



Audit Committee Meeting
Friday, May 26, 2023 at 8:00 a.m.
www.glwater.org

[Join Zoom Meeting](#)

Meeting ID: **885 1723 9006** Passcode: **767982**

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. April 28, 2023 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
7. NEW BUSINESS
 - A. *Action Item:* Resolution Regarding Approval of Series Ordinance (Page 8) Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$20,900,000
 - B. *Action Item:* Resolution Regarding Approval of Series Ordinance (Page 34) Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$21,800,000
 - C. *Action Item:* Proposed Contract No. 2204949 Municipal Advisory (Page 60) Services with PFM Financial Advisors LLC
 - D. *Action Item:* Proposed Amendment to GLWA Contract CS-195 (Page 68) effective July 1, 2023 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000
 - E. *Action Item:* Resolution Adopting the Biennial FY 2024 & FY 2025 (Page 72) Budget, Board Item 2023-054 - Clerical Error
8. REPORTS
 - A. CFO Report (Page 86)
 - B. Monthly Financial Report for February 2023 (Page 87)
 - C. Business Inclusion and Diversity Program Update (Page 88)
 - D. Charges Outreach & Modeling Update (Page 92)
 - E. Affordability & Assistance Update (Page 94)
 - F. Quarterly Investment Report (Page 96)

9. COMMUNICATIONS

A. *The Procurement Pipeline* for May 2023 (Page 123)

10. LOOK AHEAD

A. Next Audit Committee Meeting: June 23, 2023

11. OTHER MATTERS

12. ADJOURNMENT



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Friday, April 28, 2023

8:00 AM

Zoom Telephonic Meeting

Zoom Telephonic Meeting

Join Zoom Meeting:

[https://glwater.zoom.us/j/86150156690?](https://glwater.zoom.us/j/86150156690?pwd=bEVsaFRRQWNqTUFGVTVrdm9xTGhZdz09)
[pwd=bEVsaFRRQWNqTUFGVTVrdm9xTGhZdz09](https://glwater.zoom.us/j/86150156690?pwd=bEVsaFRRQWNqTUFGVTVrdm9xTGhZdz09)

Join By Telephone

US Toll-Free:

877 853 5247; or 888 788 0099

Meeting ID: 861 5015 6690

Passcode: 677811

1. Call To Order

Chairperson Baker called the meeting to order at 8:01 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

A. [2023-045](#) Minutes of March 24, 2023

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [4A March 24, 2023 Audit Committee Meeting Minutes](#)

Chairperson Baker requested a Motion to Approve the Minutes of the March 24, 2023 Audit Committee Meeting.

Motion By: Jaye Quadrozzi

Support By: Gary Brown

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business**A.** [2023-189](#) Proposed Water Residential Assistance Program Service Delivery Partner Agreements

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [6A AC Proposed WRAP Service Delivery Partner Agreements](#)
[6A Proposed WRAP Service Delivery Partner Agreements](#)

Motion By: Jaye Quadrozzi

Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors
Agenda of May 24, 2023

The motion carried by a unanimous vote.

7. New Business

A. [2023-057](#) Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$71,000,000 (Ordinance 2023-02) (CIP 122004 96 Inch Water Main Relocation)

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7A1 AC Memo - Approval of Series Ordinance 2023-02 CIP 122004 96 Inch Water Main Relocation](#)
[7A3 Series Ordinance 2023 SRF-1 3rd Quarter DWSRF CIP 122004 96 Inch Water Main Relocation](#)
[7A4 Resolution Approving 2023 SRF-1 Series Ordinance DWSRF CIP 122004 96 Inch Water Main](#)

Motion By: Gary Brown

Support By: Jaye Quadrozzi

Action: Recommended for Approval to the Board of Directors

Agenda of May 24, 2023

The motion carried by a unanimous vote.

B. [2023-157](#) Resolution for the Detroit, Dearborn, and Highland Park Transmission Main Water Metering Project - FY2024 Drinking Water State Revolving Fund (DWSRF) Project Plan (CIP 170905 Detroit, Dearborn, and Highland Park Transmission Main Water Metering)

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7B1 AC Memo Resolution Approving DWSRF FY 2024 CIP 170905 Detroit Dearborn HP Metering](#)
[7B3 Resolution Approving DWSRF FY 2024 CIP 170905 Detroit Dearborn HP Metering](#)

Motion By: Jaye Quadrozzi

Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of May 24, 2023

The motion carried by a unanimous vote.

C. [2023-158](#) Resolution to Adopt the City of Detroit Water and Sewerage Department (DWSD) Water Main Replacement - FY 2024 Drinking Water State Revolving Fund (DWSRF) Project Plan

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7C1 AC Memo- Approval of DWSD DWSRF Water Main Replacement Project Plan](#)
[7C3 Resolution for the DWSD DWSRF Water Main Replacement Project Plan](#)
[7C4 DWSD - Water Main Replacement DWSRF Draft Project Planning Document](#)

Motion By: Gary Brown

Support By: Jaye Quadrozzi

Action: Recommended for Approval to the Board of Directors
Agenda of May 24, 2023

The motion carried by a unanimous vote.

D. [2023-160](#) Report: Third Quarter Budget Amendments

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7D FY 2023 Third Quarter Budget Amendment Report](#)

Motion By: Jaye Quadrozz

Support By: Gary Brown

Action: Received and Filed

The motion carried by a unanimous vote.

8. Reports

A. [2023-161](#) CFO Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8A1 CFO Report April 2023](#)

Motion By: Gary Brown

Support By: Jaye Quadrozzi

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2023-162](#) Monthly Financial Report for January

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8B January 2023 Financial Report_Tagetik](#)

Motion By: Jaye Quadrozzi

Support By: Gary Brown

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2023-163](#) 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. [2023-164](#) Charges Outreach & Modeling Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8D1 Charges Outreach and Modeling Update - 04.28.23](#)

[8D2 Water Charge Methodology Review Subgroup Status March 2023](#)

Motion By: Gary Brown

Support By: Jaye Quadrozzi,

Action: Received and Filed

The motion carried by a unanimous vote.

Note: Director Brown was excused from the meeting at 8:37 a.m. after the vote on Item 8.D. (Charges Outreach & Modeling Update)

E. [2023-165](#) Affordability & Assistance Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8E1 Affordability and Assistance Update](#)
[8E2 WRAP Balance Rollforward thru FY22](#)

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

F. [2023-166](#) Gifts, Grants & Other Resources Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8F Gifts Grants and Other Resources Report](#)

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

G. [2023-167](#) Shared Services Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8G Shared Services Update](#)

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

- H. [2023-168](#) Board Letter and Resolution Regarding Approval of FY 2024 through FY 2028
Capital Improvement Plan Board Item 2023-015 - Clerical Error

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8H1 Board letter & resolution for CIP 2023-015 clerical error](#)
[8H2 Board Letter 2023-015 corrected](#)
[8H3 Resolution 2023-015 corrected](#)

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

9. Communications

- A. [2023-169](#) The Procurement Pipeline for April 2023

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [9A The Procurement Pipeline for April 2023](#)

No Action Taken

10. Look Ahead

The next Audit Committee Meeting is scheduled for Friday, May 28, 2023 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 9:00 a.m.



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Nick Fedewa, CPA, Acting Public Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount not to Exceed \$20,900,000 (Ordinance 2023-03 / Series 2023 SRF-2 / DWSD 7656-01 Water Main Replacement WS-732)

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 Water Supply System Revenue Bonds in an Amount not to Exceed \$20,900,000 for Drinking Water State Revolving Fund Loan for DWSD 7656-01 Water Main Replacement WS-732.

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..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$20,900,000 (Ordinance 2023-03 / Series 2023 SRF-2 / DWSD 7656-01 Water Main Replacement WS-732)

..Body

Agenda of: June 28, 2023
Item No.: **2023-179**
Amount: Not to Exceed \$20,900,000

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: June 28, 2023

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$20,900,000 (Ordinance 2023-03 / Series 2023 SRF-2 / DWSD 7656-01 Water Main Replacement WS-732)

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 for Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$20,900,000 for DWSD 7656-01 Water Main Replacement WS-732 as presented, and**

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authorizes the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

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

Financing Considerations

The Great Lakes Water Authority (GLWA) secures capital improvement financing for the of Detroit Water and Sewerage Department (DWSD) in accordance with foundational documents related to the establishment of GLWA. The amount being financed with revenue bonds via the Drinking Water State Revolving Fund (DWSRF) Bonds is within authorized GLWA limits. On April 13, 2022, the Great Lakes Water Authority (“GLWA”) Board of Directors approved Resolution 2022-120, “Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds in a principal amount not to exceed \$400,000,000” (the “Notice of Intent”). This is the fourth series of water bonds from that Notice of Intent in the amount not to exceed \$20,900,000.

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 debt issuance process. Series Ordinance 2023-03 authorizes the issuance of the bonds by GLWA, sets forth the guidelines for the DWSRF Bonds, designates the bonds as 2023 SRF-2 Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

Project Considerations

Project Plan Approval - Pursuant to Section 7.2(b) of the Regional Water Supply System Lease between the City of Detroit and GLWA, the Authority shall cooperate fully with the City in the implementation of the Detroit Capital Improvement, including financing through the Authority. Therefore, GLWA will submit the local project plan as it will be the DWSRF loan applicant. Per notification from the Michigan Department of Environment, Great Lakes and Energy (EGLE), GLWA does not need to hold a separate public hearing on the local project however, the GLWA Board of Directors will need to act on the resolution

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to issue additional debt. Last year, in preparation for the submittal of this project for DWSRF consideration, the FY 2023 DWSRF Project Plan and public hearing for the DWSD Water Main Replacement WS-732 were presented at the DWSD Board of Water Commissioners meeting on April 20, 2022. Following the public hearing by DWSD, the GLWA Board of Directors adopted the [project plan](#) on June 22, 2022.

Project Plan – This project plan incorporates two projects which seek to replace aging water mains at select locations in the various neighborhoods in the City of Detroit. **Project A (WS-732)** consists of the neighborhoods of Warrendale, McDowell, Brightmoor, Claytown, Springwells, Crary/St. Marys, Grandmont. **Project B (WS-733)** consists of the neighborhoods of Martin Park, Pilgrim Village, University District, Grixdale Farms, Greenfield Park, Mapleridge, East English Village, Yorkshire Woods, Denby, and Outer Drive-Hayes. The projects are being funded through two, separate DWSRF loans. **Project A (WS-732) is supported by the series ordinance being presented as part of this agenda item.**

Construction will include excavation of existing water mains, installation of new pipes, rehabilitation of pipes, replacement of Lead (Pb) water service lines of two inches diameter or less to connect the water main and the customer water meter, pressure testing, backfill of the excavation required for piping work, and restoration of each work site.

JUSTIFICATION

The bond series authorized by this ordinance will support a Local Water System project for DWSD Water Main Replacement projects to address aging water mains.

The 2023 SRF-2 Junior Lien Bonds will be sold through the Michigan Finance Authority under the state of Michigan's DWSRF program (Project #7656-01). The current interest rates for the DWSRF program for an overburdened applicant are 1.875% for 30-year loan. Potential dollar savings are significant when compared to municipal bond interest rates in a market-based transaction. Compared to an estimated market-based rate of 5%, potential interest savings on a 30-year loan would be \$13.3 million based on a DWSRF loan amount of \$20.9 million. It is also anticipated this loan qualifies for up to \$19.0 million of loan forgiveness due to grant funding available through the State.

Another advantage of SRF is that interest costs are only incurred on the amount drawn from the SRF loans as project expenditures are incurred. This results in additional debt service savings early in the term of the loan compared to market-based

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transactions. Further, use of SRF funding as junior lien does not impact GLWA debt reserve requirements.

BUDGET IMPACT

GLWA will be the loan applicant on DWSRF loans issued on behalf of the DWSD, and DWSD will be the DWSRF loan recipient as determined by EGLE. All project costs financed by GLWA, on behalf of DWSD, through the DWSRF program bonds and resulting principal and interest payments on the bonds will be directly allocable to the DWSD local system. Debt service is anticipated to begin in FY 2027 for this project and will be included as part of the FY 2026 – FY 2027 biennial budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on May 26, 2023. The Audit Committee [insert action] of the resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$20,900,000 as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD beyond the terms outlined above as well as reimbursement of financing costs incurred.

GREAT LAKES WATER AUTHORITY
ORDINANCE NO. 2023-03

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF
WATER SUPPLY SYSTEM REVENUE BONDS IN
AN AGGREGATE AMOUNT NOT TO EXCEED \$20,900,000**

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 SRF Junior Lien Bonds (the “2023 SRF-2 Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Local Water System identified in the Detroit Capital Improvement Program (the “2023 SRF-2 Project”).

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

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2023 SRF-2 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2023 SRF-2 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2023 SRF-2 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2023 SRF-2 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2023 SRF-2 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2023 SRF-2 Project.

(b) “2023 SRF-2 Project” means improvements to the Local Water System, including but not limited to the replacement of lead and galvanized water service lines within the City of Detroit, west of Livernois Avenue, to comply with the Michigan Department of Environment, Great Lakes, and Energy’s Lead and Copper Rules, the restoration of streets, rights-of-way and easements affected by the improvements and related facilities, 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.

(e) “City Authorized Officer” means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2023 SRF-2 Series Ordinance.

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

(g) “Local Construction Fund, Series 2023 SRF-2” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2023 SRF-2 Series Ordinance relating to the construction of the 2023 SRF-2 Project to be paid with the proceeds of the 2023 SRF-2 Junior Lien Bonds.

(h) “Maturity Date” means such dates of maturity of the 2023 SRF-2 Junior Lien Bonds as determined in the Sale Order.

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

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

(k) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2023 SRF-2 Project, including Issuance Costs relating to the 2023 SRF-2 Junior Lien Bonds to the extent any such Issuance Costs are eligible for payment from proceeds of the 2023 SRF-2 Junior Lien Bonds.

(l) “Purchase Contract” means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2023 SRF-2 Junior Lien Bonds.

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

(n) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2023 SRF-2 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2023 SRF-2 Junior Lien Bonds and to complete the other transactions contemplated herein.

(o) “Supplemental Agreement” means the Supplemental Agreement among the City, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to a Series of the 2023 SRF-2 Junior Lien Bonds.

(p) “Taxable 2023 SRF-2 Junior Lien Bonds” means any 2023 SRF-2 Junior Lien Bonds other than Tax-Exempt 2023 SRF-2 Junior Lien Bonds.

(q) “Tax-Exempt 2023 SRF-2 Junior Lien Bonds” means any 2023 SRF-2 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2023 SRF-2 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Water System to acquire, construct and undertake the 2023 SRF-2 Project, and the 2023 SRF-2 Project is hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2023 SRF-2 Project. The Project Costs are estimated by the Authority Board to be \$19,000,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2023 SRF-2 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2023 SRF-2 Junior Lien Bonds.

(a) Authorization of Borrowing. The Authority may borrow an amount not in excess of \$20,900,000, as is finally determined in the Sale Order, and issue the 2023 SRF-2 Junior Lien Bonds in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2023 SRF-2 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2023 SRF-2 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.

(b) Purpose of 2023 SRF-2 Junior Lien Bonds. The 2023 SRF-2 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Project Costs.

Priority of Lien. The 2023 SRF-2 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

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

(d) Taxable and Tax-Exempt 2023 SRF-2 Junior Lien Bonds. The 2023 SRF-2 Junior Lien Bonds may be issued as Taxable 2023 SRF-2 Junior Lien Bonds or Tax-Exempt 2023 SRF-2 Junior Lien Bonds, or as separate Series of both, as set forth in the Sale Order.

(e) Source of Payment and Security. The 2023 SRF-2 Junior Lien Bonds shall be payable and secured as provided in Section 8.

(f) Applicability of Ordinance. Except as otherwise provided in this 2023 SRF-2 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2023 SRF-2 Junior Lien Bonds as if set forth in full in this 2023 SRF-2 Series Ordinance, the

purpose of this 2023 SRF-2 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2023 SRF-2 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2023 SRF-2 Junior Lien Bond Details.

(a) Designation.

- (1) The 2023 SRF-2 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2023-SRF-2 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2023 SRF-2 Series Ordinance.
- (2) If the 2023 SRF-2 Junior Lien Bonds are not issued in 2023, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2023 SRF-2 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2023 SRF-2 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) Numbering. The 2023 SRF-2 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2023 SRF-2 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:

- (1) No 2023 SRF-2 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2023 SRF-2 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2023 SRF-2 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.50% per annum. Interest on 2023 SRF-2 Junior Lien Bonds shall be payable on each Interest Payment Date.

(e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2023 SRF-2 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2023 SRF-2 Junior Lien Bonds are owned by the MFA, the 2023 SRF-2 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 2023 SRF-2 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is due, whether by maturity, redemption or otherwise. If the 2023 SRF-2 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2023 SRF-2 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

(f) Dating. The 2023 SRF-2 Junior Lien Bonds shall be dated such date as determined in the Sale Order.

(g) Reserve Requirement. There shall be no Reserve Requirement with respect to the 2023 SRF-2 Junior Lien Bonds.

(h) Exchange. The registered owner of any 2023 SRF-2 Junior Lien Bond may exchange such 2023 SRF-2 Junior Lien Bond for a new 2023 SRF-2 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2023 SRF-2 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2023 SRF-2 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2023 SRF-2 Junior Lien Bonds.

(i) Execution and Delivery of 2023 SRF-2 Junior Lien Bonds. The 2023 SRF-2 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2023 SRF-2 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2023 SRF-2 Junior Lien Bonds. The 2023 SRF-2 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2023 SRF-2 Series Ordinance:

R-__

**UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY
WATER SUPPLY SYSTEM REVENUE BOND,
SERIES 2023-SRF-2**

REGISTERED OWNER: Michigan Finance Authority

PRINCIPAL AMOUNT: \$ _____

INTEREST RATE: _____%

ORIGINAL ISSUE DATE:

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

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

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

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank 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 "Water Supply System Revenue Bonds, Series 2023-SRF-__" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board on October 7, 2015, as

amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$20,900,000, adopted by the Board on _____, 2023 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _____, 2023 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

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

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

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

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

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

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

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

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

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

[Remainder of Page Intentionally Left Blank]

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

GREAT LAKES WATER AUTHORITY

By: _____
Chief Executive Officer

Countersigned:

By: _____
Secretary, Board of Directors

[Seal]

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as “Water Supply System Revenue Bond, Series 2023-SRF-2”.

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

By: _____

Date of Authentication: _____, 2023

ASSIGNMENT

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

Dated: _____

Signature

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

Schedule A

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

Date

Amount

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

END OF BOND FORM

Section 7. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2023 SRF-2 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the “Securities Depository”) and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2023 SRF-2 Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2023 SRF-2 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2023 SRF-2 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

- (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2023 SRF-2 Junior Lien Bonds,
- (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2023 SRF-2 Junior Lien Bonds, including any notice of redemption, or
- (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2023 SRF-2 Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2023 SRF-2 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2023 SRF-2 Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If 2023 SRF-2 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2023 SRF-2 Junior Lien Bonds that they be able to obtain 2023 SRF-2 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2023 SRF-2 Junior Lien Bonds in certificated form to

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

(f) Notwithstanding any other provision of this 2023 SRF-2 Series Ordinance to the contrary, so long as any 2023 SRF-2 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:

- (1) all payments with respect to the principal, premium, if any, and interest on such 2023 SRF-2 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2023 SRF-2 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2023 SRF-2 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
- (2) if less than all of the 2023 SRF-2 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2023 SRF-2 Junior Lien Bonds or portions of 2023 SRF-2 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
- (3) all payments with respect to principal of the 2023 SRF-2 Junior Lien Bonds and premium, if any and interest on the 2023 SRF-2 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2023 SRF-2 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2023 SRF-2 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2023 SRF-2 Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2023 SRF-2 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2023 SRF-2 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2023 SRF-2 Junior Lien Bonds as follows: Such lien in favor of the 2023 SRF-2 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.

Section 9. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2023 SRF-2 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. Disposition of Proceeds.

(a) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2023 SRF-2 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2023 SRF-2 Junior Lien Bonds and any capitalized interest on the 2023 SRF-2 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2023 SRF-2 Junior Lien Bonds.

(b) Construction Fund. The balance of the proceeds of the 2023 SRF-2 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2023 SRF-2 Junior Lien Bonds and designated the “Local Construction Fund, Series 2023 SRF-2,” and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.

(b) Moneys in the Local Construction Fund, Series 2023 SRF-2 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2023 SRF-2 Junior Lien Bonds).

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

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

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2023 SRF-2 Junior Lien Bonds, that so long as any of the Tax-Exempt 2023 SRF-2 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control or cause the City to take all actions within its control to maintain, and will refrain from taking any action and cause the City from taking any actions within its control which would impair, the exclusion of the interest on the Tax-Exempt 2023 SRF-2 Junior Lien Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2023 SRF-2 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2023 SRF-2 Junior Lien Bonds, and to prevent Tax-Exempt 2023 SRF-2 Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2023 SRF-2 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2023 SRF-2 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2023 SRF-2 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Contract to the MFA.

(b) The Authority Board hereby determines that the sale of the 2023 SRF-2 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2023 SRF-2 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA’s Drinking Water Revolving Fund Program.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2023 SRF-2 Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to any Series of the 2023 SRF-2 Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which any Series of the 2023 SRF-2 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.

(d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2023 SRF-2 Junior Lien Bonds as required by Section 33 of Act 94.

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

(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in consultation with DWSD-R in accordance with the best interests of the Authority within the parameters of this 2023 SRF-2 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2023 SRF-2 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2023 SRF-2 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2023 SRF-2 Series Ordinance, on the basis of her evaluation of the maximum amount of 2023 SRF-2 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2023 SRF-2 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2023 SRF-2 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2023 SRF-2 Series Ordinance, the maturities of each Series of the 2023 SRF-2 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2023 SRF-2 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2023 SRF-2 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2023 SRF-2 Junior Lien Bonds as Additional Bonds have been satisfied.

(e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2023 SRF-2 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2023 SRF-2 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 15. Advancement of Project Costs. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2023 SRF-2 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2023 SRF-2 Junior Lien Bonds.

Section 16. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2023 SRF-2 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 17. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2023 SRF-2 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2023 SRF-2 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. 2023 SRF-2 Series Ordinance a Contract. The provisions of this 2023 SRF-2 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2023 SRF-2 Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2023 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2023 SRF-2 Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2023 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2023 SRF-2 Junior Lien Bonds.

(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2023 SRF-2 Junior Lien Bonds, to the extent any such fees and expenses are eligible for payment from proceeds of the 2023 SRF-2 Junior Lien Bonds, or other available funds.

(d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2023 SRF-2 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2023 SRF-2 Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2023 SRF-2 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2023 SRF-2 Series Ordinance. The section and paragraph headings in this 2023 SRF-2 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2023 SRF-2 Series Ordinance.

Section 21. Publication and Recordation. This 2023 SRF-2 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.

Section 22. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2023 SRF-2 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2023 SRF-2 Series Ordinance shall be effective upon adoption.

Adopted and signed on the ____ day of _____, 2023.

GREAT LAKES WATER AUTHORITY

Signed _____
Chairperson

Signed _____
Secretary

4886-9377-9799 v1 [63818-47]

Great Lakes Water Authority

Resolution 2023-179

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System
Revenue Bonds in an Amount not to Exceed \$20,900,000**

Ordinance 2023-03

By Board Member: _____

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Water Supply System Revenue Bonds in an Amount not to Exceed \$20,900,000” (the “2023 SRF-2 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.

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 2023 SRF-2 Series Ordinance.

Now, Therefore Be It:

Resolved That the 2023 SRF-2 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2023 SRF-2 Series Ordinance in the form approved; **And Be it Further**

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

Adopted by the Great Lakes Water Authority Board on: _____, 2023



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Nick Fedewa, CPA, Acting Public Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount not to Exceed \$21,800,000 (Ordinance 2023-04 / Series 2023 SRF-3 / DWSD 7657-01 Water Main Replacement WS-733)

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 Water Supply System Revenue Bonds in an Amount not to Exceed \$21,800,000 for Drinking Water State Revolving Fund Loan for DWSD 7657-01 Water Main Replacement WS-733.

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..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$21,800,000 (Ordinance 2023-04 / Series 2023 SRF-3 / DWSD 7657-01 Water Main Replacement WS-733)

..Body

Agenda of: June 28, 2023
Item No.: **2023-180**
Amount: Not to Exceed \$21,800,000

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: June 28, 2023

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$21,800,000 (Ordinance 2023-04 / Series 2023 SRF-3 / DWSD 7657-01 Water Main Replacement WS-733)

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 for Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$21,800,000 for DWSD 7657-01 Water Main Replacement WS-733 as presented, and**

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authorizes the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

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

Financing Considerations

The Great Lakes Water Authority (GLWA) secures capital improvement financing for the of Detroit Water and Sewerage Department (DWSD) in accordance with foundational documents related to the establishment of GLWA. The amount being financed with revenue bonds via the Drinking Water State Revolving Fund (DWSRF) Bonds is within authorized GLWA limits. On April 13, 2022, the Great Lakes Water Authority (“GLWA”) Board of Directors approved Resolution 2022-120, “Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds in a principal amount not to exceed \$400,000,000” (the “Notice of Intent”). This is the fifth series of water bonds from that Notice of Intent in the amount not to exceed \$21,800,000.

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. Series Ordinance 2023-04 authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the DWSRF Bonds, designates the Bonds as 2023 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 - Pursuant to Section 7.2(b) of the Regional Water Supply System Lease between the City of Detroit and GLWA, the Authority shall cooperate fully with the City in the implementation of the Detroit Capital Improvement, including financing through the Authority. Therefore, GLWA will submit the local project plan as it will be the DWSRF loan applicant. Per notification, from the Michigan Department of Energy, Great Lakes and Environment (EGLE), GLWA does not need to hold a separate public hearing on the local project however, the GLWA Board of Directors will need to act on the resolution to

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issue additional debt. Last year, in preparation for the application for SRF funding, the FY 2023 DWSRF Project Plan and public hearing for the DWSD Water Main Replacement WS-733 was presented at the DWSD Board of Water Commissioners meeting on April 20, 2022. Following the public hearing by DWSD, the GLWA Board of Directors adopted the [project plan](#) on June 22, 2022.

Project Plan – This project plan incorporates two projects which seek to replace aging water mains at select locations in the various neighborhoods in the City of Detroit. **Project A (WS-732)** consists of the neighborhoods of Warrendale, McDowell, Brightmoor, Claytown, Springwells, Crary/St. Marys, Grandmont. **Project B (WS-733)** consists of the neighborhoods of Martin Park, Pilgrim Village, University District, Grixdale Farms, Greenfield Park, Mapleridge, East English Village, Yorkshire Woods, Denby, and Outer Drive-Hayes. The projects are being funded through two, separate DWSRF loans. **Project B (WS-733) is supported by the series ordinance being presented as part of this agenda item.**

Construction will include excavation of existing water mains, installation of new pipes, rehabilitation of pipes, replacement of Lead (Pb) water service lines of two inches diameter or less to connect the water main and the customer water meter, pressure testing, backfill of the excavation required for piping work, and restoration of each work site.

JUSTIFICATION

The bond series authorized by this ordinance will support a Local Water System project for DWSD Water Main Replacement projects to address aging water mains.

The 2023 SRF-3 Junior Lien Bonds will be sold through the Michigan Finance Authority under the state of Michigan's DWSRF program (Project #7657-01). The current interest rates for the DWSRF program for an overburdened applicant are 1.875% for 30-year loan. Potential dollar savings are significant when compared to municipal bond interest rates in a market-based transaction. Compared to an estimated market-based rate of 5%, potential interest savings on a 30-year loan would be \$13.8 million based on a DWSRF loan amount of \$21.8 million. It is also anticipated this loan qualifies for up to \$19.8 million of loan forgiveness and grant funding available through the State.

Another advantage of SRF is that interest costs are only incurred on the amount drawn from the SRF loans as project expenditures are incurred. This results in additional debt service savings early in the term of the loan compared to market-based

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transactions. Further, use of SRF funding as junior lien does not impact GLWA debt reserve requirements.

BUDGET IMPACT

GLWA will be the loan applicant on DWSRF loans issued on behalf of the DWSD, and DWSD will be the DWSRF loan recipient as determined by EGLE. All project costs financed by GLWA, on behalf of DWSD, through the DWSRF program bonds and resulting principal and interest payments on the bonds will be directly allocable to the DWSD local system. Debt service is anticipated to begin in FY 2027 for this project and will be included as part of the FY 2026 – FY 2027 biennial budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on May 26, 2023. The Audit Committee [insert action] of the resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount Not to Exceed \$21,800,000 as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD beyond the terms outlined above as well as reimbursement of financing costs incurred.

GREAT LAKES WATER AUTHORITY
ORDINANCE NO. 2023-04

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF
WATER SUPPLY SYSTEM REVENUE BONDS IN
AN AGGREGATE AMOUNT NOT TO EXCEED \$21,800,000**

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 SRF Junior Lien Bonds (the “2023 SRF-3 Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Local Water System identified in the Detroit Capital Improvement Program (the “2023 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 “2023 SRF-3 Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2023 SRF-3 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2023 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) “2023 SRF-3 Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2023 SRF-3 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2023 SRF-3 Project.

(b) “2023 SRF-3 Project” means improvements to the Local Water System, including but not limited to the replacement of lead and galvanized water service lines within the City of Detroit, east of Livernois Avenue, to comply with the Michigan Department of Environment, Great Lakes, and Energy’s Lead and Copper Rules, the restoration of streets, rights-of-way and easements affected by the improvements and related facilities, 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.

(e) “City Authorized Officer” means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2023 SRF-3 Series Ordinance.

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

(g) “Local Construction Fund, Series 2023 SRF-3” means a subaccount of the Construction Fund established in accordance with Section 11 of this 2023 SRF-3 Series Ordinance relating to the construction of the 2023 SRF-3 Project to be paid with the proceeds of the 2023 SRF-3 Junior Lien Bonds.

(h) “Maturity Date” means such dates of maturity of the 2023 SRF-3 Junior Lien Bonds as determined in the Sale Order.

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

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

(k) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2023 SRF-3 Project, including Issuance Costs relating to the 2023 SRF-3 Junior Lien Bonds to the extent any such Issuance Costs are eligible for payment from proceeds of the 2023 SRF-3 Junior Lien Bonds.

(l) “Purchase Contract” means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2023 SRF-3 Junior Lien Bonds.

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

(n) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2023 SRF-3 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2023 SRF-3 Junior Lien Bonds and to complete the other transactions contemplated herein.

(o) “Supplemental Agreement” means the Supplemental Agreement among the City, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to a Series of the 2023 SRF-3 Junior Lien Bonds.

(p) “Taxable 2023 SRF-3 Junior Lien Bonds” means any 2023 SRF-3 Junior Lien Bonds other than Tax-Exempt 2023 SRF-3 Junior Lien Bonds.

(q) “Tax-Exempt 2023 SRF-3 Junior Lien Bonds” means any 2023 SRF-3 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2023 SRF-3 Project. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Water System to acquire, construct and undertake the 2023 SRF-3 Project, and the 2023 SRF-3 Project is hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2023 SRF-3 Project. The Project Costs are estimated by the Authority Board to be \$19,800,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2023 SRF-3 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2023 SRF-3 Junior Lien Bonds.

(a) Authorization of Borrowing. The Authority may borrow an amount not in excess of \$21,800,000, as is finally determined in the Sale Order, and issue the 2023 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 2023 SRF-3 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2023 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 2023 SRF-3 Junior Lien Bonds. The 2023 SRF-3 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Project Costs.

Priority of Lien. The 2023 SRF-3 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

(c) Insufficient Proceeds. To the extent that proceeds of the 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 Local Water System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of any Additional Bonds, with the concurrence of the Authority Board.

(d) Taxable and Tax-Exempt 2023 SRF-3 Junior Lien Bonds. The 2023 SRF-3 Junior Lien Bonds may be issued as Taxable 2023 SRF-3 Junior Lien Bonds or Tax-Exempt 2023 SRF-3 Junior Lien Bonds, or as separate Series of both, as set forth in the Sale Order.

(e) Source of Payment and Security. The 2023 SRF-3 Junior Lien Bonds shall be payable and secured as provided in Section 8.

(f) Applicability of Ordinance. Except as otherwise provided in this 2023 SRF-3 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2023 SRF-3 Junior Lien Bonds as if set forth in full in this 2023 SRF-3 Series Ordinance, the

purpose of this 2023 SRF-3 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2023 SRF-3 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2023 SRF-3 Junior Lien Bond Details.

(a) Designation.

- (1) The 2023 SRF-3 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2023-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 2023 SRF-3 Series Ordinance.
- (2) If the 2023 SRF-3 Junior Lien Bonds are not issued in 2023, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2023 SRF-3 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2023 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 2023 SRF-3 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2023 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 2023 SRF-3 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2023 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. 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds are owned by the MFA, the 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds.

(h) Exchange. The registered owner of any 2023 SRF-3 Junior Lien Bond may exchange such 2023 SRF-3 Junior Lien Bond for a new 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds.

(i) Execution and Delivery of 2023 SRF-3 Junior Lien Bonds. The 2023 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 2023 SRF-3 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2023 SRF-3 Junior Lien Bonds. The 2023 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 2023 SRF-3 Series Ordinance:

R-__

**UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY
WATER SUPPLY SYSTEM REVENUE BOND,
SERIES 2023-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 City of Detroit, the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy and approved and agreed to by the Issuer, and the Order of Approval issued by the Department of Environment, Great Lakes, and Energy. The Principal Amount shall be payable on the dates and in the principal installments set forth in Schedule A attached hereto.

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

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

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank 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 "Water Supply System Revenue Bonds, Series 2023-SRF-__" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board on October 7, 2015, as

amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$21,800,000, adopted by the Board on _____, 2023 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _____, 2023 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

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

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

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

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

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

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

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

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

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

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

GREAT LAKES WATER AUTHORITY

By: _____
Chief Executive Officer

Countersigned:

By: _____
Secretary, Board of Directors

[Seal]

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as “Water Supply System Revenue Bond, Series 2023-SRF-3”.

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

By: _____

Date of Authentication: _____, 2023

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:

DateAmount

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

END OF BOND FORM

Section 7. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2023 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 2023 SRF-3 Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2023 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 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2023 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 2023 SRF-3 Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If 2023 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 2023 SRF-3 Junior Lien Bonds that they be able to obtain 2023 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 2023 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 2023 SRF-3 Series Ordinance to the contrary, so long as any 2023 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 2023 SRF-3 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2023 SRF-3 Junior Lien Bonds or portions of 2023 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 2023 SRF-3 Junior Lien Bonds and premium, if any and interest on the 2023 SRF-3 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2023 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 2023 SRF-3 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2023 SRF-3 Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2023 SRF-3 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2023 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 2023 SRF-3 Junior Lien Bonds as follows: Such lien in favor of the 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds and any capitalized interest on the 2023 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 2023 SRF-3 Junior Lien Bonds.

(b) Construction Fund. The balance of the proceeds of the 2023 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 Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2023 SRF-3 Junior Lien Bonds and designated the “Local Construction Fund, Series 2023 SRF-3,” and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.

(b) Moneys in the Local Construction Fund, Series 2023 SRF-3 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2023 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 a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.

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

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2023 SRF-3 Junior Lien Bonds, that so long as any of the Tax-Exempt 2023 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 or cause the City to take all actions within its control to maintain, and will refrain from taking any action and cause the City from taking any actions within its control which would impair, the exclusion of the interest on the Tax-Exempt 2023 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 2023 SRF-3 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2023 SRF-3 Junior Lien Bonds, and to prevent Tax-Exempt 2023 SRF-3 Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2023 SRF-3 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA’s Drinking Water Revolving Fund Program.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2023 SRF-3 Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to any Series of the 2023 SRF-3 Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which any Series of the 2023 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 2023 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 consultation with DWSD-R in accordance with the best interests of the Authority within the parameters of this 2023 SRF-3 Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2023 SRF-3 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2023 SRF-3 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2023 SRF-3 Series Ordinance, on the basis of her evaluation of the maximum amount of 2023 SRF-3 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2023 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 2023 SRF-3 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2023 SRF-3 Series Ordinance, the maturities of each Series of the 2023 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 2023 SRF-3 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2023 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 2023 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 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2023 SRF-3 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. 2023 SRF-3 Series Ordinance a Contract. The provisions of this 2023 SRF-3 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2023 SRF-3 Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2023 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 2023 SRF-3 Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2023 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 2023 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 2023 SRF-3 Junior Lien Bonds, to the extent any such fees and expenses are eligible for payment from proceeds of the 2023 SRF-2 Junior Lien Bonds, or other available funds.

(d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2023 SRF-3 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2023 SRF-3 Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2023 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 2023 SRF-3 Series Ordinance. The section and paragraph headings in this 2023 SRF-3 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2023 SRF-3 Series Ordinance.

Section 21. Publication and Recordation. This 2023 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 2023 SRF-3 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2023 SRF-3 Series Ordinance shall be effective upon adoption.

Adopted and signed on the ____ day of _____, 2023.

GREAT LAKES WATER AUTHORITY

Signed _____
Chairperson

Signed _____
Secretary

4882-1184-3933 v1 [63818-48]

Great Lakes Water Authority

Resolution 2023-180

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System
Revenue Bonds in an Amount not to Exceed \$21,800,000**

Ordinance 2023-04

By Board Member: _____

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Water Supply System Revenue Bonds in an Amount not to Exceed \$21,800,000” (the “2023 SRF-3 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.

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 2023 SRF-3 Series Ordinance.

Now, Therefore Be It:

Resolved That the 2023 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 2023 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: _____, 2023



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Nick Fedewa, CPA, Acting Public Finance Manager

Re: Proposed Contract No. 2204949 Municipal Advisory Services with PFM Financial Advisors LLC

Background & Analysis: See attached draft Great Lakes Water Authority (“GLWA”) Board letter and related analysis.

Proposed Action: The GLWA Audit Committee recommends, upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, Financial Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to enter into Contract No. 2204949, “Municipal Advisory Services” with PFM Financial Advisors LLC, at a cost not to exceed \$2,500,000.00 for a duration of three (3) years with two (2) one (1) year renewal options; 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

..Title

**Contract No. 2204949
Municipal Advisory Services
O & M**

..Body

Agenda of: June 28, 2023
Item No.: **2023-181**
Amount: \$2,500,000.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: June 28, 2023

RE: **Contract No. 2204949
Municipal Advisory Services
Vendor: PFM Financial Advisors LLC**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, Financial Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 2204949, “Municipal Advisory Services” with PFM Financial Advisors LLC, at a cost not to exceed \$2,500,000.00 for a duration of three (3) years with two (2) one (1) year renewal options;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The role of a municipal financial advisor is to act in a fiduciary capacity and provide other non-transactional services including providing advice on compliance matters, various debt management agreements, financial plans, strategies, and policies. More specific responsibilities include assistance with the following:

- The plan of finance and related transaction timetable.
- Financing solutions and alternatives for funding the capital improvement plan.

DRAFT for Audit Committee Review Only

- Method of sale for bond transactions, considering market conditions and near-term activity in the municipal market.
- Rating agency strategies and presentations.
- Bond-related and State Revolving Fund (SRF) loan-related activities associated with Internal/external accountants, feasibility consultants and escrow agents.
- Selection of underwriters, underwriter compensation issues, syndicate structure and bond allocations.
- Negotiated bond sales, including advice regarding retail order periods and institutional marketing, analysis of comparable bonds and secondary market data.
- Competitive bond sales, including preparation of notice of sale and preliminary official statement, bid verification, true interest cost (TIC) calculations and reconciliations/ verifications of bidding platform calculations, preparation of notice of sale, obtaining CUSIP numbers.
- SRF loan closing processes, including preparation of required schedules, assistance with application filings, and support throughout as needed.
- Preparation of preliminary cash flows/preliminary refunding analysis.

JUSTIFICATION

In accordance with the GLWA procurement policy, a solicitation for competitive proposal process was conducted for professional services. Attached is the Procurement Report. Four proposals were received. Each firm submitting a proposal also provided a presentation and question and answer session with the evaluation panel. Following scoring, one firm was selected for negotiations which was PFM Financial Advisors LL (PFM).

PFM has previously served as the GLWA's financial advisor and performed well.

The current municipal advisory services contract is set to expire June 30, 2023. The new proposed contract is for a duration of three (3) years with two (2) one (1) year renewal options.

FINANCIAL PLAN IMPACT

Fees related to bond transactions will be paid out of the proceeds of the bonds issued. The bond proceeds as shown in the financial plan are net of fees.

Fees related to state revolving fund (SRF) transactions and other services are expensed and paid out of operations & maintenance budget.

DRAFT for Audit Committee Review Only

Funding Source: Depending on service will be either Operations & Maintenance (O&M) Budget – Administrative or Bond Proceeds (Debt Service Fund) – Water & Sewer Specific

Cost Center(s): Public Finance - 887511/897511

Expense Type(s): Debt Cost of Issuance (706150)

Estimated Cost by Year:

<u>Fiscal Year</u>	<u>Bond Transaction</u>	<u>SRF Services</u>	<u>Other Services</u>	<u>Total</u>
FY 2024	\$ 230,000	\$ 400,000	\$ 100,050	\$ 730,050
FY 2025	-	225,000	100,050	325,050
FY 2026	230,000	225,000	102,100	557,100
FY 2027	-	225,000	103,900	328,900
FY 2028	230,000	225,000	103,900	558,900
Total	\$ 690,000	\$ 1,300,000	\$ 510,000	\$ 2,500,000


Estimated cost varies by year based upon the anticipated timing of revenue bond transactions.

COMMITTEE REVIEW

This item was reviewed by the GLWA Audit Committee at its meeting on May 26, 2023. The Audit Committee [insert action], upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, Financial Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to enter into Contract No. 2204949, "Municipal Advisory Services" with PFM Financial Advisors LLC, at a cost not to exceed \$2,500,000.00 for a duration of three (3) years with two (2) one (1) year renewal options; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD. It should be noted that fees for bond transactions are deducted from a pro-rata percentage of the bond proceeds when a market-based transaction encompasses funding for DWSD. DWSD also reimburses GLWA for SRF transaction costs incurred. A representative of DWSD was included in the procurement process.

 GLWA <small>Great Lakes Water Authority</small>	Procurement Form (FOR)		
	Effective Date: 5/1/2019	Document #: FSA_PRO_FOR_0039	Revision Date: 4/5/2023
Document Title: Procurement Board Report-RFP		Document Owner/Department: Procurement Team	

Date: May 12, 2023

To: Suzanne R. Coffey, P.E., Chief Executive Officer

From: Daniel Edwards, Procurement Manager


Re: Procurement Report

General Information			
Contract Number:	2204949	Project Owner:	Nicholas Fedewa
CIP#:	N/A		
Contract Title:	Municipal Advisory Services		
Vendor:	PFM Financial Management Services LLC		
Budget:	Operations and Maintenance		

Procurement Method			
Competitively bid – Request for Proposal (RFP) Qualification Based Selection (QBS) – Evaluation Committee			
Advertised:	2-15-2023	Addendums released:	1
Buyer:	Joan Salwasser	Downloaded by:	26
Response due date:	3-20-2023	Responses received:	4

Cost Summary – PFM Financial Management Services LLC			
Description	Proposed Cost (all years)	Negotiated Cost Y1-3	Negotiated Cost Y4+
Task 1 – Transactional Services			
Bond Financing up to \$150 Million	\$ 135,000.00	\$ 135,000.00	\$ 135,000.00
Bond Financing over \$150 up to \$250 Million	\$ 200,000.00	\$ 190,000.00	\$ 200,000.00
Bond Financing over \$250 Million	\$ 230,000.00	\$ 220,000.00	\$ 230,000.00

Task 2 – Other Services	Proposed Hourly Rate (all years)	Negotiated Cost Y1-2	Negotiated Cost Y3	Negotiated Cost Y3
Managing Director	\$ 475.00	\$ 450.00	\$ 460.00	\$ 475.00
Director	\$ 450.00	\$ 430.00	\$ 440.00	\$ 450.00
Senior Managing Consultant	\$ 395.00	\$ 380.00	\$ 390.00	\$ 395.00

 GLWA Great Lakes Water Authority	Procurement Form (FOR)		
	Effective Date: 5/1/2019	Document #: FSA_PRO_FOR_0039	Revision Date: 4/5/2023
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Senior Analyst	\$ 320.00	\$ 320.00	\$ 320.00	\$ 320.00
Analyst	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00
Associate	\$ 150.00	\$ 140.00	\$ 140.00	\$ 150.00


Description	Par Amount Range		Fee
Task 3 – SRF Transactions	\$ 0	\$ 10,000,000.00	\$ 15,000.00
	\$ 10,000,001.00	\$ 20,000,000.00	\$ 20,000.00
	\$ 20,000,001.00	\$ 30,000,000.00	\$ 25,000.00
	\$ 30,000,001.00	\$ 40,000,000.00	\$ 30,000.00
	\$ 40,000,001.00	\$ 50,000,000.00	\$ 35,000.00
	\$ 50,000,001.00	\$ 60,000,000.00	\$ 40,000.00
	\$ 60,000,001.00	\$100,000,000.00	\$ 50,000.00

Note: The negotiated hourly rates also apply to SRF consulting and support hourly rates

Benchmarking was completed by comparing the proposals for this project. This analysis confirmed that rates are in competitive range. The rate comparisons and allowances (if any) are illustrated in the attached cost tabulation.

Evaluation Committee: (Designation – Organization)
A – Chief Financial Officer & Treasurer – GLWA
B – Chief Financial Officer - DWSD
C – Finance Director – Redford Township
D – Deputy Chief Financial Officer - GLWA
E – Acting Public Finance Manager, Financial Services - GLWA

Vendor (Highest to lowest score)	Score
PFM Financial Advisors LLC	91.74
Hilltop Securities Inc.	79.01
Baird	77.60
Baker Tilly US, LLP	67.99

 GLWA <small>Great Lakes Water Authority</small>	Procurement Form (FOR)		
	Effective Date: 5/1/2019	Document #: FSA_PRO_FOR_0039	Revision Date: 4/5/2023
Document Title: Procurement Board Report-RFP		Document Owner/Department: Procurement Team	

Business Inclusion and Diversity (B.I.D.)
<input type="checkbox"/> B.I.D. program required <input checked="" type="checkbox"/> B.I.D. program not required
<input type="checkbox"/> The recommended vendor for award submitted a B.I.D. plan per the requirements under this solicitation.
<input type="checkbox"/> The recommended vendor for award did not submit a B.I.D. plan per the requirements under this solicitation.
The vendor received points for the following scored criteria:
<input type="checkbox"/> Business presence in State of Michigan
<input type="checkbox"/> Business presence in GLWA service territory area (list the territory)
<input type="checkbox"/> Business presence in economically disadvantaged GLWA service territory area (list the territory)

Note: This project was budgeted for less than 1 million dollars therefore the B.I.D. program is not applicable.

Other Data Requested by GLWA Board Members for Recommended Vendor

Minority Business Enterprise (MBE): No
Small Business Enterprise (SBE): No
Woman Business Enterprise (WBE): No
Disadvantaged Business Enterprise (DBE): No
Detroit Based Business (DBB): No
Other: No


Sub-Contractor(s) List: N/A
Vendor Response Survey: N/A

Litigation

This vendor is not currently nor has been previously involved in any litigation with the GLWA.

Financials

A financial risk assessment was performed by the GLWA via Dun & Bradstreet and was determined that the selected vendor has the financial capacity to perform the tasks under this contract. This information is available for the Board of Directors to review upon request.

Procurement Form (FOR)			
	Effective Date: 5/1/2019	Document #: FSA_PRO_FOR_0039	Revision Date: 4/5/2023
			Revision#: 2
Document Title: Procurement Board Report-RFP		Document Owner/Department: Procurement Team	

Previous Contract

Previous contract holder:

The previous contract, GLWA-CS-002, was for the period of 3/20/2015 through 6/30/2023, for \$2,607,912.00. The contract amount differences between the two contracts are provided in the table below.

2204949 - Previous Contract Summary		
Contract No.	GLWA-CS-022	2204949
Contract Dates	3-20-2015 through 6-30-2023	7-1-2023 through 6-30-2028
Contract Duration	8 years, 3 mos., 11 days	5 years (inc. 2 (1) yr. renewals)
Vendor:	PFM Financial Management LLC	PFM Financial Management LLC
Bond Transactions:	\$ 1,565,797.00	\$ 690,000.00
Other Services:	\$ 494,115.00	\$ 510,000.00
SRF Consulting:	\$ 548,000.00	\$ 1,300,000.00
Total:	\$ 2,607,912.00	\$ 2,500,000.00



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Matthew Lane, MPA, Charges Outreach and Modeling Manager

Re: Proposed Amendment to GLWA Contract CS-195 effective July 1, 2023 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000

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 of Directors approve the proposed amendment to contract CS-195 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000.

DRAFT for Audit Committee Review Only

..Title

Proposed Amendment to GLWA Contract CS-195 effective July 1, 2023 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000

..Body

Agenda of: June 28, 2023

Item No.: **2023-182**

Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: June 28, 2023

RE: **Proposed Amendment to GLWA Contract CS-195 effective July 1, 2023 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer & Treasurer, the Board of Directors of the Great Lakes Water Authority authorizes the Chief Executive Officer (CEO) to **enter into Contract No. CS-195 effective July 1, 2023 with The Foster Group LLC for Annual Financial Management Consulting Services for a period of one (1) year, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000**; and authorizes the CEO to take such action as may be necessary to accomplish the intent of this vote.

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BACKGROUND

The Foster Group LLC currently operates under a contract originally approved by the Great Lakes Water Authority Board of Directors in June of 2017. The Board has subsequently approved four (4) extensions to this contract ensuring the continuation of Financial Management Services as well as System Consulting Service (Financing Transaction Services).

The current fixed fee, fixed cost contract with The Foster Group expires June 30, 2023. The Foster Group provides critical services including:

- Member Partner outreach, engagement, and work group support,
- Annual cost of service study encompassing preparation of revenue requirements, cost of service allocations, and charge development studies and scenarios,
- Highly technical as needed analysis that bridges finance and engineering,
- Charge methodology strategic services to support Planning Group efforts,
- Financial management coordination and assistance for GLWA and DWSD and their respective consultants,
- General Counsel resource, and
- Long-term financial planning support to the Great Lakes Water Authority (GLWA).

It should be noted that there are open GLWA initiatives that depend on The Foster Group's services to support the Member Partners and GLWA – most notably the water charges methodology work group and the sewer charges methodology work group. It is anticipated that these two work groups may be able to reach a consensus within the next year.

This proposed procurement is considered a specialized procurement, defined by the GLWA Procurement Policy as *“a procurement in which there may be multiple sources of supply, but one Vendor possesses the unique ability or capability to meet the particular requirements of the Solicitation and/or where a unique expertise is provided by a Vendor that is unattainable in the market in a competitive environment”*.

JUSTIFICATION

The GLWA Board is asked to consider an extension of The Foster Group contract to carry forward these critical tasks without disruption. This contract extension is intended to be the fifth (5th) and final contract extension for The Foster Group. Upon its proposed expiration of June 30, 2024, Bart Foster, President of The Foster Group intends to retire.

The proposed fee is a fixed annual fee paid as a pro-rata monthly lump sum which includes all expenses.

It should be noted that GLWA has transitioned some of the work previously performed by The Foster Group to GLWA Financial Services staff and will continue to do so to the

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extent possible. Examples include the stand up of the Charges Outreach and Modeling team, addition of the Financial Management Planning Director and assignment of added responsibilities for the Deputy Chief Financial Officer – although two of the four positions presently remain vacant given the labor market. However, given the expert level of service provided Financial Services Area leadership believes the future state beyond this contract period will rely upon separate procurements for charges consulting and system consultant services for bond transactions. Presently a request for proposal is being drafted for solicitation in the next 30 days. The selection panel will include representatives of GLWA, DWSD, and Member Partner communities.

BUDGET IMPACT

The proposed Foster Group contract amendment is divided equally between the Financial Planning & Analysis Group FP&A (Contractual Professional Services line 5910-884113.000-617903-WS7900) and the Public Finance Group (Public Finance Consulting Services 5910-884141.000-617903-WS7900) in the Financial Services Area.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on May 26, 2023. The Audit Committee [insert action] the proposed Amendment to GLWA Contract CS-195 effective July 1, 2023 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$525,000 for a one-year contract, and for task order Bond Transaction System Consultant Services not-to-exceed \$325,000 as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD. It should be noted that fees for bond transactions are deducted from a pro-rata percentage of the bond proceeds when a market-based transaction encompasses funding for DWSD. DWSD also reimburses GLWA for SRF transaction costs incurred. DWSD is not charged for services related to annual financial planning alignment.



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Lisa L. Mancini, Financial Planning & Analysis Manager

Re: Resolution Adopting the Biennial FY 2024 & FY 2025 Budget, Board Item 2023-054
– Clerical Error

Background: A public hearing was held on February 22, 2023, in which the FY 2024 and FY 2025 Biennial Budget and Five-Year Financial Plan was presented, along with the board letter and resolution to adopt the FY 2024 and FY 2025 Biennial Budget (Board item 2023-054). The resolution was passed by the Board of Directors during this meeting.

Analysis: While reviewing the items that will be incorporated in the final FY 2024 and FY 2025 Biennial Budget & Five-Year Financial Plan FY 2024 through FY 2028 document, GLWA staff discovered that the resolution regarding the adoption of the FY 2024 and FY 2025 Biennial Budget contained a clerical error. The amounts referenced in the section of the resolution pertaining to both the Water system and Sewer system bonds were misstated. The correct amounts are as follows.

- Water system bonds: \$204,448,100 for FY 2024 and \$221,699,700 for FY 2025
- Sewer system bonds: \$260,549,900 for FY 2024 and \$262,601,400 for FY 2025

The following documents are included with this communication.

1. Board letter for the Resolution Adopting the FY 2024 & FY 2025 Biennial Budget – There were no corrections required for this document.
2. Resolution Adopting the Biennial FY 2024 & FY 2025 Budget – Corrected amounts are highlighted in blue.

The correct information was provided with the February 22, 2023 public hearing (Board Item 2023-052) all presentation materials for the Proposed FY 2024 & FY 2025 Biennial Budget. This change request will not impact that Board Item and related materials.



Correct Amounts

WHEREAS The amounts necessary to pay the principal of and interest on all Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance is **\$204,448,100** for FY 2024 and **\$221,699,700** for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

WHEREAS The amounts necessary to pay the principal of and interest on all Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance is **\$260,549,900** for FY 2024 and **\$262,601,400** for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

Original Presentation

WHEREAS The amounts necessary to pay the principal of and interest on all Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance is **\$266,002,500** for FY 2024 and **\$271,685,800** for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

WHEREAS The amounts necessary to pay the principal of and interest on all Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance is **\$331,768,200** for FY 2024 and **\$340,389,700** for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

Proposed Action: Receive and file this report.



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Resolution Adopting the FY 2024 & FY 2025 Biennial Budget

Agenda of: February 22, 2023
Item No.: **2023-054**
Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: February 22, 2023

RE: **Resolution Adopting the FY 2024 & FY 2025 Biennial Budget**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA):

- 1) Concludes the Public Hearing related to the FY 2024 and FY 2025 Biennial Budget held on February 22, 2023;**
- 2) Pending public comment, adopts the attached resolution, 2023-054, adopting the FY 2024 and FY 2025 Biennial Budget for the GLWA;**
- 3) Notes that the GLWA By-Laws Article X, Section 5, requires a super-majority affirmative vote of at least five (5) members of the Board is necessary for the approval of the operating budget; and**
- 4) Authorizes the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.**

BACKGROUND

The Great Lakes Water Authority (“GLWA” or the “Authority”) assumed the operation of the Regional Water and Sewer systems on January 1, 2016 (the “Effective Date”) pursuant to the Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015. Section 5.6 of the Lease Agreements require the Authority to adopt a two-year budget for the Regional Water and Sewer Systems that sets forth budgeted revenues and expenses for each such Fiscal Year.

JUSTIFICATION

The Board has received a proposed Budget for FY 2024 and FY 2025 which was reviewed at Audit Committee meetings on December 16, 2022 and February 13, 2023; Board meetings of January 25, 2023 and February 22, 2023; and Member Partner meetings on January 12, 2023, as it relates to the proposed Schedule of Charges, and January 19, 2023.

The information contained in the attached resolution was included in the [Proposed FY 2024 & FY 2025 Biennial Budget and Five-Year Plan Draft 2.13.2023](#) which was presented to the Audit Committee on February 13, 2023.

A Notice of Public Hearing was published in the Detroit Legal News on January 30, 2023. That notice, along with related supporting materials throughout the budget and charges development process, is available online at www.glwater.org/financials.

BUDGET IMPACT

This action establishes a budget for FY 2024 and FY 2025.

COMMITTEE REVIEW

The GLWA Audit Committee reviewed the budget and supplemental analysis at the meetings noted above. On February 13, 2023, the Audit Committee unanimously recommended that the Board of Directors adopts the resolution related to the FY 2024 and FY 2025 Biennial Budget and related FY 2024 Schedule of Charges as presented on February 13, 2023, subject to public comment at the public hearing to be held on February 22, 2023.

Great Lakes Water Authority

Resolution 2023-054

Resolution Adopting the Biennial FY 2024 & FY 2025 Budget

By Board Member: Jaye Quadrozzi

WHEREAS The Great Lakes Water Authority (“GLWA” or the “Authority”) assumed the operation of the regional water and sewer systems on January 1, 2016 (the “Effective Date”) pursuant to Water System and Sewer System Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015; and

WHEREAS In accordance with the by-laws of the GLWA, the Board shall adopt a two-year (Biennial) operating budget for the Regional Water and Sewer Systems; and

WHEREAS The Authority, through the terms of the Leases, committed to an annual increase in revenue requirement budget of no more than 4% though the fiscal year ending June 30, 2025; and

WHEREAS The GLWA Board is now adopting its eighth fiscal year budget demonstrating its ability to achieve that commitment with a Regional Water System annual revenue requirement budget increase of 4.0% which equates to an average 3.1% increase in revenues from Water Service Charges and a Regional Sewer System annual revenue requirements budget increase of 4.0% which equates to an average 2.8% increase in revenues from Sewer Service Charges; and

WHEREAS The budgeted expenses for each such Fiscal Year shall equal the sum of the projected expenses and revenue requirements for the Regional Water System and the Regional Sewer System for each such Fiscal Year; and

WHEREAS The budgeted annual revenue requirements for the Regional Water System for FY 2024 is \$370,314,500 and for FY 2025 is \$385,127,100 as shown on “Schedule 1A – Water System Revenue Requirements” of the budget document; and

WHEREAS The budgeted annual revenue requirements for the Regional Sewer System for FY 2024 is \$500,627,000 and for FY 2025 is \$520,652,100 as shown on “Schedule 1B – Sewer System Revenue Requirements” of the budget document; and

WHEREAS The operations and maintenance budget for the Regional Water System for FY 2024 is \$152,906,400 and for FY 2025 is \$162,810,600 as shown on “Schedule 1A – Water System Revenue Requirements” of the budget document; and

WHEREAS The operations and maintenance budget for the Regional Sewer System for FY 2024 is \$205,643,700 and for FY 2025 is \$216,220,400 as shown on “Schedule 1B – Sewer System Revenue Requirements” of the budget document; and

WHEREAS The amounts necessary to pay the principal of and interest on all Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$204,448,100 for FY 2024 and \$221,699,700 for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

WHEREAS The amounts necessary to pay the principal of and interest on all Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$260,549,900 for FY 2024 and \$262,601,400 for FY 2025 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and

WHEREAS The amounts necessary to fund the annual water system capital expenditures of \$11,539,100 in FY 2024 and \$9,694,400 in FY 2025 for capital outlay in accordance with the “Schedule 5A – Water Capital Financing Plan: Water Improvement and Extension Fund” budget; and

WHEREAS The amounts necessary to fund the annual water system capital expenditures of \$239,260,000 in FY 2024 and \$200,422,000 in FY 2025 for the capital improvement plan in accordance with the “Schedule 5A – Water Capital Financing Plan: Water Construction Fund” budget with those capital amounts reflecting an 100% Capital Spending Ratio applied to FY 2024 and FY 2025 as shown in the proposed FY 2024 through FY 2028 Capital Improvement Plan; and

WHEREAS The amounts necessary to fund the annual sewer system capital expenditures of \$14,970,500 in FY 2024 and \$12,399,500 in FY 2025 for the capital outlay in accordance with the “Schedule 5B – Sewer Capital Financing Plan: Sewer Improvement and Extension Fund” budget; and

WHEREAS The amounts necessary to fund the annual sewer system capital expenditures of \$199,061,000 in FY 2024 and \$190,159,000 in FY 2025 for the capital improvement plan in accordance with “Schedule 5B – Sewer Capital Financing Plan: Sewer Construction Fund” budget with those capital amounts reflecting a 100% Capital Spending Ratio applied to FY 2024 and FY 2025 as shown in the proposed FY 2024 through FY 2028 Capital Improvement Plan; and

WHEREAS The GLWA Audit Committee began review of the budget and five-year financial plan document developed for FY 2024 through FY 2028 at its meeting on December 16, 2022; with updates at its meeting on February 13, 2023; and

WHEREAS The GLWA Board conducted a public hearing on the proposed budget in accordance with the provisions of Public Act No. 43 of the Acts of the State Legislature of 1963 (“Budget Hearings of Local Governments”); and

WHEREAS A notice for the public hearing on the proposed budget scheduled for February 22, 2023 at 2:00 p.m. either in person or via a telephonic Zoom meeting was published in The Detroit Legal News announcing a public hearing on the budget in addition to posting the notice and proposed budget on glwater.org/financials; and

WHEREAS An affirmative vote of 5 Board Members is necessary for the adoption of this Resolution,

NOW THEREFORE BE IT:

RESOLVED That the GLWA Board conducted a public hearing on February 22, 2023 to receive public comment regarding the proposed budget for the Fiscal Years 2024 and 2025; and be it further

RESOLVED That the GLWA Board approves the budget for Fiscal Years 2024 and 2025; and be it finally

RESOLVED That the Chief Executive Officer, and the Chief Financial Officer/Treasurer are authorized to take such other action as may be necessary to accomplish the intent of this resolution.

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 1A – Water System Revenue Requirements Biennial Budget

	Current Year		Biennial Budget					
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance
Water System Revenue Requirements								
Revenues								
Revenues from Charges	\$354,947,900	\$353,690,600	\$366,077,800	\$ 11,129,900	3.1%	\$377,752,600	\$ 11,674,800	3.2%
Other Revenues	175,000	175,000	175,000	-	0.0%	175,000	-	0.0%
Investment Earnings	948,700	7,901,200	4,061,700	3,113,000	328.1%	7,199,500	3,137,800	77.3%
Total Revenues	356,071,600	361,766,800	\$370,314,500	\$ 14,242,900	4.0%	\$385,127,100	\$ 14,812,600	4.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$144,847,700	\$144,847,700	\$152,906,400	\$ 8,058,700	5.6%	\$162,810,600	\$ 9,904,200	6.5%
General Retirement System Legacy Pension	6,048,000	6,048,000	-	(6,048,000)	-100.0%	-	-	0.0%
Debt Service	150,337,100	150,171,200	159,482,800	9,145,700	6.1%	175,154,900	15,672,100	9.8%
General Retirement System Accelerated Pension	6,268,300	6,268,300	3,395,500	(2,872,800)	-45.8%	4,173,300	777,800	22.9%
Water Residential Assistance Program Contribution	1,770,500	1,770,500	1,851,600	81,100	4.6%	1,925,600	74,000	4.0%
Regional System Lease	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	-	-	-	0.0%	7,900,000	7,900,000	0.0%
Improvement & Extension Fund Transfer Pending	24,300,000	30,161,100	30,178,200	5,878,200	24.2%	10,662,700	(19,515,500)	-64.7%
Annual Water System Revenue Requirements	\$356,071,600	\$361,766,800	\$370,314,500	\$ 14,242,900	4.0%	\$385,127,100	\$ 14,812,600	4.0%

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 1B – Sewer System Revenue Requirements Biennial Budget

	Current Year		Biennial Budget					
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance
Sewer System Revenue Requirements								
Revenues								
Revenues from Charges	\$479,816,500	\$477,420,200	\$493,169,700	\$ 13,353,200	2.8%	\$510,633,800	\$ 17,464,100	3.5%
Other Revenues	400,000	400,000	400,000	-	0.0%	400,000	-	0.0%
Investment Earnings	1,155,600	10,915,000	7,057,300	5,901,700	510.7%	9,618,300	2,561,000	36.3%
Total Revenues	\$481,372,100	\$488,735,200	\$500,627,000	\$ 19,254,900	4.0%	\$520,652,100	\$ 20,025,100	4.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$184,052,600	\$194,822,500	\$205,643,700	\$ 21,591,100	11.7%	\$216,220,400	\$ 10,576,700	5.1%
General Retirement System Legacy Pension	10,824,000	10,824,000	-	(10,824,000)	-100.0%	-	-	0.0%
Debt Service	205,638,100	210,621,400	228,328,300	22,690,200	11.0%	230,354,100	2,025,800	0.9%
General Retirement System Accelerated Pension	11,620,700	11,620,700	6,479,300	(5,141,400)	-44.2%	8,228,800	1,749,500	27.0%
Water Residential Assistance Program Contribution	2,394,200	2,394,200	2,503,100	108,900	4.5%	2,603,300	100,200	4.0%
Regional System Lease	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	-	-	-	0.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	39,342,500	30,952,400	30,172,600	(9,169,900)	-23.3%	35,745,500	5,572,900	18.5%
Annual Sewer System Revenue Requirements	\$481,372,100	\$488,735,200	\$500,627,000	\$ 19,254,900	4.0%	\$520,652,100	\$ 20,025,100	4.0%

Schedule 1C – Combined Water and Sewer System Revenue Requirements Biennial Budget

Combined Water & Sewer System Revenue Requirements	Current Year		Biennial Budget					
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance
Revenues								
Revenues from Charges	\$834,764,400	\$831,110,800	\$859,247,500	\$ 24,483,100	2.9%	\$888,386,400	\$ 29,138,900	3.4%
Other Revenues	575,000	575,000	575,000	-	0.0%	575,000	-	0.0%
Investment Earnings	2,104,300	18,816,200	11,119,000	9,014,700	428.4%	16,817,800	5,698,800	51.3%
Total Revenues	\$837,443,700	\$850,502,000	\$870,941,500	\$ 33,497,800	4.0%	\$905,779,200	\$ 34,837,700	4.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$328,900,300	\$339,670,200	\$358,550,100	\$ 29,649,800	9.0%	\$379,031,000	\$ 20,480,900	5.7%
General Retirement System Legacy Pension	16,872,000	16,872,000	-	(16,872,000)	-100.0%	-	-	0.0%
Debt Service	355,975,200	360,792,600	387,811,100	31,835,900	8.9%	405,509,000	17,697,900	4.6%
General Retirement System Accelerated Pension	17,889,000	17,889,000	9,874,800	(8,014,200)	-44.8%	12,402,100	2,527,300	25.6%
Water Residential Assistance Program Contribution	4,164,700	4,164,700	4,354,700	190,000	4.6%	4,528,900	174,200	4.0%
Regional System Leases	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Receiving Fund Working Capital Requirement	-	-	-	-	0.0%	7,900,000	7,900,000	0.0%
Improvement & Extension Fund Transfer Pending	63,642,500	61,113,500	60,350,800	(3,291,700)	-5.2%	46,408,200	(13,942,600)	-23.1%
Annual Revenue Requirements	\$837,443,700	\$850,502,000	\$870,941,500	\$ 33,497,800	4.0%	\$905,779,200	\$ 34,837,700	4.0%

There is no Schedule 3 for purposes of the Budget Resolution.

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 4 – Debt Service Coverage Calculations Consistent with the Master Bond Ordinance

Debt Service Coverage Calculation	FY 2024	FY 2024	FY 2024 Combined (Informational Only)	FY 2025	FY 2025	FY 2025 Combined (Informational Only)
	Water Fund Requested	Sewer Fund Requested		Water Fund Requested	Sewer Fund Requested	
Revenues						
1 Regional System Wholesale Revenues	\$ 366,077,800	\$ 493,169,700	\$ 859,247,500	\$ 377,752,600	\$ 510,633,800	\$ 888,386,400
2 Local System Revenues	89,140,400	83,940,300	173,080,700	91,626,300	85,137,500	176,763,800
3 Miscellaneous Revenue (Local System)	4,210,000	8,500,000	12,710,000	4,336,300	8,755,000	13,091,300
4 Other Revenues & Investment Earnings (Regional System)	4,236,700	7,457,300	11,694,000	7,374,500	10,018,300	17,392,800
5 Total Revenues	\$ 463,664,900	\$ 593,067,300	\$ 1,056,732,200	\$ 481,089,700	\$ 614,544,600	\$ 1,095,634,300
Revenue Requirements						
Operations & Maintenance Expense						
6 Regional System Wholesale Expenses	\$ 152,906,400	\$ 205,643,700	\$ 358,550,100	\$ 162,810,600	\$ 216,220,400	\$ 379,031,000
7 Local System Expenses	44,756,000	55,655,400	100,411,400	46,593,300	57,934,500	104,527,800
8 GRS Pension allocable to Regional System	-	-	-	-	-	-
9 GRS Pension allocable to Local System	-	-	-	-	-	-
10 Total Operations & Maintenance Expense	197,662,400	261,299,100	458,961,500	209,403,900	274,154,900	483,558,800
11 Net Revenues after Operations & Maintenance Expense	\$ 266,002,500	\$ 331,768,200	\$ 597,770,700	\$ 271,685,800	\$ 340,389,700	\$ 612,075,500
Debt Service by Lien						
12 Senior Lien Bonds	\$ 136,224,100	\$ 155,429,200	\$ 291,653,300	\$ 150,810,500	\$ 163,496,800	\$ 314,307,300
13 Second Lien Bonds	51,754,500	53,273,500	105,028,000	51,930,500	53,590,200	105,520,700
14 SRF Junior Lien Bonds	16,469,500	51,847,200	68,316,700	18,958,700	45,514,400	64,473,100
15 Total Debt Service	\$ 204,448,100	\$ 260,549,900	\$ 464,998,000	\$ 221,699,700	\$ 262,601,400	\$ 484,301,100
Debt Service Coverage						
16 Senior Lien Bonds (11)/(12)	1.95	2.13		1.80	2.08	
17 Second Lien Bonds (11) / [(12)+(13)]	1.42	1.59		1.34	1.57	
18 SRF Junior Lien Bonds (11) / (15)	1.30	1.27		1.23	1.30	

**Rows highlighted in light grey in the above table are designed to align with the Local System information provided from Detroit Water & Sewerage Department (DWSD) as of February 2, 2023

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 5A – Water Capital Financing Plan

Water Improvement & Extension Fund

	Current Year		Biennial Budget	
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2025 Department Requested
Water Improvement & Extension Fund Inflows & Outflows				
Revenues				
Water System Transfers In from General Operating	\$ 24,300,000	\$ 30,161,100	\$ 30,178,200	\$ 10,662,700
Earnings on Investments	-	2,126,400	1,694,800	2,147,200
Net Use of Reserves	19,888,000	17,081,000	(10,926,100)	(5,747,200)
Total Revenues	\$ 44,188,000	\$ 49,368,500	\$ 20,946,900	\$ 7,062,700
Expenditures				
Investment Earnings Transfers Out	\$ -	\$ 2,126,400	\$ 1,694,800	\$ 2,147,200
Capital Outlay	15,452,600	15,452,600	11,539,100	9,694,400
Revenue Financed Capital - Transfer to Construction Fund	28,735,400	31,789,500	7,713,000	(4,778,900)
Total Expenditures	\$ 44,188,000	\$ 49,368,500	\$ 20,946,900	\$ 7,062,700

Water Construction Fund

	Current Year		Biennial Budget	
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2025 Department Requested
Water Construction Fund Inflows & Outflows				
Revenues				
Transfers from Improvement & Extension Fund	\$ 28,735,400	\$ 31,789,500	\$ 7,713,000	\$ (4,778,900)
Bond Proceeds	-	225,000,000	-	332,500,000
Bond Fund Earnings on Investment	128,800	4,845,600	1,864,700	1,335,800
Grant Revenues (SRF Loans)	54,992,000	82,867,000	97,102,000	44,230,000
Net Use of Reserves	71,644,800	(118,712,100)	132,580,300	(172,864,900)
Total Revenues	\$155,501,000	\$ 225,790,000	\$ 239,260,000	\$ 200,422,000
Expenditures				
Capital Improvement Plan	\$194,376,000	\$ 225,790,000	\$ 239,260,000	\$ 200,422,000
Capital Spend Rate Adjustment	(38,875,000)	-	-	-
Total Expenditures	\$155,501,000	\$ 225,790,000	\$ 239,260,000	\$ 200,422,000

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 5B – Sewer Capital Financing Plan

Sewer Improvement & Extension Fund

	Current Year		Biennial Budget	
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2025 Department Requested
Sewer Improvement & Extension Fund Inflows & Outflows				
Revenues				
Sewer System Transfers In from General Operating	\$ 39,342,500	\$ 30,952,400	\$ 30,172,600	\$ 35,745,500
Earnings on Investments	-	2,492,300	2,133,000	2,432,500
Net Use of Reserves	5,549,500	11,494,700	(15,202,100)	(14,330,100)
Total Revenues	\$ 44,892,000	\$ 44,939,400	\$ 17,103,500	\$ 23,847,900
Expenditures				
Investment Earnings Transfers Out	\$ -	\$ 2,492,300	\$ 2,133,000	\$ 2,432,500
Capital Outlay	18,447,100	18,447,100	14,970,500	12,399,500
Revenue Financed Capital - Transfer to Construction Fund	26,444,900	24,000,000	-	9,015,900
Total Expenditures	\$ 44,892,000	\$ 44,939,400	\$ 17,103,500	\$ 23,847,900

Sewer Construction Fund

	Current Year		Biennial Budget	
	FY 2023 Adopted Budget	FY 2023 Estimated Budget	FY 2024 Department Requested	FY 2025 Department Requested
Sewer Construction Fund Inflows & Outflows				
Revenues				
Transfers from Improvement & Extension Fund	\$ 26,444,900	\$ 24,000,000	\$ -	\$ 9,015,900
Bond Proceeds	-	225,000,000	-	280,250,000
Bond Fund Earnings on Investment	86,200	5,191,300	2,365,600	1,279,000
Grant Revenues (SRF Loans)	18,720,000	39,750,000	47,253,000	31,104,000
Net Use of Reserves (a)	49,197,900	(154,529,300)	149,442,400	(131,489,900)
Total Revenues	\$ 94,449,000	\$ 139,412,000	\$ 199,061,000	\$ 190,159,000
Expenditures				
Capital Improvement Plan	\$125,932,000	\$ 139,412,000	\$ 199,061,000	\$ 190,159,000
Capital Spend Rate Adjustment	(31,483,000)	-	-	-
Total Expenditures	\$ 94,449,000	\$ 139,412,000	\$ 199,061,000	\$ 190,159,000



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

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

Re: CFO Update

ERP Implementation – Milestone Success

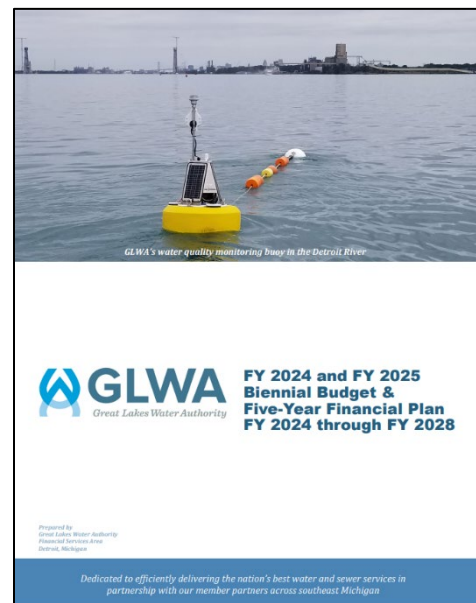
Friday, May 12, 2023 was a milestone date for an initial round of testing for the Workday implementation. It was reported that our cross-functional teams from Financial Services, Organizational Development, and Information Technology achieved 97.4% complete as of that date which is AMAZING! Over 1,100 tests have been run since January 2023 by over 65 GLWA team members who are actively participating in this effort.

While our teams are working very hard on Workday as well as NexGen, GLWA's new asset management system, in addition to day-to-day workload, preventing team member burnout is an area of concern. One way to do this a "project hiatus" on June 29, 30, and July 3. During the project hiatus no project meetings will be scheduled on those dates and no project work will be expected, including no responses expected to automated project-related e-mails. This hiatus will give team members an opportunity to take PTO or work on other job responsibilities, and to recharge and refresh as we work toward the first go-live date for Workday Human Capital Management on December 25, 2023 and the launch of the financial system on July 1, 2024.

Presently the ERP team is now also focusing on financial reporting and forecasting, along colleagues in Information Technology, via launch of the demonstration phase of Adaptive Insights which is now owned by Workday.

FY 2024 & FY 2025 Biennial Budget and Five Year Financial Plan

On May 19, 2023 the final "budget book" was published [online](#) and submitted to the Government Finance Officers Association (GFOA) for consideration of the annual budget award.



GLWA

Great Lakes Water Authority



Monthly Financial Report Binder

February 2023

**Presented to the
Great Lakes Water Authority
Audit Committee on May 26, 2023**

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 Highland Park Life-to-Date Billings & Collections B-1



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)

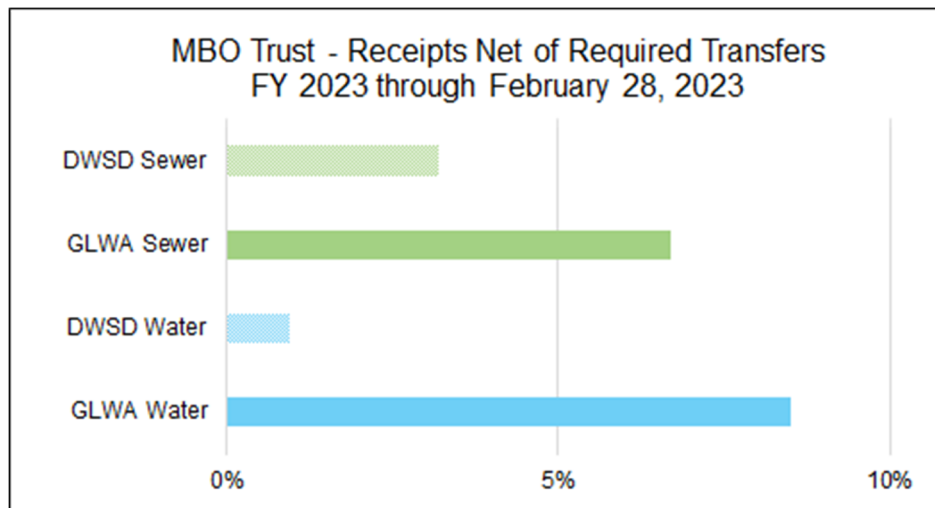
Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information. This report reflects second quarter budget amendments approved by the GLWA Board of Directors on April 26, 2023.

For the current period, investment income, water capital spend, and sewer capital spend all reflect variances to budget outside the normal range. Investment income earned continues to increase monthly and is anticipated to achieve budget expectations by yearend. GLWA staff will continue to monitor capital spend to determine if additional budget amendments will be necessary.

As of February 28, 2023					
Metric	FY 2023 Budget	FY 2023 Amended Budget	FY 2023 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$226.6	\$226.6	\$228.2	1%	47
Wholesale Water Billed Usage (mcf)	9,084,000	9,084,000	9,193,000	1%	
Wholesale Sewer Billed Revenue (\$M)	\$183.1	\$183.1	\$183.1	0%	49
Wholesale Water Operations & Maintenance (\$M)	\$96.6	\$99.4	\$100.5	1%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$122.7	\$135.5	\$129.9	-4%	
Investment Income (\$M)	\$1.5	\$21.7	\$18.3	-16%	36
Water Prorated Capital Spend w/SRA* (\$M)	\$103.7	\$150.5	\$136.0	-10%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$84.0	\$93.0	\$60.0	-35%	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 52)



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 \$741 thousand and DWSD Sewer reports a surplus of \$6.3 million of net receipts over disbursements through February 2023.

Budget to Actual Analysis (page 3)

- FY 2023 information includes the second quarter budget amendments which were approved by the GLWA Board of Directors on April 26, 2023.
- The total Revenue Requirements are on target through February 2023.
- The total overall Operations & Maintenance expenses are at 65.4% of budget through February 2023 which is slightly below the pro-rata benchmark of 66.7%. This positive variance equates to a dollar amount of \$4.4 million.

Basic Financial Statements (page 9)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for February 2023 is \$55.5 million for the Water fund (22.8% of total revenues) and \$77.8 million for the Sewer fund (24.3 % of total revenues).
- Water Net Position increased by \$ 12.5 million, and Sewage Disposal Net Position increased by \$ 23.0 million for the year to date through February 2023.

Capital Improvement Plan Financial Summary (page 27)

- The Water system is below the amended 116.2% Capital Spend Ratio assumption.
- The Sewer system is also below the amended 110.7% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For February, transfers of \$13.7 million and \$19.0 million were completed for the GLWA Water and Sewer funds, respectively.
- Also, for February, transfers of \$6.0 million and \$6.0 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 36)

- Total cash & investments are \$581 million for Water and \$640 million in the Sewer fund.
- Total, combined, cumulative, FY 2023 investment income through February is \$18.3 million.

DWSD Retail Revenues, Receivables & Collections (page 40)

- Water usage through February 28, 2023 is 109.81% and revenues are 106.33% of budget.
- Sewer usage through February 28, 2023 is 104.17% and revenues are 100.92% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$45.4 million over the prior year.
- Past dues over 180 days make up of 68.7% the total accounts receivable balance. The current bad debt allowance covers 96.7% of past dues over 60 days.

GLWA Wholesale Billing, Receivables & Collections (page 46)

- GLWA accounts receivable past due balance net of Highland Park is 2.04% 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 \$54.4 million. It includes \$40.8 million for wastewater treatment services, \$1.9 million for industrial waste control services, and \$11.8 million for water supply services. Highland Park made a catch-up payment of \$1.7 million on June 3, 2022 and has continued to make additional, monthly payments since that time totaling \$3.5 million as of February 28, 2023.

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



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

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

The FY 2023 information presented in these sections includes the second quarter FY 2023 budget amendments which were approved by the GLWA Board of Directors on April 26, 2023.

Revenue Requirements Budget Basis Analysis

GLWA's annual revenue requirements represent 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 expenses are largely reported on an accrual basis. The primary difference between the revenue requirements budget basis to the financial reporting basis is the treatment of debt service, legacy pension obligations, and lease related activities. The Revenue Requirements Basis is foundational to GLWA's daily operations, financial plan, and of most interest to key stakeholders.

Table 1A – Water Revenue Requirements Budget and **Table 1B – Sewer Revenue Requirements Budget** presents a year-over-year budget to actual performance report. The revenue requirements budget is accounted for in the operations and maintenance fund for each system. Since this report is for February 2023, the pro-rata benchmark is 66.7% (8 of 12 months of the fiscal year).

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

1. **Revenues:** For FY 2023, the *water* system, at 67.1%, is slightly above the pro-rata benchmark for total revenues while the *sewer* system, at 66.4%, is slightly below the 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 February 28, 2023, these payments total \$4.3 million for FY 2023.

2. **Investment Earnings:** For both systems, investment earnings are below the pro-rata benchmark for FY 2023; the *water* system is at 44.8%; while the *sewer* system is at 45.7%. Detailed analysis of investment earnings activity to date can be found in the *Cash & Investment Income* section of this financial report binder.
3. **Other Revenues:** These are one-time and unusual items that do not fit an established revenue category. Both the *water* and *sewer* systems actual amount will vary from budget due to the nature of the items recorded in this category.
4. **Operations & Maintenance Expense:** Actual expenses¹ for *both* systems have variances from the pro-rata benchmark. The *water* system is slightly above the pro-rata benchmark for FY 2023 at 67.4%. The *sewer* system O&M expenses, at 63.9%, is below the pro-rata benchmark.
5. **Debt Service:** For FY 2023, both systems are slightly above the pro-rata benchmark for debt service; the *water* system is at 68.0% while the *sewer* system is at 67.0%. 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 2023.
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.² Steps to proactively detect, and ideally prevent, this shortfall scenario were put into place with the 2018 Memorandum of Understanding (dated June 27, 2018). For FY 2022, 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 2023, neither the DWSD *water* system nor the DWSD *sewer* system have a budgetary shortfall through February 28, 2023. GLWA and DWSD staff meet 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* and *sewer* systems.
9. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12th basis each month in accordance with the Master Bond Ordinance.
10. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

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

² As a reminder, the monthly O&M transfer for MBO purposes 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 Requirements Budget (year-over-year) – (\$000)

	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 2/28/2022	Percent Year-to- Date	FY 2023 BOARD ADOPTED BUDGET	FY 2023 AMENDED BUDGET	FY 2023 ACTIVITY THRU 2/28/2023	Percent Year-to- Date
Water System							
Revenues							
Suburban Wholesale Customer Charges	\$ 315,011	\$ 212,499	67.5%	\$ 331,962	\$ 330,856	\$ 223,985	67.7%
Retail Service Charges	21,697	14,465	66.7%	22,986	22,834	15,240	66.7%
Investment Earnings	1,924	1,321	68.7%	949	9,670	4,335	44.8%
Other Revenues	684	679	99.2%	175	875	974	111.3%
Total Revenues	\$ 339,316	\$ 228,964	67.5%	\$ 356,072	\$ 364,236	\$ 244,534	67.1%
Revenue Requirements							
Operations & Maintenance Expense	\$ 143,934	\$ 86,204	59.9%	\$ 144,848	\$ 149,148	\$ 100,542	67.4%
General Retirement System Legacy Pension	6,048	4,032	66.7%	6,048	6,048	4,032	66.7%
Debt Service	135,121	90,263	66.8%	150,337	150,055	102,109	68.0%
General Retirement System Accelerated Pension	6,268	4,179	66.7%	6,268	6,268	4,179	66.7%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	1,706	1,137	66.7%	1,771	1,771	1,180	66.7%
Regional System Lease	22,500	15,000	66.7%	22,500	22,500	15,000	66.7%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall Pending	-	-	0.0%	-	-	-	0.0%
Improvement & Extension Fund Transfer Pending	23,740	18,124	76.3%	24,300	28,446	18,983	66.7%
Total Revenue Requirements	\$ 339,316	\$ 218,940	64.5%	\$ 356,072	\$ 364,236	\$ 246,024	67.5%
Net Difference		\$ 10,024				\$ (1,491)	
<i>Recap of Net Positive Variance</i>							
<i>Revenue Variance</i>		\$ 2,753				\$ 1,710	
<i>Revenue Requirement Variance</i>		7,271				(3,201)	
<i>Overall Variance</i>		\$ 10,024				\$ (1,491)	

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

	FY 2022 AMENDED BUDGET	FY 2022 ACTIVITY THRU 2/28/2022	Percent Year-to- Date	FY 2023 BOARD ADOPTED BUDGET	FY 2023 AMENDED BUDGET	FY 2023 ACTIVITY THRU 2/28/2023	Percent Year-to- Date
Sewer System							
Revenues							
Suburban Wholesale Customer Charges	\$ 268,130	\$ 181,539	67.7%	\$ 275,404	\$ 274,407	\$ 183,678	66.9%
Retail Service Charges	188,662	125,775	66.7%	191,042	191,042	127,361	66.7%
Industrial Waste Control Charges	8,325	5,529	66.4%	8,420	8,420	5,579	66.3%
Pollutant Surcharges	5,089	3,263	64.1%	4,951	4,951	3,161	63.8%
Investment Earnings	1,876	1,061	56.6%	1,156	13,532	6,184	45.7%
Other Revenues	538	325	60.4%	400	1,170	1,506	128.7%
Total Revenues	\$ 472,620	\$ 317,492	67.2%	\$ 481,372	\$ 493,522	\$ 327,468	66.4%
Revenue Requirements							
Operations & Maintenance Expense	\$ 191,909	\$ 123,209	64.2%	\$ 184,053	\$ 203,223	\$ 129,925	63.9%
General Retirement System Legacy Pension	10,824	7,216	66.7%	10,824	10,824	7,216	66.7%
Debt Service	204,985	137,380	67.0%	205,638	212,509	142,284	67.0%
General Retirement System Accelerated Pension	11,621	7,747	66.7%	11,621	11,621	7,747	66.7%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	2,358	1,572	66.7%	2,394	2,394	1,596	66.7%
Regional System Lease	27,500	18,333	66.7%	27,500	27,500	18,333	66.7%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall Pending	-	1,862	0.0%	-	-	-	0.0%
Improvement & Extension Fund Transfer Pending	23,424	22,473	95.9%	39,343	25,452	18,717	73.5%
Total Revenue Requirements	\$ 472,620	\$ 319,793	67.7%	\$ 481,372	\$ 493,522	\$ 325,817	66.0%
Net Difference		\$ (2,301)				\$ 1,651	
<i>Recap of Net Positive Variance</i>							
<i>Revenue Variance</i>		\$ 2,412				\$ (1,547)	
<i>Revenue Requirement Variance</i>		(4,713)				3,198	
<i>Overall Variance</i>		\$ (2,301)				\$ 1,651	

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of February 28, 2023, is 66.7% (eight months). When comparing FY 2023 to FY 2022 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, the overall spending is higher in FY 2023.

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 2022		Percent Year-to-Date	FY 2023		FY 2023	
	FY 2022 AMENDED BUDGET	ACTIVITY THRU 2/28/2022		BOARD ADOPTED BUDGET	FY 2023 AMENDED BUDGET	ACTIVITY THRU 2/28/2023	Percent Year-to-Date
Water	\$ 76,422	\$ 49,669	65.0%	\$ 76,518	\$ 80,818	\$ 56,582	70.0%
Sewer	120,971	77,443	64.0%	113,198	132,367	89,176	67.4%
Centralized	103,846	60,787	58.5%	104,503	104,503	63,487	60.8%
Administrative	34,603	21,515	62.2%	34,682	34,682	21,222	61.2%
Employee Benefits	-	-	0.0%	-	-	-	0.0%
Total O&M Budget	\$ 335,843	\$ 209,414	62.4%	\$ 328,900	\$ 352,370	\$ 230,466	65.4%

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 65.4% which is slightly below the pro-rata benchmark of 66.7%. This positive variance equates to a dollar amount of \$4.4 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 64.4% through February 2023.

Utilities: The overall category is above the pro-rata benchmark; coming in at 74.5% through February 2023. 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 71.2%. The FY 2023 budget was adjusted for the increase to the charge for kWh, however, an additional budget amendment was processed for the second quarter FY 2023. It should be noted that variances are not unexpected as usage varies throughout the year. 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 105.4% which is higher than the benchmark of 66.7%. Variances within this category are not unexpected as usage varies throughout the year. The FY 2023 budget was adjusted for the increase in both usage as well as for the cost of natural gas MMBTU. Further review of this category is being conducted.
- **Sewage service** is higher than the benchmark, coming in at 70.1%. Increased usage has been 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. A second quarter FY 2023 budget amendment was processed for this service and this category continues to be closely monitored.
- **Water service** is lower than the benchmark, coming in at 64.6%. 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 have been coming in higher than the estimated billings. In addition, a new water billing structure was implemented in early FY 2023 which has resulted in an increase in the water billing rate. A second quarter FY 2023 budget amendment was processed for this is service and this category continues to be closely monitored.

Chemicals: This category is slightly higher than the pro-rate benchmark; coming in at 67.4% through February 2023. The FY 2023 budget has been amended for both systems to adjust for the rising chemical costs and this category continues to be closely monitored.

Supplies & Other: This category is lower than the benchmark; coming in at 60.8% through February 2023. 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. A review of this category is being conducted.

Contractual Services: The overall category is lower than the pro-rata benchmark; coming in at 63.0% through February 2023. 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 37.1% through February 2023. 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. A review of this category is being conducted.

Shared Services: This category is lower than the benchmark; coming in at 63.6% through February 2023. 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 2023. 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 and activity includes true-up billings from prior years.

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

Expense Categories	FY 2022		Percent Year-to- Date at 2/28/2022	FY 2022		Percent Year-to- Date at 6/30/2022	FY 2023		Percent Year-to- Date 2/28/2023	FY 2023
	FY 2022 AMENDED BUDGET	ACTIVITY THRU 2/28/2022		FY 2022 ACTIVITY THRU 6/30/2022	FY 2023 AMENDED BUDGET		PRORATED BUDGET (8 MONTHS)	FY 2023 ACTIVITY THRU 2/28/2023		PRORATED BUDGET LESS FY 2023
Entity-wide										
Salaries & Wages	\$ 66,113	\$ 43,085	65.2%	\$ 63,901	67.4%	\$ 71,755	\$ 47,837	\$ 47,374	66.0%	\$ 463
Workforce Development	869	505	58.1%	844	59.8%	1,342	895	845	62.9%	50
Overtime	8,126	5,324	65.5%	8,113	65.6%	7,007	4,671	5,605	80.0%	(934)
Employee Benefits	25,956	16,964	65.4%	24,206	70.1%	27,869	18,579	16,581	59.5%	1,999
Transition Services	10,805	6,968	64.5%	9,990	69.8%	11,030	7,353	6,241	56.6%	1,113
Employee Benefits Fund	-	-	0.0%	-	0.0%	-	-	-	0.0%	-
Personnel Costs	111,869	72,845	65.1%	107,053	68.0%	119,002	79,335	76,645	64.4%	2,690
Electric	43,950	28,713	65.3%	43,755	65.6%	43,314	28,876	30,847	71.2%	(1,971)
Gas	7,081	4,429	62.5%	8,665	51.1%	8,553	5,702	9,019	105.4%	(3,317)
Sewage Service	2,510	1,584	63.1%	2,568	61.7%	2,596	1,730	1,821	70.1%	(90)
Water Service	5,841	2,120	36.3%	4,669	45.4%	11,052	7,368	7,136	64.6%	232
Utilities	59,383	36,845	62.0%	59,656	61.8%	65,515	43,677	48,823	74.5%	(5,146)
Chemicals	19,842	12,804	64.5%	20,382	62.8%	28,476	18,984	19,194	67.4%	(210)
Supplies & Other	35,034	19,503	55.7%	29,711	65.6%	35,122	23,414	21,357	60.8%	2,058
Contractual Services	111,198	70,795	63.7%	107,527	65.8%	105,978	70,652	66,752	63.0%	3,900
Capital Program Allocation	(2,684)	(1,679)	62.5%	(2,632)	63.8%	(3,636)	(2,424)	(1,349)	37.1%	(1,076)
Shared Services	(3,202)	(1,699)	53.1%	(2,398)	70.8%	(1,501)	(1,001)	(955)	63.6%	(45)
Unallocated Reserve	4,402	-	0.0%	-	0.0%	3,414	2,276	-	0.0%	2,276
Total Expenses	\$ 335,843	\$ 209,414	62.4%	\$ 319,300	65.6%	\$ 352,370	\$ 234,913	\$ 230,467	65.4%	\$ 4,447

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 2022 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 February 28, 2023
(\$000)**

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2022
Assets				
Cash - unrestricted (a)	\$ 177,833	\$ 225,241	\$ 403,073	\$ 347,655
Cash - restricted (a)	94,325	56,739	151,065	113,378
Investments - unrestricted (a)	73,738	81,530	155,268	185,209
Investments - restricted (a)	199,467	302,155	501,622	144,445
Accounts Receivable	84,858	87,612	172,470	175,133
Due from (to) Other Funds (b)	4,178	(4,178)	-	-
Other Assets (c)	675,210	410,328	1,085,538	1,077,698
Cash held FBO DWSD Advance	-	-	-	-
Capital Assets, net of Depreciation	1,221,274	2,030,015	3,251,289	3,432,437
Land	293,617	126,816	420,433	420,750
Construction Work in Process (e)	399,999	252,548	652,547	467,190
Total assets	3,224,497	3,568,807	6,793,304	6,363,896
Deferred Outflows (f)	46,506	116,278	162,785	182,497
Liabilities				
Liabilities - Liabilities-ST	144,411	194,345	338,756	354,055
Due to (from) Other Funds (b)	-	-	-	-
Other Liabilities (h)	1,917	4,951	6,868	7,500
Cash Held FBO DWSD (d)	16,895	19,023	35,918	20,470
Liabilities - Long-Term (i)	3,158,959	3,515,560	6,674,519	6,263,510
Total liabilities	3,322,183	3,733,878	7,056,061	6,645,535
Deferred Inflows (f)	45,586	38,247	83,833	120,157
Total net position (j)	\$ (96,765)	\$ (87,041)	\$ (183,805)	\$ (219,299)

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, 2022 are also reported at market value. The February 28, 2023 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 February 2023 Financial Report Binder. Prior year ending balances are provided in the June 30, 2022 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 Eight Months ended February 28, 2023
(\$000)

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- Type Activities	Comparative June 30, 2022
Revenue						
Wholesale customer charges	\$ 228,281	93.6%	\$ 183,678	57.3%	\$ 411,959	\$ 591,840
Local system charges	15,240	6.2%	127,361	39.7%	142,601	210,360
Industrial waste charges		0.0%	5,579	1.7%	5,579	8,300
Pollutant surcharges		0.0%	3,161	1.0%	3,161	5,182
Other revenues	371	0.2%	843	0.3%	1,214	664
Total Revenues	243,892	100.0%	320,622	100.0%	564,514	816,345
Operating expenses						
Operations and Maintenance	101,526	41.6%	133,148	41.5%	234,674	324,735
Depreciation	84,486	34.6%	109,407	34.1%	193,893	281,210
Amortization of intangible assets	2,378	1.0%	293	0.1%	2,671	4,006
Total operating expenses	188,390	77.2%	242,848	75.7%	431,238	609,951
Operating Income	55,502	22.8%	77,774	24.3%	133,276	206,394
Total Nonoperating (revenue) expense	43,001	17.6%	54,782	17.1%	97,783	215,561
Increase/(Decrease) in Net Position	12,501	5.1%	22,992	7.2%	35,494	(9,167)
Net Position (deficit), beginning of year	(109,266)		(110,033)		(219,299)	(210,132)
Net position (deficit), end of year	\$ (96,765)		\$ (87,041)		\$ (183,805)	\$ (219,299)

Totals may be off due to rounding

Water Fund

- ✓ The increase in Water Fund Net Position is \$12.5 million.
- ✓ Wholesale water customer charges of \$228.3 million account for 93.6% of Water System revenues.
- ✓ Operating expenses of \$188.4 million represent 77.2% of total operating revenue. Depreciation is the largest operating expense at \$84.5 million or 44.8% of operating expense.
- ✓ Amortization of intangible assets represents activity for raw water rights.
- ✓ Operating income after operating expenses (including depreciation) equals \$55.5 million or 22.8% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$55.5 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 \$23.0 million.
- ✓ Wholesale customer charges of \$183.7 million account for 57.3% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$127.4 million account for 39.7% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$242.8 million represent 75.7% of total operating revenue. Depreciation is the largest operating expense at \$109.4 million or 45.1% of total operating expense.
- ✓ Amortization of intangible assets represents activity for a warehouse lease.
- ✓ Operating income after operating expenses (including depreciation) equals \$77.8 million or 24.3% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$64.6 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 February 2023 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
– All Funds Combined
For the Eight Months ended February 28, 2023
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- Type Activities	Percent of Total
Operating Expenses						
Personnel						
Salaries & Wages	17,419	17.2%	37,040	27.8%	54,459	23.2%
Overtime	3,510	3.5%	2,095	1.6%	5,605	2.4%
Benefits	11,632	11.5%	4,948	3.7%	16,581	7.1%
Total Personnel	\$ 32,561	32.1%	\$ 44,084	33.1%	\$ 76,645	32.7%
Utilities						
Electric	20,330	20.0%	10,517	7.9%	30,847	13.1%
Gas	1,294	1.3%	7,725	5.8%	9,019	3.8%
Sewage	420	0.4%	1,401	1.1%	1,821	0.8%
Water	4	0.0%	7,132	5.4%	7,136	3.0%
Total Utilities	\$ 22,048	21.7%	\$ 26,775	20.1%	\$ 48,823	20.8%
Chemicals	8,297	8.2%	10,897	8.2%	19,194	8.2%
Supplies and other	7,478	7.4%	13,554	10.2%	21,032	9.0%
Contractual services	32,535	32.0%	38,869	29.2%	71,404	30.4%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(737)	-0.7%	(612)	-0.5%	(1,349)	-0.6%
Intergovernmental Agreement	-	0.0%	(120)	-0.1%	(120)	-0.1%
Shared services allocation	(656)	-0.6%	(299)	-0.2%	(955)	-0.4%
Operations and Maintenance Expenses	\$ 101,526	100.0%	\$ 133,148	100.0%	\$ 234,674	100.0%

Totals may be off due to rounding

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

- ✓ Core expenses for water and sewage disposal systems are utilities (20.8% of total O&M expenses) and chemicals (8.2% of total O&M expenses).
- ✓ Personnel costs (32.7% 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 (30.4%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$3.4 million);
 - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$11.1 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 Eight Months ended February 28, 2023
(\$000)**

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2022
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (16,407)	\$ (10,930)	\$ (27,337)	\$ (42,120)
Interest income DWSD Shortfall	-	-	-	(145)
Investment earnings	(8,246)	(10,490)	(18,735)	(3,735)
Net (incr) decr in fair value of invstmt	(2,534)	(3,667)	(6,201)	9,119
Other nonoperating revenue	(603)	(663)	(1,265)	(476)
Interest Expense				
Bonded debt	71,859	75,551	147,410	212,284
Lease obligation	11,222	13,716	24,938	37,836
Other obligations	2,803	964	3,768	6,077
Total interest expense	85,884	90,232	176,116	256,197
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	-
Capital Contribution	-	(2,176)	(2,176)	(6,991)
Amortization, issuance costs, debt	(9,213)	2,179	(7,034)	(13,318)
(Gain) loss on disposal of capital assets	275	1,877	2,152	322
Loss on impairment of capital assets	-	-	-	-
Water Residential Assistance Program	1,287	1,741	3,028	2,793
Legacy pension expense	(7,444)	(13,322)	(20,765)	13,915
Total Nonoperating (Revenue)/Expense	\$ 43,001	\$ 54,782	\$ 97,783	\$ 215,561

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). This loan was paid in full in FY 2022.
- ✓ 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.

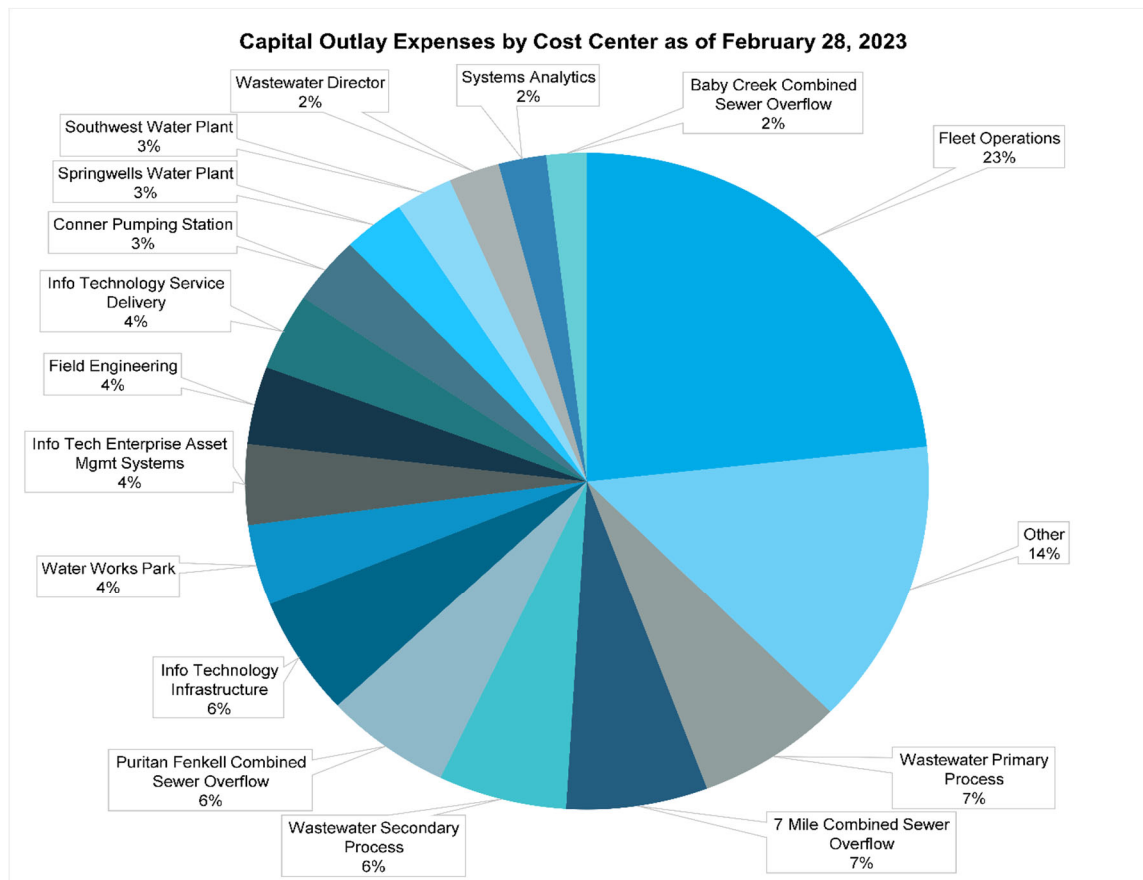
- ✓ Net (increase) decrease in fair value of investments consists of market value of investments and realized gain/loss on sale of investments. FY 2021 market value adjustments for Water and Sewer total \$1.5 million and \$1.0 million, respectively. FY 2022 market value adjustments for Water and Sewer total \$2.8 million and \$3.9 million, respectively. Any difference is due to realized gain or loss on investments.
- ✓ 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.
- ✓ FY 2023 other non-operating income primarily represents FEMA Covid-19 grant income for the Water and Sewage Disposal systems.
- ✓ The FY 2023 capital contribution in Nonoperating (revenue) expense represents funds from the Evergreen Farmington Sewer District for a maximum discharge capacity of 227 cubic feet per second (cfs) to the regional sewer system.
- ✓ The FY 2022 capital contribution in Nonoperating (revenue) expense represents \$7.0 million from the Oakland Macomb Interceptor Drainage District for assets placed in service during FY 2022.
- ✓ FY 2023 Sewage Disposal loss on disposal of capital assets includes sale of McKinstry warehouse.
- ✓ For FY 2023, GLWA is recognizing non-operating pension revenue rather than expense as a result of improved investment earnings for the plan.

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 February 28, 2023, total capital outlay spend is \$7.1 million. Following this chart is a sample list of projects and purchases from the total spend of \$7.1 million:



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

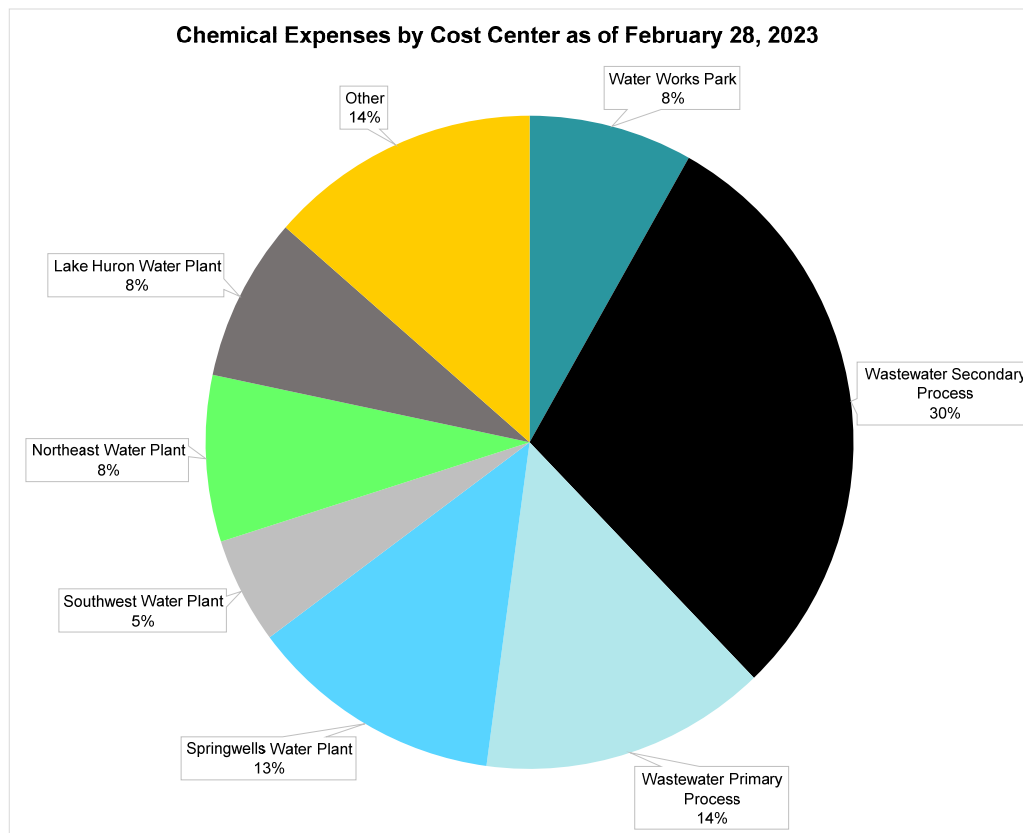
Water Operations: Overhead door repair (\$160k); EDS Dashboard (\$86k); furniture for multiple sites (\$77k); metering pump repairs (\$57k); pumps (\$49k); composite cylinders (\$45k) and CAAS Cube ELISA System (\$37k).

Wastewater Operations: CSO actuator replacement (\$793k); Water intake improvements (\$372k); Rotork replacements (\$188k); WRRF Electrical Buildings project (\$163k); Scum hopper (\$153k); WRRF Actuator (\$132k); Pulsafeeders (\$121k); Gas detection unit (\$121k); Complex A pump replacement (\$110k); Instrumentation and controls (\$103k); Water Champ (\$97k); Terrain litter vacuum (\$95k); Puritan-Fenkell courtyard accessibility improvements (\$84k); Flygt Mixer (\$73k); CSO PQM Meters (\$73k); Wastewater pumps (\$71k); Gate valve actuators (\$50k); Electric actuator (\$50k) and Rotork units (\$42k).

Centralized & Administrative Facilities: Trucks and vehicles (\$1.6m); Software (\$342k); Cloud Backup Project (\$322k); Computer hardware (\$224k); Pressure transmitter (\$87k); transmitter (\$46k) and maintenance renewal (\$37k).

Chart 2 – Chemical Expenses – Water and Sewer System Combined

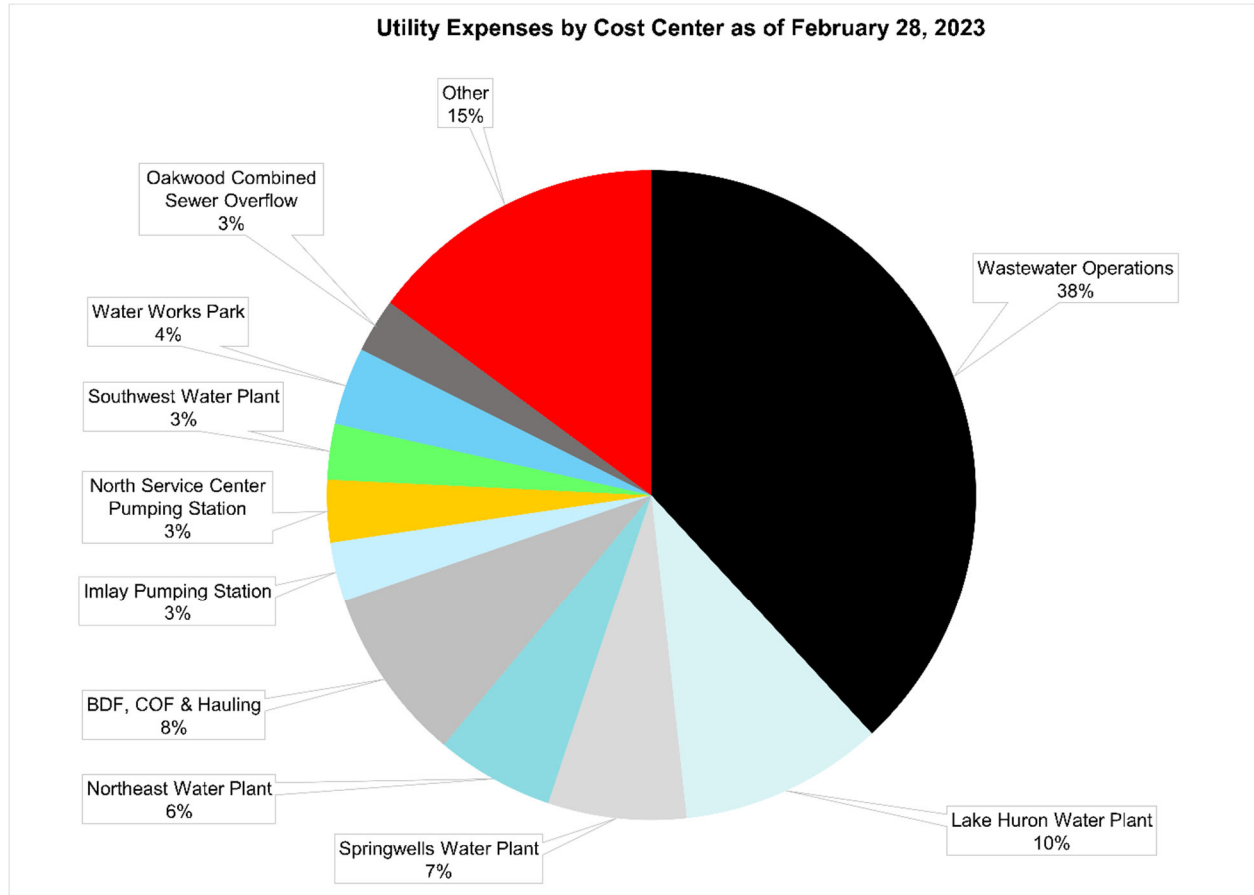
Chemical expenses are \$19.2 million through February 28, 2023. The allocation is shown in the chart below and remains consistent with prior periods.



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 \$48.8 million through February 28, 2023. 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 February 28, 2023 all reconciliations are up-to-date and complete.

There were no accounts inactivated in the general ledger accounts since January 2023.

Chart 1 – Bank Reconciliation Completion Status

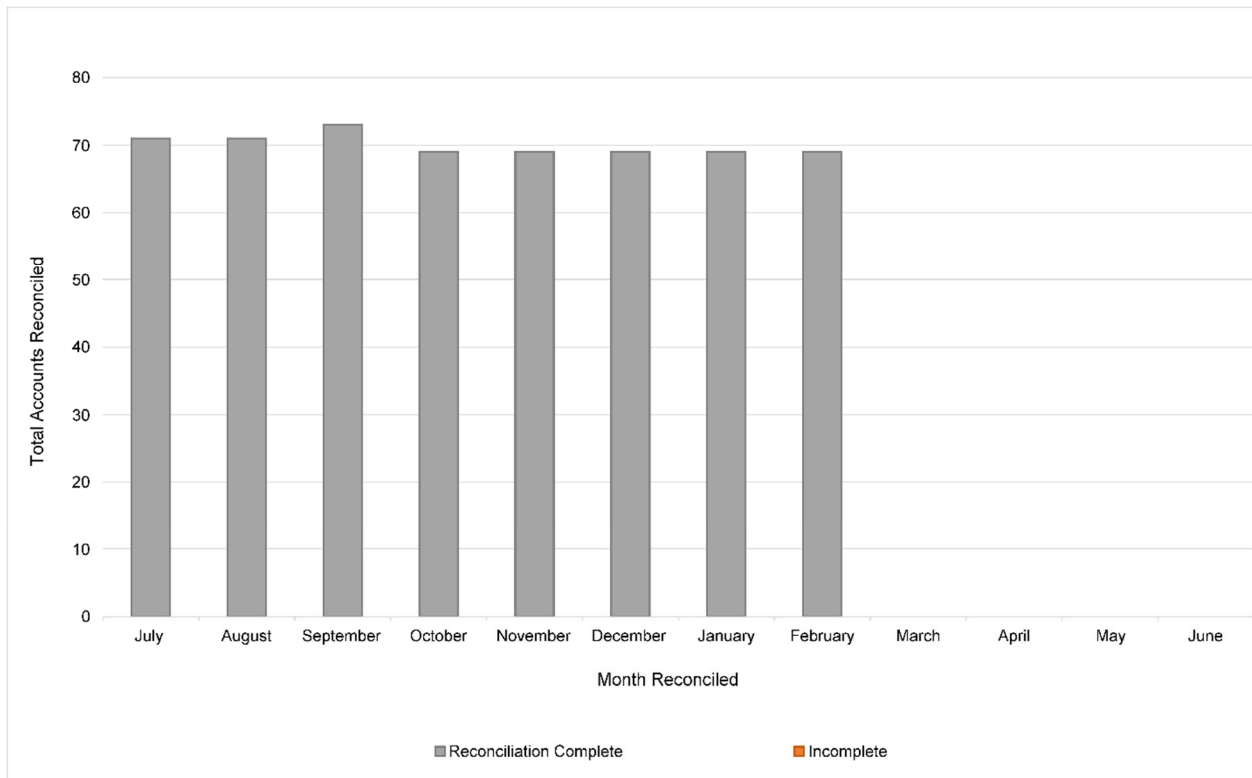


Table 1 – Fiscal Year 2023 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2022	72
New GL Cash accounts	2
Inactivated GL Cash accounts	(5)
Total GL Cash accounts as of February 28, 2023	69

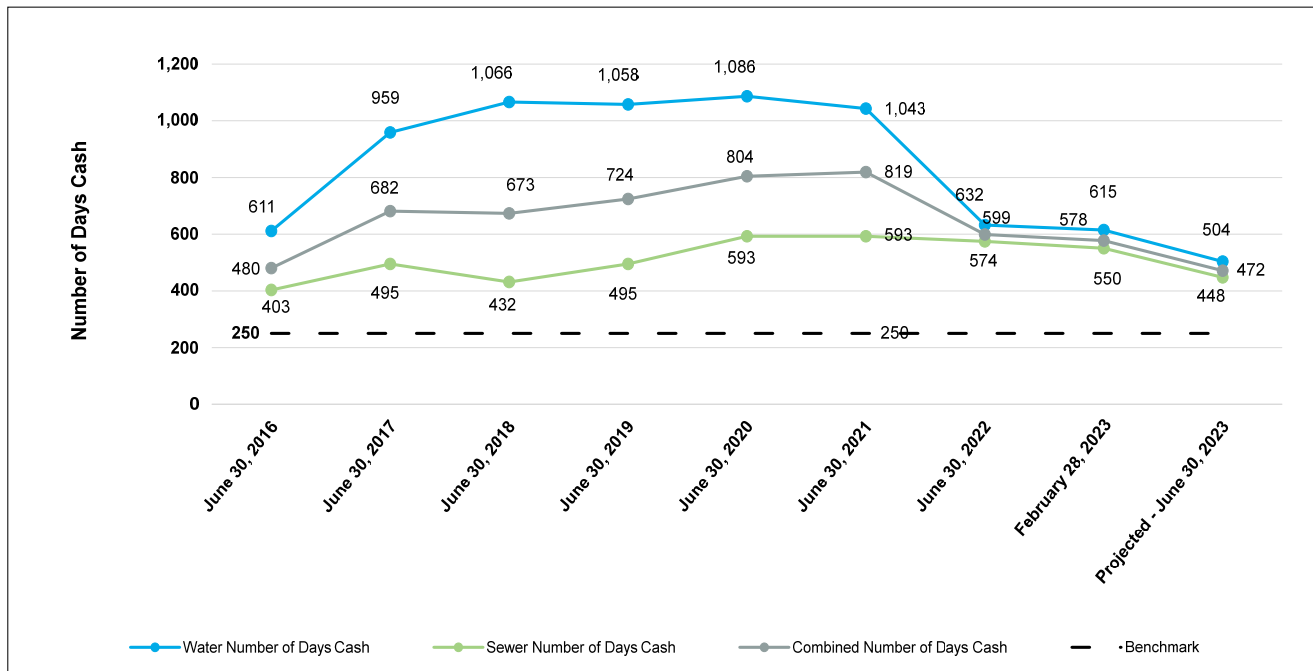


Financial Operations KPI - Liquidity

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 615 and Sewer at 550 days cash on hand as of February 28, 2023. These balances remain strong for the regional system but did decrease in FY 2022 as I&E funds were used as planned to fund capital improvement projects. A September 2022 revenue bond transaction has replenished the construction bond fund and reduced the emphasis on I&E funding. The FY 2023 projection is calculated based on values from the GLWA FY 2023 – 2027 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

	<u>June 30, 2022</u>	<u>February 28, 2023</u>	<u>Projected June 30, 2023</u>
Water Fund			
Cash and Investments - Unrestricted	\$ 238,691,000	\$ 251,570,000	\$ 205,800,000
Operating Expense			
Operating Expense (a)	\$ 264,579,000	\$ 192,010,000	\$ 288,014,000
Less: Depreciation (a)	(123,196,000)	(90,200,000)	(135,300,000)
Less: Amortization of Intangible Asset (a)	(3,567,000)	(2,378,000)	(3,567,000)
Net Operating Expense	<u>\$ 137,816,000</u>	<u>\$ 99,432,000</u>	<u>\$ 149,148,000</u>
Operating Expense per Day	<u>\$ 378,000</u>	<u>\$ 409,000</u>	<u>\$ 409,000</u>
Days Cash			
Number of Days Cash	<u>632</u>	<u>615</u>	<u>504</u>
Sewage Disposal Fund			
Cash and Investments - Unrestricted	\$ 294,174,000	\$ 306,771,000	\$ 249,400,000
Operating Expense			
Operating Expense (a)	\$ 345,372,000	\$ 243,348,000	\$ 365,023,000
Less: Depreciation (a)	(158,014,000)	(107,867,000)	(161,800,000)
Less: Amortization of Intangible Asset (a)	(440,000)	-	-
Net Operating Expense	<u>\$ 186,919,000</u>	<u>\$ 135,482,000</u>	<u>\$ 203,223,000</u>
Operating Expense per Day	<u>\$ 512,000</u>	<u>\$ 558,000</u>	<u>\$ 557,000</u>
Days Cash			
Number of Days Cash	<u>574</u>	<u>550</u>	<u>448</u>
Combined			
Cash and Investments - Unrestricted	\$ 532,865,000	\$ 558,341,000	\$ 455,200,000
Operating Expense			
Operating Expense (a)	\$ 609,951,000	\$ 435,358,000	\$ 653,037,000
Less: Depreciation (a)	(281,210,000)	(198,067,000)	(297,100,000)
Less: Amortization of Intangible Asset (a)	(4,006,000)	(2,378,000)	(3,567,000)
Net Operating Expense	<u>\$ 324,735,000</u>	<u>\$ 234,913,000</u>	<u>\$ 352,370,000</u>
Operating Expense per Day	<u>\$ 890,000</u>	<u>\$ 967,000</u>	<u>\$ 965,000</u>
Days Cash			
Number of Days Cash	<u>599</u>	<u>578</u>	<u>472</u>
<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 1/12th of the budget as defined in the MBO (“the flow of funds”) for all revenue requirements except for the Debt Service monthly transfer. The Debt Service monthly requirement is computed by the trustee, U.S. Bank. The cash transfer for debt is net of investment earnings that remain in the debt service accounts to be used for debt service.

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

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

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

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

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

**Table 1 – Crosswalk Budget Basis to Financial Reporting Basis (\$000)
For the Eight Months Ended February 28, 2023**

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ (1,491)	\$ 1,651	\$ 160
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	7,627	13,650	21,277
Prior year pension contribution accounted for in current year (d)	7,444	13,322	20,766
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	46,657	77,663	124,320
Accelerated pension B&C notes obligation portion (g)	192	432	624
Regional System lease (h)	3,778	4,617	8,395
Right to use lease - warehouse (h)		241	241
WRAP (i)	(107)	(145)	(252)
DWSD short term allocation (j)	-	-	-
Improvement & Extension Fund transfers (j)	18,983	18,717	37,700
Nonbudgeted financial reporting categories adjustments			
Depreciation and amortization (k)	(86,864)	(109,700)	(196,564)
Amortization - debt related (k)	9,213	(2,179)	7,034
Other nonoperating income (k)	-	-	-
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	(275)	(1,877)	(2,152)
Subscription Based Information Tech Arrangements (k)	-	-	-
Raw water rights obligation (l)	1,884	-	1,884
Investment earnings for construction fund (m)	3,600	4,112	7,711
Interest on DWSD note receivable (n)	-	-	-
Investment earnings unrealized gain/loss (o)	2,844	3,860	6,704
Improvement & extension fund operating expenses (p)	(984)	(3,548)	(4,532)
Net Position Increase/(Decrease) per Financial Statements (b)	\$ 12,501	\$ 22,992	\$ 35,493

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 for 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 purposes the Flint wholesale charges are recorded as 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 a 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. DWSD does not currently have a note receivable due to GLWA.
- (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) The Water Improvement and Extension fund and the Sewer Improvement and Extension fund reflect certain 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.



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 (Board) 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 2023 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.

GLWA completed a bond transaction of \$450 million in September 2022 to support water system and sewage disposal system improvements. These funds along with I&E and SRF low-interest loans will fund the capital program going forward.

Capital spend reflects a noticeable variance from budgeted CIP for both the water and sewer funds. For the purposes of this metric, we compare actual spend with the Board-approved budget. For the purposes of managing the financial plan, budget amendments are made to align spending with resources available. Second quarter FY 2023 budget amendments were approved by the Board on April 26, 2023. The capital spend rate adjustment is 116.2% of the Board approved CIP planned spend for the water fund and 110.7% of the Board approved CIP planned spend for the sewer fund.

As of December 31, 2022, the State Revolving Fund (SRF) activity reported in Charts 1 and 2 has been revised to reflect recent changes in approved, GLWA SRF funding.

Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date

As of February 2023, the water system incurred over \$136 million of construction costs to date. This spend represents 105% of the original, Board-approved CIP, and 90% of the Board-reviewed spend rate adjustment.

Economic factors affecting the CIP spend are considered by the Board quarterly at which time the Board may amend the planned spend rate adjusted.

Chart 1 – Water System Capital Improvement Plan Spend Incurred to Date – Spend Rate Adjusted

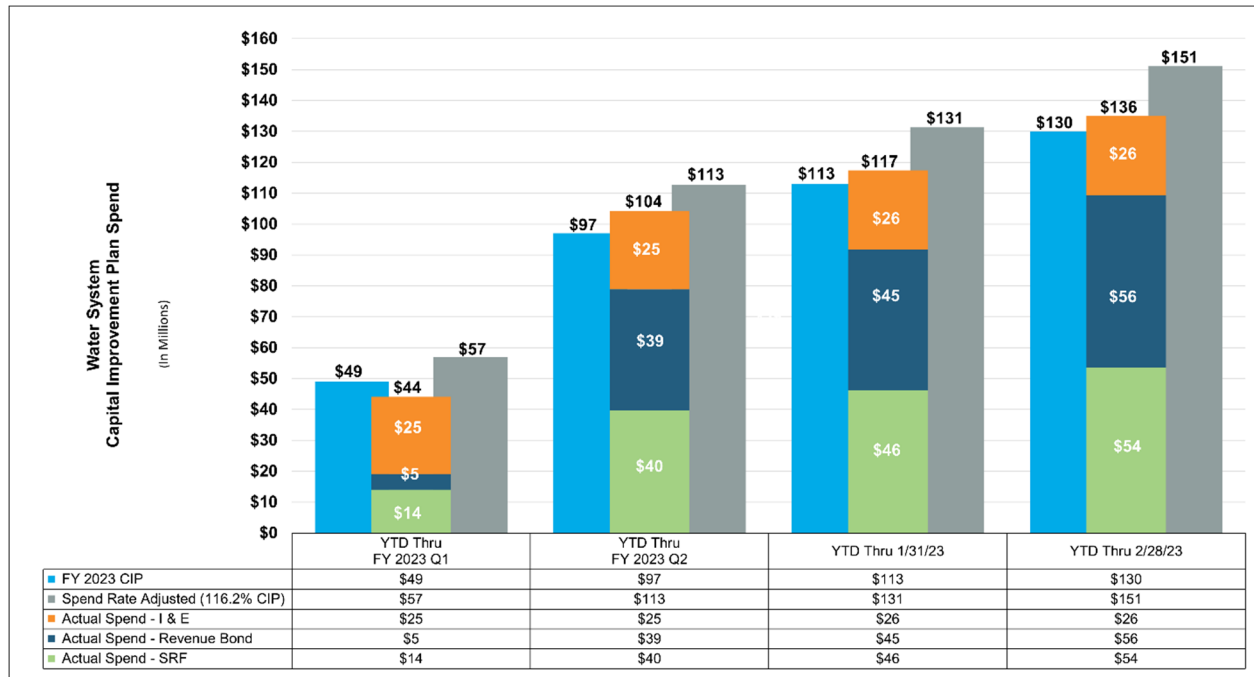
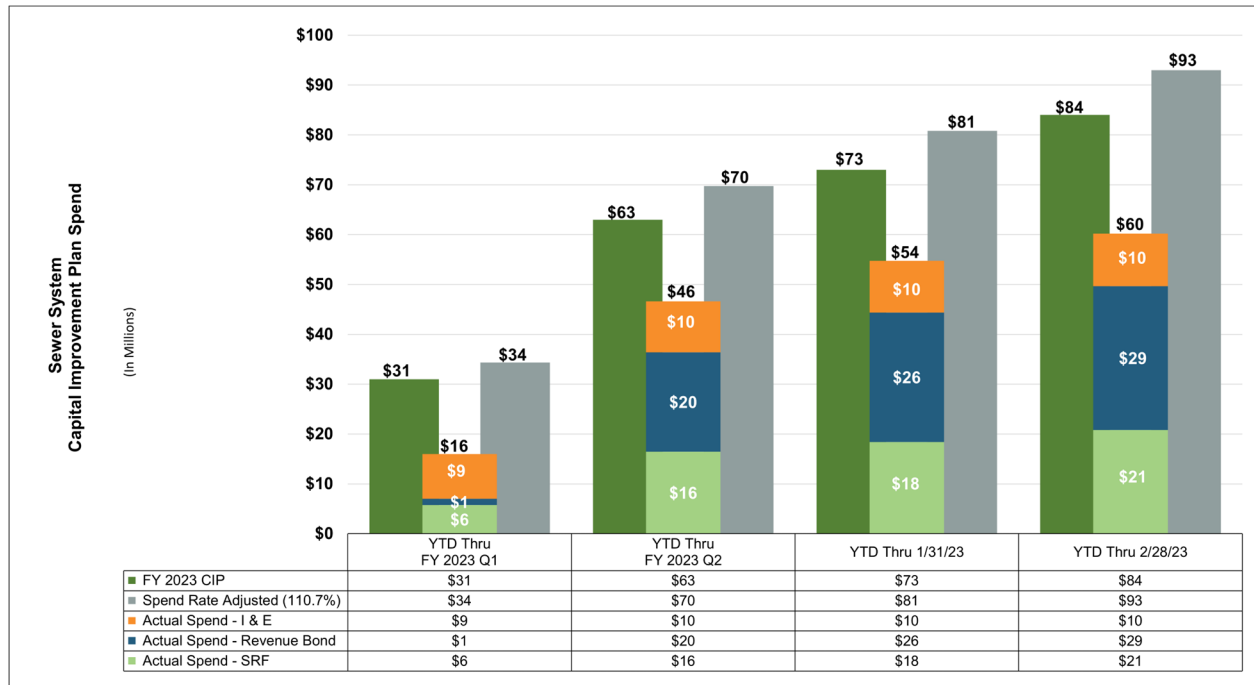


Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date

As of February 2023, the Sewer system incurred nearly \$60 million of construction costs to date. This spend represents 72% of the original, Board-approved CIP, and 65% of the Board-reviewed spend rate adjustment.

Economic factors affecting the CIP spend are considered by the Board quarterly at which time the Board may amend the planned spend rate adjusted.

Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date – Spend Rate Adjusted



All amounts are unaudited unless otherwise noted.



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. If there are transfers to the Extraordinary Repair & Replacement (ER&R) fund they would be completed annually based on budget and year-end fund status.

Table 1 – GLWA FY 2023 Water MBO Transfers reflects the required transfers for FY 2023 completed through February 2023. MBO transfers for water totaling \$109.4 million have been transferred to GLWA accounts.

Table 2 – GLWA FY 2023 Sewer MBO Transfers reflects the required transfers for FY 2023 completed through February 2023. MBO transfers for sewer totaling \$148.2 million have been transferred to GLWA accounts.

Table 3 – GLWA MBO Transfer History reflects historical transfers for FY 2016 through FY 2023 to date.

Table 1 – GLWA FY 2023 Water MBO Transfers

	WATER				Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP			
FY 2023							
July 2022	\$ 12,070,642	\$504,000	\$891,308	\$200,975	-	-	\$13,666,925
August 2022	\$ 12,070,642	\$504,000	\$891,308	\$200,975	-	-	13,666,925
September 2022	\$ 12,070,642	\$504,000	\$891,308	\$200,975	-	-	13,666,925
October 2022	\$ 12,070,642	\$504,000	\$891,308	\$223,209	-	-	13,689,159
November 2022	\$ 12,070,642	\$504,000	\$891,308	\$223,209	-	-	13,689,159
December 2022	\$ 12,070,642	\$504,000	\$891,308	\$223,209	-	-	13,689,159
January 2023	\$ 12,070,642	\$504,000	\$891,308	\$223,209	-	-	13,689,159
February 2023	\$ 12,070,642	\$504,000	\$891,308	\$223,209	-	-	13,689,159
Total FY 2023	\$ 96,565,136	\$ 4,032,000	\$ 7,130,464	\$ 1,718,970	\$ -	\$ -	\$109,446,570

Table 2 – GLWA FY 2023 Sewer MBO Transfers

	SEWER				Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP			
FY 2023							
July 2022	\$ 15,337,717	\$902,000	\$1,223,950	\$321,925	-	-	\$17,785,592
August 2022	\$ 15,337,717	\$902,000	\$1,223,950	\$321,925	-	-	17,785,592
September 2022	\$ 15,337,717	\$902,000	\$1,223,950	\$321,925	-	-	17,785,592
October 2022	\$ 16,534,372	\$902,000	\$1,223,950	\$300,892	-	-	18,961,214
November 2022	\$ 16,534,372	\$902,000	\$1,223,950	\$300,892	-	-	18,961,214
December 2022	\$ 16,534,372	\$902,000	\$1,223,950	\$300,892	-	-	18,961,214
January 2023	\$ 16,534,372	\$902,000	\$1,223,950	\$300,892	-	-	18,961,214
February 2023	\$ 16,534,372	\$902,000	\$1,223,950	\$300,892	-	-	18,961,214
Total FY 2023	\$ 128,685,011	\$7,216,000	\$9,791,600	\$2,470,235	\$ -	\$ -	\$148,162,846

Table 3 – GLWA MBO Transfer History

	GLWA MBO Transfer History				Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
	WATER						
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP			
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	143,933,800	6,048,000	10,695,700	2,376,600	-	-	163,054,100
Total FY 2023 (8 months)	96,565,136	4,032,000	7,130,464	1,718,970	-	-	109,446,570
Life to Date	\$927,523,248	\$46,346,300	\$81,203,339	\$16,681,474	\$2,686,900	\$606,000	\$1,075,047,261
	SEWER				Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP			
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	191,908,600	10,824,000	14,687,400	3,868,700	-	-	221,288,700
Total FY 2023 (8 months)	128,685,011	7,216,000	9,791,600	2,470,235	-	-	148,162,846
Life to Date	\$1,343,698,603	\$83,012,800	\$111,281,609	\$23,800,131	\$8,246,100	\$779,600	\$1,570,818,843

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

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 2023 Water MBO Transfers reflects the required transfers for FY 2023 completed through February 2023. MBO transfers for Water totaling \$42.3 million have been transferred to accounts held by DWSD. For FY 2023, DWSD has requested that \$2,922,100 of the lease payment be utilized to offset a portion of debt service.

Table 5 – DWSD FY 2023 Sewer MBO Transfers reflects the required transfers for FY 2023 completed through February 2023. MBO transfers for Sewer totaling \$53.4 million have been transferred to accounts held by DWSD. For FY 2023, DWSD has requested that \$4,388,300 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 2023 to date.

Table 7 – DWSD Sewer MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2023 to date.

Table 4 – DWSD FY 2023 Water MBO Transfers

WATER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Water</u>
FY 2023				
July 2022	\$2,540,833	\$356,000	\$1,150,750	\$4,047,583
August 2022	2,540,833	356,000	1,150,750	4,047,583
September 2022	2,540,833	356,000	1,150,750	4,047,583
October 2022	3,884,345	356,000	1,791,739	6,032,084
November 2022	3,884,345	356,000	1,791,739	6,032,084
December 2022	3,884,345	356,000	1,791,739	6,032,084
January 2023	3,884,345	356,000	1,791,739	6,032,084
February 2023	3,884,345	356,000	1,791,739	6,032,084
Total FY 2023	\$27,044,224	\$2,848,000	\$12,410,945	\$42,303,169

Table 5 – DWSD FY 2023 Sewer MBO Transfers

SEWER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Sewer</u>
FY 2023				
July 2022	\$5,282,500	\$238,000	\$2,291,667	\$7,812,167
August 2022	5,282,500	238,000	2,291,667	7,812,167
September 2022	5,282,500	238,000	2,291,667	7,812,167
October 2022	3,949,878	238,000	1,804,078	5,991,956
November 2022	3,949,878	238,000	1,804,078	5,991,956
December 2022	3,949,878	238,000	1,804,078	5,991,956
January 2023	3,949,878	238,000	1,804,078	5,991,956
February 2023	3,949,878	238,000	1,804,078	5,991,956
Total FY 2023	\$35,596,890	\$1,904,000	\$15,895,391	\$53,396,281

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
FY 2016 *				
MBO/Lease Requirement	\$26,185,600	\$4,262,700	\$22,500,000	\$52,948,300
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	50,621,400
FY 2017				
MBO/Lease Requirement	33,596,400	4,262,400	22,500,000	60,358,800
Offset to Debt Service	-	-	-	-
Net MBO Transfer	33,596,400	4,262,400	22,500,000	60,358,800
FY 2018				
MBO/Lease Requirement	35,059,704	4,272,000	22,500,000	61,831,704
Offset to Debt Service	-	-	(1,875,000)	(1,875,000)
Net MBO Transfer	35,059,704	4,272,000	20,625,000	59,956,704
FY 2019				
MBO/Lease Requirement	35,484,300	4,272,000	22,500,000	62,256,300
Offset to Debt Service	-	-	(3,972,200)	(3,972,200)
Net MBO Transfer	35,484,300	4,272,000	18,527,800	58,284,100
FY 2020				
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
FY 2021				
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
FY 2022				
MBO/Lease Requirement	29,989,000	4,272,000	22,500,000	56,761,000
Offset to Debt Service	-	-	(8,925,400)	(8,925,400)
Net MBO Transfer	29,989,000	4,272,000	13,574,600	47,835,600
FY 2023 (8 months)				
MBO/Lease Requirement	27,044,224	2,848,000	15,000,000	44,892,224
Offset to Debt Service	-	-	(2,589,055)	(2,589,055)
Net MBO Transfer	27,044,224	2,848,000	12,410,945	42,303,169
Life-to-Date				
MBO/Lease Requirement	257,855,528	32,733,100	172,500,000	463,088,628
Offsets	-	-	(31,514,855)	(31,514,855)
Total Water	257,855,528	32,733,100	140,985,145	431,573,773

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

Table 7 – DWSD Sewer MBO and Lease Payment Transfer History

	SEWER			
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
FY 2016 *				
MBO/Lease Requirement	\$19,774,300	\$2,861,800	\$27,500,000	\$50,136,100
Offset to Debt Service	-	-	(19,991,500)	(19,991,500)
Total MBO Transfer	19,774,300	2,861,800	7,508,500	30,144,600
FY 2017				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
Total MBO Transfer	41,535,600	2,862,000	27,500,000	71,897,600
FY 2018				
MBO/Lease Requirement	60,517,992	2,856,000	27,500,000	90,873,992
Offset to Debt Service	-	-	(9,166,664)	(9,166,664)
Total MBO Transfer	60,517,992	2,856,000	18,333,336	81,707,328
FY 2019				
MBO/Lease Requirement	56,767,920	2,856,000	27,500,000	87,123,920
Offset to Debt Service	-	-	(4,415,000)	(4,415,000)
Total MBO Transfer	56,767,920	2,856,000	23,085,000	82,708,920
FY 2020				
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
FY 2021				
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
FY 2022				
MBO/Lease Requirement	61,301,000	2,856,000	27,500,000	90,735,453
Offset to Debt Service	-	-	(5,529,297)	(4,607,750)
Total MBO Transfer	61,301,000	2,856,000	21,970,703	86,127,703
FY 2023 (8 months)				
MBO/Lease Requirement	35,596,890	1,904,000	18,333,333	55,834,223
Offset to Debt Service	-	-	(2,437,942)	(2,437,942)
Total MBO Transfer	35,596,890	1,904,000	15,895,391	53,396,281
Life-to-Date				
MBO/Lease Requirement	407,752,902	21,907,800	210,833,333	639,572,488
Offsets	(7,100,000)	-	(49,830,303)	(56,008,756)
Total Sewer	400,652,902	21,907,800	161,003,030	583,563,732

* 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

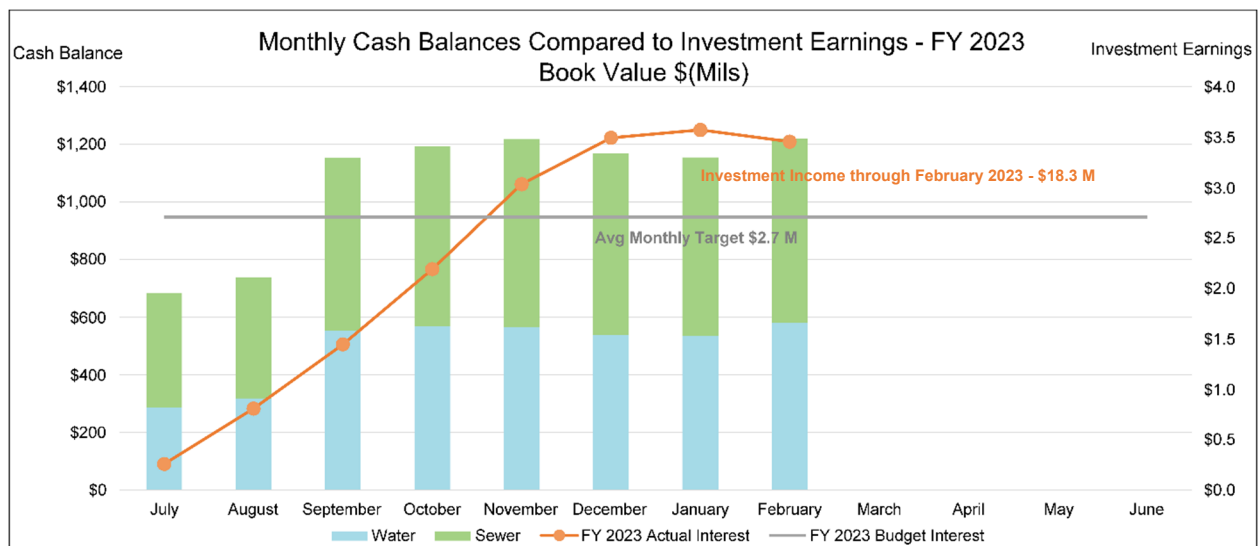
Monthly Cash Balances Compared to Investment Income

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 February 2023, GLWA earned investment income of \$3.5 million and cumulative FY 2023 earnings through February 2023 of \$18.3 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 February 2023



\$(Mils)	July	August	September	October	November	December	January	February	March	April	May	June
Water	\$287	\$318	553	570	564	538	535	581	-	-	-	-
Sewer	\$397	\$418	599	624	654	631	619	640	-	-	-	-
Total	\$684	\$737	1,152	1,194	1,219	1,169	1,154	1,221	-	-	-	-
Investment Income	\$0.3	\$0.8	\$1.4	\$2.2	\$3.0	\$3.5	\$3.6	\$3.5	\$0.0	\$0.0	\$0.0	\$0.0

Cash Balance Detail

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

Funds Held Within Trust:

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

Funds Held Outside Trust:

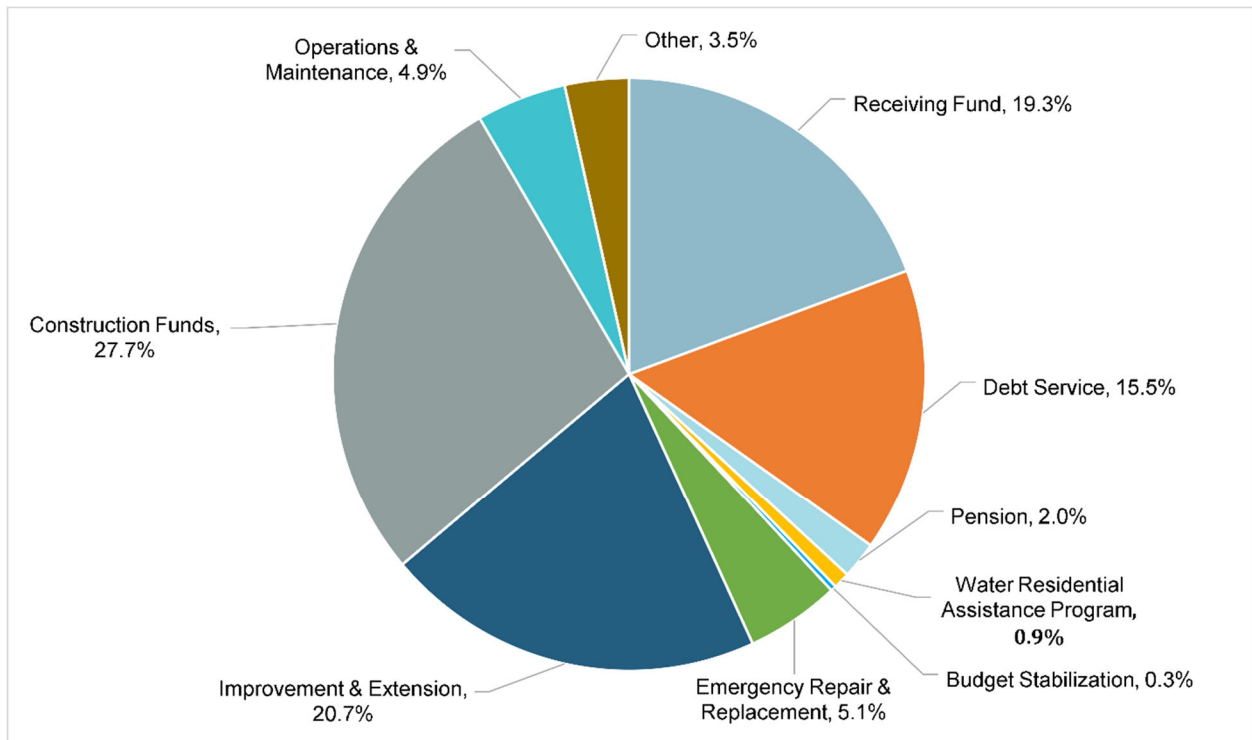
- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors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

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

Chart 2 – Cash Balances - Water Funds as of February 2023 - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of February 28, 2023 is \$581 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.

GLWA completed a bond transaction of \$225 million in September 2022 to support water system improvements. These funds along with I&E and SRF low-interest loans will fund the capital program going forward.

Chart 2 – Cash Balances - Water Funds as of February 2023

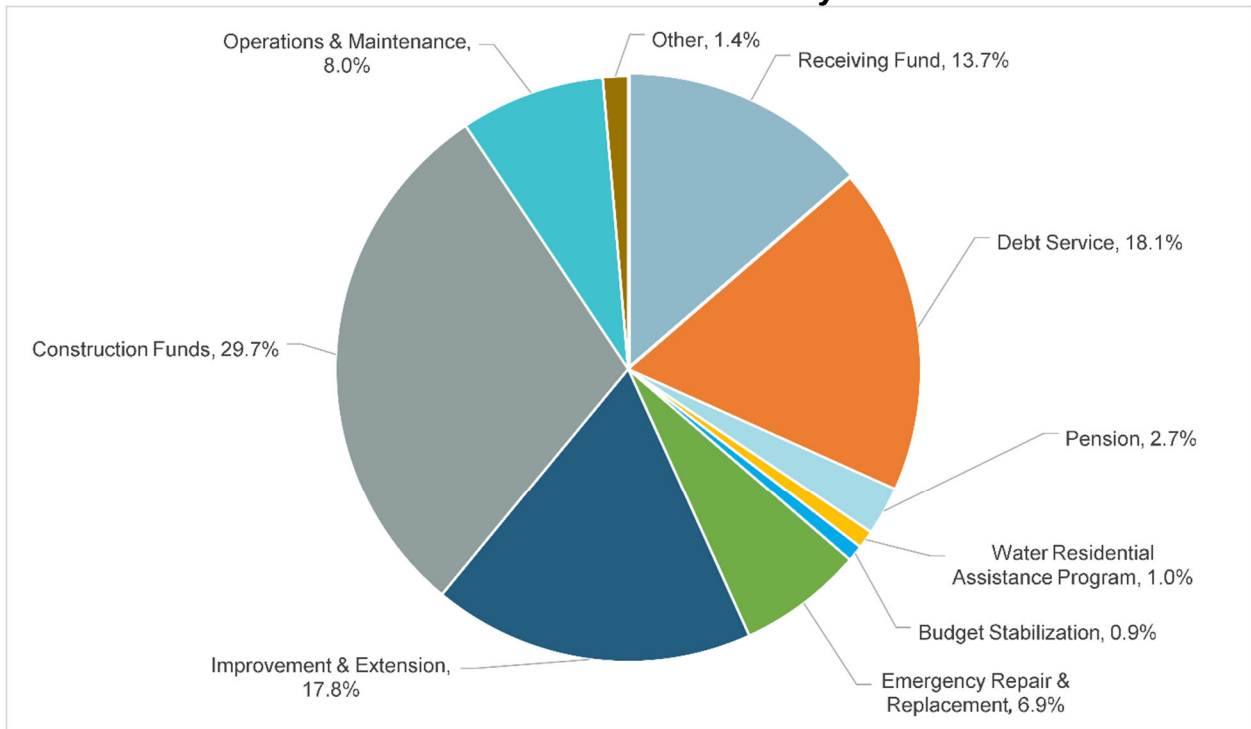


Note: Due to rounding totals may not equal 100%.

Chart 3 – Cash Balances - Sewer Funds as of February 2023 - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of February 28, 2023 is \$640 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.

In conjunction with the Water Fund transaction, GLWA completed a bond transaction of \$225 million in September 2022 to support sewage disposal system improvements. These funds along with I&E and SRF low-interest loans will fund the capital program going forward.

Chart 3 – Cash Balances - Sewer Funds as of February 2023



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 2023 water usage and billed revenue which are provided by DWSD staff. As of February 28, 2023, the DWSD usage was at 109.81% of the budget and billed revenue was at 106.33% 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 2023 - Original Budget		FY 2023 - Actual		FY 2023 - Variance		FY 2022 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	257,000	11,956,000	244,749	9,490,589	(12,251)	(2,465,411)	266,704	10,064,683
August	248,900	11,711,000	277,313	13,301,941	28,413	1,590,941	264,644	9,994,589
September	218,600	10,776,000	234,806	11,591,601	16,206	815,601	232,348	9,169,300
October	198,900	10,184,900	239,062	11,730,809	40,162	1,545,909	204,290	8,422,092
November	194,500	9,954,500	212,663	10,706,519	18,163	752,019	209,830	8,544,611
December	193,700	9,902,000	222,502	11,073,513	28,802	1,171,513	204,072	8,442,152
January	198,600	10,050,700	227,748	11,257,742	29,148	1,207,042	221,369	8,819,430
February	190,400	9,842,000	208,568	10,569,468	18,168	727,468	204,489	8,438,300
March	204,900	10,276,600					233,190	9,221,716
April	192,400	9,922,800					192,495	8,305,331
May	214,500	10,567,000					245,471	9,530,928
June	245,700	11,523,800					272,811	10,281,954
Total	2,558,100	126,667,300	1,867,411	89,722,182	166,811	5,345,082	2,751,713	109,235,086
Subtotals ytd	1,700,600	84,377,100	1,867,411	89,722,182	166,811	5,345,082		
Achievement of Budget			109.81%	106.33%				

(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
March	11,093,125	8,458,827	2,634,298	31.14%
April	7,431,900	7,536,272	(104,372)	-1.38%
May	7,660,852	7,365,204	295,648	4.01%
June	9,123,179	8,917,831	205,348	2.30%
July	8,518,373	8,387,705	130,668	1.56%
August	9,636,219	8,588,507	1,047,712	12.20%
September	5,082,383	8,041,683	(2,959,300)	-36.80%
October	13,082,744	8,512,614	4,570,130	53.69%
November	10,270,582	7,926,331	2,344,251	29.58%
December	11,630,994	8,121,586	3,509,408	43.21%
January	8,857,268	6,919,040	1,938,228	28.01%
February	8,244,713	10,156,126	(1,911,413)	-18.82%
Rolling, 12-Month Total	110,632,332	98,931,726		
Rolling, 12-Month Average	9,219,361	8,244,311		

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

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 2023 sewer billed revenue which are provided by DWSD staff. As of February 28, 2023, the DWSD usage was at 104.17% of the budget and billed revenue was at 100.92% 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 2023 - Original Budget		FY 2023 - Actual		FY 2023 - Variance		FY 2022 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	211,900	27,858,000	223,661	29,297,748	11,761	1,439,748	219,791	29,462,804
August	217,600	28,027,300	231,809	29,640,202	14,209	1,612,902	249,522	31,231,624
September	188,400	27,285,000	197,455	27,523,933	9,055	238,933	215,748	29,401,234
October	182,400	27,102,800	194,154	27,375,180	11,754	272,380	190,483	27,936,280
November	167,500	26,696,800	172,579	26,525,064	5,079	(171,736)	194,135	28,032,939
December	166,500	26,780,100	174,896	26,676,360	8,396	(103,740)	189,283	27,836,982
January	169,200	26,797,900	175,562	26,403,544	6,362	(394,356)	203,526	28,493,782
February	166,100	26,702,400	160,804	25,814,735	(5,296)	(887,665)	189,525	27,837,984
March	176,100	26,994,800					212,176	29,032,277
April	166,400	26,761,800					179,291	27,196,557
May	182,100	27,166,400					220,082	29,382,758
June	210,600	27,861,300					242,746	30,704,517
Total	2,204,800	326,034,600	1,530,920	219,256,766	61,320	2,006,466	2,506,308	346,549,738
Subtotals ytd	1,469,600	217,250,300	1,530,920	219,256,766		2,006,466		
Achievement of Budget/Goal			104.17%	100.92%				

(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
March	29,410,086	25,002,508	4,407,578	17.63%
April	22,115,076	21,196,170	918,906	4.34%
May	20,952,592	21,888,687	(936,095)	-4.28%
June	25,922,279	32,508,249	(6,585,970)	-20.26%
July	30,935,343	24,185,252	6,750,091	27.91%
August	26,064,896	25,036,198	1,028,698	4.11%
September	15,261,467	22,635,796	(7,374,329)	-32.58%
October	28,182,933	25,119,240	3,063,693	12.20%
November	21,994,899	23,505,249	(1,510,350)	-6.43%
December	23,756,153	24,880,743	(1,124,590)	-4.52%
January	23,760,629	23,020,491	740,138	3.22%
February	23,867,073	24,495,922	(628,849)	-2.57%
Rolling 12-Month Total	292,223,426	293,474,505		
Rolling, 12-Month Average	24,351,952	24,456,209		

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 February 28, 2023 with comparative totals from June 30, 2022, 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 held in check overall due to a consistent practice of adjusting the allowance for doubtful accounts monthly. 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 February 28, 2023 with comparative totals from February 28, 2022. 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 February 28, 2023 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	
June 30, 2022	\$ 39,022,000	\$ 300,346,000	\$ (253,924,000)	\$ 46,422,000	36	
February 28, 2023	\$ 37,724,000	\$ 325,977,000	\$ (263,562,000)	\$ 62,414,000	50	

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	A/R Balance
Residential	226,369	\$ 950.14	\$ 14,366,000 7.6%	\$ 9,389,000 5.0%	\$ 32,877,000 17.5%	\$ 131,282,000 69.9%	\$ 187,915,000 100.0%
Commercial	21,217	1,278.53	7,010,000 26.1%	2,530,000 9.4%	4,880,000 18.2%	12,394,000 46.2%	26,815,000 100.0%
Industrial	3,639	4,372.48	5,152,000 32.8%	1,229,000 7.8%	2,803,000 17.9%	6,513,000 41.5%	15,697,000 100.0%
Tax Exempt	3,823	780.31	533,000 17.9%	203,000 6.8%	491,000 16.4%	1,759,000 58.9%	2,987,000 100.0%
Government	49,419	303.60	7,307,000 30.8%	1,556,000 6.6%	2,659,000 11.2%	12,221,000 51.5%	23,744,000 100.0%
Drainage	32,559	858.17	2,449,000 8.7%	1,608,000 5.7%	4,345,000 15.5%	19,589,000 70.0%	27,991,000 100.0%
Subtotal - Active Accounts	337,026	\$ 846.16	\$ 36,817,000 12.9%	\$ 16,517,000 5.8%	\$ 48,056,000 16.9%	\$ 183,758,000 64.4%	\$ 285,148,000 100.0%
Inactive Accounts	325,880	126.24	79,000 0.2%	108,000 0.3%	300,000 0.7%	40,342,000 98.8%	40,829,000 100.0%
Total	662,906	\$ 493.59	\$ 36,896,000 11.3%	\$ 16,625,000 5.1%	\$ 48,355,000 14.8%	\$ 224,100,000 68.7%	\$ 325,977,000 100.0%
<i>% of Total A/R</i>							
Water Fund	244,859	275.87	\$ 9,931,000	\$ 4,036,000	\$ 10,267,000	\$ 43,315,000	\$ 67,548,000
Sewer Fund	282,142	915.95	\$ 26,966,000	\$ 12,589,000	\$ 38,088,000	\$ 180,785,000	\$ 258,428,000
Total February 28, 2023 (a)	662,906	493.59	\$ 36,896,000	\$ 16,625,000	\$ 48,355,000	\$ 224,100,000	\$ 325,977,000
Water Fund- Allowance							\$ (51,233,000)
Sewer Fund- Allowance							\$ (212,329,000)
Total Bad Debt Allowance							\$ (263,562,000)
Comparative - February 2022 (b)	643,804	435.78	\$ 34,856,000	\$ 15,794,000	\$ 43,390,000	\$ 186,520,000	\$ 280,560,000
Difference (a) - (b)	19,102		\$ 2,040,000	\$ 831,000	\$ 4,965,000	\$ 37,580,000	\$ 45,417,000

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023



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	87

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 2023 water billed usage and revenues. As of February 28, 2023, the billed usage was at 101.20% of the original plan and billed revenue at 100.74% of the original plan. Billings and usage from the City of Flint are included as they were assumed in the FY 2023 Budget.

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

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. Current year collections are trending above with the prior year for the twelve-month period ending February 28, 2023.

Table 1 – FY 2023 Wholesale Water Billings Report

WHOLESALE WATER CHARGES								
Month (1)	FY 2023 Charges (3)		FY 2023 - Actual		FY 2023 - Variance		FY 2022 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	1,565,900	33,114,500	1,664,936	34,349,872	99,036	1,235,372	1,342,686	29,642,785
August	1,513,500	32,632,400	1,418,347	31,555,444	(95,153)	(1,076,956)	1,417,142	30,604,230
September	1,271,200	29,674,600	1,308,481	30,306,713	37,281	632,113	1,298,750	29,065,588
October	1,033,200	27,094,600	1,055,245	27,391,089	22,045	296,489	1,006,217	26,123,483
November	901,100	25,815,700	906,669	25,911,801	5,569	96,101	905,525	25,117,181
December	986,900	26,357,900	990,177	26,652,607	23,277	294,707	958,879	25,542,432
January	954,300	26,296,700	979,573	26,536,114	25,273	239,414	979,803	25,791,405
February	877,900	25,580,400	869,843	25,535,320	(8,057)	(45,080)	875,553	24,800,493
March	965,300	26,359,200					963,825	25,592,186
April	907,300	25,855,100					912,124	25,139,078
May	1,086,000	27,886,200					1,094,002	27,116,529
June	1,470,200	32,090,900					1,385,287	30,301,351
Total	13,512,800	338,758,200	9,193,271	228,238,960	109,271	1,672,160	13,139,793	324,836,740
Subtotals ytd	9,084,000	226,566,800	9,193,271	228,238,960	109,271	1,672,160		
Achievement of Original Plan			101.20%	100.74%				
Billing Adjustments (4)			6,668	(147,399)				
			9,199,939	228,091,561				
			101.28%	100.67%				

(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 2023 water supply system charge schedule.

(4) Reflects prior period adjustments made in the current year for DTE Greenwood and Madison Heights.

Table 2 - Wholesale Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
March	22,123,572	20,854,506	1,269,066	6.09%
April	21,726,941	23,545,123	(1,818,182)	-7.72%
May	27,717,969	24,878,479	2,839,490	11.41%
June	26,379,503	25,403,968	975,535	3.84%
July	14,435,092	23,709,847	(9,274,755)	-39.12%
August	41,154,992	31,668,492	9,486,500	29.96%
September	21,887,632	23,849,618	(1,961,986)	-8.23%
October	38,029,648	29,212,277	8,817,371	30.18%
November	30,903,329	25,265,770	5,637,559	22.31%
December	34,298,469	25,302,369	8,996,100	35.55%
January	19,182,054	31,280,599	(12,098,545)	-38.68%
February	26,553,529	24,919,847	1,633,682	6.56%
Rolling 12-Month Total	324,392,729	309,890,895		
Rolling, 12-Month Average	27,032,727	25,824,241		

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

Wholesale Sewer Billings and Collections

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

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

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

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

Table 3 - Wholesale Sewer Billings shows the FY 2023 sewer billed revenue. As of February 28, 2023 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 in line with the twelve-month period ending February 28, 2023.

Table 3 – FY 2023 Wholesale Sewer Billings Report

WHOLESALE SEWER CHARGES								
Month (1)	FY 2023 Charges		FY 2023 - Actual		FY 2023 - Variance		FY 2022 - Actuals	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
August	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
September	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
October	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
November	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
December	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
January	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
February	N/A	22,888,100	N/A	22,888,100	N/A	-	N/A	22,615,000
March	N/A	22,888,100	N/A		N/A		N/A	22,615,000
April	N/A	22,888,100	N/A		N/A		N/A	22,615,000
May	N/A	22,888,100	N/A		N/A		N/A	22,615,000
June	N/A	22,888,100	N/A		N/A		N/A	22,615,000
Total		274,657,200		183,104,800		-		271,380,000
Subtotals ytd		183,104,800		183,104,800		-		
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
March	24,713,158	16,872,900	7,840,258	46.47%
April	19,937,558	22,368,124	(2,430,566)	-10.87%
May	10,226,700	28,128,933	(17,902,233)	-63.64%
June	29,659,245	15,972,800	13,686,445	85.69%
July	28,223,515	28,523,650	(300,135)	-1.05%
August	21,036,661	21,842,125	(805,464)	-3.69%
September	22,244,437	22,191,725	52,712	0.24%
October	24,707,249	26,706,558	(1,999,309)	-7.49%
November	19,882,939	16,534,758	3,348,181	20.25%
December	18,314,222	21,765,958	(3,451,736)	-15.86%
January	17,636,972	26,436,258	(8,799,286)	-33.28%
February	33,102,769	23,937,258	9,165,511	38.29%
Rolling 12-Month Total	269,685,425	271,281,047		
Rolling, 12-Month Average	22,473,785	22,606,754		

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

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 February 28, 2023, Highland Park had a delinquent balance of \$54.4 million, including \$40.8 million for wastewater treatment services, \$1.9 million for industrial waste control services, and \$11.8 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 2023 through February 28, 2023. 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

City of Highland Park Billings and Payments				
	Water	Sewer	IWC	Total
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
May 2022 Billing	96,254	446,400	4,009	546,663
May 2022 Payments	-	-	-	-
May 31, 2022 Balance	10,840,630	41,973,475	1,814,083	54,628,188
June 2022 Billing	100,820	446,400	4,002	551,222
June 2022 Payments	-	(1,788,828)	-	(1,788,828)
June 30, 2022 Balance	10,941,450	40,631,047	1,818,085	53,390,582
July 2022 Billing	104,262	446,400	4,002	554,664
July 2022 Payments	-	(126,056)	-	(126,056)
July 31, 2022 Balance	11,045,712	40,951,391	1,822,087	53,819,190
August 2022 Billing	112,017	451,700	4,082	567,799
August 2022 Payments	-	(117,079)	-	(117,079)
August 31, 2022 Balance	11,157,729	41,286,012	1,826,169	54,269,910
September 2022 Billing	113,427	451,700	4,025	569,152
September 2022 Payments	-	(144,837)	-	(144,837)
September 30, 2022 Balance	11,271,156	41,592,875	1,830,194	54,694,225
October 2022 Billing	106,220	451,700	4,026	561,946
October 2022 Payments	-	(133,899)	-	(133,899)
October 31, 2022 Balance	11,377,376	41,910,676	1,834,220	55,122,272
November 2022 Billing	106,221	451,700	4,026	561,947
November 2022 Payments	-	(492,789)	-	(492,789)
November 30, 2022 Balance	11,483,597	41,869,587	1,838,246	55,191,430
December 2022 Billing	103,645	451,700	4,025	559,370
December 2022 Payments	-	(641,773)	-	(641,773)
December 31, 2022 Balance	11,587,242	41,679,514	1,842,271	55,109,027
January 2023 Billing	99,260	451,700	3,997	554,957
January 2023 Payments	-	(1,341,522)	-	(1,341,522)
January 31, 2023 Balance	11,686,502	40,789,692	1,846,268	54,322,462
February 2023 Billing	106,448	451,700	3,998	562,146
February 2023 Payments	-	(434,682)	-	(434,682)
February 28, 2023 Balance	11,792,950	40,806,710	1,850,266	54,449,926

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

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 February 28, 2023.

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

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and Dearborn is the same summary *without* the past due balances for the City of Highland Park and Dearborn. Two water accounts comprise the past due balances over 46 days and were paid in full in March. One past due sewer account makes up the entire past due balance over 46 days and was paid in full in March.

The past due IWC account in the amount of \$4 thousand dollars was paid in full in March. One past due pollutant surcharge account totaling \$8 thousand was paid in full in March, the remaining past due balance consists of smaller account holders that GLWA staff continue to communicate with.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 56,444,864.36	\$ 39,134,153.69	\$ 1,217,619.76	\$ 1,171,309.79	\$ 14,921,781.12
Sewer	\$ 59,658,095.48	\$ 18,629,485.05	\$ 788,500.00	\$ 788,500.00	\$ 39,451,610.43
IWC	\$ 2,476,371.40	\$ 629,839.30	\$ 8,286.40	\$ 4,025.71	\$ 1,834,219.99
Pollutant Surcharge	\$ 468,525.56	\$ 451,865.28	\$ 12,395.20	\$ 1,328.89	\$ 2,936.19
Total	\$ 119,047,856.80	\$ 58,845,343.32	\$ 2,026,801.36	\$ 1,965,164.39	\$ 56,210,547.73
	100.00%	49.43%	1.70%	1.65%	47.22%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 44,651,913.93	\$ 38,822,225.24	\$ 1,113,974.02	\$ 1,065,089.36	\$ 3,650,625.31
Sewer	\$ 18,851,385.05	\$ 18,177,785.05	\$ 336,800.00	\$ 336,800.00	\$ -
IWC	\$ 626,105.85	\$ 621,845.16	\$ 4,260.69	\$ -	\$ -
Pollutant Surcharge	\$ 468,525.56	\$ 451,865.28	\$ 12,395.20	\$ 1,328.89	\$ 2,936.19
Total	\$ 64,597,930.39	\$ 58,073,720.73	\$ 1,467,429.91	\$ 1,403,218.25	\$ 3,653,561.50
	100.00%	89.90%	2.27%	2.17%	5.66%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 37,453,461.83	\$ 36,974,658.21	\$ 395,090.94	\$ 72,987.51	\$ 10,725.17
Sewer	\$ 18,851,385.05	\$ 18,177,785.05	\$ 336,800.00	\$ 336,800.00	\$ -
IWC	\$ 626,105.85	\$ 621,845.16	\$ 4,260.69	\$ -	\$ -
Pollutant Surcharge	\$ 468,525.56	\$ 451,865.28	\$ 12,395.20	\$ 1,328.89	\$ 2,936.19
Total	\$ 57,399,478.29	\$ 56,226,153.70	\$ 748,546.83	\$ 411,116.40	\$ 13,661.36
	100.00%	97.96%	1.30%	0.72%	0.02%

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 2023 reflects eight months of activity to date.

Water fund receipts exceeded required disbursements by 9% through February 28, 2023 compared to the four-year historical average ratio of required receipts exceeding disbursements by 11% since July 1, 2018.

Sewer fund receipts exceeded required disbursements by 7% through February 28, 2023 compared to the four-year historical average ratio of required receipts exceeding disbursements by 7% since July 1, 2018.

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 2019	FY 2020	FY 2021	FY 2022	FY 2023 Thru Feb 28
Water					
1 Receipts	\$ 336,594,234	\$ 332,606,196	\$ 336,642,021	\$ 338,117,694	\$ 245,952,821
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	336,594,234	332,606,196	336,642,021	338,117,694	245,952,821
4 Disbursements	(289,230,481)	(296,190,425)	(308,713,407)	(316,495,360)	(225,065,360)
5 Receipts Net of Required Transfers	47,363,753	36,415,771	27,928,614	21,622,334	20,887,461
6 I&E Transfer	(47,695,000)	(25,719,751)	(31,991,687)	(26,622,862)	(8,702,217)
7 Net Receipts	\$ (331,247)	\$ 10,696,020	\$ (4,063,073)	\$ (5,000,528)	\$ 12,185,244
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	116%	112%	109%	107%	109%
Sewer					
9 Receipts	\$ 467,743,744	\$ 490,461,356	\$ 472,871,853	\$ 471,979,297	\$ 327,802,644
10 MOU Adjustments	-	-	-	-	-
11 Adjusted Receipts	467,743,744	490,461,356	472,871,853	471,979,297	327,802,644
12 Disbursements	(453,406,636)	(445,604,952)	(436,600,883)	(450,701,751)	(305,861,155)
13 Receipts Net of Required Transfers	14,337,108	44,856,404	36,270,970	21,277,546	21,941,489
14 I&E Transfer	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)	(11,440,334)
15 DWSD Shortfall Advance	-	-	-	-	-
16 Shortfall Repayment (principal)	9,367,355	17,542,669	18,206,431	8,296,578	-
17 Net Receipts	\$ 1,156,763	\$ 43,302,873	\$ 13,972,674	\$ (8,077,664)	\$ 10,501,155
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	103%	110%	108%	105%	107%
Combined					
19 Receipts	\$ 804,337,978	\$ 823,067,552	\$ 809,513,874	\$ 810,096,991	\$ 573,755,465
20 MOU Adjustments	-	-	-	-	-
21 Adjusted Receipts	804,337,978	823,067,552	809,513,874	810,096,991	573,755,465
22 Disbursements	(742,637,117)	(741,795,377)	(745,314,290)	(767,197,111)	(530,926,515)
23 Receipts Net of Required Transfers	61,700,861	81,272,175	64,199,584	42,899,880	42,828,950
24 I&E Transfer	(70,242,700)	(44,815,951)	(72,496,414)	(64,274,650)	(20,142,551)
25 Shortfall Advance	-	-	-	-	-
26 Shortfall Repayment	9,367,355	17,542,669	18,206,431	8,296,578	-
27 Net Receipts	\$ 825,516	\$ 53,998,893	\$ 9,909,601	\$ (13,078,192)	\$ 22,686,399
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	108%	111%	109%	106%	108%

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 26, 2023

Chart 1 – GLWA 12-Month Net Receipts – Water

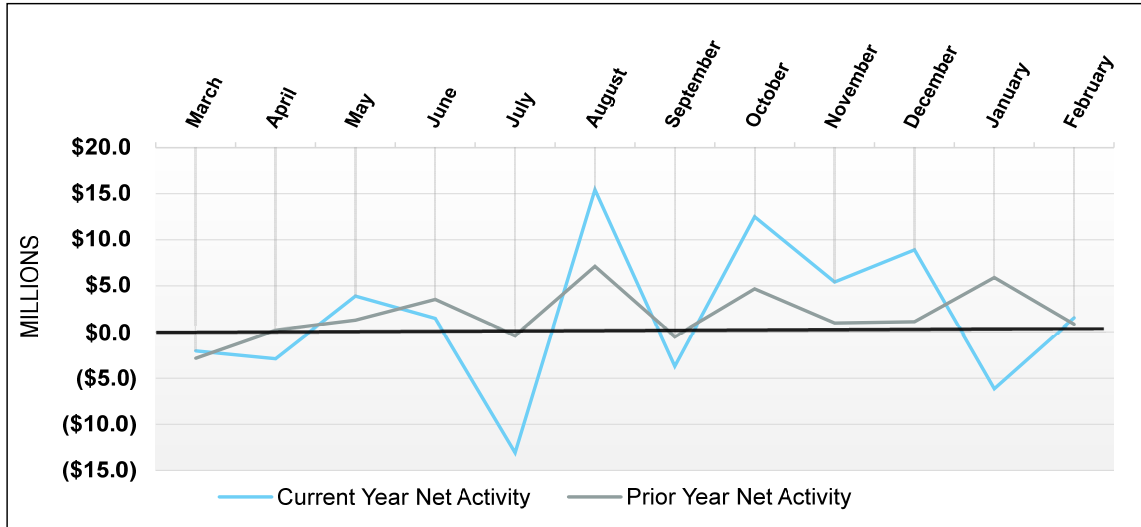
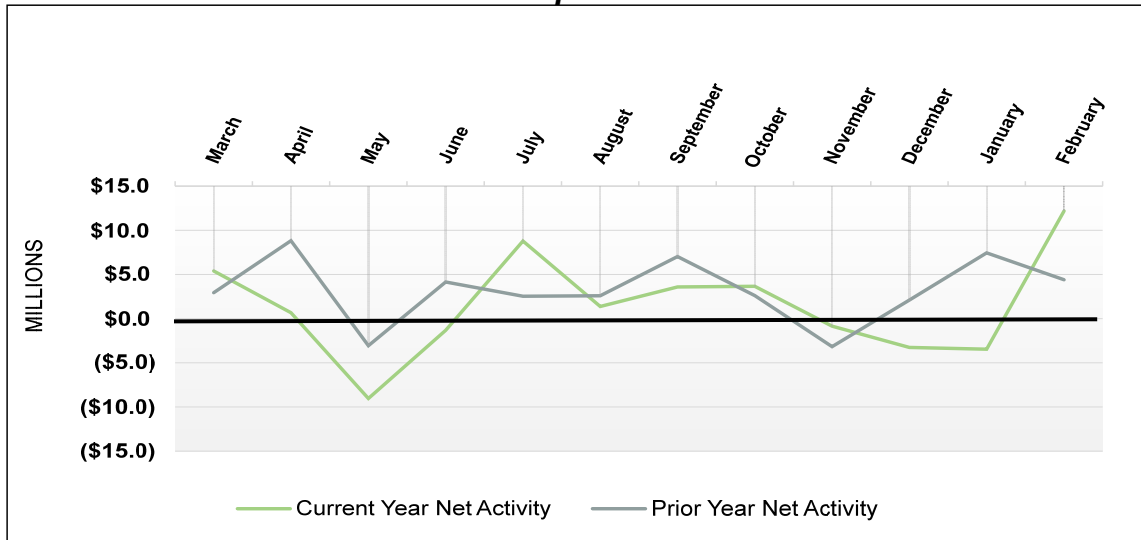


Chart 2 – GLWA 12-Month Net Receipts – Sewer



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 2023 reflects eight months of activity to date.

Water fund receipts exceeded required disbursements by 1% through February 28, 2023 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2018.

Sewer fund receipts exceeded required disbursements by 3% through February 28, 2023 compared to the four-year historical average of required receipts exceeding disbursements by 1% since July 1, 2018.

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

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023 Thru Feb 28
Water					
1 Receipts	\$ 99,868,219	\$ 96,885,723	\$ 102,067,423	\$ 101,964,963	\$ 77,940,439
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	99,868,219	96,885,723	102,067,423	101,964,963	77,940,439
4 Disbursements	(97,694,600)	(97,823,097)	(100,707,200)	(94,495,601)	(77,199,335)
5 Receipts Net of Required Transfers	2,173,619	(937,374)	1,360,223	7,469,362	741,104
6 I&E Transfer	(8,407,080)	-	-	-	-
7 Net Receipts	\$ (6,233,461)	\$ (937,374)	\$ 1,360,223	\$ 7,469,362	\$ 741,104
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	102%	99%	101%	108%	101%
Sewer					
9 Receipts	\$ 265,339,797	\$ 264,689,559	\$ 308,210,767	\$ 291,280,896	\$ 196,399,720
10 MOU Adjustments	6,527,200	-	-	-	-
11 Adjusted Receipts	271,866,997	264,689,559	308,210,767	291,280,896	196,399,720
12 Disbursements	(271,018,306)	(275,507,374)	(295,100,771)	(285,256,000)	(190,143,571)
13 Receipts Net of Required Transfers	848,691	(10,817,815)	13,109,996	6,024,896	6,256,149
14 I&E Transfer	-	-	-	-	-
15 Shortfall Advance from GLWA	-	-	-	-	-
16 Net Receipts	\$ 848,691	\$ (10,817,815)	\$ 13,109,996	\$ 6,024,896	\$ 6,256,149
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	100%	96%	104%	102%	103%
Combined					
18 Receipts	\$ 365,208,016	\$ 361,575,282	\$ 410,278,190	\$ 393,245,859	\$ 274,340,159
19 MOU Adjustments	6,527,200	-	-	-	-
20 Adjusted Receipts	371,735,216	361,575,282	410,278,190	393,245,859	274,340,159
21 Disbursements	(368,712,906)	(373,330,471)	(395,807,971)	(379,751,601)	(267,342,906)
22 Receipts Net of Required Transfers	3,022,310	(11,755,189)	14,470,219	13,494,258	6,997,253
23 I&E Transfer	(8,407,080)	-	-	-	-
24 Shortfall Advance from GLWA	-	-	-	-	-
25 Net Receipts	\$ (5,384,770)	\$ (11,755,189)	\$ 14,470,219	\$ 13,494,258	\$ 6,997,253
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	101%	97%	104%	104%	103%

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.

Chart 3 – DWSD 12-Month Net Receipts – Water

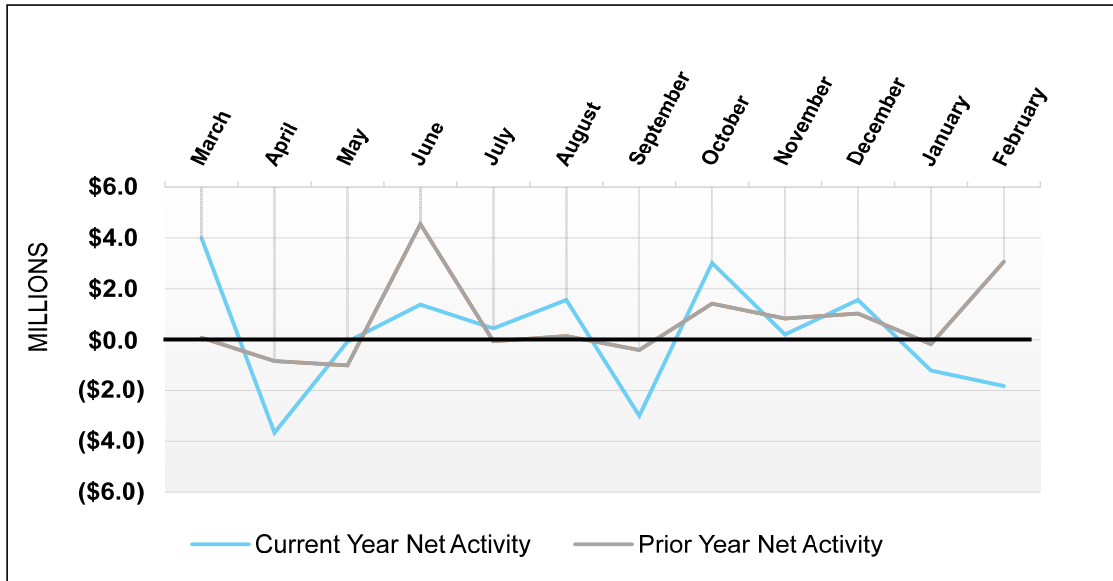
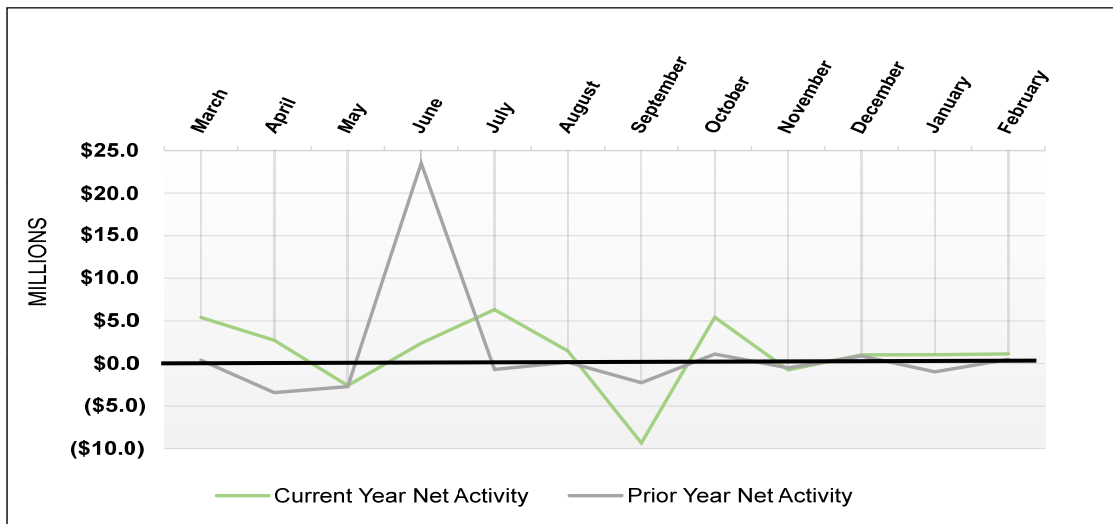


Chart 4 – DWSD 12-Month Net Receipts – Sewer



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 3 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year. Fiscal year 2023 reflects eight months of activity to date.

Water fund net receipts exceeded required disbursements by 7% through February 28, 2023 compared to the four-year historical average ratio of required receipts exceeding disbursements by 9% since July 1, 2018.

Sewer fund receipts exceeded required disbursements by 6% through February 28, 2023 compared to the four-year historical average ratio of required receipts exceeding disbursements by 4% since July 1, 2018.

Table 3 – Combined Net Cash Flows from Trust Receipts & Disbursements

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023 Thru Feb 28
Water					
1 Receipts	\$ 436,462,453	\$ 429,491,919	\$ 438,709,444	\$ 440,082,657	\$ 323,893,260
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	436,462,453	429,491,919	438,709,444	440,082,657	323,893,260
4 Disbursements	(386,925,081)	(394,013,522)	(409,420,607)	(410,990,961)	(302,264,695)
5 Receipts Net of Required Transfers	49,537,372	35,478,397	29,288,837	29,091,696	21,628,565
6 I&E Transfer	(56,102,080)	(25,719,751)	(31,991,687)	(26,622,862)	(8,702,217)
7 Net Receipts	\$ (6,564,708)	\$ 9,758,646	\$ (2,702,850)	\$ 2,468,834	\$ 12,926,348
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	113%	109%	107%	107%	107%
Sewer					
9 Receipts	\$ 733,083,541	\$ 755,150,915	\$ 781,082,620	\$ 763,260,193	\$ 524,202,364
10 MOU Adjustments	6,527,200	-	-	-	-
11 Adjusted Receipts	739,610,741	755,150,915	781,082,620	763,260,193	524,202,364
12 Disbursements	(724,424,942)	(721,112,326)	(731,701,654)	(735,957,751)	(496,004,726)
13 Receipts Net of Required Transfers	15,185,799	34,038,589	49,380,966	27,302,442	28,197,638
14 I&E Transfer	(22,547,700)	(19,096,200)	(40,504,727)	(37,651,788)	(11,440,334)
15 Shortfall Advance	-	-	-	-	-
16 Shortfall Repayment (principal)	9,367,355	17,542,669	18,206,431	8,296,578	-
17 Net Receipts	\$ (7,361,901)	\$ 32,485,058	\$ 27,082,670	\$ (2,052,768)	\$ 16,757,304
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	102%	105%	107%	104%	106%
Combined					
19 Receipts	\$ 1,169,545,994	\$ 1,184,642,834	\$ 1,219,792,064	\$ 1,203,342,850	\$ 848,095,624
20 MOU Adjustments	6,527,200	-	-	-	-
21 Adjusted Receipts	1,176,073,194	1,184,642,834	1,219,792,064	1,203,342,850	848,095,624
22 Disbursements	(1,111,350,023)	(1,115,125,848)	(1,141,122,261)	(1,146,948,712)	(798,269,421)
23 Receipts Net of Required Transfers	64,723,171	69,516,986	78,669,803	56,394,138	49,826,203
24 I&E Transfer	(78,649,780)	(44,815,951)	(72,496,414)	(64,274,650)	(20,142,551)
25 Shortfall Advance	-	-	-	-	-
26 Shortfall Repayment	9,367,355	17,542,669	18,206,431	8,296,578	-
27 Net Receipts	\$ (4,559,254)	\$ 42,243,704	\$ 24,379,820	\$ 416,066	\$ 29,683,652
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	106%	106%	107%	105%	106%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$202,652.05	\$202,652.05	\$0.00	\$0.00	\$0.00
ALMONT VILLAGE	\$20,820.90	\$20,820.90	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$68,587.81	\$68,587.81	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$28,231.85	\$28,231.85	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$62,622.61	\$62,622.61	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$309,146.10	\$309,146.10	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$ (28,206.03)	\$0.00	\$ (28,206.03)	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$27,945.35	\$27,945.35	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$925,642.35	\$925,642.35	\$0.00	\$0.00	\$0.00
CENTER LINE	\$84,078.82	\$84,078.82	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$739,253.03	\$739,253.03	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$647,658.45	\$647,658.45	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$584,473.76	\$584,473.76	\$0.00	\$0.00	\$0.00
DEARBORN	\$7,198,452.10	\$1,847,567.03	\$718,883.08	\$992,101.85	\$3,639,900.14
DEARBORN HEIGHTS	\$671,012.52	\$671,012.52	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$289,512.97	\$289,512.97	\$0.00	\$0.00	\$0.00
ECORSE	\$118,318.17	\$118,318.17	\$0.00	\$0.00	\$0.00
FARMINGTON	\$86,503.87	\$86,503.87	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$1,479,286.03	\$1,479,286.03	\$0.00	\$0.00	\$0.00
FERNDALE	\$178,113.31	\$178,113.31	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$112,482.64	\$112,482.64	\$0.00	\$0.00	\$0.00
FLINT	\$415,650.19	\$415,650.19	\$0.00	\$0.00	\$0.00
FRASER	\$210,156.70	\$210,156.70	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GARDEN CITY	\$134,888.04	\$134,888.04	\$0.00	\$0.00	\$0.00
GENESEE COUNTY DRAIN COMM	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$28,901.62	\$28,901.62	\$0.00	\$0.00	\$0.00
GREATER LAPEER CUA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GREENWOOD TWP. (DTE)	\$86,058.86	\$86,058.86	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$108,274.09	\$108,274.09	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$106,026.97	\$106,026.97	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$48,069.07	\$48,069.07	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$104,828.69	\$104,828.69	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$305,855.95	\$150,070.65	\$72,072.62	\$72,987.51	\$10,725.17
HARPER WOODS	\$77,774.15	\$77,774.15	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$141,861.54	\$141,861.54	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$65,120.67	\$65,120.67	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$11,792,950.43	\$311,928.45	\$103,645.74	\$106,220.43	\$11,271,155.81
HURON TOWNSHIP	\$173,460.06	\$173,460.06	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$115,484.94	\$115,484.94	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP (CHAMPION BUS	\$803.22	\$803.22	\$0.00	\$0.00	\$0.00
INKSTER	\$122,565.42	\$122,565.42	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$53,029.00	\$53,029.00	\$0.00	\$0.00	\$0.00
LAPEER	\$130,631.66	\$130,631.66	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$54,252.57	\$54,252.57	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LINCOLN PARK	\$443,468.17	\$440,093.17	\$3,375.00	\$0.00	\$0.00
LIVONIA	\$938,883.32	\$938,883.32	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$1,053,899.31	\$1,053,899.31	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$183,429.50	\$183,429.50	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP (KAMAX)	\$3,696.54	\$3,696.54	\$0.00	\$0.00	\$0.00
MELVINDALE	\$128,727.88	\$128,727.88	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$33,777.98	\$33,777.98	\$0.00	\$0.00	\$0.00
NOCWA	\$3,722,265.15	\$3,722,265.15	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$66,241.47	\$66,241.47	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$446,651.62	\$446,651.62	\$0.00	\$0.00	\$0.00
NOVI	\$1,509,314.65	\$1,509,314.65	\$0.00	\$0.00	\$0.00
OAK PARK	\$122,089.82	\$122,089.82	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$13,666.00	\$13,666.00	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$90,078.74	\$90,078.74	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$370,305.09	\$370,305.09	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$277,951.18	\$277,951.18	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$62,701.06	\$62,701.06	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$77,571.37	\$77,571.37	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$23,990.48	\$23,990.48	\$0.00	\$0.00	\$0.00
ROMEO	\$37,565.48	\$37,565.48	\$0.00	\$0.00	\$0.00
ROMULUS	\$1,060,149.88	\$712,300.53	\$347,849.35	\$0.00	\$0.00
ROSEVILLE	\$235,745.15	\$235,745.15	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$34,463.38	\$34,463.38	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SHELBY TOWNSHIP	\$2,296,913.75	\$2,296,913.75	\$0.00	\$0.00	\$0.00
SOCWA	\$3,864,127.90	\$3,864,127.90	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$10,424.62	\$10,424.62	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$197,546.16	\$197,546.16	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$287,782.85	\$287,782.85	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$2,528,968.36	\$2,528,968.36	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$63,871.90	\$63,871.90	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$20,915.64	\$20,915.64	\$0.00	\$0.00	\$0.00
TAYLOR	\$431,211.91	\$431,211.91	\$0.00	\$0.00	\$0.00
TRENTON	\$145,102.09	\$145,102.09	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,091,805.43	\$1,091,805.43	\$0.00	\$0.00	\$0.00
UTICA	\$48,393.59	\$48,393.59	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$294,553.75	\$294,553.75	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$134,505.96	\$134,505.96	\$0.00	\$0.00	\$0.00
WARREN	\$903,637.53	\$903,637.53	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$187,387.72	\$187,387.72	\$0.00	\$0.00	\$0.00
WAYNE	\$280,980.57	\$280,980.57	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,777,239.98	\$1,777,239.98	\$0.00	\$0.00	\$0.00
WESTLAND	\$560,633.25	\$560,633.25	\$0.00	\$0.00	\$0.00
WIXOM	\$198,499.97	\$198,499.97	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$280,143.32	\$280,143.32	\$0.00	\$0.00	\$0.00
YCUA	\$1,820,352.39	\$1,820,352.39	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOTAL WATER ACCOUNTS	\$56,444,864.36	\$39,134,153.69	\$1,217,619.76	\$1,171,309.79	\$14,921,781.12

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$86,899.50	\$86,899.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$3,016,300.00	\$3,016,300.00	\$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	\$1,010,400.00	\$336,800.00	\$336,800.00	\$336,800.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$40,806,710.43	\$451,700.00	\$451,700.00	\$451,700.00	\$39,451,610.43
MELVINDALE	\$131,200.00	\$131,200.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,864,800.00	\$3,864,800.00	\$0.00	\$0.00	\$0.00
OMID	\$6,053,885.55	\$6,053,885.55	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$22,600.00	\$22,600.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,660,900.00	\$4,660,900.00	\$0.00	\$0.00	\$0.00
SOUTH MACOMB SANITATION DIST	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,400.00	\$4,400.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$59,658,095.48	\$18,629,485.05	\$788,500.00	\$788,500.00	\$39,451,610.43

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,623.53	\$1,623.53	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$11,550.87	\$11,550.87	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$1,959.24	\$1,959.24	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$397.38	\$397.38	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,182.62	\$3,182.62	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$1,005.98	\$1,005.98	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$1,088.32	\$1,088.32	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$4,874.17	\$4,874.17	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$3,281.07	\$3,281.07	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$3,458.28	\$3,401.00	\$57.28	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,768.60	\$7,768.60	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$85.92	\$85.92	\$0.00	\$0.00	\$0.00
CENTER LINE	\$5,481.47	\$5,480.98	\$0.49	\$0.00	\$0.00
CHARTER TOWNSHIP OF INDEPENI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$25,901.30	\$25,901.30	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$202.27	\$202.27	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$17,935.80	\$17,935.80	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,750.05	\$3,750.05	\$0.00	\$0.00	\$0.00
CLARKSTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$69.78	\$69.78	\$0.00	\$0.00	\$0.00
CLAWSON	\$6,270.89	\$6,270.89	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$27,505.14	\$27,505.14	\$0.00	\$0.00	\$0.00
DEARBORN	\$37,641.91	\$37,641.91	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
DEARBORN HEIGHTS	\$9,716.12	\$9,716.12	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$107.40	\$107.40	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$6,499.49	\$6,499.49	\$0.00	\$0.00	\$0.00
FARMINGTON	\$4,065.09	\$4,065.09	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$50,535.28	\$50,535.28	\$0.00	\$0.00	\$0.00
FRASER	\$9,988.20	\$9,988.20	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$4,048.98	\$4,048.98	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,591.31	\$1,591.31	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,103.25	\$2,103.25	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,190.35	\$1,190.35	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,996.46	\$2,996.46	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$12,608.76	\$8,405.84	\$4,202.92	\$0.00	\$0.00
HARPER WOODS	\$1,807.90	\$1,807.90	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$617.55	\$617.55	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,375.94	\$3,375.94	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,850,265.55	\$7,994.14	\$4,025.71	\$4,025.71	\$1,834,219.99
HUNTINGTON WOODS	\$288.19	\$288.19	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$1,286.37	\$1,286.37	\$0.00	\$0.00	\$0.00
INKSTER	\$11,198.24	\$11,198.24	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$1,421.26	\$1,421.26	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,415.89	\$1,415.89	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LENOX TOWNSHIP	\$655.14	\$655.14	\$0.00	\$0.00	\$0.00
LIVONIA	\$41,186.11	\$41,186.11	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$207.64	\$207.64	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$3,540.62	\$3,540.62	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$619.34	\$619.34	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$2,357.43	\$2,357.43	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NOVI	\$17,878.52	\$17,878.52	\$0.00	\$0.00	\$0.00
OAK PARK	\$7,340.79	\$7,340.79	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$916.48	\$916.48	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$683.78	\$683.78	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$4,090.15	\$4,090.15	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$499.80	\$499.80	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,050.73	\$1,050.73	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,267.32	\$1,267.32	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$551.32	\$551.32	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$7,854.52	\$7,854.52	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$137.83	\$137.83	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$12,714.37	\$12,714.37	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$18,907.77	\$18,907.77	\$0.00	\$0.00	\$0.00
ROMULUS	\$787.60	\$787.60	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,876.69	\$14,876.69	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ROYAL OAK	\$13,854.60	\$13,854.60	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$1,822.22	\$1,822.22	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$15,138.03	\$15,138.03	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$28,869.12	\$28,869.12	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,361.62	\$3,361.62	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$12,204.22	\$12,204.22	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$32,288.02	\$32,288.02	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$773.28	\$773.28	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$38,218.29	\$38,218.29	\$0.00	\$0.00	\$0.00
UTICA	\$3,080.59	\$3,080.59	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$132.46	\$132.46	\$0.00	\$0.00	\$0.00
VILLAGE OF LAKE ORION	\$1,618.16	\$1,618.16	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADMI	\$3,189.05	\$3,189.05	\$0.00	\$0.00	\$0.00
WAYNE	\$5,053.17	\$5,053.17	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$12,902.78	\$12,902.78	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) A	\$492.25	\$492.25	\$0.00	\$0.00	\$0.00
WESTLAND	\$23,087.42	\$23,087.42	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOTAL IWC ACCOUNTS	\$2,476,371.40	\$629,839.30	\$8,286.40	\$4,025.71	\$1,834,219.99

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY (MINNESOTA MINING	\$2,074.84	\$2,074.84	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$944.08	\$944.08	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$143.57	\$143.57	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$ (37.27)	\$0.00	\$ (37.27)	\$0.00	\$0.00
ADORING PET FUNERAL HOME	\$69.34	\$69.34	\$0.00	\$0.00	\$0.00
ADVANCE ENGINEERING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$547.68	\$547.68	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$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.	\$6,168.29	\$6,168.29	\$0.00	\$0.00	\$0.00
APPLIED TECHNOLOGY INDUSTRIE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$5.33	\$5.33	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$4.20	\$4.20	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$7.69	\$7.69	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$137.26	\$137.26	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$44.85	\$44.85	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BATCH BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAYS MICHIGAN CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$37.00	\$0.00	\$0.00	\$0.00	\$37.00
BETTER MADE SNACK FOOD	\$22,631.83	\$22,631.83	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$121.33	\$118.59	\$2.74	\$0.00	\$0.00
BREW DETROIT	\$5,306.31	\$5,306.31	\$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	\$20,683.23	\$20,683.23	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$105.68	\$26.45	\$13.80	\$25.30	\$40.13
CINTAS CORP. - MACOMB TWP.	\$21,271.53	\$21,271.53	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$8,278.59	\$0.00	\$8,278.59	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$3.42	\$3.42	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLEAN EARTH OF MICHIGAN, LLC	\$78.73	\$78.73	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$ (572.05)	\$0.00	\$ (572.05)	\$0.00	\$0.00
DANA CONTAINER, INC.	\$2,150.27	\$2,150.27	\$0.00	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$6,344.13	\$6,344.13	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$288.09	\$288.09	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$51.28	\$18.85	\$0.00	\$0.00	\$32.43
DEARBORN SAUSAGE	\$9,024.57	\$9,024.57	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$11,880.87	\$11,880.87	\$0.00	\$0.00	\$0.00
DETROIT BEER CO.	\$71.65	\$71.65	\$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	\$681.01	\$681.01	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$6.71	\$6.71	\$0.00	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$265.30	\$265.30	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$105.37	\$105.37	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$467.67	\$467.67	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$2,820.39	\$2,820.39	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$32.07	\$32.07	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
DUBOIS CHEMICALS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
E & E MANUFACTURING CO, PLAN	\$44.19	\$44.19	\$0.00	\$0.00	\$0.00
E & E MANUFACTURING CO, PLAN	\$99.41	\$99.41	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$4,114.77	\$4,114.77	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP?	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$380.02	\$380.02	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$1,529.73	\$1,529.73	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (0.59)	\$0.00	\$0.00	\$0.00	\$ (0.59)
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CL?	\$1,583.93	\$1,583.93	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$339.77	\$339.77	\$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.	\$7,136.36	\$7,136.36	\$0.00	\$0.00	\$0.00
FITZGERALD FINISHING LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FIVES CINETIC CORP.	\$1,714.55	\$1,714.55	\$0.00	\$0.00	\$0.00
FORD NEW MODEL PROGRAM	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$12.68	\$12.68	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$450.71	\$450.71	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$4,143.96	\$4,143.96	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GENERAL MOTORS, LLC ROMULUS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$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
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	\$2,178.71	\$1,173.90	\$385.76	\$618.05	\$1.00
HENKEL CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HENRY FORD MACOMB HOSPITAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOME STYLE FOOD INC.	\$1,630.05	\$1,630.05	\$0.00	\$0.00	\$0.00
HOMEGROWN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HUNTINGTON CLEANERS	\$176.68	\$176.68	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$532.02	\$532.02	\$0.00	\$0.00	\$0.00
INTRASTATE DISTRIBUTORS	\$785.86	\$785.86	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$663.98	\$663.98	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JELD-WEN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$1,317.68	\$1,142.34	\$175.34	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LA MICHOACANA FLOUR TORTILLA	\$1,014.21	\$1,014.21	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$39.40	\$39.40	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$1,310.80	\$0.00	\$1,310.80	\$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 OF ILLI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LIQUID ENVIRONMENTAL SOLUTIC	\$974.80	\$974.80	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$452.87	\$452.87	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$503.65	\$503.65	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$31.54	\$0.00	\$31.54	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$201.38	\$111.88	\$67.13	\$22.37	\$0.00
METROPOLITAN BAKERY	\$843.10	\$795.71	\$47.39	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$119,431.68	\$119,431.68	\$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	\$635.55	\$635.55	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$1,149.70	\$1,149.70	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$(13.65)	\$0.00	\$0.00	\$0.00	\$(13.65)
MOTOR CITY BREWING WORKS	\$13.81	\$13.81	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
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 & MEZ	\$8.35	\$8.35	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$110.96	\$110.96	\$0.00	\$0.00	\$0.00
OLIVER HATCH CONSTRUCTION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$28.54	\$28.54	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$17,238.94	\$17,238.94	\$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
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$30.79	\$12.60	\$18.19	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$41,785.39	\$41,785.39	\$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	\$2,079.37	\$0.00	\$2,079.37	\$0.00	\$0.00
PREMIER PLATING- STERLING HE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUAKER HOUGHTON - PLANT #2	\$355.89	\$127.90	\$21.65	\$47.23	\$159.11

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
QUAKER HOUGHTON - PLANT #2	\$218.00	\$66.62	\$18.70	\$33.46	\$99.22
QUAKER HOUGHTON - PLANT #2	\$5,106.84	\$3,162.80	\$524.48	\$545.15	\$874.41
QUALA SERVICES, LLC	\$57.82	\$57.82	\$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
ROAK BREWING CO. LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$138.62	\$138.62	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$2,048.01	\$1,181.66	\$0.00	\$0.00	\$866.35
ROYAL OAK BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RTT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SEAFARE FOODS, INC.	\$72.59	\$72.59	\$0.00	\$0.00	\$0.00
SECOND NATURE (SANDERS)	\$20,594.82	\$20,594.82	\$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.- MADISON HEIGH	\$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	\$46.62	\$46.62	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$120.43	\$120.43	\$0.00	\$0.00	\$0.00
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE DEBURRING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THERMO FISHER SCIENTIFIC	\$29,159.18	\$29,159.18	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOM LAUNDRY CLEANERS	\$0.56	\$0.56	\$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.	\$572.33	\$572.33	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$49,385.53	\$49,385.53	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,738.02	\$2,738.02	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$0.80	\$0.80	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$318.97	\$318.97	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$599.09	\$599.09	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$2,746.33	\$2,746.33	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$2,586.30	\$2,586.30	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$674.12	\$674.12	\$0.00	\$0.00	\$0.00
VALICOR ENVIRONMENTAL SERVIC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
VAUGHAN INDUSTRIES, INC.	\$75.22	\$75.22	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$4,998.10	\$4,998.10	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$526.50	\$526.50	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$128.60	\$62.23	\$29.04	\$37.33	\$0.00
WIGLEY'S MEAT PROCESS	\$490.02	\$490.02	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$1,004.64	\$1,004.64	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 02/28/23

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WINTER SAUSAGE MFG. CO.	\$201.37	\$201.37	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$1,616.48	\$1,616.48	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,152.49	\$2,152.49	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$144.24	\$0.00	\$0.00	\$0.00	\$144.24
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$468,525.56	\$451,865.28	\$12,395.20	\$1,328.89	\$2,936.19

City of Highland Park Billings and Collections

	<u>Water</u>	<u>Sewer</u>	<u>IWC</u>	<u>Cumulative Total</u>
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	<u>(65,652)</u>	<u>(2,206,211)</u>	<u>-</u>	<u>(2,271,863)</u>
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	<u>-</u>	<u>(1,612,633)</u>	<u>-</u>	<u>(1,612,633)</u>
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	<u>-</u>	<u>(1,444,623)</u>	<u>-</u>	<u>(1,444,623)</u>
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	<u>-</u>	<u>(2,022,335)</u>	<u>-</u>	<u>(2,022,335)</u>
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	<u>-</u>	<u>(2,309,186)</u>	<u>-</u>	<u>(2,309,186)</u>
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	<u>-</u>	<u>(4,108,108)</u>	<u>-</u>	<u>(4,108,108)</u>
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments	<u>-</u>	<u>(5,241,583)</u>	<u>-</u>	<u>(5,241,583)</u>
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings	1,182,639	5,665,400	47,097	6,895,136
FY 2020 Payments	<u>-</u>	<u>(3,026,117)</u>	<u>-</u>	<u>(3,026,117)</u>
				-
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	<u>-</u>	<u>(2,783,552)</u>	<u>-</u>	<u>(2,783,552)</u>
				-
June 30, 2021 Balance	9,719,190	37,030,575	1,769,763	48,519,528
FY 2022 Billings	1,222,260	5,389,300	48,322	6,659,882
FY 2022 Payments	<u>-</u>	<u>(1,788,828)</u>	<u>-</u>	<u>(1,788,828)</u>
				-
June 30, 2022 Balance	\$ 10,941,450	\$ 40,631,047	\$ 1,818,085	\$ 53,390,582
FY 2023 Billings (8 Months)	851,500	3,608,300	32,181	4,491,981
FY 2023 Payments (8 Months)	<u>-</u>	<u>(3,432,637)</u>	<u>-</u>	<u>(3,432,637)</u>
				-
Balance as of February 28, 2023	<u>\$ 11,792,950</u>	<u>\$ 40,806,710</u>	<u>\$ 1,850,266</u>	<u>\$ 54,449,926</u>



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Megan Savage, Vendor Outreach Coordinator

Re: Business Inclusion & Diversity Program Update

Background: On November 25, 2020, the GLWA Board of Directors approved an amendment to the Procurement Policy allowing for the formation of a new Business Inclusion & Diversity (B.I.D.) Program within the Financial Services' Procurement Group. The B.I.D. Program Team, which includes internal GLWA Team Members as well as external consultants, executed a Phase I launch of the program on February 1, 2021 and a Phase II launch on July 1, 2021.

Analysis: This month we present tables to recap B.I.D. Program activity from the date of the program launch on February 1, 2021 through April 30, 2023 for procurements budgeted to exceed \$1 million.

Table 1: B.I.D. Eligible Procurements as April 30, 2023

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	64	8	8	80
Total Number of Diversity Plans Submitted	182	18	n/a	200

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 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	92%	\$617.6
Member Partner Service Area	88%	\$575.4
Disadvantaged Service Area	53%	\$307.2

Table 3: Member Partner Communities

Table 3 provides a breakdown of the number of awarded contracts to vendors located in GLWA's Member Partner Service area.

	Total Contract Count	Total Contract Amount (in millions)
City of Detroit	33	\$289.6
City of Auburn Hills	5	\$76.9
City of Novi	3	\$94.4
City of Livonia	3	\$59.6
City of Taylor	1	\$12.6
City of Troy	3	\$17.0
City of Southfield	2	\$6.3
City of Madison Heights	1	\$6.0
City of Warren	1	\$3.6
City of Farmington Hills	2	\$6.5
City of Riverview	1	\$1.9
Harrison Township	1	\$1.0
Total	56	\$575.4

Table 4: Economically Disadvantaged Communities

Table 4 provides a breakdown of the number of awarded contracts to vendors who have a business presence in an economically disadvantaged GLWA service territory area. This means that the vendor is located in a municipality 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.

	Total Contract Count	Total Contract Amount (in millions)
Detroit	33	\$289.6

Table 5: Non-Scored Criteria - Disadvantaged, Minority-owned, Women-owned, and Small Businesses

Table 5 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	38%	\$292.5

Table 6: Diversity Certification Percentages

Table 6 provides a breakdown of the vendors who met the certification criteria as SBE (Small Business Enterprise), DBE (Disadvantaged Business Enterprise), MBE (Minority-owned Business Enterprise), and/or WBE (Women-owned Business Enterprise). Note that some firms may have multiple certifications.

	SBE	DBE	MBE	WBE
Percentage of Awarded Procurements to SBE, DBE, MBE, and WBE	10%	79%	31%	8%
Total Contract Amount (in millions)	\$18.5	\$333.6	\$78.4	\$65.2

Table 7: Overall Contracts Awarded

Table 7 provides a breakdown of overall dollars awarded under the B.I.D. Program thus far, distinguishing between firms that met the B.I.D. Program certification criteria (non-scored criteria) and firms that met the three B.I.D. Program geographic criteria (scored criteria).

	Total Contract Count	Total Contract Amount (in millions)
Eligible Procurements	64	\$771.0
Firms that met the certification criteria (non-scored criteria)	29	\$292.5
Firms that met the three geographic criteria (scored criteria)	34	\$307.2

Other activities completed this month to expand awareness of the B.I.D. Program and to foster the development of effective diversity plans included the following.

- Attended the Michigan Public Purchasing Officer's Association (MPPOA) Reverse Trade Fair on April 28, 2023 in Lansing, MI.
- Attended the Michigan Minority Supplier Development Conference (MMSDC) 2023 Michigan Minority Procurement Conference on May 4, 2023 in Detroit.
- Working with Bonfire to develop options for tracking and reporting on GLWA's efforts to update our vendor database to include information on diversity certifications. These options are contingent upon pending software enhancements required by Bonfire.
- Continued attendance of the B.I.D. Program Liaison at all Pre-Bid and Pre-Proposal solicitation meetings to overview B.I.D. Program requirements and answer any questions from vendors/contractors.

Additionally, the following tasks remain at the top of our priority list.

- Continued evaluation of the insurance and bonding requirements for small, minority-owned, and disadvantaged business enterprises.
- Identifying meaningful reporting and performances measures.

Proposed Action: Receive and file this report.



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Matthew S. Lane, MPA, Charges Outreach and Modeling Manager

Re: Charges Outreach & Modeling Update

Background: The Charges Outreach & Modeling (CO&M) Team was established in Fiscal Year 2023 as part of the Financial Management & Planning Group to facilitate internal communication and external outreach with GLWA Member Partners as it relates to the charge methodology and charge-related financial matters. This team also serves as liaison between GLWA and third-party consultants in the development, maintenance and review of the annual water and sewer charges.

Analysis: This month we present an update on activities related to charges initiatives.

Professional Development/Outreach Activities

1. In early April, I completed the Accounting and Rate Setting course through the Institute of Public Utilities at Michigan State University. I was joined in this three-day class by finance and regulatory staff from utilities and public service commissions from across the country. This was an opportunity for me to network with colleagues from various organizations including water & sewer utilities, electric utilities, railroad commissions, industry regulators and even the Postal Regulatory Commission. Additional CO&M updates include the following:
2. Contributed to the quarterly trade magazine, *Water Works News*, as an active member of the American Water Works Association - Michigan Section Communications Council. In the Spring 2023 Edition published in April, I provided a teaser for a new semi-annual feature article series titled, "*Water Warriors: Teams on the Frontline of Water Quality.*" This series will tell stories of teamwork and problem-solving from utilities across the state, including GLWA. The articles will be featured in the Spring and Fall editions.
3. Participated in an annual leadership retreat as a member of the MI-AWWA Communications Council on Friday, May 12 in East Lansing.
4. Presented on Sewer SHARES 101 presentation at the Charges Work Group meeting on April 25th.
5. Attended the Water Analytical Work Group meeting on April 18th at UofM Detroit Center.
6. Attended the Wastewater Analytical Task Force virtually on April 20.
7. Honored to participate in the Inaugural GLWA Environmental, Social, & Governance (ESG) Framework Initiative, the Linear System Integrity Program, and newly-formed cross-functional outreach team with an objective of an improved Member Partner database.
8. The position for the Charges Outreach & Modeling Management Professional position was posted. We are currently reviewing resumes.

Outreach & Charges Activities

1. Water Charges Work Group
 - a. This group is made up of Member Partners and staff from GLWA. It was established to review water and sewer charge methodology and to make recommendations regarding potential changes.
 - b. The Water Charges Methodology Review Subgroup is made up of interested volunteer Member Partners and is convened to work closely with GLWA on the technical analysis and provide input on charges scenarios. The Subgroup meets twice per month and reports its findings and updates to the larger Charges Work Group as-needed. We received valuable feedback from Member Partners at-large during the Charges Rollout process that will help guide future discussions for this subgroup.
 - c. The Water Charges Third-Party Rate Consulting firm has provided multiple presentations regarding their work including Member Partner interviews and peer reviews. They presented to the overall Charges Work Group on Tuesday, April 25th.
 - d. The most recent in-person meeting of the Water Charges Methodology Review Subgroup was held on May 5, 2023 at the Dearborn Center for the Performing Arts.
 - e. The next in-person Water Charges Methodology Review Subgroup Meeting is scheduled for June 2, 2023 at the UofM Detroit Center.
2. Wastewater Charges Work Group
 - a. Wastewater Charges Work Group met on Tuesday, May 9 via Zoom.
3. Combined Water and Wastewater Charges

The overall Charges Work Group met Tuesday, April 25, 2023 via Zoom for an update on the work of the Water Charges Methodology Review Subgroup.
4. One Water Partnership Meetings
 - a. The most recent OWP was held in-person on March 23, 2023, at the Michigan First Conference Center (The Mint) in Lathrup Village.
 - b. The next OWP meeting is on the Outreach schedule for June 22, 2023 with the location to be determined.

Proposed Action: Receive and file this report.



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Madison Merzlyakov, Affordability & Assistance Manager

Re: Affordability & Assistance Update

Background: In 2021, an Affordability & Assistance team was created within GLWA's Financial Services Area. The team serves as the internal and external resource for strategic policies and programs related to water affordability and assistance.

Analysis: This month we present an update on the initiatives the Affordability & Assistance team have been focused on, such as outreach on available assistance programs and efforts related to sustainable water assistance funding.

Outreach Initiatives

GLWA continues to encourage Member Partner participation in the Low-Income Household Water Assistance Program (LIHWAP), a temporary program that is federally funded and administered through the Michigan Department of Health and Human Services (MDHHS). Communities must formally opt-in to the program for their residents to access funding available to pay down past due balances. Last month, GLWA sent an email blast to Member Partners providing a LIHWAP overview and directions on how to opt-in. This month GLWA mailed a letter from Chief Executive Officer Suzanne Coffey to elected officials of communities that are not yet participating in LIHWAP to encourage further participation.

Sustainable Water Assistance Funding

Meaningful conversations are underway with various entities at both the state and federal levels regarding water affordability. Recently, GLWA and other stakeholders have engaged in discussions across the state of Michigan focused on providing a framework for a statewide sustainable water assistance program. Michigan State Senator Stephanie Chang leads a work group focused on draft legislation around this issue in which GLWA participates.

In support of these conversations, GLWA is working with a coalition to provide feedback to Senator Chang that encourages legislation while preserving the right of local control. Other members of this coalition include the Michigan Municipal League, Michigan Section of the American Water Works Association, Detroit Water and Sewerage Department, Oakland

County Water Resources Commissioners Office, Southeast Michigan Council of Governments, The Nature Conservancy, and the Michigan Townships Association.

The Affordability & Assistance team will continue to update the Audit Committee as this important work progresses.

Proposed Action: Receive and file this report.



Financial Services Audit Committee Communication

Date: May 26, 2023

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report (Unaudited)

Background: As stated in section 14 of the Great Lakes Water Authority (GLWA) Investment Policy, quarterly reporting shall be presented to provide a clear picture of the status of the current GLWA investment portfolio. The attached report, prepared and presented by PFM Asset Management LLC, summarizes portfolio information through March 31, 2023 (unaudited).

Analysis: The Quarterly Investment Report complies with the requirements of Public Act 20 of 1948, as amended and the GLWA Investment Policy. GLWA is investing its funds in a diversified portfolio which includes bank deposits, money market funds, a local government investment pool (LGIP), U.S. Treasuries, Federal Agencies, and commercial paper. All securities in the portfolio comply with the GLWA investment policy. Key metrics are provided below with additional commentary in the attached report.

- Yield at Cost:
 - As of March 31, 2023: 4.27%
 - As of December 31, 2022: 3.71%

- Yield at Market:
 - As of March 31, 2023: 4.60%
 - As of December 31, 2022: 4.33%

- Portfolio Allocation in Cash/Money Market/LGIP Securities:
 - As of March 31, 2023: 54%
 - As of December 31, 2022: 49%

The Treasury group continues to work with PFM Asset Management LLC to identify strategies to maximize investment returns while meeting the GLWA standards for safety and liquidity.

Proposed Action: Receive and file this report.

Great Lakes Water Authority

Investment Performance Report – March 2023



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PORTFOLIO RECAP

- **Safety** – The aggregate portfolio is diversified amongst cash, bank deposits, U.S. Treasuries, Federal Agencies, commercial paper, SEC-registered money market funds, and a local government investment pool. The total credit profile of the portfolio is strong with over 97% of the assets invested in bank deposits or securities that are rated within the two highest short and long-term rating classifications as established by Standard & Poor’s.
- **Liquidity** – Great Lakes Water Authority (“GLWA”) has continued to monitor its portfolio with the goal of limiting the allocation to cash and bank deposit accounts and maximizing the use of short-term investments to meet cash requirements. As of March 31, 2023, approximately 54% of the funds were held in cash and money market accounts maturing overnight. The percentage is slightly lower than last quarter due to higher short-term commercial paper yields.
- **Return** – The overall yield at market increased to 4.60% as of March 31, 2023, versus 4.33% as of December 31, 2023. The higher yield is reflective of the rise in interest rates experienced throughout the fiscal year. GLWA earned \$21.9 million (unaudited) in investment income for the first nine months of fiscal year 2023 on a book value basis. We expect the investment income for GLWA for FY 2023 to be approximately \$32.5 million (~\$13.0 million for construction bond proceeds funds; ~\$3.5 million for Improvement & Extension funds; ~\$3.4 million for Operating & Maintenance funds; and ~\$12.6 million for all other funds).

AVAILABLE FUNDS (Unaudited)

Type	Book Value	Market Value	Yield @ Cost (as of 3/31/23)	Yield @ Market (as of 3/31/23)
Deposit Account	\$9,052,640	\$9,052,640	3.03%	3.03%
Deposit Account - Retainage	\$26,553,530	\$26,553,530	0.01%	0.01%
Deposit Account – Flint Security Deposit	\$3,873,371	\$3,873,371	3.03%	3.03%
Trust Money Market Fund	\$395,491,204	\$395,491,204	4.61%	4.61%
Money Market Fund	\$14,000,009	\$14,000,009	3.07%	3.07%
Local Government Investment Pool	\$211,604,036	\$211,604,036	4.76%	4.76%
Managed Funds	\$576,816,401	\$572,747,953	4.13%	4.84%
<u>MARCH 2023 TOTALS:</u>	<u>\$1,237,391,191</u>	<u>\$1,233,322,743</u>	<u>4.27%</u>	<u>4.60%</u>
<u>PREVIOUS QUARTER TOTALS:</u>	<u>\$1,169,245,122</u>	<u>\$1,163,331,669</u>	<u>3.71%</u>	<u>4.33%</u>

Investment Strategy

OVERALL STRATEGY

- All investment activity is conducted subject to GLWA’s investment policy and state statutes while meeting the primary objectives of safety and liquidity. The portfolio is managed to a disciplined investment plan to provide improved safety and diversification while putting every dollar to work.
- GLWA, working with its investment advisor PFM Asset Management (“PFMAM”), has continued to invest its funds in a mixture of short and intermediate-term individual investment securities to ensure adequate liquidity to cover upcoming debt, pension payments, and operational requirements.
- PFMAM will continue to actively manage long-term portfolios with full discretion and align short-term balances with expected liabilities and identify strategies to maximize future investment income in the current interest rate environment, subject to GLWA’s investment policy and state statutes.

PORTFOLIO PERFORMANCE – CURRENT PERIOD*

- The overall portfolio’s original yield at cost went from 3.71% as of 12/31/2022 to 4.27% as of 3/31/2023.
- The total portfolio had a market yield of 4.60% at the end of March, compared to 4.33% as of December 31, 2022. Yield at market represents what the market would provide in return if the portfolio was purchased on March 31, 2023 (versus purchased in prior months / years). The higher yield is a result of the increase in rates throughout the fiscal year.
 - We utilize a variety of investment sectors, and because of that, this 4.60% yield at market as of 3/31/2023 is beneficial when compared to the 4.54% yield of the 3-Month U.S. Treasury Bill index, which is a comparable market indicator.

PORTFOLIO PERFORMANCE – PROJECTIONS

- GLWA earned over \$21.9 million (unaudited) in investment income for fiscal year-to-date 2023 (as of 3/31/23) on a book value basis.
- The current period earnings are in line with budgeted expectations, especially with no more Federal Reserve interest rate hikes priced into the market.
- The FY 2023 total interest earnings projection forecast is currently \$32.5 million.

** Yield at cost is based on the original cost of the individual investments from the purchase date to maturity. On the other hand, yield at market is calculated on a specific day (in this case, March 31, 2023) and assumes that all the securities in the portfolio are purchased given the market price/yield on that particular day. If one is to generally hold their investments to the stated maturity date, then the yield at cost would be the better number to use to gauge how the portfolio is performing.*

Summary Market Overview and Outlook

ECONOMIC HIGHLIGHTS UPDATE

- The Federal Reserve (“Fed”) raised its benchmark interest rate by 25 basis points on March 22nd, despite uncertainty caused by the announcement of two large bank failures in the U.S. The short-term Federal Funds rate is at a new target range of 4.75% to 5.00%. The accompanying Fed statement noted that job gains are running at a robust pace, the unemployment rate has remained low, and inflation remains elevated.
- The Fed’s latest Summary of Economic Projections suggest only more 0.25% rate hike this year, with the median expectation for the target rate to remain above 5.00% through the end of the year. Conversely, Fed Funds futures contracts have diverged markedly from Fed expectations, implying that markets are betting on rate cuts to begin within six months. Fed Chair Jerome Powell has reiterated that rate cuts were not the Fed’s “base case” assumption.
- Inflation (CPI year-over-year) fell for the ninth straight month to 5.0% in March, the lowest reading in almost two years. This was led by a decline in all major energy component indices but was more than offset by increases in shelter costs, which has a higher relative importance in the index and was the largest contributor to the month-over-month increase.
- Employers added 236,000 jobs in March, in line with expectations. The unemployment rate ticked lower to 3.5%. Wages grew 4.2% year-over-year, the slowest pace in 21 months, while job openings fell below 10 million for the first time in nearly two years.
- Factory orders and durable goods orders fell in February, while March readings for both the ISM manufacturing and services indices were lower. Fed district surveys from Philadelphia, New York, Kansas City, Richmond, and Dallas all showed signs of weakness.

ECONOMIC IMPACT ON PORTFOLIO

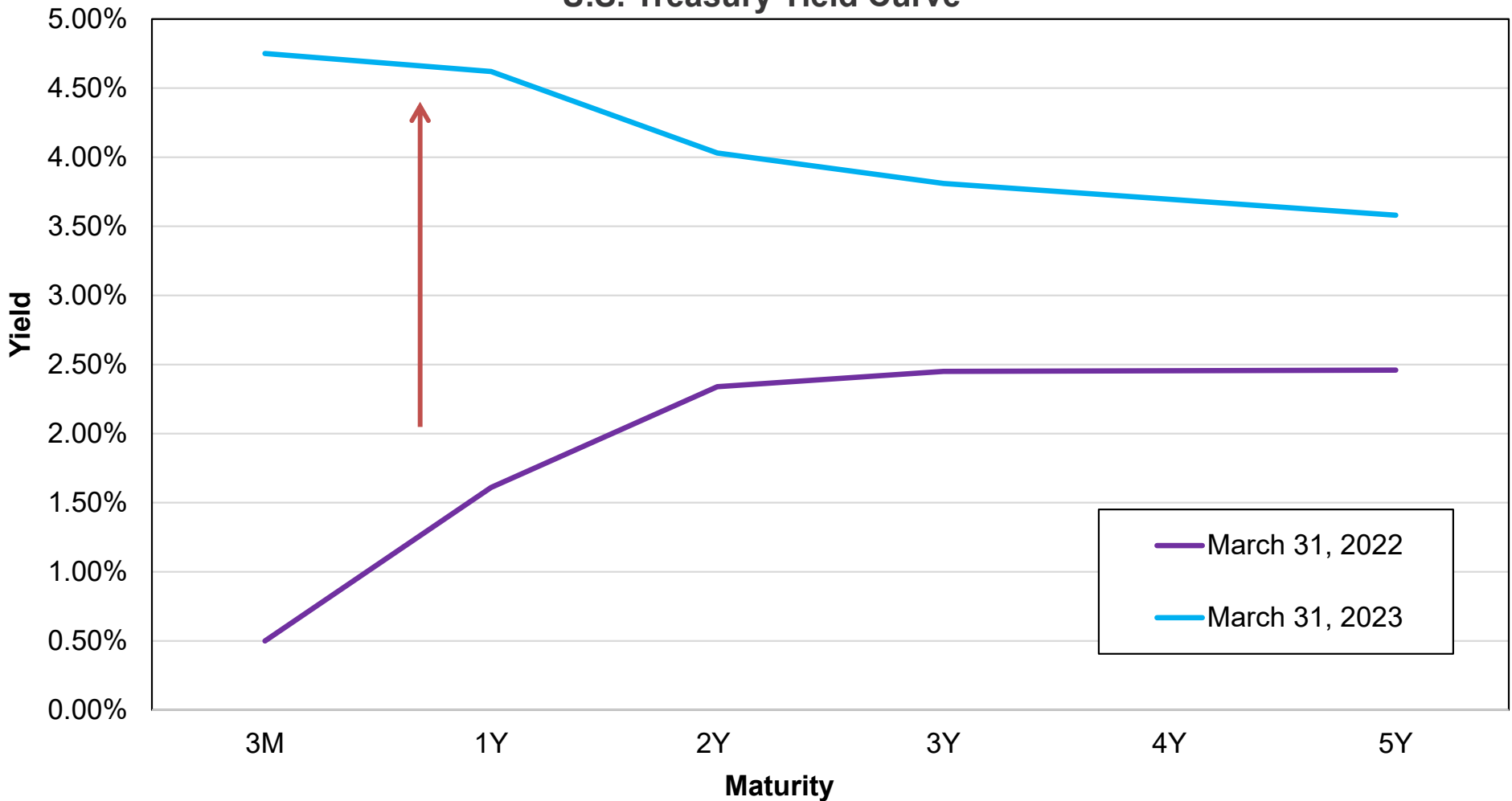
- Treasury yields moved sharply lower in March on reduced rate hike expectations, recession fears, and a “flight to quality.” The 2-year Treasury yield fell by 80 basis points during the month to 4.02%, reflecting increased bond market volatility which was exacerbated by recent banking concerns.
- Treasuries of all maturities rode the bond rally in March, as benchmark 3-month, 5-year, and 10-year U.S. Treasuries finished the quarter at 4.75%, 3.57%, and 3.47%, having fallen by 8, 61, and 45 basis points during the month of March alone, respectively. As a result, Treasury index returns advanced in the quarter.
- Portfolio Impact: In light of the recent news regarding the debt ceiling, we have taken a closer look at those accounts that held Treasuries around the time that the Treasury may default if a compromise is not reached by Congress to suspend or raise the debt ceiling. Treasury Secretary Yellen noted that the government could possibly run out of money by early June. We believe that a default is unlikely but understand that there may be sensitivity around holding Treasuries in this maturity area. As a result, we sold Treasuries in the Water and Sewer Pension Obligation and O&M Pension funds that were scheduled to mature on 6/15/2023, and were able to purchase commercial paper at yields above 5.00% which will diminish the impact of some of the realized losses.

Summary Market Overview and Outlook

Treasury Yield Curve Presently Inverted

- It should be noted that, caught up in market volatility, Agency spreads widened, creating good investment and swap opportunities. The peak of the Treasury yield curve is now around the 6-month maturity range. Money market investors continue to benefit from the highest short-term yields in over 15 years.

U.S. Treasury Yield Curve



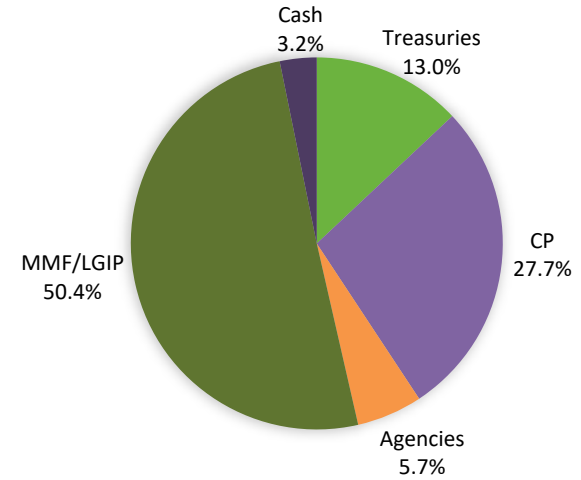
Portfolio Snapshot

Overall Portfolio Composition Summary

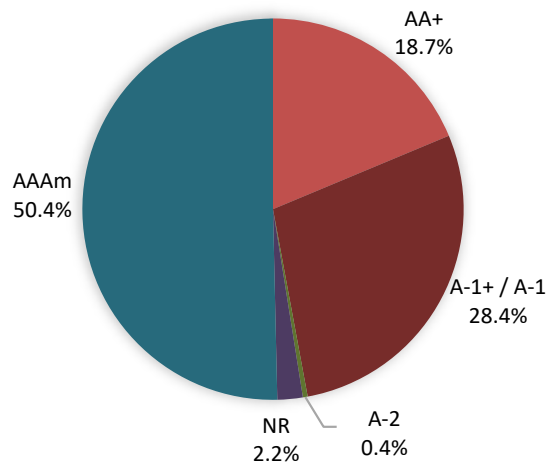
PORTFOLIO STATISTICS

Invested Amount	\$1.233 Billion
Duration	0.20 Years
Yield at Cost	4.27%
Yield at Market	4.60%

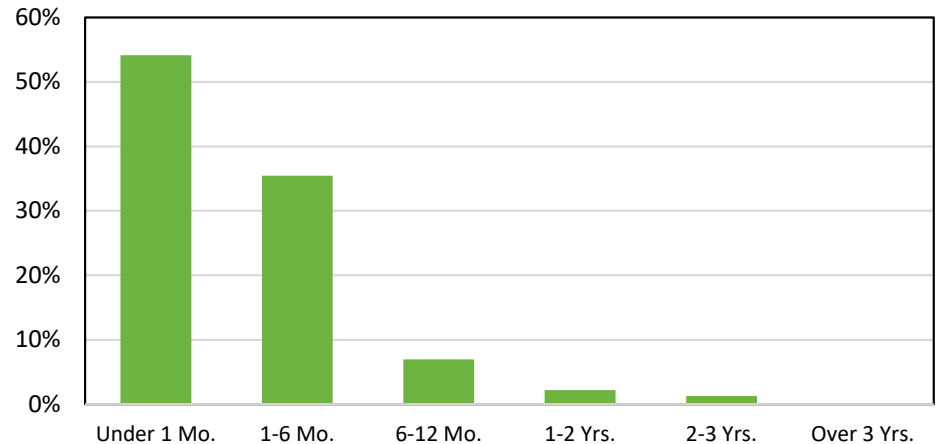
SECTOR ALLOCATION



CREDIT QUALITY



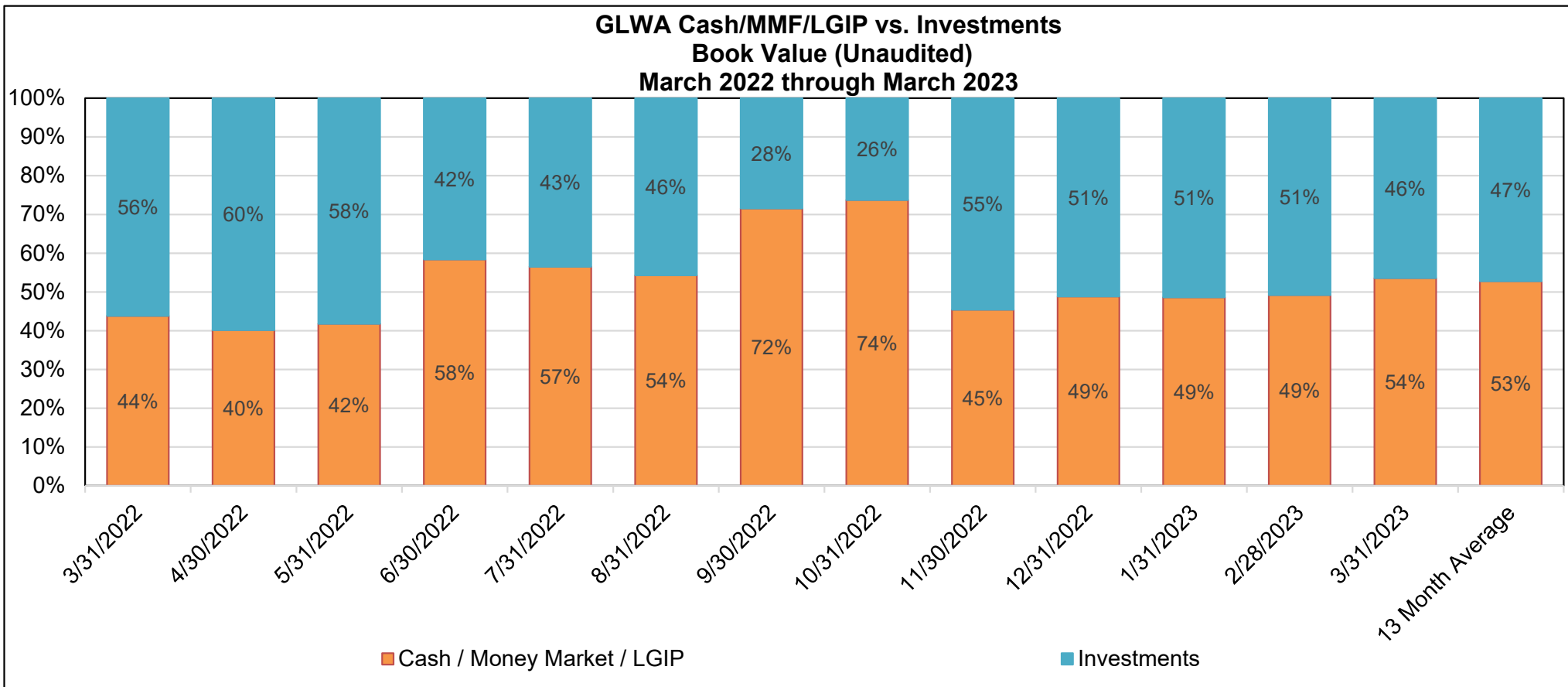
MATURITY DISTRIBUTION



Portfolio Snapshot

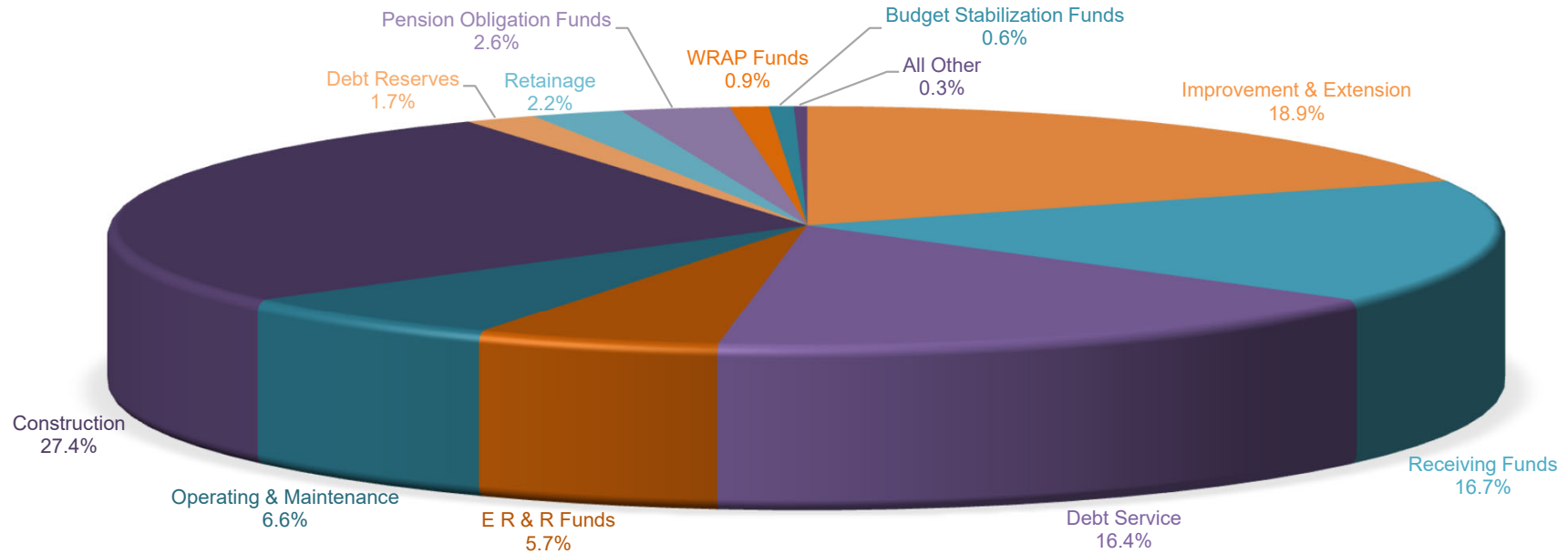
Portfolio Mix – Cash / Money Market vs. Investments

- GLWA’s liquidity requirements fluctuate each month based on operational requirements, capital funding, and debt payments. Based on a review of historical activity and refinement of cash flow projections, GLWA has continually tried to balance the allocation of the portfolio’s holdings to cash & money market accounts versus the allocation to investments for the portfolio holdings.
- The chart below compares the monthly allocation of the portfolio holdings to the 13-month average. The allocation between cash and investments will vary each month based on liquidity requirements. For March of 2023, 54% of the overall portfolio was invested in cash, LGIP, and/or overnight money market fund accounts. This is slightly higher than usual due to the timing of recent maturities that will be reinvested.



Portfolio Snapshot

Investments – By Account Purpose

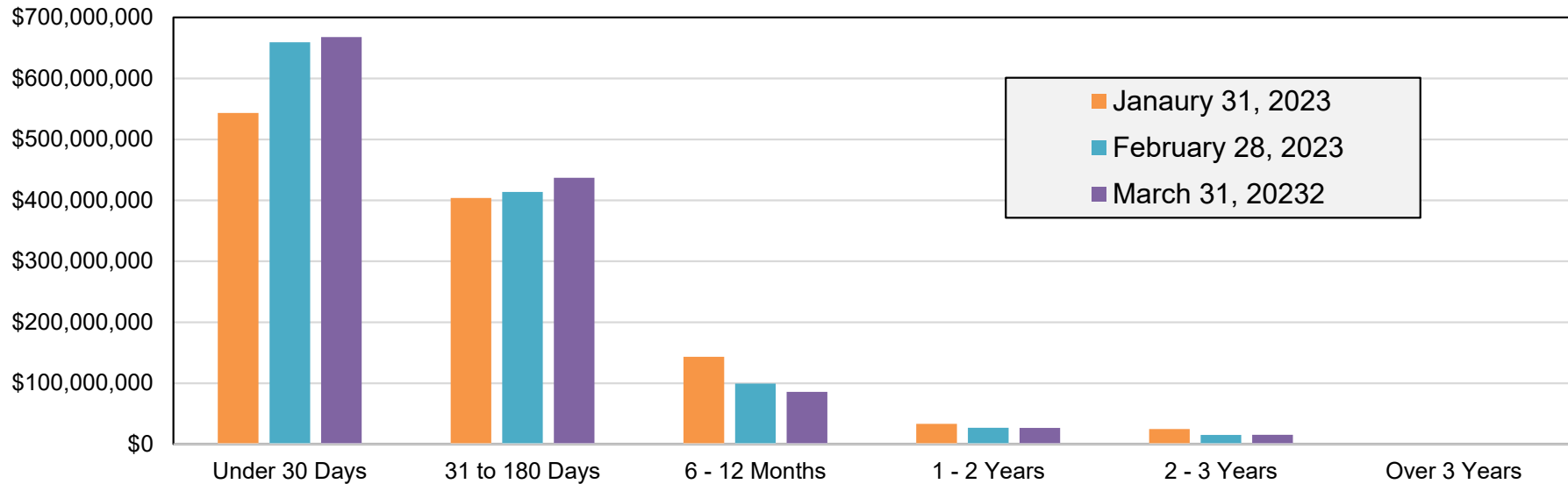


Account Purpose	Market Value	Allocation %	Cost at Yield	Market at Yield	Duration	Strategy
Construction	\$ 338,528,180	27.4%	5.34%	5.02%	0.228 Years	Cash Flow Driven
Improvement & Extension	\$ 233,532,524	18.9%	3.76%	4.78%	0.051 Years	Cash Flow Driven
Receiving Funds (includes lockbox account)	\$ 205,951,698	16.7%	3.86%	3.86%	0.003 years	Short Term
Debt Service	\$ 202,429,790	16.4%	5.45%	5.23%	0.235 Years	Short Term
Operating & Maintenance	\$ 81,265,351	6.6%	3.99%	3.99%	0.003 Years	Short Term
Extraordinary Repair & Replacement Funds	\$ 70,328,712	5.7%	1.42%	4.59%	1.159 Years	Long Term
Pension Obligation Funds	\$ 31,680,535	2.6%	4.73%	4.98%	0.205 Years	Short Term
Retainage	\$ 26,553,530	2.2%	0.01%	0.01%	0.003 Years	Restricted Short Term
Debt Reserves	\$ 20,801,799	1.7%	1.43%	4.67%	0.702 Years	Long Term
WRAP funds	\$ 11,174,933	0.9%	5.13%	5.04%	0.139 Years	Short Term
Budget Stabilization Funds	\$ 7,202,319	0.6%	1.67%	4.61%	1.076 Years	Long Term
Fling Security Deposit Account	\$ 3,873,371	0.3%	3.03%	3.03%	0.003 Years	Restricted Short Term
Total	\$ 1,233,322,743	100.0%	4.27%	4.60%	0.202 Years	

Portfolio Snapshot

Investments – By Maturity

Maturity Distribution	January 31, 2023		February 28, 2023		March 31, 2023	
	\$	%	\$	%	\$	%
Under 30 Days	543,419,922	47.3%	659,406,035	54.3%	667,940,574	54.2%
31 to 180 Days	403,938,414	35.1%	413,824,347	34.1%	437,096,206	35.4%
6 - 12 Months	143,495,542	12.5%	99,545,010	8.2%	85,860,988	7.0%
1 - 2 Years	33,415,270	2.9%	26,960,122	2.2%	26,890,919	2.2%
2 - 3 Years	24,929,107	2.2%	15,226,947	1.3%	15,534,056	1.3%
Over 3 Years	-	0.0%	-	0.0%	-	0.0%
Totals	\$ 1,149,198,254	100.0%	\$ 1,214,962,461	100.0%	\$ 1,233,322,743	100.0%



Portfolio Snapshot

Investment Accounts – Yield at Cost & Market

	As of March 31, 2023		As of December 31, 2022	
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Bank A	0.01%	0.01%	0.01%	0.01%
Bank B	0.01%	0.01%	0.01%	0.01%
Flint Deposit Account	3.03%	3.03%	2.43%	2.43%
Bank C	3.03%	3.03%	2.43%	2.43%
Sub-Total Bank Deposits	0.61%	0.61%	1.12%	1.12%
Money Market Funds / LGIPs				
Local Government Investment Pool	4.76%	4.76%	4.28%	4.28%
Trust Money Market Fund	4.61%	4.61%	4.06%	4.06%
Money Market Fund	3.07%	3.07%	2.47%	2.47%
Sub-Total MMF / LGIPs	4.63%	4.63%	4.11%	4.11%
Investment Portfolios				
Sewage SR Debt Serv 5403	5.11%	5.06%	5.20%	5.00%
Sewage SR Res 5400	0.32%	4.43%	0.32%	4.51%
Sew 2nd Debt Serv 5403	5.01%	5.05%	4.97%	4.93%
Sewage 2nd Res 5481	4.17%	4.43%	4.17%	4.51%
Sew SRF Debt Serv 5410	5.26%	5.26%	4.80%	4.83%
Sewage ER & R	4.40%	4.37%	0.46%	4.52%
Sewer Improvement & Extension	0.77%	4.52%	0.91%	4.70%
Sewer Pension Obligation	4.46%	4.80%	4.11%	4.80%
Sewer Wrap Fund	4.68%	4.87%	4.13%	5.02%
Sewer Budget Stabilization Fund	0.45%	4.38%	0.47%	4.53%
Sewer Bond Fund	5.09%	4.87%	5.00%	4.86%
Sewer O&M Pension Sub Account	4.28%	4.79%	3.97%	4.78%
Water SR Debt Ser 5503	5.11%	5.05%	5.20%	5.02%
Water SR Reserve 5500	0.70%	4.54%	0.70%	4.57%
Water 2nd Debt Serv 5503	5.12%	5.03%	5.27%	4.94%
Water 2nd Res 5581	4.18%	4.54%	4.18%	4.57%
Water SRF Debt Serv 5575	5.05%	5.02%	4.64%	4.83%
Water ER & R	0.43%	4.37%	0.45%	4.53%
Water Improvement & Extension	0.36%	4.62%	0.38%	4.67%
Water Pension Obligation	4.43%	4.80%	4.09%	4.79%
Water Wrap Fund	4.91%	4.90%	4.30%	4.93%
Water Budget Stabilization Fund	0.45%	4.37%	0.47%	4.53%
Water Bond Fund	5.34%	4.99%	5.17%	4.96%
Water O&M Pension Sub Account	4.29%	4.79%	3.97%	4.78%
Sub-Total Investment Portfolios	4.13%	4.84%	3.61%	4.82%
Grand Total	4.27%	4.60%	3.71%	4.33%

YTM @ Cost is the expected return, based on the original cost, the annual interest receipts, maturity value and the time period from purchase date to maturity, stated as a percentage, on an annualized basis. YTM @ Market is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.

Portfolio Snapshot

Peer Analysis Comparison

- The comparison agencies included in the list below were selected based on type and/or other non-performance-based criteria to show a broad range of water entities/utilities; this peer group list does not represent an endorsement of any of the public agencies or their services.
- The overall yield of GLWA’s aggregate portfolio compares somewhat favorably to those of other short-term market indices (i.e., the S&P LGIP index and the 3-month U.S. Treasury index), despite the volatility of short-term interest rates and the limited ability in managing assets to a longer-term strategy.
- GLWA does have some limitations and unique constraints related to its ordinance and covenants that restricts the potential for a longer duration portfolio when compared to other similar water agencies.

As of March 31, 2023

	Market Value	YTM @ Market	Effective Duration	Weighted Average Maturity
GLWA				
Great Lakes Water Authority	\$1,233,322,743	4.60%	0.20 Years	73 Days
Short/Intermediate-Term Indices				
S&P Rated Government Investment Pool Index		4.46%	0.08 Years	30 Days
BoA / ML 3-Month Treasury Index		4.54%	0.14 Years	55 Days
BoA / ML 6-Month Treasury Index		4.78%	0.39 Years	146 Days
BoA / ML 1-Year Treasury Index		4.67%	0.89 Years	336 Days
BoA / ML 1-3 Year Treasury Index		4.20%	1.75 Years	668 Days
BoA / ML 1-5 Year Treasury Index		4.01%	2.50 Years	964 Days
Peer Analysis (Water Entities / Utilities)				
District of Columbia Water & Sewer Authority, DC	\$414,554,269	4.56%	0.81 Years	328 Days
DuPage Water Commission, IL	\$186,039,181	4.22%	1.96 Years	965 Days
Fairfax County Water Authority, VA	\$190,346,378	4.26%	1.97 Years	753 Days
Metro Wastewater Reclamation District, CO	\$205,835,543	4.15%	2.09 Years	837 Days
Metropolitan Water District of Southern California, CA	\$977,227,114	4.55%	1.07 Years	490 Days
Philadelphia Water Department, PA	\$200,668,906	4.70%	0.83 Years	318 Days
San Bernardino Valley Municipal Water District, CA	\$337,032,733	4.42%	1.58 Years	624 Days
Tohopekaliga Water Authority, FL	\$197,516,799	4.24%	1.63 Years	829 Days
Truckee Meadows Water Authority, NV	\$96,997,000	4.26%	2.06 Years	778 Days

The BoA / ML indexes are unmanaged indexes tracking on-the-run Treasuries. These indexes are produced and maintained by Bank of America / Merrill Lynch & Co. Yield to maturity is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.

Portfolio Snapshot

Monthly Investment Income

(Book Value in 000's)

FY 2023 INVESTMENT INCOME BY MONTH (Unaudited)

Month	Interest Earned During Period <i>(in thousands)</i>	Realized Gain / Loss <i>(in thousands)</i>	Investment Income <i>(in thousands)</i>
July 2022	\$567.7	(\$310.2)*	\$257.5
August 2022	\$807.7	\$0.0	\$807.7
September 2022	\$1,638.1	(\$192.9)*	\$1,445.3
October 2022	\$2,191.1	(\$0.0)	\$2,191.1
November 2022	\$3,032.8	\$0.0	\$3,032.8
December 2022	\$3,493.9	\$0.0	\$3,493.9
January 2023	\$3,534.0	\$37.3	\$3,571.3
February 2023	\$3,455.3	\$0.0	\$3,455.3
March 2023	\$3,721.2	\$0.0	\$3,721.2
<u>FY 2023 Y-T-D</u>	<u>\$22,441.8</u>	<u>(\$465.7)</u>	<u>\$21,976.1</u>

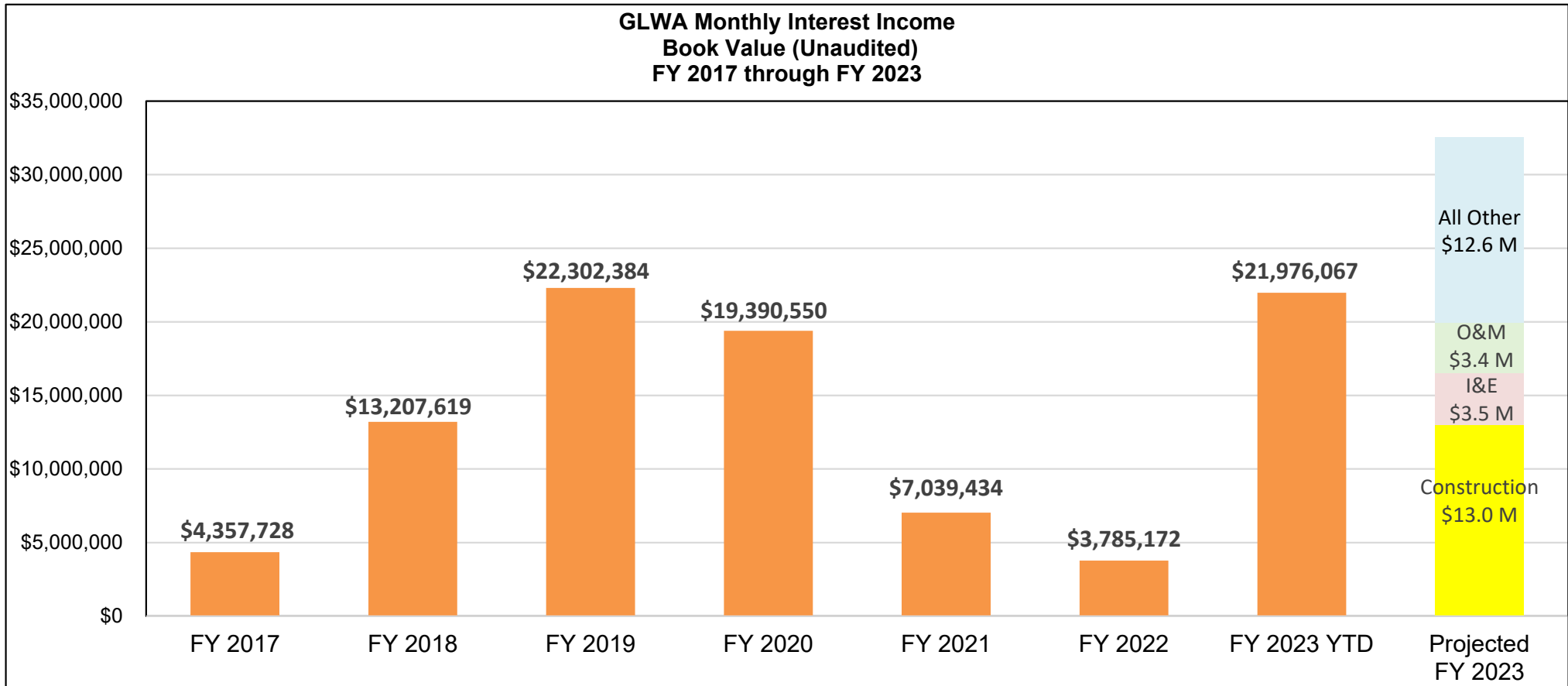
* The realized loss in July of 2022 was due to the sale of investments in the Water I&E account in anticipation of liquidity requirements. The realized loss in September of 2022 was due to the sale of investments to fund the Debt Service Reserve Fund ("DSRF") releases.

These figures are based upon actual interest earned and posted to the Authority's various accounts via book value and does not include any earnings credit rate tied to the Authority's bank deposits.

Portfolio Snapshot

Year-Over-Year Investment Income

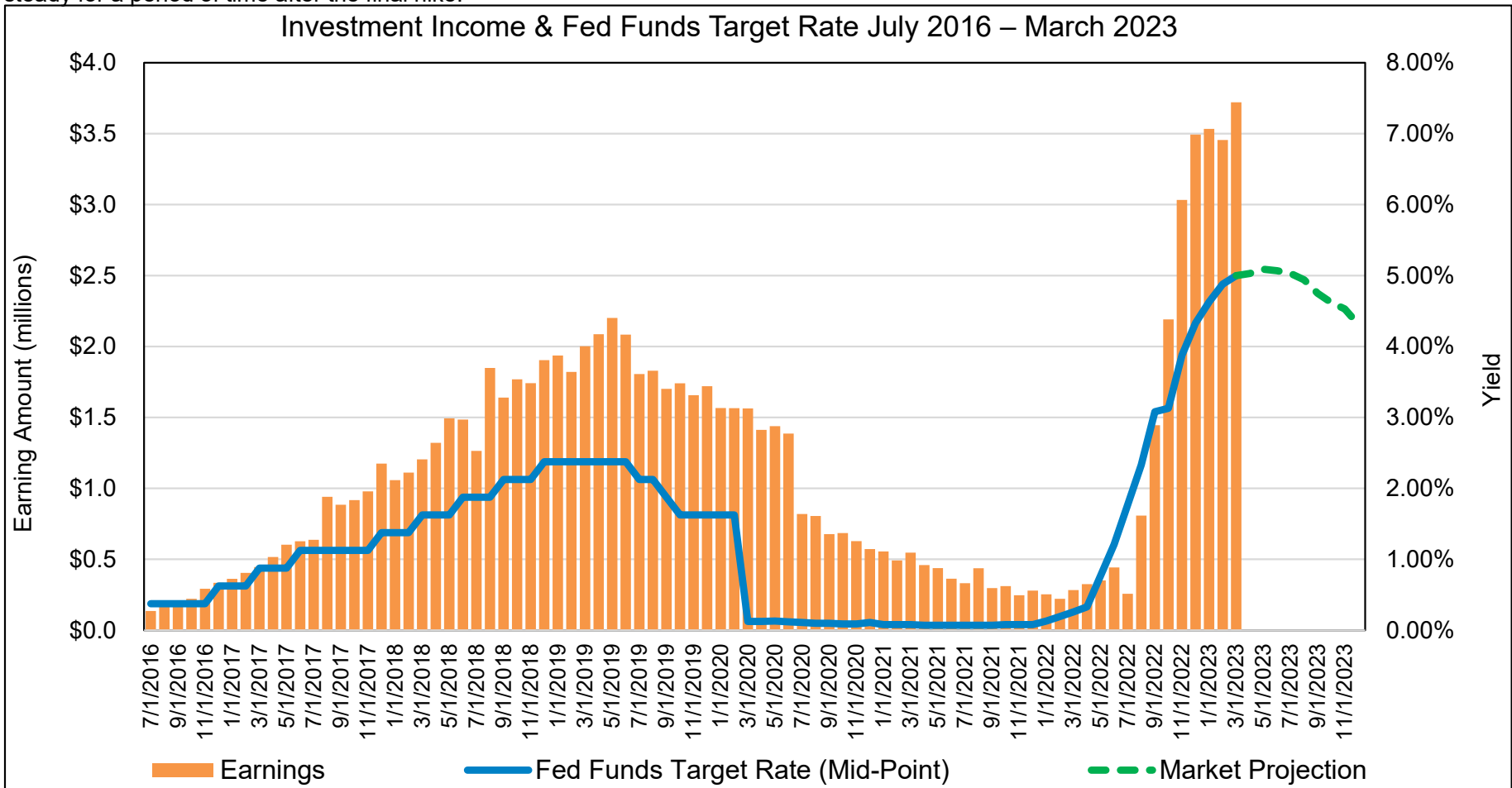
- GLWA earned \$21,976,067 in investment income for the first nine months of fiscal year 2023 on a book value basis compared to \$2,665,036 for the first nine months of fiscal year 2022.
- Based on current market assumptions and the addition of assets and proceeds from GLWA’s most recent bond fund issue, projected investment income for fiscal year 2023 is forecasted to be around \$32.5 million, as the market expects the overnight lending rate to hold steady over the next couple of months. This interest earnings projection forecast is consistent with previous expectations and also consistent with the budget amendments that were made in the second quarter of FY 2023.



Portfolio Snapshot

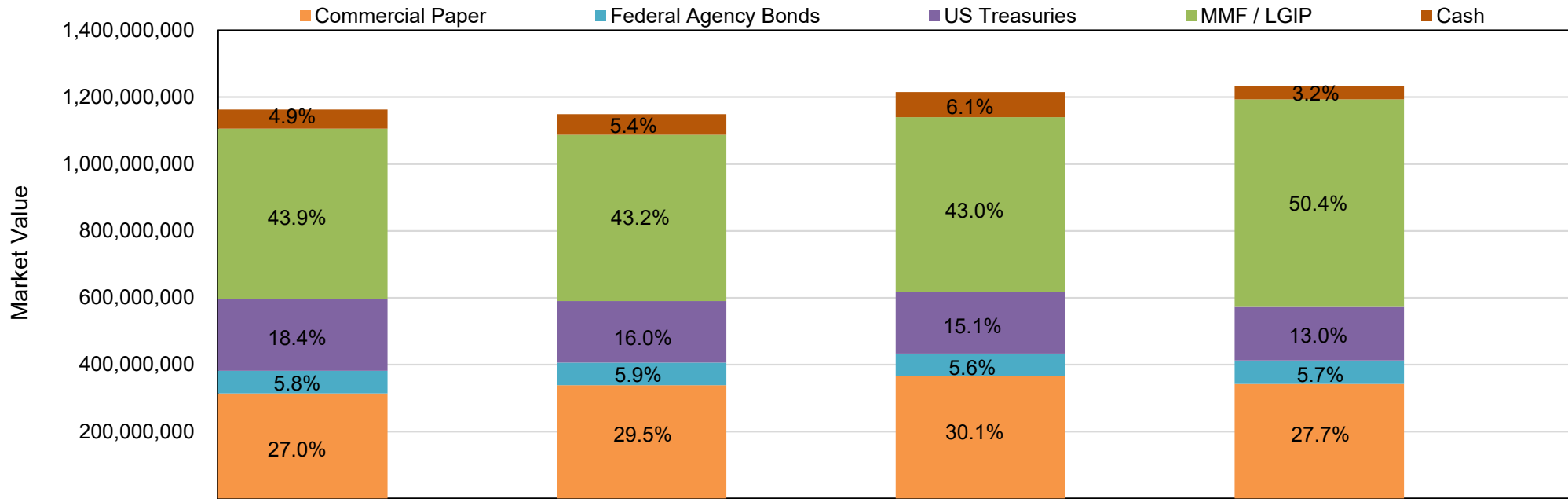
Monthly Investment Income Compared to Fed Funds Rate

- At least 50% of the GLWA portfolio is designated for obligations that are 12 months or less. As a result of the short-term duration of GLWA’s portfolio, it is heavily impacted by changes in the Fed Funds rate; the chart below shows that GLWA’s income has consistently followed the trend of the Fed Funds rate.
- The market is once again subject to the familiar tug of war between investors and the Federal Reserve, although after the banking turmoil in March, the fed is not pulling as hard, and investors are aggressively and consistently pricing in Fed cuts resulting from what they view as an impending recession; current Fed Funds futures have cuts priced in by January of next year, and for its part, the Fed maintains that is not likely and their predicted outcome is holding steady for a period of time after the final hike.



Portfolio Snapshot

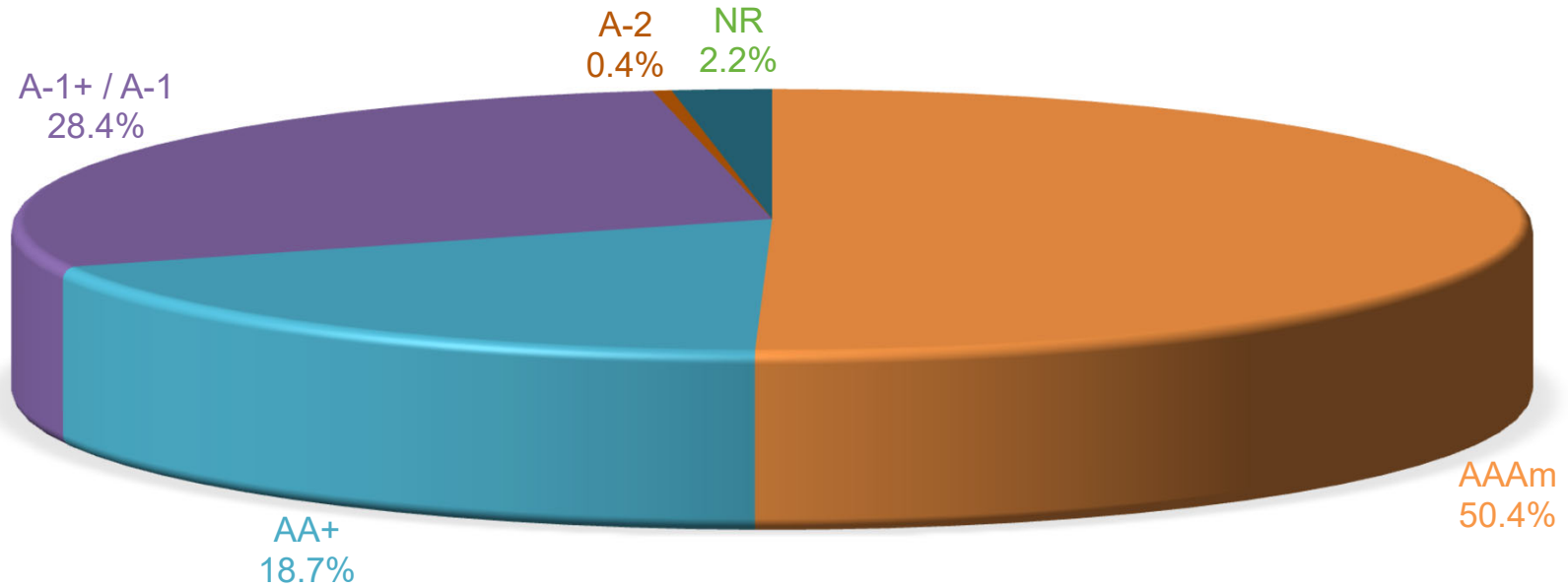
Investments – By Security Type



Security Type	December		January		February		March	
	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation
Commercial Paper	314,135,724	27.0%	338,525,776	29.5%	365,495,393	30.1%	342,072,816	27.7%
Federal Agencies	67,460,122	5.8%	67,697,334	5.9%	67,917,716	5.6%	70,382,441	5.7%
U.S. Treasuries	213,595,594	18.4%	184,271,936	16.0%	183,988,354	15.1%	160,241,668	13.0%
MMF / LGIP	510,834,246	43.9%	496,951,304	43.2%	523,004,241	43.0%	621,095,249	50.4%
Cash	57,305,984	4.9%	61,751,904	5.4%	74,556,758	6.1%	39,530,568	3.2%
Total	1,163,331,669	100.0%	1,149,198,254	100.0%	1,214,962,461	100.0%	1,233,322,743	100.0%

Portfolio Snapshot

Investments – By Credit Quality



Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	621,095,249	50.4%
AA+	230,670,551	18.7%
A-1 + / A-1	349,986,377	28.4%
A-2	5,017,036	0.4%
NR	26,553,530	2.2%
Totals	1,233,322,743	100.0%

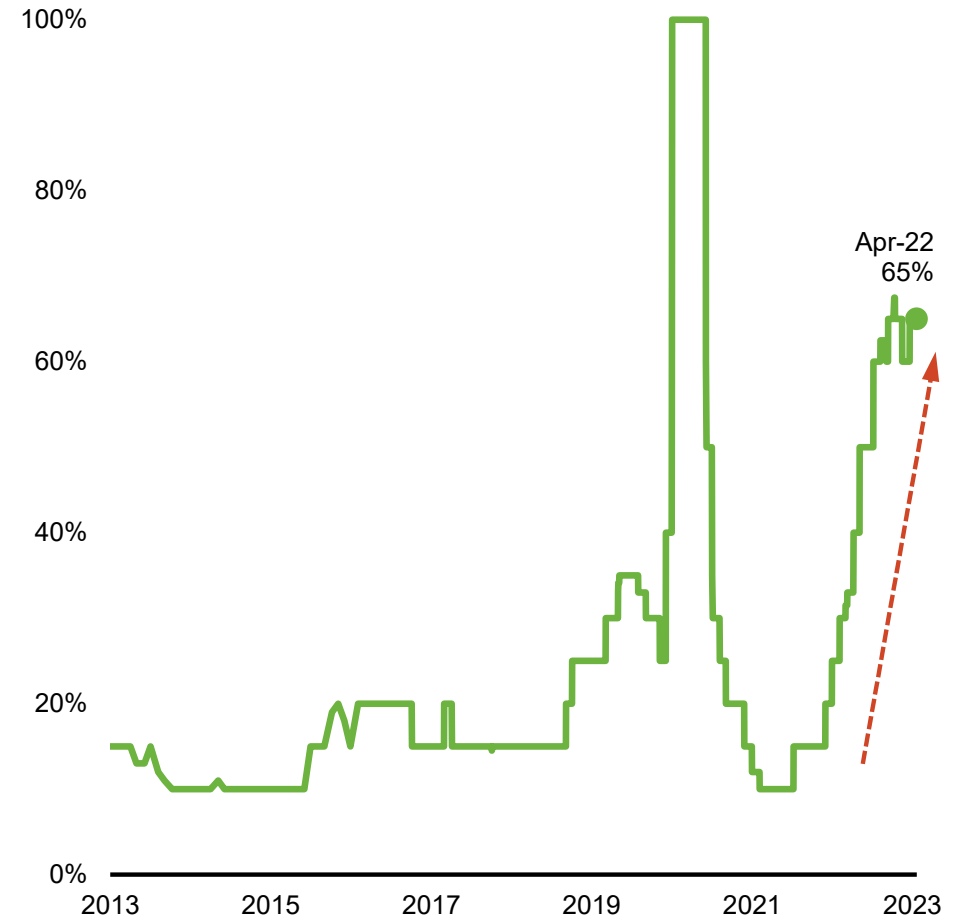
Appendix I: Economic Update

Strong Consumer Spending Keeps GDP Positive Despite Slowdown

GDP Contributors

	Q2 2022	Q3 2022	Q4 2022	Q1 2023
U.S. Real GDP	-0.6%	3.2%	2.6%	1.1%
<i>Personal Consumption</i>	1.4%	1.5%	0.7%	2.5%
<i>Fixed Investment</i>	-0.9%	-0.6%	-0.7%	-0.1%
<i>Private Inventories</i>	-1.9%	-1.2%	1.5%	-2.3%
<i>Net Exports</i>	1.2%	2.9%	0.4%	0.1%
<i>Gov't Expenditures</i>	-0.3%	0.6%	0.6%	0.8%

**U.S. 1-Year Recession Probability
 (Bloomberg Median Economist Forecast)**

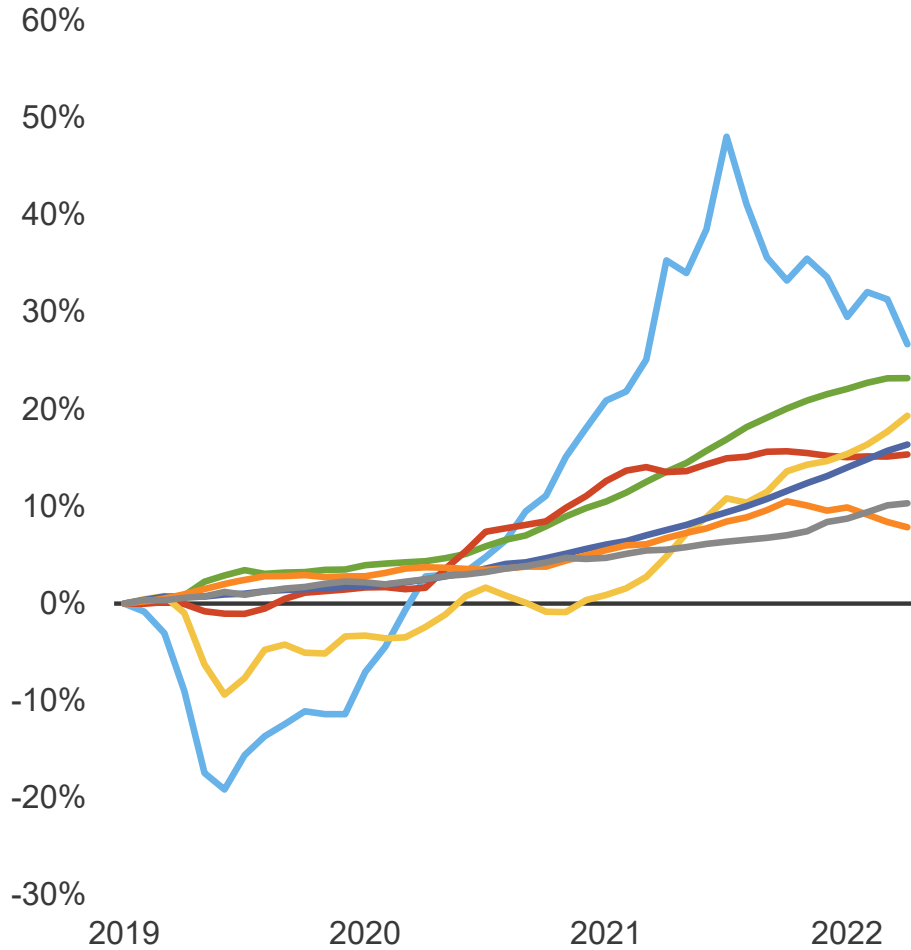


Source: Bloomberg, Bureau of Economic Analysis, real gross domestic product first quarter advance estimate as of April 2023. Detail may not add to total due to rounding.

Energy and Food Prices Fall While Shelter Remains Biggest Contributor to Inflation

Price Change of Major CPI Components

Since December 2019



CPI Component	12-mo. Change	Weight ¹	Contribution to YoY CPI
Energy	-6.4%	7.0%	-0.4%
Food	8.5%	13.5%	1.1%
Transportation	13.8%	5.8%	0.8%
Shelter	8.2%	34.5%	2.8%
Goods	1.6%	21.3%	0.3%
Other Services ²	4.4%	11.4%	0.5%
Medical Services	1.0%	6.5%	0.1%
Overall	5.0%		

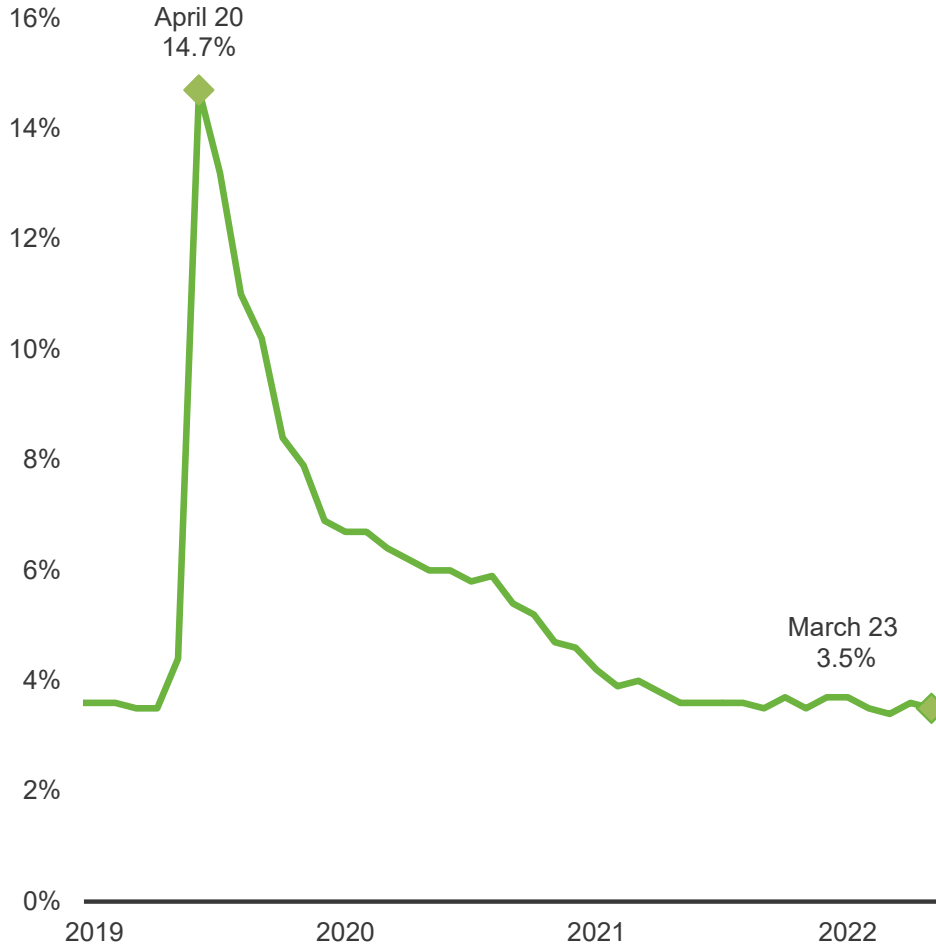
Source: Bloomberg, Bureau of Labor Statistics as of March 2023.

¹ Index weights are as of March 2023 as they are published on a one-month lag.

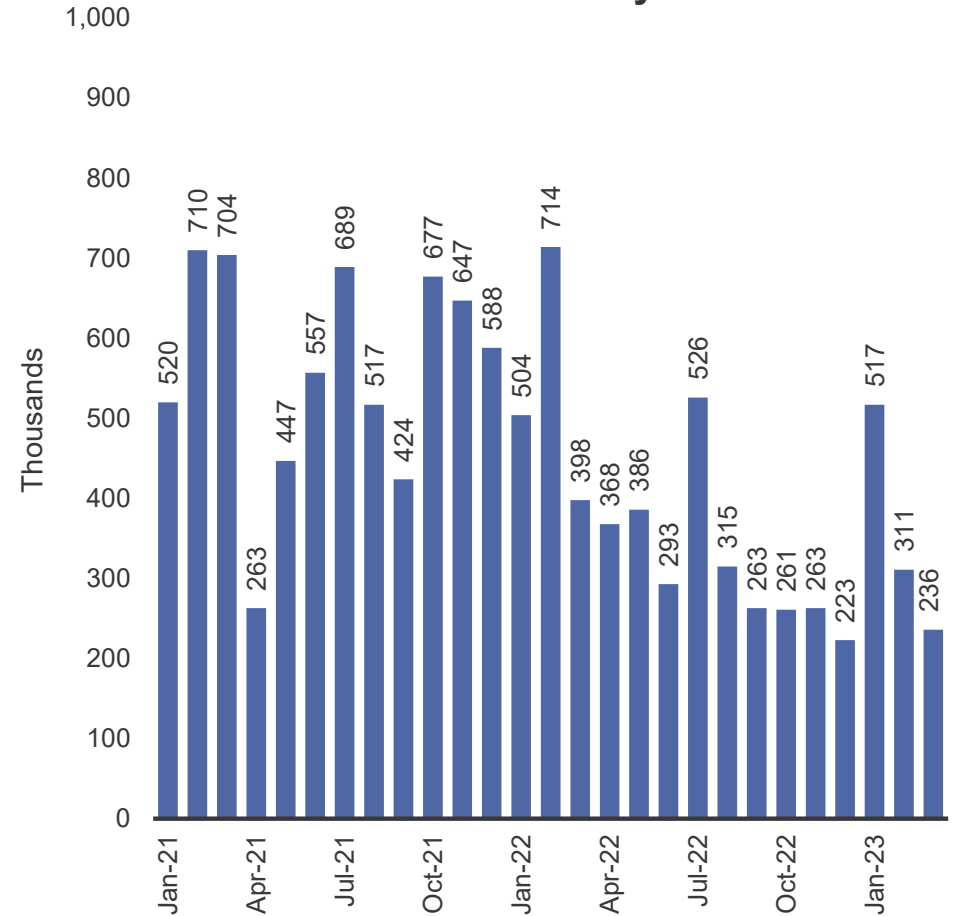
² Other services is a weighted blend of Water/Sewer/Trash, Household Operations, Recreation, and Education and Communication services.

U.S. Economy Added 236,000 Jobs in March; Unemployment Rate Decreased to 3.5%

Unemployment Rate



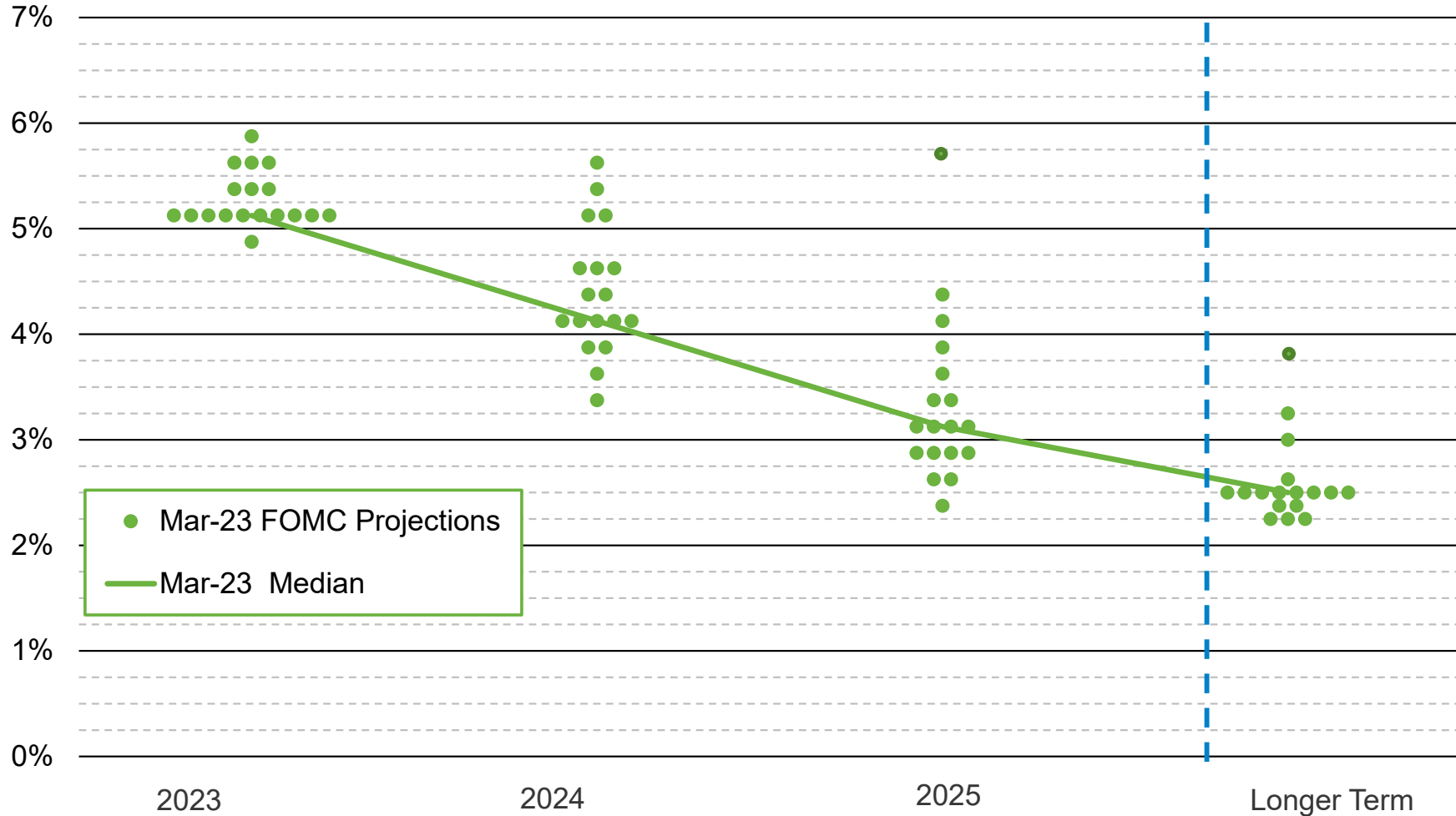
**Monthly Change In
 Nonfarm Payrolls**



Source: Bloomberg, as of March 2023. Data is seasonally adjusted.

Fed’s “Dot Plot” Indicates We Are Nearing Sufficiently Restrictive Territory

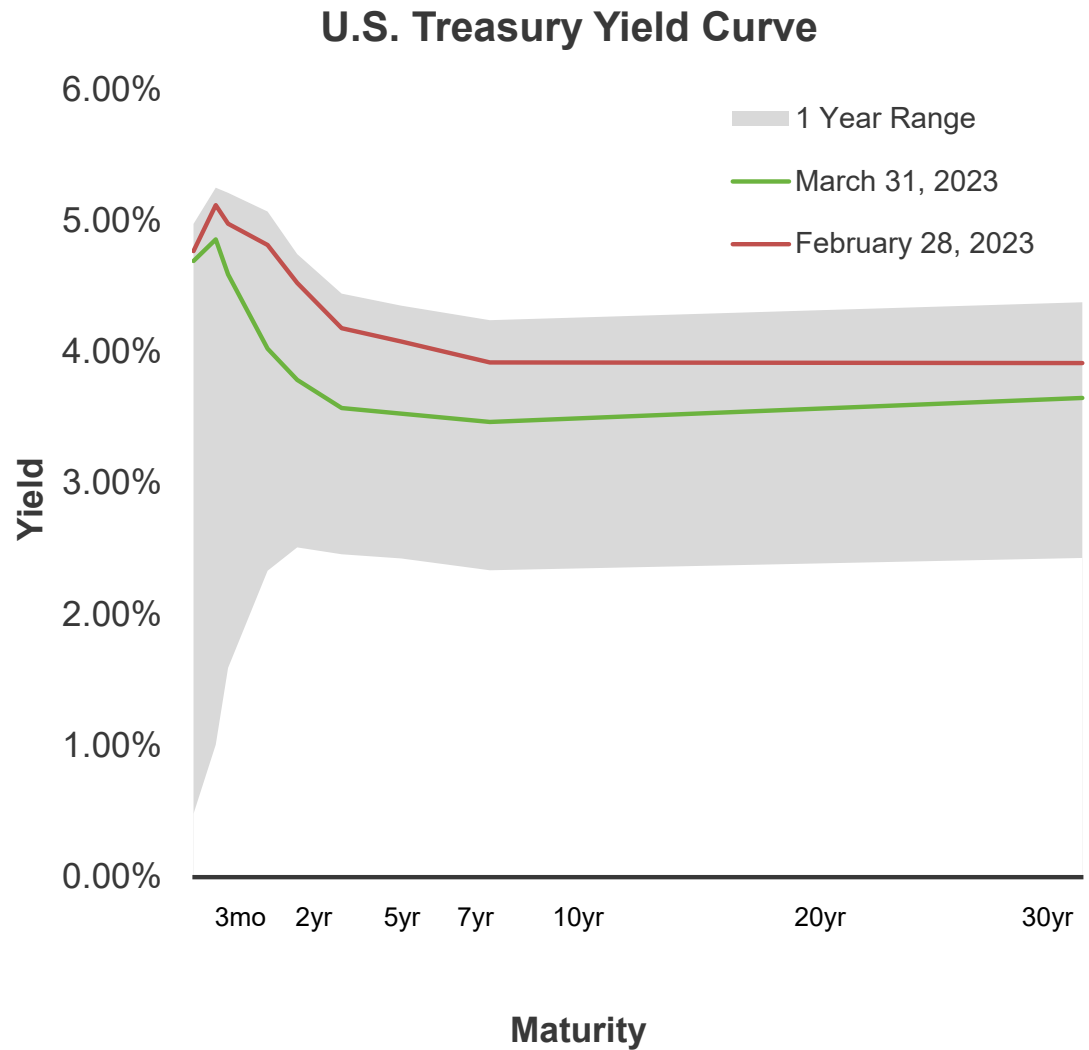
Fed Participants’ Assessments of ‘Appropriate’ Monetary Policy



Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members’ judgement of the midpoint of the appropriate target range for the Federal Funds rate at each year-end.

Treasury Yield Curve

	<u>02/28/2023</u>	<u>03/31/2023</u>	<u>Change</u>
3 month	4.77%	4.69%	-0.08%
6 month	5.12%	4.86%	-0.26%
1 year	4.98%	4.59%	-0.39%
2 year	4.82%	4.03%	-0.79%
3 year	4.53%	3.79%	-0.74%
5 year	4.00%	3.57%	-0.43%
10 year	3.92%	3.47%	-0.45%
30 year	2.44%	3.65%	1.21%



Source: Bloomberg, as of 02/28/2023 and 03/31/2023, as indicated.

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- In the previous quarter, U.S. economic conditions were characterized by:
 - Lingering inflation that remains well above the Federal Reserve’s (“Fed”) long-term inflation target
 - A labor market that may be showing the first signs of moderation
 - Greater economic uncertainty following debt ceiling debates and financial industry volatility, including the surprise failure of Silicon Valley Bank and Signature Bank

- The scope for the Fed to continue its rate-hiking path has narrowed dramatically with the recent developments in the banking sector and the outlook for economic growth
 - Following two rate hikes in the first quarter of calendar year 2023 (a 25-basis point increase in both February and March), the overnight target rate is now in a range of 4.75% to 5.00%
 - Fed Chair Jerome Powell noted that events in the banking system might also “contribute to significant tightening in credit conditions over time, and in principle, that means that monetary policy may have less work to do”
 - Markets now firmly expect the Fed is at or very near its terminal peak rate
 - While the Fed has maintained that they will keep rates elevated for some time, a disconnect has emerged in Fed Funds futures, which indicate that the market anticipates rate cuts during the latter half of 2023

- The U.S. hit its debt ceiling (\$31.4 trillion) in January, triggering the U.S. Treasury Department to start taking extraordinary measures to prevent a default
 - Congress and the President need to agree on a budget for the federal government by October 1st
 - Treasury Secretary Janet Yellen warned and sent word that the so-called X date of when the U.S. government could run out of cash to cover its expenses is closer upon us, “potentially as early as June 1st”
 - Congress can avert the looming economic catastrophe by authorizing more government borrowing so the U.S. can keep paying its bills and avoid an unprecedented default on its financial obligations

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- The sharp fall in rates through March was led by the 2-year U.S. Treasury, which declined by 104 basis points from its March high of 5.07% to close the quarter at 4.03%
 - Longer-term U.S. Treasury yields declined notably during the quarter as well, but to a lesser extent, as the inversion in the yield curve (measured by the difference between 2-year and 10-year U.S. Treasury yields) weakened from an intra-quarter low of -108 basis points to finish the quarter at -56 basis points)
 - U.S. Treasuries, coming off one of the most volatile quarters in 15 years, posted firmly positive total returns as yields declined across the board

- Fed policy tightening may be nearly complete
 - The need for more rate hikes has become less clear
 - Although the Fed has acknowledged the impact of the recent bank failures, their March updated Summary of Economic Projections were little changed from December
 - The Fed has maintained they will keep rates elevated for some time, but the market is pricing in cuts beginning this year

- Bond markets saw unprecedented volatility in March
 - In a classic “flight to quality,” Treasury yields fell sharply, with the 2-year Treasury falling from 5.07% on March 8th to under 4.00% on March 17th
 - The curve inversion from 3 months to 10 years reached the deepest levels in over 40 years
 - Credit yield spreads widened, especially those on banks, but not nearly to levels seen during the global financial crisis

- Diversification away from U.S. Treasury investment securities was a mixed bag for fixed-income performance during the first quarter of calendar year 2023 as market volatility and the fall in interest rates largely dictated the relative performance of non-Treasury sectors

Disclosure

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Welcome to the May edition of *The Procurement Pipeline*, a monthly newsletter designed to provide updates on doing business with the Great Lakes Water Authority (GLWA).

Procurement Tip of the Month: Utilizing GLWA's Capital Improvement Plan (CIP)

GLWA's Capital Improvement Plan (CIP) is a five-year planning document which identifies projects that support the continuation of major capital asset investments in GLWA's regional water and wastewater systems. Updated annually to reflect changing system needs, priorities, and funding opportunities, GLWA's Board Approved [Capital Improvement Plan for 2024-2028](#) is now available on the [CIP page of GLWA's Website](#).

Vendors reviewing GLWA's CIP documents may expect to find the following.

- ✓ Full listing of CIP projects for water, wastewater, and centralized services;
- ✓ One-page summaries including details on each project's purpose, status (whether in procurement, execution, or future planned), phases, scope of work, cost estimations, and potential challenges; and
- ✓ Six additional informational appendices providing greater detail about projects, system background information, scoring evaluations, and [How to Navigate the CIP](#).

Vendors may also reference the [Capital Improvement Viewer](#), which plots active CIP projects on an interactive map of GLWA's service territory area. Projects are color-coded by category and users of this mapping tool can click on each project to view additional information.

Vendors who regularly utilize the "Upcoming Solicitation" portion of the monthly *Procurement Pipeline* newsletter to prepare for future solicitations submissions will see, where applicable, CIP numbers listed next to certain projects. Vendors interested to know more about these upcoming projects may look up those CIP numbers in GLWA's CIP documents to review

further details on projects they may be interested to pursue.

Reminder: Maintaining Up-to-Date Contact Information in Your Bonfire Vendor Profile

Maintaining up-to-date contact information in your Bonfire Vendor Profile is the key to staying informed about GLWA. This is because GLWA uses our Bonfire Vendor database to distribute important communications to the Vendor Community. Vendors should consider using a distribution-style email address to ensure multiple individuals from your organization receive these communications should one or more be unavailable at the time of sending. Any questions about your Bonfire Vendor profile may 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 to schedule a virtual vendor introduction meeting. Topics include information on submitting a competitive bid or proposal to any GLWA solicitation.

Keeping up with GLWA

Our Chief Executive Officer (CEO) 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 April 2023 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 or contact us via email at procurement@glwater.org.

Upcoming Solicitations May 2023

Category	CIP #	Description/Project Title	Budget Estimate
Water System (next four to nine months)			
N/A			
Wastewater Systems (next four to nine months)			
Construction	211005.2	WRRF Pump Station 2 VFD Replacements	\$12,000,000
Construction	232002	Freud & Connor Creek Pump Station Improvements	\$75,000,000
Construction	211007	Pump Station No.2 Bar Racks Replacement and Grit Collection System Improvements	\$96,000,000
Water System (next three months)			
Construction	170802	Reservoir Rehabilitation Construction Services Phase II at Waterworks Park, Northeast, and Booster Stations.	\$35,972,000
Wastewater (next three months)			
Construction	260209	Emergency and Urgent Sewer Repair II	\$12,400,000
Design-Bid-Build	261001	WRRF Rehabilitation of Secondary Clarifiers	\$6,000,000
Projects moved to Procurement Team (Preparing for solicitation on Bonfire)			
Professional Services	O&M	CSO Facility Accusonic Meter Maintenance	\$3,000,000
Professional Services	O&M	Grounds Maintenance Services	\$4,600,000
Professional Services	O&M	Motor Repair Contract	\$1,800,000
Professional Services	O&M	Instrumentation and Controls Contract	\$3,011,840
Professional Services	O&M	Overhead Door Preventative Maintenance and Repairs	\$892,000
Construction	260802	WRRF Roofing Improvements	\$4,300,000
Professional Services	O&M	Snow Removal and De-icing Services	\$2,158,106
Construction	170802	Reservoir Rehabilitation Construction Services Phase II at Waterworks Park, Northeast, and Booster Stations	\$35,972,000
Construction	211005.3	WRRF Pump Station 2 Mag Meter Replacements (JOC)	\$1,000,000

Vendors should continue to monitor [Bonfire](#) for solicitation updates.

Acronyms		
WRRF: Water Resource Recovery Facility	CSO: Combined Sewer Overflow	WTP: Water Treatment Plant