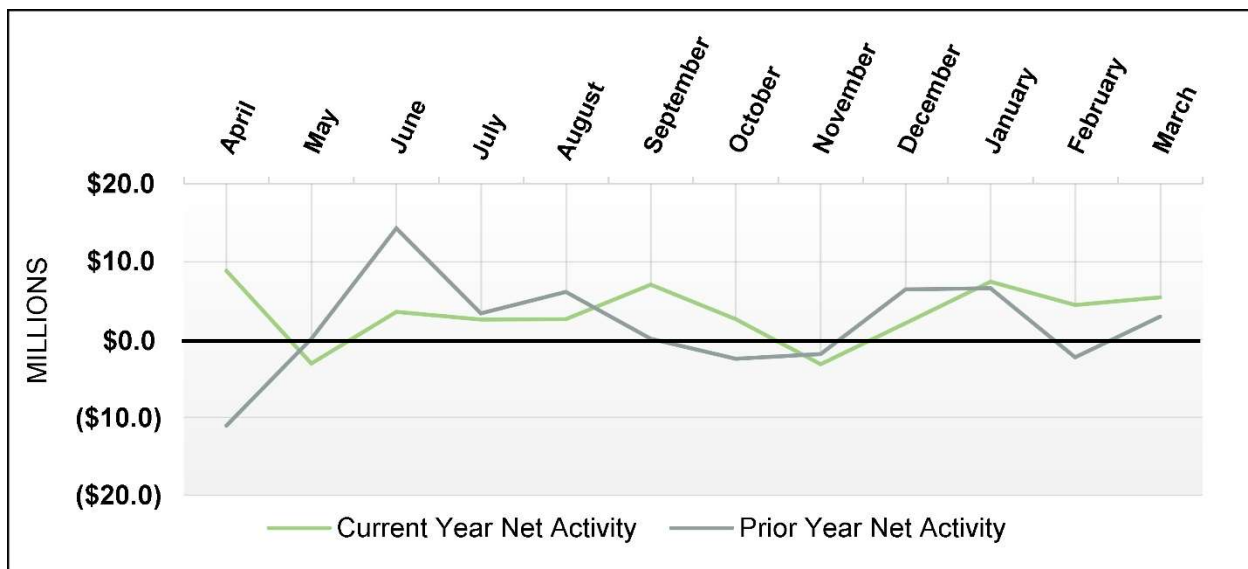
**Chart 1 – GLWA 12-Month Net Receipts – Water** outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

**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.



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

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Mar 31
<b>Water</b>					
1 Receipts	\$ 338,452,001	\$ 336,594,234	\$ 332,606,196	\$ 336,642,021	\$ 255,992,111
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	338,452,001	336,594,234	332,606,196	336,642,021	255,992,111
4 Disbursements	(297,064,810)	(289,230,481)	(296,190,425)	(308,713,407)	(236,850,164)
5 Receipts Net of Required	41,387,191	47,363,753	36,415,771	27,928,614	19,141,947
6 I&E Transfer	(25,739,700)	(47,695,000)	(25,719,751)	(31,991,687)	(24,542,262)
7 Net Receipts	\$ 15,647,491	\$ (331,247)	\$ 10,696,020	\$ (4,063,073)	\$ (5,400,315)
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	114%	116%	112%	109%	108%
<b>Sewer</b>					
9 Receipts	\$ 476,269,761	\$ 467,743,744	\$ 490,461,356	\$ 472,871,853	\$ 360,459,193
10 MOU Adjustments	-	-	-	-	-
11 Adjusted Receipts	476,269,761	467,743,744	490,461,356	472,871,853	360,459,193
12 Disbursements	(458,903,335)	(453,406,636)	(445,604,952)	(436,600,883)	(329,499,399)
13 Receipts Net of Required	17,366,426	14,337,108	44,856,404	36,270,970	30,959,794
14 I&E Transfer	(22,698,100)	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)
15 DWSD Shortfall Advance	(24,113,034)	-	-	-	-
16 Shortfall Repayment (principal)	-	9,367,355	17,542,669	18,206,431	6,197,459
17 Net Receipts	\$ (29,444,708)	\$ 1,156,763	\$ 43,302,873	\$ 13,972,674	\$ (494,535)
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	104%	103%	110%	108%	109%
<b>Combined</b>					
19 Receipts	\$ 814,721,762	\$ 804,337,978	\$ 823,067,552	\$ 809,513,874	\$ 616,451,304
20 MOU Adjustments	-	-	-	-	-
21 Adjusted Receipts	814,721,762	804,337,978	823,067,552	809,513,874	616,451,304
22 Disbursements	(755,968,145)	(742,637,117)	(741,795,377)	(745,314,290)	(566,349,563)
23 Receipts Net of Required	58,753,617	61,700,861	81,272,175	64,199,584	50,101,741
24 I&E Transfer	(48,437,800)	(70,242,700)	(44,815,951)	(72,496,414)	(62,194,050)
25 Shortfall Advance	(24,113,034)	-	-	-	-
26 Shortfall Repayment	-	9,367,355	17,542,669	18,206,431	6,197,459
27 Net Receipts	\$ (13,797,217)	\$ 825,516	\$ 53,998,893	\$ 9,909,601	\$ (5,894,850)
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	108%	108%	111%	109%	109%

**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. Fiscal year 2022 reflects nine months of activity to date.

Water fund receipts exceeded required disbursements by 14% through March 31, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 2% through March 31, 2022 consistent with the four-year historical average ratio of required receipts falling short of disbursements by 2% since July 1, 2017.

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

**Table 4 – 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.



**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.

**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.

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

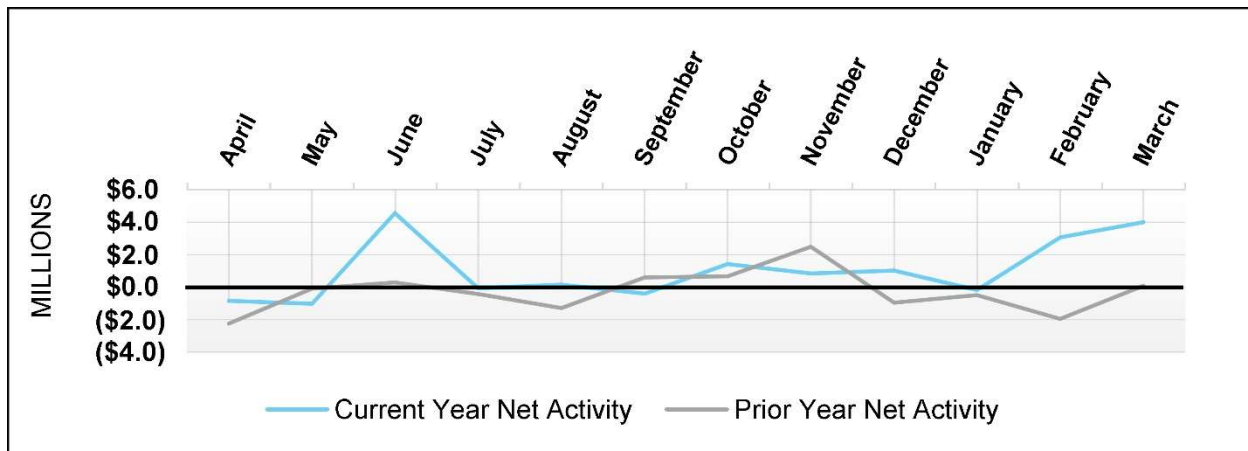
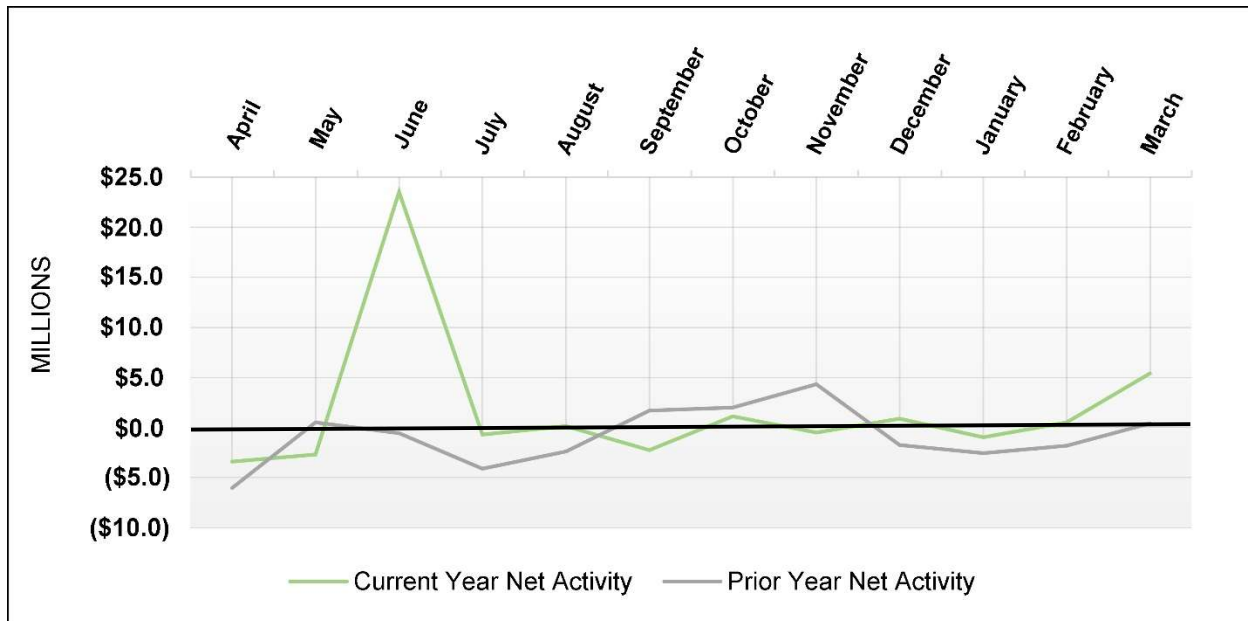
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Mar 31
<b>Water</b>					
1 Receipts	\$ 101,233,147	\$ 99,868,219	\$ 96,885,723	\$ 102,067,423	\$ 77,746,867
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	101,233,147	99,868,219	96,885,723	102,067,423	77,746,867
4 Disbursements	(93,049,457)	(97,694,600)	(97,823,097)	(100,707,200)	(67,911,294)
5 Receipts Net of Required	8,183,690	2,173,619	(937,374)	1,360,223	9,835,573
6 I&E Transfer	-	(8,407,080)	-	-	-
7 Net Receipts	\$ 8,183,690	\$ (6,233,461)	\$ (937,374)	\$ 1,360,223	\$ 9,835,573
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	109%	102%	99%	101%	114%
<b>Sewer</b>					
9 Receipts	\$ 242,104,791	\$ 265,339,797	\$ 264,689,559	\$ 308,210,767	\$ 222,289,276
10 MOU Adjustments	-	6,527,200	-	-	-
11 Adjusted Receipts	242,104,791	271,866,997	264,689,559	308,210,767	222,289,276
12 Disbursements	(266,217,825)	(271,018,306)	(275,507,374)	(295,100,771)	(218,751,860)
13 Receipts Net of Required	(24,113,034)	848,691	(10,817,815)	13,109,996	3,537,416
14 I&E Transfer	-	-	-	-	-
15 Shortfall Advance from GLWA	24,113,034	-	-	-	-
16 Net Receipts	\$ -	\$ 848,691	\$ (10,817,815)	\$ 13,109,996	\$ 3,537,416
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	91%	100%	96%	104%	102%
<b>Combined</b>					
18 Receipts	\$ 343,337,938	\$ 365,208,016	\$ 361,575,282	\$ 410,278,190	\$ 300,036,143
19 MOU Adjustments	-	6,527,200	-	-	-
20 Adjusted Receipts	343,337,938	371,735,216	361,575,282	410,278,190	300,036,143
21 Disbursements	(359,267,282)	(368,712,906)	(373,330,471)	(395,807,971)	(286,663,154)
22 Receipts Net of Required	(15,929,344)	3,022,310	(11,755,189)	14,470,219	13,372,989
23 I&E Transfer	-	(8,407,080)	-	-	-
24 Shortfall Advance from GLWA	24,113,034	-	-	-	-
25 Net Receipts	\$ 8,183,690	\$ (5,384,770)	\$ (11,755,189)	\$ 14,470,219	\$ 13,372,989
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	96%	101%	97%	104%	105%

**Table 3 – FY 2018 DWSD Loan Receivable – Sewer**

Date	Transaction	Amount	Balance
06-30-19	Record Loan Receivable		24,113,034
07-15-19	Payment for July 2019	638,978	23,474,056
08-08-19	Payment for August 2019	640,686	22,833,370
09-06-19	Payment for September 2019	642,400	22,190,970
10-02-19	Payment for October 2019	644,118	21,546,852
11-04-19	Payment for November 2019	645,840	20,901,012
12-03-19	Payment for December 2019	647,567	20,253,445
01-06-20	Payment for January 2020	649,299	19,604,146
02-04-20	Payment for February 2020	651,035	18,953,111
03-03-20	Payment for March 2020	652,776	18,300,335
04-15-20	Payment for April 2020	654,522	17,645,813
05-06-20	Payment for May 2020	656,272	16,989,541
06-02-20	Payment for June 2020	658,027	16,331,514
07-07-20	Payment for July 2020	659,787	15,671,727
08-04-20	Payment for August 2020	661,551	15,010,176
09-02-20	Payment for September 2020	663,320	14,346,855
10-05-20	Payment for October 2020	665,094	13,681,761
11-03-20	Payment for November 2020	666,873	13,014,888
12-03-20	Payment for December 2020	668,656	12,346,232
01-05-21	Payment for January 2021	670,444	11,675,788
02-02-21	Payment for February 2021	672,237	11,003,551
03-03-21	Payment for March 2021	674,035	10,329,517
04-05-21	Payment for April 2021	675,837	9,653,679
05-04-21	Payment for May 2021	677,644	8,976,035
06-03-21	Payment for June 2021	679,457	8,296,578
07-02-21	Payment for July 2021	681,274	7,615,305
08-03-21	Payment for August 2021	683,095	6,932,209
09-03-21	Payment for September 2021	684,922	6,247,287
10-05-21	Payment for October 2021	686,754	5,560,534
11-03-21	Payment for November 2021	688,590	4,871,944
12-06-21	Payment for December 2021	690,432	4,181,512
01-05-22	Payment for January 2022	692,278	3,489,234
02-04-22	Payment for February 2022	694,129	2,795,105
03-03-22	Payment for March 2022	695,985	2,099,119
		<b>22,013,915</b>	<b>2,099,119</b>

**Table 4 – FY 2018 DWSD Loan Receivable Payments – Sewer**

Date	Transaction	Principal	Interest	Total Paid
07-15-19	Payment for July 2019	638,978	64,482	703,460
08-08-19	Payment for August 2019	640,686	62,774	703,460
09-06-19	Payment for September 2019	642,400	61,060	703,460
10-02-19	Payment for October 2019	644,118	59,342	703,460
11-04-19	Payment for November 2019	645,840	57,620	703,460
12-03-19	Payment for December 2019	647,567	55,893	703,460
01-06-20	Payment for January 2020	649,299	54,161	703,460
02-04-20	Payment for February 2020	651,035	52,425	703,460
03-03-20	Payment for March 2020	652,776	50,684	703,460
04-15-20	Payment for April 2020	654,522	48,938	703,460
05-06-20	Payment for May 2020	656,272	47,188	703,460
06-02-20	Payment for June 2020	658,027	45,433	703,460
07-07-20	Payment for July 2020	659,787	43,673	703,460
08-04-20	Payment for August 2020	661,551	41,909	703,460
09-02-20	Payment for September 2020	663,320	40,140	703,460
10-05-20	Payment for October 2020	665,094	38,366	703,460
11-03-20	Payment for November 2020	666,873	36,587	703,460
12-03-20	Payment for December 2020	668,656	34,804	703,460
01-05-21	Payment for January 2021	670,444	33,016	703,460
02-02-21	Payment for February 2021	672,237	31,223	703,460
03-03-21	Payment for March 2021	674,035	29,425	703,460
04-05-21	Payment for April 2021	675,837	27,623	703,460
05-04-21	Payment for May 2021	677,644	25,816	703,460
06-03-21	Payment for June 2021	679,457	24,003	703,460
07-02-21	Payment for July 2021	681,274	22,186	703,460
08-03-21	Payment for August 2021	683,095	20,365	703,460
09-03-21	Payment for September 2021	684,922	18,538	703,460
10-05-21	Payment for October 2021	686,754	16,706	703,460
11-03-21	Payment for November 2021	688,590	14,870	703,460
12-06-21	Payment for December 2021	690,432	13,028	703,460
01-05-22	Payment for January 2022	692,278	11,182	703,460
02-04-22	Payment for February 2022	694,129	9,331	703,460
03-03-22	Payment for March 2022	695,985	7,475	703,460
		<b>22,013,915</b>	<b>1,200,266</b>	<b>23,214,180</b>

**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 5 – Combined Net Cash Flows from Trust Receipts & Disbursements** provides a summary of cash receipt collections and required MBO transfers by fiscal year. Fiscal year 2022 reflects nine months of activity to date.

Water fund net receipts exceeded required disbursements by 10% through March 31, 2022 consistent with the four-year historical average ratio of required receipts exceeding disbursements by 10% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 6% through March 31, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2017.

**Table 5 – Combined Net Cash Flows from Trust Receipts & Disbursements**

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Mar 31
<b>Water</b>					
1 Receipts	\$ 439,685,148	\$ 436,462,453	\$ 429,491,919	\$ 438,709,444	\$ 333,738,978
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	439,685,148	436,462,453	429,491,919	438,709,444	333,738,978
4 Disbursements	(390,114,267)	(386,925,081)	(394,013,522)	(409,420,607)	(304,761,458)
5 Receipts Net of Required	49,570,881	49,537,372	35,478,397	29,288,837	28,977,520
6 I&E Transfer	(25,739,700)	(56,102,080)	(25,719,751)	(31,991,687)	(24,542,262)
7 Net Receipts	\$ 23,831,181	\$ (6,564,708)	\$ 9,758,646	\$ (2,702,850)	\$ 4,435,258
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	113%	113%	109%	107%	110%
<b>Sewer</b>					
9 Receipts	\$ 718,374,552	\$ 733,083,541	\$ 755,150,915	\$ 781,082,620	\$ 582,748,469
10 MOU Adjustments	-	6,527,200	-	-	-
11 Adjusted Receipts	718,374,552	739,610,741	755,150,915	781,082,620	582,748,469
12 Disbursements	(725,121,160)	(724,424,942)	(721,112,326)	(731,701,654)	(548,251,259)
13 Receipts Net of Required	(6,746,608)	15,185,799	34,038,589	49,380,966	34,497,210
14 I&E Transfer	(22,698,100)	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)
15 Shortfall Advance	-	-	-	-	-
16 Shortfall Repayment (principal)	-	9,367,355	17,542,669	18,206,431	6,197,459
17 Net Receipts	\$ (29,444,708)	\$ (7,361,901)	\$ 32,485,058	\$ 27,082,670	\$ 3,042,881
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	99%	102%	105%	107%	106%
<b>Combined</b>					
19 Receipts	\$1,158,059,700	\$1,169,545,994	\$1,184,642,834	\$1,219,792,064	\$ 916,487,447
20 MOU Adjustments	-	6,527,200	-	-	-
21 Adjusted Receipts	1,158,059,700	1,176,073,194	1,184,642,834	1,219,792,064	916,487,447
22 Disbursements	(1,115,235,427)	(1,111,350,023)	(1,115,125,848)	(1,141,122,261)	(853,012,717)
23 Receipts Net of Required	42,824,273	64,723,171	69,516,986	78,669,803	63,474,730
24 I&E Transfer	(48,437,800)	(78,649,780)	(44,815,951)	(72,496,414)	(62,194,050)
25 Shortfall Advance	-	-	-	-	-
26 Shortfall Repayment	-	9,367,355	17,542,669	18,206,431	6,197,459
27 Net Receipts	\$ (5,613,527)	\$ (4,559,254)	\$ 42,243,704	\$ 24,379,820	\$ 7,478,139
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	104%	106%	106%	107%	107%

## APPENDIX

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$188,883.33	\$188,883.33	\$0.00	\$0.00	\$0.00
ALMONT VILLAGE	\$19,541.53	\$19,541.53	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$65,863.47	\$65,863.47	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$26,148.55	\$26,148.55	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$60,259.41	\$60,259.41	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$290,819.89	\$290,819.89	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$22,352.98	\$22,352.98	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$24,036.43	\$24,036.43	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$827,433.04	\$827,433.04	\$0.00	\$0.00	\$0.00
CENTER LINE	\$79,874.81	\$79,874.81	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$349,228.08	\$349,228.08	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$599,503.54	\$599,503.54	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$554,539.94	\$554,539.94	\$0.00	\$0.00	\$0.00
DEARBORN	\$6,317,986.06	\$1,543,782.92	\$991,641.19	\$725,318.49	\$3,057,243.46
DEARBORN HEIGHTS	\$316,562.67	\$316,562.67	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$136,738.95	\$136,738.95	\$0.00	\$0.00	\$0.00
ECORSE	\$116,009.60	\$116,009.60	\$0.00	\$0.00	\$0.00
FARMINGTON	\$81,741.64	\$81,741.64	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$1,415,214.96	\$1,415,214.96	\$0.00	\$0.00	\$0.00
FERNDAL	\$183,987.47	\$183,987.47	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$104,504.86	\$104,504.86	\$0.00	\$0.00	\$0.00
FLINT	\$261,138.07	\$261,138.07	\$0.00	\$0.00	\$0.00
FRASER	\$100,680.50	\$100,680.50	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GARDEN CITY	\$141,292.35	\$141,292.35	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$27,687.35	\$27,687.35	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$90,708.60	\$90,708.60	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$102,008.91	\$102,008.91	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$45,942.71	\$45,942.71	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$98,618.28	\$98,618.28	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$66,821.29	\$66,821.29	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$73,543.41	\$73,543.41	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$133,759.88	\$133,759.88	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$60,096.05	\$60,096.05	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$10,645,980.60	\$193,743.11	\$96,632.92	\$100,907.81	\$10,254,696.76
HURON TOWNSHIP	\$253,382.65	\$253,382.65	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$116,793.34	\$116,793.34	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$963.60	\$963.60	\$0.00	\$0.00	\$0.00
INKSTER	\$125,283.07	\$125,283.07	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$51,159.74	\$51,159.74	\$0.00	\$0.00	\$0.00
LAPEER	\$129,913.96	\$129,913.96	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$50,997.12	\$50,770.19	\$226.93	\$0.00	\$0.00
LINCOLN PARK	\$204,504.78	\$204,504.78	\$0.00	\$0.00	\$0.00
LIVONIA	\$894,381.84	\$894,381.84	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$1,987,563.18	\$1,987,563.18	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$ (1,863.65)	\$0.00	\$ (1,863.65)	\$0.00	\$0.00



## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MAYFIELD TOWNSHIP	\$3,299.23	\$3,299.23	\$0.00	\$0.00	\$0.00
MELVINDALE	\$114,310.79	\$114,310.79	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$31,357.15	\$31,357.15	\$0.00	\$0.00	\$0.00
NOCWA	\$3,545,529.95	\$3,545,529.95	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$67,513.69	\$67,513.69	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$422,202.12	\$422,202.12	\$0.00	\$0.00	\$0.00
NOVI	\$1,457,631.07	\$1,457,631.07	\$0.00	\$0.00	\$0.00
OAK PARK	\$117,061.31	\$117,061.31	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$11,057.72	\$11,057.72	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$86,314.62	\$86,314.62	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$696,196.98	\$696,196.98	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$262,970.79	\$262,970.79	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$120,237.93	\$120,237.93	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$72,455.76	\$72,455.76	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$23,297.27	\$23,297.27	\$0.00	\$0.00	\$0.00
ROMEO	\$43,008.45	\$43,008.45	\$0.00	\$0.00	\$0.00
ROMULUS	\$334,133.76	\$334,133.76	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$219,959.25	\$219,959.25	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$33,580.13	\$33,580.13	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$2,219,942.47	\$2,219,942.47	\$0.00	\$0.00	\$0.00
SOCWA	\$3,767,542.42	\$3,767,542.42	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$9,545.39	\$9,545.39	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$192,530.63	\$192,530.63	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR CNTY-GREENWOOD ENE	\$69,437.80	\$69,437.80	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$263,833.45	\$263,833.45	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$2,546,677.46	\$2,546,677.46	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$64,779.13	\$64,779.13	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$19,032.86	\$19,032.86	\$0.00	\$0.00	\$0.00
TAYLOR	\$391,750.57	\$391,750.57	\$0.00	\$0.00	\$0.00
TRENTON	\$137,706.23	\$137,706.23	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,036,582.69	\$1,036,582.69	\$0.00	\$0.00	\$0.00
UTICA	\$46,150.12	\$46,150.12	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$570,841.87	\$570,841.87	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$134,806.70	\$134,806.70	\$0.00	\$0.00	\$0.00
WARREN	\$862,905.68	\$862,905.68	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$182,457.06	\$182,457.06	\$0.00	\$0.00	\$0.00
WAYNE	\$269,560.22	\$269,560.22	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,729,872.73	\$1,729,872.73	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,585,908.69	\$1,058,961.37	\$526,947.32	\$0.00	\$0.00
WIXOM	\$392,255.27	\$392,255.27	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$141,424.39	\$141,424.39	\$0.00	\$0.00	\$0.00
YCUA	\$1,758,809.94	\$1,758,809.94	\$0.00	\$0.00	\$0.00
<b>TOTAL WATER ACCOUNTS</b>	<b>\$53,499,060.58</b>	<b>\$37,747,309.35</b>	<b>\$1,613,584.71</b>	<b>\$826,226.30</b>	<b>\$13,311,940.22</b>

## GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 03/31/22

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	\$85,799.50	\$85,799.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$41,080,675.16	\$446,400.00	\$446,400.00	\$446,400.00	\$39,741,475.16
MELVINDALE	\$129,500.00	\$129,500.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMID	\$5,898,684.90	\$5,898,684.90	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,605,600.00	\$4,605,600.00	\$0.00	\$0.00	\$0.00
SOUTH MACOMB SANITATION DIST	\$2,064,400.00	\$2,064,400.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,300.00	\$4,300.00	\$0.00	\$0.00	\$0.00
<b>TOTAL SEWER ACCOUNTS</b>	<b>\$53,868,959.56</b>	<b>\$13,234,684.40</b>	<b>\$446,400.00</b>	<b>\$446,400.00</b>	<b>\$39,741,475.16</b>

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/22

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
AUBURN HILLS (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,147.06	\$3,147.06	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$994.74	\$994.74	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$2,347.02	\$2,347.02	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$5,667.54	\$5,667.54	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$84.96	\$84.96	\$0.00	\$0.00	\$0.00
CENTER LINE	\$7,334.88	\$7,334.88	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,556.38	\$12,556.38	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$8,867.70	\$8,867.70	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,708.15	\$3,708.15	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$3,125.82	\$3,125.82	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN	\$36,854.94	\$36,854.94	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$9,223.47	\$9,223.47	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$212.40	\$212.40	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EASTPOINTE	\$6,426.87	\$6,426.87	\$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	\$4,938.30	\$4,938.30	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,079.75	\$2,079.75	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,177.05	\$1,177.05	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$339.84	\$339.84	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,646.15	\$2,646.15	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,155.96	\$4,155.96	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,900.98	\$1,900.98	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$28.32	\$28.32	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,269.19	\$3,269.19	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,806,065.33	\$8,002.17	\$4,001.97	\$4,074.54	\$1,789,986.65
HUNTINGTON WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$1,300.70	\$1,300.70	\$0.00	\$0.00	\$0.00
INKSTER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$800.04	\$800.04	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,400.07	\$1,400.07	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$338.55	\$338.55	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$40,329.45	\$40,329.45	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$37,849.68	\$37,849.68	\$0.00	\$0.00	\$0.00
MELVINDALE	\$7,002.12	\$7,002.12	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NOVI	\$17,675.22	\$17,675.22	\$0.00	\$0.00	\$0.00
OAK PARK	\$14,395.41	\$7,221.60	\$7,173.81	\$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)	\$4,278.09	\$4,278.09	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$486.88	\$486.88	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,019.52	\$1,019.52	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,253.16	\$1,253.16	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$545.16	\$545.16	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$3,883.38	\$3,883.38	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$136.29	\$136.29	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$12,427.17	\$12,427.17	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$18,590.31	\$18,590.31	\$0.00	\$0.00	\$0.00
ROMULUS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,774.14	\$13,774.14	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SHELBY TOWNSHIP	\$14,821.98	\$14,821.98	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$56,033.75	\$56,033.75	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$7,126.56	\$6,648.12	\$478.44	\$0.00	\$0.00
ST. CLAIR SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,920.18	\$31,920.18	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$382.32	\$382.32	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$37,616.04	\$37,616.04	\$0.00	\$0.00	\$0.00
UTICA	\$3,035.55	\$3,035.55	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,039.04	\$2,039.04	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,513.35	\$1,513.35	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADM)	\$3,152.89	\$3,152.89	\$0.00	\$0.00	\$0.00
WAYNE	\$4,996.71	\$4,996.71	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$12,699.84	\$12,699.84	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) P	\$486.78	\$486.78	\$0.00	\$0.00	\$0.00
WESTLAND	\$22,765.74	\$22,765.74	\$0.00	\$0.00	\$0.00
<b>TOTAL IWC ACCOUNTS</b>	<b>\$2,303,228.87</b>	<b>\$497,513.46</b>	<b>\$11,654.22</b>	<b>\$4,074.54</b>	<b>\$1,789,986.65</b>

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY (MINNESOTA MINING	\$3,223.30	\$3,223.30	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$1,487.29	\$1,487.29	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$31.27	\$31.27	\$0.00	\$0.00	\$0.00
ADORING PET FUNERAL HOME	\$74.81	\$74.81	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$398.19	\$398.19	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
APPLIED TECHNOLOGY INDUSTRIE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$0.00	\$0.00	\$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	\$108.43	\$0.00	\$108.43	\$0.00	\$0.00
BARON INDUSTRIES	\$636.06	\$636.06	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$1,053.13	\$0.00	\$61.16	\$0.00	\$991.97
BAYS MICHIGAN CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BEIRUT BAKERY, INC.	\$37.00	\$0.00	\$0.00	\$0.00	\$37.00
BETTER MADE SNACK FOOD	\$26,435.79	\$26,435.79	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$39.79	\$39.79	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$4,637.44	\$4,637.44	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$0.00	\$0.00	\$0.00	\$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	\$9,638.23	\$9,638.23	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,023.28	\$20.46	\$10.23	\$11.37	\$1,981.22
CINTAS CORP. - MACOMB TWP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$9,557.52	\$9,557.52	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$8,556.18	\$8,556.18	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$3.19	\$3.19	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$0.00	\$0.00	\$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
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

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
COUNTRY FRESH DAIRY CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$ (336.66)	\$0.00	\$0.00	\$ (336.66)	\$0.00
DARLING INGREDIENTS, INC.	\$5,780.43	\$5,780.43	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$ (29.48)	\$0.00	\$0.00	\$0.00	\$ (29.48)
DEARBORN SAUSAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT BEER CO.	\$ (14.72)	\$0.00	\$0.00	\$0.00	\$ (14.72)
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	\$24.33	\$15.48	\$8.85	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$24.80	\$24.80	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$101.55	\$101.55	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,548.80	\$3,548.80	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,537.40	\$1,537.40	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$23.83	\$0.00	\$23.83	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$3,875.86	\$3,875.86	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$81.91	\$0.00	\$81.91	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$2,023.64	\$2,023.64	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$5,890.14	\$5,890.14	\$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	\$107.91	\$107.91	\$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.	\$25,586.37	\$25,586.37	\$0.00	\$0.00	\$0.00
FIVES CINETIC CORP.	\$3,532.86	\$0.00	\$3,532.86	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$600.83	\$600.83	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$2,584.78	\$2,584.78	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (38.34)	\$0.00	\$0.00	\$ (38.34)	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GREAT BARABOO BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$2,276.61	\$1,195.15	\$405.91	\$475.59	\$199.96
HENKEL CORPORATION	\$64.15	\$64.15	\$0.00	\$0.00	\$0.00
HOME STYLE FOOD INC.	\$634.56	\$634.56	\$0.00	\$0.00	\$0.00
HOME GROWN BREWING COMPANY	\$37.35	\$0.00	\$37.35	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$ (79.67)	\$0.00	\$0.00	\$0.00	\$ (79.67)
HOUGHTON INTERNATIONAL INC.	\$291.29	\$48.76	\$67.29	\$80.94	\$94.30
HOUGHTON INTERNATIONAL INC.	\$ (5,076.74)	\$0.00	\$0.00	\$0.00	\$ (5,076.74)
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$656.24	\$656.24	\$0.00	\$0.00	\$0.00
INTRASTATE DISTRIBUTORS	\$1,331.43	\$1,331.43	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$386.63	\$386.63	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$46.13	\$0.00	\$21.09	\$0.00	\$25.04
KAR NUT PRODUCTS	\$1,029.88	\$1,029.88	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$116.63	\$116.63	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$403.85	\$403.85	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$38.96	\$38.96	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$2,049.43	\$2,049.43	\$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
LIQUID ENVIRONMENTAL SOLUTIC	\$2,364.48	\$1,727.42	\$637.06	\$0.00	\$0.00
MACDERMID, INC.	\$1,228.50	\$1,228.50	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$284.16	\$284.16	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$25.43	\$25.43	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELLO MEATS INC, - KUBISCH S	\$66.33	\$66.33	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$71.63	\$71.63	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$113,354.19	\$113,354.19	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MILANO BAKERY	\$368.93	\$368.93	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$1,606.04	\$1,606.04	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$ (2.16)	\$0.00	\$0.00	\$0.00	\$ (2.16)
MOTOR CITY BREWING WORKS	\$398.90	\$0.00	\$85.67	\$0.00	\$313.23
NATIONAL CHILI COMPANY	\$231.01	\$231.01	\$0.00	\$0.00	\$0.00
NEAPCO DRIVELINES	\$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 & MEAT	\$15.44	\$15.44	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$49.85	\$49.85	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$63.53	\$0.00	\$23.92	\$0.00	\$39.61
PELLERITO FOODS INC.	\$78.60	\$78.60	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$36,178.66	\$36,178.66	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$61.34	\$37.82	\$23.52	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$29,179.62	\$15,100.70	\$14,078.92	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$106.38	\$106.38	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$1,956.93	\$1,956.93	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$233.20	\$233.20	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$440.60	\$0.00	\$0.00	\$0.00	\$440.60
ROCHESTER MILLS BEER COMPANY	\$502.03	\$0.00	\$175.52	\$0.00	\$326.51
ROCHESTER MILLS PROD BREWERY	\$4,016.98	\$0.00	\$1,618.75	\$0.00	\$2,398.23
ROYAL OAK BREWERY	\$ (183.95)	\$0.00	\$0.00	\$0.00	\$ (183.95)
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$45.10	\$45.10	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$14.52	\$0.00	\$0.00	\$0.00	\$14.52
SUPERNATURAL SPIRITS & BREWI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$404.38	\$101.60	\$55.42	\$56.45	\$190.91
THERMO FISHER SCIENTIFIC	\$38,280.63	\$37,856.41	\$0.00	\$424.22	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$ (31.16)	\$0.00	\$0.00	\$0.00	\$ (31.16)
TURRI'S ITALIAN FOODS	\$18,186.84	\$18,186.84	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$280.20	\$280.20	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$40,383.87	\$40,383.87	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,765.67	\$2,765.67	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$0.83	\$0.83	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$187.32	\$187.32	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$76.44	\$0.00	\$76.44	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$254.21	\$254.21	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$2,350.40	\$2,350.40	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$2,942.71	\$2,942.71	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$751.48	\$751.48	\$0.00	\$0.00	\$0.00
VAUGHAN INDUSTRIES, INC.	\$23.64	\$23.64	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$5,159.71	\$5,159.71	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$478.31	\$478.31	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (7.55)	\$0.00	\$0.00	\$0.00	\$ (7.55)
WIGLEY'S MEAT PROCESS	\$422.29	\$422.29	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$844.60	\$844.60	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WINTER SAUSAGE MFG. CO.	\$ (28.73)	\$ (28.73)	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$4,099.52	\$4,099.52	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$1,936.83	\$1,936.83	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$144.24	\$0.00	\$0.00	\$0.00	\$144.24
<b>TOTAL POLLUTANT SURCHARGE ACCOUNTS</b>	<b>\$467,761.76</b>	<b>\$416,137.21</b>	<b>\$21,134.13</b>	<b>\$673.57</b>	<b>\$29,816.85</b>



## City of Highland Park Billings and Collections

	Water	Sewer	IWC	Cumulative Total
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	(65,652)	(2,206,211)	-	(2,271,863)
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	-	(1,612,633)	-	(1,612,633)
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	-	(1,444,623)	-	(1,444,623)
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	-	(2,022,335)	-	(2,022,335)
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	-	(2,309,186)	-	(2,309,186)
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	-	(4,108,108)	-	(4,108,108)
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments	-	(5,241,583)	-	(5,241,583)
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings	1,182,639	5,665,400	47,097	6,895,136
FY 2020 Payments	-	(3,026,117)	-	(3,026,117)
June 30, 2020 Balance	\$ 8,533,684	\$ 34,112,127	\$ 1,722,340	\$ 44,368,151
FY 2021 Billings	1,185,506	5,702,000	47,423	6,934,929
FY 2021 Payments	-	(2,783,552)	-	(2,783,552)
June 30, 2021 Balance	\$ 9,719,190	\$ 37,030,575	\$ 1,769,763	\$ 48,519,528
FY 2022 Billings (9 Months)	926,791	4,050,100	36,302	5,013,193
FY 2022 Payments (9 Months)	-	-	-	-
<b>Balance as of March 31, 2022</b>	<b>\$ 10,645,981</b>	<b>\$ 41,080,675</b>	<b>\$ 1,806,065</b>	<b>\$ 53,532,721</b>

**GLWA**

*Great Lakes Water Authority*



# **Monthly Financial Report Binder**

**April 2022**

**Presented to the  
Great Lakes Water Authority  
Audit Committee on July 25, 2022**

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## Key Financial Metrics

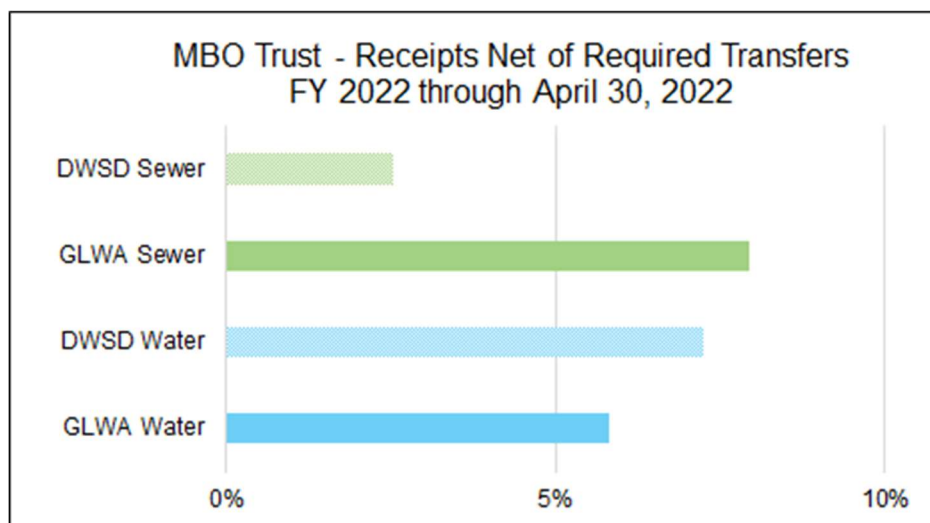
The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows: No Risk (green) - Potential (yellow) - Likely (red)

Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information. To address the wholesale water revenue shortfall, a first quarter budget amendment was approved for \$2.4 million. Capital spend is less than the total Capital Improvement Plan (CIP); an amendment is under consideration.

As of April 30, 2022					
Metric	FY 2022 Budget	FY 2022 Amended Budget	FY 2022 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$272.2	\$269.8	\$267.4	-1%	47
Wholesale Water Billed Usage (mcf)	11,156,000	10,936,000	10,661,000	-3%	
Wholesale Sewer Billed Revenue (\$M)	\$226.2	\$226.2	\$226.2	0%	49
Wholesale Water Operations & Maintenance (\$M)	\$119.9	\$119.9	\$105.5	-12%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$151.1	\$159.9	\$155.9	-3%	
Investment Income (\$M)	\$2.5	\$3.2	\$3.0	-5%	36
Water Prorated Capital Spend w/SRA* (\$M)	\$112.5	\$112.5	\$132.7	18%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$88.0	\$66.0	\$54.5	-17%	29

\*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 (page 30)



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

subsequent year(s). DWSD Water reports a surplus of \$6.2 million and DWSD Sewer also reports a surplus of \$6.2 million of net receipts over disbursements through April 2022. On August 26, 2021, the DWSD Board of Water Commissioners proactively adopted budget amendments to address potential shortfalls for FY 2022. These budget amendments are reflected in this April 2022 report.

The current DWSD loan receivable balance for fiscal year 2018 is \$1.4 million.

### **Budget to Actual Analysis (page 3)**

- FY 2022 information includes the fourth quarter budget amendments which were approved by the GLWA Board on June 22, 2022.
- The total Revenue Requirements are on target through April 2022.
- The total overall Operations & Maintenance expenses are at 77.8% of budget through April 2022 which is reasonable within the pro-rata benchmark of 83.3%.

### **Basic Financial Statements (page 9)**

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for April 2022 is \$73.0 million for the Water fund (25.5% of total revenues) and \$107.0 million for the Sewer fund (27.1 % of total revenues).
- Water Net Position decreased by \$ 2.6 million, and Sewage Disposal Net Position increased by \$ 0.4 million for the year to date through April 2022.

### **Capital Improvement Plan Financial Summary (page 27)**

- Water systems exceed the 75% Capital Spend Ratio assumption.
- Sewer systems also exceed the 75% Capital Spend Ratio assumption.

### **Master Bond Ordinance Transfers (page 30)**

- For April, transfers of \$13.6 million and \$17.6 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for April, transfers of \$7.2 million and \$2.8 million were completed for the DWSD Water and Sewer funds, respectively.

### **Cash Balances & Investment Income (page 36)**

- Total cash & investments are \$423 million in the Water fund and \$488 million in the Sewer fund.
- Total, combined, cumulative, FY 2022 investment income through April is \$3.0 million.

### **DWSD Retail Revenues, Receivables & Collections (page 40)**

- Water usage through April 30, 2022 is at 108.15% and revenues at 100.03% of budget.
- Sewer usage through April 30, 2022 is at 103.72% and revenues at 99.74% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$42.7 million over the prior year.
- Past dues over 180 days make up 68.7% of the total accounts receivable balance. The current bad debt allowance covers 102.8% of past dues over 60 days.

### **GLWA Wholesale Billing, Receivables & Collections (page 46)**

- GLWA accounts receivable past due balance net of Highland Park is 13.52% of the total accounts receivable balance, with the majority of that balance related to one water account dispute currently under discussion.
- The Highland Park past due balance is \$54.1 million. It includes \$41.5 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$10.7 million for water supply services. Highland Park recently made two payments totaling \$1.8 million in June 2022.

**Questions?** Contact the Office of the Chief Financial Officer at [CFO@glwater.org](mailto: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

The FY 2022 information presented in these sections includes the fourth quarter budget amendments approved by the GLWA Board on June 22, 2022.

## 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 2022, 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 2022 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.

Water revenues presented in Table 1A differ from those presented in *Table 2 – Statement of Revenues, Expenses and Changes in Net Position* found in the *Basic Financial Statement* section of this report. Water Revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract as documented in Appendix A-2 of the [Flint Water Agreement](#). Through April 30, 2022, these payments total \$5.4 million for FY 2022.

2. **Investment Earnings:** Investment earnings is slightly above the pro-rata benchmark for FY 2022 for the *water* system at 84.1%; while the *sewer* system is below the pro-rata benchmark at 72.0%. 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. The

*water* system is higher than the pro-rata benchmark, at 105.2%, due to the receipt of a liquid aluminum sulfate settlement for estimated overcharges (\$354,000).

4. **Operations & Maintenance Expense:** Actual expenses<sup>1</sup> for *both* systems have variances from the pro-rata benchmark. The *water* system is below the pro-rata benchmark for FY 2022 at 73.3%. The *sewer* system O&M expenses, at 81.2%, is slightly below the pro-rata benchmark.
5. **Debt Service:** For both systems, debt service is on target with the pro-rata benchmark for FY 2022; the *water* system is at 83.5%; while the *sewer* system is at 83.6%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down.
6. **Operating Reserve Deposit:** GLWA has established a target balance in the O&M Fund of 45 days of operating expense which works in tandem with the I&E Funds to provide liquidity to the utility. Adequate funding is in place to meet this requirement; therefore, it is expected that additional transfers to this reserve will not be required in FY 2022.
7. **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.<sup>2</sup> 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 2021, DWSD management successfully implemented a formal plan to end the year with positive net cash flows for both the DWSD *water* system and the DWSD *sewer* system. For FY 2022, neither the DWSD *water* system nor the DWSD *sewer* system have budgetary shortfalls through April 30, 2022. GLWA and DWSD staff are meeting regularly to discuss steps to mitigate shortfalls, when they occur, as outlined in the 2018 MOU.
8. **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.
9. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12<sup>th</sup> basis each month in accordance with the Master Bond Ordinance.
10. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

<sup>1</sup>The 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.

<sup>2</sup> As a reminder, the monthly O&M transfer for MBO purposes is 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)**

	FY2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 4/30/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 4/30/2022	Percent Year-to- Date
<b>Water System</b>							
<b>Revenues</b>							
Suburban Wholesale Customer Charges	\$ 317,034	\$ 262,033	82.7%	\$ 321,111	\$ 315,011	\$ 262,374	83.3%
Retail Service Charges	21,926	18,403	83.9%	21,697	21,697	18,081	83.3%
Investment Earnings	3,956	3,740	94.6%	1,047	1,924	1,618	84.1%
Other Revenues	229	267	116.7%	175	684	720	105.2%
<b>Total Revenues</b>	<b>\$ 343,144</b>	<b>\$ 284,443</b>	<b>82.9%</b>	<b>\$ 344,031</b>	<b>\$ 339,316</b>	<b>\$ 282,793</b>	<b>83.3%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 134,127	\$ 100,753	75.1%	\$ 143,934	\$ 143,934	\$ 105,541	73.3%
General Retirement System Legacy Pension	6,048	5,040	83.3%	6,048	6,048	5,040	83.3%
Debt Service	137,436	116,139	84.5%	135,481	135,121	112,804	83.5%
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	1,669	1,391	83.3%	1,706	1,706	1,421	83.3%
Regional System Lease	22,500	18,750	83.3%	22,500	22,500	18,750	83.3%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall Pending Improvement & Extension Fund Transfer Pending	-	2,167	0.0%	-	-	-	0.0%
	35,095	25,316	72.1%	28,094	23,740	22,550	95.0%
<b>Total Revenue Requirements</b>	<b>\$ 343,144</b>	<b>\$ 274,779</b>	<b>80.1%</b>	<b>\$ 344,031</b>	<b>\$ 339,316</b>	<b>\$ 271,330</b>	<b>80.0%</b>
<b>Net Difference</b>		<b>\$ 9,664</b>				<b>\$ 11,463</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ (1,510)				\$ 29	
Revenue Requirement Variance		11,174				11,434	
Overall Variance		<b>\$ 9,664</b>				<b>\$ 11,463</b>	

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

	FY 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 4/30/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 4/30/2022	Percent Year-to- Date
<b>Sewer System</b>							
<b>Revenues</b>							
Suburban Wholesale Customer Charges	\$ 272,454	\$ 225,120	82.6%	\$ 272,130	\$ 268,130	\$ 226,968	84.6%
Retail Service Charges	187,960	157,082	83.6%	188,662	188,662	157,219	83.3%
Industrial Waste Control Charges	7,685	6,656	86.6%	9,025	8,325	6,915	83.1%
Pollutant Surcharges	6,108	5,268	86.3%	4,189	5,089	4,121	81.0%
Investment Earnings	2,778	2,456	88.4%	1,023	1,876	1,351	72.0%
Other Revenues	2,195	408	18.6%	400	538	398	74.0%
<b>Total Revenues</b>	<b>\$ 479,179</b>	<b>\$ 396,990</b>	<b>82.8%</b>	<b>\$ 475,429</b>	<b>\$ 472,620</b>	<b>\$ 396,971</b>	<b>84.0%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 182,296	\$ 134,383	73.7%	\$ 181,300	\$ 191,909	\$ 155,864	81.2%
General Retirement System Legacy Pension	10,824	9,020	83.3%	\$ 10,824	\$ 10,824	\$ 9,020	83.3%
Debt Service	201,780	170,270	84.4%	\$ 207,210	\$ 204,985	\$ 171,271	83.6%
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	2,415	2,013	83.3%	\$ 2,358	\$ 2,358	\$ 1,965	83.3%
Regional System Lease	27,500	22,917	83.3%	\$ 27,500	\$ 27,500	\$ 22,917	83.3%
Operating Reserve Deposit	-	-	0.0%	\$ -	\$ -	\$ -	0.0%
DWSD Budget Shortfall Pending Improvement & Extension Fund Transfer Pending	-	7,695	0.0%	\$ -	\$ -	\$ -	0.0%
	42,743	35,048	82.0%	\$ 34,617	\$ 23,424	\$ 28,197	120.4%
<b>Total Revenue Requirements</b>	<b>\$ 479,179</b>	<b>\$ 391,028</b>	<b>81.6%</b>	<b>\$ 475,429</b>	<b>\$ 472,620</b>	<b>\$ 398,918</b>	<b>84.4%</b>
<b>Net Difference</b>		<b>\$ 5,961</b>				<b>\$ (1,946)</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ (2,326)				\$ 3,121	
Revenue Requirement Variance		8,287				(5,068)	
Overall Variance		<b>\$ 5,961</b>				<b>\$ (1,946)</b>	



## Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of April 30, 2022, is 83.3% (ten months). When comparing FY 2022 to FY 2021 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, the overall spending is higher in FY 2022, especially in the Sewer category.

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 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 4/30/2021	Percent Year-to- Date	FY 2022 BOARD ADOPTED BUDGET	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 4/30/2022	Percent Year-to- Date
Water	\$ 70,820	\$ 55,197	77.9%	\$ 74,813	\$ 76,422	\$ 61,545	80.5%
Sewer	114,975	85,660	74.5%	111,971	120,971	98,348	81.3%
Centralized	100,339	71,839	71.6%	103,846	103,846	75,344	72.6%
Administrative	30,290	22,440	74.1%	34,603	34,603	26,168	75.6%
Employee Benefits	-	-	0.0%	-	-	-	0.0%
<b>Total O&amp;M Budget</b>	<b>\$ 316,424</b>	<b>\$ 235,136</b>	<b>74.3%</b>	<b>\$ 325,234</b>	<b>\$ 335,842</b>	<b>\$ 261,406</b>	<b>77.8%</b>
<i>Totals may be off due to rounding</i>							

## 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 overall O&M expenses are at 77.8% which is reasonably within the pro-rata benchmark of 83.3%. This positive variance equates to a dollar amount of \$18.5 million. The expense category commentary is provided below for items highlighted on Table 3.

**Personnel Costs:** The overall category is slightly under the pro-rata benchmark; coming in at 80.7% through April 2022.

**Utilities:** The overall category is slightly less than the pro-rata benchmark; coming in at 81.6% through April 2022. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is on target with the pro-rata benchmark, coming in at 83.1%. 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 82.4% which is slightly less than the benchmark of 83.3%. The cost of natural gas per BTU has increased 125% since July 2021. In addition, increased production at the Biosolids Dryer Facility (BDF) and wastewater incineration has led to an increase in natural gas usage. The FY 2022 budget has been adjusted for this increase.
- **Sewage service** is slightly less than the benchmark, coming in at 81.0%. Increased usage is being reported at the WRRF (in part due to bills being received for actual meter readings when in the past the bills had been estimated), the Biosolids Dryer Facility (BDF), and the Southwest Water Plant. The FY 2022 budget has been adjusted for this increase.
- **Water service** is less than the benchmark, coming in at 70.3%. As meters have been repaired or replaced at the WRRF, the billings that previously reported estimated readings have been replaced with actual readings. The actual readings are coming in higher than the estimated billings. The FY 2022 budget has been adjusted for this increase.

**Chemicals:** This category is slightly less than the pro-rate benchmark; coming in at 80.6% through April 2022. The FY 2022 budget has been adjusted for the increase in chemical costs.

**Supplies & Other:** This category is lower than the benchmark; coming in at 72.4% through April 2022. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, variances are not unexpected.

**Contractual Services:** The category is lower than the pro-rata benchmark; coming in at 76.9% through April 2022. 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 are 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 lower than the benchmark; coming in at 79.5% through April 2022. 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 lower than the benchmark; coming in at 67.7% through April 2022. 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 reflect the forecasted activity more accurately for FY 2022. Budget amendments have been entered to adjust the shared services budget to this revised FY 2022 forecast. In addition, it is important to note that some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount.

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

Expense Categories	FY 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 4/30/2021	Percent Year-to- Date at 4/30/2021	FY 2021 ACTIVITY THRU 6/30/2021	Percent Year-to- Date at 6/30/2021	FY 2022 AMENDED BUDGET	FY 2022 PRORATED AMENDED BUDGET (10 MONTHS)	FY 2022 ACTIVITY THRU 4/30/2022	Percent Year-to- Date 4/30/2022	FY 2022 PRORATED BUDGET LESS FY 2022
<b>Entity-wide</b>										
Salaries & Wages	\$ 67,306	\$ 54,161	80.5%	\$ 64,910	83.4%	\$ 66,113	\$ 55,095	\$ 53,745	81.3%	\$ 1,349
Workforce Development	895	695	77.7%	829	83.8%	869	724	665	76.6%	59
Overtime	7,537	6,194	82.2%	7,365	84.1%	8,126	6,772	6,678	82.2%	93
Employee Benefits	26,806	21,879	81.6%	25,448	86.0%	25,956	21,630	20,745	79.9%	884
Transition Services	8,557	6,857	80.1%	8,392	81.7%	10,805	9,004	8,480	78.5%	524
Employee Benefits Fund	-	-	0.0%	-	0.0%	-	-	-	0.0%	-
<b>Personnel Costs</b>	<b>111,100</b>	<b>89,787</b>	<b>80.8%</b>	<b>106,945</b>	<b>84.0%</b>	<b>111,869</b>	<b>93,224</b>	<b>90,315</b>	<b>80.7%</b>	<b>2,909</b>
Electric	41,554	34,444	82.9%	41,982	82.0%	43,950	36,625	36,504	83.1%	121
Gas	5,924	4,813	81.2%	5,706	84.4%	7,081	5,901	5,833	82.4%	68
Sewage Service	2,297	1,532	66.7%	2,075	73.8%	2,510	2,092	2,034	81.0%	58
Water Service	2,608	2,090	80.1%	2,987	70.0%	5,841	4,868	4,109	70.3%	759
<b>Utilities</b>	<b>52,383</b>	<b>42,879</b>	<b>81.9%</b>	<b>52,749</b>	<b>81.3%</b>	<b>59,383</b>	<b>49,486</b>	<b>48,480</b>	<b>81.6%</b>	<b>1,006</b>
Chemicals	14,362	11,627	81.0%	13,982	83.2%	19,842	16,535	15,993	80.6%	543
Supplies & Other	35,595	23,166	65.1%	31,216	74.2%	35,034	29,195	25,354	72.4%	3,841
Contractual Services	99,977	74,043	74.1%	92,020	80.5%	111,198	92,665	85,567	76.9%	7,098
Capital Program Allocation	(3,447)	(2,575)	74.7%	(3,192)	80.7%	(2,684)	(2,237)	(2,135)	79.5%	(102)
Shared Services	(4,512)	(3,790)	84.0%	(2,567)	147.7%	(3,202)	(2,669)	(2,169)	67.7%	(500)
Unallocated Reserve	10,966	-	0.0%	-	0.0%	4,402	3,669	-	0.0%	3,669
<b>Total Expenses</b>	<b>\$ 316,424</b>	<b>\$ 235,136</b>	<b>74.3%</b>	<b>\$ 291,153</b>	<b>80.8%</b>	<b>\$ 335,842</b>	<b>\$ 279,869</b>	<b>\$ 261,406</b>	<b>77.8%</b>	<b>\$ 18,463</b>

Totals may be off due to rounding



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 June 2021 comparative amounts shown in the tables below 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, 2022**  
**(\$000)**

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2021
<b>Assets</b>				
Cash - unrestricted (a)	\$ 129,847	\$ 200,055	\$ 329,902	\$ 354,351
Cash - restricted (a)	18,850	13,336	32,186	162,646
Investments - unrestricted (a)	139,074	106,521	245,595	322,930
Investments - restricted (a)	122,095	180,103	302,197	70,225
Accounts Receivable	88,174	52,596	140,771	165,059
Due from (to) Other Funds (b)	(1,889)	1,889	-	-
Other Assets (c)	678,822	424,916	1,103,738	1,098,362
Capital Assets, net of Depreciation	1,247,167	2,137,309	3,384,477	3,546,027
Land	293,897	124,757	418,655	417,512
Construction Work in Process (e)	313,668	200,459	514,127	395,973
<b>Total assets</b>	<b>3,029,706</b>	<b>3,441,941</b>	<b>6,471,647</b>	<b>6,533,085</b>
<b>Deferred Outflows (f)</b>	<b>51,870</b>	<b>128,607</b>	<b>180,477</b>	<b>225,074</b>
<b>Liabilities</b>				
Liabilities - Liabilities-ST	146,525	169,772	316,297	329,279
Due to (from) Other Funds (b)	-	-	-	-
Other Liabilities (h)	1,729	4,890	6,619	7,500
Cash Held FBO DWSD (d)	15,382	14,121	29,503	6,064
Liabilities - Long-Term (i)	2,948,153	3,416,094	6,364,248	6,529,068
<b>Total liabilities</b>	<b>3,111,790</b>	<b>3,604,877</b>	<b>6,716,668</b>	<b>6,871,911</b>
<b>Deferred Inflows (f)</b>	<b>69,602</b>	<b>78,108</b>	<b>147,710</b>	<b>96,380</b>
<b>Total net position (j)</b>	<b>\$ (99,816)</b>	<b>\$ (112,438)</b>	<b>\$ (212,254)</b>	<b>\$ (210,132)</b>

Totals may be off due to rounding

In general, the Statement of Net Position reflects a mature organization with no unexpected trends.

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 2032 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 market value. Investments at June 30, 2021 are also reported at market value. The April 30, 2022 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 Other Funds* and *Due to Other Funds* are shown at gross 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 mainly 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 only adjusted in the interim 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 because 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 2022 Financial Report Binder. Prior year ending balances are provided in the June 30, 2021 column as a reference for comparative purposes. Explanatory notes follow this statement.

Water revenues presented below in Table 2 differ from those presented in *Table 1A – Water Revenue Requirement Budget* found in the *Budget to Actual Analysis* section of this report because water revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights.

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position**  
**– All Funds Combined**  
**For the Ten Months ended April 30, 2022**  
**(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- Type Activities	Comparative June 30, 2021
<b>Revenue</b>						
Wholesale customer charges	\$ 267,801	93.6%	\$ 226,968	57.4%	\$ 494,769	\$ 589,992
Local system charges	18,081	6.3%	157,219	39.7%	175,300	209,885
Industrial waste charges		0.0%	6,915	1.7%	6,915	8,005
Pollutant surcharges		0.0%	4,121	1.0%	4,121	6,720
Other revenues	267	0.1%	378	0.1%	646	767
<b>Total Revenues</b>	<b>286,150</b>	<b>100.0%</b>	<b>395,601</b>	<b>100.0%</b>	<b>681,750</b>	<b>815,369</b>
<b>Operating expenses</b>						
Operations and Maintenance	107,441	37.5%	157,876	39.9%	265,317	301,740
Depreciation	102,694	35.9%	130,326	32.9%	233,019	274,044
Amortization of intangible assets	2,972	1.0%	366	0.1%	3,339	3,677
<b>Total operating expenses</b>	<b>213,107</b>	<b>74.5%</b>	<b>288,568</b>	<b>72.9%</b>	<b>501,675</b>	<b>579,460</b>
<b>Operating Income</b>	<b>73,042</b>	<b>25.5%</b>	<b>107,033</b>	<b>27.1%</b>	<b>180,075</b>	<b>235,909</b>
<b>Total Nonoperating (revenue) expense</b>	<b>75,592</b>	<b>26.4%</b>	<b>106,605</b>	<b>26.9%</b>	<b>182,197</b>	<b>224,464</b>
<b>Increase/(Decrease) in Net Position</b>	<b>(2,550)</b>	<b>-0.9%</b>	<b>428</b>	<b>0.1%</b>	<b>(2,122)</b>	<b>11,445</b>
Net Position (deficit), beginning of year	(97,266)		(112,867)		(210,132)	(221,578)
<b>Net position (deficit), end of year</b>	<b>\$ (99,816)</b>		<b>\$ (112,438)</b>		<b>\$ (212,254)</b>	<b>\$ (210,132)</b>
<i>Totals may be off due to rounding</i>						

## Water Fund

- ✓ The decrease in Water Fund Net Position is \$2.6 million.
- ✓ Wholesale water customer charges of \$267.8 million account for 93.6% of Water System revenues.
- ✓ Operating expenses of \$213.1 million represent 74.5% of total operating revenue. Depreciation is the largest operating expense at \$102.7 million or 48.2% of operating expense.
- ✓ Amortization of intangible assets represents activity for raw water rights.
- ✓ Operating income after operating expenses (including depreciation) equals \$73.0 million or 25.5% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$65.4 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 \$0.4 million.
- ✓ Wholesale customer charges of \$227.0 million account for 57.4% 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 \$157.2 million account for 39.7% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$288.6 million represent 72.9% of total operating revenue. Depreciation is the largest operating expense at \$130.3 million or 45.2% of total operating expense.
- ✓ Amortization of intangible assets represents activity for a warehouse lease.
- ✓ Operating income after operating expenses (including depreciation) equals \$107.0 million or 27.1% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$76.3 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 2022 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, 2022  
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- Type Activities	Percent of Total
<b>Operating Expenses</b>						
<b>Personnel</b>						
Salaries & Wages	18,266	17.0%	44,625	28.3%	62,891	23.7%
Overtime	4,245	4.0%	2,433	1.5%	6,678	2.5%
Benefits	14,328	13.3%	6,418	4.1%	20,745	7.8%
Total Personnel	<b>\$ 36,839</b>	<b>34.3%</b>	<b>\$ 53,476</b>	<b>33.9%</b>	<b>\$ 90,315</b>	<b>34.0%</b>
<b>Utilities</b>						
Electric	22,080	20.6%	14,424	9.1%	36,504	13.8%
Gas	1,213	1.1%	4,620	2.9%	5,833	2.2%
Sewage	641	0.6%	1,393	0.9%	2,034	0.8%
Water	4	0.0%	4,104	2.6%	4,109	1.5%
Total Utilities	<b>\$ 23,939</b>	<b>22.3%</b>	<b>\$ 24,541</b>	<b>15.5%</b>	<b>\$ 48,480</b>	<b>18.3%</b>
Chemicals	6,121	5.7%	9,871	6.3%	15,993	6.0%
Supplies and other	7,351	6.8%	17,765	11.3%	25,116	9.5%
Contractual services	36,440	33.9%	53,533	33.9%	89,973	33.9%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(1,323)	-1.2%	(812)	-0.5%	(2,135)	-0.8%
Intergovernmental Agreement	(187)	-0.2%	(69)	0.0%	(256)	-0.1%
Shared services allocation	(1,739)	-1.6%	(430)	-0.3%	(2,169)	-0.8%
<b>Operations and Maintenance Expenses</b>	<b>\$ 107,441</b>	<b>100.0%</b>	<b>\$ 157,876</b>	<b>100.0%</b>	<b>\$ 265,317</b>	<b>100.0%</b>

Totals may be off due to rounding



- ✓ Core expenses for water and sewage disposal systems are utilities (18.3% of total O&M expenses) and chemicals (6.0% of total O&M expenses).
- ✓ Personnel costs (34.0% 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 (33.9%) includes:
  - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$7.0 million);
  - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$13.9 million); and
  - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, field, planning and other services.
- ✓ The Capital Program Allocation, Intergovernmental Agreement and Shared Services Allocation are shown as negative amounts because they are 'contra' expense accounts representing offsets to associated costs in other Operations and Maintenance expense categories.

## 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, 2022**  
**(\$000)**

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2021
<b>Nonoperating (Revenue)/Expense</b>				
Interest income contractual obligation	\$ (20,896)	\$ (14,177)	\$ (35,073)	\$ (43,087)
Interest income DWSD Shortfall	-	(139)	(139)	(635)
Investment earnings	(1,630)	(1,361)	(2,991)	(7,040)
Net incr (decr) in fair value of invstmt	1,500	1,006	2,505	5,781
Other nonoperating revenue	(452)	(20)	(472)	476
Interest Expense				
Bonded debt	86,318	90,457	176,775	218,857
Lease obligation	14,204	17,361	31,565	38,332
Other obligations	3,731	1,394	5,125	6,296
Total interest expense	104,254	109,212	213,466	263,485
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	-
Capital Contribution	-	34	34	(5,960)
Amortization, issuance costs, debt	(12,700)	2,039	(10,662)	(12,966)
(Gain) loss on disposal of capital assets	(15)	332	317	365
Loss on impairment of capital assets	-	-	-	-
Water Residential Assistance Program	544	753	1,297	1,517
Legacy pension expense	4,988	8,927	13,915	22,528
<b>Total Nonoperating (Revenue)/Expense</b>	<b>75,592</b>	<b>106,605</b>	<b>182,197</b>	<b>224,464</b>

*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. FY 2020 market value adjustments for Water and Sewer totaled \$4.9 million and \$3.3 million, respectively.

FY 2021 market value adjustments for Water and Sewer totaled \$1.5 million and \$1.0 million, respectively.

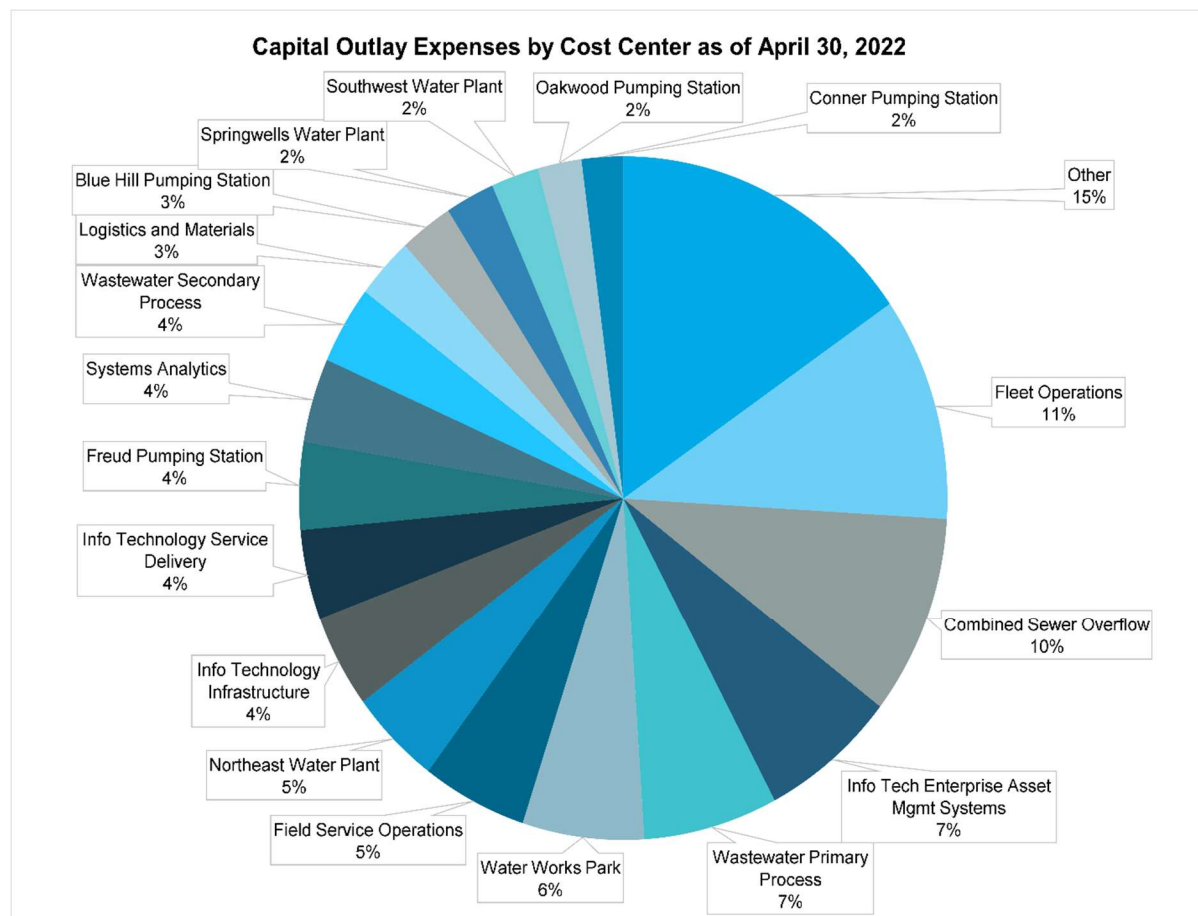
- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
  - Bonded debt;
  - Lease obligation for the regional assets from the City of Detroit; and
  - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.
- ✓ The FY 2021 capital contribution in Nonoperating (revenue) expense represents one-half of an \$11.92 million payment made by Oakland Macomb Interceptor Drainage District (OMIDD). The payment was part of an amendment to the OMIDD Wastewater Disposal Services Contract and was split between FY 2020 and FY 2021 based on budgeted revenue requirements for those respective years.

## 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, 2022, total capital outlay spend is \$8.3 million. Following this chart is a sample list of projects and purchases from the total spend of \$8.3 million:



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

**Water Operations:** 14 Mile Water Main Assessment (\$350k); Turbidimeter at Northeast Water Plant (\$216k); high pressure water tank (\$174k); Water Works Park furniture (\$132k); multiple pumping station circuit breakers (\$116k); power inverter (\$85k); Southwest Water Plant furniture (\$75k); Water Works Park capacitor repair (\$63k);

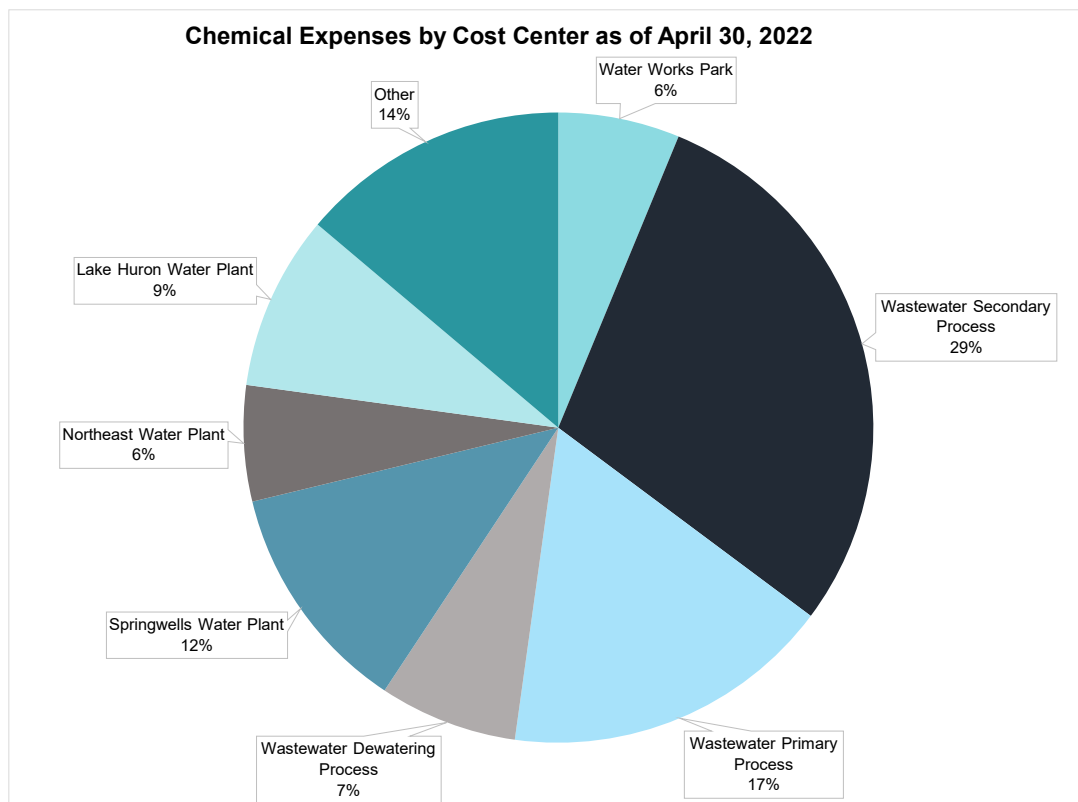
buoy system (\$56k); universal power supply (\$49k); excitation motor retrofit (\$42k); vacuum regulator (\$40k); steam generator (\$39k) and water pump (\$39k).

**Wastewater Operations:** PQM Meters for CSO Facilities (\$787k); wastewater pump (\$347k); pull out assembly refurbishment (\$300k); Freud electric backup service installation (\$245k); flygt pump (\$182k); B-houses (\$167k); Main Lift Pump emergency repair (\$139k); sewer pump (\$81k); effluent channel stop-logs (\$80k); water champ (\$65k); Leib CSO accusonic flow meters (\$60k); Freud meter station (\$57k); multiple pump station circuit breakers (\$54k); rotork repairs (\$50k); 150 gallon day tank (\$40k); electric loader (\$40k); mini loader (\$40k); metering pump (\$33k) and pump service (\$32k).

**Centralized & Administrative Facilities:** Trucks and vehicles (\$878k); IT software (\$775k); IT computers and hardware (\$351k); sewer meter support (\$329k); Rialto Security (\$240k); chemical monitoring equipment (\$78k); Water Works Park UPS system (\$76k); EAM advisory services (\$73k) and power meters (\$42k).

### Chart 2 – Chemical Expenses – Water and Sewer System Combined

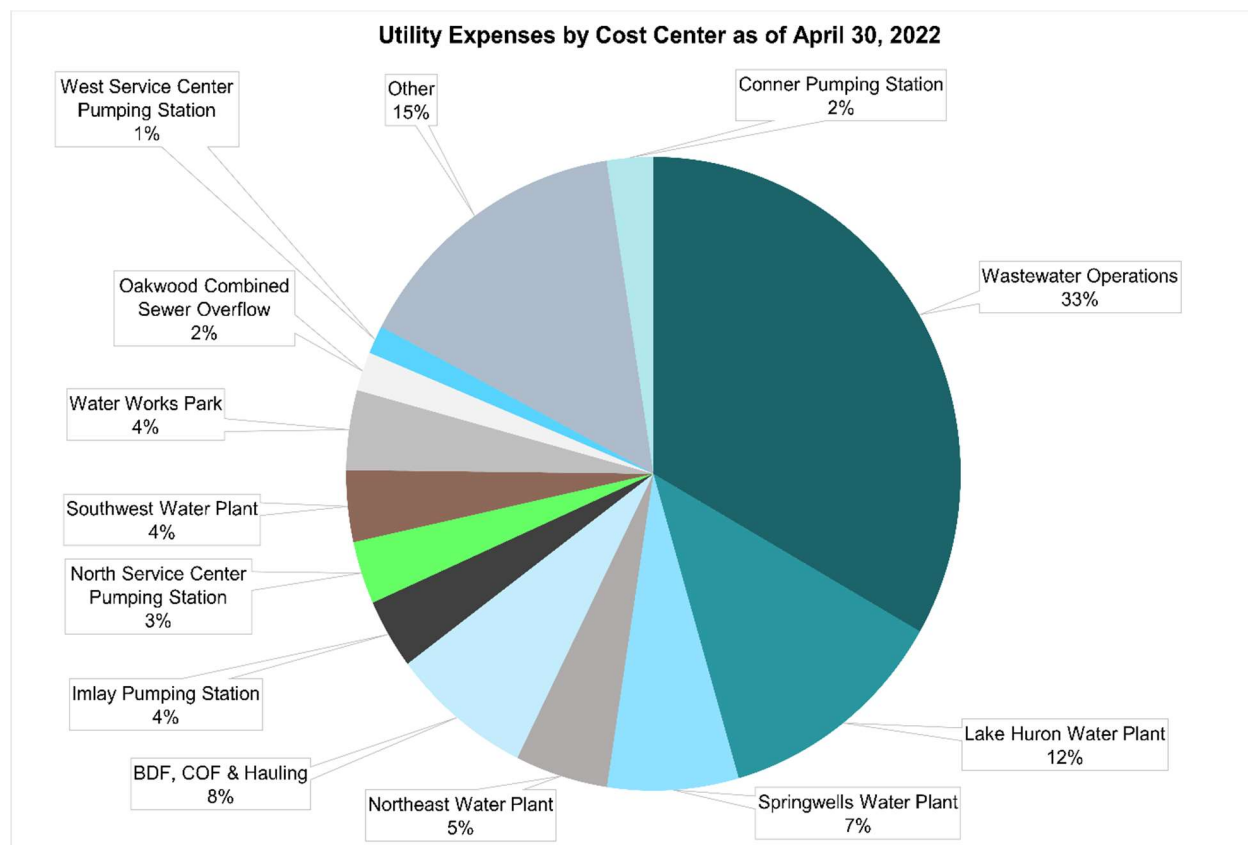
Chemical expenses are \$16.0 million through April 30, 2022. The allocation is shown in the chart below and remains consistent with prior periods.



**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 Expenses – Water and Sewer System Combined

Utility expenses are \$48.5 million through April 30, 2022. The allocation is shown in the chart below and consistent with prior periods.



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

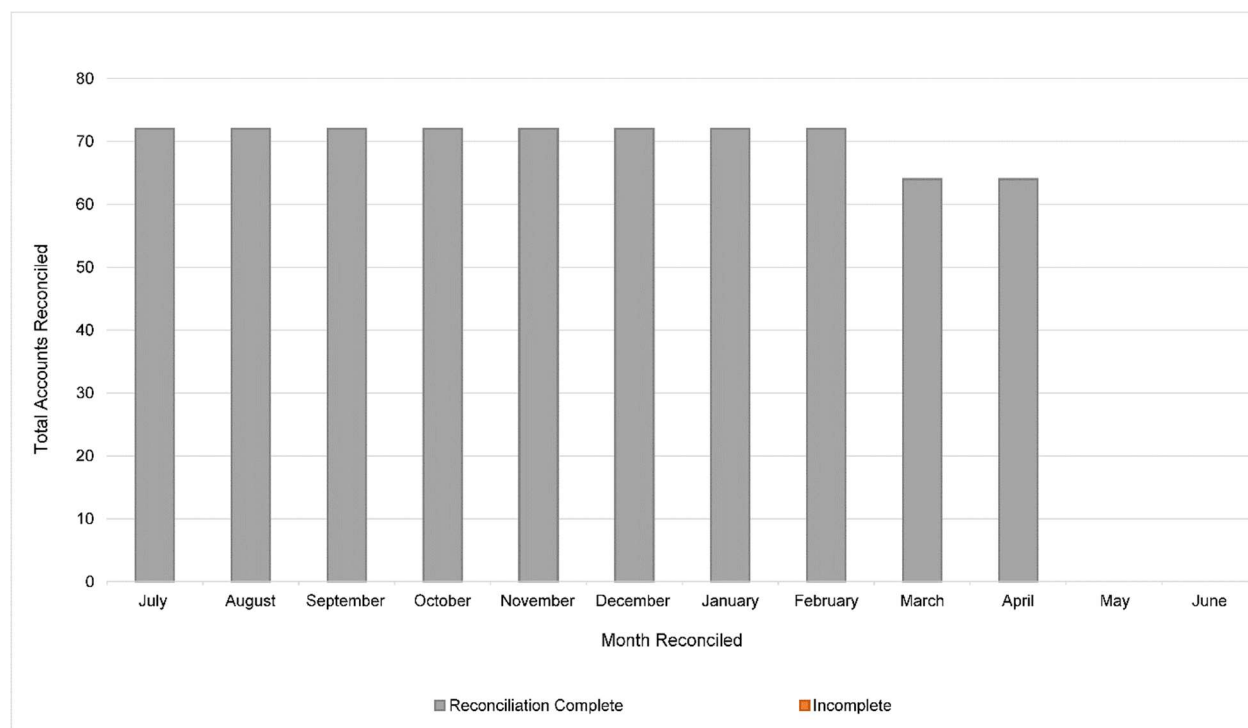


## Financial Operations KPI

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, 2022 all reconciliations are up-to-date and complete.

There was no reduction of accounts since March 2022.

**Chart 1 – Bank Reconciliation Completion Status**



**Table 1 – Fiscal Year 2022 GL Cash Account Rollforward**

Total GL Cash accounts as of July 1, 2021	72
New GL Cash accounts	0
Inactivated GL Cash accounts	(8)
Total GL Cash accounts as of April 30, 2022	<u>64</u>



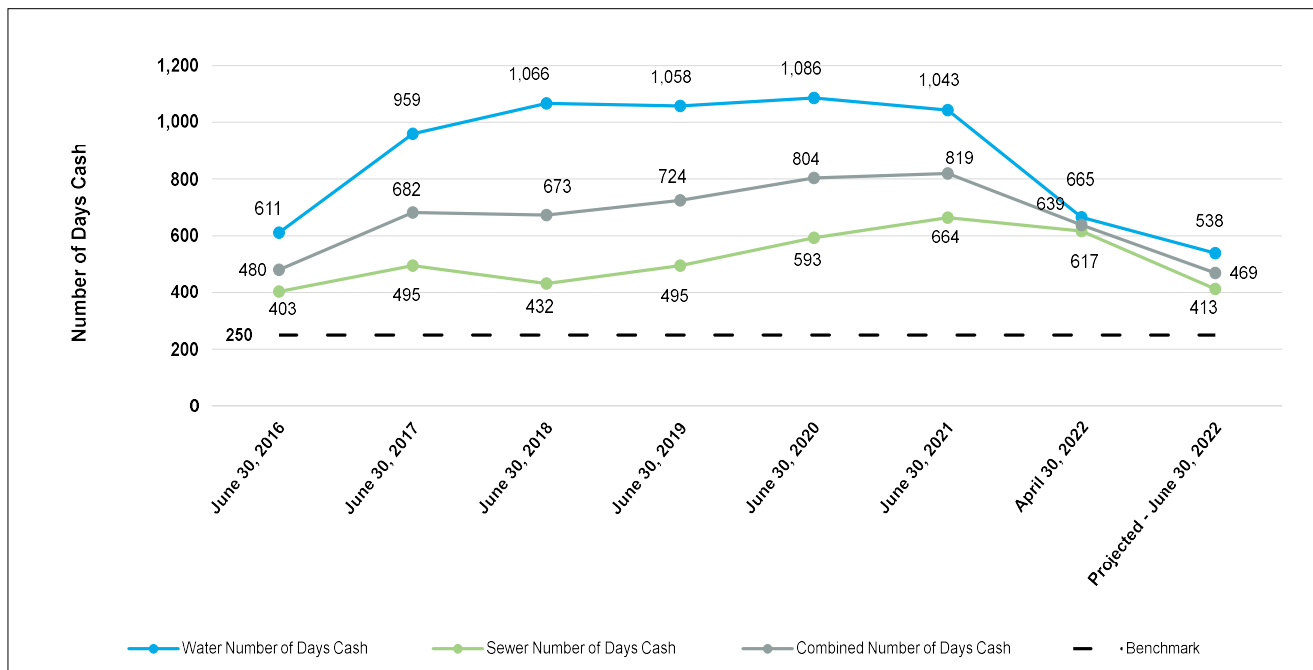


## Financial Operations KPI - Liquidity

This key performance indicator shown in **Chart 1 – Historical Schedule of Days Cash on Hand – Liquidity – Regional System** and **Table 1 – Schedule of Days Cash on Hand – Liquidity – Regional System** below provides a measure of a utility's ability to meet expenses, cope with emergencies and navigate business interruptions. Liquidity is one of several key metrics monitored by bond rating agencies reflecting an organization's financial strength. A best practice benchmark for this key performance indicator is greater than 250 days cash on hand as shown by the dashed line in Chart 1 below.

Both GLWA Water and Sewer funds continue to exceed this target with Water at 665 and Sewer at 617 days cash on hand as of April 30, 2022. These balances remain strong for the regional system in large part due to the need to fund CIP projects with I&E funds but drop in the FY 2022 projection as these funds are depleted and GLWA transitions to a planned bond issue. The FY 2022 projection is calculated based on values from the GLWA FY 2022 – 2026 Budget & Five-Year Plan.

**Chart 1 – Historical Schedule of Days Cash on Hand – Liquidity – Regional System**



**Note:** The GLWA Annual Comprehensive Financial Reports are the source of all historic data referenced. Refer to these reports for detailed calculations by fiscal year.



**Table 1 – Schedule of Days Cash on Hand – Liquidity – Regional System**

	June 30, 2021	April 30, 2022	Projected June 30, 2022
<b>Water Fund</b>			
Cash and Investments - Unrestricted	\$ 353,308,000	\$ 268,921,000	\$ 217,600,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 250,476,000	\$ 230,334,000	\$ 276,400,000
Less: Depreciation (a)	(123,272,000)	(104,444,000)	(125,333,000)
Less: Amortization of Intangible Asset (a)	(3,567,000)	(2,972,000)	(3,567,000)
Net Operating Expense	\$ 123,638,000	\$ 122,917,000	\$ 147,500,000
<b>Operating Expense per Day</b>	\$ 339,000	\$ 404,000	\$ 404,000
<b>Days Cash</b>			
Number of Days Cash	1,043	665	538
<b>Sewage Disposal Fund</b>			
Cash and Investments - Unrestricted	\$ 323,973,000	\$ 306,576,000	\$ 205,000,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 328,983,000	\$ 273,417,000	\$ 328,100,000
Less: Depreciation (a)	(150,772,000)	(122,333,000)	(146,800,000)
Less: Amortization of Intangible Asset (a)	(110,000)	-	-
Net Operating Expense	\$ 178,101,000	\$ 151,083,000	\$ 181,300,000
<b>Operating Expense per Day</b>	\$ 488,000	\$ 497,000	\$ 497,000
<b>Days Cash</b>			
Number of Days Cash	664	617	413
<b>Combined</b>			
Cash and Investments - Unrestricted	\$ 677,281,000	\$ 575,497,000	\$ 422,600,000
<b>Operating Expense</b>			
Operating Expense (a)	\$ 579,460,000	\$ 503,750,000	\$ 604,500,000
Less: Depreciation (a)	(274,044,000)	(226,778,000)	(272,133,000)
Less: Amortization of Intangible Asset (a)	(3,677,000)	(2,972,000)	(3,567,000)
Net Operating Expense	\$ 301,740,000	\$ 274,000,000	\$ 328,800,000
<b>Operating Expense per Day</b>	\$ 827,000	\$ 901,000	\$ 901,000
<b>Days Cash</b>			
Number of Days Cash	819	639	469
<i>Totals may be off due to rounding</i>			

(a) Current year expenses are expressed as a proration of the annual budget for the purposes of this metric.



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 Difference” 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 1/12<sup>th</sup> 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, 2022**

	Water	Sewer	Total
<b>Net Revenue Requirement Budget Variance (a)</b>	\$ 11,463	\$ (1,947)	\$ 9,516
<b>Budgetary categories adjustments to financial reporting basis</b>			
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)	(4,988)	(8,927)	(13,915)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	47,382	94,991	142,373
Accelerated pension B&C notes obligation portion (g)	162	364	526
Regional System lease (h)	4,546	5,556	10,102
Right to use lease - warehouse (h)		130	130
WRAP (i)	877	1,212	2,089
DWSD short term allocation (j)	-	-	-
Improvement & Extension Fund transfers (j)	22,550	28,197	50,747
<b>Nonbudgeted financial reporting categories adjustments</b>			
Depreciation and amortization (k)	(105,666)	(130,692)	(236,358)
Amortization - debt related (k)	12,700	(2,039)	10,661
Other nonoperating income (k)	-	-	-
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	15	(332)	(317)
Raw water rights obligation (l)	2,271	-	2,271
Investment earnings for construction fund (m)	12	11	23
Interest for Subscription Based Information Tech Arrangements (l)	(8)	(8)	(16)
Interest on DWSD note receivable (n)	-	139	139
Investment earnings unrealized gain/loss (o)	(1,500)	(1,006)	(2,506)
Improvement & extension fund operating expenses (p)	(1,900)	(2,250)	(4,150)
Capital Contribution (q)	-	(34)	(34)
	-	-	-
<b>Net Position Increase/(Decrease) per Financial Statements (b)</b>	\$ (2,550)	\$ 428	\$ (2,122)

**Table 2 - Explanatory Notes for Crosswalk**

- (a) Source: Budget to Actual Table 1A and Table 1B in Monthly Financial Report
- (b) Source: Basic Financial Statements Table 2 in Monthly Financial Report
- (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 and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes.
- (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) Interest on the DWSD note receivable is budgeted as part of the Sewer improvement and extension fund and is transferred directly to that fund as payments are made.
- (o) Unrealized gains and losses are recorded annually as required for financial reporting purposes but do not reflect actual investment earnings and are not included in cash basis reporting.
- (p) For FY 2022, the Water Improvement and Extension fund reflects \$1.9 million, and the Sewer Improvement and Extension fund reflects \$2.3 million in expenses relating to repairs paid for through the Water and Sewer Improvement and Extension funds, respectively. These are consolidated expenses for financial reporting purposes but are not reflected in the current Operations and Maintenance budget expenses. In addition, GLWA enters interlocal agreements with other local governments to coordinate projects and services and reduce overlapping expense. Many of these agreements relate to current capital improvement projects. Where another local government reimburses GLWA for direct expenses associated with a capital improvement project financed using improvement and extension funds, those reimbursements received under the agreement are transferred back to the Improvement and Extension fund.



The Monthly Capital Improvement Plan Financial Summary includes the following.

1. Water System Capital Improvement Plan Spend Incurred to date
2. Sewer System Capital Improvement Plan Spend Incurred to date

## **Capital Improvement Plan Financial Summary**

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 CIP 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 2022 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.

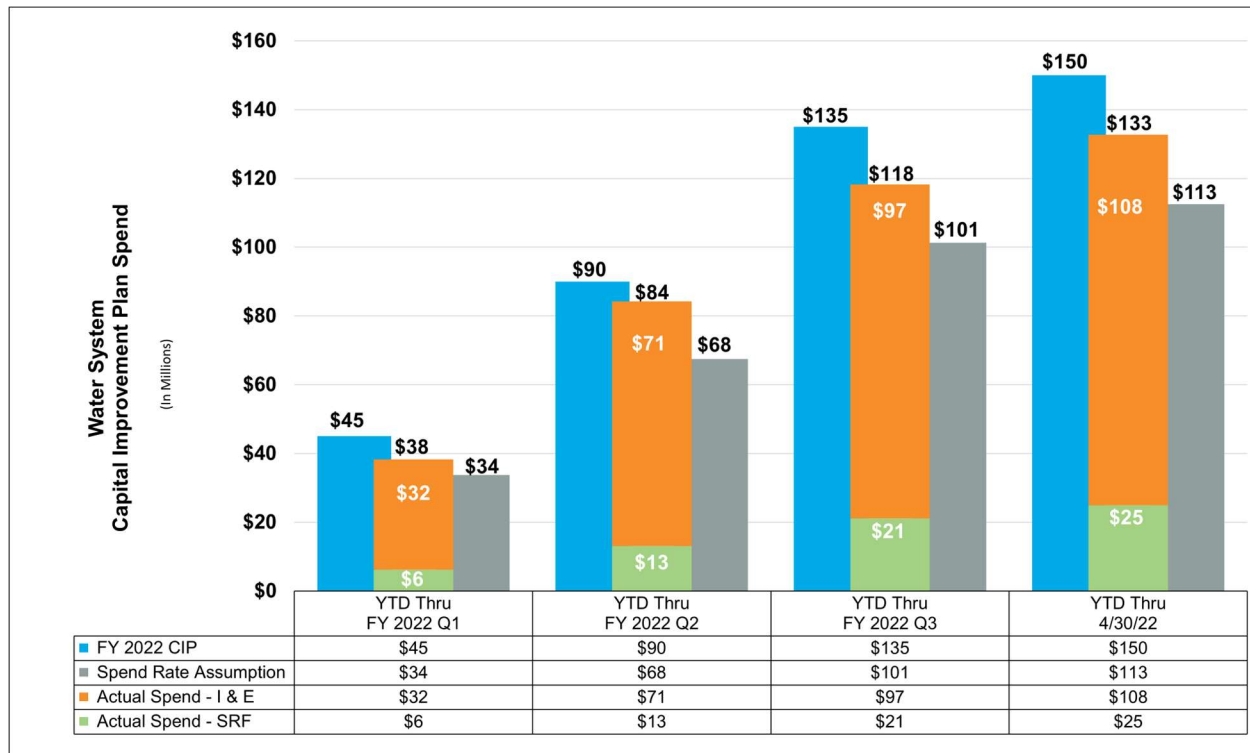
Beginning January 1, 2021, GLWA has intentionally depleted Bond funds and has moved to solely using I&E and State Revolving Loans to fund CIP expenditures to lower the cost of debt. It is expected that the I&E funds will be sufficient to fund the capital program through FY 2022. A bond transaction is planned for the first quarter of FY 2023.



### Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date

As of April 2022, the Water system incurred nearly \$133 million of construction costs to date. This is 88% of the fiscal year 2022 CIP through April and 118% of the financial plan which is labeled as the FY 2022 CIP w/SRA in the chart below.

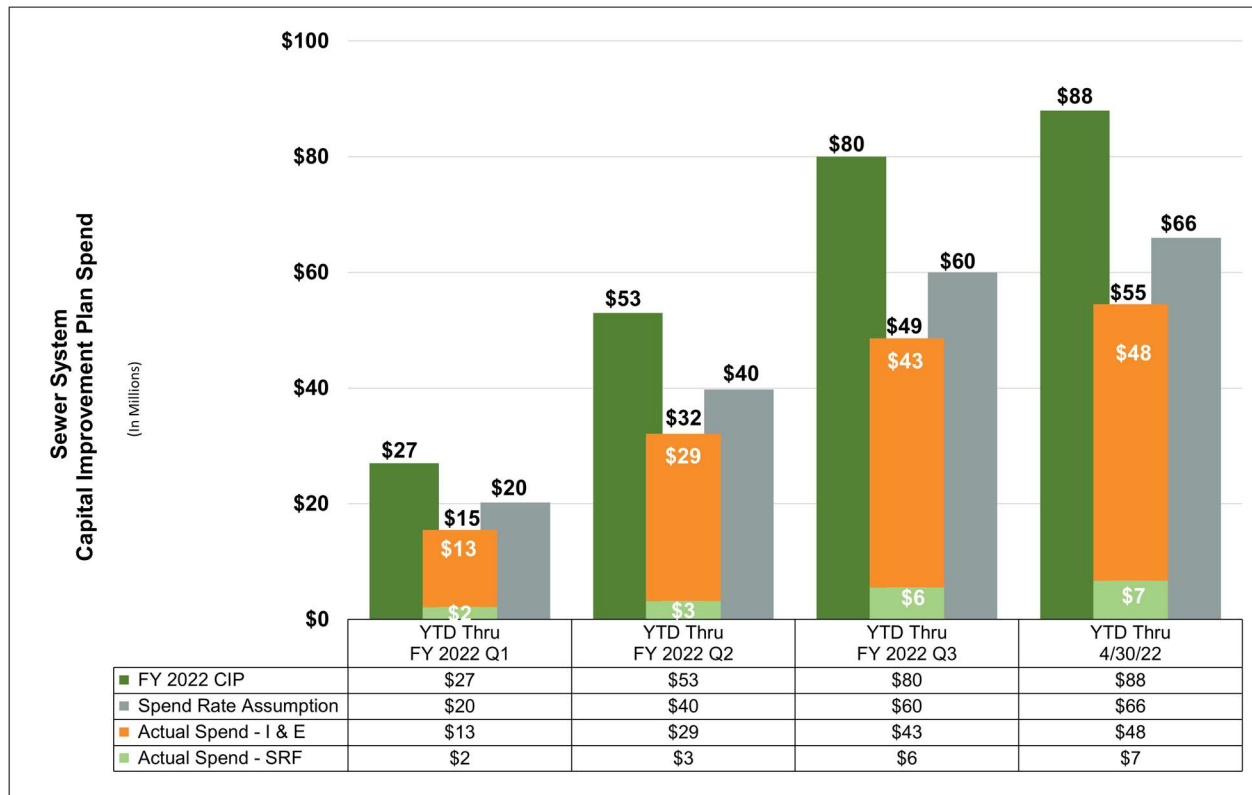
### Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date



## Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date

As of April 2022, the Sewer system incurred nearly \$55 million of construction costs to date. This is 62% of the fiscal year 2022 CIP through April and 83% of the financial plan which is labeled as the FY 2022 CIP w/SRA in the chart below.

### Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date







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 2022 Water MBO Transfers** reflects the required transfers for FY 2022 completed through April 1, 2022. MBO transfers for water totaling \$135.9 million have been transferred to GLWA accounts.

**Table 2 – GLWA FY 2022 Sewer MBO Transfers** reflects the required transfers for FY 2022 completed through April 1, 2022. MBO transfers for sewer totaling \$175.6 million have been transferred to GLWA accounts.

**Table 3 – GLWA MBO Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 1 – GLWA FY 2022 Water MBO Transfers**

<b>WATER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
<b>FY 2022</b>							
July 2021	\$ 11,994,483	\$504,000	\$921,308	\$198,050	-	-	\$13,617,841
August 2021	11,994,483	504,000	921,308	198,050	-	-	13,617,841
September 2021	11,994,483	504,000	831,488	198,050	-	-	13,528,021
October 2021	11,994,483	504,000	921,308	198,050	-	-	13,617,841
November 2021	11,994,483	504,000	861,308	198,050	-	-	13,557,841
December 2021	11,994,483	504,000	891,308	198,050	-	-	13,587,841
January 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
February 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
March 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
April 2022	11,994,483	504,000	891,308	198,050	-	-	13,587,841
<b>Total FY 2022</b>	<b>\$ 119,944,830</b>	<b>\$5,040,000</b>	<b>\$8,913,260</b>	<b>\$1,980,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$135,878,590</b>

**Table 2 – GLWA FY 2022 Sewer MBO Transfers**

<b>SEWER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
<b>FY 2022</b>							
July 2021	\$ 15,108,317	\$902,000	\$1,223,950	\$322,392	-	-	\$17,556,659
August 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
September 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
October 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
November 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
December 2021	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
January 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
February 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
March 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
April 2022	15,108,317	902,000	1,223,950	322,392	-	-	17,556,659
<b>Total FY 2022</b>	<b>\$151,083,170</b>	<b>\$9,020,000</b>	<b>\$12,239,500</b>	<b>\$3,223,920</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$175,566,590</b>

**Table 3 – GLWA MBO Transfer History**

<b>GLWA MBO Transfer History</b>							
<b>WATER</b>							
	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	126,840,204	6,048,000	10,695,683	1,980,804	-	-	145,564,691
Total FY 2021	134,127,300	6,048,000	10,695,700	2,324,200	-	-	153,195,200
Total FY 2022 (10 months)	119,944,830	5,040,000	8,913,260	1,980,500	-	-	135,878,590
<b>Life to Date</b>	<b>\$806,969,142</b>	<b>\$41,306,300</b>	<b>\$72,290,435</b>	<b>\$14,566,404</b>	<b>\$2,686,900</b>	<b>\$606,000</b>	<b>\$938,425,181</b>
<b>SEWER</b>							
	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	181,925,800	10,824,000	14,687,517	2,887,300	-	-	210,324,617
Total FY 2021	182,296,000	10,824,000	14,687,500	3,764,300	-	-	211,571,800
Total FY 2022 (10 months)	151,083,170	9,020,000	12,239,500	3,223,920	-	-	175,566,590
<b>Life to Date</b>	<b>\$1,174,188,162</b>	<b>\$73,992,800</b>	<b>\$99,042,109</b>	<b>\$20,685,116</b>	<b>\$8,246,100</b>	<b>\$779,600</b>	<b>\$1,376,933,887</b>

## 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 2022 Water MBO Transfers** reflects the required transfers for FY 2022 completed through April 1, 2022. MBO transfers for Water totaling \$40.1 million have been transferred to accounts held by DWSD. For FY 2022, DWSD originally requested that \$6,690,600 of the lease payment be utilized to offset a portion of debt service. Beginning with the October transfers, DWSD amended budget required an additional portion of the lease payment be directed to offset debt service. A calculation correction which will be made in April 2022 will result in a revised lease payment offset of \$8,925,400 for FY 2022.

**Table 5 – DWSD FY 2022 Sewer MBO Transfers** reflects the required transfers for FY 2022 completed through April 1, 2022. MBO transfers for Sewer totaling \$72.2 million have been transferred to accounts held by DWSD. For FY 2022, DWSD has requested that \$5,529,300 of the lease payment be utilized to offset a portion of debt service.

**Table 6 – DWSD Water MBO and Lease Payment Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 7 – DWSD Sewer MBO and Lease Payment Transfer History** reflects historical transfers for FY 2016 through FY 2022 to date.

**Table 4 – DWSD FY 2022 Water MBO Transfers**

	<b>WATER</b>			
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Water</u>
<b>FY 2022</b>				
July 2021	\$2,887,383	\$356,000	\$1,317,450	\$4,560,833
August 2021	2,887,383	356,000	1,317,450	4,560,833
September 2021	2,887,383	356,000	1,317,450	4,560,833
October 2021	2,369,650	356,000	479,983	3,205,633
November 2021	2,369,650	356,000	479,983	3,205,633
December 2021	2,369,650	356,000	479,983	3,205,633
January 2022	2,369,650	356,000	479,983	3,205,633
February 2022	2,369,650	356,000	479,983	3,205,633
March 2022	2,369,650	356,000	479,983	3,205,633
April 2022	2,369,650	356,000	479,983	3,205,633
April 2022	-	-	3,999,936	3,999,936
<b>Total FY 2022</b>	<b>\$25,249,699</b>	<b>\$3,560,000</b>	<b>\$11,312,167</b>	<b>\$40,121,866</b>

**Table 5 – DWSD FY 2022 Sewer MBO Transfers**

	<b>SEWER</b>			
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Sewer</u>
<b>FY 2022</b>				
July 2021	\$5,769,417	\$238,000	\$2,291,667	\$8,299,084
August 2021	5,769,417	238,000	2,291,667	8,299,084
September 2021	5,769,417	238,000	2,291,667	8,299,084
October 2021	4,888,083	238,000	2,291,667	7,417,750
November 2021	4,888,083	238,000	2,291,667	7,417,750
December 2021	4,888,083	238,000	2,291,667	7,417,750
January 2022	4,888,083	238,000	2,291,667	7,417,750
February 2022	4,888,083	238,000	2,291,667	7,417,750
March 2022	4,888,083	238,000	2,291,667	7,417,750
April 2022	4,888,083	238,000	2,291,667	7,417,750
April 2022	-	-	(4,607,750)	(4,607,750)
<b>Total FY 2022</b>	<b>\$51,524,832</b>	<b>\$2,380,000</b>	<b>\$18,308,920</b>	<b>\$72,213,752</b>



**Table 6 – DWSD Water MBO and Lease Payment Transfer History**

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
<b>FY 2016 *</b>				
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
<b>FY 2017</b>				
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
<b>FY 2018</b>				
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
<b>FY 2019</b>				
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
<b>FY 2020</b>				
MBO/Lease Requirement	34,662,400	4,272,000	22,500,000	61,434,400
Offset to Debt Service	-	-	(3,548,000)	(3,548,000)
Net MBO Transfer	34,662,400	4,272,000	18,952,000	57,886,400
<b>FY 2021</b>				
MBO/Lease Requirement	35,833,900	4,272,000	22,500,000	62,605,900
Offset to Debt Service	-	-	(8,278,300)	(8,278,300)
Net MBO Transfer	35,833,900	4,272,000	14,221,700	54,327,600
<b>FY 2022 (10 months)</b>				
MBO/Lease Requirement	25,249,699	3,560,000	18,750,000	47,559,699
Offset to Debt Service	-	-	(7,437,833)	(7,437,833)
Net MBO Transfer	25,249,699	3,560,000	11,312,167	40,121,866
<b>Life-to-Date</b>				
MBO/Lease Requirement	226,072,003	29,173,100	153,750,000	408,995,103
Offsets	-	-	(27,438,233)	(27,438,233)
<b>Total Water</b>	<b>226,072,003</b>	<b>29,173,100</b>	<b>126,311,767</b>	<b>381,556,870</b>

**Table 7 – DWSD Sewer MBO and Lease Payment Transfer History**

	<b>SEWER</b>			
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
<b>FY 2016 *</b>				
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
<b>FY 2017</b>				
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
<b>FY 2018</b>				
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
<b>FY 2019</b>				
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
<b>FY 2020</b>				
MBO/Lease Requirement	62,343,500	2,856,000	27,500,000	92,699,500
Offset to address shortfall	(7,100,000)	-	-	(7,100,000)
Offset to Debt Service	-	-	(5,032,700)	(5,032,700)
Total MBO Transfer	55,243,500	2,856,000	22,467,300	80,566,800
<b>FY 2021</b>				
MBO/Lease Requirement	69,915,700	2,856,000	27,500,000	100,271,700
Offset to Debt Service	-	-	(3,257,200)	(3,257,200)
Total MBO Transfer	69,915,700	2,856,000	24,242,800	97,014,500
<b>FY 2022 (10 months)</b>				
MBO/Lease Requirement	51,524,832	2,380,000	22,916,670	76,821,502
Offset to Debt Service	-	-	(4,607,750)	-
Total MBO Transfer	51,524,832	2,380,000	18,308,920	72,213,752
<b>Life-to-Date</b>				
MBO/Lease Requirement	362,379,844	19,527,800	187,916,670	569,824,314
Offsets	(7,100,000)	-	(46,470,814)	(48,963,064)
<b>Total Sewer</b>	<b>355,279,844</b>	<b>19,527,800</b>	<b>141,445,856</b>	<b>516,253,500</b>

\* 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

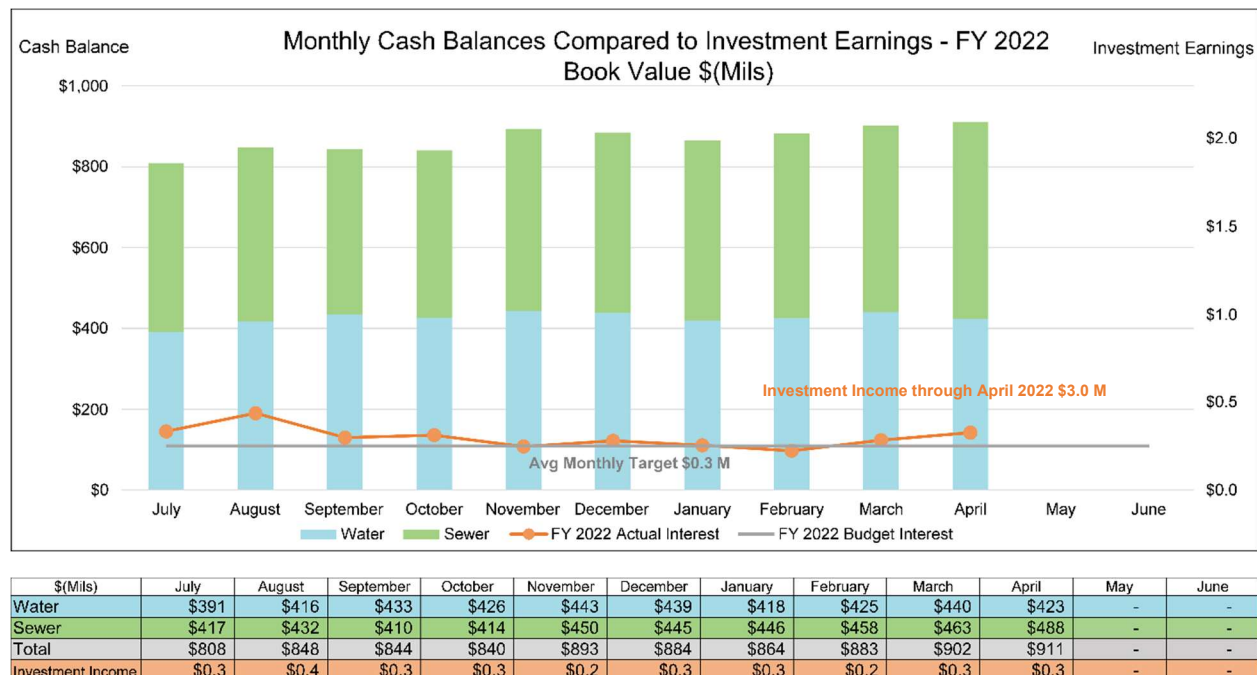
## Monthly Cash Balances Compared to Investment Income

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. For the month of April 2022, GLWA earned investment income of \$0.3 million and the cumulative FY 2022 earnings through April 2022 is \$3.0 million. Total investment income reported includes earnings from revenue requirement funds as well as construction bond funds.

GLWA continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment income while meeting the objectives of safety and liquidity.

**Chart 1 – Monthly Cash Balances Compared to Investment Income – Through April 2022**



## 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

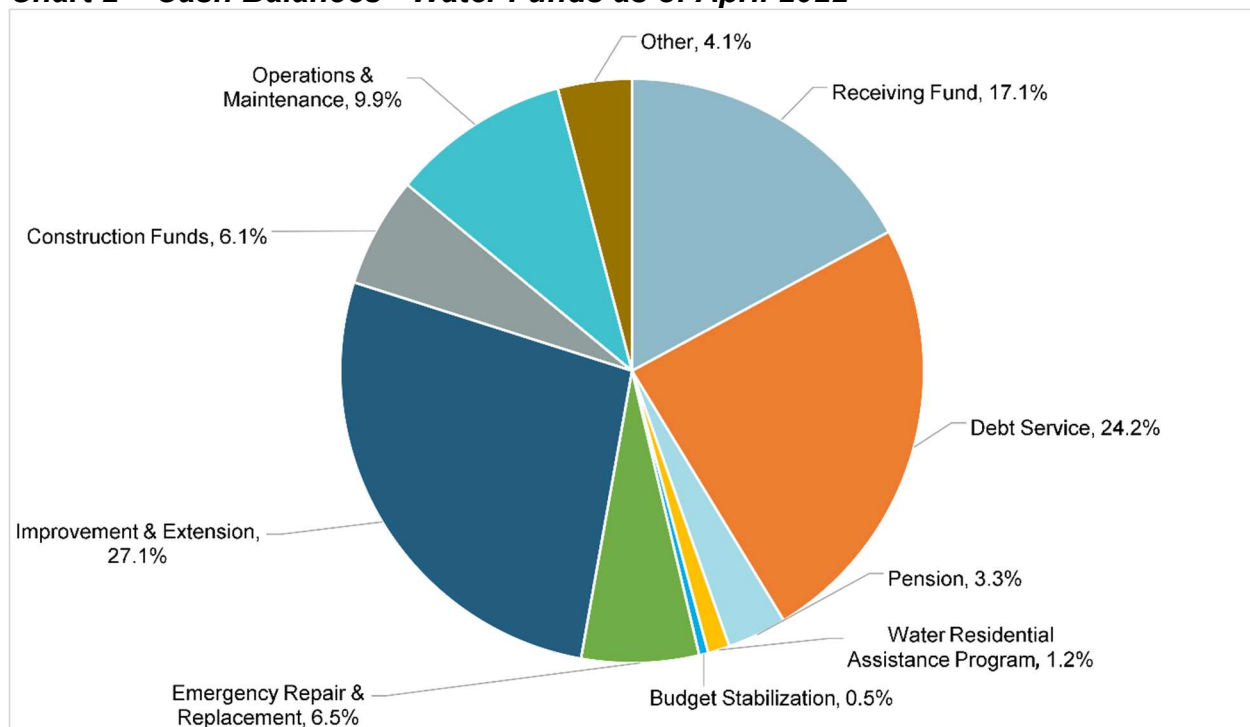
A [chart](#) depicting the follow of funds is online at [glwater.org](http://glwater.org) as well as the [MBO](#) documents.



**Chart 2 – Cash Balances - Water Funds as of April 2022** - 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, 2022 is \$423 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.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds supplemented with SRF low-interest loan funding will be sufficient to fund the capital program through FY 2022. A bond transaction is currently planned for the first quarter of FY 2023.

**Chart 2 – Cash Balances - Water Funds as of April 2022**

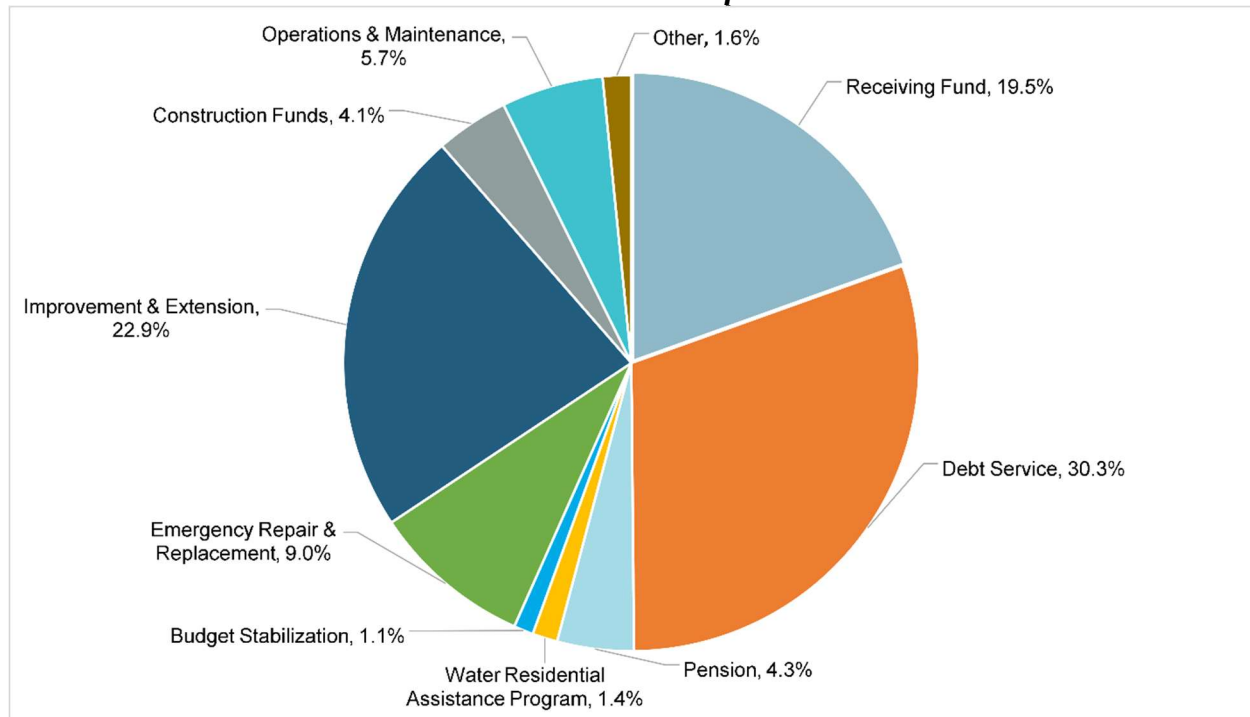


**Note:** Due to rounding totals may not equal 100%.

**Chart 3 – Cash Balances - Sewer Funds as of April 2022** - 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, 2022 is \$488 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.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds supplemented with SRF low-interest loan funding will be sufficient to fund the capital program through FY 2022. A bond transaction is currently planned for the first quarter of FY 2023.

**Chart 3 – Cash Balances - Sewer Funds as of April 2022**



**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 2022 water usage and billed revenue which are provided by DWSD staff. As of April 30, 2022, the DWSD usage was at 108.15% of the budget and billed revenue was at 100.03% 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.

**Table 1 – DWSD Retail Water Billing**

RETAIL WATER CUSTOMERS								
Month (1)	FY 2022 - Original Budget		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	245,000	9,963,800	266,704	10,064,683	21,704	100,883	265,796	9,747,518
August	235,000	9,697,500	264,644	9,994,589	29,644	297,089	250,308	9,378,385
September	210,000	9,032,500	232,348	9,169,300	22,348	136,800	218,840	8,544,457
October	195,000	8,633,500	204,290	8,422,092	9,290	(211,408)	197,362	7,978,833
November	195,000	8,633,500	209,830	8,544,611	14,830	(88,889)	194,648	7,952,436
December	195,000	8,633,500	204,072	8,442,152	9,072	(191,348)	197,125	7,985,955
January	190,000	8,500,500	221,369	8,819,430	31,369	318,930	190,289	7,827,536
February	190,000	8,500,500	204,489	8,438,300	14,489	(62,200)	191,180	7,895,496
March	200,080	8,768,700	233,190	9,221,716	33,110	453,016	205,631	8,242,563
April	210,000	9,032,500	192,495	8,305,331	(17,505)	(727,169)	214,288	8,438,333
May	210,000	9,032,500					214,232	8,519,154
June	240,000	9,830,500					243,301	9,249,694
<b>Total</b>	<b>2,515,080</b>	<b>108,259,500</b>	<b>2,233,431</b>	<b>89,422,204</b>	<b>168,351</b>	<b>25,704</b>	<b>2,583,000</b>	<b>101,760,360</b>
Subtotals ytd	2,065,080	89,396,500	2,233,431	89,422,204	168,351	25,704		
Achievement of Budget			108.15%	100.03%				

(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	7,365,204	8,109,469	(744,265)	-9.18%
June	8,917,831	7,821,791	1,096,040	14.01%
July	8,387,705	8,017,490	370,215	4.62%
August	8,588,507	7,135,456	1,453,051	20.36%
September	8,041,683	9,031,966	(990,283)	-10.96%
October	8,512,614	9,079,199	(566,585)	-6.24%
November	7,926,331	10,803,009	(2,876,678)	-26.63%
December	8,121,586	7,409,888	711,698	9.60%
January	6,919,040	7,884,889	(965,849)	-12.25%
February	10,156,126	6,426,553	3,729,573	58.03%
March	11,093,125	8,458,827	2,634,298	31.14%
April	7,431,900	7,536,272	(104,372)	-1.38%
<b>Rolling, 12-Month Total</b>	<b>101,461,652</b>	<b>97,714,809</b>		
<b>Rolling, 12-Month Average</b>	<b>8,455,138</b>	<b>8,142,901</b>		

## 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 2022 sewer billed revenue which are provided by DWSD staff. As of April 30, 2022, the DWSD usage was at 103.72% of the budget and billed revenue was at 99.74% 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.

**Table 3 - DWSD Retail Sewer Billings**

RETAIL SEWER CUSTOMERS								
Month (1)	FY 2022 - Original Budget		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	233,100	30,779,300	219,791	29,462,804	(13,309)	(1,316,496)	252,929	29,802,377
August	225,700	30,357,000	249,522	31,231,624	23,822	874,624	240,390	29,261,344
September	198,500	28,805,000	215,748	29,401,234	17,248	596,234	206,880	27,232,400
October	186,000	28,091,700	190,483	27,936,280	4,483	(155,420)	188,816	26,230,683
November	186,000	28,091,700	194,135	28,032,939	8,135	(58,761)	184,240	25,933,888
December	186,000	28,091,700	189,283	27,836,982	3,283	(254,718)	187,397	26,628,891
January	178,700	27,675,200	203,526	28,493,782	24,826	818,582	179,115	26,098,738
February	184,600	28,011,800	189,525	27,837,984	4,925	(173,816)	185,696	26,370,674
March	192,030	28,435,800	212,176	29,032,277	20,146	596,477	197,486	27,090,940
April	199,600	28,867,800	179,291	27,196,557	(20,309)	(1,671,243)	203,684	27,447,662
May	200,100	28,896,300					204,107	27,765,537
June	228,500	30,516,800					231,627	29,058,129
<b>Total</b>	<b>2,398,830</b>	<b>346,620,100</b>	<b>2,043,480</b>	<b>286,462,463</b>	<b>73,250</b>	<b>(744,537)</b>	<b>2,462,367</b>	<b>328,921,263</b>
Subtotals ytd	1,970,230	287,207,000	2,043,480	286,462,463		(744,537)		
Achievement of Budget/Goal			103.72%	99.74%				

(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	21,888,687	23,639,652	(1,750,965)	-7.41%
June	32,508,249	22,558,827	9,949,422	44.10%
July	24,185,252	20,652,159	3,533,093	17.11%
August	25,036,198	22,395,220	2,640,978	11.79%
September	22,635,796	26,463,387	(3,827,591)	-14.46%
October	25,119,240	26,683,109	(1,563,869)	-5.86%
November	23,505,249	28,730,139	(5,224,890)	-18.19%
December	24,880,743	22,856,217	2,024,526	8.86%
January	23,020,491	22,057,276	963,215	4.37%
February	24,495,922	22,777,467	1,718,455	7.54%
March	29,410,086	25,002,508	4,407,578	17.63%
April	22,115,076	21,196,170	918,906	4.34%
<b>Rolling 12-Month Total</b>	<b>298,800,989</b>	<b>285,012,131</b>		
<b>Rolling, 12-Month Average</b>	<b>24,900,082</b>	<b>23,751,011</b>		

## 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 monthly sales, total receivables, bad debt allowance and net Water and Sewer receivables as of April 30, 2022 with comparative totals from June 30, 2021 and June 30, 2020. This table does not include past due accounts that have been transferred to the City of Detroit for collection as tax liens.

The table provides a comparison of days in accounts receivable calculated as net receivables divided by daily sales and confirms that over time days in AR is declining due in large part to a consistent practice of recognizing past due amounts over 60 days as bad debt expense. To the extent this allowance is adjusted, and bad debt expense is recognized in the DWSD budget, it does not impact GLWA.

**Table 6** is a summary of the total, current and non-current Water and Sewer receivables by category as of April 30, 2022 with comparative totals from April 30, 2021. This table does not include past due accounts that have been transferred to the City of Detroit for collection as tax liens.

The Total Balance and Total Bad Debt Allowance as of April 30, 2022 are reflective of the values in both the Table 5 Summary and Table 6 breakdown.

**Table 5 – DWSD Retail Accounts Receivable Aging Report – Summary**

Summary					
Period Ending	Monthly Sales	Receivables			Days in AR (1)
		Total	Allowance	Net	
June 30, 2020	\$ 33,061,000	\$ 213,846,000	\$ (142,882,000)	\$ 70,964,000	64
June 30, 2021	\$ 36,335,000	\$ 248,055,000	\$ (200,146,000)	\$ 47,909,000	40
April 30, 2022	\$ 38,369,000	\$ 286,730,000	\$ (245,318,000)	\$ 41,412,000	32
Totals may be off due to rounding					

(1) Days in AR is calculated as net receivables divided by daily sales (monthly sales/30 days)

**Table 6 – DWSD Retail Accounts Receivable Aging Report – Water & Sewer Combined**

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	211,504	\$ 728.11	\$ 14,410,000	\$ 8,747,000	\$ 25,431,000	\$ 105,410,000	\$ 153,999,000
			9.4%	5.7%	16.5%	68.4%	100.0%
Commercial	21,043	1,402.25	8,323,000	2,358,000	6,378,000	12,448,000	29,508,000
			28.2%	8.0%	21.6%	42.2%	100.0%
Industrial	3,487	4,258.70	4,676,000	1,310,000	1,925,000	6,939,000	14,850,000
			31.5%	8.8%	13.0%	46.7%	100.0%
Tax Exempt	3,840	775.34	536,000	185,000	527,000	1,729,000	2,977,000
			18.0%	6.2%	17.7%	58.1%	100.0%
Government	51,514	397.23	2,560,000	750,000	2,297,000	14,856,000	20,463,000
			12.5%	3.7%	11.2%	72.6%	100.0%
Drainage	43,401	708.85	2,574,000	1,390,000	4,871,000	21,930,000	30,765,000
			8.4%	4.5%	15.8%	71.3%	100.0%
Subtotal - Active Accounts	<b>334,789</b>	<b>\$ 754.39</b>	<b>\$ 33,080,000</b>	<b>\$ 14,740,000</b>	<b>\$ 41,430,000</b>	<b>\$ 163,312,000</b>	<b>\$ 252,562,000</b>
			13.1%	5.8%	16.4%	64.7%	100.0%
Inactive Accounts	311,954	109.53	45,000	124,000	285,000	33,714,000	34,168,000
			0.1%	0.4%	0.8%	98.7%	100.0%
<b>Total</b>	<b>646,743</b>	<b>\$ 443.34</b>	<b>\$ 33,126,000</b>	<b>\$ 14,864,000</b>	<b>\$ 41,715,000</b>	<b>\$ 197,025,000</b>	<b>\$ 286,730,000</b>
% of Total A/R			11.6%	5.2%	14.5%	68.7%	100.0%
Water Fund	236,076	228.97	\$ 7,770,000	\$ 2,807,000	\$ 6,770,000	\$ 36,706,000	\$ 54,053,000
Sewer Fund	273,452	850.89	\$ 25,355,000	\$ 12,057,000	\$ 34,944,000	\$ 160,320,000	\$ 232,676,000
<b>Total April 30, 2022 (a)</b>	<b>646,743</b>	<b>443.34</b>	<b>\$ 33,126,000</b>	<b>\$ 14,864,000</b>	<b>\$ 41,715,000</b>	<b>\$ 197,025,000</b>	<b>\$ 286,730,000</b>
Water Fund- Allowance							\$ (45,379,000)
Sewer Fund- Allowance							\$ (199,939,000)
<b>Total Bad Debt Allowance</b>							<b>\$ (245,318,000)</b>
Comparative - April 2021 (b)	630,206	387.22	\$ 30,999,000	\$ 13,201,000	\$ 39,770,000	\$ 160,059,000	\$ 244,029,000
Difference (a) - (b)	16,537	56.12	\$ 2,127,000	\$ 1,662,000	\$ 1,945,000	\$ 36,966,000	\$ 42,701,000





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	84
Emergency	1
Older Contracts	<u>2</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 2022 water billed usage and revenues. As of April 30, 2022, the billed usage was at 95.56% of the original plan and billed revenue at 98.23% of the original plan. Billings and usage from the City of Flint are included as they were assumed in the FY 2022 Budget.

This table also reflects the positive impact of approved FY 2022 budget amendments and known billing adjustments on the original plan.

**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. Current year collections are trending slightly below prior year for the twelve-month period ending April 30, 2022.

**Table 1 – FY 2022 Wholesale Water Billings Report**

WHOLESALE WATER CHARGES								
Month (1)	FY 2022 Charges (3)		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	1,677,100	33,302,700	1,342,686	29,642,785	(334,414)	(3,659,915)	1,862,791	33,583,619
August	1,509,200	31,598,500	1,417,142	30,604,230	(92,058)	(994,270)	1,622,324	31,230,027
September	1,316,400	29,141,000	1,298,750	29,065,588	(17,650)	(75,412)	1,313,440	27,836,560
October	1,034,000	26,280,800	1,006,217	26,123,483	(27,783)	(157,317)	1,070,660	25,454,840
November	896,800	25,001,500	905,525	25,117,181	8,725	115,681	956,542	24,390,303
December	972,100	25,612,000	958,879	25,542,432	(13,221)	(69,568)	981,770	24,600,202
January	972,000	25,650,600	979,803	25,791,405	7,803	140,805	969,483	25,235,130
February	884,400	24,852,700	875,553	24,800,493	(8,847)	(52,207)	920,467	24,794,259
March	979,500	25,678,200	963,825	25,592,186	(15,675)	(86,014)	1,001,073	25,450,418
April	914,000	25,117,700	912,124	25,139,078	(1,876)	21,378	954,308	25,140,003
May	1,059,200	26,721,900					1,181,186	27,569,969
June	1,374,300	30,029,900					1,424,230	30,066,884
<b>Total</b>	<b>13,589,000</b>	<b>328,987,500</b>	<b>10,660,504</b>	<b>267,418,860</b>	<b>(494,996)</b>	<b>(4,816,840)</b>	<b>14,258,274</b>	<b>325,352,214</b>
Subtotals ytd	11,155,500	272,235,700	10,660,504	267,418,860	(494,996)	(4,816,840)		
Achievement of Original Plan			95.56%	98.23%				
1st Quarter Budget Amendments	(220,000)	(2,400,000)			220,000	2,400,000		
Billing Adjustments			21,488	129,440	21,488	129,440		
Revised Subtotal	10,935,500	269,835,700	10,681,992	267,548,300	(253,508)	(2,287,400)		
Achievement of Amended Plan			97.68%	99.15%				

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

(2) Water Revenues differ from Table 1A because amounts are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract in Table 1A

(3) Charges are based on the approved FY 2022 water supply system charge schedule.

**Table 2 - Wholesale Water Collections**

Water				
Month	Current Year	Prior Year	Variance	Ratio
May	24,878,479	24,811,582	66,897	0.27%
June	25,403,968	27,098,783	(1,694,815)	-6.25%
July	23,709,847	25,080,575	(1,370,728)	-5.47%
August	31,668,492	26,241,018	5,427,474	20.68%
September	23,849,618	26,078,015	(2,228,397)	-8.55%
October	29,212,277	29,292,690	(80,413)	-0.27%
November	25,265,770	32,218,822	(6,953,052)	-21.58%
December	25,302,369	29,609,061	(4,306,692)	-14.55%
January	31,280,599	20,716,948	10,563,651	50.99%
February	24,919,847	25,694,176	(774,329)	-3.01%
March	22,123,572	20,854,506	1,269,066	6.09%
April	21,726,941	23,545,123	(1,818,182)	-7.72%
<b>Rolling 12-Month Total</b>	<b>309,341,779</b>	<b>311,241,299</b>		
<b>Rolling, 12-Month Average</b>	<b>25,778,482</b>	<b>25,936,775</b>		

## 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	7
Total	<u>18</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 2022 sewer billed revenue. As of April 30, 2022 the billed revenue is at 100.00% of the original plan.

**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 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. Current year collections are trending slightly below prior year for the twelve-month period ending April 30, 2022.

**Table 3 – FY 2022 Wholesale Sewer Billings Report**

WHOLESALE SEWER CHARGES								
Month (1)	FY 2022 Charges		FY 2022 - Actual		FY 2022 - Variance		FY 2021 - Actuals	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
August	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
September	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
October	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
November	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
December	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,323,183
January	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
February	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
March	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
April	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
May	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
June	N/A	22,615,000	N/A	22,615,000	N/A	-	N/A	22,633,025
<b>Total</b>		271,380,000		226,150,000		-		269,737,248
Subtotals ytd		226,150,000		226,150,000		-		
Achievement of Budget				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	15,972,800	21,189,047	(5,216,247)	-24.62%
June	28,523,650	28,598,467	(74,817)	-0.26%
July	21,842,125	22,297,737	(455,612)	-2.04%
August	22,191,725	25,354,280	(3,162,555)	-12.47%
September	26,706,558	19,593,613	7,112,945	36.30%
October	22,176,058	16,853,983	5,322,075	31.58%
November	16,534,758	18,966,208	(2,431,450)	-12.82%
December	21,765,958	25,232,649	(3,466,691)	-13.74%
January	26,436,258	25,968,849	467,409	1.80%
February	23,937,258	16,872,900	7,064,358	41.87%
March	24,713,158	22,368,124	2,345,034	10.48%
April	19,937,558	28,128,933	(8,191,375)	-29.12%
<b>Rolling 12-Month Total</b>	270,737,864	271,424,790		
<b>Rolling, 12-Month Average</b>	22,561,489	22,618,733		



## 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, 2022, Highland Park had a delinquent balance of \$54.1 million, including \$41.5 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$10.7 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 2022 through April 30, 2022. 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, 2021 Balance	9,619,853	36,551,675	1,765,710	47,937,238
June 2021 Billing	99,337	478,900	4,053	582,290
June 2021 Payments	-	-	-	-
June 30, 2021 Balance	9,719,190	37,030,575	1,769,763	48,519,528
July 2021 Billing	102,730	478,900	3,972	585,602
July 2021 Payments	-	-	-	-
July 31, 2021 Balance	9,821,920	37,509,475	1,773,735	49,105,130
August 2021 Billing	109,067	446,400	4,067	559,534
August 2021 Payments	-	-	-	-
August 31, 2021 Balance	9,930,987	37,955,875	1,777,802	49,664,664
September 2021 Billing	110,440	446,400	4,062	560,902
September 2021 Payments	-	-	-	-
September 30, 2021 Balance	10,041,427	38,402,275	1,781,864	50,225,566
October 2021 Billing	109,853	446,400	4,053	560,306
October 2021 Payments	-	-	-	-
October 31, 2021 Balance	10,151,280	38,848,675	1,785,917	50,785,872
November 2021 Billing	103,417	446,400	4,069	553,886
November 2021 Payments	-	-	-	-
November 30, 2021 Balance	10,254,697	39,295,075	1,789,986	51,339,758
December 2021 Billing	100,908	446,400	4,075	551,383
December 2021 Payments	-	-	-	-
December 31, 2021 Balance	10,355,605	39,741,475	1,794,061	51,891,141
January 2022 Billing	96,633	446,400	4,002	547,035
January 2022 Payments	-	-	-	-
January 31, 2022 Balance	10,452,238	40,187,875	1,798,063	52,438,176
February 2022 Billing	97,203	446,400	4,002	547,605
February 2022 Payments	-	-	-	-
February 28, 2022 Balance	10,549,441	40,634,275	1,802,065	52,985,781
March 2022 Billing	96,540	446,400	4,000	546,940
March 2022 Payments	-	-	-	-
March 31, 2022 Balance	10,645,981	41,080,675	1,806,065	53,532,721
April 2022 Billing	98,395	446,400	4,009	548,804
April 2022 Payments	-	-	-	-
April 30, 2022 Balance	10,744,376	41,527,075	1,810,074	54,081,525

## 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, 2022.

**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. One member partner contract dispute accounts for \$5.61 million of the current water past due balance. The remaining water past due accounts were paid in early May.

Pollutant surcharge past dues generally consist of smaller account holders that GLWA staff continue to communicate with. The pollutant surcharge balance over 105 days is related to a bankruptcy that is pending further court action.

**Table 6 - Wholesale Accounts Receivable Aging Report Summary**

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 56,922,928.31	\$ 37,997,986.57	\$ 3,698,274.18	\$ 1,088,501.04	\$ 14,138,166.52
Sewer	\$ 56,553,270.34	\$ 15,472,595.18	\$ 446,400.00	\$ 446,400.00	\$ 40,187,875.16
IWC	\$ 2,319,446.88	\$ 516,800.65	\$ 4,583.07	\$ 4,001.97	\$ 1,794,061.19
Pollutant Surcharge	\$ 455,988.21	\$ 427,017.98	\$ (616.42)	\$ 1,949.11	\$ 27,637.54
Total	\$ 116,251,633.74	\$ 54,414,400.38	\$ 4,148,640.83	\$ 1,540,852.12	\$ 56,147,740.41
	100.00%	46.81%	3.57%	1.33%	48.30%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 46,178,551.98	\$ 37,803,050.78	\$ 3,601,071.13	\$ 991,868.12	\$ 3,782,561.95
Sewer	\$ 15,026,195.18	\$ 15,026,195.18	\$ -	\$ -	\$ -
IWC	\$ 509,372.50	\$ 508,791.40	\$ 581.10	\$ -	\$ -
Pollutant Surcharge	\$ 455,988.21	\$ 427,017.98	\$ (616.42)	\$ 1,949.11	\$ 27,637.54
Total	\$ 62,170,107.87	\$ 53,765,055.34	\$ 3,601,035.81	\$ 993,817.23	\$ 3,810,199.49
	100.00%	86.48%	5.79%	1.60%	6.13%

**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. Fiscal year 2022 reflects ten months of activity to date.

Water fund receipts exceeded required disbursements by 6% through April 30, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 13% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 9% through April 30, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 6% since July 1, 2017.

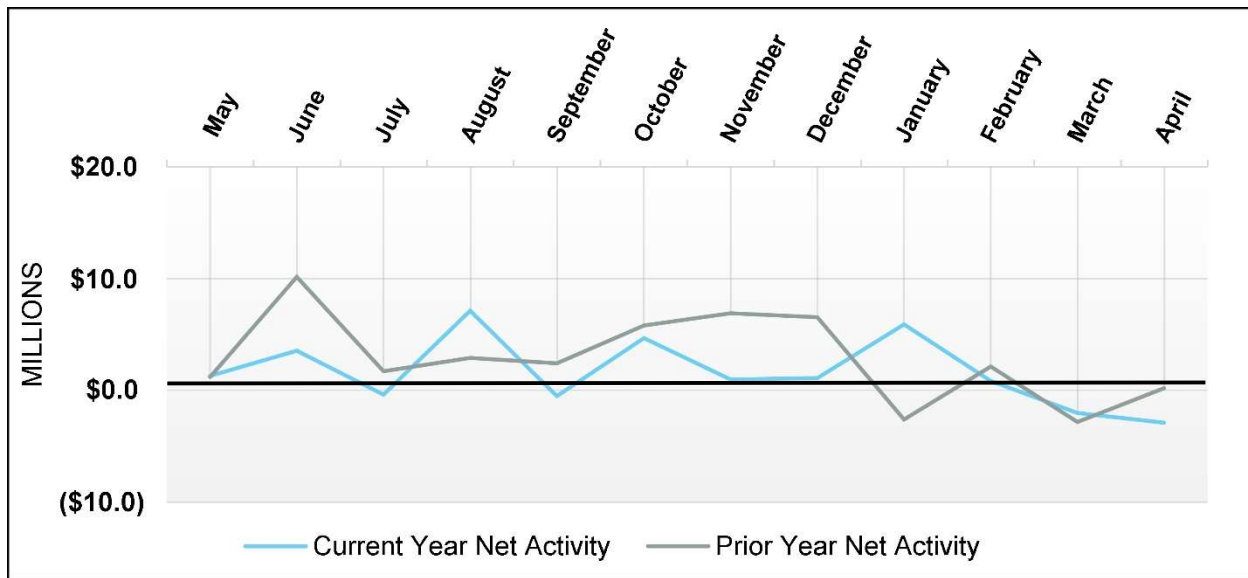
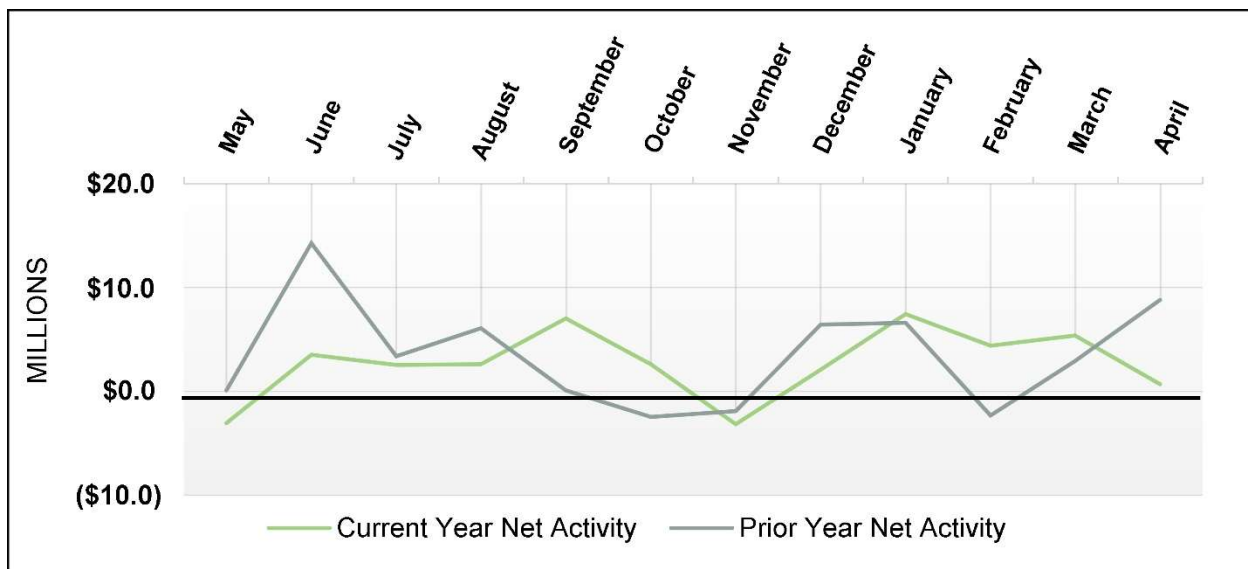
**Chart 1 – GLWA 12-Month Net Receipts – Water** outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

**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.

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

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Apr 30
<b>Water</b>					
1 Receipts	\$ 338,452,001	\$ 336,594,234	\$ 332,606,196	\$ 336,642,021	\$ 279,439,945
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	338,452,001	336,594,234	332,606,196	336,642,021	279,439,945
4 Disbursements	(297,064,810)	(289,230,481)	(296,190,425)	(308,713,407)	(263,183,629)
5 Receipts Net of Required	41,387,191	47,363,753	36,415,771	27,928,614	16,256,316
6 I&E Transfer	(25,739,700)	(47,695,000)	(25,719,751)	(31,991,687)	(24,542,262)
7 Net Receipts	\$ 15,647,491	\$ (331,247)	\$ 10,696,020	\$ (4,063,073)	\$ (8,285,946)
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	114%	116%	112%	109%	106%
<b>Sewer</b>					
9 Receipts	\$ 476,269,761	\$ 467,743,744	\$ 490,461,356	\$ 472,871,853	\$ 397,576,943
10 MOU Adjustments	-	-	-	-	-
11 Adjusted Receipts	476,269,761	467,743,744	490,461,356	472,871,853	397,576,943
12 Disbursements	(458,903,335)	(453,406,636)	(445,604,952)	(436,600,883)	(365,939,924)
13 Receipts Net of Required	17,366,426	14,337,108	44,856,404	36,270,970	31,637,019
14 I&E Transfer	(22,698,100)	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)
15 DWSD Shortfall Advance	(24,113,034)	-	-	-	-
16 Shortfall Repayment (principal)	-	9,367,355	17,542,669	18,206,431	6,895,306
17 Net Receipts	\$ (29,444,708)	\$ 1,156,763	\$ 43,302,873	\$ 13,972,674	\$ 880,537
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	104%	103%	110%	108%	109%
<b>Combined</b>					
19 Receipts	\$ 814,721,762	\$ 804,337,978	\$ 823,067,552	\$ 809,513,874	\$ 677,016,888
20 MOU Adjustments	-	-	-	-	-
21 Adjusted Receipts	814,721,762	804,337,978	823,067,552	809,513,874	677,016,888
22 Disbursements	(755,968,145)	(742,637,117)	(741,795,377)	(745,314,290)	(629,123,553)
23 Receipts Net of Required	58,753,617	61,700,861	81,272,175	64,199,584	47,893,335
24 I&E Transfer	(48,437,800)	(70,242,700)	(44,815,951)	(72,496,414)	(62,194,050)
25 Shortfall Advance	(24,113,034)	-	-	-	-
26 Shortfall Repayment	-	9,367,355	17,542,669	18,206,431	6,895,306
27 Net Receipts	\$ (13,797,217)	\$ 825,516	\$ 53,998,893	\$ 9,909,601	\$ (7,405,409)
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	108%	108%	111%	109%	108%



**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. Fiscal year 2022 reflects ten months of activity to date.

Water fund receipts exceeded required disbursements by 8% through April 30, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 3% through April 30, 2022 compared to the four-year historical average ratio of required receipts falling short of disbursements by 2% since July 1, 2017.

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

***Table 4 – 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.

**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.

**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.

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

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Apr 30
<b>Water</b>					
1 Receipts	\$ 101,233,147	\$ 99,868,219	\$ 96,885,723	\$ 102,067,423	\$ 85,178,778
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	101,233,147	99,868,219	96,885,723	102,067,423	85,178,778
4 Disbursements	(93,049,457)	(97,694,600)	(97,823,097)	(100,707,200)	(79,005,196)
5 Receipts Net of Required	8,183,690	2,173,619	(937,374)	1,360,223	6,173,582
6 I&E Transfer	-	(8,407,080)	-	-	-
7 Net Receipts	\$ 8,183,690	\$ (6,233,461)	\$ (937,374)	\$ 1,360,223	\$ 6,173,582
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	109%	102%	99%	101%	108%
<b>Sewer</b>					
9 Receipts	\$ 242,104,791	\$ 265,339,797	\$ 264,689,559	\$ 308,210,767	\$ 244,404,427
10 MOU Adjustments	-	6,527,200	-	-	-
11 Adjusted Receipts	242,104,791	271,866,997	264,689,559	308,210,767	244,404,427
12 Disbursements	(266,217,825)	(271,018,306)	(275,507,374)	(295,100,771)	(238,157,313)
13 Receipts Net of Required	(24,113,034)	848,691	(10,817,815)	13,109,996	6,247,114
14 I&E Transfer	-	-	-	-	-
15 Shortfall Advance from GLWA	24,113,034	-	-	-	-
16 Net Receipts	\$ -	\$ 848,691	\$ (10,817,815)	\$ 13,109,996	\$ 6,247,114
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	91%	100%	96%	104%	103%
<b>Combined</b>					
18 Receipts	\$ 343,337,938	\$ 365,208,016	\$ 361,575,282	\$ 410,278,190	\$ 329,583,205
19 MOU Adjustments	-	6,527,200	-	-	-
20 Adjusted Receipts	343,337,938	371,735,216	361,575,282	410,278,190	329,583,205
21 Disbursements	(359,267,282)	(368,712,906)	(373,330,471)	(395,807,971)	(317,162,509)
22 Receipts Net of Required	(15,929,344)	3,022,310	(11,755,189)	14,470,219	12,420,696
23 I&E Transfer	-	(8,407,080)	-	-	-
24 Shortfall Advance from GLWA	24,113,034	-	-	-	-
25 Net Receipts	\$ 8,183,690	\$ (5,384,770)	\$ (11,755,189)	\$ 14,470,219	\$ 12,420,696
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	96%	101%	97%	104%	104%

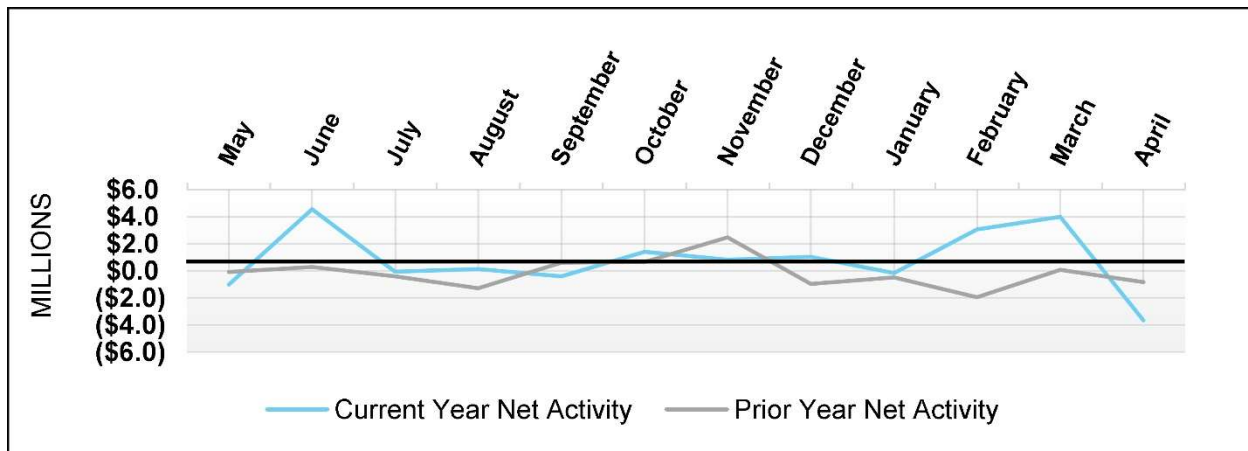
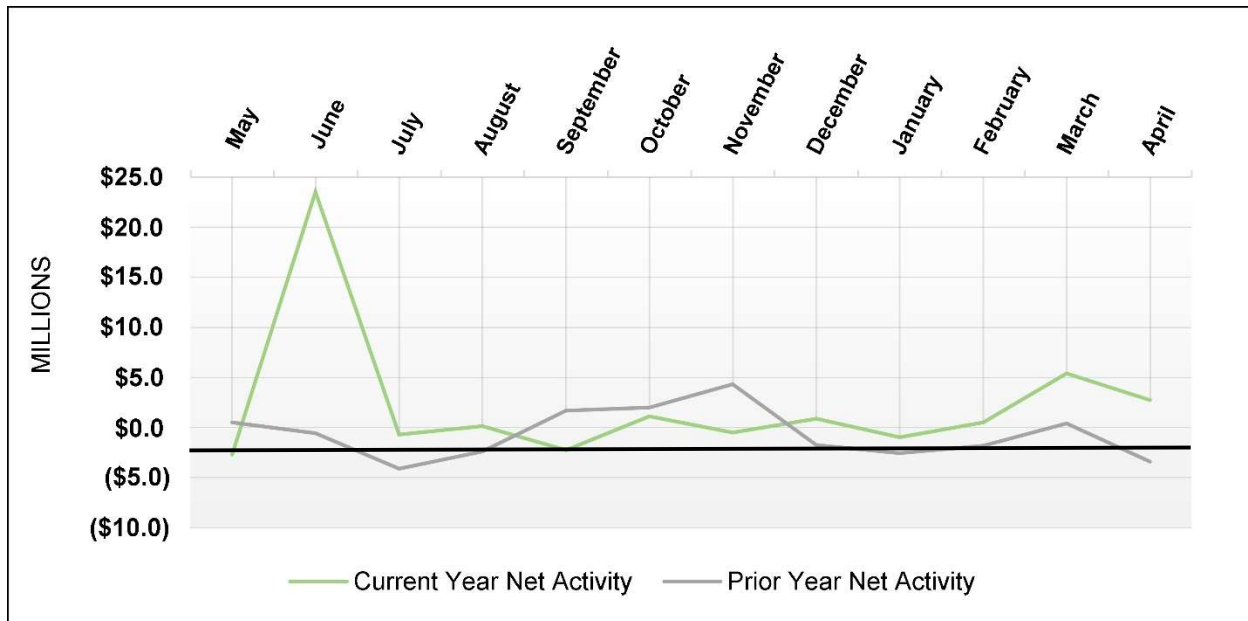
**Table 3 – FY 2018 DWSD Loan Receivable – Sewer**

Date	Transaction	Amount	Balance
06-30-19	Record Loan Receivable		24,113,034
07-15-19	Payment for July 2019	638,978	23,474,056
08-08-19	Payment for August 2019	640,686	22,833,370
09-06-19	Payment for September 2019	642,400	22,190,970
10-02-19	Payment for October 2019	644,118	21,546,852
11-04-19	Payment for November 2019	645,840	20,901,012
12-03-19	Payment for December 2019	647,567	20,253,445
01-06-20	Payment for January 2020	649,299	19,604,146
02-04-20	Payment for February 2020	651,035	18,953,111
03-03-20	Payment for March 2020	652,776	18,300,335
04-15-20	Payment for April 2020	654,522	17,645,813
05-06-20	Payment for May 2020	656,272	16,989,541
06-02-20	Payment for June 2020	658,027	16,331,514
07-07-20	Payment for July 2020	659,787	15,671,727
08-04-20	Payment for August 2020	661,551	15,010,176
09-02-20	Payment for September 2020	663,320	14,346,855
10-05-20	Payment for October 2020	665,094	13,681,761
11-03-20	Payment for November 2020	666,873	13,014,888
12-03-20	Payment for December 2020	668,656	12,346,232
01-05-21	Payment for January 2021	670,444	11,675,788
02-02-21	Payment for February 2021	672,237	11,003,551
03-03-21	Payment for March 2021	674,035	10,329,517
04-05-21	Payment for April 2021	675,837	9,653,679
05-04-21	Payment for May 2021	677,644	8,976,035
06-03-21	Payment for June 2021	679,457	8,296,578
07-02-21	Payment for July 2021	681,274	7,615,305
08-03-21	Payment for August 2021	683,095	6,932,209
09-03-21	Payment for September 2021	684,922	6,247,287
10-05-21	Payment for October 2021	686,754	5,560,534
11-03-21	Payment for November 2021	688,590	4,871,944
12-06-21	Payment for December 2021	690,432	4,181,512
01-05-22	Payment for January 2022	692,278	3,489,234
02-04-22	Payment for February 2022	694,129	2,795,105
03-03-22	Payment for March 2022	695,985	2,099,119
04-03-22	Payment for April 2022	697,847	1,401,273
		<b>22,711,761</b>	<b>1,401,273</b>



**Table 4 – FY 2018 DWSD Loan Receivable Payments – Sewer**

Date	Transaction	Principal	Interest	Total Paid
07-15-19	Payment for July 2019	638,978	64,482	703,460
08-08-19	Payment for August 2019	640,686	62,774	703,460
09-06-19	Payment for September 2019	642,400	61,060	703,460
10-02-19	Payment for October 2019	644,118	59,342	703,460
11-04-19	Payment for November 2019	645,840	57,620	703,460
12-03-19	Payment for December 2019	647,567	55,893	703,460
01-06-20	Payment for January 2020	649,299	54,161	703,460
02-04-20	Payment for February 2020	651,035	52,425	703,460
03-03-20	Payment for March 2020	652,776	50,684	703,460
04-15-20	Payment for April 2020	654,522	48,938	703,460
05-06-20	Payment for May 2020	656,272	47,188	703,460
06-02-20	Payment for June 2020	658,027	45,433	703,460
07-07-20	Payment for July 2020	659,787	43,673	703,460
08-04-20	Payment for August 2020	661,551	41,909	703,460
09-02-20	Payment for September 2020	663,320	40,140	703,460
10-05-20	Payment for October 2020	665,094	38,366	703,460
11-03-20	Payment for November 2020	666,873	36,587	703,460
12-03-20	Payment for December 2020	668,656	34,804	703,460
01-05-21	Payment for January 2021	670,444	33,016	703,460
02-02-21	Payment for February 2021	672,237	31,223	703,460
03-03-21	Payment for March 2021	674,035	29,425	703,460
04-05-21	Payment for April 2021	675,837	27,623	703,460
05-04-21	Payment for May 2021	677,644	25,816	703,460
06-03-21	Payment for June 2021	679,457	24,003	703,460
07-02-21	Payment for July 2021	681,274	22,186	703,460
08-03-21	Payment for August 2021	683,095	20,365	703,460
09-03-21	Payment for September 2021	684,922	18,538	703,460
10-05-21	Payment for October 2021	686,754	16,706	703,460
11-03-21	Payment for November 2021	688,590	14,870	703,460
12-06-21	Payment for December 2021	690,432	13,028	703,460
01-05-22	Payment for January 2022	692,278	11,182	703,460
02-04-22	Payment for February 2022	694,129	9,331	703,460
03-03-22	Payment for March 2022	695,985	7,475	703,460
04-04-22	Payment for April 2022	697,847	5,613	703,460
		<b>22,711,761</b>	<b>1,205,879</b>	<b>23,917,640</b>

**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 5 – Combined Net Cash Flows from Trust Receipts & Disbursements** provides a summary of cash receipt collections and required MBO transfers by fiscal year. Fiscal year 2022 reflects ten months of activity to date.

Water fund net receipts exceeded required disbursements by 7% through April 30, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 10% since July 1, 2017.

Sewer fund receipts exceeded required disbursements by 6% through April 30, 2022 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2017.

**Table 5 – Combined Net Cash Flows from Trust Receipts & Disbursements**

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 Thru Apr 30
<b>Water</b>					
1 Receipts	\$ 439,685,148	\$ 436,462,453	\$ 429,491,919	\$ 438,709,444	\$ 364,618,723
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	439,685,148	436,462,453	429,491,919	438,709,444	364,618,723
4 Disbursements	(390,114,267)	(386,925,081)	(394,013,522)	(409,420,607)	(342,188,825)
5 Receipts Net of Required	49,570,881	49,537,372	35,478,397	29,288,837	22,429,898
6 I&E Transfer	(25,739,700)	(56,102,080)	(25,719,751)	(31,991,687)	(24,542,262)
7 Net Receipts	\$ 23,831,181	\$ (6,564,708)	\$ 9,758,646	\$ (2,702,850)	\$ (2,112,364)
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	113%	113%	109%	107%	107%
<b>Sewer</b>					
9 Receipts	\$ 718,374,552	\$ 733,083,541	\$ 755,150,915	\$ 781,082,620	\$ 641,981,370
10 MOU Adjustments	-	6,527,200	-	-	-
11 Adjusted Receipts	718,374,552	739,610,741	755,150,915	781,082,620	641,981,370
12 Disbursements	(725,121,160)	(724,424,942)	(721,112,326)	(731,701,654)	(604,097,237)
13 Receipts Net of Required	(6,746,608)	15,185,799	34,038,589	49,380,966	37,884,133
14 I&E Transfer	(22,698,100)	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)
15 Shortfall Advance	-	-	-	-	-
16 Shortfall Repayment (principal)	-	9,367,355	17,542,669	18,206,431	6,895,306
17 Net Receipts	\$ (29,444,708)	\$ (7,361,901)	\$ 32,485,058	\$ 27,082,670	\$ 7,127,651
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	99%	102%	105%	107%	106%
<b>Combined</b>					
19 Receipts	\$1,158,059,700	\$1,169,545,994	\$1,184,642,834	\$1,219,792,064	\$ 1,006,600,093
20 MOU Adjustments	-	6,527,200	-	-	-
21 Adjusted Receipts	1,158,059,700	1,176,073,194	1,184,642,834	1,219,792,064	1,006,600,093
22 Disbursements	(1,115,235,427)	(1,111,350,023)	(1,115,125,848)	(1,141,122,261)	(946,286,062)
23 Receipts Net of Required	42,824,273	64,723,171	69,516,986	78,669,803	60,314,031
24 I&E Transfer	(48,437,800)	(78,649,780)	(44,815,951)	(72,496,414)	(62,194,050)
25 Shortfall Advance	-	-	-	-	-
26 Shortfall Repayment	-	9,367,355	17,542,669	18,206,431	6,895,306
27 Net Receipts	\$ (5,613,527)	\$ (4,559,254)	\$ 42,243,704	\$ 24,379,820	\$ 5,015,287
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	104%	106%	106%	107%	106%

## APPENDIX



## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$195,778.98	\$195,778.98	\$0.00	\$0.00	\$0.00
ALMONT VILLAGE	\$20,080.14	\$20,080.14	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$134,762.85	\$134,762.85	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$27,049.75	\$27,049.75	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$61,409.61	\$61,409.61	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$296,909.00	\$296,909.00	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$22,668.47	\$22,668.47	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$23,651.01	\$23,651.01	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$843,081.33	\$843,081.33	\$0.00	\$0.00	\$0.00
CENTER LINE	\$79,874.81	\$79,874.81	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$359,475.38	\$359,475.38	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$621,836.33	\$621,836.33	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$552,913.34	\$552,913.34	\$0.00	\$0.00	\$0.00
DEARBORN	\$7,251,891.79	\$1,637,179.39	\$840,509.26	\$991,641.19	\$3,782,561.95
DEARBORN HEIGHTS	\$639,910.36	\$639,910.36	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$275,148.30	\$275,148.30	\$0.00	\$0.00	\$0.00
ECORSE	\$115,572.46	\$115,572.46	\$0.00	\$0.00	\$0.00
FARMINGTON	\$83,708.40	\$83,708.40	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$1,402,345.58	\$1,402,345.58	\$0.00	\$0.00	\$0.00
FERNDAL	\$91,389.42	\$91,389.42	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$107,904.44	\$107,904.44	\$0.00	\$0.00	\$0.00
FLINT	\$271,694.65	\$271,694.65	\$0.00	\$0.00	\$0.00
FRASER	\$104,350.98	\$104,350.98	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GARDEN CITY	\$5,316.57	\$5,316.57	\$0.00	\$0.00	\$0.00
GENESEE COUNTY DRAIN COMM	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$28,429.53	\$28,429.53	\$0.00	\$0.00	\$0.00
GREATER LAPEER CUA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$91,045.15	\$91,045.15	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$21,005.32	\$21,005.32	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$106,928.99	\$106,928.99	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$47,535.75	\$47,535.75	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$100,651.40	\$100,651.40	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$134,036.43	\$134,036.43	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$72,826.29	\$72,826.29	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$138,103.47	\$138,103.47	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$54,010.62	\$54,010.62	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$10,744,376.33	\$194,935.79	\$97,203.05	\$96,632.92	\$10,355,604.57
HURON TOWNSHIP	\$131,459.06	\$131,459.06	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$120,664.57	\$120,664.57	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,076.16	\$1,076.16	\$0.00	\$0.00	\$0.00
INKSTER	\$114,716.84	\$114,716.84	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$50,227.17	\$50,227.17	\$0.00	\$0.00	\$0.00
LAPEER	\$135,922.87	\$135,922.87	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$77,642.87	\$51,551.98	\$25,863.96	\$226.93	\$0.00
LINCOLN PARK	\$411,421.73	\$411,421.73	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$915,115.42	\$915,115.42	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$2,993,135.30	\$1,975,404.69	\$1,017,730.61	\$0.00	\$0.00
MADISON HEIGHTS	\$178,828.91	\$178,828.91	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$3,602.54	\$3,602.54	\$0.00	\$0.00	\$0.00
MELVINDALE	\$114,427.15	\$114,427.15	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$63,990.96	\$63,990.96	\$0.00	\$0.00	\$0.00
NOCWA	\$3,477,919.92	\$3,477,919.92	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$69,403.23	\$69,403.23	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$844,273.09	\$844,273.09	\$0.00	\$0.00	\$0.00
NOVI	\$1,441,028.31	\$1,441,028.31	\$0.00	\$0.00	\$0.00
OAK PARK	\$238,198.12	\$238,198.12	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$7,730.65	\$7,730.65	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$172,979.05	\$172,979.05	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$1,044,675.26	\$690,944.50	\$353,730.76	\$0.00	\$0.00
REDFORD TOWNSHIP	\$ (7,209.78)	\$ (7,209.78)	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$180,068.60	\$119,371.90	\$60,696.70	\$0.00	\$0.00
RIVERVIEW	\$74,157.55	\$74,157.55	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$47,790.04	\$47,790.04	\$0.00	\$0.00	\$0.00
ROMEO	\$22,080.78	\$22,080.78	\$0.00	\$0.00	\$0.00
ROMULUS	\$346,566.97	\$346,566.97	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$227,698.75	\$227,698.75	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$33,031.15	\$33,031.15	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,109,286.00	\$1,109,286.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOCWA	\$3,730,542.10	\$3,730,542.10	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$10,019.52	\$10,019.52	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$196,847.11	\$196,847.11	\$0.00	\$0.00	\$0.00
ST. CLAIR CNTY-GREENWOOD ENE	\$61,676.82	\$61,676.82	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$273,405.03	\$273,405.03	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$3,824,295.42	\$2,521,755.58	\$1,302,539.84	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$66,600.33	\$66,600.33	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$24,663.63	\$24,663.63	\$0.00	\$0.00	\$0.00
TAYLOR	\$398,718.39	\$398,718.39	\$0.00	\$0.00	\$0.00
TRENTON	\$140,779.59	\$140,779.59	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,064,201.45	\$1,064,201.45	\$0.00	\$0.00	\$0.00
UTICA	\$47,543.08	\$47,543.08	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$577,200.83	\$577,200.83	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$130,234.65	\$130,234.65	\$0.00	\$0.00	\$0.00
WARREN	\$1,756,351.83	\$1,756,351.83	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$181,215.10	\$181,215.10	\$0.00	\$0.00	\$0.00
WAYNE	\$288,102.03	\$288,102.03	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,722,890.99	\$1,722,890.99	\$0.00	\$0.00	\$0.00
WESTLAND	\$544,275.78	\$544,275.78	\$0.00	\$0.00	\$0.00
WIXOM	\$199,529.31	\$199,529.31	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$142,335.39	\$142,335.39	\$0.00	\$0.00	\$0.00
YCUA	\$1,771,917.46	\$1,771,917.46	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOTAL WATER ACCOUNTS	\$56,922,928.31	\$37,997,986.57	\$3,698,274.18	\$1,088,501.04	\$14,138,166.52

## GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$69,800.00	\$69,800.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$85,799.50	\$85,799.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,671,500.00	\$1,671,500.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$156,900.00	\$156,900.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$332,800.00	\$332,800.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$41,527,075.16	\$446,400.00	\$446,400.00	\$446,400.00	\$40,187,875.16
MELVINDALE	\$129,500.00	\$129,500.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMID	\$5,905,595.68	\$5,905,595.68	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,605,600.00	\$4,605,600.00	\$0.00	\$0.00	\$0.00
SOUTH MACOMB SANITATION DIST	\$2,064,400.00	\$2,064,400.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,300.00	\$4,300.00	\$0.00	\$0.00	\$0.00
<b>TOTAL SEWER ACCOUNTS</b>	<b>\$56,553,270.34</b>	<b>\$15,472,595.18</b>	<b>\$446,400.00</b>	<b>\$446,400.00</b>	<b>\$40,187,875.16</b>

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,605.39	\$1,605.39	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,147.06	\$3,147.06	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$994.74	\$994.74	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$2,431.98	\$2,431.98	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$5,664.00	\$5,664.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$169.92	\$169.92	\$0.00	\$0.00	\$0.00
CENTER LINE	\$3,667.44	\$3,667.44	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,533.37	\$12,533.37	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$200.01	\$200.01	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$8,867.70	\$8,867.70	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,708.15	\$3,708.15	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$3,122.28	\$3,122.28	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN	\$73,812.54	\$73,812.54	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$9,251.79	\$9,251.79	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$212.40	\$212.40	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EASTPOINTE	\$6,426.87	\$6,426.87	\$0.00	\$0.00	\$0.00
FARMINGTON	\$4,019.67	\$4,019.67	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$9,876.60	\$9,876.60	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$6,106.50	\$6,106.50	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,573.53	\$1,573.53	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,079.75	\$2,079.75	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,177.05	\$1,177.05	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,155.96	\$4,155.96	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,897.44	\$1,897.44	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,148.83	\$3,148.83	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,260.34	\$3,260.34	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,810,074.38	\$8,009.25	\$4,001.97	\$4,001.97	\$1,794,061.19
HUNTINGTON WOODS	\$284.97	\$284.97	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$1,300.70	\$1,300.70	\$0.00	\$0.00	\$0.00
INKSTER	\$5,536.56	\$5,536.56	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$800.04	\$800.04	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,400.07	\$1,400.07	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$323.91	\$323.91	\$0.00	\$0.00	\$0.00



## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$40,244.49	\$40,244.49	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$205.32	\$205.32	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$7,002.12	\$7,002.12	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$612.42	\$612.42	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$1,736.37	\$1,736.37	\$0.00	\$0.00	\$0.00
NOVI	\$17,712.39	\$17,712.39	\$0.00	\$0.00	\$0.00
OAK PARK	\$7,218.06	\$7,218.06	\$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)	\$4,278.09	\$4,278.09	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$486.88	\$486.88	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$2,086.83	\$2,086.83	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,253.16	\$1,253.16	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$272.58	\$272.58	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$7,766.76	\$7,766.76	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$136.29	\$136.29	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$24,905.67	\$24,803.01	\$102.66	\$0.00	\$0.00
ROCHESTER HILLS	\$18,590.31	\$18,590.31	\$0.00	\$0.00	\$0.00
ROMULUS	\$778.80	\$778.80	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,714.01	\$14,714.01	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,790.07	\$13,790.07	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SHELBY TOWNSHIP	\$14,821.98	\$14,821.98	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$56,046.14	\$56,046.14	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$7,126.56	\$6,648.12	\$478.44	\$0.00	\$0.00
ST. CLAIR SHORES	\$11,841.30	\$11,841.30	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,870.62	\$31,870.62	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UTICA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,039.04	\$2,039.04	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,569.99	\$1,569.99	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADM)	\$3,157.31	\$3,157.31	\$0.00	\$0.00	\$0.00
WAYNE	\$4,996.71	\$4,996.71	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,334.92	\$6,334.92	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) P	\$243.39	\$243.39	\$0.00	\$0.00	\$0.00
WESTLAND	\$22,776.36	\$22,776.36	\$0.00	\$0.00	\$0.00
<b>TOTAL IWC ACCOUNTS</b>	<b>\$2,319,446.88</b>	<b>\$516,800.65</b>	<b>\$4,583.07</b>	<b>\$4,001.97</b>	<b>\$1,794,061.19</b>

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY (MINNESOTA MINING	\$3,125.62	\$3,125.62	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$1,919.34	\$1,919.34	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$67.66	\$67.66	\$0.00	\$0.00	\$0.00
ADORING PET FUNERAL HOME	\$118.45	\$118.45	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$588.80	\$588.80	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$168.49	\$168.49	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
APPLIED TECHNOLOGY INDUSTRIE	\$966.39	\$966.39	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$0.00	\$0.00	\$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	\$83.52	\$83.52	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$1,096.89	\$43.76	\$0.00	\$61.16	\$991.97
BAYS MICHIGAN CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BEIRUT BAKERY, INC.	\$37.00	\$0.00	\$0.00	\$0.00	\$37.00
BETTER MADE SNACK FOOD	\$27,700.71	\$27,700.71	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$53.06	\$53.06	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$7,351.88	\$5,158.71	\$2,193.17	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$63.26	\$63.26	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CADILLAC STRAITS BREWING CO.	\$30.54	\$30.54	\$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	\$10,879.38	\$10,879.38	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,034.65	\$21.60	\$10.23	\$10.23	\$1,992.59
CINTAS CORP. - MACOMB TWP.	\$23,271.79	\$23,271.79	\$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.	\$7.07	\$7.07	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$7.41	\$7.41	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$0.00	\$0.00	\$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
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

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
COUNTRY FRESH DAIRY CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$ (336.66)	\$0.00	\$0.00	\$0.00	\$ (336.66)
DARLING INGREDIENTS, INC.	\$7,023.53	\$7,023.53	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$ (11.58)	\$0.00	\$0.00	\$0.00	\$ (11.58)
DEARBORN SAUSAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT BEER CO.	\$24.04	\$24.04	\$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	\$707.83	\$707.83	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$17.68	\$17.68	\$0.00	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$88.03	\$88.03	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$98.97	\$98.97	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$7,831.26	\$7,831.26	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,408.66	\$3,408.66	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$31.74	\$31.74	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$3,223.61	\$3,223.61	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$163.82	\$81.91	\$0.00	\$81.91	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$2,114.56	\$2,114.56	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$7,930.97	\$7,930.97	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$40.64	\$40.64	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLF	\$1,667.23	\$1,667.23	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$212.86	\$212.86	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$2.55	\$2.55	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$21,210.53	\$21,210.53	\$0.00	\$0.00	\$0.00
FIVES CINETIC CORP.	\$3,142.44	\$3,142.44	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$17.63	\$17.63	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$484.71	\$484.71	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$3,085.66	\$3,085.66	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (19.82)	\$0.00	\$0.00	\$0.00	\$ (19.82)
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$13.52	\$13.52	\$0.00	\$0.00	\$0.00
GREAT BARABOO BREWING CO.	\$78.42	\$78.42	\$0.00	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$1,991.66	\$1,162.35	\$629.35	\$199.96	\$0.00
HENKEL CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOME STYLE FOOD INC.	\$929.49	\$929.49	\$0.00	\$0.00	\$0.00
HEMEGROWN BREWING COMPANY	\$39.54	\$39.54	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$ (36.76)	\$0.00	\$0.00	\$0.00	\$ (36.76)
HOUGHTON INTERNATIONAL INC.	\$309.82	\$29.26	\$38.03	\$67.29	\$175.24
HOUGHTON INTERNATIONAL INC.	\$ (4,072.25)	\$0.00	\$0.00	\$0.00	\$ (4,072.25)
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$728.44	\$728.44	\$0.00	\$0.00	\$0.00
INTRASTATE DISTRIBUTORS	\$1,421.51	\$1,344.10	\$77.41	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$929.39	\$929.39	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$68.54	\$22.41	\$0.00	\$21.09	\$25.04
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$485.63	\$485.63	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$471.50	\$471.50	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$43.06	\$43.06	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$0.00	\$0.00	\$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	\$32.95	\$32.95	\$0.00	\$0.00	\$0.00
LIQUID ENVIRONMENTAL SOLUTIC	\$3,495.68	\$2,052.08	\$806.54	\$637.06	\$0.00
MACDERMID, INC.	\$1,640.85	\$1,640.85	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$622.74	\$622.74	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$25.43	\$25.43	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELLO MEATS INC, - KUBISCH S	\$66.33	\$66.33	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$422.88	\$422.88	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$102,495.39	\$102,495.39	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$1,929.06	\$1,929.06	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$303.40	\$303.40	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MILANO BAKERY	\$388.87	\$388.87	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,073.20	\$2,073.20	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$ (1.66)	\$0.00	\$0.00	\$0.00	\$ (1.66)
MOTOR CITY BREWING WORKS	\$445.03	\$46.13	\$0.00	\$85.67	\$313.23
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NEAPCO DRIVELINES	\$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 & MEAT	\$9.85	\$9.85	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$49.85	\$49.85	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$109.20	\$45.67	\$0.00	\$23.92	\$39.61
PELLERITO FOODS INC.	\$2.02	\$2.02	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$30,312.10	\$30,312.10	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$30,944.58	\$30,944.58	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$10,387.33	\$10,387.33	\$0.00	\$0.00	\$0.00



## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PERDUE PREMIUM MEAT COMPANY	\$3,695.96	\$3,695.96	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$79.33	\$37.82	\$17.99	\$23.52	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$19,958.50	\$19,958.50	\$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	\$1,956.93	\$0.00	\$1,956.93	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$308.83	\$308.83	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$215.93	\$215.93	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$440.60	\$0.00	\$0.00	\$0.00	\$440.60
ROCHESTER MILLS BEER COMPANY	\$137.82	\$137.82	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$1,765.08	\$1,083.20	\$0.00	\$681.88	\$0.00
ROYAL OAK BREWERY	\$ (128.00)	\$0.00	\$0.00	\$0.00	\$ (128.00)
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$55.36	\$55.36	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$33.44	\$33.44	\$0.00	\$0.00	\$0.00
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$14.52	\$0.00	\$0.00	\$0.00	\$14.52
SUPERNATURAL SPIRITS & BREWI	\$51.40	\$51.40	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$265.81	\$104.68	\$49.26	\$55.42	\$56.45
THERMO FISHER SCIENTIFIC	\$ (6,395.33)	\$0.00	\$ (6,395.33)	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$ (31.16)	\$0.00	\$0.00	\$0.00	\$ (31.16)
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$569.08	\$569.08	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$50,439.10	\$50,439.10	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,913.84	\$2,913.84	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$0.87	\$0.87	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$203.87	\$203.87	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$74.47	\$74.47	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$330.17	\$330.17	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$1,863.37	\$1,863.37	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$2,146.17	\$2,146.17	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$602.87	\$602.87	\$0.00	\$0.00	\$0.00
VAUGHAN INDUSTRIES, INC.	\$28.62	\$28.62	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$6,081.42	\$6,081.42	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$464.32	\$464.32	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$19.10	\$19.10	\$0.00	\$0.00	\$0.00
WIGLEY'S MEAT PROCESS	\$433.36	\$433.36	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$979.47	\$979.47	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 04/30/22

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WINTER SAUSAGE MFG. CO.	\$103.94	\$103.94	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$4,891.36	\$4,891.36	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,339.22	\$2,339.22	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$144.24	\$0.00	\$0.00	\$0.00	\$144.24
<b>TOTAL POLLUTANT SURCHARGE ACCOUNTS</b>	<b>\$455,988.21</b>	<b>\$427,017.98</b>	<b>\$ (616.42)</b>	<b>\$1,949.11</b>	<b>\$27,637.54</b>

## City of Highland Park Billings and Collections

	Water	Sewer	IWC	Cumulative Total
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	(65,652)	(2,206,211)	-	(2,271,863)
				-
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	-	(1,612,633)	-	(1,612,633)
				-
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	-	(1,444,623)	-	(1,444,623)
				-
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	-	(2,022,335)	-	(2,022,335)
				-
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	-	(2,309,186)	-	(2,309,186)
				-
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	-	(4,108,108)	-	(4,108,108)
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments	-	(5,241,583)	-	(5,241,583)
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings	1,182,639	5,665,400	47,097	6,895,136
FY 2020 Payments	-	(3,026,117)	-	(3,026,117)
				-
June 30, 2020 Balance	\$ 8,533,684	\$ 34,112,127	\$ 1,722,340	\$ 44,368,151
FY 2021 Billings	1,185,506	5,702,000	47,423	6,934,929
FY 2021 Payments	-	(2,783,552)	-	(2,783,552)
				-
June 30, 2021 Balance	\$ 9,719,190	\$ 37,030,575	\$ 1,769,763	\$ 48,519,528
FY 2022 Billings (10 Months)	1,025,186	4,496,500	40,311	5,561,997
FY 2022 Payments (10 Months)	-	-	-	-
				-
<b>Balance as of April 30, 2022</b>	<b>\$ 10,744,376</b>	<b>\$ 41,527,075</b>	<b>\$ 1,810,074</b>	<b>\$ 54,081,525</b>



The Business Inclusion and Diversity (B.I.D.) Program Year-in-Review Summary includes the following:

1. Report Highlights
2. Background
3. Program Overview and Legal Framework for Establishing Diversity and Inclusion Programming in Michigan
4. Phase I - Benchmarking and Program Implementation
5. Phase II - Program Adjustments and Additions
6. Vendor Outreach & Communication Efforts
7. Program Data Summary (February 1, 2021 through June 30, 2022)
8. Future Opportunities for GLWA's B.I.D. Program

## **Report Highlights**

- The Business Inclusion & Diversity (B.I.D.) program was launched in February 2021. The first procurement submittal that included the B.I.D. criteria was received on April 27, 2021.
- As of June 30, 2022, GLWA has awarded 34 contracts under the B.I.D. Program requirements totaling \$340.4 million. GLWA has also received and reviewed 145 vendor Diversity Plans that documented efforts to maximize the participation of small, minority-owned, and disadvantaged business enterprises in GLWA's procurement process.
- The B.I.D. Program Team continues to refine B.I.D. Program business processes, conduct internal Team Member training, develop communication materials, and attend outreach events to support and educate the Vendor Community about the B.I.D. requirements.

## **Background**

Historically, small, minority-owned, and disadvantaged business enterprises within GLWA's service area have faced obstacles to participation in procurements on a competitive basis. On September 23, 2020, the GLWA Board of Directors expressed their desire to strengthen GLWA's commitment to the principles of affordability, equity, and inclusion. The objectives of this effort were to develop and implement a program designed to maximize opportunities for small, minority-owned, and disadvantaged businesses within GLWA's service area so that they may effectively compete and do business with GLWA. In the long-term, such a program would allow GLWA to further support economic development throughout the region, expand its pool of skilled resources, and improve competitive pricing in its procurements.



On November 25, 2020, the GLWA Board of Directors approved an amendment to the [Procurement Policy](#) allowing for the formation of a Business Inclusion & Diversity (B.I.D.) Program.

#### **4.5 Business Inclusion and Diversity Plan**

*GLWA is committed to providing business opportunities to vendors who honor the values of inclusion and diversity in selecting their business partners. To foster these values, the solicitation selection will require vendors to submit, for all solicitations budgeted at \$1 million or more, a Business Inclusion & Diversity Plan that addresses their efforts to include Minority-owned Business Enterprise (MBE), Woman-owned Business Enterprise (WBE), Small Business Enterprise (SBE), and Socially and Economically Disadvantaged Business Enterprise (DBE) subcontractors.*

- a. In support of this commitment, the vendor agrees to ensure that, with regard to any contract entered into pursuant to this procurement policy, inclusion and diversity business enterprises will be afforded full opportunity and will not be discriminated against on the basis of race, color, gender, age, disability, religion, ancestry, marital status, sexual orientation, national origin or place of birth. In recognition of this, the vendor will take steps to ensure maximum participation by qualified diversity businesses in a manner and to the degree that it equals or exceeds standards for its other customers and/or clients.*
- b. The vendor shall provide methods to maximize opportunity for diversity participation and reporting methods that indicate firms invited, firms recommended for award and other pertinent information*

With the amended policy, the B.I.D. Program Team within the Procurement Group executed a Phase I launch of the program on February 1, 2021 and a Phase II launch on July 1, 2021.

## **Program Overview and Legal Framework for Establishing Diversity and Inclusion Programming in Michigan**

In accordance with GLWA's Procurement Policy, amended on November 25, 2020, all vendors responding to solicitations budgeted at \$1 million or more must fulfill the requirements of the B.I.D. Program. There are two key components of GLWA's B.I.D. Program Requirements: 1) the Business Inclusion and Diversity Plan and 2) the Economic Equity and Development Scored Criteria. These are explained in further detail below.

### **Business Inclusion and Diversity Plan**

Under GLWA's B.I.D. Program, a Business Inclusion and Diversity Plan is a mandatory requirement for all vendors responding to solicitations budgeted at \$1 million or more. The



goal of the Diversity Plan is to demonstrate how the Vendor presented and maximized opportunities for qualified small, minority-owned, and economically disadvantaged business enterprises within GLWA's service area.

A successful Diversity Plan documents the vendor's efforts to include diverse subcontractors and must be specific to the GLWA solicitation. A vendor's Diversity Plan may include (but is not limited to) documentation of the following efforts:

- Targeted outreach to diverse subcontractors;
- Identifying scopes of work that can be broken down into smaller portions; and
- Assisting potential subcontractors in the development of bids and/or quotations.

As part of the Diversity Plan, vendors are also asked to submit any Diversity Certifications that they or their subcontractors hold. GLWA's objective is to make it easy to participate in the procurement process and reduce the administrative burdens required from the Vendor Community. For this reason, GLWA does not act in the capacity of a certifying agency. Instead, it accepts vendor diversity certifications from a federal agency, the state of Michigan, or a Michigan local unit of government. The Diversity Certifications that GLWA seeks from Vendors includes the following:

- Disadvantaged Business Enterprise (DBE);
- Minority-owned Business Enterprise (MBE);
- Small Business Enterprise (SBE); and
- Woman-owned Business Enterprise (WBE).

Each Vendor's Diversity Plan is scored pass/fail. Under the awarded contract, the vendor's Diversity Plan becomes part of the executed contract and may be negotiated during contract finalization. In future, vendor performance and B.I.D. Program compliance monitoring will be assessed during the length and completion of the contract.

### ***Economic Equity and Development Scored Criteria***

As a regional water authority and partner to the business community, GLWA is committed to providing economic development opportunities within the state of Michigan and the GLWA service area in which we operate. Therefore, in addition to the Diversity Plan, all solicitations budgeted at \$1 million or more include the following scored criteria:

- 1% — Business Presence<sup>1</sup> in the State of Michigan;
- 1% — Business Presence in GLWA service area; and

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<sup>1</sup> A "business presence" in the State of Michigan indicates that a business is eligible to be a Certified Michigan Based Business as defined by State of Michigan law: a) files a Michigan single business tax return; b) has a Michigan income tax return statement showing income generated in, or attributed to, the state of Michigan; or c) withheld Michigan income tax from compensation paid to vendors/owners and remitted to the Michigan Department of Treasury.



- 1% — Business Presence in a designated, economically disadvantaged municipality<sup>2</sup> within GLWA’s service area.

A cumulative total of 3% points may be added to a vendor’s overall bid or proposal score. In both a Request for Bid (RFB) and Request for Proposal (RFP), this means that 97% out of a possible total of 100% refers to the vendor’s bid or proposal, with the remaining 3% accounted for by the B.I.D. solicitation scored criteria.

To receive these percentage points, Vendors complete and submit a B.I.D. Program Questionnaire in GLWA’s Bonfire Procurement Portal indicating if they have a business presence in the above three categories. A full list of the qualifying communities and counties within GLWA’s service area are always identified in the GLWA solicitation documents.

### ***Legal Framework for Establishing Diversity and Inclusion Programming in Michigan***

GLWA’s B.I.D. program was created to align with case law that defines the boundaries of diversity and inclusion programming within the state of Michigan. In 2006, Michigan voters approved Proposal 2, or the Michigan Civil Rights Initiative. This initiative, and subsequent amendment to the Michigan Constitution ([Article I, §26 Affirmative Action Programs](#)) “bans affirmative action programs that give preferential treatment to groups or individuals based on their race, gender, color, ethnicity, or national origin for public employment, education, or contracting purposes,” with the exception of those institutions that are required to maintain affirmative action policies in order to receive federal funding.

This law was followed by two Attorney General Opinions (the [2007 Attorney General Mike Cox Opinion](#) regarding the City of Grand Rapids’ Equal Business Opportunity Construction Policy and the [2018 Attorney General Bill Schuette Opinion](#) regarding the Michigan State Housing Development Authority’s Equal Employment Opportunity Policy) which concluded that governmental entities within the State of Michigan were not prohibited from establishing and implementing diversity and inclusion programming, but that any such programming could not offer “preferential treatment” on the basis of sex or racial classifications and therefore must be achieved through race- and sex-neutral means only.

The 2006 amendment to Michigan’s Constitution, and the subsequent Attorney General opinions, has impacted how public entities in Michigan, including GLWA, are able to implement business diversity programs, the type of activities they can conduct, and the key performance metrics and goals they can establish for their programs. The results of these limitations are primarily reflected in the limitation or absence of equalization credits, key performance metrics, and goals related to vendor diversity for GLWA’s B.I.D. Program.

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<sup>2</sup> An “economically disadvantaged” municipality within GLWA’s service area is designated as having one of the five lowest median household incomes in that respective county as defined by the U.S. Census Bureau every five years.





## Phase I - Benchmarking and Program Implementation

During the development phase of the B.I.D. Program, GLWA engaged the services of Public Sector Consultants (PSC) to undertake Program Benchmarking. PSC worked with GLWA leadership and staff to identify a list of 14 business diversity programs in Michigan and other states that merited consideration for review based on these organizations' purchasing profiles and geographical reach. PSC collected publicly available information and developed profiles for each business diversity program. In addition, PSC conducted phone interviews with program staff or sent a list of questions via email. Input from 10 programs was received and reviewed that represented a cross-section of peer utilities, including other water and wastewater authorities, airport authorities, electricity and natural gas utilities, universities, and county and state government.

PSC's benchmarking efforts revealed and helped to further establish GLWA's B.I.D. Program as a leading diversity and inclusion program within the state of Michigan. In studying peer organizations attempting to navigate the legal boundaries on diversity and inclusion programming in Michigan, GLWA learned from these organizations' challenges and designed a simple, straightforward, and practical program that both leverages the certifying work of federal, state, and local agencies, and encourages greater small business vendor participation in GLWA's procurement process without imposing burdensome requirements, something that is especially important for small businesses with less experience and fewer administrative resources.

In addition to program benchmarking, GLWA also hosted focus group discussions to gather feedback and reactions on GLWA's B.I.D. Program. Two vendor focus groups were held on December 14, 2020 and January 12, 2021 which included representatives from construction, engineering/architecture, financial, and janitorial service firms. An additional focus group was held with eight Michigan-based professional associations on January 25, 2021.

Internal outreach and training on the B.I.D. Program were also conducted in advance of the program launch to ensure that GLWA Team Members across all operating units were made aware of the program and understood its key requirements. This effort included Procurement Team training on January 22, 2021 and January 29, 2021 as well as presentations to GLWA's business units. Internal outreach and training efforts also continued during the early months of the Phase I rollout with presentations to GLWA's Executive Leadership Team on March 2, 2021 and informative features on the program launch and requirements in the *Procurement Pulse*, a quarterly internal newsletter produced by the Procurement Team for GLWA Team Members.

The B.I.D. Program Team executed a Phase I launch of the B.I.D. Program on February 1, 2021. The Phase I launch focused on the core program criteria and its impact on procurement submittals. This was followed by a more comprehensive Phase II program



launch on July 1, 2021. The gradual program rollout enabled GLWA to learn, receive feedback, and refine our processes.

## **Phase II - Program Adjustments and Additions**

After the Phase II Program launch, B.I.D. Program business processes were further streamlined and refined to increase program effectiveness and efficiency. The B.I.D. Program Requirements guidelines document that is included with all B.I.D. qualifying solicitations was modified based upon lessons learned from vendor submissions. The form was modified to reflect a “form” or “template” style document which fostered the development of more effective Diversity Plans by focusing Vendors’ attention on the information requested. This updated form also enabled GLWA Procurement Team Members greater ease and efficiency in reviewing and evaluating the Diversity Plans.

In addition, GLWA Contract templates were also reviewed, and specific language is currently being added regarding the B.I.D. Program to reinforce the importance of this program. This language will also provide the Procurement Team with the opportunity to conduct compliance monitoring with the Vendor’s Diversity Plan.

Lastly, the B.I.D. Program Team met with our GLWA insurance provider to discuss ways to lessen the challenges small companies may have in complying with GLWA’s insurance and bonding requirements. Short of GLWA taking on this risk ourselves, no substantial solution has yet been identified, but we continue to look for ways to address this challenge.

## **Vendor Outreach & Communication Efforts**

Communication with and support of the Vendor Community was a central focus of the B.I.D. Program Team during year one of the program’s launch. The B.I.D. Program Team drafted communication materials and resources, or “B.I.D. Program Vendor Guides”, including several features in GLWA’s monthly *Procurement Pipeline* newsletter as well as an informative PowerPoint presentation on the B.I.D. Program requirements.

GLWA also delivered presentations on the B.I.D. Program at speaking engagements sponsored by various local federal, state, and municipal organizations. Since the B.I.D. Program launched in February 2021, the B.I.D. Program has participated in eight Vendor Outreach events, hosted by the Michigan Department of Transportation (MDOT), Southwest Michigan Procurement Technical Assistance Center (SWMI PTAC), Pure Michigan Business Connect (PMBC), Macomb PTAC, and the U.S. Small Business Administration (SBA).

The B.I.D. Program Team/GLWA has also hosted virtual vendor introduction meetings where vendors can ask questions about the B.I.D. Program in a one-on-one setting. Since the Program launch in February 2021, GLWA has hosted over 20 Vendor Introduction meetings. The B.I.D. Program Team is also a regular participant in GLWA-hosted Capital Improvement



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Project (CIP) Workgroup meetings, where information and updates on the B.I.D. Program are regularly provided.

In addition, the Vendor Management Team has participated in all GLWA Pre-Bid and Pre-Proposal meetings that have included the B.I.D. Program requirements since the program launch in February 2021. During these meetings a program overview is provided along highlighting the steps to successfully submitting a diversity and inclusion plan for the solicitation being discussed. Vendors are also afforded the opportunity to ask any questions and network with other vendors.

Lastly, GLWA has also been an invited speaker at the Michigan Intergovernmental Trade Network (MITN) Cooperative on May 21, 2021 and June 18, 2021 to overview and educate procurement professionals throughout the state of Michigan on the design, development, and implementation of the B.I.D. Program. GLWA was also an invited speaker at the Michigan Public Purchase Officer's Association (MPPOA) October 2021 conference to speak on the B.I.D. Program alongside other peer diversity and inclusion programs in Michigan.

### **Program Data Summary (February 1, 2021 Through June 30, 2022)**

The B.I.D. Program data tables included below recap B.I.D. activity from the date of the program launch on February 1, 2021 through June 30, 2022 for GLWA procurements budgeted to exceed \$1 million.

***Table 1 - B.I.D. Eligible Procurements as of June 30, 2022***

Table 1 provides an overview of the total number of B.I.D. Program-eligible Procurements awarded, in evaluation, or advertised as active opportunities in GLWA's Bonfire Procurement Portal. Each vendor who submits a response to a B.I.D. Program-eligible procurement must also submit a Business Inclusion and Diversity Plan. The total number of Diversity Plans that GLWA has received for B.I.D.-eligible procurements that have been awarded and that are in evaluation is also provided.

	Awarded	In Evaluation Phase	Active (Advertised)	Total
Procurements Requiring B.I.D. Submittals	34	13	3	50
Total Number of Diversity Plans Submitted	98	47	n/a	145

***Table 2 - Scored Criteria for Awarded Procurements***

Table 2 provides a breakdown of the percentage of B.I.D. Program-eligible procurements awarded thus far that met the B.I.D. Program scored criteria. This scored criteria is based



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on whether the vendor has a business presence in the state of Michigan, GLWA's Member Partner service area, or a disadvantaged municipality within GLWA's service area.

	Procurements Awarded Meeting B.I.D. Criteria as a % of Total Awards	Total Contract Amount (in millions)
Michigan Location	88%	\$192.1
Member Partner Service Area	82%	\$151.0
Disadvantaged Service Area	52%	\$89.6

**Table 3 - Non-Scored Criteria - Disadvantaged, Minority-owned, Women-owned, and Small Businesses**

Table 3 provides a breakdown of the percentage of B.I.D. Program-eligible procurements awarded thus far that met the B.I.D. Program Non-Scored Criteria. This Non-Scored Criteria refers to any diversity certifications that the vendor may hold as a Disadvantaged Business Enterprise (DBE), Minority-Owned Business Enterprise (MBE), Women-Owned Business Enterprise (WBE), or Small Business Enterprise (SBE).

	Procurements Awarded as a % of Total Awards	Total Contract Amount (in millions)
Awarded to Disadvantaged, Minority-owned, Women-owned, and Small Businesses	65%	\$121.0

**Table 4 - Overall Contracts Awarded**

Table 4 provides a breakdown of overall dollars awarded under the B.I.D. Program thus far, distinguishing between firms that met all four B.I.D. Program scoring criteria (including scored and non-scored criteria) and firms that met all three criteria (scored criteria only).

	Total Contract Count	Total Contract Amount (in millions)
Eligible Procurements	34	\$340.4
Firms that met four criteria	22	\$121.0
Firms that met three criteria	12	\$219.4



## **Future Opportunities for GLWA's B.I.D. Program**

Since the B.I.D. Program's inception, the B.I.D. Program Team has learned that in most projects involving local labor, attention to diversity and inclusion (D&I) is common and regularly incorporated into vendors' sourcing practices. For vendors who are familiar with D&I, developing a Diversity and Inclusion Plan to fulfill B.I.D. Program requirements often dovetails with work they already routinely do and in many cases is a company priority.

The B.I.D. Program Team has also identified business sectors that are not as familiar with incorporating D&I programming into their sourcing practices. For these vendors, D&I programming requirements, such as the B.I.D. Program, can be perceived as an additional administrative burden that is not applicable to the goods and/or services that they supply.

Therefore, one important future direction for GLWA's B.I.D. Program includes raising awareness of D&I programming and practices as an opportunity for vendors across all business sectors to improve their own sourcing capabilities. To this end, the GLWA B.I.D. Program Team views future outreach and education opportunities as crucial to further growing and developing the B.I.D. Program and its impact on the small, minority-owned, and disadvantaged business community.



## Financial Services Audit Committee Communication

**Date:** July 25, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** Dana Bierer, CPA, Manager - Special Projects

**Re:** Grants, Gifts, and Other Resources Report through May 31, 2022

**Background:** The Great Lakes Water Authority (GLWA) delegated authority to the Chief Executive Officer to oversee and report on activities identified in the GLWA Articles of Incorporation related to solicitation and receipt of 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.

Other resources in this context refer to labor, contributions of money, property, or other things of value from any other person or entity, public or private with the exception for loans, subject to provisions of the GLWA Board Debt Management Policy, and Intergovernmental agreements and other activities that are addressed in the GLWA Board Procurement Policy.

Participation in any other way in a federal, state local, or intergovernmental government program includes participation in research projects at universities.

Refer to the Grants, Gifts, and Other Resources Delegation Policy at [Grants, Gifts, and Other Resources Delegation Policy - GLWA \(glwater.org\)](https://www.glwater.org/Grants-Gifts-and-Other-Resources-Delegation-Policy).

**Analysis:** To ensure transparency and timely communication, this report is provided to the Board, no less than quarterly, documenting activities subject to the policy. The report will, at a minimum, include description, type of activity, dollar amount, compliance and/or performance requirements, if any, and status including, at a minimum, solicitation, acceptance, and close-out.

**Bolded items** in the attached tables reflect changes from the prior report.

Highlights of this quarter's report includes the following.

- ✓ FEMA DR-4494-MI, Michigan Covid-19 Pandemic, includes multiple projects with the State for review.
  - The next step is to receive the funds from the State.
  - Funding was set to expire June 30, 2022. We have been informed that eligible expenses are at 90% reimbursement starting July 2022 with no end date yet identified.
- ✓ FEMA DR-4607-MI, Michigan Severe Storms, Flooding, and Tornadoes, Public Assistance, includes multiple projects under development with FEMA for damages. In addition, there are two Combined Sewer Overflow (CSO) projects being reviewed by FEMA for consideration of additional funding to mitigate future damages as a part of this Public Assistance.
- ✓ 2020-013 (Contract 2001402) -The research for the surveillance of Covid-19 wastewater continues with an expanded scope to cover a larger area of Michigan in the monitoring system.

This report presents the Grants, Gifts, and Other Resources across three tables.

**Table 1 - Grant Submissions** reflects open FY2020 submissions, FY2021 submissions, and FY2022 submissions to date. The summarized activity provided identifies seven programs with ten reimbursement requests.

**Table 2 - Participation in Other Federal, State, Local or Intergovernmental Programs** reflects open FY2020 projects, open FY2021 projects, and FY2022 projects to date. The summarized activity provided identifies 17 projects with GLWA as a contributor and/or participant with efforts being conducted by a university or government program.

**Table 3 - Closed Programs** reflects seven programs with seven reimbursement requests and receipts in FY2021 and FY2022, through May 31, 2022.

**Proposed Action:** Receive and file this report.





## Financial Services Audit Committee Communication

**Table 1 - Grant Submissions** reflects open FY2020 submissions, FY2021 submissions, and FY2022 submissions to date. The summarized activity provided identifies six programs with eleven grant reimbursement request submissions, separately identified.

**Table 1 - Grant Submissions**

Reference Number	Request Date	Program Description	Type of Activity	Amount Requested	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-002a	09/15/2020	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 144208	Federal Grant (Reimbursement Basis)	To Be Determined	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer
2021-013	12/28/2021	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 552205	Federal Grant (Reimbursement Basis)	\$36,014	Federal Audit Requirements (add to existing audit program)	<b>State is reviewing</b>	Dana Bierer
2022-001a	03/03/2022	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 435200	Federal Grant (Reimbursement Basis)	\$92,033	Federal Audit Requirements (add to existing audit program)	<b>State is reviewing</b>	Dana Bierer
2022-001b	03/03/2022	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 553382	Federal Grant (Reimbursement Basis)	\$63,842	Federal Audit Requirements (add to existing audit program)	<b>State is reviewing</b>	Dana Bierer
2022-004	03/03/2022	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 149797-Amended	Federal Grant (Reimbursement Basis)	To Be Determined	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer
2022-005	03/25/2022	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 553713	Federal Grant (Reimbursement Basis)	To Be Determined	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer



Reference Number	Request Date	Program Description	Type of Activity	Amount Requested	Compliance and/or Performance Requirements	Status	Team Member Contact
2022-002	01/06/2022	Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Multiple projects <b>including two mitigation projects</b>	Federal Grant (Reimbursement Basis)	\$1,000,000	Federal Audit Requirements (add to existing audit program)	Pending application completion	Dana Bierer
2022-003	01/20/2022	Federal Emergency Management Agency (FEMA), Building Resilient Infrastructure and Communities (BRIC) Northwest Interceptor Diversion Tunnel	Federal Grant (Reimbursement Basis)	\$39,611,007	Federal Audit Requirements (add to existing audit program) Match \$13,203,669	FEMA is reviewing	Jody Caldwell
2022-004	02/23/2022	Water Technician Registered Apprenticeship Program- \$2,225 per apprentice, 25 apprentices	Macomb Community College Tuition	<b>\$1,712 (Year to Date)</b> \$55,625 (Award amount)	None	<b>Ongoing</b>	Patricia Butler
2021-003	02/18/2021	The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Watershed Council Support Program	State Grant (Reimbursement Basis)	\$40,000	Quarterly Progress Reports	<b>Ongoing</b>	Dan Gold
2021-007	06/23/2021	The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Surface Water Intake Protection Program (SWIPP)	State Grant (Reimbursement Basis)	\$50,000	Quarterly Progress Reports Match \$50,000	<b>Ongoing</b>	Mary Lynn Semegen and Terry Daniel

**Table 2 Participation in Other Federal, State, Local or Intergovernmental Programs** reflects open FY2020 projects, open FY2021 projects, and FY2022 projects to date. The summarized activity provided identifies 17 projects with GLWA as a contributor and/or participant in research being conducted by a university or government program.

**Table 2 - Participation in Other Federal, State, Local, or Intergovernmental Programs**

Reference Number	Start Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-003	Pre-FY 2019	Anaerobic Digestion Project CS-217	Michigan State University Project	\$353,282 (Life to date through FY2021) \$355,800 (Contract amount)	None	Ongoing	John Norton
2020-004	Pre-FY 2019	Phosphorus & Oxygen Control; Collection System Optimization Contract 1900169	Multiple Projects with University of Michigan	\$94,541 (Life to date through FY2021) \$246,823 (Contract amount)	None	Ongoing	John Norton
2020-005	FY2020	PFAS Health & Ecological Impacts Contract 1902151	Wayne State University Project	\$79,450 (Life to date through FY2021) \$192,153 (Contract amount)	None	Ongoing	John Norton
2020-007	FY2020	Transport/Fate of Nutrients in Biosolids Contract 1902059	Michigan State University Project	\$224,345 (Life to date through FY2021) \$277,470 (Amended contract amount)	None	Ongoing	John Norton
2020-008	FY2020	Surveillance of Covid-19 in Southeast MI Wastewater Contract 2001402	Michigan State University Project	\$177,004 (Life to date through FY2021) \$267,458 (Contract amount)	None	Ongoing	John Norton

Reference Number	Start Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-009	07/22/2020	Implementation of LTCP modeling Contract 2001434	University of Michigan Project	\$264,348 (Life to date through FY2021) \$636,702 (Contract amount)	None	Ongoing	John Norton
2020-010	08/01/2020	Microplastics and Human Health Contract 1904710	Wayne State University Project	\$39,570 (Life to date through FY2021) \$195,000 (Contract amount)	None	Ongoing	John Norton
2020-011	Pre-FY2020	Smart Pipes Contract 1900902	University of Michigan Project	\$310,243 (Life to date through FY2021) \$356,610 (Contract amount)	None	Ongoing	John Norton
2020-013	08/01/2020	Surveillance of Covid-19 in Southeast MI Wastewater- Expanded project scope- Phase 1, <b>Phase 2, Phase 3, Phase 4</b>  <b>Contract 2001402</b>	State of Michigan/ CDM Smith and  Michigan State University	GLWA receiving samples and analytics;  <b>\$267,457</b> <b>(Contract amount)</b> (Project worth \$400,000; \$2,700,000,  <b>\$3,200,000)</b>	None	Ongoing	John Norton

Reference Number	Start Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-014	12/29/2020	Assessing biosolid treatment processes on pollutant environmental fate on plant uptake  <b>Contract 2103714</b>	US Environmental Protection Agency (EPA)/ Michigan State, Colorado State, and University of Georgia	\$100,000 and in-kind labor for program participation (Contract amount) (Project worth \$1,498,000)	None	Ongoing	John Norton
2021-004	03/17/2021	Project GREEN-Accumulation of Per- and Polyfluoroalkyl Substances in Historically Archived Corn and Wheat Grains  <b>Contract 2103224</b>	Michigan State University Project	\$20,000 (Contract amount) (Project worth \$69,999)	None	Ongoing	John Norton
2021-005	05/04/2021	Converting Biosolids into Diesel	Department of Energy (DOE)/ Pacific Northwest National Labs (PNNL)	In-kind labor and facility for research and analysis with PNNL (Project worth \$740,750)	None	Ongoing	John Norton
2021-008	07/12/2021	Method Development for Detection of Human Sources of Fecal Contamination in the Watershed (LAMP) Contract 2100771	Wayne State University Project	\$297,560 (Contract amount)	None	Ongoing	John Norton

Reference Number	Start Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2021-009	03/30/2021	Life cycle assessment Contract 2001595	University of Michigan Project	\$23,680 (Contract amount)	None	Ongoing	John Norton
2021-010	02/11/2021	Prestressed concrete cylinder pipe (PCCP) Study on Loss of Preload <b>Contract 2101210</b>	Tarrant Regional Water District	\$20,000 (Contract amount) (Project worth \$100,000)	None	<b>Ongoing</b>	John Norton
2021-011	04/29/2021	Integrated biochemical electrochemical technologies (IBET)	University of Michigan Project	\$312,500 and in-kind labor and facility for program participation (Contract amount; Project worth \$6,790,983)	None	<b>Ongoing</b>	John Norton
2021-012	11/19/2021	Michigan Industry Cluster Approach 3.0 (MICA 3.0) Employer Partnership	Focus: Hope	GLWA leading employer collaboration (Project worth \$250,000)	None	<b>Ongoing</b>	Patricia Butler

**Table 3 Closed Programs** reflects seven programs with seven reimbursement requests and receipts in FY2021 and FY2022, through May 31, 2022.

**Table 3 - Closed Programs**

Reference Number	Request Date	Program Description	Type of Activity	Amount	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-001	08/31/2020; 09/23/2020; 10/26/2020; 11/23/2020	Wage Incentive used for qualified apprentices	MOU with DESC (Detroit Employment Solutions Corporation) and SER-Metro Detroit	\$12,000 (\$3,000 per month)	Minimum wage and monthly work hour requirements	\$12,000 received	Patricia Butler
2020-006	FY2020	Lake Huron to Lake Erie Monitoring Platform; Photocatalytic UV materials	Multiple Projects with Wayne State University	\$1,284,500 (Contract amount)	None	Program not initiated; no resources provided	John Norton
2021-002	02/01/2021	Southeast Michigan Council of Governments (SEMCOG) Infrastructure Asset Management Program	Organization of Local Governments (Reimbursement Basis)	\$29,951	None	\$29,951 received 02/18/2021	Jody Caldwell
2020-012	Pre-FY2020	Phosphorus and Oxygen Control; Collection System Optimization Contract 1900169	Multiple Projects with University of Michigan	\$250,000 (Contract amount)	None	Program incorporated into similar 2020-004 program	John Norton

Reference Number	Request Date	Program Description	Type of Activity	Amount	Compliance and/or Performance Requirements	Status	Team Member Contact
2021-006	06/21/2021	Improving Arrested Anaerobic Digestion Using Vacuum-Based IntensiCarb Reactors	Department of Energy, Office of Energy Efficiency and Renewable Energy/ University of California Irvine	In-kind labor for program participation (Project worth \$3,875,000)	None	Program not initiated; no resources provided	John Norton
2020-002b	11/11/2020	Federal Emergency Management Agency (FEMA) activity related to COVID-19  Project 149797	Federal Grant  (Reimbursement Basis)	\$84,244	Federal Audit Requirements (add to existing audit program)	\$84,244 received 10/14/2021	Dana Bierer
2020-002c	02/09/2021	Federal Emergency Management Agency (FEMA) activity related to COVID-19  Project 149800	Federal Grant  (Reimbursement Basis)	\$16,123	Federal Audit Requirements (add to existing audit program)	\$16,123 received 10/14/2021	Dana Bierer
2021-001	01/01/2021	The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water Asset Management (DWAM) Grant  CS-198	State Grant  (Reimbursement Basis)	\$998,047	None	<b>Not received</b>	Jody Caldwell



## **Financial Services Audit Committee Communication**

**Date:** June 24, 2022

**To:** Great Lakes Water Authority Audit Committee

**From:** William Baker, Professional Administrative Analyst, Construction Accounting & Financial Reporting

**Re:** FY 2022 Q3 Construction Work-in-Progress Report through March 31, 2022  
(Unaudited)

**Background:** The quarterly construction work-in-progress (CWIP) provides information and analysis related to the execution of the Great Lakes Water Authority capital improvement program (CIP).

**Analysis:** The attached documents summarize the FY 2022 Q3 CWIP positions and provides a detailed snapshot to inform decision makers and stakeholders.

**Proposed Action:** Receive and file this report.





**Construction Work-in-Progress Quarterly Report  
(Unaudited)**

**As of March 31, 2022**

**For questions, please contact:**

**William Baker**  
**Construction Accounting and Financial Reporting**  
**Phone: 313.378.9760**  
**Email: [william.baker@glwater.org](mailto:william.baker@glwater.org)**



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**June 24, 2022****To Our Stakeholders:**

The contents of this report represent the financial presentation of construction work-in-progress activity for the Great Lakes Water Authority (GLWA) as of March 31, 2022. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2022–2026 Capital Improvement Plan (CIP) and look to inform decision makers as we evaluate the draft FY 2023–2027 CIP.

As we continue to refine this report to better communicate pertinent information to inform decision makers and stakeholders, content and formatting may be changed. With the summary of active projects now regularly being reported to the Capital Planning Committee the project highlights previously being reported have been removed from this report.

**Report Contents and Organization**

*Construction Work-in-Progress (CWIP) Appendices:* Includes breakdown by jurisdiction which provides a summary of the planned and actual project activity by the jurisdictions identified within the FY 2022 – 2026 Board Approved CIP Plan, detailed CWIP rollforward, which lists all projects in the CIP along with financial activity. These tables may be used to revisit priorities, workload, and phasing. In addition, this section contains project amendment summaries which consider the award of CIP contracts and the related execution thereof may result in deviations from the amount and timing of project activity. Project amendments are prepared to fund the related increase or decrease with either an adjustment to Capital Reserve or Program / Allowance accounts to amend the board approved fiscal year CIP accordingly and to inform decision makers in the development of future Capital Improvement Plans.

**Financial Information**

All project amounts are unaudited. This means that direct contractor costs are generally included in these totals with most pay estimates entered through March 31, 2022. There may, however, be some pay estimates that lag. The totals do not include indirect overhead.

**Budget vs. Plan**

Generally, GLWA's CIP projects span two or more fiscal years. The GLWA Board of Directors adopts a biennial "budget" and a five-year capital improvement "plan".

- ✓ The adopted **budget** relates to operations and maintenance expense, annual fixed commitments such as debt service, and incremental adjustments to reserves. The budget provides authority to spend within defined amounts. The budget is also referred to as the "revenue requirement" for the utility.
- ✓ After contracts are awarded at amounts variant from the CIP plan and more reliable anticipated spend data becomes available, the amended budget for the current fiscal year may increase or decrease by way of "Capital Reserve" budget amendments.
- ✓ The five-year capital improvement **plan** is a rolling plan that is updated at an administrative tracking level as projects move from estimated to actual bid numbers. An updated mid-cycle CIP would be presented to the Board for approval if the prioritization strategy was revised and/or the plan was in need of material revisions.
- ✓ 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.

**Executive Summary**

The rate of spend is a key performance indicator. The development of the FY 2022-2026 and related CIP Plan for FY 2022 were based on anticipation of FY 2022 activity resulting in 75% of planned spend. The Water System spend for the period ending March 31, 2022, is 88.0% of the FY 2022 board approved CIP, 87.6% of the FY 2022 board approved CIP with project amendments, and 117.3% of the FY 2022 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2022 Board Approved CIP was amended from \$179,210,481 to \$179,978,262 is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending March 31, 2022, is 61.1% of the FY 2022 board approved CIP, 64.5% of the FY 2022 board approved CIP with project amendments, and 81.5% of the FY 2022 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2022 Board Approved CIP was amended from \$106,050,041 to \$100,479,614 is provided in the subsequent Project Amendment Summary appendix of this report.

Water System Projects		FY 2021	FY 2021 Activity	FY 2021 Percentage	FY 2022	FY 2022 Prorated (Nine Months)	FY 2022 Activity (Unaudited)	FY 2022 Percentage
FY 2021 Board Approved CIP	\$	147,564,000	\$	131,687,819	89.2%			
FY 2021 Board Approved CIP With Project Amendments		149,084,720		131,687,819	88.3%			
FY 2021 Capital Spend Rate Assumption (SRA)		110,673,000		131,687,819	119.0%			
FY 2022 Board Approved CIP					\$ 179,210,481	\$ 134,407,861	\$ 118,275,638	88.0%
FY 2022 Board Approved CIP With Project Amendments					179,978,262	\$ 134,983,697	118,275,638	87.6%
FY 2022 Capital Spend Rate Assumption (SRA)					134,407,861	\$ 100,805,896	118,275,638	117.3%

Wastewater System Projects		FY 2021	FY 2021 Activity	FY 2021 Percentage	FY 2022	FY 2022 Prorated (Nine Months)	FY 2022 Activity (Unaudited)	FY 2022 Percentage
FY 2021 Board Approved CIP	\$	110,638,000	\$	85,051,935	76.9%			
FY 2021 Board Approved CIP With Project Amendments		110,180,582		85,051,935	77.2%			
FY 2021 Capital Spend Rate Assumption (SRA)		82,978,500		85,051,935	102.5%			
FY 2022 Board Approved CIP					\$ 106,050,041	\$ 79,537,530	\$ 48,595,801	61.1%
FY 2022 Board Approved CIP With Project Amendments					100,479,614	\$ 75,359,711	48,595,801	64.5%
FY 2022 Capital Spend Rate Assumption (SRA)					79,537,530	\$ 59,653,148	48,595,801	81.5%

**Appendix A - Construction Work-in-Progress Rollforward Summaries by Jurisdiction**

The purpose of the construction work-in-progress (CWIP) summary rollforward by jurisdiction is to provide a high-level overview of the financial status of the projects identified within the current board approved CIP by their jurisdiction. Within the FY 2022 – 2026 Board Approved CIP Plan, projects are identified and categorized as either City of Detroit, Wayne County - Outside Detroit, Lapeer County, Macomb County, Oakland County, Saint Clair County or Multiple Counties and reflected accordingly in this report.

**\$297.4** million is in CWIP as of March 31, 2022 as shown for the Water System in A1.

**\$191.6** million is in CWIP as of March 31, 2022 as show for the Wastewater System in A2.

The order of these appendices on the subsequent pages are in ascending by jurisdiction alphabetically.

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward Summary By Jurisdiction**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

<b>Jurisdiction</b>	<b>Total Project Plan Estimate from FY 2022-2026 CIP</b>	<b>CWIP Balance July 1, 2021</b>	<b>FY 2022 Board Approved CIP</b>	<b>FY 2022 Board Approved CIP With Project Amendments</b>	<b>FY 2022 Activity through March 31, 2022</b>	<b>CWIP Balance March 31, 2022</b>
City of Detroit	\$ 603,366,840	\$ 58,438,128	\$ 37,084,101	\$ 37,329,200	\$ 43,236,833	\$ 99,996,727
Lapeer County	5,937,124	1,154,458	3,962,267	3,962,267	175,389	1,329,847
Mutiple Counties	386,207,886	40,301,434	17,176,543	16,130,562	20,324,958	45,738,524
Oakland County	276,954,686	19,579,122	55,618,942	55,539,197	18,415,886	37,995,008
Saint Clair County	199,416,920	13,545,671	10,660,756	11,633,756	3,431,115	8,109,683
Wayne County - Outside Detroit	881,825,559	71,834,216	54,707,871	55,383,280	32,691,456	104,248,655
<b>Grand Total</b>	<b>\$ 2,353,709,015</b>	<b>\$ 204,853,029</b>	<b>\$ 179,210,481</b>	<b>\$ 179,978,262</b>	<b>\$ 118,275,638</b>	<b>\$ 297,418,444</b>

## Great Lakes Water Authority

**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward Summary By Jurisdiction**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

<b>Jurisdiction</b>	<b>Total Project Plan Estimate from FY 2022-2026 CIP</b>	<b>CWIP Balance July 1, 2021</b>	<b>FY 2022 Board Approved CIP</b>	<b>FY 2022 Board Approved CIP With Project Amendments</b>	<b>FY 2022 Activity through March 31, 2022</b>	<b>CWIP Balance March 31, 2022</b>
City of Detroit	\$ 1,311,840,369	\$ 165,620,802	\$ 73,893,106	\$ 70,000,156	\$ 34,086,651	\$ 154,109,111
Mutiple Counties	422,491,975	24,943,729	32,156,934	30,479,458	14,381,075	37,342,738
Wayne County - Outside Detroit	47,820,767	555,754	-	-	128,075	138,429
<b>Grand Total</b>	<b>\$ 1,782,153,110</b>	<b>\$ 191,120,285</b>	<b>\$ 106,050,041</b>	<b>\$ 100,479,614</b>	<b>\$ 48,595,801</b>	<b>\$ 191,590,278</b>



## Appendix B - Construction Work-in-Progress Rollforwards

The purpose of the construction work-in-progress (CWIP) rollforward is to analyze the current year activity for each project in relation to the overall capital improvement program as well as the project portfolio overall.

As part of our project life cycle review the CA&FR team identifies when it is appropriate for projects to be capitalized. Projects are to be capitalized when they have been completed in totality or are inclusive of identifiable assets that have been placed in service. Capitalization of project cost occurred in the FY 2022 3rd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
111007	1803823	LHWTP: Raw Sludge Clarifier & Pumping
211004	1903449	CP-789/CON-250: Weiss: Pump and Grid Station #1
212004	CON-238	Chlorination and Dechlorination Process Improvements
214001	1803776	CON-280: IWC Laboratory Operation Construction

**\$297.4** million is in CWIP as of March 31, 2022, as shown for the Water System in B1.

**\$191.6** million is in CWIP as of March 31, 2022, as shown for the Wastewater System in B2.

The order of these appendices on the subsequent pages are in ascending order by CIP project number.

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ 57,178,250	\$ 1,897,571	\$ 1,962,266	1,962,266	\$ 867,150	\$ -	\$ 2,764,720	\$ 2,764,720	5%
111002	LHWTP Backflow Replacement	8,705,313	-	-	-	-	8,717,768	-	8,717,768	100%
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	3,892,689	-	-	-	-	3,892,299	-	3,892,299	100%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	16,789,745	1,273,880	5,196,046	5,196,046	4,861	-	1,278,741	1,278,741	8%
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	9,181,107	8,448,408	184,222	184,222	418,696	8,867,103	-	8,867,103	97%
111008	LHWTP Architectural Programming - Lab	1,196,283	-	-	-	-	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	30,480,734	1,726,061	1,061,103	1,061,103	842,265	-	2,568,327	2,568,327	8%
111010	Lake Huron Water Treatment Plant - Filtration and Pretreatment Improvements	42,206,783	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	3,247,998	198,694	1,719,487	1,719,487	1,006,586	-	1,205,280	1,205,280	37%
111012	LHWTP-Flocculation Improvements	26,538,016	1,057	537,632	1,510,632	291,558	-	292,615	292,615	1%
112002	Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	1,172,880	-	-	-	-	1,169,962	-	1,169,962	100%
112003	NE WTP High Lift Pumping Electrical	71,545,621	223,875	173,058	173,058	220,996	-	444,870	444,870	1%
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	1,088,655	937,879	4,892	4,892	-	937,879	-	937,879	86%
112006	Northeast Water Treatment Plant Flocculator Replacements	11,316,013	254,450	2,521,861	2,521,861	19,682	-	274,132	274,132	2%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	-	-	-	20,182	171,079	20,182	191,262	0%
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	6,728,375	-	501,031	501,031	-	5,798,535	-	5,798,535	86%
113003	Replacement of Butterfly Valves	21,811,953	110	-	-	(110)	-	-	-	0%
113006	SW WTP Chloring Scrubber	7,330,660	204,126	4,683,170	2,805,737	1,426,131	-	1,630,257	1,630,257	22%
113007	Architectural and Building Mechanical	3,167,022	-	-	-	-	-	-	-	0%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	80,828,071	-	-	-	-	99,764,892	-	99,764,892	123%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	224,221,541	12,944,042	16,546,006	16,546,006	8,126,579	-	21,070,620	21,070,620	9%
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	8,155,919	0	-	-	-	8,167,884	0	8,167,884	100%
114005	Springwells WTP Admin Building Improvements	9,259,571	1,178,639	3,660,252	3,660,252	18,538	-	1,197,177	1,197,177	13%
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	-	10,674	-	-	-	1,021,039	10,674	1,031,712	0%
114007	Powder Activated Carbon Systems	4,020,591	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	13,923,254	11,142,286	2,484,952	2,484,952	213,929	-	11,356,215	11,356,215	82%
114010	Yard Piping Improvements	200,471,687	531,529	1,568,415	1,568,415	985,050	-	1,516,578	1,516,578	1%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	25,540,354	18,464,648	5,373,516	5,373,516	5,257,513	277,017	23,445,143	23,722,160	93%
114012	Springwells Water Treatment Plant 1930 Filter Building-Roof Replacement	3,911,148	-	-	-	-	3,911,148	-	3,911,148	100%
114013	Springwells Reservoir Fill Line Improvements	4,923,914	-	-	-	-	4,706,751	-	4,706,751	96%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	2,280,781	428,322	566,115	901,115	1,012,839	-	1,441,160	1,441,160	63%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	12,358,115	189,943	370,545	370,545	521,826	-	711,769	711,769	6%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	1,544,706	-	80,013	80,013	-	-	-	-	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	54,815,232	5,749,771	6,321,527	6,808,728	4,842,767	-	10,592,539	10,592,539	19%
115003	Comprehensive Condition Assessment at Waterworks Park WTP	514,004	-	-	-	-	-	-	-	0%
115004	Water Works Park WTP Chlorine System Upgrade	6,892,656	9,563	-	-	-	6,957,032	9,563	6,966,596	101%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
115005	WWP WTP Building Ventilation Improvements	4,923,595	563,444	522,778	522,778	201,071	-	764,514	764,514	16%
115006	Water Works Park Site/Civil Improvements	5,881,718	-	-	-	-	-	-	-	0%
115007	Water Works Park High Lift Pumping Station Modernization	88,946,247	-	280,105	280,105	-	-	-	-	0%
116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on	94,880,203	25,947,664	8,359,585	8,359,585	19,324,034	4,685,231	45,271,698	49,956,930	53%
116005	Belle Isle Seawall Rehabilitation	1,831,677	-	318,843	76,741	702	-	702	702	0%
116006	Belle Isle Intake System Rehabilitation and Improvements	350,000	-	-	-	-	-	-	-	0%
122003	New Waterworks Park to Northeast Transmission Main	143,217,044	21,324,515	14,593,187	14,593,187	11,855,964	740,355	32,440,124	33,180,479	23%
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	144,852,077	9,673,781	2,576,909	4,776,651	3,797,442	-	13,471,222	13,471,222	9%
122005	Replacement Schoolcraft Watermain	15,325,893	6,260,526	7,606,560	7,606,560	8,434,676	-	14,695,202	14,695,202	96%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	22,419,614	17,132,964	4,773,529	5,322,561	4,517,066	-	21,650,030	21,650,030	97%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	22,154,359	1,805	26,909	26,909	(1,805)	-	-	-	0%
122011	Park-Merriman Water Main-Final Phase	9,600,066	295,202	7,836	7,836	418,997	6,435,948	714,199	7,150,147	74%
122012	36-inch Water Main in Telegraph Road	9,870,398	-	-	-	-	9,986,284	-	9,986,284	101%
122013	Lyon Township Transmission Main Extension Project	105,180,009	9,960,713	37,593,404	37,513,658	10,157,914	357,808	20,118,627	20,476,435	19%
122016	Downriver Transmission Loop	37,067,100	1,620,310	664,877	664,877	723,284	-	2,343,594	2,343,594	6%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,188,759	1,454,251	1,943,731	1,943,731	4,283,266	-	5,737,516	5,737,516	10%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	54,102,536	-	1,530,061	1,530,061	956,233	-	956,233	956,233	2%
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	1,961,708	-	-	-	-	1,742,479	-	1,742,479	89%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	3,363,699	-	-	-	1,731	3,226,045	1,731	3,227,776	96%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,187,314	927,112	3,962,267	3,962,267	175,389	-	1,102,502	1,102,502	21%
132008	Needs Assessment Study for all Water Booster Pumping Stations	1,675,441	-	-	-	-	-	-	-	0%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,142,158	9,058,202	17,149,461	17,149,461	8,249,751	-	17,307,953	17,307,953	38%
132012	Ypsilanti PS Improvements	35,393,046	515,125	584,384	584,384	117,990	-	633,115	633,115	2%
132014	Adams Road Booster Pumping Improvements	52,864,694	83,262	203,019	203,019	-	-	83,262	83,262	0%
132015	Newburgh BPS	45,044,000	444,073	733,037	733,037	27,865	-	471,937	471,937	1%
132016	North Service Center BPS Improvements	68,255,116	363,478	673,058	673,058	8,221	-	371,700	371,700	1%
132018	Schoolcraft BPS	47,317	47,317	-	-	-	-	47,317	47,317	100%
132019	Wick Road BPS - Switchgear	9,358,231	56,912	-	-	-	-	56,912	56,912	1%
132020	Franklin BPS - Isolation Gate Valves	2,544,535	93,160	-	-	-	-	93,160	93,160	4%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	749,810	227,346	-	-	-	-	227,346	227,346	30%
132022	Joy Road BPS - Replace Reservoir Pumps	39,613,214	71,380	276,909	276,909	-	-	71,380	71,380	0%
132025	Northwest Booster Station Yard Piping Improvements	-	20,306	-	-	-	-	20,306	20,306	0%
132026	Franklin Pumping Station Valve Replacement	1,006,467	-	-	-	-	975,327	-	975,327	97%
170102	Water Production Plant Flow Mettering Improvements at NE, SP & SW WTP	372,374	373,640	-	-	-	-	373,640	373,640	100%
170109	Inspection of Raw Water Intakes and Tunnels	1,656,069	-	-	-	-	-	-	-	0%
170120	Phosphoric Acid Feed System Improvements at Southwest WTP	1,625	-	-	-	-	634,509	-	634,509	39047%
170200	As Needed Construction Materials, Environmental Media and Special Allowance	1,427,227	-	146	146	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	13,249,000	9,000	6,151,000	4,482,191	(9,000)	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	-	1,755,142	1,755,142	0%
170302	SW WTP SCADA Improvements	9,000,000	74,413	3,605,928	5,274,737	869,177	-	943,589	943,589	10%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
170303	WWP WTP Power Monitoring Installation	1,700,000	203,628	514,474	514,474	1,360,407	-	1,564,034	1,564,034	92%
170304	WWP WTP SCADA Upgrade	-	13,947	-	-	171,711	-	185,658	185,658	0%
170400	Water Transmission Improvement Program	33,171,211	-	1,033,961	1,033,961	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station	1,661,231	-	-	-	-	2,633,282	-	2,633,282	159%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	5,350,164	-	232,066	42,066	-	-	-	-	0%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,071,663	2,110,241	1,304,975	1,304,975	1,033,517	-	3,143,757	3,143,757	31%
170504	Repair of WTM, Valves, & Priority Repair Water Transmission Main Asset	-	-	-	190,000	8,311,798	-	8,311,798	8,311,798	0%
170600	Assessment Program	8,438,215	-	24,218	24,218	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	23,827,344	-	321,527	321,527	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	15,090,049	11,457,639	463,000	573,000	5,380,104	7,184,856	9,652,888	16,837,743	112%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	40,718,957	-	1,159,000	1,159,000	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	10,616,499	8,531,114	2,838,297	1,151,383	765,053	7,703,013	1,593,154	9,296,167	88%
170902	Brownstown Meter Pit Rehabilitation	1,245,254	219,873	593,887	593,887	-	-	219,873	219,873	18%
171500	Roof Replacement - Var Facilities Program	22,710,989	-	10,764	10,764	-	-	-	-	0%
171501	Roof Replacements - Var Facilities Program	3,484,352	-	-	-	-	3,354,843	-	3,354,843	96%
331003	Masonry Replacement and Rehabilitation	25,000,000	-	-	-	-	-	-	-	0%
341001	Security Infrastructure Improvements	9,169,807	8,139,352	567,392	567,392	1,046,045	1,138,691	9,185,398	10,324,089	113%
351001	Water Facility Lighting Renovations	699,523	6,667	37,632	37,632	-	-	6,667	6,667	1%
380600	General Engineering Services Allowance	55,126	-	-	-	-	-	-	-	0%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	2,130,722	-	455,655	455,655	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	2,623,926	-	-	-	-	-	-	-	0%
<b>Grand Total</b>		<b>\$ 2,353,709,015</b>	<b>\$ 204,853,029</b>	<b>\$ 179,210,481</b>	<b>179,978,262</b>	<b>\$ 118,275,638</b>	<b>\$ 287,530,097</b>	<b>\$ 297,418,444</b>	<b>\$ 584,948,542</b>	<b>25%</b>
<b>Project Amendments:</b>					<b>767,781</b>					

**Great Lakes Water Authority**  
**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	\$ 54,061,159	\$ -	\$ -	\$ -	\$ -	\$ 54,748,738	\$ -	\$ 54,748,738	101%
211002	Pump Station No. 2 Pumping Improvments	3,340,152	2,517,234	-	-	42,022	-	2,559,256	2,559,256	77%
211004	Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	23,295,382	27,865,682	-	-	29,318	27,895,001	(0)	27,895,001	120%
211005	Pump Station No. 2 Improvements	13,797,096	2,176	-	-	642	-	2,818	2,818	0%
211006	Pump Station No. 1 Improvements	68,709,404	3,491,519	3,060,848	3,060,848	688,482	-	4,180,002	4,180,002	6%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	76,228,576	1,509,443	2,303,172	2,303,172	2,263,589	-	3,773,032	3,773,032	5%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	11,387,944	1,870,766	5,358,083	7,431,083	2,382,848	-	4,253,614	4,253,614	37%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	13,007,908	39,674	476,043	476,043	1,721	-	41,395	41,395	0%
211010	Rehabilitation of Sludge Processing Complexes A and B	13,934,471	94,270	-	-	67	-	94,337	94,337	1%
211011	WRRF PS1 Screening and Grit Improvements	93,303,153	-	-	-	-	-	-	-	0%
212003	Aeration System Improvements	14,643,450	-	-	-	-	16,524,875	-	16,524,875	113%
212004	ProjectChlorination/Dechlorination Process Equipment Improvements	5,742,203	5,642,328	-	-	8,173	5,652,101	(1,600)	5,650,501	98%
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	43,788,731	-	-	-	-	43,788,731	-	43,788,731	100%
212007	Rehabilitation of the Secondary Clarifiers	49,871,040	2,247	9,900	9,900	-	-	2,247	2,247	0%
212008	WRRF Rehabilitation of Intermediate Lift	81,931,310	583,363	2,566,737	2,566,737	211,176	-	794,540	794,540	1%
212009	WRRF Aeration Improvements 3 and 4	73,588,564	-	-	-	-	-	-	-	0%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,765,452	-	-	-	-	-	-	-	0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	4,489,934	194,357	342,468	342,468	81,477	-	275,834	275,834	6%



**Great Lakes Water Authority**  
**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	22,162,273	20,120,012	2,499,064	3,349,064	1,582,131	-	21,702,143	21,702,143	98%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	8,432,039	151,058	295,324	295,324	-	-	151,058	151,058	2%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	12,651,082	11,949,799	-	-	68,124	14,300,183	0	14,300,183	113%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	6,645,397	3,070,854	75,940	293,860	1,976,649	-	5,047,503	5,047,503	76%
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	23,874,377	1,038,944	558,406	1,243,856	2,368,216	-	3,407,160	3,407,160	14%
216007	DTE Primary Electric 3rd Feed Supply Line to the WRRF	4,544,429	3,380,783	393,514	393,514	37,387	543,500	3,418,170	3,961,670	87%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,820,651	262,035	906,386	906,386	706,251	-	968,287	968,287	2%
216009	Logistics & Material Facility	164,904	-	-	-	-	-	-	-	0%
216010	WRRF Facility Optimization	10,270,771	-	57,420	57,420	-	-	-	-	0%
216011	WRRF Structural Improvements	12,333,080	-	2,051,568	2,051,568	8,582	-	8,582	8,582	0%
216012	WRRF Research Facility	-	-	-	-	10,547	10,547	-	10,547	0%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,397,144	475,416	790,559	1,453,944	1,015,313	-	1,490,729	1,490,729	3%
222002	Detroit River Interceptor Evaluation and Rehabilitation	72,775,106	37,097,586	11,191,618	3,456,645	3,239,354	-	40,336,940	40,336,940	55%
222004	Collection System Valve Remote Operation Structures Improvements	-	4,246	-	-	-	-	4,246	4,246	0%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	40,073,406	30,371,550	12,781,009	10,696,662	7,453,304	-	37,824,854	37,824,854	94%
232002	Freud and Connor Creek Pump Station Improvements	229,278,758	4,582,109	3,357,420	3,357,420	5,063,062	6,000,596	9,622,402	15,622,998	7%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	257,420	-	-	-	-	-	-	-	0%
233003	Rouge River In-system Storage Devices	46,317,488	-	-	-	-	-	-	-	0%

**Great Lakes Water Authority**  
**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	53,748,897	-	-	-	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	32,282,349	10,587,039	1,479,167	1,479,167	4,290,058	18,542,127	14,877,097	33,419,224	104%
260202	Conveyance System Interceptor Rehab	-	1,904	-	-	-	-	1,904	1,904	0%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	52,157,408	943,846	11,646,299	10,305,439	596,296	-	1,540,141	1,540,141	3%
260205	NWI Outfall Rehabilitation	10,937,891	267,139	5,045,936	5,045,936	56,265	-	323,404	323,404	3%
260206	Conveyance System Rehabilitation - Interceptors	47,821,376	22,180	7,045,936	7,045,936	186,552	-	208,732	208,732	0%
260207	Rehabilitation of Woodward Sewer System	-	1,229,440	-	-	1,377,457	-	2,606,897	2,606,897	0%
260500	CSO Outfall Rehab	5,000,000	-	832,953	832,953	-	-	-	-	0%
260504	Rehabilitation of Outfalls - Phase II	5,051,112	-	-	-	22,843	4,900,746	22,843	4,923,589	97%
260505	Rehabilitation of Outfalls - Phase IV	5,718,385	4,938,825	640,637	640,637	770,399	-	5,709,224	5,709,224	100%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	0%
260508	B-39 Outfall Rehab	568,620	150,000	180,517	4,004,869	48,217	-	198,217	198,217	35%
260509	B-40 Outfall Rehab	88,500	77,621	-	-	4,687	-	82,308	82,308	93%
260510	Conveyance System Rehabilitation - Outfalls	48,863,036	34,594	7,709,560	3,885,208	690,106	-	724,700	724,700	1%
260600	CSO Facilities Improvements	126,400,000	-	1,000,000	-	-	-	-	-	0%
260601	Oakwood Drain Valve Improvements	864,218	-	-	-	-	804,574	-	804,574	93%
260602	CSO Fire Alarm System Improvements	997,619	-	-	-	-	997,619	-	997,619	100%
260603	Conner Creek CSO Basin Rehab	7,898,362	7,518,411	-	-	136,059	-	7,654,471	7,654,471	97%
260606	Puritan Fenkell Roof Replacement	346,540	-	-	-	-	346,540	-	346,540	100%
260607	Lieb SDF Electrical Improvements	1,032,687	(0)	-	-	-	1,032,508	(0)	1,032,508	100%
260608	Seven Mile RTB - Roof Replacement	496,699	-	-	-	-	496,699	-	496,699	100%
260609	Seven Mile RTB - Parking Lot / Sitework	416,597	-	-	-	-	429,557	-	429,557	103%
260610	Baby Creek MAU Replacement	275,151	-	-	-	-	275,151	-	275,151	100%
260611	HVAC Improvements At Lieb SDF	395,615	-	-	-	-	412,590	-	412,590	104%
260613	Baby Creek HVAC Improvements	587,628	529,906	-	-	15,494	545,401	-	545,401	93%
260614	CSO Facilities Structural Improvements	13,794,118	2,352,725	4,422,021	4,422,021	2,941,571	54,741	5,239,554	5,294,296	38%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	801,140	382,407	199,240	199,240	199,366	-	581,773	581,773	73%

**Great Lakes Water Authority**  
**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
260616	Baby Creek SCO Anchor & Wedge Improvements	782,863	-	-	-	-	770,114	-	770,114	98%
260617	St. Aubin Chemical Disinfection Improvements	6,966,364	417,052	387,420	387,420	1,838	-	418,891	418,891	6%
260618	Oakwood HVAC Improvements	3,966,512	370,525	3,235,005	5,335,005	2,478,569	-	2,849,094	2,849,094	72%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	116,179	62,766	-	-	-	-	62,766	62,766	54%
260620	Baby Creek Roof Replacement	640,500	25,848	-	-	21,402	-	47,249	47,249	7%
260621	Connor Creek Berm Improvements	-	284,034	-	-	1,814,478	-	2,098,511	2,098,511	0%
260622	CSO Facilities Emergency Generator Improvements	-	893	-	-	52,708	-	53,600	53,600	0%
260623	Baby Creek Screen Rehabilitation	-	-	-	-	15,186	-	15,186	15,186	0%
260700	Sewer System Infrastructure Improvements & Pumping Stations	35,901,492	-	3,660,745	3,660,745	-	-	-	-	0%
260701	Conveyance System Infrastructure Improvements	4,586,079	1,384,239	1,356,302	1,356,302	678,762	-	2,063,001	2,063,001	45%
260702	Pump Station Assets Updates	669,000	-	-	-	-	-	-	-	0%
260901	Rehab. Hazmat Facility at WRRF	-	131,014	-	-	81,599	-	212,613	212,613	0%
260902	WRRF Renovation of 4th Floor	-	49,160	-	-	456	-	49,615	49,615	0%
270001	Pilot CSO Netting Facility	9,573,092	235	13,420	13,420	-	-	235	235	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,839,631	-	8,580	8,580	-	-	-	-	0%
270003	Long Term CSO Control Plan	9,267,841	5,596	3,798,606	3,798,606	1,706,550	1,712,146	-	1,712,146	18%
270004	Oakwood Lieb CSO Facility Improvement	-	3,564	-	-	42,349	-	45,913	45,913	0%
273001	Hubbell Southfield CSO Facility Improvement	-	-	-	-	91,179	-	91,179	91,179	0%
274001	Leib Improvements for Meldrum Diversion	10,941,804	-	254,232	254,232	-	-	-	-	0%
277001	Baby Creek Outfall Improvements Project	18,825,761	19,228	1,807,420	1,807,420	428,679	33,653	414,255	447,907	2%
278001	Oakwood Improvements for NWI Diversion	10,225,804	-	251,772	251,772	-	-	-	-	0%
331002	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	8,888,476	-	1,276,569	1,276,569	-	1,123,056	-	1,123,056	13%

**Great Lakes Water Authority**  
**Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

Project	Project Name	Total Project Plan	CWIP Balance	FY 2022	FY 2022 Board	FY 2022	Life to Date	CWIP Balance	Life to Date	Life to Date
		Estimate from			Approved CIP					
		FY 2022-2026 CIP	July 1, 2021	Approved CIP	With Project	Activity through	Capitalization /	March 31, 2022	Activity through	Activity /
					Amendments	March 31, 2022	Expense Through	March 31, 2022	March 31, 2022	Total Project
										Plan Estimate
341001	Security Infrastructure Improvements	-	-	-	-	-	-	-	-	0%
341002	Security Infrastructure Improvements	3,533,510	2,934,004	722,226	722,226	406,243	181,525	3,158,722	3,340,248	95%
<b>Grand Total</b>		<b>\$ 1,782,153,110</b>	<b>\$ 191,120,285</b>	<b>\$ 106,050,041</b>	<b>\$ 100,479,614</b>	<b>\$ 48,595,801</b>	<b>\$ 394,950,404</b>	<b>\$ 191,590,278</b>	<b>\$ 586,540,682</b>	<b>33%</b>
Project Amendments:					\$ (5,570,426)					

## **Appendix C - Project Amendment Summaries**

The purpose of the Project Amendment Summary is to illustrate the amendments to the current fiscal year board approved CIP for each project with an amendment resulting from the use of allowance and program funding for a specific amount necessitated by contract award.

The award of CIP contracts and the related execution thereof may result in deviation from the amount and timing of planned spend. Acknowledging the aforementioned deviation, project amendments are prepared to fund the related increase or decrease either to or from the Capital Reserve to amend the current fiscal year board approved Capital Improvement Plan accordingly and to inform decision makers in the development of future Capital Improvement Plans. Similar to the project amendments prepared for the Capital Reserve, project amendments are also prepared for contracts that are planned or funded by way of the CIP Program and Allowance accounts. As additional contracts are awarded, and other project information becomes available additional project amendments to and from the Capital Reserve will be prepared to amend the board approved FY 2022 Capital Improvement Plan.

**\$767,781** of Capital Reserve project amendments have been prepared as of March 31, 2022, as shown for the Water System in C1 with project amendments detailing the assignment of funding within Program and Allowance accounts.

**\$5,570,426** of Capital Reserve project amendments have been prepared as of March 31, 2022, as shown for the Wastewater system in C2 with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of these appendices on the subsequent pages are in ascending order by CIP project number.

**Great Lakes Water Authority**  
**Water System Project Amendment Summary**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

<b>Project</b>	<b>Project Name</b>	<b>Capital Reserve</b>	<b>Program / Allowance</b>	<b>Grand Total</b>
<b>111012</b>	LHWTP-Flocculation Improvements	\$ 973,000	\$	973,000
<b>113006</b>	SW WTP Chloring Scrubber	(1,877,433)		(1,877,433)
<b>114016</b>	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	335,000		335,000
<b>115001</b>	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	487,201		487,201
<b>122006</b>	Transmission System Water Main Work-Wick Road Parallel Water Main	549,032		549,032
<b>122013</b>	Lyon Township Transmission Main Extension Project	(79,745)		(79,745)
<b>170300</b>	Water Treatment Plant Automation Program		(1,668,809)	(1,668,809)
<b>170302</b>	SW WTP SCADA Improvements		1,668,809	1,668,809
<b>170500</b>	Transmission System Valve Assessment and Rehabilitation/Replacement Program		(190,000)	(190,000)
<b>170504</b>	Repair of WTM, Valves, & Priority Repair		190,000	190,000
<b>170801</b>	Reservoir Inspection, Design and Rehabilitation	110,000		110,000
<b>116005</b>	Belle Isle Seawall Rehabilitation	(242,102)		(242,102)
<b>170901</b>	Suburban Water Meter Pit Rehabilitation and Meter Replacement	(1,686,914)		(1,686,914)
<b>122004</b>	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	2,199,742		2,199,742
<b>Grand Total</b>		<b>\$ 767,781</b>	<b>\$ -</b>	<b>\$ 767,781</b>

**Great Lakes Water Authority**  
**Wastewater System Project Amendment Summary**  
**Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022**

<b>Project</b>	<b>Project Name</b>	<b>Capital Reserve</b>	<b>Program / Allowance</b>	<b>Grand Total</b>
<b>211008</b>	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	\$ 2,073,000		\$ 2,073,000
<b>260508</b>	B-39 Outfall Rehab		3,824,352	3,824,352
<b>260510</b>	Conveyance System Rehabilitation - Outfalls		(3,824,352)	(3,824,352)
<b>260600</b>	CSO Facilities Improvements		(1,000,000)	(1,000,000)
<b>260618</b>	Oakwood HVAC Improvements	1,100,000	1,000,000	2,100,000
<b>213007</b>	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	850,000		850,000
<b>216004</b>	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	217,920		217,920
<b>216006</b>	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	685,450		685,450
<b>222002</b>	Detroit River Interceptor Evaluation and Rehabilitation	(7,734,973)		(7,734,973)
<b>232001</b>	Fairview Pumping Station - Replace Four Sanitary Pumps	(2,084,347)		(2,084,347)
<b>222001</b>	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	663,385		663,385
<b>260204</b>	Energy Services for Rehabilitation of Conveyance Sewer System	(1,340,861)		(1,340,861)
<b>Grand Total</b>		\$ (5,570,426)	\$ -	\$ (5,570,426)



Financial Report  
Debt Summary  
for the Quarter Ended March 31, 2022

The Quarterly Debt Summary Report includes the following:

1. Key Takeaways
2. Look Ahead – Five Year Capital Financing Plan
3. Existing Debt
4. Debt Service Coverage
5. Refinancing

Pursuant to leases that became effective on January 1, 2016, the Great Lakes Water Authority (GLWA) assumed possession and control of the regional assets of both the water supply and sewage disposal systems owned by the City of Detroit (City), which were previously operated by the Detroit Water and Sewerage Department (DWSD). GLWA assumed certain liabilities including State Revolving Fund loans and 100% of the revenue bond debt issued by DWSD prior to January 1, 2016.

The bonds are repaid by the revenues of the water and sewage disposal systems including the DWSD retail system (local system) revenues which are the exclusive property of GLWA in accordance with Section 5.7 of each lease agreement. The DWSD is GLWA's agent for purposes of billing and collection of the retail system revenues for both the water and sewer system, as set forth in a water and sewer services agreement between the City and GLWA. All revenue receipts are deposited into a trust and administered in compliance with the Master Bond Ordinance, applicable to each system (referred to herein collectively as the "MBO").

The leases also provide that GLWA will finance local system improvements of DWSD. GLWA is the obligor of 100% of the debt payable which is recorded in GLWA's books. An "obligation receivable" is recorded by GLWA which represents the amount related to the DWSD local system improvements. Accordingly, DWSD records an "obligation payable" for a like amount.

GLWA maintains detailed records of all debt issuances and how the responsibility for payment of debt is allocated between the regional system and local system, as well as between the water and sewer systems. GLWA and DWSD regularly reconcile interrelated accounts between the entities.

The lease agreements, water and sewer services agreement, and MBO noted above are available on GLWA's website at [www.glwater.org](http://www.glwater.org). The above explanation is a synopsis of key points and is not intended to fully represent the agreements or any sub-sections thereof.



## Key Takeaways

- ✓ The purpose of this report is to provide a resource for stakeholders and to support management decisions as capital financing needs evolve.
- ✓ GLWA continues to enhance transparency by including the Debt Summary Report in the Audit Committee Binder quarterly.
- ✓ GLWA has fourteen active State Revolving Fund (SRF) loans, ten for water and four for sewer. On behalf of DWSD, GLWA is administering four projects for water and two for sewer.
- ✓ Existing proceeds from special revenue bonds are depleted. This means that all capital projects are now funded with Improvement & Extension funds, except for SRF funded projects.
- ✓ Other key items of interest include the following balances as of March 31, 2022.

As of March 31, 2022 (\$ Millions)		
	Water	Sewer
FY 2022 Approved SRF Projects - <b>Table 5</b>	\$316.9	\$101.7
DWSD Obligation Receivable - <b>Table 6</b>	\$547.4	\$381.3
GLWA Outstanding Debt - <b>Table 8</b>	\$2,279.4	\$2,861.8

## Look Ahead - Five Year Capital Financing Plan

The following tables summarize the projected Capital Improvement Program (CIP) funding to be provided by proceeds received from the issuance of new revenue bonds and draws on committed SRF loans. *The financing plan is dynamic and changes with the pace of capital spending and alignment with refunding opportunities.*

Table 1 is based on the FY 2023 and FY 2024 Biennial Budget & Five-Year Financial Plan FY 2023 through FY 2027 approved by the GLWA Board of Directors. It should be noted existing proceeds from special revenue bonds are depleted. This means that all capital projects are now funded with Improvement & Extension (I&E) funds, except for SRF funded projects.

It is expected that the I&E funds supplemented with SRF low-interest loan funding will be sufficient to fund the capital program through FY 2022. A bond transaction is anticipated in the first quarter of FY 2023. However, the upcoming transaction sizing and strategies are under review as GLWA continues to evaluate economic conditions.

Table 2 is based on the current, draft local system CIP presented to the DWSD's Board of Water Commissioners at its June 1, 2022 Finance Committee meeting. It is important to note the amounts represented in Revenue Bonds reflect the anticipated par amount of the bonds to be issued and not the net proceeds needed to support the capital plan.

**Table 1 - GLWA Projected Bond Financing FY 2023 – FY 2027**

Projected Funding Needs for Regional System					
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Water</b>					
Revenue Bonds	\$ 187,000,000	\$ -	\$ 272,000,000	\$ -	\$ 277,000,000
SRF loan draws	\$ 54,992,000	\$ 59,446,000	\$ 21,442,000	\$ 2,400,000	\$ 22,505,000
Total projected funding Water	\$ 241,992,000	\$ 59,446,000	\$ 293,442,000	\$ 2,400,000	\$ 299,505,000
<b>Sewer</b>					
Revenue Bonds	\$ 146,000,000	\$ -	\$ 131,000,000	\$ -	\$ 146,000,000
SRF loan draws	\$ 18,720,000	\$ 10,247,000	\$ 9,785,000	\$ 15,357,000	\$ 7,198,000
Total projected funding Sewer	\$ 164,720,000	\$ 10,247,000	\$ 140,785,000	\$ 15,357,000	\$ 153,198,000

**Table 2 - DWSD Projected Bond Financing FY 2023 – FY 2027**

Projected Funding Needs for Local System					
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Water</b>					
Revenue Bonds	\$ -	\$ -	\$ -	\$ -	\$ -
SRF loan draws	\$ 23,064,000	\$ 11,100,000	\$ 15,000,000	\$ 8,000,000	\$ -
Total projected funding Water	\$ 23,064,000	\$ 11,100,000	\$ 15,000,000	\$ 8,000,000	\$ -
<b>Sewer</b>					
Revenue Bonds	\$ -	\$ -	\$ -	\$ -	\$ -
SRF loans draws	\$ 24,750,000	\$ 14,050,000	\$ -	\$ -	\$ -
Total projected funding Sewer	\$ 24,750,000	\$ 14,050,000	\$ -	\$ -	\$ -

**Note:** Information presented is as of March 31, 2022. Financing plans continue to evolve based on the needs of the system.

## Existing Debt

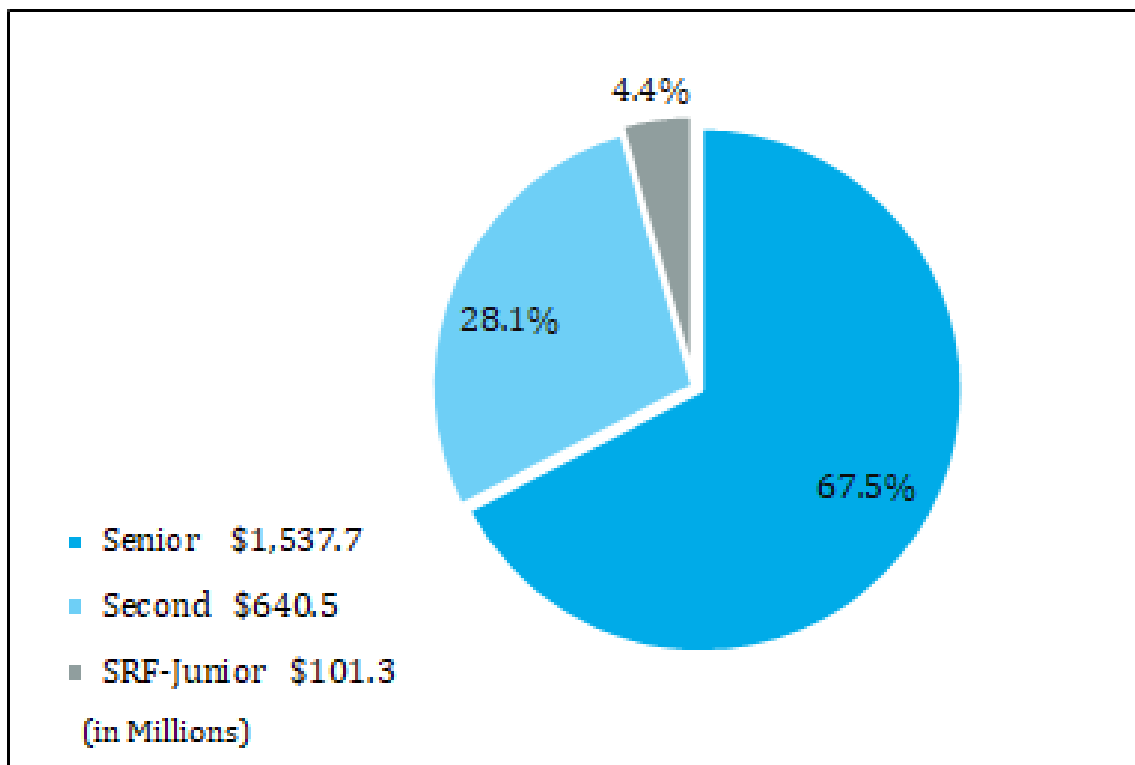
**Current Debt Ratings:** Bond ratings are a key measure of an organization's financial strength. Ratings are established by independent agencies that conduct detailed reviews of an organization's operational and financial performance to assist those seeking to invest in an organization through the purchase of bonds. GLWA actively monitors its debt ratings and continually seeks to make operational and financial improvements to improve its bond ratings. Achieving higher ratings will allow GLWA to finance its capital needs at lower interest rates.

**Table 3 – Debt Ratings by System** provides a summary of the debt ratings assigned in March 2020 in advance of the most recent bond refinancing and new money issuance in May and June 2020.

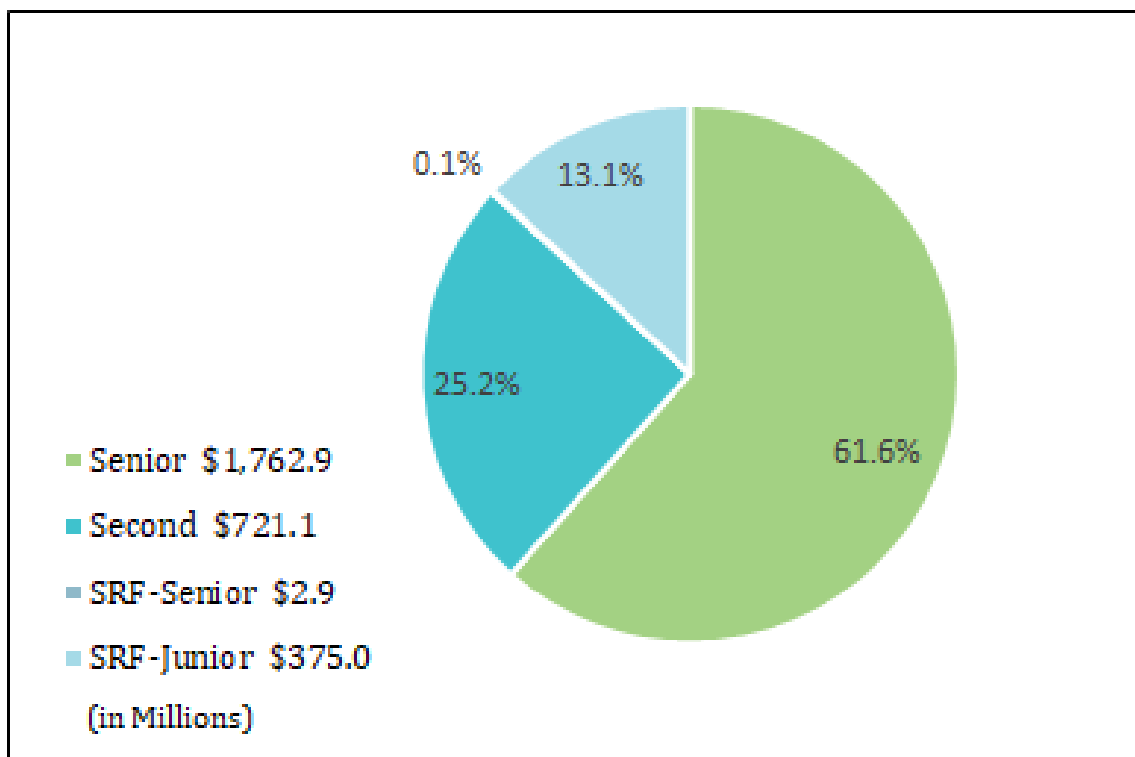
Current Debt Ratings			
	S&P Global Ratings	Moody's Investors Service	Fitch Ratings
<b>Water Supply System Revenue Bonds</b>			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable
<b>Sewage Disposal System Revenue Bonds</b>			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable

**Debt Allocation:** GLWA has over \$2.4 billion in water system debt and nearly \$2.9 billion in sewer system debt for a combined total of over \$5.3 billion. Debt within each system is prioritized according to its security interest, or lien category, with senior lien debt having the highest security interest, followed by second lien and finally junior lien.

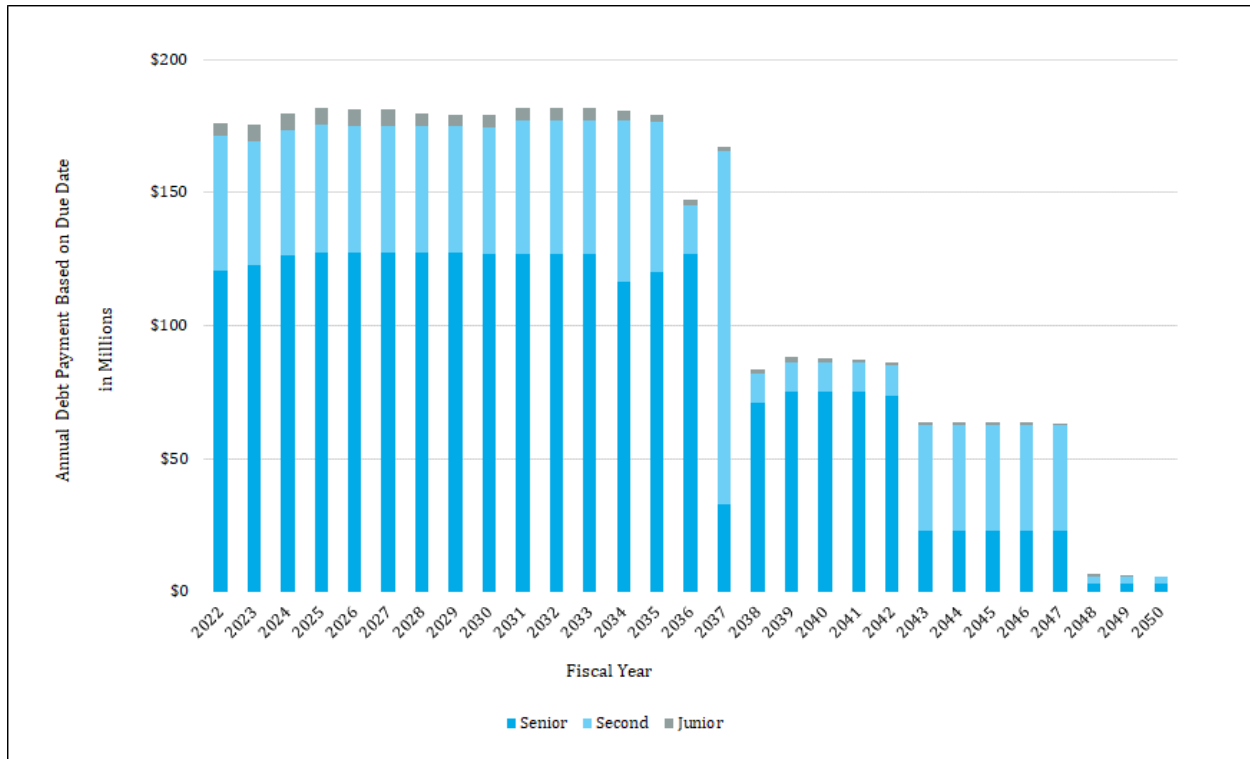
**Chart 1 - Debt Type by Lien – Water** provides a breakdown of the total water system debt for both the regional and local systems by lien type.



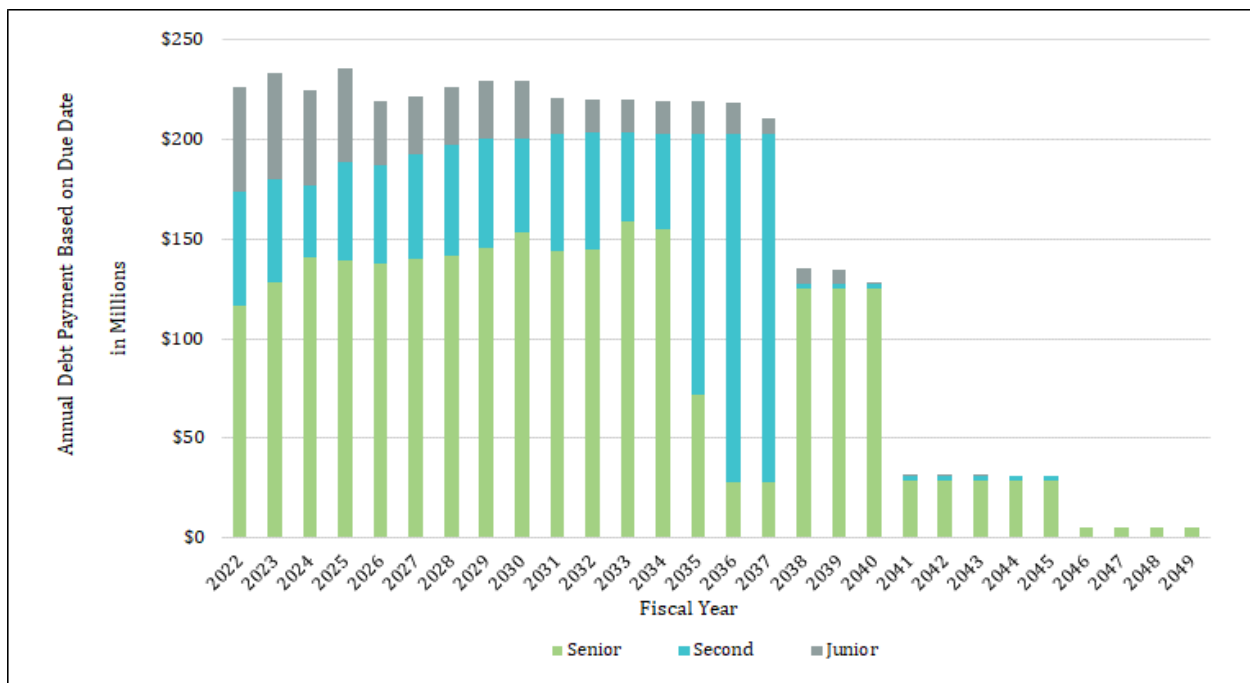
**Chart 2 - Debt Type by Lien – Sewer** provides a breakdown of the total sewer system debt for both the regional and local systems by lien type.



**Chart 3 – Annual Debt Service Payments by Lien – Water** provides the annual debt service installment requirements for each fiscal year.



**Chart 4 – Annual Debt Service Payments by Lien – Sewer** provides the annual debt service installment requirements for each fiscal year.



**Note:** The figures in these charts reflect the debt service installment requirements for each fiscal year, which are required by the MBO to be set aside monthly in advance of actual payment dates. This information will differ from the Annual Comprehensive Financial Report which reflects when the actual payments are made to the bond paying agent.

**State of Michigan's State Revolving Fund (SRF) Programs:** GLWA participates in the State's Clean Water Revolving Fund (CWRP) to finance qualified sewage disposal system projects and the State's Drinking Water Revolving Fund (DWRP) to finance qualified water supply system projects. For the purposes of this report, both water and sewer projects financed through these programs will be referred to as either water or sewer SRF loans.

These loan programs have interest rates that are well below open market interest rates (usually between 1.875% and 2.5%) and are repaid over 20-30 years. For the state's FY 2022, the DWRP and CWRP program rates are 1.875% for 20-year loans and 2.125% for 30-year loans.

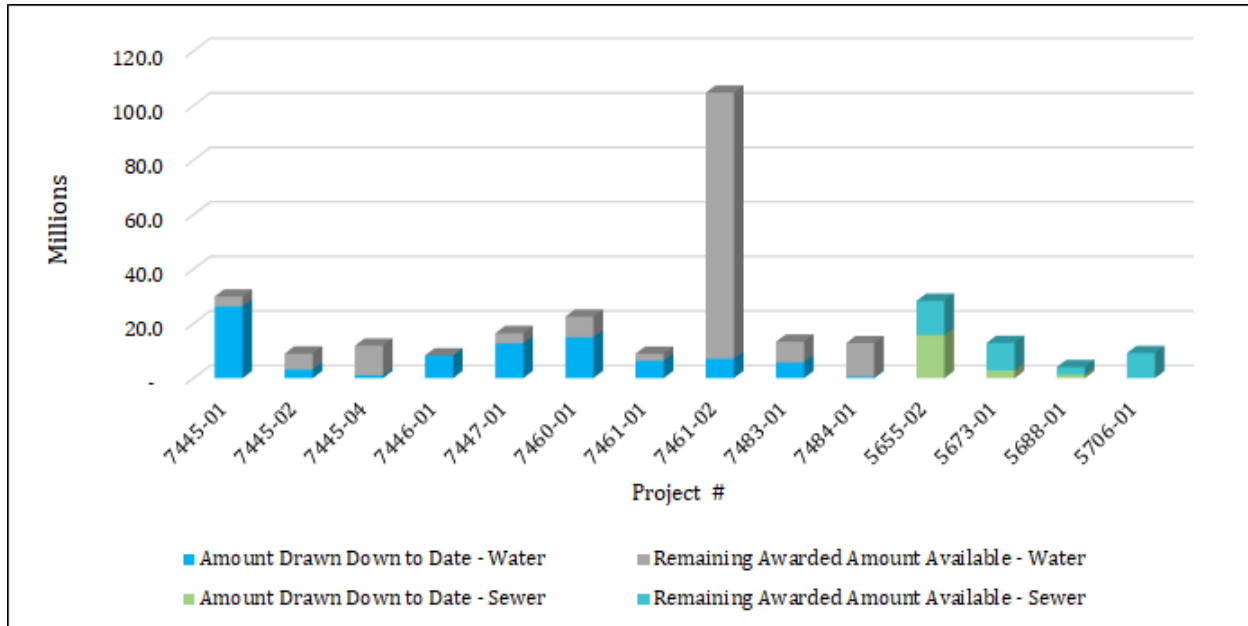
Funds are disbursed as construction payments are made. Interest on each loan is based on the amount of funds drawn and not the full loan amount. GLWA must submit project plans to the Michigan Department of Environment, Great Lakes, and Energy ("EGLE", and formerly known as the Michigan Department of Environmental Quality or MDEQ) for each project by the annual submission date (July 1 for DWRP and June 1 for CWRP) to be considered for the State's funding pool for the following fiscal year.

**State Revolving Fund Loans:** GLWA's strategy is to maximize its use of SRF loans to finance qualified capital projects. GLWA currently has \$101.3 million in outstanding water SRF loans and \$377.8 million in outstanding sewer SRF loans.

**Table 4 - Active SRF Project Summary** provides information regarding each loan including the loan award date which is also referred to as the Order of Approval date by the State of Michigan.

State Loan #	Description	Order of Approval	Project Total (\$ Millions)
<b>SRF Water - DWSD Projects</b>			
7447-01	Water Main Replacement (WS-707 & 714)	8/9/2019	\$16.5
7460-01	Water Main Replacement (WS-710 & WS-711)	7/15/2020	\$22.6
7483-01	Water Main Replacement (WS-715 & WS-718)	9/9/2020	\$13.4
7484-01	Water Main Replacement - Jefferson Chalmers (WS-713)	8/6/2021	\$12.8
<b>SRF Water - GLWA Projects</b>			
7445-01	Northeast Transmission Phase 1	8/9/2019	\$30.0
7445-02	Northeast Transmission Main - Phase 2a	8/7/2020	\$9.0
7445-04	Northeast Transmission Main - Phase 3a	5/28/2021	\$11.9
7446-01	Lake Huron Sludge System-Raw Sludge Clarifiers	5/17/2019	\$8.3
7461-01	14 Mile Transmission Main Loop - Phase 1	8/7/2020	\$9.0
7461-02	14 Mile Transmission Main Loop - Phase 2	8/6/2021	\$104.7
<b>Total Water</b>			<b>\$238.2</b>
<b>SRF Sewer - DWSD Projects</b>			
5688-01	Sewer Main Rehab/Rplcmt (DWS-916) - Project A	9/9/2020	\$4.0
5706-01	Sewer Main Replacements - Project B (DWS-917 & DWS-918)	9/9/2021	\$9.2
<b>SRF Sewer - GLWA Projects</b>			
5655-02	Detroit River Interceptor Segment 2	3/27/2020	\$28.4
5673-01	PS-1 Ferric Chloride System Rehabilitation	2/26/2021	\$12.9
<b>Total Sewer</b>			<b>\$54.5</b>

**Chart 5 - Open State Revolving Fund Loans** summarizes all current SRF loans held by GLWA (including financings on behalf of DWSD) that are active (reference Table 4 above for project descriptions). It summarizes the original award amount remaining and the amount drawn down as of March 31, 2022 for each loan. On March 31, 2022, the amount of SRF loans authorized and unissued is \$151.8 million for the Water fund and \$34.5 million for the Sewage Disposal Fund.



**Table 5 - Project Plan Approved by EGLE** identifies projects approved by the EGLE but for which applications had not yet been submitted for funding as of March 31, 2022.

Project Owner	Description	Estimated Loan Amount	Anticipated Funding Date
<b>Water SRF</b>			
DWSD	Lead Service Line Water Main Replacement (WS-721)	\$ 10,000,000	2.5Q 2022
GLWA	96-inch Water Transmission Main Relocation Project - Phase 1	\$ 36,300,000	4Q 2022
GLWA	96-inch Water Transmission Main Relocation Project - Phase 2	\$ 76,800,000	4Q 2022
GLWA	Northeast Transmission Main - Phase 2b	\$ 76,800,000	FY 2023
GLWA	Ypsilanti Pumping Station	\$ 36,700,000	FY 2023
GLWA	Northeast Transmission Main - Phase 3b	\$ 80,294,000	FY 2024
<b>Total Water SRF</b>		<b>\$ 316,894,000</b>	
<b>Sewer SRF</b>			
GLWA	Detroit River Interceptor (DB-226) - 2nd Financial Segment	\$ 34,195,000	3Q 2022
GLWA	In-System Storage Device and Dam and Valve Remote Evaluation and Rehabilitation	\$ 10,600,000	4Q 2022
GLWA	Connor Creek Sewer System Rehabilitation	\$ 56,900,000	4Q 2022
<b>Total Sewer SRF</b>		<b>\$ 101,695,000</b>	

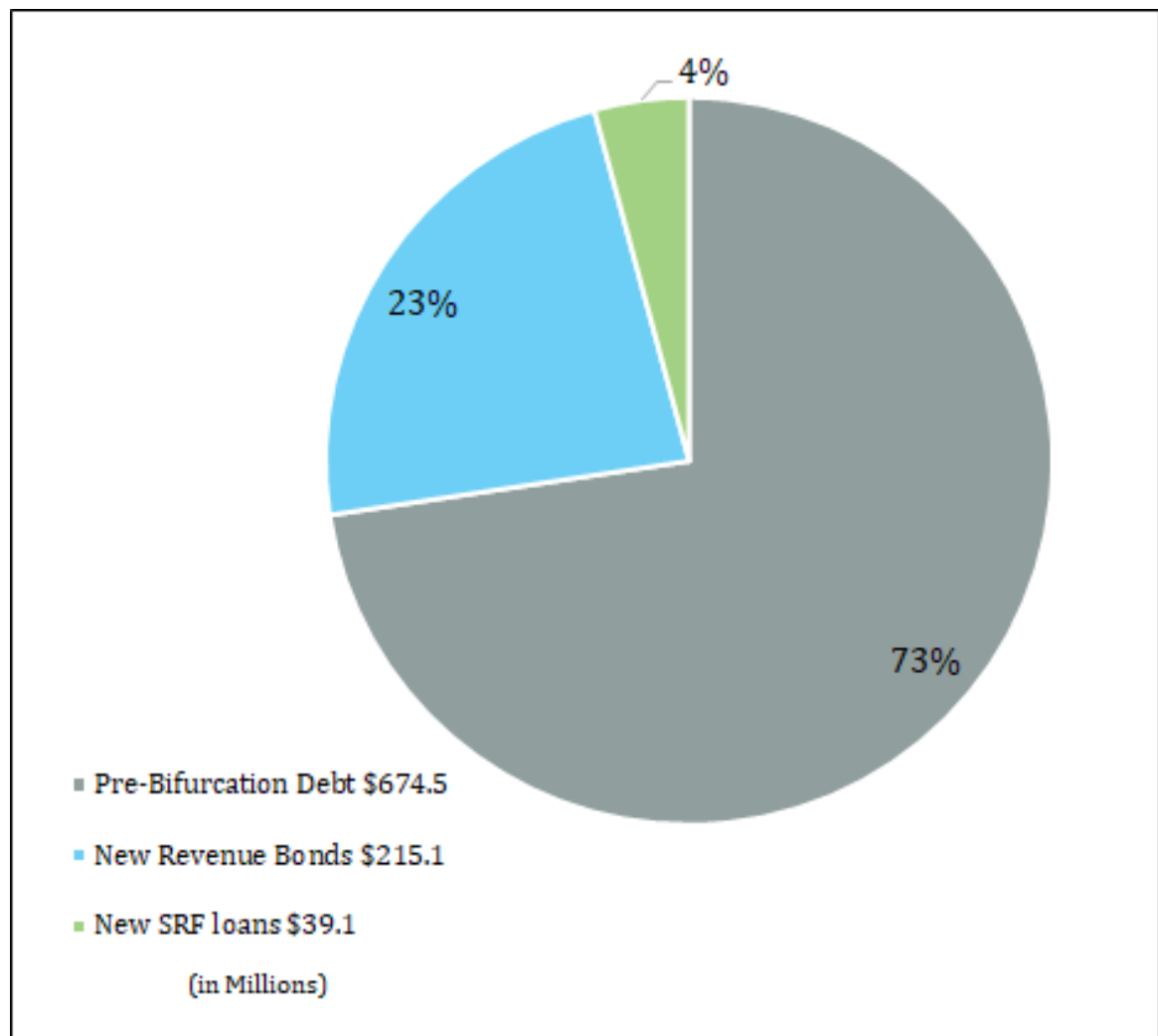
**DWSD Obligation Receivable:** GLWA holds an obligation receivable from DWSD as an asset to account for the amount due for financing local system capital projects. DWSD carries a like amount of this as an obligation payable on its statement of net assets.

There are three components to the calculation of the DWSD obligation receivable. These are:

- a) an agreed upon amount for pre-January 1, 2016 (i.e. “pre-bifurcation”) debt as documented in a 2018 Memorandum of Understanding (\$455 million for water system and \$370 million for sewer per agreed-upon amortization schedules),
- b) new revenue bonds issued after January 1, 2016 to specifically fund the DWSD local system capital improvement projects which are payable based on the allocable share of the actual bonds debt service schedule, and
- c) SRF loans issued after January 1, 2016 for specific DWSD capital projects which are payable based on the allocable share of the actual loan payment schedule.

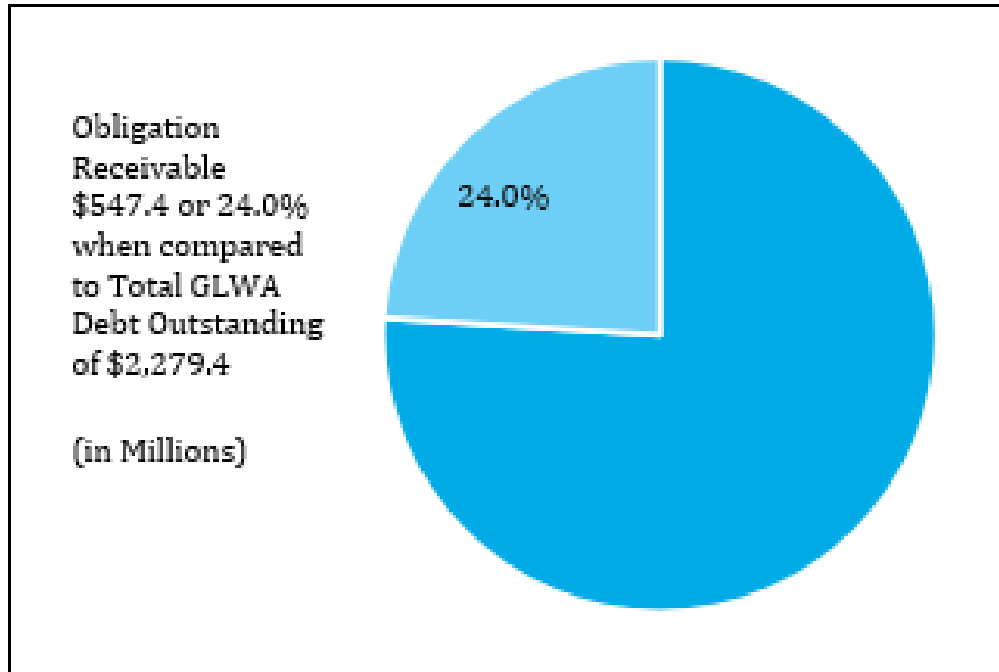
All retail customer revenues are deposited into a trust to fund these financial obligations in accordance with the MBO flow of funds.

**Chart 6 - DWSD Obligation Receivable by Type** summarizes the total DWSD obligation receivable balance for both Water and Sewer as of March 31, 2022 by pre-bifurcation, revenue bond and SRF component.

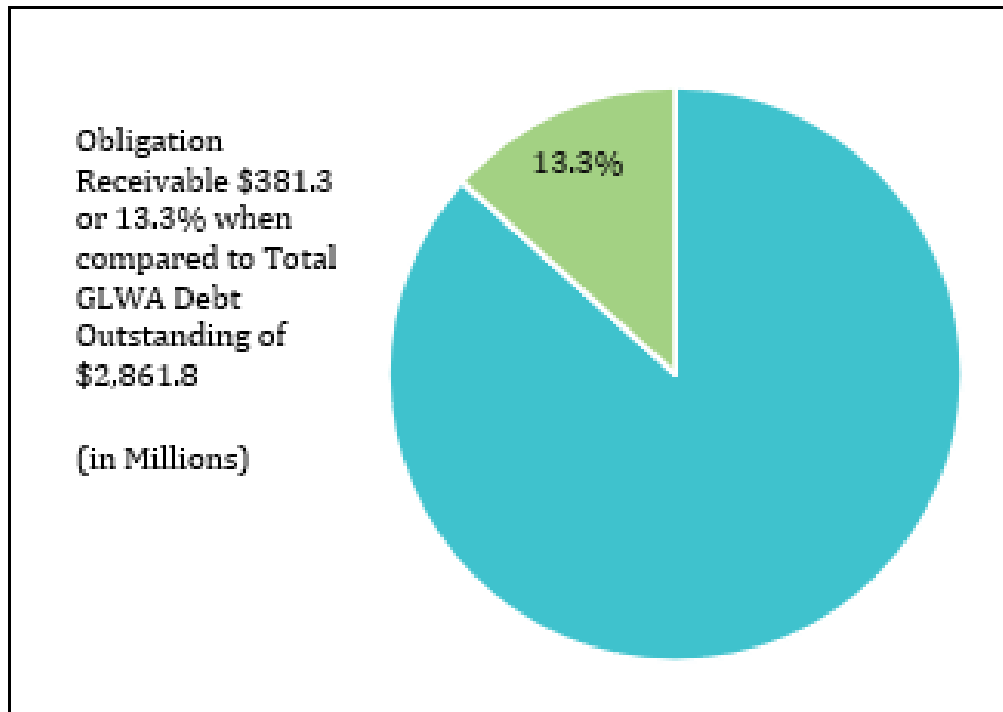




**Chart 7 – Obligation Receivable Compared to Total Debt - Water** provides context by comparing the Water System Obligation Receivable to the Total Water Debt (excludes unamortized premiums).



**Chart 8 – Obligation Receivable Compared to Total Debt - Sewer** provides context by comparing the Sewer System Obligation Receivable to the Total Sewer Debt (excludes unamortized premiums).



**Table 6 - DWSD Obligation Receivable** provides obligation receivable detail including fiscal year 2022 beginning balances by debt type and loan issue (for revenue bonds and SRF loans), year-to-date activity and ending balances as of March 31, 2022. Total DWSD debt totals \$929 million. This differs slightly from the total in Chart 6 due to the inclusion of unamortized premiums.

Debt Type	July 1, 2021 Beg Balance	Increase	Decrease	SRF Debt Forgiveness	March 31, 2022 End Balance
<b>DWSD Water</b>					
Pre-Bifurcation Debt	\$ 383,841	\$ -	\$ (11,376)		\$ 372,465
Revenue Bond - 2016A	17,725	-	-	-	17,725
Revenue Bond - 2016B	33,015	-	-	-	33,015
Revenue Bond - 2020A	42,445	-	-	-	42,445
Revenue Bond - 2020B	43,135	-	-	-	43,135
SRF 7412-01	4,842	-	-	-	4,842
SRF 7413-01	3,139	-	-	-	3,139
SRF 7414-01	5,503	-	(155)	-	5,348
SRF 7447-01	7,684	347	(288)	-	7,743
SRF 7460-01	7,718	5,247	-	-	12,965
SRF 7483-01	-	5,773	-	(1,202)	4,571
SRF 7484-01	-	484	-	(484)	-
Total DWSD Obligation	549,046	11,851	(11,819)	(1,686)	547,393
Unamortized Premiums	19,606	-	(552)		19,053
<b>Subtotal: Water</b>	<b>568,652</b>	<b>11,851</b>	<b>(12,371)</b>	<b>(1,686)</b>	<b>566,446</b>
<b>DWSD Sewer</b>					
Pre-Bifurcation Debt	311,584	-	(9,585)	-	301,999
Revenue Bond - 2018A	78,810	-	-	-	78,810
SRF 5688-01	-	1,288	-	(808)	480
Total DWSD Obligation	390,394	1,288	(9,585)	(808)	381,289
Unamortized Premiums	8,962	-	(293)	-	8,668
<b>Subtotal: Sewer</b>	<b>399,356</b>	<b>1,288</b>	<b>(9,878)</b>	<b>(808)</b>	<b>389,958</b>
<b>Total DWSD Debt</b>	<b>\$ 968,008</b>	<b>\$ 13,139</b>	<b>\$ (22,249)</b>	<b>\$ (2,494)</b>	<b>\$ 956,404</b>

**Table 7 – Loan Forgiveness** provides a summary of loan principal forgiven on DWSD SRF loans closed after January 1, 2016. EGLE grants principal loan forgiveness on qualified planning costs for disadvantaged communities. Through March 31, 2022, over \$16.4 million or 16% of approved, DWSD SRF loans have been forgiven as a disadvantaged community.

**Table 7 - DWSD SRF Loan Forgiveness**

State Loan #	Approved Amount	Loan Forgiveness
<b>DWSD Water SRF</b>		
SRF 7412-01	10,605,000	1,000,000
SRF 7413-01	5,180,000	1,000,000
SRF 7414-01	8,675,000	2,000,000
SRF 7447-01	16,500,000	4,711,944
SRF 7460-01	22,570,000	2,031,300
SRF 7483-01	13,355,000	1,201,950
SRF 7484-01	12,845,000	1,316,050
<b>Subtotal: Water</b>	<b>89,730,000</b>	<b>13,261,244</b>
<b>DWSD Sewer SRF</b>		
SRF 5688-01	4,040,000	808,000
SRF 5706-01	9,175,000	2,293,750
<b>Subtotal: Sewer</b>	<b>13,215,000</b>	<b>3,101,750</b>
<b>Total DWSD Debt</b>	<b>\$ 102,945,000</b>	<b>\$ 16,362,994</b>

**Annual Change in Outstanding Debt:** It is the goal of GLWA to ensure the long-term sustainability of the water and sewer systems. One of the best ways to accomplish this is by reducing the debt service payments on existing bonds as well as reducing the amounts of future bond issues by using revenue financed capital.

**Table 8 - Long-Term Debt Summary** provides a detail of GLWA's fiscal year 2021 beginning balances by debt type and loan issues, year-to-date activity, and ending balances as of March 31, 2022. GLWA debt includes financing for both the regional and local share.

Debt Type	June 30, 2021			Debt	March 31, 2022 End
	Beg Balance	Increase	Decrease	Forgiveness	Balance
Water Fund					
Revenue Bonds	\$ 2,192,510	\$ -	\$ (14,390)	\$ -	\$ 2,178,120
State Revolving Loans	71,260	34,702	(2,998)	(1,686)	101,278
Total Installment Debt	2,263,770	34,702	(17,388)	(1,686)	2,279,398
Unamortized Premiums / Discounts	176,122	-	(11,334)	-	164,788
Subtotal: Water	2,439,892	34,702	(28,722)	(1,686)	2,444,186
Sewer Fund					
Revenue Bonds	2,515,455	-	(31,545)	-	2,483,910
Capital Appreciation bonds	5,675	-	(5,675)	-	-
State Revolving Loans	416,768	8,698	(46,815)	(808)	377,843
Total Installment Debt	2,937,898	8,698	(84,035)	(808)	2,861,753
Capital Appreciation Bond Discount	(171)	-	171	-	-
Unamortized Premiums / Discounts	62,187	-	(2,488)	-	59,699
Subtotal: Sewer	2,999,914	8,698	(86,352)	(808)	2,921,452
Total Combined, Long Term Debt	\$ 5,439,806	\$ 43,399	\$ (115,074)	\$ (2,494)	\$ 5,365,638

## Debt Service Coverage

GLWA is committed to ensuring the long-term sustainability of the water and sewer systems and has pledged specific revenue streams to secure the repayment of the revenue bonds and SRF loans associated with them. The MBO establishes minimum debt coverage levels at 1.20 for senior lien bonds, 1.10 for second lien bonds and 1.00 for any junior lien bonds, other than second lien bonds. Debt service coverage ratios are inclusive of all debt held on behalf of both GLWA and DWSD.

GLWA computes the debt service coverage ratio using two different methodologies. The Rate Covenant Method uses the cash basis in computing pledged revenue and the GAAP Method uses the accrual basis in computing pledged revenue. Pledged revenue is divided by the debt service requirements of each lien on a set aside basis to compute the debt service coverage ratio. The set aside basis is defined as the cash available to make the debt service payments on the due dates. The following table details the components of the pledged revenue for each methodology.

Components of Pledged Revenue	Pledged Revenue Calculation	Rate Covenant Basis	GAAP Basis
Revenues	Addition	Cash basis	Accrual basis
GLWA O&M expenses	Subtraction	Cash basis	Accrual basis
GLWA O&M pension	Subtraction	Cash basis	Cash basis
DWSD O&M expenses & O&M pension	Subtraction	Cash transfers to DWSD	Cash transfers to DWSD

**Table 9: Debt Service Coverage Ratios - Water** provides a summary of the MBO required minimum, historical, and budgeted debt service coverage ratios for the Water fund.

Debt Service Coverage Water System							
	MBO Required Minimum	Actual 2019	Actual 2020	Actual 2021	Adopted Budget 2022	Adopted Budget 2023	Adopted Budget 2024
<b>Rate Covenant Basis</b>							
Senior Lien Bonds	1.20	2.13	1.94	1.99	1.89	1.80	1.88
Senior and second lien bonds	1.10	1.54	1.39	1.40	1.37	1.33	1.40
All bonds, including SRF junior lien	1.00	1.51	1.37	1.38	1.32	1.27	1.29
<b>GAAP Basis</b>							
Senior Lien Bonds		2.04	1.98	1.99			
Senior and second lien bonds		1.47	1.43	1.40			
All bonds, including SRF junior lien		1.45	1.40	1.38			

**Table 10: Debt Service Coverage Ratios - Sewer** provides a summary of the MBO required minimum, historical, and budgeted debt service coverage ratios for the Sewer fund.

Debt Service Coverage Sewage Disposal System							
	MBO Required Minimum	Actual 2019	Actual 2020	Actual 2021	Adopted Budget 2022	Adopted Budget 2023	Adopted Budget 2024
<b>Rate Covenant Basis</b>							
Senior Lien Bonds	1.20	2.11	2.15	2.92	2.42	2.17	2.28
Senior and second lien bonds	1.10	1.62	1.64	1.97	1.74	1.74	1.72
All bonds, including SRF junior lien	1.00	1.29	1.29	1.51	1.35	1.37	1.35
<b>GAAP Basis</b>							
Senior Lien Bonds		2.10	2.16	2.55			
Senior and second lien bonds		1.62	1.65	1.72			
All bonds, including SRF junior lien		1.28	1.30	1.32			

## Refinancing

To reduce the annual water and sewer debt service payments, GLWA monitors its outstanding water and sewer debt portfolios to determine if it can refund existing bond issues with new, lower interest rate bonds. At least once per year, GLWA's registered municipal advisor, PFM Financial Advisors, LLC (PFM) prepares an analysis of GLWA's bond refunding opportunities based on the current municipal interest rate environment and the existing debt service on GLWA's callable bonds.

In May 2020, GLWA completed a \$463.1 million Water Supply System Revenue and Revenue Refunding bond transaction. This included a \$377.5 million taxable bond refinancing transaction with an additional \$85.6 million in tax-exempt new money to support the DWSD local system capital improvements. The refunding transaction resulted in \$66.5 million of present value savings for the water system. In June 2020, GLWA completed a \$687 million Sewage Disposal System Revenue Refunding taxable bond transaction resulting in present value savings of \$123 million for the sewage disposal system.

As part of the May and June 2020 transactions noted, funds from the refunding bonds have been placed in an irrevocable trust with an escrow agent to pay off this debt on the next available call dates. The bonds to be refunded are considered defeased and have been removed from GLWA's statement of net position.

**Table 11: Defeased Debt** provides a summary of the debt which has been defeased and the call dates.

Defeased Debt - Sewage Disposal Fund			
Bond Series to be Refunded	Amount	Call Date	Bond Issue Refunded By
Series 2012A	\$ 419,810,000	July 1, 2022	Series 2020A & Series 2020B
Series 2014C-1	\$ 123,200,000	July 1, 2022	Series 2020A & Series 2020B
Series 2014C-2	\$ 27,450,000	July 1, 2022	Series 2020A & Series 2020B
<b>Total Defeased Sewage Disposal Fund Debt</b>	<b>\$ 570,460,000</b>		

The next available refunding opportunity will be for bonds with a call date of July 1, 2024, for both the water fund and sewage disposal fund. Approximately \$434.2 million in water bonds and \$436.5 million in sewer bonds will be callable at that time. GLWA will continue to work with its registered municipal advisor to monitor the potential for refunding these bonds.



**Welcome to the June edition of *The Procurement Pipeline***, a monthly newsletter designed to provide updates on doing business with the Great Lakes Water Authority (GLWA).

## **Types of GLWA Solicitations – Request for Bid (RFB), Request for Proposal (RFP), and Invitation to Quote (ITQ)**

GLWA routinely issues different types of solicitations in the [Bonfire Procurement Portal](#). A solicitation is a document used by a GLWA Buyer to obtain competitive bids or proposals for the purpose of entering a contract with qualified vendors. All purchases greater than \$50,000 require a formal solicitation process, which includes notifying vendors that GLWA wishes to receive bids or proposals on specified goods and/or services. Read below to learn about three of the most common types of GLWA solicitations.

### ***Request for Bid (RFB)***

This type of solicitation is used when needed goods and/or services can be completely described in the bid specifications and awarded based on pricing alone using a low bid evaluation method. RFBs are publicly solicited in GLWA's Bonfire Portal.

### ***Request for Proposal (RFP)***

This type of solicitation is used when needed goods and/or services are of a complex and technical nature that cannot be fully described in the bid specifications. As a result of this, the award of the contract must be based on factors other than price alone. For RFPs, these additional evaluation factors are identified in the solicitation documents. RFPs are publicly solicited in GLWA's Bonfire Portal.

### ***Invitation to Quote (ITQ)***

This type of solicitation is used to invite vendors to an informal process to quote on specified goods and/or services. At least three known vendors are contacted by the GLWA Buyer to obtain competitive price quotations. ITQs do not exceed the \$50,000 threshold for small purchases and therefore are by invite-only for vendors who have active profiles in GLWA's Bonfire Portal.

## **Coronavirus Update #165: GLWA Masking Update – Masks Currently Required at ALL GLWA Facilities and Project Worksites**

On May 16, 2022 GLWA issued [Coronavirus Update #165](#) to the Vendor Community, indicating that Wayne and St. Clair County had risen to “RED” on the Centers for Disease Control and Prevention (CDC) [Community Levels](#) list. As stated in [Coronavirus Update #159](#), this means that ***face masks are currently required for all Visitors who provide onsite services at any GLWA facility or project worksite, regardless of its location, until further notice.*** Questions regarding this matter, or COVID-19 Visitor Access Requirements, should be directed to [Michael Lasley](#) and [Megan Savage](#).

## **Virtual Vendor Introduction Meetings**

If you are interested in learning more about doing business with GLWA, contact us at [GLWAVendorOutreach@glwater.org](mailto:GLWAVendorOutreach@glwater.org) to schedule a virtual vendor introduction meeting. Topics include information on submitting a competitive bid or proposal to a GLWA solicitation, as well as the requirements for GLWA's Business Inclusion and Diversity (B.I.D.) Program.

## **Keeping up with GLWA**

Our Interim Chief Executive Officer (ICEO) Monthly Report provides a wealth of information and news about important initiatives within GLWA's service territory that impact GLWA, its member partners, and the public. To read the May 2022 Monthly Report, please [click here](#).

## **What's Coming Down the Pipe?**

*Current Solicitations:* Register in GLWA's [Bonfire Procurement Portal](#) for new solicitations and contract award information.

*Upcoming Procurements: Next Three to Nine Months*—See newsletter page 2.

## **Visit GLWA online!**

To see the GLWA Vendor homepage, please visit [www.glwater.org](http://www.glwater.org) or contact us via email at [procurement@glwater.org](mailto:procurement@glwater.org).



# Upcoming Solicitations June 2022

Category	CIP #	Description/Project Title	Budget Estimate
<b>Water System (next four to nine months)</b>			
Construction	170802	Reservoir Rehabilitation Construction Services Phase II at Waterworks Park, Northeast, and Booster Stations.	\$35,972,000
Construction	112003	Northeast WTP Medium Voltage Electrical System Improvements	\$20,000,000
Construction	114002C	Springwells WTP Low and High Lift Pumping Station Improvements	\$133,000,000
<b>Wastewater Systems (next four to nine months)</b>			
Construction	260802	WRRF Roofing Improvements	\$4,300,000
Construction	232002	Freud Pump Station Improvements	\$75,000,000
Design	270001	Pilot Netting Facility	\$1,500,000
Design-Build	261001	WRRF Rehabilitation of Secondary Clarifiers	\$6,000,000
<b>Water System (next three months)</b>			
Construction	114017	Springwells WTP 1958 Flocculator Replacements	\$22,000,000
Materials & Equipment	114002E-G	Springwells WTP Pumping Unit Procurement Package (Contract E thru G)	\$57,000,000
Materials & Equipment	114002H-J	Springwells WTP Process Valve Procurement Package (Contract H thru J)	\$13,000,000
<b>Wastewater (next three months)</b>			
Design-Build	212008	Aeration Decks 1 & 2 RFP (invite to RFQ selected teams only)	\$74,000,000
Construction	211006	WRRF Pump Station #1 Improvements	\$73,400,000
Construction	260903	WRRF Front Entrance Rehabilitation	\$3,300,000
Construction	O&M	Incinerator #11 Rehabilitation	\$1,200,000
Construction	260206	Rehabilitation of Joy Rd Sewer & Brush/Bates Sewer	\$16,000,000
Design	273001	Hubbell Southfield CSO Facility Improvements	8,554,480
Construction	O&M	Plumbing Shop Rehabilitation	\$1,500,000
<b>Projects moved to Procurement Team (Preparing for solicitation on Bonfire)</b>			
Professional Services	O&M	SCADA System Professional Services	\$5,500,000
Engineering Services	260210	Rehabilitation of GLWA Sewers; Ashland Relief, Linwood, Lonyo, Second Avenue, and Shiawassee	\$6,900,000
Construction	114002B	Springwells WTP Medium Voltage Electrical System Replacement	\$52,000,000
Construction	211006	Rehabilitation of Pump Station #1 Improvements	\$60,000,000
Construction	211006	Pump Station #1 Screenings Building HVAC Improvements	\$1,200,000

Vendors should continue to monitor [Bonfire](#) for solicitation updates.

Acronyms		
<b>WRRF:</b> Water Resource Recovery Facility	<b>CSO:</b> Combined Sewer Overflow	<b>WTP:</b> Water Treatment Plant





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## Types of GLWA Solicitations Part II – Request for Information (RFI) and Request for Qualification (RFQ)

GLWA routinely issues different types of solicitations in the [Bonfire Procurement Portal](#). A solicitation is a document used by a Buyer to obtain competitive bids or proposals for the purpose of entering a contract with qualified vendor(s). In the [June 2022 Procurement Pipeline](#), we reviewed some of the most common types of GLWA solicitations, including Requests for Bid (RFBs), Requests for Proposal (RFPs), and Invitations to Quote (ITQs). In this month's *Procurement Pipeline*, we provide an overview of two additional types of GLWA solicitations: Requests for Information (RFIs) and Requests for Qualifications (RFQs).

### *Request for Information (RFI)*

This type of solicitation is used to obtain general information and feedback from potential vendors regarding goods and/or services. In an RFI, the scope of work is not fully defined, and this solicitation method is often used to help determine a scope of work prior to issuing a competitive solicitation. Information requested may include best practices, industry standards, and technology issues. Generally, price or cost information is not required for an RFI, and this method is not binding to either the vendor or GLWA. RFIs are publicly solicited in GLWA's Bonfire Portal.

### *Request for Qualification (RFQ)*

This type of solicitation is used to obtain qualification information from potential vendors in advance of the issuance of a Request for Bid (RFB) or a Request for Proposal (RFP). The RFQ selects the most qualified Vendor(s) or pre-qualifies potential Vendors for a possible subsequent direct award. Cost information may or may not be requested. RFQs are publicly solicited in GLWA's Bonfire Portal.

## Coronavirus Update #167: GLWA Mask Mandate Lifted at all GLWA Facilities & Project Worksites

On June 21, 2022 GLWA issued [Coronavirus Update #167](#) to the Vendor Community, indicating all the counties where staffed GLWA facilities or project worksites were "GREEN" on the Centers for Disease Control and Prevention (CDC) [Community Levels](#) list. As stated previously in [Coronavirus Update #159](#), this means that ***the wearing of face masks is optional for GLWA Vendors providing onsite services at GLWA facilities or project worksites regardless of their location until further notice.*** Questions regarding this matter, or GLWA's COVID-19 Visitor Access Requirements, should be directed to [Michael Lasley](#) and [Megan Savage](#).

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Construction	O&M	Plumbing Shop Rehabilitation	\$1,500,000
Design	213006	Improvements to Sludge Feed Pumps @ Dewatering (re-advertisement)	\$1,500,000
<b>Projects moved to Procurement Team (Preparing for solicitation on Bonfire)</b>			
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