

Audit Committee Meeting Monday, June 17, 2024 at 8:00 a.m.

www.glwater.org

Join Zoom Meeting

Meeting ID: **865 5038 9447** Passcode: **089203**

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

AGENDA

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF AGENDA
- 4. APPROVAL OF MINUTES
 - A. April 26, 2024 (Page 1)
- 5. PUBLIC PARTICIPATION
- 6. OLD BUSINESS
 - A. 2024 Municipal Bond Refunding Transaction Results (Page 6)
 - B. Report on Status of Conditions Precedent Related to Bad Debt (Page 62) Recovery Credit

7. NEW BUSINESS

- A. *Action Item*: GLWA Resolution Regarding Approval of Series (Page 88) Ordinance Authorizing Issuance and Sale of Sewer Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 (Ordinance 2024-04)
- B. Action Item: FY 2024 Third Quarter Budget Amendments (Page 118)
- 8. REPORTS
 - A. CFO Report (Verbal)
 - B. Monthly Financial Report for February 2024 (Page 150)
 - C. Gifts, Grants & Other Resources Report (Page 151)
 - D. Quarterly Investment Report (Page 159)
- 9. COMMUNICATIONS
 - A. The Procurement Pipeline for May 2024 (Page 186)
- 10. LOOK AHEAD
 - A. Next Audit Committee Meeting: Scheduled for June 28, 2024 at 8:00 a.m.
- 11. OTHER MATTERS
- 12. ADJOURNMENT

Great Lakes Water Authority



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

Meeting Minutes - Draft

Audit Committee

Monday, April 29, 2024 8:00 AM Zoom Telephonic Meeting

Zoom Telephonic Meeting

Join Zoom Meeting: https://glwater.zoom.us/j/82469219358?pwd=K0R4dkhnaXVISkF6K1Qxc0p1b28yQT09

Join By Telephone: 877 853 5247 US Toll-free 888 788 0099 US Toll-free Meeting ID: 824 6921 9358 Passcode: 395690

1. Call To Order

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

2. Quorum Call

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

3. Approval of Agenda

Chairperson Baker requested a Motion to Approve the Agenda.

Motion By: Jaye Quadrozzi Support By: Gary Brown Action: Approved

The motion carried by a unanimous vote.

4. Approval of Minutes

Audit Committee Meeting Minutes - Draft April 29, 2024

A. <u>2024-161</u> Minutes of March 22, 2024

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 4A Minutes - March 22, 2024 Audit Committee Meeting.pdf

Chairperson Baker requested a Motion to Approve the March 22, 2024 Audit

Committee Meeting Minutes.

Motion By: Gary Brown Support By: Jaye Quadrozzi

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business

None

7. New Business

A. <u>2024-160</u> Resolution to Adopt the City of Detroit Water and Sewerage

Department (DWSD) Water System Improvements Project Plan for Fiscal Year (FY) 2025 Drinking Water State Revolving Fund (DWSRF)

Funding Consideration

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7A1 AC Memo - Approval of DWSD FY2025 DWSRF Project Plan.pdf

7A3 GLWA Resolution to Adopt DWSD FY2025 CWSRF Project

Plan.docx

7A4 DWSD - FY2025 DWSRF Project Plan Summary and

Resolution.pdf

Motion By: Jaye Quadrozzi Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of May 22, 2024

The motion carried by a unanimous vote.

Audit Committee Meeting Minutes - Draft April 29, 2024

B. 2024-121 Resolution to Approve the FY 2024 Second Quarter Budget

Amendments

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7B0 FY 2024 2nd Quarter Budget Amendment Report Memo.pdf

7B2 FY 2024 2nd Quarter Budget Amendment Report.pdf
7B7 FY 2024 2nd Quarter Budget Amendment Resolution.pdf

Motion By: Gary Brown Support By: Jaye Quadrozzi

Action: Recommended for Approval to the Board of Directors

Agenda of May 22, 2024

The motion carried by a unanimous vote.

8. Reports

A. 2024-165 CFO Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8A1 CFO Report April 2024.pdf

8A2 Awwa Others April 17 2024.pdf

8A3 AWWA Others LIHWAP EstablishmentAct support 2-5-24.pdf

8A4 LIHWAP Establishment Act.pdf

Motion By: Jaye Quadrozzi Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

B. 2024-166 Monthly Financial Report for January 2024

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8B January 2024 Financial Report.pdf

Motion By: Gary Brown Support By: Jaye Quadrozzi Action: Received and Filed

The motion carried by a unanimous vote.

C. 2024-167 Affordability & Assistance Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8C Affordability & Assistance Update-April.pdf

Motion By: Gary Brown Support By: Jaye Quadrozzi Action: Received and Filed

The motion carried by a unanimous vote.

D. 2024-168 Gifts, Grants & Other Resources Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8D Grants Gifts and Other Resources Report.pdf

Motion By: Jaye Quadrozzi Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

E. 2024-169 Quarterly BID Report through March 31, 2024

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8E Quarterly B.I.D. Report through March 31, 2024.pdf

Motion By: Gary Brown Support By: Jaye Quadrozzi Action: Received and Filed

The motion carried by a unanimous vote.

F. 2024-170 Semiannual Debt Report through March 31, 2024

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8F1 Semiannual Debt Report as of 3.31.2024.pdf

Motion By: Jaye Quadrozzi Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

Audit Committee Meeting Minutes - Draft April 29, 2024

G. 2024-171 General Retirement System Financial Report and Annual Actuarial

Valuation for Year End June 30, 2023 (City of Detroit Component II)

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8G1 GRS Component II Annual Pension Report.pdf

8G2 GRS Audit Communication Letter 6.30.23.pdf 8G3 GRS Audited Financial Report 6.30.2023.pdf

8G4 GRS Component II GASB 67 & 68 Report 6.30.2023.pdf 8G5 GRS Valuation Component II-Legacy Pension 6.30.2023.pdf

Motion By: Gary Brown Support By: Jaye Quadrozzi Action: Received and Filed

The motion carried by a unanimous vote.

9. Communications

A. 2024-172 The Procurement Pipeline for April 2024

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 9A The Procurement Pipeline for April 2024.pdf

No Action Taken

10. Look Ahead

A. Next Audit Committee Meeting: May 24, 2024 at 8:00 a.m.

11. Other Matters

There were no other matters.

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Gary Brown Support By: Jaye Quadrozzi

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 9:08 a.m.

Page 6 AGENDA ITEM #6A



Financial Services Audit Committee Communication

Date: June 17, 2024

To: Great Lakes Water Authority Audit Committee

From: Nicholas Fedewa, CPA, Public Finance Manager

Re: 2024 Municipal Bond Refunding Transaction Results

Background: Consistent with the Great Lakes Water Authority's (GLWA) long term debt management strategy, a refunding bond transaction was authorized by the Board of Directors earlier in the calendar year. The pricing took place on May 21, 2024. A high-level review of the attached presentation titled "Summary of 2024 Financing Results" was presented to the Board of Directors at their meeting on May 22, 2024. This presentation was compiled by PFM Financial Advisors LLC (PFM) who serves as the GLWA municipal bond advisors.

Analysis: Attached is the presentation referenced above. GLWA Staff and PFM will provide a more in-depth review of the most recent bond transaction that was recently closed on June 6, 2024.

Also attached are the rating agency reports from Fitch Ratings, Moody's Investors Service, and Standard & Poor's that were released in the days leading up to the bond pricing.

Proposed Action: Receive and file this report.



Great Lakes Water Authority

Summary of 2024 Financing Results

\$384,105,000 Water Supply System Revenue Refunding Bonds, Series 2024

\$348,175,000 Water Supply System Revenue Refunding Senior Lien Bonds, Series 2024A \$35,930,000 Water Supply System Revenue Refunding Second Lien Bonds, Series 2024B

\$387,565,000 Sewage Disposal System Revenue Refunding Bonds, Series 2024

\$347,305,000 Sewage Disposal System Revenue Refunding Senior Lien Bonds, Series 2024A \$40,260,000 Sewage Disposal System Revenue Refunding Second Lien Bonds, Series 2024B

Presented to the Board May 22, 2024 and the Audit Committee on June 17, 2024

Executive Summary



Recent bond transactions for the Water System and Sewer System achieved favorable outcomes for GLWA

- Successful refinancing of \$434.2 million of Water System bonds and \$436.5 million of Sewer System bonds
 - Water System future cashflow savings of \$67.5 million (\$39.3 million net present value, or 9.1%)
 - Sewer System future cashflow savings of \$62.9 million (\$37.3 million net present value, or 8.5%)
- Affirmation of strong GLWA credit ratings, including maintenance of the positive outlook from Fitch on the Sewer System
- Achieved reduction of Reserve Requirement to \$0, representing culmination of long-term strategy to modernize Master Bond
 Ordinances and create a more efficient structure
 - Required rating agency confirmation was received
 - Funds in the existing reserve accounts were used to reduce the size of the Series 2024 transaction by \$32.2 million (across the two systems) and improve cashflow savings
- Extensive outreach to investors was effective and included an electronic investor roadshow and one-on-one investor calls between the Authority and major institutional investors
 - Significant investor interest despite heavy tax-exempt supply in the market on the same day, driven by recent decreases in interest rates and favorable tax-exempt ratios
 - Strong GLWA name received orders from over 50 unique institutional investors, leading to GLWA's lowest ever credit spreads to municipal benchmark rates
 - SWS supported the transaction by underwriting \$132 million of bonds to maintain the integrity of the order book
- Series 2024 bond structures strategically aligned refunding cashflow savings to achieve overall debt structuring goals and lessen burden on the budget for upcoming years







Goals Set... Goals Met



The goals for the Series 2024 financings were achieved and provide the Authority with a strong base with which to weather the challenges of a growing capital plan while still achieving future financial goals.





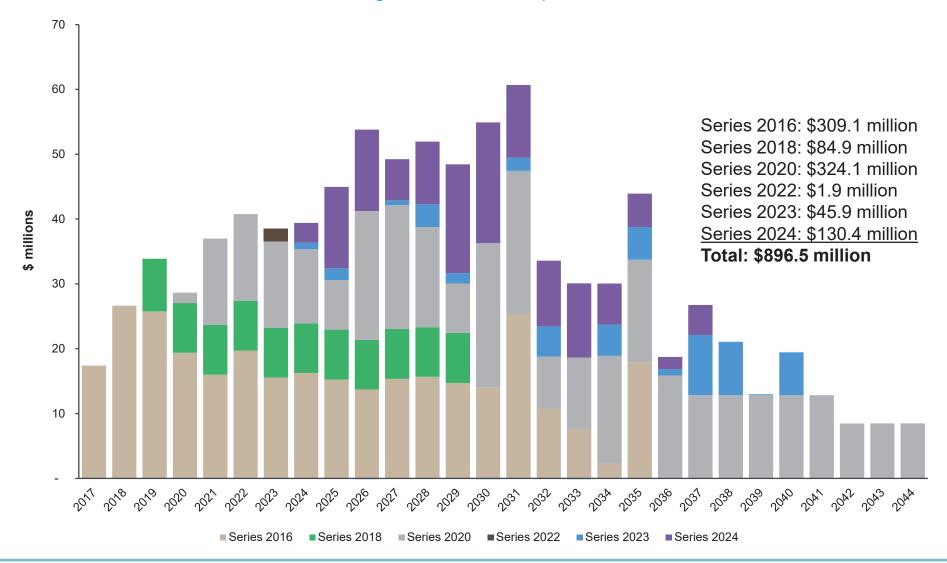




History of Debt Service Savings Since GLWA Standup



Through the leadership of the Authority's management, the financing team has been able to achieve nearly \$900 million in future cash flow debt service savings since the stand-up of GLWA









Reduction of Reserve Fund Requirement



- Reserve Fund Amendment allows GLWA the option (but not requirement) to reduce or eliminate the Reserve Requirement once conditions precedent have been met:
 - Attain ratings of at least AA- or Aa3 on the Senior Lien from at least two of Moody's, S&P, and Fitch ✓ and
 - Confirmation that ratings will not be reduced solely because of the change in the Reserve Requirement ☑
- Ratings confirmation achieved in concert with Series 2024, allowing GLWA to reduce Reserve Requirement to \$0 for each of Water Senior, Water Second, Sewer Senior, and Sewer Second liens
 - Represents culmination of long-term strategy to create a more efficient structure
 - Originally envisioned as far back as 2016
- Potential for negative rating agency and investor reception managed by communicating plans to modestly increase liquidity targets for Water System and Sewer System to 600 days by 2034
- \$16.1 million from the Water System reserve accounts and \$16.1 million from the Sewer System reserve accounts used to reduce the size of the borrowing and enhance the Series 2024 future cashflow savings
- Elimination of the Reserve Requirement is designed to achieve substantial financial and risk reduction benefits for GLWA over the long term:
 - Supports better management of overall liquidity by eliminating restrictions on fund balances
 - Reduces outstanding debt by dedicating released funds to downsize Series 2024 borrowing
 - Eliminates costly negative arbitrage associated with Debt Service Reserve Fund (DSRF) investments, which has created a significant drag on over the past decade
 - Improves debt service coverage levels by eliminating borrowing for the purpose of funding a DSRF requirement (or cost of surety premiums)
 - Addresses need to replace surety policies that will terminate with Series 2024 refunding and uncertainties over future expiring surety policies that would have to be replaced with cash or another surety policy (if available)



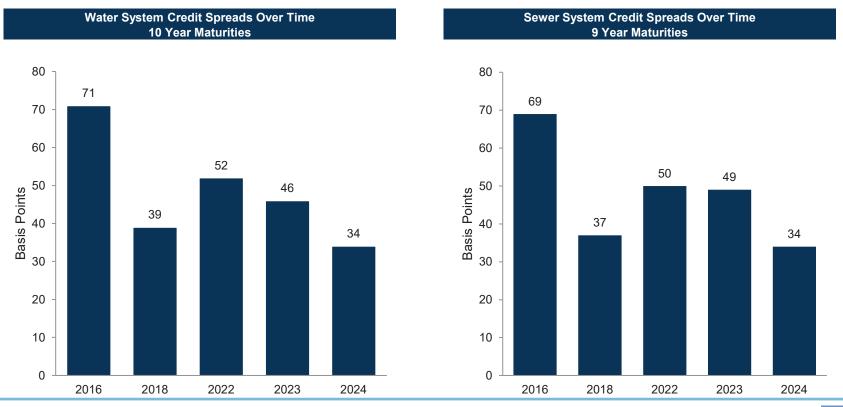




GLWA Credit Spreads Have Declined Since Standup



- GLWA's tax-exempt borrowing costs are a function of municipal benchmark rates that are common to the market plus credit spreads that are specific to GLWA
- As GLWA's credit profile has strengthened, GLWA's credit spreads have declined
 - Declines in GLWA credit spreads translate directly to reduced debt service costs and increased availability of refinancing savings, resulting in tangible benefits for member partners that comes from GLWA's stronger credit profile
- The following charts show GLWA credit spreads in the 9 and 10-year part of the yield curve since GLWA's inaugural financing in 2016 (there were no 10-year sewer bonds in 2024)
 - Credit spreads are also impacted by market conditions at the time of the sale; GLWA's credit spreads in 2018 reflected very favorable market conditions and overall low rates

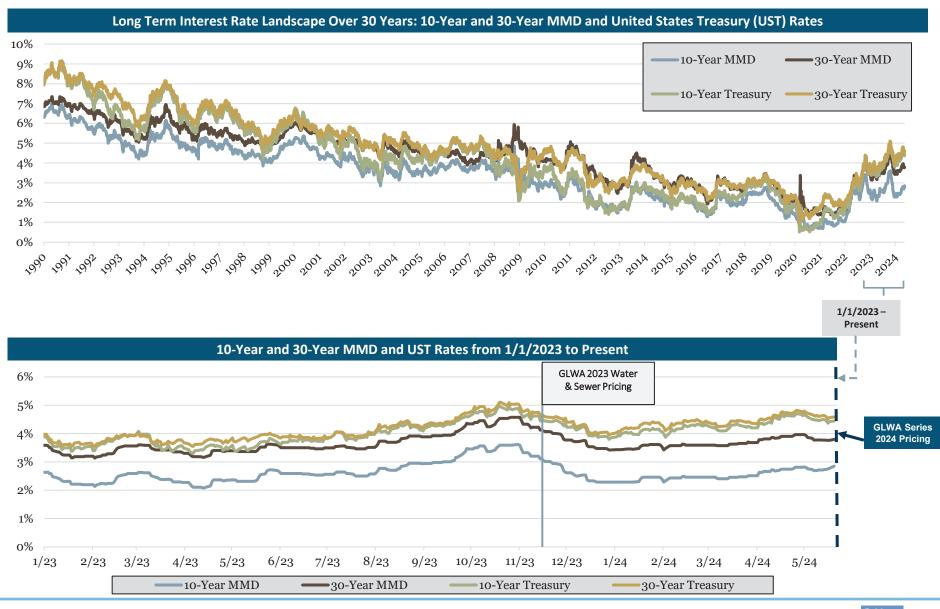






10-Year and 30-Year MMD and Treasury Yields



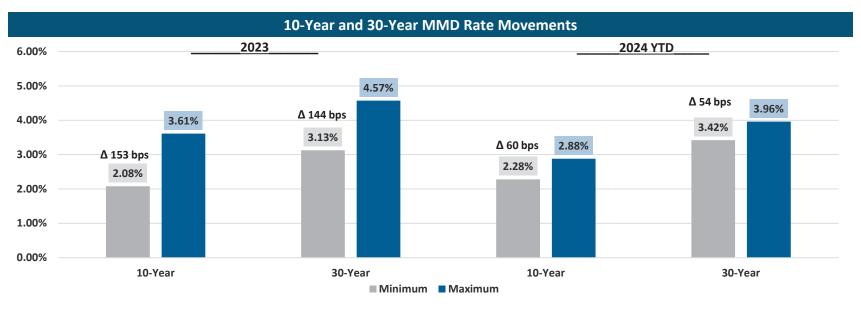


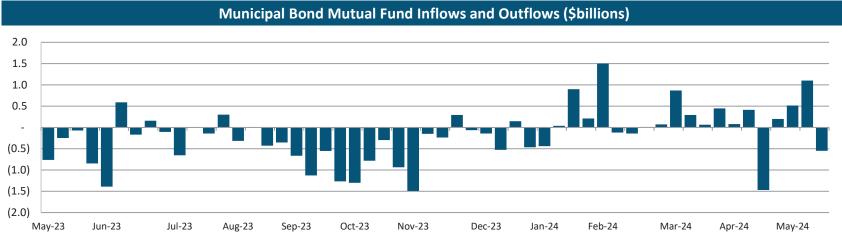




Changing Market Fundamentals and Volatility









Note: All rates, analyses, and commentary are as of May 21, 2024

Sources: Bloomberg and TM3





Comprehensive Marketing Outreach



Order Book & Marketing Process:

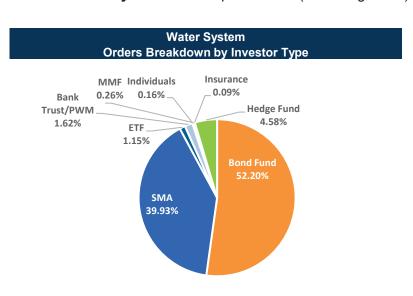
- An extensive premarketing effort led by Siebert Williams Shank & Co., LLC in the days leading up to the sale generated demand from a
 wide variety of institutional accounts
 - Marketing outreach efforts included 3 one-on-one investor calls, 41 unique investor views of the POS, and 37 unique investor views of the investor roadshow
 - Of the roadshow viewers, 8 unique investors followed through with orders on either the water or sewer credits
 - 1 of 3 investors requesting one-on-one calls with GLWA management followed through with orders

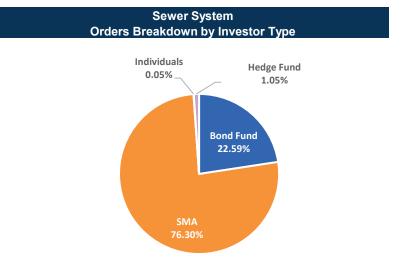
Institutional Orders:

- The Water System transaction received \$474.115 million in priority orders
 - 34 unique investors participated, including 12 institutional investors that did not participate in GLWA's 2023 water transaction
- The Sewer System transaction received \$436.300 million in priority orders
 - 21 unique investors participated, including 5 institutional investors that did not participate in GLWA's 2023 sewer transaction

Subscriptions:

- Orders were received from a mix of investors including insurance companies, bond funds, separately managed accounts ("SMA"), and bank portfolios
 - Water System: Subscription levels (excluding stock) ranged from 0.0x to a high of 3.7x
 - Sewer System: Subscription levels (excluding stock) ranged from 0.0x to a high of 3.0x









Water System - Transaction Overview



- GLWA issued \$384.1 million in Water System Bonds to refund \$434.2 million of outstanding obligations for debt service savings
- Savings were structured to create level savings through the term of the refunded debt, to the extent possible
- The combined Water System transaction generated \$39.3 million in present value savings (9.1% of refunded par)
- As a result of recent rating upgrades, GLWA was able to release \$16.1 million from the Water System Reserve Accounts and use it to reduce debt within this transaction

Water System Sources and Uses

	Senior Lien	Second Lien	Aggregate
Sources	Series 2024A	Series 2024B	Series 2024 Bonds
Par Amount	348,175,000	35,930,000	384,105,000
Premium	31,484,694	4,410,240	35,894,935
GLWA Reserve Account	12,569,327	3,539,451	16,108,779
GLWA Debt Service Account	8,406,059	940,549	9,346,608
Total	400,635,081	44,820,240	445,455,321
	Senior Lien	Second Lien	Aggregate
Uses	Series 2024A	Series 2024B	Series 2024 Bonds
Escrow Deposit	398,680,605	44,608,120	443,288,725
Underwriter's Discount	1,001,743	103,665	1,105,408
Costs of Issuance	952,733	108,455	1,061,188
Total	400,635,081	44,820,240	445,455,321
Total Refunded Bonds	390,475,000	43,690,000	434,165,000
Total Future Cashflow Savings	57,287,875	10,193,444	67,481,319
Total Present Value Savings (\$)	34,323,156	4,970,160	39,293,317
Total Present Value Savings (%)	8.8%	11.4%	9.1%

Water System Cashflow Savings				
Fiscal Year	Senior Lien Savings	Second Lien Savings	Total Savings	
2024	1,355,816	151,701	1,507,517	
2025	4,641,059	1,233,243	5,874,302	
2026	4,643,250	1,234,500	5,877,750	
2027	4,642,500	1,229,750	5,872,250	
2028	4,645,000	693,000	5,338,000	
2029	4,640,250	725,750	5,366,000	
2030	4,643,250	605,750	5,249,000	
2031	4,643,250	600,500	5,243,750	
2032	4,645,000	599,500	5,244,500	
2033	4,643,000	592,500	5,235,500	
2034	4,642,000	1,234,750	5,876,750	
2035	4,641,500	58,750	4,700,250	
2036	221,000	1,233,750	1,454,750	
2037	4,641,000	-	4,641,000	
Totals	57,287,875	10,193,444	67,481,319	







Sewer System - Transaction Overview



- GLWA issued \$387.6 million in Sewer System Bonds to refund \$436.5 million of outstanding obligations for debt service savings
- Savings were structured to maintain savings from FY2024 FY2026, while savings thereafter were structured to improve future budget flexibility with respect to the existing debt portfolio
- The combined Sewer System transaction generated \$37.3 million in present value savings (8.5% of refunded par)
- As a result of recent rating upgrades, GLWA was able to release \$16.1 million from the Sewer System Reserve Accounts and use it to reduce debt within this transaction

Sewer System Sources and Uses

	Senior Lien	Second Lien	Aggregate
Sources	Series 2024A	Series 2024B	Series 2024 Bonds
Par Amount	347,305,000	40,260,000	387,565,000
Premium	31,596,323	3,217,125	34,813,448
GLWA Reserve Account	15,316,431	795,949	16,112,380
GLWA Debt Service Account	8,449,007	948,622	9,397,628
Total	402,666,761	45,221,695	447,888,456

Iotai	702,000,701	70,221,000	77,000,1750
	Senior Lien	Second Lien	Aggregate
Uses	Series 2024A	Series 2024B	Series 2024 Bonds
Escrow Deposit	400,717,528	44,991,001	445,708,529
Underwriter's Discount	998,821	115,674	1,114,495
Costs of Issuance	950,411	115,021	1,065,432
Total	402,666,761	45,221,695	447,888,456
Total Refunded Bonds	392,470,000	44,065,000	436,535,000
Total Future Cashflow Savings	57,859,073	5,055,962	62,915,035
Total Present Value Savings (\$)	33,915,511	3,398,468	37,313,979
Total Present Value Savings (%)	8.6%	7.7%	8.5%

	Sewer System Cashflow Savings				
Fiscal Year	Senior Lien Savings	Second Lien Savings	Total Savings		
2024	1,362,743	153,003	1,515,747		
2025	6,227,330	465,458	6,692,788		
2026	6,229,500	459,500	6,689,000		
2027	3,000	460,000	463,000		
2028	3,877,250	459,750	4,337,000		
2029	10,952,250	458,750	11,411,000		
2030	12,993,500	382,000	13,375,500		
2031	5,609,750	373,250	5,983,000		
2032	4,456,000	459,250	4,915,250		
2033	6,147,750	60,250	6,208,000		
2034	-	460,250	460,250		
2035	-	460,250	460,250		
2036	-	404,250	404,250		
Totals	57,859,073	5,055,962	62,915,035		

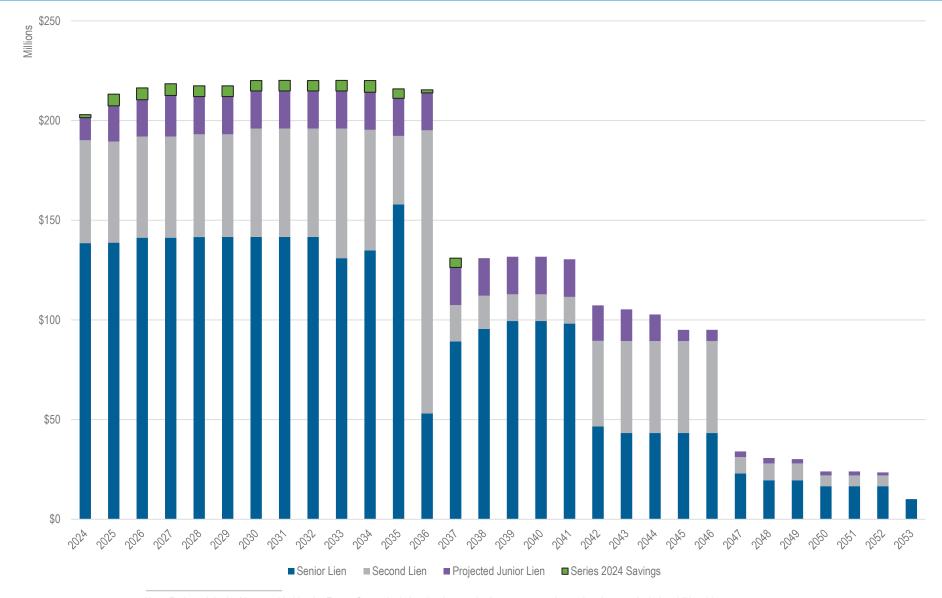






Water System – Aggregate Debt Portfolio





Note: Projected Junior Lien provided by the Foster Group; Includes the draw projections on current loans, but does not include additional loans

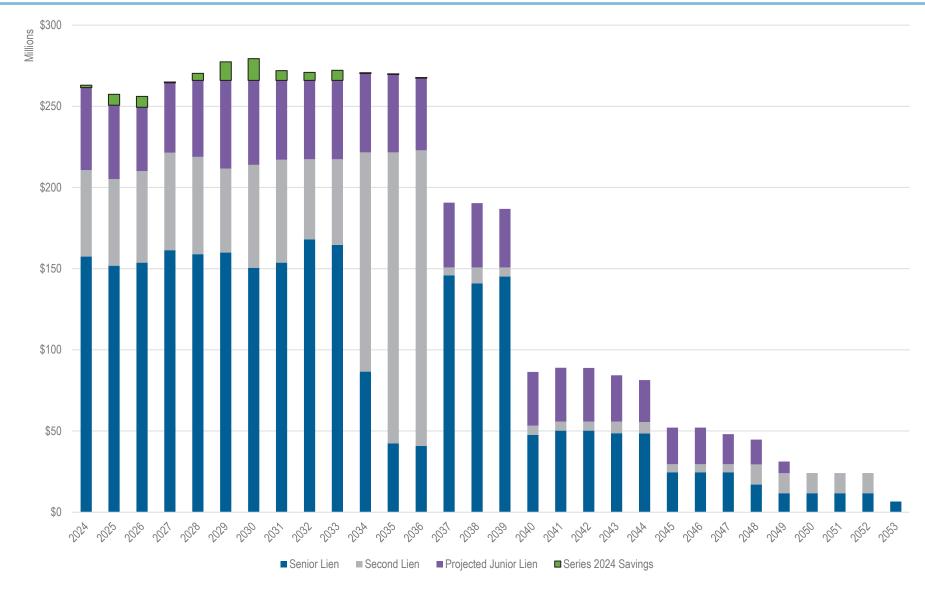






Sewer System – Aggregate Debt Portfolio





Note: Projected Junior Lien provided by the Foster Group; Includes the draw projections on current loans, but does not include additional loans







Transaction Participants



Transaction Role	Firm		
Issuer	Great Lakes Water Authority		
Financial Advisor	PFM Financial Advisors LLC		
Bond Counsel	Dickinson Wright, PLLC		
Feasibility Consultant	The Foster Group		
Trustee	U.S. Bank, N.A.		
Senior Bookrunning Manager	 Siebert Williams Shank & Co., LLC 		
Co-Senior Manager	Goldman Sachs & Co. LLC		
Co-Managing Underwriters	 JP Morgan Securities LLC Loop Capital Markets LLC Morgan Stanley & Co. LLC Ramirez & Co., Inc. Wells Fargo Securities 		
Underwriter's Counsel	 Kutak Rock, LLP 		
Auditor	 Baker Tilly Virchow Krause, LLP 		









CREDIT OPINION

14 May 2024



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EMEA 44-20-7772-5454

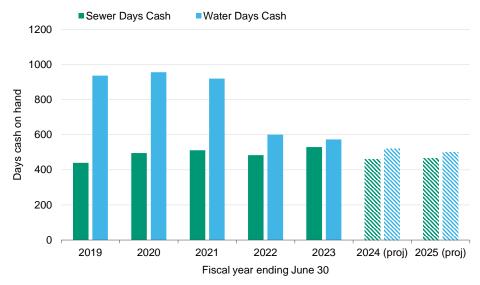
Great Lakes Wtr Auth, MI

Update to credit analysis

Summary

The <u>Great Lakes Water Authority's</u> (GLWA) <u>water</u> and <u>sewer</u> enterprises (both senior liens rated Aa3 stable; both subordinate liens rated A1 stable) have solid credit profiles, bolstered by a sizable scale of operations and very large service areas. GLWA has effectively balanced its hefty capital needs with an affordable rate structure and stable operating performance. Debt service coverage will narrow somewhat, but improve to more adequate levels in the next few years for both systems. Days cash on hand will remain strong for both systems even after water funds are spent on capital projects (exhibit 1). The systems have above-average leverage and the <u>City of Detroit</u> (Baa2 positive) makes up a significant portion of their service area. Detroit has undergone material economic and fiscal improvement over the last five years. Building greater resilience to extreme wet-weather events will likely be an ongoing challenge.

Exhibit 1
Liquidity will remain strong for both systems, even as cash is spent for water projects



Figures shown on a GAAP-basis Source: Moody's Ratings

Credit strengths

- Very large utility systems, providing essential water and wastewater services to a substantial portion of the state's population
- Commitment to annual revenue enhancements to support strong liquidity and ongoing capital investments
- Track record of strong budget management and good transparency

Credit challenges

- Debt service coverage trails higher-rated large utilities
- High leverage will persist given outstanding capital needs and plans to issue additional debt
- Increasing occurrence of extreme wet weather events placing strain on stormwater and sewer treatment capacity in certain segments of the system

Rating outlook

The outlook is stable because the authority will maintain solid coverage and liquidity metrics given its strong management, stable operations and improving service area.

Factors that could lead to an upgrade

- Steady improvement in asset condition while lowering debt-to-revenue ratio closer to 4x
- Sustained trend of a debt service coverage ratio materially exceeding 1.5x while maintaining around 500 days cash on hand

Factors that could lead to a downgrade

- Days cash on hand closer to 400 days or if debt service coverage is likely to remain materially below 1.2x
- Material growth in debt-to-revenue ratio above 6x or deterioration of asset conditions

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Exhibit 2

Great Lakes Water Authority, MI Sewer Enterprise							
System Characteristics							
Asset Condition (Net Fixed Assets / Annual Depreciation)	17 years						
System Size - O&M (in \$000s)	\$279,197						
Service Area Wealth: MFI % of US median	96%						
Legal Provisions							
Rate Covenant (x)	1.20						
Debt Service Reserve Requirement	DSRF funded at le	ess than 3-prong t	est OR springing	DSRF (A)			
Management							
Rate Management	Aa						
Regulatory Compliance and Capital Planning	Aa						
Financial Strength							
	2017	2018	2019	2020	2021	2022	2023
Operating Revenue (\$000)	\$557,396	\$561,784	\$550,959	\$562,231	\$559,812	\$607,690	\$604,403
System Size - O&M (\$000)	\$206,540	\$250,551	\$244,468	\$243,438	\$255,908	\$262,941	\$279,197
Net Revenues (\$000)	\$350,856	\$311,233	\$306,491	\$318,793	\$303,904	\$344,749	\$325,206
Net Funded Debt (\$000)	\$3,144,592	\$3,076,993	\$3,093,347	\$3,039,222	\$2,875,070	\$2,755,512	\$2,876,460
Annual Debt Service (\$000)	\$234,555	\$232,281	\$239,172	\$245,783	\$230,163	\$235,848	\$242,859
Annual Debt Service Coverage (x)	1.5x	1.3x	1.3x	1.3x	1.3x	1.5x	1.3>
Cash on Hand	455 days	460 days	440 days	496 days	512 days	484 days	478 days
Debt to Operating Revenues (x)	5.6x	5.5x	5.6x	5.4x	5.1x	4.5x	4.8>

Figures shown on a GAAP-basis. Revenue and O&M include GLWA wholesale operations and DWSD local retail operations. Source: Moody's Ratings

Exhibit 3

EXHIDIT 3							
Great Lakes Water Authority, MI Water Ent.							
System Characteristics							
Asset Condition (Net Fixed Assets / Annual Depreciation)	18 years						
System Size - O&M (in \$000s)	\$178,539						
Service Area Wealth: MFI % of US median	96%						
Legal Provisions							
Rate Covenant (x)	1.20						
Debt Service Reserve Requirement	DSRF funded at le	ss than 3-prong t	est OR springing	DSRF (A)			
Management							
Rate Management	Aa						
Regulatory Compliance and Capital Planning	Aa						
Financial Strength							
	2017	2018	2019	2020	2021	2022	2023
Operating Revenue (\$000)	\$428,044	\$425,245	\$407,231	\$419,479	\$411,583	\$426,889	\$476,824
System Size - O&M (\$000)	\$145,499	\$153,930	\$163,519	\$176,822	\$164,995	\$178,539	\$210,351
Net Revenues (\$000)	\$282,545	\$271,315	\$243,712	\$242,657	\$246,588	\$248,351	\$266,473
Outstanding Revenue Debt (\$000)	\$2,358,137	\$2,310,261	\$2,250,181	\$2,301,253	\$2,403,127	\$2,361,794	\$2,612,746
Annual Debt Service (\$000)	\$175,010	\$172,550	\$167,966	\$172,869	\$179,214	\$176,589	\$192,801
Annual Debt Service Coverage (x)	1.6x	1.6x	1.5x	1.4x	1.4x	1.4x	1.4x
Cash on Hand	676 days	912 days	937 days	956 days	920 days	602 days	519 days
Debt to Operating Revenues (x)	5.5x	5.4x	5.5x	5.5x	5.8x	5.5x	5.5x

 $Figures shown on a GAAP-basis. Revenue and O\&M include GLWA wholesale operations and DWSD local retail operations. \\ \textit{Source: Moody's Ratings}$

Profile

The Great Lakes Water Authority (GLWA) is the regional wholesale provider of water and sewer services to southeast Michigan (Aa1 stable). The water enterprise treats water from Lake Huron, Lake St. Clair and the Detroit River and distributes treated water to a service area population of about 3.8 million. The sewer enterprise collects, treats and disposes of wastewater produced by a service area population of about 2.8 million. GLWA is an incorporated municipal authority, established in 2016, operating under the guidance of a six-member board, consisting of one appointee each of the counties of Macomb, Oakland and Wayne, two appointees of the Mayor of Detroit and one of the Governor of Michigan.

Detailed credit considerations

Service area and system characteristics: very large service area in southeast Michigan

The systems will continue to benefit from large service areas with broad and diverse customer bases. The regional water supply system covers roughly 1,700 square miles in southeast Michigan, providing treated water to 112 communities and roughly 40% of the state's population. Water usage, like in many systems, have fallen somewhat over the past several years because of conservation efforts and the region's stagnant population. The sewer system is a little smaller; covering 944 square miles and providing wastewater services to about a third of the state's population across 79 communities.

GLWA's pledged revenue is derived from both GLWA wholesale operations and Detroit Water and Sewerage Department (DWSD) local retail operations. The bulk of water and sewer revenue comes from wholesale contracts with suburban communities. Wholesale contracts generate roughly three quarters of water revenue and a little under half of sewer revenue. Detroit residents and businesses are retail customers of DWSD, which manages the local system. The revenue generated within the City of Detroit is assigned to GLWA and is deposited directly with the bond trustee.

Debt service coverage and liquidity: coverage likely to narrow in short-term and then will improve

Coverage will narrow for both systems through fiscal 2025 (year-end June 30) because of rising costs, planned borrowing and the authority's commitment to a 4% revenue growth limit through fiscal 2025. The revenue limit is pursuant to the system leases and can only be circumvented in limited scenarios, including to meet the rate covenant. The authority plans to grow revenue faster starting in fiscal 2026; revenue from wholesale water and sewer charges are forecast to grow annually by 7.5% and 5.5%, respectively from fiscal 2026 through fiscal 2029.

The authority projects roughly 1.2x total debt service coverage for both water and sewer revenue bonds in fiscal 2024. Coverage was about 1.3x for sewer and 1.4x for both water in fiscal 2023 (see exhibit 4).

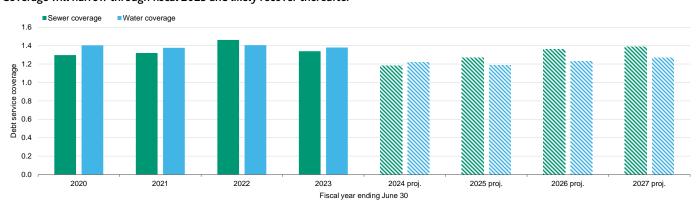


Exhibit 4 Coverage will narrow through fiscal 2025 and likely recover thereafter

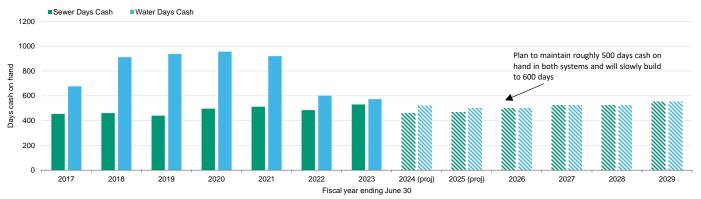
Source: Moody's Ratings, Great Lakes Water Authority, MI

The authority typically maintains adequate annual debt service coverage and ample liquidity because of management's close monitoring of revenue targets, the stability of its wholesale charges and its ability to set rates. Most revenue in both systems comes from fixed monthly wholesale charges (roughly 60% in the water system and 100% in the sewer system), which enhances revenue reliability and dependability.

Liquidity

Liquidity is strong for both systems and will remain so even after planned spending for capital investments in the water system (exhibit 5). Management plans to maintain roughly 500 days cash on hand starting in fiscal 2024 and will slowly grow to 600 days over the next decade. The two systems also have significant restricted cash assets held for budget stabilization and capital.

Exhibit 5 Days cash on hand will remain strong for both systems, even as the authority spends down cash for water projects



Source: Moody's Ratings

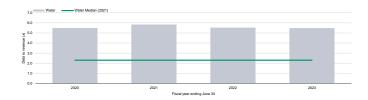
Debt and legal covenants: high debt burden will stay level with sustained revenue growth

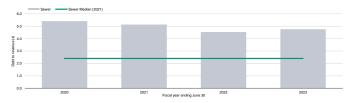
Each system has a very high debt burden that will remain elevated because of substantial capital needs. Leverage metrics will likely remain stable because GLWA has control over its rates and it plans to finance a portion its CIP with cash.

The systems have a variety of capital needs, including reducing combined sewer overflow (CSO) and enhancing transmission and storage. The systems will also likely need to build greater resilience to extreme wet-weather events over the long-term. Favorably, the systems are not operating under any federal or state consent decrees. The CIP for fiscal 2024 through 2029 includes about \$1.3 billion of water projects and \$1.1 billion of sewer projects. The authority has historically had high nonrevenue water volume because of pipe leaks and breaks. While water loss and other nonrevenue water increased to 14.2% in fiscal 2022 from 10.6% the year before, both are materially improved from where the system performed in the past.

The water and sewer systems' long-term debt leverage across all liens is materially higher than sector medians (exhibit 6). GLWA had about \$5.5 billion of combined total net debt outstanding at the end of fiscal 2023, about \$2.6 billion for the water system and \$2.9 billion for the sewer system.

Exhibit 6 Leverage metrics are much higher than US medians for both the water and sewer systems





Latest medians are for fiscal 2021 Source: Moody's Ratings

Legal security

Water and sewer revenue bonds are backed by the net revenue of the respective systems. Legal provisions are solid and are the same for both systems. The rate covenant requires projected net revenue coverage of debt service equal to 120% for senior lien bonds, 110% for second lien bonds and 100% for any subordinate lien debt. Per the master bond ordinance, projected net revenue includes the revenue of the respective systems plus any estimated revenue increase from approved rate increases.

The money collected from regional wholesale and local retail customer payments are deposited to a lockbox, which is administered by a third-party trustee. Operations and maintenance (O&M) expenses are defined as cash transfers made to GLWA's and DWSD's respective O&M funds. The revenue and O&M expenses related to GLWA are reported in its segregated business funds while the revenue and expenses of DWSD are accounted for in Detroit's water and sewer funds, respectively. The bifurcated accounting requires adjustments from reported figures to assess rate covenant coverage under the master bond ordinance.

The authority is allowed to reduce or eliminate its reserve requirement if the senior lien is rated Aa3/AA- by two or more rating agencies. The bonds that are being issued will not include a debt service reserve fund (DSRF). GLWA will reduce the reserve requirement for the outstanding bonds to \$0 upon the issuance of the bonds.

Debt structure

All of GLWA's water revenue debt and most of its sewer bonds are fixed rate. The sewer system has one series of variable rate debt: its Series 2006D bonds. The bonds are floating rate notes, are fully callable and make up a little less than 10% of sewer debt. The bonds do not have any demand risk. Interest rates are reset quarterly based upon a formula using a three-month Term SOFR rate.

The water system held a little under half of total GLWA debt at the end of fiscal 2023, with roughly \$1.6 billion of senior lien bonds, \$691 million of second lien water revenue bonds and \$207 million of junior lien state revolving fund (SRF) loans. The remainder is held by the sewer system, inclusive of \$1.8 billion of senior lien bonds, \$774 million of second lien sewer revenue bonds and \$349 million junior lien state revolving fund (SRF) loans. The debt service schedule is front-loaded and the bulk of both system's debt matures over the next 15 years.

Debt-related derivatives

The GLWA is not party to any derivative agreements.

Pensions and OPEB

GLWA employees are participants in a defined contribution benefit plan. There are some former DWSD employees who were hired by GLWA that qualify for accrued pension benefits from the City of Detroit's frozen defined benefit General Retirement System (GRS). Pursuant to the City of Detroit's bankruptcy plan of adjustment, GLWA contributed annually to GRS through fiscal 2023 to accelerate amortization of the GRS unfunded liability associated with GLWA's agreed share, which was based on the liability determined to be associated with the regional system before GLWA began operations.

Starting in fiscal 2024, GLWA's payments to GRS will be based on the actuarial needs of the plan and sized to amortize any unfunded liability associated with GLWA's agreed upon share that is still remaining. GLWA also makes a payment to Detroit for its allocable share of the city's financial recovery bonds, which were issued to satisfy claims relating to the city's pension obligation certificates and OPEB. GLWA established a new defined-contribution retiree healthcare savings plan, resulting in no potential unfunded liability.

ESG considerations

Great Lakes Water Authority, MI Water Ent.'s ESG credit impact score is CIS-2

Exhibit 7

ESG credit impact score



Source: Moody's Ratings

The authority's ESG Credit Impact Score of **CIS-2** indicates that ESG considerations have a neutral-to-low impact on its credit rating, reflecting moderately negative exposure to environmental risks and neutral-to-low exposure to social and governance risks.

Exhibit 8
ESG issuer profile scores



Source: Moody's Ratings

Environmental

The authority's E Issuer Profile Score is **E-3** reflecting moderately negative exposure to physical climate and water management risks and neutral-to-low exposure to carbon transition, natural capital, and waste and pollution risks. Climate change and extreme weather are likely to impact the authority's future operations, particularly on the sewer system. For example, major wet weather events, like those that occurred during the summer of 2021, can overwhelm the system's ability to store and process infiltration. The water system benefits from access to a vast amount of fresh water and the sewer system includes one of the largest single-site wastewater treatment plants in the world. Both systems are subject to extensive regulation pursuant to the federal Clean Water Act, the Clean Air Act, the Michigan Natural Resources and Environmental Protection Act and various administrative rules and regulations. The authority is in material compliance with all existing permits relating to the operation of the regional water and sewer systems.

Social

The authority's Issuer Profile Score is **S-2**, reflecting moderately negative exposure to responsible production risks because of ongoing product quality risks and neutral-to-low exposure to most social risks including customer relations, demographic and social trends, health and safety and human capital. Population in the Detroit MSA grew a little over 2% between 2010 and 2020. The system's sizable service area and customer base provides a high level of diversity, balancing social challenges in portions of the customer base, such as high poverty areas in the City of Detroit. GLWA provides payment and conservation assistance to low-income retail customers through its Water Residential Assistance Program, which helps to avoid delinquencies and support revenue stability.

Governance

The authority's governance Issuer Profile Score is G-2, reflecting positive exposure from strong management credibility and compliance and reporting, a moderately negative organizational structure given its heavy exposure to the City of Detroit, and neutral-to-low exposure to financial strategy and board structure risks. GLWA was created in the aftermath of the Detroit bankruptcy. It obtained possession and control of the city's water supply and sewage disposal systems via regional system leases (effective January 1, 2016) for an initial 40-year term and replaced the city as the obligor on all outstanding debt obligations related to the systems, pursuant to bondholder consent. Pursuant to the lease, the City of Detroit has irrevocably assigned its right, title and interest in all revenue of the sewer and water enterprises to GLWA. The lease will automatically extend to correspond with scheduled repayment of newly issued revenue debt. All revenues of both systems were assigned to GLWA. GLWA is governed by a six-member board. The board has full authority to set service charges on municipal customers. Rates charged to retail customers in the City of Detroit are established by the city's Board of Water Commissioners pursuant to an agency agreement with GLWA. The lease agreement grants the GLWA board the ability to override the city's authority of retail rates and collections should the city not make adjustments sufficient to meet annual revenue requirements. All wholesale customers retain responsibility for levying local charges sufficient to cover costs charged by GLWA. Pursuant to the memorandum of understanding between GLWA and DWSD, GLWA assumes an annual increase of not more than 4% in the revenue requirements through fiscal 2025. GLWA has demonstrated strong budget management since its inception, enhancing operational efficiencies and regional cooperation. Each year GLWA conducts an extensive study of both its wholesale service charges and allocated annual revenue requirement to retail customers, with the purpose of adjusting revenue to reflect the cost of operations, depreciation expense and return on the rate base. Additionally, since system capacity exceeds demand, management is de-rating parts of its water treatment plants. This allows the water system to reduce capital costs while preserving flexibility to put the facilities back to use.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

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S&P Global Ratings

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Great Lakes Water Authority, Michigan; Water/Sewer

Credit Profile

US\$350.11 mil wtr supp sys rev rfdg bnds sr ln bnds ser 2024A due 07/01/2037

Long Term Rating AA-/Stable New

US\$36.665 mil wtr supp sys rev rfdg bnds 2nd ln bnds ser 2024B due 07/01/2036

Long Term Rating A+/Stable New

Credit Highlights

- S&P Global Ratings assigned its 'AA-' rating to the Great Lakes Water Authority (GLWA), Mich.'s series 2024A (senior-lien) and its 'A+' rating to GLWA's series 2024B (second-lien) water supply system revenue refunding bonds.
- At the same time, S&P Global Ratings affirmed its 'AA-' rating on GLWA's existing senior-lien bonds and its 'A+' rating on GLWA's second-lien bonds.
- The outlook is stable.

Security

The bonds are secured by a statutory lien on pledged assets of the system, pursuant to both the bond ordinance and Michigan Act 94 of 1933 (as amended), and prioritized by the lien status. Pledged assets include net revenue of GLWA's water supply system, along with investments credited to the water system and earnings on those investments. The net revenue pledge is constituted from gross revenue of the Detroit Water and Sewer Board (DWSD) retail and GLWA regional wholesale systems, which cover both systems' operating and maintenance (O&M) expenses. A rate covenant stipulates that the GLWA board set rates to produce at least 1.2x coverage of senior-lien debt, 1.1x for second-lien bonds, and 1x for junior-lien bonds. The ability to issue additional bonds exists if net revenue for the previous fiscal year, or net revenue adjusted by approved rate increases and system expansion for the current or next fiscal year, produces coverage of maximum annual debt service (MADS; including the proposed bonds) of at least those levels indicated in the rate covenant for the particular liens.

In conjunction with the series 2024 issuances, GLWA is eliminating the debt service reserve requirement on its outstanding and future bonds because two credit rating agencies rate its senior-lien bonds no lower than 'AA-' or the equivalent; this change has no effect on the rating. The reserves originally funded with bond proceeds are being contributed to the escrow related to the 2024 refinancing.

Credit overview

GLWA's water system has a large service base, complex service delivery considerations, and significant strategic
coordination requirements between GLWA's management and both its retail customer class in Detroit and
wholesale contractual customers. Management's successful navigation of these factors continues to provide key
credit support.

- GLWA serves the city of Detroit retail customer class, whose relationship with the city and its water and sewer
 department (DWSD) is governed by a number of foundational agreements and other documents stemming from
 GLWA's incorporation. These agreements serve as additional support for the rating because they provide a basis for
 codification of financial and operational practices for DWSD while GLWA retains ultimate rights for rate-setting,
 billing and collecting revenue from the retail class customers.
- Sophisticated financial and capital planning combined with a wholesale rate structure that has a 60% fixed-cost recovery component helps add predictability to GLWA's future financial performance, in our view.
- To meet GLWA's financial forecasts, management will rely on continued rate adjustments for both its retail and
 wholesale customer classes, which could cause downside financial risks if either they aren't implemented as forecast
 or other positive variances aren't achieved.
- Revenue from Detroit retail customers only represents about 25% of revenue collected within the GLWA water
 trust, and there are significant social risks to consider given the economic disparities within the city. GLWA and
 DWSD will need to continue active management of delinquent accounts in Detroit (DWSD's collection rate for its
 248,000 active retail accounts is reported by management to be 87%). Both GLWA and DWSD management will
 need to continue balancing implementation of its assistance programs while also achieving higher collection rates
 within Detroit.
- GLWA and DWSD are party to litigation, some of which could cause material financial impacts depending on the outcome. As these suits resolve, we would incorporate any material financial effects into our analysis.

Environmental, social, and governance

Minimizing governance risk lies primarily in maintaining collaboration with both suburban wholesale customers and DWSD management. All these efforts require considerable staff resources, but these efforts also are credit supportive as long as GLWA is able to continue providing its services without significant customer discord that disrupts revenue collections. Litigation with Highland Park has been ongoing for decades, but has just been resolved with financial assistance for improvements to Highland Park's utility system coming from the State of Michigan.

Many procedures involving DWSD regarding capital and budget planning, management of budget variances, sharing of services to gain efficiencies, and reporting requirements are built into key documents to which GLWA and Detroit are party. The "One Water Partnership" between GLWA and its suburban wholesale customers generally facilitates information sharing, capital project coordination, and technical assistance.

GLWA has significant social risks to manage given the wide diversity in economic and demographic bases served by the utility. We consider social risks credit neutral, but both GLWA and DWSD management will need to continue balancing implementation of its assistance programs while also achieving higher collection rates within Detroit. GLWA's Water Residential Assistance Program (WRAP) is designed to both provide bill assistance and household water audits to all qualified residents within GLWA's service territory. DWSD management also has a dedicated shut-off program implemented by an outside contractor. In 2022, DWSD also launched a lifeline program for residents in Detroit that is funded by WRAP and other state grants and federal resources such as the Low Income Water Assistance Program (LIWAP). WRAP is supported from revenue generated from water and sewer rates.

We view environmental risks to be credit neutral, with the most acute potential risk being exposure to future lead and copper rule changes and Polyfluoroalkyl Substances (PFAS) regulation. We believe lead and copper rule changes

would mostly directly affect DWSD operations and capital requirements, but could also affect GLWA's operations if corrosion control measures need to be substantially modified. Management has represented that PFAS is currently undetectable in its drinking water but has a monitoring program to identify point sources of the substances. GLWA's five water treatment plants provide significant excess capacity of 1,720 million gallons per day (mgd), which typically provides about 60% headroom compared to maximum daily usage.

Outlook

The stable outlook reflects our expectation that GLWA will continue its steady financial performance while funding all its needed capital projects and adjusting its budget if economic headwinds or inflationary pressures are having meaningful budget impacts. Because the authority's CIP is not currently regulatory driven, we believe that flexibility to shift capital spend targets and/or revenue requirements due to economic or inflationary pressures will help minimize downside risks to meeting or outperforming near-term projected financial projections.

We would also expect management to continue its collaborative efforts with both member partners and DWSD to minimize environmental, social, and governance risks that could have a negative influence on credit quality.

Downside scenario

The rating or outlook could be affected if future financial performance falls below historical trends. Significant deferral of capital projects, while providing cash flow flexibility, could also lead to downside pressure on the rating or outlook if the deferrals weaken GLWA's asset renewal and replacement efforts.

Upside scenario

If economic recovery in Detroit continues and starts to have meaningful positive effects on its economic fundamentals and utility collection rates, then the rating could be improved. We also would consider an upgrade if GLWA meaningfully outperforms historical financial trends, funds its capital improvement plan (CIP) generally as planned, and the improvements are sustainable over a long-term horizon.

Credit Detail

A number of key provisions in the lease agreement, service agreement, and memorandum of understanding (MOU) between GLWA and Detroit support the ability of the GLWA regional system to help make the net revenue originating from Detroit's local system more predictable despite various economic and collection risks:

- GLWA sets revenue requirements for DWSD that are related to the costs for providing services, and, in turn, Detroit sets retail rates in a fashion that meets GLWA's revenue requirement.
- Explicit language that requires all revenue collected by Detroit be held in segregated accounts in trust and remitted within five days of receipt to a trustee-held pledged revenue account under the Master Bond Ordinance.
- A services agreement between GLWA and Detroit that holds the city to performance and administrative standards to maintain its agency relationship with GLWA for rate-setting and revenue collection.
- · Requirements that both GLWA and Detroit retail maintain a biennial budget and a five-year CIP.

• DWSD is required to submit periodic budget and operational reporting requirements to GLWA and discuss these results at a Reconciliation Committee, which is also the initial mechanism to develop a plan for DWSD to cure any budget shortfalls. If there are any, then the MOU between the two entities describes a workout mechanism to recover the budget shortfalls over a period no longer than the next three fiscal years.

Related Research

 Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of May 14, 2024)		
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2005-S	RF1 due 10/01/2026	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2005-S	RF2 due 10/01/2026	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2006-S	RF due 10/01/2026	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2008-S	RF due 10/01/2028	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2016A-	-SRF due 04/01/2048	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2016B-	-SRF due 04/01/2048	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr supp sys rev bnds ser 2017-S	RF due 10/01/2048	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr (BAM) (SECMKT		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth wtr (BAM) (SECMKT)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth wtr (BAM) (SECMKT)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth wtr (Sr lien)		
Long Term Rating	AA-/Stable	Affirmed
Great Lakes Wtr Auth wtr (Sr lien) (AGM)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth wtr (Sr lien) 2005B (BHAC)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth wtr (2nd lien)		
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth wtr (2nd lien) (AGM)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed

Ratings Detail (As Of May 14, 2024) (cont.)				
Great Lakes Wtr Auth wtr (2nd lien) (AGM)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth wtr (2nd lien) (MBIA)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Great Lakes Wtr Auth wtr (2nd lien) (MBIA) (National)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Finance Authority, Michigan				
Great Lakes Water Authority, Michigan				
Michigan Fin Auth (Great Lakes Wtr Auth) wtr (AGM)				
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) wtr (BAM) (SECMKT)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) wtr (National)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR				
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR				
Long Term Rating	AA-/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR				
Long Term Rating	A+/Stable	Affirmed		
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR (AGM)				
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed		
36 ' 1 11 1 1'				

Many issues are enhanced by bond insurance.

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S&P Global Ratings

RatingsDirect®

Summary:

Great Lakes Water Authority, Michigan; Water/Sewer

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Summary:

Great Lakes Water Authority, Michigan; Water/Sewer

Credit Profile

US\$348.395 mil swg disposal sys rev rfdg bnds sr ln bnds ser 2024A due 07/01/2033

Long Term Rating AA-/Stable New

US\$40.485 mil swg disposal sys rev rfdg bnds 2nd ln bnds ser 2024B due 07/01/2035

Long Term Rating A+/Stable New

Credit Highlights

- S&P Global Ratings assigned its 'AA-' rating to the Great Lakes Water Authority (GLWA), Mich.'s series 2024A (senior-lien) and 'A+' rating to GLWA's series 2024B (second-lien) sewage disposal system revenue refunding bonds.
- At the same time, S&P Global Ratings affirmed its 'AA-' rating on GLWA's existing senior-lien bonds and its 'A+' rating on GLWA's second-lien bonds.
- · The outlook is stable.

Security

The bonds are secured by a statutory lien on pledged assets of the system, pursuant to both the bond ordinance and Michigan Act 94 of 1933 (as amended), and prioritized by the lien status. Pledged assets include net revenue of GLWA's sewage disposal system, along with investments credited to the sewer system and earnings on those investments. The net revenue pledge is constituted from gross revenue of the Detroit Water and Sewer Board (DWSD) retail and GLWA regional wholesale systems, which cover both systems' operating and maintenance (O&M) expenses. A rate covenant stipulates that the GLWA board set rates to produce at least 1.2x coverage of senior-lien debt, 1.1x for second-lien bonds, and 1x for junior-lien bonds. The ability to issue additional bonds exists if net revenue for the previous fiscal year, or net revenue adjusted by approved rate increases and system expansion for the current or next fiscal year, produces coverage of maximum annual debt service (MADS; including the proposed bonds) of at least those levels indicated in the rate covenant for the particular liens.

In conjunction with the series 2024 issuances, GLWA is eliminating the debt service reserve requirement on its outstanding and future bonds because two credit rating agencies rate GLWA's senior-lien bonds no lower than 'AA-' or the equivalent; this change has no impact on the rating. The reserves originally funded with bond proceeds are being contributed to the escrow related to the 2024 refinancing.

Credit overview

GLWA's sewer system has a large service base, complex service delivery considerations, and significant strategic
coordination requirements between GLWA's management and both its retail customer class in Detroit and
wholesale contractual customers. Management's successful navigation of these factors continues to provide key
credit support.

- GLWA serves the city of Detroit retail customer class, whose relationship with the city and its water and sewer
 department (DWSD) is governed by a number of foundational agreements and other documents stemming from
 GLWA's incorporation. These agreements serve as additional support for the rating because they provide a basis for
 codification of financial and operational practices for DWSD while GLWA retains ultimate rights for rate-setting,
 billing and collecting revenue from the retail class customers.
- Sophisticated financial and capital planning combined with a wholesale rate structure that has a 100% fixed-cost recovery component helps add predictability to GLWA's future financial performance, in our view.
- To meet GLWA's financial forecasts, management will rely on continued rate adjustments for both its retail and
 wholesale customer classes, which could cause downside financial risks if either they aren't implemented as forecast
 or other positive variances aren't achieved.
- Revenue from Detroit retail customers represents about 50% of revenue collected within the GLWA sewer trust and
 there are significant social risks to consider given the economic disparities within the city. GLWA and DWSD will
 need to continue active management of delinquent accounts in Detroit (DWSD's collection rate for its 248,000
 active retail accounts is reported by management to be 87%). Both GLWA and DWSD management will need to
 continue balancing implementation of its assistance programs while also achieving higher collection rates within
 Detroit.
- GLWA and DWSD are party to litigation, some of which could cause material financial impacts depending on the outcome. As these suits resolve, we would incorporate any material financial effects into our analysis.

Environmental, social, and governance

Minimizing governance risk lies primarily in maintaining collaboration with both suburban wholesale customers and DWSD management. All these efforts require considerable staff resources, but they also are credit supportive as long as GLWA is able to continue providing its services without significant customer discord that disrupts revenue collections. Litigation with Highland Park has been ongoing for decades, but has just been resolved with financial assistance for improvements to Highland Park's utility system coming from the State of Michigan.

Many procedures involving DWSD regarding capital and budget planning, management of budget variances, sharing of services to gain efficiencies, and reporting requirements are built into key documents to which GLWA and Detroit are party. The "One Water Partnership" between GLWA and its suburban wholesale customers generally facilitates information sharing, capital project coordination, and technical assistance.

GLWA has significant social risks to manage given the wide diversity in economic and demographic bases served by the utility. We consider social risks credit neutral, but both GLWA and DWSD management will need to continue balancing implementation of its assistance programs while also achieving higher collection rates within Detroit. GLWA's Water Residential Assistance Program (WRAP) is designed to both provide bill assistance and household water audits to all qualified residents within GLWA's service territory. DWSD management also has a dedicated shut-off program implemented by an outside contractor. In 2022, DWSD also launched a lifeline program for residents in Detroit that is funded by WRAP and other state grants and federal resources such as the Low Income Water Assistance Program (LIWAP). WRAP is supported from revenue generated from water and sewer rates.

We view environmental risks to be credit neutral, with the most acute potential risk being exposure to Polyfluoroalkyl Substances (PFAS) regulation that could affect discharge requirements. One positive recent outcome related to

environmental risks is that GLWA was released from an administrative consent order with the Michigan Department of Environment, Great Lakes, and Energy for monitoring of sewer treatment facility operations and biosolids handling; the order had been in place prior to Detroit's bankruptcy. Also of note is that GLWA maintains a strong record of discharge permit and combined sewer overflow compliance.

Outlook

The stable outlook reflects our expectation that GLWA will continue its steady financial performance while funding all its needed capital projects and adjusting its budget if economic headwinds or inflationary pressures are having meaningful budget impacts. Because the authority's capital improvement plan (CIP) is not currently regulatory driven, we believe that flexibility to shift capital spend targets and/or revenue requirements due to economic or inflationary pressures will help minimize downside risks to meeting or outperforming near-term projected financial projections.

We would also expect management to continue its collaborative efforts with both member partners and DWSD to minimize environmental, social, and governance risks that could have a negative influence on credit quality.

Downside scenario

The rating or outlook could be affected if future financial performance falls below historical trends. Significant deferral of capital projects, while providing cash flow flexibility, could also lead to downside pressure on the rating or outlook if the deferrals weaken GLWA's asset renewal and replacement efforts.

Upside scenario

If economic recovery in Detroit continues and starts to have meaningful positive effects on its economic fundamentals and utility collection rates, then the rating could be improved. We also would consider an upgrade if GLWA meaningfully outperforms historical financial trends and funds its CIP generally as planned, and the improvements are sustainable over a long-term horizon.

Credit Detail

A number of key provisions in the lease agreement, service agreement, and memorandum of understanding (MOU) between GLWA and Detroit support the ability of the GLWA regional system to help make the net revenue originating from Detroit's local system more predictable despite various economic and collection risks:

- GLWA sets revenue requirements for DWSD that are related to the costs for providing services, and, in turn, Detroit sets retail rates in a fashion that meets GLWA's revenue requirement.
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- Requirements that both GLWA and Detroit retail maintain a biennial budget and a five-year CIP.
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Related Research

• Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of May 14, 2024)		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	001-SRF1 due 10/01/2024	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	001-SRF2 due 10/01/2024	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	002-SRF3 due 10/01/2024	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	003-SRF1 due 10/01/2025	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	003-SRF2 due 04/01/2025	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	004-SRF1 due 10/01/2024	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	004-SRF3 due 04/01/2025	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	007-SRF1 due 10/01/2029	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	009-SRF1 due 04/01/2030	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	010-SRF1 due 04/01/2031	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	012-SRF1 due 10/01/2034	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	015A-SRF due 04/01/2036	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	015B-SRF due 10/01/2035	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	015D-SRF due 10/01/2035	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2	016-SAW due 10/01/2038	
Long Term Rating	A+/Stable	Affirmed

Ratings Detail (As Of May 14, 2024) (cont.)		
Great Lakes Wtr Auth swg disp sys rev bnds ser 2016-SR	F1 due 04/01/2038	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2016-SR	F2 due 04/01/2039	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2017-SR	F1 due 10/01/2038	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2018-SR	F1 due 10/01/2042	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg disp sys rev bnds ser 2018-SR	F2 due 10/01/2039	
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg (wrap of insured) (MBIA, Nati	ional & ASSURED GTY) (SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (AGM)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien)		
Long Term Rating	AA-/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien) (AGM)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (Sr lien) (AGM) (SECMKT)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien)		
Long Term Rating	A+/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (F	GIC & AGM) (SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (F	GIC) (MBIA) (SEC MKT) (National)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (wrap of insured) (F	GIC, AGM & BHAC) (SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (AGM)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (BAM) (SECMKT)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (BAM) (SECMKT)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (MBIA) (National)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swg (2nd lien) (MBIA) (National)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Great Lakes Wtr Auth swr (wrap of insured) (FGIC) (ASS	URED GTY - SEC MKT)	
Unenhanced Rating	A+(SPUR)/Stable	Affirmed

Ratings Detail (As Of May 14, 2024) (cont.)					
Michigan Finance Authority, Michigan					
Great Lakes Water Authority, Michigan					
Michigan Fin Auth (Great Lakes Wtr Auth) swg disposal (AGM)					
Unenhanced Rating	A+(SPUR)/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) swg dispos	sal (BAM)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) swg (BAM) (SECMKT)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) swg (Natio	nal)				
Unenhanced Rating	A+(SPUR)/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR					
Long Term Rating	AA-/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR					
Long Term Rating	AA-/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR					
Long Term Rating	AA-/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR					
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed			
Michigan Fin Auth (Great Lakes Wtr Auth) WTRSWR					
Long Term Rating	A+/Stable	Affirmed			

Many issues are enhanced by bond insurance.

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13 MAY 2024

Fitch Rates Great Lakes Water Authority's Water Revs 'A+'/'A'; Outlook Stable

Fitch Ratings - New York - 13 May 2024: Fitch Ratings has assigned the following ratings to the obligations issued by the Great Lakes Water Authority, MI (GLWA or the authority):

- --Approximately \$346.8 million water supply system revenue refunding senior lien bonds series 2024A, 'A+'
- --Approximately \$36.0 million water supply system revenue refunding second lien bonds series 2024B, 'A'.

The bonds are scheduled to sell via negotiation the week of May 20. Proceeds will be used to refund certain bonds and pay costs of issuance.

Fitch also has affirmed the ratings on the following GLWA bonds, including bonds previously issued by the city of Detroit (the city) and the Michigan Finance Authority, MI on behalf of the Detroit Water and Sewerage Department (DWSD) and assumed by GLWA (all pre-refunding):

- --Approximately \$1.6 billion senior lien water supply system revenue bonds at 'A+';
- --Approximately \$691 million second lien water supply system revenue bonds at 'A'.

Fitch has assessed GLWA's water system's (the system) Standalone Credit Profile (SCP) at 'a'.

The Rating Outlook is Stable.

The 'A+'/'A' bond ratings on the Great Lakes Water Authority's (GLWA, or the authority) senior and subordinate bonds, respectively, and the 'a' SCP consider the system's strong financial profile within the context of very strong revenue defensibility and operating risk profiles, both assessed at 'aa'. Leverage, measured by Fitch Ratings as net adjusted debt to adjusted funds available for debt service, was approximately 10.2x in fiscal 2023 (FYE June 30), similar to fiscal 2022 results.

The system's leverage is anticipated to rise through fiscal 2028 as it implements a robust capital improvement plan (CIP) financed in part with additional debt issuances. Revenue requirements to fund the CIP are likely to be higher than historical but are expected to remain manageable overall. Leverage may reach close to 12.0x in fiscal 2025, before falling to around 10.7x by fiscal 2028. Overall leverage should remain in line with the current rating.

The revenue defensibility assessment considers the authority's ability to reallocate any shortfalls from a non-performing customer to its performing customers via a rate increase and the overall strength of such customers. While the credit quality of DWSD's water system is considered midrange by Fitch, other significant customers have stronger credit profiles, resulting in strong overall purchaser credit quality. The operating risk profile considers the system's very low operating cost burden, coupled with its low, but recently rising life cycle ratio.

The notching distinction between the senior and the second lien bonds reflects the meaningful protection afforded to senior debt given the sizable balance of subordinated obligations, the latter of which include the second-lien bonds, state revolving fund loans, and the long-term leases payable under the lease agreement between DWSD and the authority, as well as the absence of an automatic cross-default or acceleration between the liens.

SECURITY

Senior-lien bonds are secured by a first lien on net revenues of the system. Second-lien bonds are secured by net revenues after payment of the senior-lien bonds.

KEY RATING DRIVERS

Revenue Defensibility - aa

Strong Purchaser Credit Quality, Very Strong Revenue Source Characteristics

The authority has contract provisions that allow for full cost recovery and the unlimited reallocation of costs across users. Under the Water and Sewer Services Agreements (WSSA) in place with the wholesale customers, the authority has the exclusive right to establish rates for the water service it provides. The authority has delegated to the city its right to establish rates with respect to services provided to city of Detroit customers.

Revenue defensibility is supported by purchasers that exhibit strong credit quality. The city of Detroit accounts for approximately 27% of fiscal 2023 operating revenues (inclusive of the local water system operating revenues). Other key wholesale customers include Southeastern Oakland County Water Authority, Shelby Township, Livonia and Sterling Heights. Although the city's system exhibits midrange credit quality, the strong PCQ incorporates the credit quality of suburban members. The local water system is the portion of the water system that provides service directly to the city's retail customers.

Operating Risk - aa

Very Low Operating Cost Burden, Moderate Investment Needs

In fiscal 2023, the system's operating cost burden was considered very low at \$2,568 per million gallons (mg), consistent with the operating risk assessment. The life cycle ratio was very low at 35% in fiscal 2023. Capex to depreciation has been weak, but improved to a five-year average of 84% in fiscal 2023. Planned capital spending for the next five years should generally outpace historical depreciation, supporting a continued very low life cycle ratio.

The DWSD CIP is funded through the lease payments and debt issued by GLWA for local DWSD water projects. Planned CIP spending for 2024-2028 for the consolidated GLWA and DWSD water system approximates \$1.6 billion. The CIP is anticipated to be primarily funded with debt, including State Revolving Fund proceeds.

Financial Profile - a

Leverage to Increase Modestly; Neutral Liquidity

The system had moderate leverage of 10.2x as of fiscal 2023, which is in line with historical performance of between 9.7x and 10.2x since fiscal 2019. The liquidity profile is neutral to the overall assessment, with a Fitch-calculated liquidity cushion of 433 days and coverage of full obligations (COFO) of 1.8x. Fitch-calculated total debt service coverage was also 1.8x in fiscal 2023.

The Fitch Analytical Stress Test (FAST) considers the potential trend of key ratios in a base case and stress case over a five-year period. The stress case is designed to impose capital costs 10% above expected base case levels and evaluate potential variability in projected key ratios. The FAST reflects Fitch's view of a reasonable scenario, which is generally informed by publicly available and/or management provided information with respect to capital expenditures, user charges and rate of revenue and expenditure growth.

In the base case scenario, the leverage ratio is projected to increase to 11.7x in fiscal 2025 and then decrease to 10.2x through fiscal 2028. In the stress scenario, which is considered the rating case, the leverage ratio follows a similar trajectory peaking at 11.9x in fiscal 2025 before declining to 10.7x over the next three years. Liquidity is expected to remain neutral to the assessment over the five-year horizon.

Asymmetric Additional Risk Considerations

No asymmetric additive considerations affected this rating determination.

RATING SENSITIVITIES

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- --Sustained leverage approaching 13.0x in Fitch's rating case scenario through the forward period, assuming stability in the revenue defensibility and operating risk assessments.
- --Downward revisions to the system's overall PCQ.
- --Material declines in liquidity that expose bondholders to the timing risk of the true-up.
- --The senior-lien rating could converge at the SCP assessment if there is a significant erosion of the financial cushion afforded to senior bondholders that results in a lack of meaningful difference in the probability of payment default between the liens.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

--Sustained improvements in leverage approaching 11.0x in Fitch's rating case scenario, assuming stability in the current revenue defensibility and operating risk assessments.

PROFILE

GLWA provides wholesale water services to a population of approximately 3.8 million, or 38% of the state's population. In January 2016, the authority assumed operational control of Detroit's system assets (excluding its local distribution infrastructure) via a 40-year lease agreement and authorized GLWA the right to set and collect rates from the customers historically served by the city.

Separately, a security interest in the city's system-related revenues was granted under the Master Bond Ordinance (MBO), while the WSSA assigned the city the right to set and collect rates from its retail customers. The agreement required GLWA to assume all liabilities of the regional water and sewer systems, including outstanding indebtedness related to the respective systems.

System assets include five water treatment plants that collectively can treat around 1.7 billion gallons per day, an extensive conveyance system and many water-storage reservoirs. Water is supplied to the treatment plants via the Detroit River, Lake Huron and Lake St. Clair. Supply and capacity are robust and more than sufficient for the long-term anticipated needs of the service area.

Updated U.S. Environmental Protection Agency (EPA) Regulations

GLWA does not expect any operational impact as a result of the EPA's recently finalized rule in relation to perand polyfluoroalkyl substances (PFAS). Testing to date had not detected any PFAS contaminants. Compliance with the EPA's Lead and Copper Rule (LCR) Revisions and LCR Improvements is also not expect to pose a challenge; as a wholesale provider lead service lines (LSL) are not within GLWA's oversight. However, to date one of the authority's purchasers, DWSD, has secured over \$100 million in American Rescue Plan Act funds for LSL replacement projects.

Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

Summary of Financial Statement Adjustments

In its analysis, Fitch adjusted GLWA's 'Statement of Revenues, Expenses and Changes in Net Position' to include information from DWSD's 'Statement of Revenues, Expenses and Changes in Net Position.' The adjustments are made to provide greater comparability of GLWA's financial position in accordance with the flow of funds under the bond ordinances and lease-related agreements.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/topics/esg/products#esg-relevance-scores.

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Rating Actions

ENTITY/DEBT	RATING			RECOVERY	PRIOR
Great Lakes Water Authority (MI) [Water]					
 Great Lakes Water Authority (MI) /Water Revenues (2nd Lien)/2 LT 	LT	A O	Affirmed		A •
• Great Lakes Water Authority (MI) /Water Revenues	LT /1	A+ O	Affirmed		A+ •

RATINGS KEY OUTLOOK WATCH

NEGATIVE • •

EVOLVING •

STABLE O

Applicable Criteria

U.S. Public Sector, Revenue-Supported Entities Rating Criteria (pub.12 Jan 2024) (including rating assumption sensitivity)

U.S. Water and Sewer Rating Criteria (pub.29 Feb 2024) (including rating assumption sensitivity)

Additional Disclosures

Solicitation Status

Endorsement Status

Great Lakes Water Authority (MI) EU Endorsed, UK Endorsed

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verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third- party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed. Fitch Ratings makes routine, commonly-accepted adjustments to reported financial data in accordance with the relevant criteria and/or industry standards to provide financial metric consistency for entities in the same sector or asset class.

The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Fitch also provides information on best-case rating upgrade scenarios and worst-case rating downgrade scenarios (defined as the 99th percentile of rating transitions, measured in each direction) for international credit ratings, based on historical performance. A simple average across asset classes presents best-case upgrades of 4 notches and worst-case downgrades of 8 notches at the 99th percentile. For more details on sector-specific best- and worst-case scenario credit ratings, please see Best- and Worst-Case Measures under the Rating Performance page on Fitch's website.

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13 MAY 2024

Fitch Rates Great Lakes Water Authority's Sewage Revs 'AA-'/'A+'; Outlook Positive

Fitch Ratings - New York - 13 May 2024: Fitch Ratings has assigned the following ratings to the obligations issued by the Great Lakes Water Authority, MI (GLWA or the authority):

- --Approximately \$345.3 million sewage disposal system revenue refunding senior lien bonds series 2024A at 'AA-';
- --Approximately \$40.2 million sewage disposal system revenue refunding second lien bonds series 2024B at 'A+'.

The bonds are scheduled to sell via negotiation the week of May 20th. Proceeds will be used to refund certain bonds and pay costs of issuance.

In addition, Fitch has affirmed the ratings on the following GLWA bonds, including bonds previously issued by the city of Detroit (the city) and the Michigan Finance Authority on behalf of the Detroit Water and Sewerage Department (DWSD) and assumed by GLWA (all pre-refunding):

- --\$1.78 billion senior lien sewage disposal system revenue bonds at 'AA-';
- --\$766.0 million second lien sewage disposal system revenue bonds at 'A+'.

Fitch has assessed GLWA's sewer system's (the system) standalone credit profile (SCP) at 'a+'.

The Rating Outlook remains Positive.

The 'AA-' and 'A+' sewer revenue bond rating, along with the 'a+' SCP, reflect the system's very strong financial profile in the context of its very strong revenue defensibility and very strong operating risk profile, both assessed at 'aa'. The system's leverage, measured as net-adjusted debt to adjusted funds available for debt service (FADS), was very low at 9.2x in fiscal 2023. Leverage is projected to peak at 9.7x in fiscal 2024 in Fitch's Analytical Stress Test (FAST) rating case, supporting the Positive Outlook.

The revenue defensibility assessment considers the authority's ability to reallocate any shortfalls from a non-performing customer to its performing customers via a rate increase, and the overall strength of such customers. While Fitch considers the credit quality of DWSD's sewer system midrange, the authority's other large wholesale customers have stronger credit profiles, resulting in a strong aggregate purchaser credit quality (PCQ). The operating risk profile considers the system's very low operating cost burden, coupled with its favorable life cycle ratio, while recognizing continued robust capital plans.

The Positive Rating Outlook is based on the realized and expected leverage trend, which Fitch expects will stabilize to decline over the five-year horizon, potentially falling to 8.6x by fiscal 2028. However, the system's capital improvement plan (CIP) has increased, in part due to cost pressures. The system has increased its targeted spend rate to 100% from 75% of the plan. The capital plan is designed to maintain and improve the

resiliency of the system, which is an overall positive; however, the authority must balance ambitious capital plans that include some remaining uncertainty regarding costs, with the goal of maintaining modest revenue adjustments.

The distinction between the senior and the second lien bonds reflects the meaningful protection afforded to senior debt, given the sizable balance of subordinated obligations, which include the second lien bonds, state revolving fund loans, and long-term leases payable under the lease agreement between GLWA and DWSD. It also includes the absence of an automatic cross-default or acceleration between the liens.

SECURITY

Senior lien bonds are secured by a first lien on net revenues of the system. Second lien bonds are secured by net revenues after payment of the senior lien bonds.

KEY RATING DRIVERS

Revenue Defensibility - 'aa'

Strong Purchaser Credit Quality, Very Strong Revenue Source Characteristics

The authority has contract provisions that allow for full cost recovery and the unlimited reallocation of costs across users. Under the water and sewer services agreements (WSSAs) in place with the wholesale customers, the authority has the exclusive right to establish rates for the water and sewer services it provides. The authority has delegated to the city its right to establish rates with respect to services provided to city of Detroit customers.

After the city of Detroit, which accounted for about 50% of the system's operating revenues (inclusive of the local sewer system operating revenues) in fiscal 2023, the largest customers include the Oakland-Macomb Interceptor Drainage District, Wayne County's Rouge Valley and Oakland County's George Kuhn Drainage District. Although the city exhibits just midrange credit quality, the authority's large suburban members contribute to a strong overall PCQ. The local sewer system is the portion of the sewer system that provides service directly to the city's retail customers.

Operating Risk - 'aa'

Very Low Operating Cost Burden; Moderate Investment Needs

In fiscal 2023, the system's operating cost burden was very low at \$3,617 per million gallons (mg), consistent with the operating risk assessment. The life cycle ratio was very low at 33% in fiscal 2023. Annual capital spending relative to depreciation has been weak though improving, averaging 50% over the last five fiscal years from 2019 to 2023. Planned capital spending through fiscal 2028, which reflects the goal to spend 100% of plan, should pace historical depreciation, supporting a continued very low life cycle ratio.

The DWSD CIP is funded through the lease payments and debt issued by GLWA for local DWSD sewer projects. Planned CIP spending for fiscal 2024 through 2028 for the consolidated GLWA and DWSD sewer systems approximates \$1.3 billion. The CIP focuses on implementation of the authority's sewer master plan; projects include those tied to general repair and maintenance, with a focus on resiliency.

Given inflationary pressure, expected spending has increased over prior years, but costs associated with the CIP appear manageable overall. Funding for the CIP is expected to be provided by approximately 70% new debt proceeds and 30% existing funds on hand.

Leverage to Stabilize; Neutral Liquidity

The system had very low leverage of 9.2x as of fiscal 2023; this measure has been on a generally downward trend since fiscal 2018, when it measured 10.3x. The liquidity profile is neutral to the overall assessment with a Fitch-calculated liquidity ratio of 278 days and coverage of full obligations (COFO) of 1.6x in fiscal 2023. Fitch-calculated total debt service coverage for fiscal 2023 was also about 1.6x.

The FAST considers the potential trend of key ratios in a base case and stress scenario over a five-year period. The stress scenario is designed to impose capital costs 10% above expected base case levels and evaluate potential variability in projected key ratios. The FAST reflects Fitch's view of a reasonable scenario, which is generally informed by publicly available and/or management provided information with respect to capital expenditures, user charges and rate of revenue and expenditure growth.

In the base case scenario, the leverage ratio is projected to increase to 9.6x in fiscal 2024, then decrease to 8.3x through fiscal 2028. In the stress scenario, which is considered the rating case, the leverage ratio is expected to increase to 9.7x in fiscal 2024, then decline to 8.6x through fiscal 2028. The liquidity profile is expected to remain neutral to the assessment over the five-year horizon. The Positive Outlook reflects Fitch's expectation that actual and projected leverage will remain consistent with a 'aa' financial profile.

Asymmetric Additional Risk Considerations

No asymmetric additive considerations affected this rating determination.

RATING SENSITIVITIES

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- --A material reversal in the trend of leverage would likely stabilize the Outlook.
- --Sustained weakening in the leverage ratio such that it approaches 12.0x would pressure the ratings.
- --Downward revision to the system's PCQ and/or revenue defensibility assessment.
- --Material declines in liquidity that expose bondholders to timing risk of the true-up.
- --The senior lien rating could converge at the SCP assessment if there is a significant erosion of the financial cushion afforded to senior bondholders that results in a lack of meaningful difference in the probability of payment default between the liens.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- --Greater certainty that upcoming planned capital spending has fully accounted for inflationary pressures while meeting authority goals and maintaining leverage within current expectations.
- --Sustained leverage below 10.0x, assuming stability in the current revenue defensibility and operating risk assessments.

PROFILE

5/18/24 4: 237 M

GLWA provides wholesale sewer services to a population of approximately 2.8 million, or 28% of the state population. In January 2016, the authority assumed operational control of Detroit's system assets (excluding its local collection infrastructure) via a 40-year lease agreement, and authorized GLWA the right to set and collect rates from the customers historically served by the city.

Separately, security interest in the city's system-related revenues was granted under the master bond ordinance (MBO), while the WSSA assigned the city the right to set and collect rates from its retail customers. The agreement required GLWA to assume all liabilities of the DWSD's regional water and sewer systems, including outstanding indebtedness related to the respective systems.

System assets include a wastewater treatment plant (the water resource recovery facility, or WRRF), which is one of the largest single-site facilities in the U.S., with capacity of 1,700 mg per day. The treatment plant can accommodate dry-weather flows without further mediation, but also operates eight combined sewer overflow retention treatment basins to accommodate wet-weather flows. Wholesale customers retain ownership in collection system infrastructure, which conveys flows and ultimately discharges such flows into GLWA's interceptors.

Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

Summary of Financial Statement Adjustments

In its analysis, Fitch adjusted GLWA's "Statement of Revenues, Expenses and Changes in Net Position" to include information from DWSD's "Statement of Revenues, Expenses and Changes in Net Position." Fitch also adjusted GLWA's balance sheet to include DWSD's unrestricted cash. The adjustments are made to provide greater comparability of GLWA's financial position in accordance with the flow of funds under the bond ordinances and lease-related agreements.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

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Rating Actions

ENTITY/DEBT	RATING			RECOVERY	PRIOR
Great Lakes Water Authority (MI) [Sewer]					
 Great Lakes Water Authority (MI) /Sewer Revenues (2nd Lien)/2 LT 	LT	A+ •	Affirmed		A+ ••
 Great Lakes Water Authority (MI) /Sewer 	LT	AA- Đ	Affirmed		AA- Đ

^{5/1}Page 39 M

ENTITY/DEBT RATING RECOVERY PRIOR

Revenues/1

LT

RATINGS KEY OUTLOOK WATCH

POSITIVE • •

EVOLVING •

STABLE • O

Applicable Criteria

U.S. Public Sector, Revenue-Supported Entities Rating Criteria (pub.12 Jan 2024) (including rating assumption sensitivity)

U.S. Water and Sewer Rating Criteria (pub.29 Feb 2024) (including rating assumption sensitivity)

Additional Disclosures

Solicitation Status

Endorsement Status

Great Lakes Water Authority (MI) EU Endorsed, UK Endorsed

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Financial Services Audit Committee Communication

Date: June 17, 2024

To: Great Lakes Water Authority Audit Committee

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

Re: Report on Status of Conditions Precedent Related to Bad Debt Recovery Credit

Background: A comprehensive settlement agreement between the State of Michigan, the City of Highland Park and GLWA has now been approved and executed by all parties and resolves many years of litigation between the Detroit Water & Sewerage Department, then the Great Lakes Water Authority, and Highland Park. This follows an October 2023 Term Sheet which outlined the terms of the global resolution.

In addition to settlement discussions, consideration was given to how this settlement would impact other Member Partner communities – particularly those that funded some of the bad debt expense in previous years. At its November 16, 2023 meeting, the Board approved Resolution No. 2023-427 "Resolution Regarding Approval of Schedule of Member Partner Bad Debt Recovery Credits #2023-2 Totaling \$20,026,500 with Conditions Precedent Utilizing the Highland Park Bad Debt Recovery Credits Methodology." The Highland Park Bad Debt Recovery Credit Methodology provides for credit allocation among Member Partner communities of the Authority related to the settlement of the litigation between Highland Park and the Authority as discussed herein. Resolution 2023-427 authorized payment of Member Partner Bad Debt Recovery Credits totaling \$20,026,500 (\$5,026,500 for the Water System and \$15,000,000 for the Sewer System), conditioned upon satisfaction of certain conditions precedent necessary to effectuate the Term Sheet. It was expected that credits were to be provided no sooner than the fourth quarter of Fiscal Year 2024. A copy of a report that includes items from the Board action is posted on the GLWA website (also attached) and also follows this report.

Analysis: Key actions to date indicate that staff will likely be in a position to recommend that the GLWA Board of Directors authorize the application of the credits to June 2024 services at the Board meeting on June 26, 2024. This will reduce the amount due from Member Partners for payments due after July 1, 2024.

- We received notice that, on June 14, 2024, a payment will be disbursed to the GLWA for the \$5 million water system capital grant from the State of Michigan.
- The capital grant from the State of Michigan to GLWA for the \$25 million sewer system grant has been received.
- The settlement agreement, new water and sewer contracts for Highland Park, and a trust agreement between Highland Park and US Bank as trustee are in place. Transfers appear to be deposited in the trust account as agreed upon and the initial distribution from the trustee to GLWA for services provided to the city of Highland Park has been made also as agreed upon.
- The FY 2024 second quarter budget amendments included the commitment of funding for the Member Partner credits pending the cash collections to fund the budget commitments. As we approach the end of the year, the cash management plan has been designed to allow for the temporary decrease in collections in the first quarter of FY 2025 as a result of the credits.
- In early calendar year 2022, some Member Partners withheld payment as a means of expressing their frustration with the unresolved matter. The Charges & Outreach Modeling manager has been in communication with each of those communities with all but one paying in full or committing to payment by the June 26th Board meeting. The remaining community is presently consulting internally and is expected to reply next week.
- The Financial Services Area team, General Counsel personnel, and outside counsel are coordinating a few remaining details.

Proposed Action: Receive and file report.





Bad Debt Recovery Credit Pending

Calculated Consistent with the Methodology
Established by the Bad Debt Recovery Methodology in
Board Resolution #2023-427

for

Future Bad Debt Recovery Credits Pending Certain Conditions Precedent as Adopted by the Board of Directors November 16, 2023

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December 5, 2023

To Our Member Partners:

The purpose of this document is to provide you with talking points as it relates to the <u>Term Sheet</u> that was approved by the Great Lakes Water Authority (GLWA) Board of Directors on October 25, 2023 and subsequent action by the Board on November 16, 2023 that outlines a plan to provide reimbursement credits to Member Partners following the implementation of the Term Sheet.

Key Points Related to the Term Sheet

The Term Sheet outlines the framework for a settlement agreement between the city of Highland Park, the State of Michigan, and GLWA which encompasses several next steps. There are three main pillars to the Term Sheet that not only provide much needed assurances from Highland Park, but also support a fresh start in the GLWA-Highland Park-State of Michigan relationship:

- Pillar 1: Payment assurances from Highland Park (including entering into GLWA model contracts for water and sewer and agreeing to mandatory, expedited binding arbitration for all disputes);
- Pillar 2: Investment in capital improvements in the Highland Park and GLWA systems by the State (\$30M to GLWA -- \$25M previously appropriated for Wastewater Infrastructure projects and a new \$5M appropriation for water infrastructure projects);
- *Pillar 3*: The addition of metering to create confidence that Highland Park is being billed equitably for their use of the regional system.

Once the conditions precedent from the term sheet are met and the agreement is implemented, all litigation will be dismissed.

Direct Impact for Member Partners

While the pending resolution of these matters brings greater stability to the region, the settlement agreement did not provide specific funds to reimburse Member Partners for their contributions for prior bad debt expense. The GLWA Board of Directors did, however, at their meeting on November 16, 2023, unanimously approve a resolution that provides a plan to provide Highland Park bad debt recovery credits to reimburse first-tier member partners who had previously absorbed portions of the bad debt expense in their GLWA service charges. You can find that resolution here.

A few key points about that resolution are below.

Timing: The reimbursement plan is financially feasible after the Term Sheet is implemented. Although the depth and breadth of work required to satisfy the conditions precedent contained in the resolution and laid out in the settlement <u>Term Sheet</u> is significant, it is estimated that these bad debt recovery credits could be applied as early as the fourth quarter of the current GLWA fiscal year, which ends on June 30, 2024. The

exact amount of the credits will be determined closer to the actual date that credits will be applied.

- Of note, credits may not be applicable if a community has prior or current account delinquencies. In that case, those communities will be notified.
- Amount: The Board adopted resolution provides for water system Member Partners receiving 100 percent reimbursement of the amounts previously charged. Based upon limited funds available, first-tier sewer system Member Partners will be reimbursed approximately 45 percent of the amounts previously charged.
- Manner: The methodology for applying the credits will in a similar manner as that approved by the Board in June 2023, and that was applied to member Partner accounts in August 2023 for the \$1 million dollar payment received last year.

We will continue to provide updates as new information becomes available. As we do with all regional system issues that are multi-jurisdictional, GLWA will coordinate closely with Member Partners on the communications strategy going forward.

If you have overall questions about the bad debt credit recovery process, please contact Outreach@glwater.org.



Board of Directors

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

Great Lakes Water Authority Board of Directors

General Certification

The undersigned hereby certifies that (i) the Resolution 2023-427 regarding "Resolution Regarding Approval of Schedule of Member Partner Bad Debt Recovery Credits #2023-2 Totaling \$20,026,500 With Conditions Precedent Utilizing the Highland Park Bad Debt Recovery Credits Methodology" attached hereto is a true and complete copy of the Resolution duly passed by the Great Lakes Water Authority Board of Directors at a meeting held on November 16, 2023 at which meeting a quorum was present and remained throughout, (ii) the original thereof is on file in the records of the Great Lakes Water Authority Board of Directors, (iii) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended); and (iv) Minutes of such meeting were kept and will be or have been made available as required thereby.

YES: Freman Hendrix, Brian Baker, Mark Miller, Gary A. Brown,

Jaye Quadrozzi, and John J. Zech

NO: None ABSTAIN: None EXCUSED: None

Dated: November 16, 2023

By: Rechanda L. Willis

Title: Executive Board Assistant



Board of Directors

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

Resolution Regarding Approval of Schedule of Member Partner Bad Debt Recovery Credits #2023-2 Totaling \$20,026,500 With Conditions Precedent Utilizing the Highland Park Bad Debt Recovery Credits Methodology

Agenda of: November 16, 2023

Item No.: 2023-427

Amount: \$20,026,500.00

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.

Chief Executive Officer

Great Lakes Water Authority

DATE: October 25, 2023

RE: Resolution Regarding Approval of Schedule of Member Partner Bad

Debt Recovery Credits #2023-2 Totaling \$20,026,500 With Conditions Precedent Utilizing the Highland Park Bad Debt Recovery Credits

Methodology

MOTION

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer & Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), adopts Resolution #2023-427 to:

1. Approve the Schedule of Member Partner Bad Debt Recovery Credits #2023-2 totaling \$20,026,500 with \$5,026,500 for the water system and \$15,000,000 for the sewer system with conditions precedent utilizing the Highland Park Bad Debt Recovery Credits Methodology;

- 2. Acknowledge that the following actions (collectively the "Conditions Precedent"), which provide indirect budget relief, are conditions precedent that must occur prior to the funding, application, and distribution of the credits:
 - a. Execution of the implementation agreements as described in the October 18, 2023 Term Sheet (attached) between the City of Highland Park, Great Lakes Water Authority, and the State of Michigan ("Term Sheet") including the successful implementation of the all-receipts trust;
 - b. Appropriation by State of Michigan of "a \$5M grant for work to be conducted by GLWA on drinking water infrastructure" referenced in section 2.c. of the Term Sheet.";
 - c. Release by the State of Michigan and transfer to GLWA of "the \$25M sewer infrastructure grant funds previously allocated in the FY 2023 budget to GLWA on or before December 31, 2023";
 - d. Payment of "\$241,418.75 cash bond deposited by HP [Highland Park] with the U.S. District Court Clerk [which] shall be released to GLWA from E.D. Mich. Case No. 16-cv-13840"
- 3. Request that staff report to the Board of Directors when conditions precedent are met to seek approval to apply credits totaling \$20,026,500 as outlined in the above methodology and related Schedule of Member Partner Bad Debt Recovery Credits #2023-2 no sooner than the fourth quarter of FY24;
- 4. Provide contingent funding for credits to Member Partners subject to the conditions precedent in the FY 2024 First Quarter Budget Amendments of \$5,026,500 for the water system and \$15,000,000 for the sewer system;
- 5. Authorize staff to deposit the \$241,418.75 cash bond to the sewer system deposited by Highland Park with the U.S. District Court Clerk related to E.D. Mich. Case No. 16-cv-13840; and
- 6. Authorize the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.



BACKGROUND

In accordance with contractual terms for service and related court orders, Member Partner communities are explicitly responsible for funding certain bad debt expense. Over an extended period, Member Partner communities have been charged for bad debt expense related to partial non-payment by the City of Highland Park. Simultaneously, litigation with Highland Park and the State of Michigan has occurred as it relates to water, sewer, and industrial waste control service charges.

Recently, developments in a confidential mediation process between the City of Highland Park, the Great Lakes Water Authority (GLWA) and the State of Michigan resulted in the parties entering into the attached Term Sheet. The Term Sheet includes the following excerpted provisions which are most pertinent to the release of funds to GLWA to fund Member Partner bad debt expense recovery credits.

- Item #1 "The Great Lakes Water Authority (GLWA), the City of Highland Park (HP), and the State of Michigan (SOM) shall enter into a settlement agreement by January 15, 2024 that incorporates the basic terms set forth below including mutually agreeable release language."
- Item #2c "The SOM shall: Release the \$25M sewer infrastructure grant funds previously allocated in the FY 2023 budget to GLWA on or before December 31, 2023 and appropriate a \$5M grant for work to be conducted by GLWA on drinking water infrastructure."
- Item #4i "HP will enter into contracts based on GLWA's model contract by January 15, 2024 covering the period of January 1, 2014 to December 31, 2044 for water and sewer services. ...
 - i. The settlement agreement and contracts shall require all amounts paid for HP water, sewer (including industrial waste control) and stormwater services be placed into a trust in which the trustee pays GLWA and any remaining amounts to HP on the same date."
- Item #9 "Upon effectuation of the settlement agreement, its attachments and related documents, including initial funding consistent with this agreement and after receipt by the trustee of one month of HP's water and sewer receipts and distribution of one month's payment of funds to GLWA under Paragraph 4.i, all litigation between GLWA, Detroit Water and Sewerage Department (DWSD), HP, or SOM shall be dismissed ..."
- Item #10 "The \$241,418.75 cash bond deposited by HP with the U.S. District Court Clerk shall be released to GLWA from E.D. Mich. Case No. 16-cv-13840."



Item #13 – "This term sheet is conditional and dependent upon (a) final approval
of terms by the Governor, (b) appropriation of funds from the legislature to the
extent necessary, and (c) approval by the governing bodies of GLWA, and any
other necessary party on or before October 26, 2023. "

JUSTIFICATION

History of Bad Debt Expense & Member Partners Charges

The 2011 federal court *Order to Incorporate Rate Settlements into Wastewater Contracts and Dismiss All Prior Rate Settlements*, requires then Detroit Water & Sewerage Department and now GLWA to allocate the bad debt expense in its sewer charges. The 2011 Order also identifies the allocation of bad debt expense by customer class. Under the 2011 Order, bad debt expense recovery from "wholesale contract customers" must be recovered from that same customer class. The status of bad debt expense is discussed every year during charges rollout meetings and several years ago, the cost was shown as a line item of the charge calculation sheet. A similar approach has been applied to water charges. From a utility sector charge setting perspective, bad debt expense is an operating cost that should be accounted for in charges and it is therefore not uncommon. The larger issue for GLWA and its Member Partner communities is that it had likely not envisioned that an unpaid account would reach \$54 million. As we look to bring closure to the past with the recent Term Sheet of October 18, 2023, a more wholistic approach is warranted to balance the financial burden.

Highland Park Accounts Receivable as of June 30, 2023 and Member Partner Interests

For the water system, as of June 30, 2023, the Highland Park accounts receivable balance (all amounts rounded for discussion purposes), is \$12 million. Of that amount, all Member Partner communities, including suburban wholesale and DWSD, were charged \$5 million of bad debt expense and GLWA has absorbed \$7 million. Member Partner communities are interested to know if there is a way that they can be made fully or partially whole given the recently agreed upon Term Sheet. The entire amount contributed by Member Partners, in an exact amount is \$5,026,500 (which is \$5,152,500 previously charged less the one-time credit of \$126,000 based upon a specific payment made by Highland Park on June 9, 2023).

For the sewer system, as of June 30, 2023, the Highland Park accounts receivable balance (all amounts rounded for discussion purposes), is \$41 million. Of that amount, suburban wholesale Member Partner Communities were charged \$35 million of bad debt expense and GLWA has absorbed \$6 million. Member Partner communities are interested to know if there is a way that they can be made fully or partially whole given the recently agreed upon Term Sheet. The entire amount contributed by Member Partners, in an exact amount, is \$34,782,400 (which is \$35,656,400 previously charged



less the one-time credit of \$874,000 based upon a specific payment made by Highland Park on June 9, 2023).

What Options Does GLWA Have to Ease the Prior Bad Debt Expense Burden?

The nature of all public utility finances is that the entire cost of operations and capital improvements are borne by the customers. And those costs are largely fixed in nature. Public utilities use break-even budgeting; there is no "profit." If the fixed cost system has a shortfall in year one, that shortfall directly or indirectly is reflected in future charges – largely because there are less funds carried forward for the capital improvement needs in subsequent years. Barring the availability of other resources, this results in higher charges requests in subsequent years.

Within the past month, there were two concurrent efforts underway which we would like to discuss as a wholistic view of the Member Partner credit requests from availability of other available resources.

Starting with the term sheet itself. First, there will be approximately \$250,000 for past legal fees which was agreed upon to be released to GLWA and would be recorded in an operating account. That is a straightforward decision to tag those funds for member partner credits. Second, there is also the potential \$5 million water infrastructure grant (pending legislative approval) and the \$25 million sewer infrastructure grant (pending release by the State and aligning project costs with federal requirements). These grants are great news for the system overall, but appropriately have spending restrictions and are to be used for capital improvements, not operating expenses, as well as carry a myriad of other restrictions. Also, since they are capital in nature, and will be paid on a reimbursement basis that may extend over a year, they cannot be tagged for Member Partner credits. Our challenge in leveraging how the economic benefit of these grants over a period of time and with restricted uses, can be used for providing charge relief. Understanding timing and cashflow are at the center of evaluating the request.

Turning to the other concurrent matter which is the analysis and preparation of the first quarter FY 2024 budget amendments. The downside is that we are continuing to see intense budget pressure as discussed in great detail at the GLWA Board Workshop on September 13, 2023. Attached is a synopsis of the budget status for the fiscal year that began on July 1, 2023. Note the following related to that attached table.

Water System – Negative FY 2024 Q1 proposed amendment of \$18 million due to \$4 million water revenue shortfall (wet weather in summer months), \$10 million in increased operating expenses (chemicals, utilities and the change in funding source from Improvement & Extension to Operations & Maintenance for the Workday implementation and other services that cannot be capitalized), and \$3 million net of other items with the most significant being increased debt service



due to new money transaction this fall to keep pace with the water system improvements underway.

We do have good news on forecasted investment earnings as our investment manager continues to optimize the portfolio with an \$8 million positive variance.

The net of the \$18 million negative variance and the \$8 million uptick in investment earnings meant that the FY 2024 Q1 budget amendment would be a decrease to the Improvement & Extension (I&E) Fund for future capital improvements by \$10 million. Instead, we propose to tag the \$5,000,000 of unrestricted positive investment earnings in FY 2024 along with \$26,500 in other operating funds to credit Member Partners based on the previously approved "Highland Park Bad Debt Recovery Credits Methodology." While it means that we would further decrease the I&E contribution this year, the receipt of the grant would make up for it in the future. This is of course, dependent upon the actions of all parties to carry out the tasks outlined in the term sheet. It should be noted that the sum of \$5,026,500 would fully reimburse water system Member Partners.

Sewer System – Negative FY 2024 Q1 proposed amendment of \$15 million are due to a \$14 million increase in operating expenses (chemicals, utilities, repairs & maintenance contracts, and the change in funding source from Improvement & Extension to Operations & Maintenance for the Workday implementation and other services that cannot be capitalized), and \$1 million net of other items with the most significant being increased debt service due to new money transaction this fall to keep pace with the sewer system improvements underway.

We did have good news on investment earnings as our investment manager continues to optimize the portfolio with an \$9 million positive variance.

The net of the \$15 million negative variance and the \$9 million uptick in investment earnings meant that the FY 2024 Q1 budget amendment would be a decrease to the Improvement & Extension (I&E) Fund for future capital improvements by \$6 million. Instead, we propose to tag the \$9 million of the positive unrestricted investment earnings in FY 2024 to credit Member Partners based on the previously approved "Highland Park Bad Debt Recovery Credits Methodology". In addition, given that the economic benefit of the grant of \$25 Million will accrue to the entire system, we have been asked if there is a way to recognize that 60% of the revenue comes from the suburban customer class — which was charged for bad debt expense. This results in a request of \$15 million (60% multiplied by \$25 million) for a credit to Member Partners. While it means that we would further decrease the I&E contribution by \$6 million this year, the receipt of the grant would make up for it in the future. Bottom line would be \$15 million tagged for suburban wholesale



Member Partner credits. This is also, of course, dependent upon the actions of all parties to carry out the tasks outlined in the term sheet.

Highland Park Bad Debt Recovery Credits Methodology

On June 28, 2023, the Board of Directors adopted a methodology for credit allocation among Member Partners (File #2023-234). The overall allocation is 87.4% Sewer System and 12.6% Water System based on a proportional share of what was included in previous years' charges for services to first-tier Member Partners. Attached is a schedule which identifies a percentage for each Member Partner community and their relative share based on the discussion above.

BUDGET IMPACT

The financial impact on the budget is outlined above. In summary, it is reduction to the I&E Fund contribution in FY 2024 with a corresponding increase in construction fund capital grant revenue that spans potentially FY 2024 and subsequent years, *pending completion of the conditions precedent*.

Water System FY 2024 – I&E contribution reduced by \$5,026,500 for Member Partner Credits with timing of future \$5 million capital grant for the construction fund at a future data.

Sewer System - I&E contribution reduced by \$15 million (representing 60% suburban wholesale class allocation) for Member Partner Credits with timing of future \$25 million capital grant for the construction fund at a future date.

In terms of timing, it is proposed that this proposal be reflected in the FY 2024 Q1 Budget Amendments. Timing of the credits applied is dependent upon a number of actions, including the establishment of an all receipts trust and 30 days to ensure that the overall agreements are working as intended. There are complexities to the Term Sheet, but it should be reasonably expected that credits could occur in late FY 2024 Q3 or early Q4.

COMMITTEE REVIEW

This matter was presented at the November 9, 2023 Audit Committee with a unanimous recommendation to move the items to the full Board of Directors for discussion at its meeting on November 16, 2023.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.



Table 1 - Water System proposed budget amendments and tagging of funds for credits

	FY 2024 Board	Total 1st Quarter	FY 2024	FY 2024
	Adopted	FY 2024	Amended	Activity Thru
Water System	Budget	Amendments	Budget	8/31/2023
Revenues				
Suburban Wholesale Customer Charges	\$ 340,540,600	\$ (4,000,000	\$ 336,540,600	\$ 61,756,600
Less: Bad Debt Expense	-	-	-	-
Less: Pending Bad Debt Recovery Credit	-	(5,026,500)	(5,026,500)	-
Retail Service Charges	25,537,200	-	25,537,200	4,256,200
Investment Earnings	4,061,700	8,000,000	12,061,700	2,352,800
Other Revenues	175,000	265,000	440,000	236,100
Total Revenues	\$ 370,314,500	\$ (761,500	\$ 369,553,000	\$ 68,601,700
Revenue Requirements				
Operations & Maintenance Expense	\$ 152,906,400	\$ 10,194,100	\$ 163,100,500	\$ 25,161,400
General Retirement System Legacy Pension	_	_	_	_
Debt Service	159,482,800	3,872,800	163,355,600	26,932,500
General Retirement System Accelerated Pension	3,395,500	(1,890,000		565,900
Extraordinary Repair & Replacement Deposit	-	_	-	_
Water Residential Assistance Program Contribution	1,851,600	_	1,851,600	308,600
Regional System Lease	22,500,000	_	22,500,000	3,750,000
DWSD Budget Shortfall Pending	-	-	-	-
Receiving Fund Working Capital Requirement	-	1,500,000	1,500,000	-
Improvement & Extension Fund				
Transfer Pending	30,178,200	(14,438,400	15,739,800	5,029,700
Total Revenue Requirements	\$ 370,314,500	\$ (761,500	\$ 369,553,000	\$ 61,748,100
Net Actual to Date	\$ -	\$ -	\$ -	\$ 6,853,600
Regional System Debt Service Coverage Ratio				
- With Credits	1.36	(0.10)	1.26	
- Without Credits	1.36	(0.07)	1.29	

Table 2 - Sewer System proposed budget amendments and tagging of funds for credits

	FY 2024	Total			
	Board	1st Quarter	FY 2024	FY 2024	
	Adopted	FY 2024	Amended	Activity Thru	
Sewer System	Budget	Amendments	Budget	8/31/2023	
Revenues					
Suburban Wholesale Customer Charges	\$ 282,687,600	\$ -	\$ 282,687,600	\$ 47,142,400	
Less: Bad Debt Expense	-	-	-	-	
Less: Pending Bad Debt Recovery Credit	-	(15,000,000)	(15,000,000)	-	
Retail Service Charges	196,569,600	-	196,569,600	32,761,600	
Industrial Waste Control Charges	8,584,200	-	8,584,200	1,437,400	
Pollutant Surcharges	5,328,300	-	5,328,300	554,800	
Investment Earnings	7,057,300	9,000,000	16,057,300	3,236,300	
Other Revenues	400,000	317,000	717,000	362,000	
Total Revenues	\$ 500,627,000	\$ (5,683,000)	\$ 494,944,000	\$ 85,494,500	
Revenue Requirements					
Operations & Maintenance Expense	\$ 205,643,700	\$ 14,484,700	\$ 220,128,400	\$ 34,669,500	
General Retirement System Legacy Pension	_	-	-	-	
Debt Service	228,328,300	3,836,900	232,165,200	38,705,900	
General Retirement System Accelerated Pension	6,479,300	(3,382,500)	3,096,800	1,079,900	
Extraordinary Repair & Replacement Deposit	-	-	-	-	
Water Residential Assistance Program Contribution	2,503,100	_	2,503,100	417,200	
Regional System Lease	27,500,000	_	27,500,000	4,583,300	
DWSD Budget Shortfall Pending	-	_	-	-	
Improvement & Extension Fund					
Transfer Pending	30,172,600	(20,622,100)	9,550,500	5,028,800	
Total Revenue Requirements	\$ 500,627,000	\$ (5,683,000)	\$ 494,944,000	\$ 84,484,600	
Net Actual to Date	\$ -	\$ -	\$ -	\$ 1,009,900	
Regional System Debt Service Coverage Ratio					
- With Credits	1.29	(0.11)	1.18		
- Without Credits	1.29	(0.04)	1.25		



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MEDIATION COMMUNICATION

F: 248-888-9955

Term Sheet- 10/18/2023

1. The Great Lakes Water Authority (GLWA), the City of Highland Park (HP), and the State of Michigan (SOM) shall enter into a settlement agreement by January 15, 2024 that incorporates the basic terms set forth below including mutually agreeable release language. The various documents referenced and necessary to effectuate this term sheet shall be attached, signed, and incorporated as a part of that agreement by that date. In addition, the Department of Environment, Great Lakes and Energy (EGLE) will either amend or replace its July 28, 2017 Administrative Consent Order (ACO) by January 15, 2024 to incorporate the terms set forth below that are specific to HP.

2. The SOM shall:

- a. Pay for the reasonable and necessary cost to install water master meter(s) on water lines and sufficient temporary meters to estimate the sewage flow produced by HP. Metro Consulting (Metro) will be responsible for conducting the necessary work to install the meters. EGLE shall oversee that work pursuant to its regulatory authority. Metro will submit a proposal(s) to EGLE for this work, which will include the number and placement location of those meters in accordance with the provisions below. Metro will consult with GLWA in preparing the proposal(s). EGLE must approve in writing any proposal before installation of meters or implementation begins. In addition:
 - i. The water master meter(s) and temporary sewage metering devices will be installed subject to GLWA's specifications.
 - ii. The water master meter(s) shall be installed at all open points of connection between HP and GLWA.
 - iii. Upon transfer, GLWA will own, operate, and maintain the water master meter(s). HP shall be responsible for the cost of maintaining and operating the sewer meters.
 - iv. HP and GLWA shall agree to a third party and procedures to maintain and operate the sewer meters including the sharing of data produced by the meters. If the parties cannot agree to a third party or the procedures associated with operation, SOM shall identify the third party and prescribe the procedures.
 - v. HP shall have the same access to the Wholesale Automated Meter Reading (WAMR) system and Greater Detroit Regional Sewer System (GDRSS) data for the installed HP water and sewer meters as all other customer communities served by GLWA.

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Judicial Resource Services PC

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- vi. HP shall have the right to annually inspect the water master meter(s) and sewer meters upon request.
- vii. Unless otherwise agreed by the parties, the water master meter(s) and sewage metering devices for HP shall be installed within one year of the execution of the settlement agreement and accompanying documents. HP shall provide full access to meter locations to complete the work timely.
- b. Pay for work necessary to complete water main and service line replacement efforts within the boundaries of HP. EGLE shall have responsibility for determining the necessary work, including conducting or supervising this work.
- c. Release the \$25M sewer infrastructure grant funds previously allocated in the FY 2023 budget to GLWA on or before December 31, 2023 and appropriate a \$5M grant for work to be conducted by GLWA on drinking water infrastructure.
 - 3. HP shall continue to retain Metro to operate HP's water and sewer operations, which includes all billing, collections, maintenance, and improvements. If for any reason, Metro ceases to be HP's operator, then subject to SOM's approval, HP will retain another entity to conduct these operations. Subject to all terms and conditions of the settlement agreement and the contract between GLWA and HP, beginning January 1, 2024 and on a going forward basis, HP shall pay the full amount of GLWA's monthly charges pursuant to the terms of any contract between GLWA and HP.
 - 4. HP will enter into contracts based on GLWA's model contract by January 15, 2024 covering the period of January 1, 2014 to December 31, 2044 for water and sewer services.
 - i. The settlement agreement and contracts shall require all amounts paid for HP water, sewer (including industrial waste control) and stormwater services be placed into a trust in which the trustee pays GLWA and any remaining amounts to HP on the same date. Any grants or loans from SOM to HP for infrastructure projects shall not be part of or included in the trust.
 - ii. Except to enforce the conditions of this term sheet and the settlement agreement, to the extent that any future disputes arise between HP and GLWA over water and sewer services, which the parties are unable to resolve within 30-days' notice of that dispute, HP and GLWA agree to resolve such disputes through expedited mandatory arbitration pursuant to Michigan statute and court rule that shall be binding upon them. For a charge or billing dispute, the trustee must place in escrow the amount in dispute.



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- iii. Once the master water meter(s) is installed, HP shall be treated as part of the master metered customer class.
- iv. For five years commencing on the date of this agreement, the model water contract will allow for Highland Park's max day and peak hour water volume demand to be updated annually as Highland Park continues to "dry up" its system by replacing water mains and lead service lines, or completing other infrastructure improvements that would impact Highland Park's water demand requirements.
- 5. HP and EGLE will either revise the current ACO or replace it with a new one to incorporate the terms set forth in this term sheet that are specific to HP. That ACO shall remain effective and in effect until January 1, 2044 after which it may be terminated if HP has met all of its terms.
- 6. Until metering data can be used to project water and sewer charges:
- a. For services provided until December 31, 2023, HP will continue to pay or the trustee will pay on HP's behalf 65% of any and all amounts received by HP in payment of bills for water and wastewater treatment services.
- b. Effective January 1, 2024, subject to and conditioned upon execution by all parties of the settlement agreement by January 15, 2024, GLWA will reduce HP's water charges based on reductions in usage volume due to documented repairs of leaks up to 25 percent of its current water usage.
- c. Effective January 1, 2024, subject to and conditioned upon execution by all parties of the settlement agreement by January 15, 2024, GLWA will also provide a settlement credit of \$60,000 per month to HP on its sewage charges until June 30, 2024 subject to the following:
 - i. HP may fully participate in GLWA's share and charge process for FY 2025.
 - ii. Beginning July 1, 2024, HP shall receive the lesser of (A) the current FY 2024 sewage charges and credit or (B) the new FY 2025 share and resulting charges.
 - iii. This settlement credit will terminate no later than June 30, 2025.
 - 7. Once 12 months of quality metering data is available to project estimated annual water and sewer flows, GLWA charges to HP shall be based on that data and future data.
 - 8. HP shall increase its water and sewer rates by adopting an interim amended budget no later than December 2023, for the period of January 1, 2024 to June 30, 2024. For all subsequent fiscal years, Metro shall annually retain an independent rate analyst, subject to the approval of the SOM, to calculate necessary adjustments in its water





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and sewer rates to ensure that the budget for HP's water and sewer operations is sufficient to ensure payment of all GLWA charges and all overhead, maintenance, and operational costs associated with its water and sewer operations. The analyst will recommend necessary rates changes to HP and HP shall annually adjust its water and sewer rates in accordance with the recommendations of the rate analyst.

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- 9. Upon effectuation of the settlement agreement, its attachments and related documents, including initial funding consistent with this agreement and after receipt by the trustee of one month of HP's water and sewer receipts and distribution of one month's payment of funds to GLWA under Paragraph 4.i, all litigation between GLWA, Detroit Water and Sewerage Department (DWSD), HP, or SOM shall be dismissed with prejudice according to the following:
- a. The judgment entered in Wayne County Circuit Court Case No. 2014-001974-CK shall be released or deemed satisfied, and HP shall dismiss its pending appeal from that action (COA Case No. 367193). The court shall retain jurisdiction to enforce the terms of the settlement agreement, which will be entered by the court as a consent judgment.
- b. HP and GLWA shall submit a proposed stipulated order of dismissal of Wayne County Circuit Court Case No. 20-011589.
- c. HP shall dismiss its appeal (COA Case No. 362416) from Wayne County Circuit Court Case No. 22-004754-CB and shall release and waive any further challenge to GLWA's rules that were the subject of that action.
- d. GLWA and SOM shall submit a stipulated order of dismissal of Court of Claims Case No. 2021-000151.
- e. HP and SOM will submit a proposed stipulated order of dismissal in Court of Claims Case No. 19-000129-MZ.
- f. HP and GLWA shall submit a proposed stipulated order setting aside the Amended Consent Judgment dated June 18, 1996 in E.D. Mich. Case No. 92-CV7677-DT and 94-CV-73135-DT
 - 10. The \$241,418.75 cash bond deposited by HP with the U.S. District Court Clerk shall be released to GLWA from E.D. Mich. Case No. 16-cv-13840.
 - 11. Upon approval of this term sheet by HP, SOM, and GLWA, not later than October 23, 2023, GLWA and HP shall submit a signed copy of the term sheet to, and submit a request for, a stipulated Stay of the October 24, 2023, Status Conference and all further proceedings in Judge Joseph's Case No. 14-001974 and all appellate proceedings from that case, Case COA Docket No. 367193, until January 15, 2024.
 - 12. Upon execution and approval of this term sheet by HP, SOM, and GLWA, not later than October 27, 2023, GLWA and HP shall submit:



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- a. a signed copy of the term sheet to, and submit a request for, a stipulated Stay of the November 2, 2023, Status conference and all further proceedings in Judge Berry's Case No 20-011589 until January 15, 2024.
- b. a signed copy of the term sheet to, and submit a request for, a stipulated Stay of Petition for Rehearing in Banc in 6th circuit case no. 22-1288, until January 15, 2024.
- c. Stipulate to a stay of all proceedings in HP's appeal (COA Case No. 362416) from Wayne County Circuit Court Case No. 22-004754-CB.
- 13. This term sheet is conditional and dependent upon (a) final approval of terms by the Governor, (b) appropriation of funds from the legislature to the extent necessary, and (c) approval by the governing bodies of GLWA, and any other necessary party on or before October 26, 2023.

City of Highland Park:

10/19/2023

Dated:

10/19/23

State of Michigan:

Datad.

Suranne R. Coffee Jones Frautive Officer

Dated:

Highland Park Bad Debt Synopsis Allocation of Potential Subsequent Recovery Credit to <u>Water and Sewer</u> Member Partners

	(1)	(2)	(3)	(4)	(5)
	Cumulative	Relative Share of		Pending	
	Amount in	Highland	Initial	Subsequent	Total
	Charges	Park Bad	Recovery	Recovery	Recovery
	thru FY 2022	<u>Debt</u>	<u>Credit</u>	<u>Credit</u>	<u>Credit</u>
	(a)		<i>(b)</i>	<i>(c)</i>	(3) + (4)
Water Charges					
Macomb	\$1,127,700	21.9%	\$27,400	\$1,100,300	\$1,127,700
Oakland	1,471,900	28.6%	36,100	1,435,800	1,471,900
Wayne (excl. Detroit)	1,516,100	29.4%	36,900	1,479,200	1,516,100
Other	394,600	7.7%	9,700	384,900	394,600
Detroit	642,200	12.5%	15,900	626,300	642,200
Total	\$5,152,500	100.0%	\$126,000	\$5,026,500	\$5,152,500
Sewer Charges					
Macomb (d)	\$8,565,900	24.0%	\$209,900	\$3,603,500	\$3,813,500
Oakland (e)	14,419,900	40.4%	353,500	6,066,200	6,419,600
Wayne (excl. Detroit)	12,670,600	35.5%	310,600	5,330,300	5,640,900
Other	NA	NA	NA	NA	NA
Detroit	NA	NA	NA	NA	NA
Total	\$35,656,400	100.0%	\$874,000	\$15,000,000	\$15,874,000
Combined Water and Sewer Charges					
Macomb (d)	\$9,693,600	23.8%	\$237,300	\$4,703,800	\$4,941,200
Oakland (e)	15,891,800	38.9%	389,600	7,502,000	7,891,500
Wayne (excl. Detroit)	14,186,700	34.8%	347,500	6,809,500	7,157,000
Other	394,600	1.0%	9,700	384,900	394,600
Detroit	642,200	1.6%	15,900	626,300	642,200
Total	\$40,808,900	100.0%	\$1,000,000	\$20,026,500	\$21,026,500
Industrial Waste Control *			0	0	0
			\$1,000,000	\$20,026,500	\$21,026,500

^{*} Highland Park IWC Bad Debt was not directly included in charges to any customer

⁽a) Reflects different historical time frames for Water and Sewer Charges.

⁽b) Allocation of initial \$1 million combined Water / Sewer recovery payment credited in August 2023.

⁽c) Potential credit to be issued pending effectuation of conditions precedent.

⁽b) Includes 60% of Sewer amounts for the Oakland Macomb Interceptor Drain District

⁽c) Includes 40% of Sewer amounts for the Oakland Macomb Interceptor Drain District

Table 1 - Allocation of Pending Subsequent Recovery Credit to $\underline{\mathbf{Water}}$ Member Partners

			•			
		(1)	(2)	(3)	(4)	(5)
		Cumulative	Relative			
		Amount in	Share of		Pending	
		Charges	Highland	Initial	Subsequent	Total
		FY 2019 thru	Park Bad	Recovery	Recovery	Recovery
				· ·	•	=
		<u>FY 2022</u>	<u>Debt</u>	<u>Credit</u>	Credit	<u>Credit</u>
		(a)		<i>(b)</i>	<i>(c)</i>	(3) + (4)
1	Allen Park	\$33,900	0.66%	\$800	\$33,100	\$33,900
2	Almont Village	3,300	0.06%	100	3,200	3,300
3	Ash Township	11,700	0.23%	300	11,400	11,700
4	Belleville	4,300	0.08%	100	4,200	4,300
5	Berlin Township	10,600	0.21%	300	10,300	10,600
6	Brownstown Township	52,500	1.02%	1,300	51,200	52,500
7	Bruce Township	3,900	0.08%	100	3,800	3,900
8	Burtchville Township	4,700	0.09%	100	4,600	4,700
9	Canton Township	147,400	2.86%	3,600	143,800	147,400
10	Center Line	6,500	0.13%	200	6,300	6,500
11	Chesterfield Township	59,900	1.16%	1,500	58,400	59,900
12	Clinton Township	112,000	2.17%	2,700	109,300	112,000
13	Commerce Township	52,300	1.02%	1,300	51,000	52,300
14	Dearborn	159,100	3.09%	3,900	155,200	159,100
15	Dearborn Heights	52,600	1.02%	1,300	51,300	52,600
16	Eastpointe Eastpointe	21,900	0.43%	500	21,400	21,900
17	Ecorse		0.43%	500		
18		21,500		400	21,000	21,500
	Farmington	14,700	0.29%		14,300	14,700
19	Farmington Hills	129,600	2.52%	3,200	126,400	129,600
20	Ferndale	14,300	0.28%	300	14,000	14,300
21	Flat Rock	19,500	0.38%	500	19,000	19,500
22	Flint *	162,600	3.16%	4,000	158,600	162,600
23	Fraser	17,500	0.34%	400	17,100	17,500
24	Garden City	24,400	0.47%	600	23,800	24,400
25	Gibraltar	5,400	0.10%	100	5,300	5,400
26	Greenwood Township (DTE)	7,700	0.15%	200	7,500	7,700
27	Grosse Ile Township	16,900	0.33%	400	16,500	16,900
28	Grosse Pt. Park	20,900	0.41%	500	20,400	20,900
29	Grosse Pt. Shores	9,400	0.18%	200	9,200	9,400
30	Grosse Pt. Woods	20,200	0.39%	500	19,700	20,200
31	Hamtramck	10,600	0.21%	300	10,300	10,600
32	Harper Woods	12,200	0.24%	300	11,900	12,200
33	Harrison Township	22,200	0.43%	500	21,700	22,200
34	Hazel Park	10,300	0.20%	300	10,000	10,300
35	Highland Park (d)	0	0.00%	0	0	0
36	Huron Township	21,300	0.41%	500	20,800	21,300
37	Imlay City	19,500	0.38%	500	19,000	19,500
38	Imlay Township (Single User)	100	0.00%	0	100	100
-	, , ,					

Table 1 - Allocation of Pending Subsequent Recovery Credit to $\underline{\mathbf{Water}}$ Member Partners

		(1)	(2)	(3)	(4)	(5)
		Cumulative Amount in	Relative Share of		Pending	
		Charges	Highland	Initial	Subsequent	Total
		FY 2019 thru	Park Bad	Recovery	Recovery	Recovery
		FY 2022	<u>Debt</u>	Credit	Credit	Credit
		(a)		<i>(b)</i>	(c)	(3) + (4)
39	Inkster	20,400	0.40%	500	19,900	20,400
40	Keego Harbor	4,300	0.08%	100	4,200	4,300
41	Lapeer	21,900	0.43%	500	21,400	21,900
42	Lenox Township	4,000	0.08%	100	3,900	4,000
43	Lincoln Park	32,000	0.62%	800	31,200	32,000
44	Livonia	177,500	3.44%	4,300	173,200	177,500
45	Macomb Township	177,700	3.45%	4,300	173,400	177,700
46	Madison Heights	28,200	0.55%	700	27,500	28,200
47	Mayfield Township (KAMAX)	500	0.01%	0	500	500
48	Melvindale	9,200	0.18%	200	9,000	9,200
49	New Haven, Village of	5,700	0.11%	100	5,600	5,700
50	NOCWA	326,400	6.33%	8,000	318,400	326,400
51	Northville	11,800	0.23%	300	11,500	11,800
52	Northville Township	81,900	1.59%	2,000	79,900	81,900
53	Novi	131,200	2.55%	3,200	128,000	131,200
54	Oak Park	19,800	0.38%	500	19,300	19,800
55	Oakland GWK Drain District	1,000	0.02%	0	1,000	1,000
56	Plymouth	15,400	0.30%	400	15,000	15,400
57	Plymouth Township	65,000	1.26%	1,600	63,400	65,000
58	Redford Township	45,700	0.89%	1,100	44,600	45,700
59	River Rouge	9,800	0.19%	200	9,600	9,800
60	Riverview	12,400	0.24%	300	12,100	12,400
61	Rockwood	4,100	0.08%	100	4,000	4,100
62	Romeo	3,600	0.07%	100	3,500	3,600
63	Romulus	58,600	1.14%	1,400	57,200	58,600
64	Roseville	37,900	0.74%	900	37,000	37,900
65	Royal Oak Township	3,000	0.06%	100	2,900	3,000
66	Shelby Township	204,300	3.97%	5,000	199,300	204,300
67	SOCWA	335,500	6.51%	8,200	327,300	335,500
68	South Rockwood	1,600	0.03%	0	1,600	1,600
69	Southgate	32,100	0.62%	800	31,300	32,100
70	St. Clair Shores	43,200	0.84%	1,100	42,100	43,200
71	Sterling Heights	218,300	4.24%	5,300	213,000	218,300
72	Sumpter Township	9,600	0.19%	200	9,400	9,600
73	Sylvan Lake	3,400	0.07%	100	3,300	3,400
74	Taylor	67,000	1.30%	1,600	65,400	67,000
75	Trenton	25,800	0.50%	600	25,200	25,800
76	Troy	197,700	3.84%	4,800	192,900	197,700
, 0	J	171,100	3.01/0	1,000		171,100

Table 1 - Allocation of Pending Subsequent Recovery Credit to $\underline{\mathbf{Water}}$ Member Partners

		(1)	(2)	(3)	(4)	(5)
		Cumulative Amount in Charges FY 2019 thru FY 2022 (a)	Relative Share of Highland Park Bad <u>Debt</u>	Initial Recovery Credit (b)	Pending Subsequent Recovery Credit (c)	Total Recovery Credit (3) + (4)
77	Utica	8,100	0.16%	200	7,900	8,100
78	Van Buren Township	48,700	0.95%	1,200	47,500	48,700
79	Walled Lake	12,200	0.24%	300	11,900	12,200
80	Warren	148,200	2.88%	3,600	144,600	148,200
81	Washington Township	32,800	0.64%	800	32,000	32,800
82	Wayne	43,500	0.84%	1,100	42,400	43,500
83	West Bloomfield Township	151,800	2.95%	3,700	148,100	151,800
84	Westland	89,300	1.73%	2,200	87,100	89,300
85	Wixom	36,200	0.70%	900	35,300	36,200
86	Woodhaven	24,200	0.47%	600	23,600	24,200
87	Ypsilanti Comm Util Auth	150,400	2.92%	3,700	146,700	150,400
88	Total Suburban Wholesale	4,510,300	87.54%	110,100	4,400,200	4,510,300
89	Detroit	642,200	12.46%	15,900	626,300	642,200
90	TOTAL	\$5,152,500	100.00%	\$126,000	\$5,026,500	\$5,152,500
	Summary by County					
	Macomb	\$1,127,700	21.89%	\$27,400	\$1,100,300	\$1,127,700
	Oakland	1,471,900	28.57%	36,100	1,435,800	1,471,900
	Wayne (excl. Detroit)	1,516,100	29.42%	36,900	1,479,200	1,516,100
	Other	394,600	7.66%	9,700	384,900	394,600
	Detroit	642,200	12.46%	15,900	626,300	642,200
	Total	\$5,152,500	100.00%	\$126,000	\$5,026,500	\$5,152,500

⁽a) Based on amounts allocated in approved charges. Does not reflect impacts of variances in actual purchased volumes.

⁽b) Allocation of initial \$1 million combined Water / Sewer recovery payment credited in August 2023.

⁽c) Potential credit to be issued pending effectuation of conditions precedent.

⁽d) Highland Park is NOT allocated responsibility for, NOR charged, an amount related to the Water debt they create - as they have never made a payment.

Table 2 - Allocation of Pending Subsequent Recovery Credit to **Sewer** Member Partners

		(1)	(2)	(3)	(4)	(5)
		Cumulative Amount in Charges FY 2008 thru FY 2022 (a)	Relative Share of Highland Park Bad <u>Debt</u>	Initial Recovery Credit (b)	Pending Subsequent Recovery Credit (c)	Total Recovery Credit (3) + (4)
1	OMID	\$8,281,000	23.22%	\$202,900	\$3,483,700	\$3,686,600
2	Rouge Valley	7,420,000	20.81%	181,900	3,121,500	\$3,303,400
3	Oakland GWK	6,495,000	18.22%	159,200	2,732,300	\$2,891,500
4	Evergreen Farmington	4,459,200	12.51%	109,300	1,875,900	\$1,985,200
5	SE Macomb San Dist	3,471,100	9.73%	85,100	1,460,200	\$1,545,300
6	Dearborn	2,769,000	7.77%	67,900	1,164,900	\$1,232,800
7	Grosse Pointe Farms	368,300	1.03%	9,000	154,900	\$163,900
8	Grosse Pointe Park	241,300	0.68%	5,900	101,500	\$107,400
9	Melvindale	192,600	0.54%	4,700	81,000	\$85,700
10	Farmington	153,300	0.43%	3,800	64,500	\$68,300
11	Center Line	126,200	0.35%	3,100	53,100	\$56,200
12	Allen Park	98,200	0.28%	2,400	41,300	\$43,700
13	Highland Park (d)	753,700	2.11%	18,500	317,100	\$335,600
14	Hamtramck	616,200	1.73%	15,100	259,200	\$274,300
15	Grosse Pointe	145,500	0.41%	3,600	61,200	\$64,800
16	Harper Woods	37,500	0.11%	900	15,800	\$16,700
17	Redford Township	24,300	0.07%	600	10,200	\$10,800
18	Wayne County #3	4,000	0.01%	100	1,700	\$1,800
19	Total	\$35,656,400	100.00%	\$874,000	\$15,000,000	\$15,874,000
	Summary by County					
	Macomb	\$8,565,900	24.02%	\$209,900	\$3,603,500	\$3,813,500
	Oakland	14,419,900	40.44%	353,500	6,066,200	6,419,600
	Wayne (excl. Detroit)	12,670,600	35.54%	310,600	5,330,300	5,640,900
	Other	NA	NA	NA	NA	NA
	Detroit	NA	NA	NA	NA	NA
	Total	\$35,656,400	100.00%	\$874,000	\$15,000,000	\$15,874,000

⁽a) Based on amounts allocated in approved charges. Does not reflect impacts of variances in actual contributed wastewater volumes.

⁽b) Allocation of initial \$1 million combined Water / Sewer recovery payment credited in August 2023.

⁽c) Potential credit to be issued pending effectuation of conditions precedent.

⁽d) Yes, Highland Park is allocated responsibility for, and charged, an amount related to the Sewer bad debt they create - reflecting the partial payments they have made.

Page 88 AGENDA ITEM #7A



Financial Services Audit Committee Communication

Date: May 24, 2024 (Presented June 17, 2024)

To: Great Lakes Water Authority Audit Committee

From: Jacqueline Morgan, CTP, State Revolving Fund Program Finance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of

Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed

\$66,096,901 (Ordinance 2024-04)

Background & Analysis: See attached draft Great Lakes Water Authority ("GLWA") Board letter related to a proposed resolution to secure lower cost financing through the state revolving fund (SRF) loan program.

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 Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 for the GLWA Oakwood District Intercommunity Relief Sewer Modification of Oakwood Diversion (SRF No. 5840-01) and the city of Detroit Water and Sewerage Department West Chicago South Stormwater Improvements (SRF No. 5980-01) projects.

..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 (Ordinance 2024-04)

..Body

Agenda of: June 26, 2024

Item No.: 2024-195

Amount: Not to Exceed \$66,096,901

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 26, 2024

RE: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 (Ordinance 2024-04)

MOTION

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer & Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approves the resolution related to the Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 (Ordinance 2024-04), and 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 considerations related to this resolution: the projects being funded and financing.

Project Considerations

Regional Sewer System Project:

Northwest Interceptor to Oakwood Combined Sewer Overflow Sewer (NOCSOS) - (CIP #222001, Series 2024-SRF-3): This project consists of improvements to the existing Northwest Interceptor to Oakwood CSO Sewer, including the construction of an approximately 3,500-foot long, 10-foot finished diameter tunnel between the Northwest Interceptor and the Oakwood CSO Control Facility, to divert wet weather flows to the Oakwood CSO Facility for treatment and discharge into the Rouge River.

GLWA submitted this project for funding consideration to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Fiscal Year 2024 Clean Water State Revolving Fund (CWSRF) financing program. On May 25, 2022, GLWA held a <u>public hearing</u> to present the project and allow opportunities for public comment in accordance with the CWSRF guidelines. After the public hearing, the Board adopted the resolution approving the project plan and GLWA was subsequently approved for funding as notified on EGLE's final CWSRF Intended Use Plan (IUP) in October 2023.

- Since that time, the project was renamed from Oakwood District Intercommunity Relief Sewer Modification at Oakwood District - Northwest Interceptor Relief Sewer to Northwest Interceptor to Oakwood Combined Sewer Overflow Sewer (NOCSOS).
- The project cost estimate was \$75 million when presented at the May 2022 public hearing.
- The current estimated project cost is approximately \$103 million.
- GLWA was awarded a maximum funding amount of \$75 million, including a \$20 million American Rescue Plan Act (ARPA) grant.
- The proposed series ordinance not to exceed amount of \$60.5 million in attached resolution includes an additional 10% loan financing contingency to allow for any fluctuation in the final SRF award amount.

Local Sewer System Project:

West Chicago South Stormwater Improvements – This project consists of sewer installation and construction of new stormwater outfalls to create capacity within the West Outer Drive Neighborhood upstream of Combined Sewer Overflow (CSO) B063 at West Chicago. The Detroit Water and Sewerage Department (DWSD) submitted this project for FY 2024 funding consideration through EGLE's CWSRF financing program. On May 25, 2022, DWSD held a public hearing to present the project and allow opportunities for public comment in accordance with the CWSRF guidelines. After the public hearing, the DWSD Board of Water Commissioners adopted the resolution approving the project plan and was subsequently approved for funding as notified on EGLE's final CWSRF Intended Use Plan (IUP) in October 2023.

- Current estimated project cost is approximately \$21.4 million.
- DWSD was awarded a maximum funding amount of \$19.1 million including \$14 million American Rescue Plan Act (ARPA) grant funds and an additional \$5.1 million in principal forgiveness.
- The project was fully funded with grant and principal forgiveness; however, a bond must be issued for the principal forgiveness portion (\$5.1 million) requiring GLWA to adopt a series ordinance in support of that issuance.
- The proposed series ordinance not to exceed amount of \$5.6 million in attached resolution includes an additional 10% loan financing contingency to allow for any fluctuation in the final SRF award amount.

Financing Considerations

The amount to be financed with revenue bonds through the CWSRF bonds is within authorized GLWA limits. On July 29, 2022, the GLWA Board of Directors approved Resolution 2022-312, "Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Sewerage Disposal System Revenue Bonds" in a principal amount not to exceed \$650,000,000 (the "Notice of Intent"). This is the second series of sewer bonds from that Notice of Intent and is in the amount not to exceed \$66,096,901.

The approval of the series ordinance is the next formal step required by the GLWA Board of Directors in the bond issuance process, and this proposed action authorizes the bonds to be issued. The series ordinance authorizes the issuance of the bonds by GLWA, sets forth the guidelines for the CWSRF bonds, designates the bonds as 2024 SRF-3/4 Junior

Lien Bonds (with 3 representing GLWA Northwest Interceptor to Oakwood CSO Sewer project and 4 representing the DWSD West Chicago South Stormwater Improvements project), and authorizes the Chief Executive Officer or the Chief Financial Officer/Treasurer to execute the final terms of the bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

The bond series authorized by this ordinance will support the Regional and Local Sewer System improvements. The 2024 SRF-3/4 Junior Lien Bonds will be sold through the Michigan Finance Authority under the CWSRF program.

GLWA secures capital improvement financing for DWSD in accordance with foundational documents related to the establishment of GLWA. Pursuant to Section 7.2(b) of the Regional Sewage Disposal System Lease between the City of Detroit and GLWA, the Authority shall cooperate fully with the City in the implementation of this Detroit capital improvement, including financing through the Authority. GLWA is the loan applicant on behalf of DWSD, and DWSD will be the CWSRF loan recipient. All project costs financed by GLWA, on behalf of DWSD, through the CWSRF program and resulting principal and interest payments on the bonds will be directly allocable to the DWSD local system.

The current CWSRF interest rates for overburdened applicants are 2% for 20-year and 30-year loans. The GLWA Northwest Interceptor to Oakwood CSO Sewer project and DWSD West Chicago South Stormwater Improvements project both qualified for "overburdened applicant status". Potential dollar savings are significant when compared to municipal bond interest rates in a market-based transaction. By way of example, the current GLWA ten-year financial plan utilizes an estimated interest rate of 5% for market-based debt. Comparing the current CWSRF interest rate of 2% to the GLWA estimated rate of 5%, the potential interest savings on a 20-year loan is approximately \$21 million and \$34 million on a 30-year loan related to the GLWA Oakwood CSO Sewer project. This comparative calculation is not necessary for the DWSD Stormwater Improvements project because the project is fully funded through grant and principal forgiveness.

Another advantage of the SRF program 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

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

BUDGET IMPACT

The debt service payments on the GLWA Regional project are anticipated to start on October 1, 2029 with minimal amounts of interest due, because of the projected draw down schedules. An estimate for debt service on the loan will be included in the biennial FY 2025 Sewer Budget as well as GLWA's current ten-year forecast.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on June 17, 2024. The Audit Committee [insert action taken] the Board of Directors approve the resolution related to the Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount Not to Exceed \$66,096,901 as presented.

GREAT LAKES WATER AUTHORITY ORDINANCE NO. 2024-04

SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF SEWAGE DISPOSAL SYSTEM REVENUE BONDS IN AN AGGREGATE AMOUNT NOT TO EXCEED \$66,096,901

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

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

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time two or more Series of SRF Junior Lien Bonds (the "2024 SRF-3/4 Junior Lien Bonds") to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Regional Sewer System identified in the Capital Improvement Program (the "2024 SRF-3 Project") and to the Local Sewer System identified in the Detroit Capital Improvement Program (the "2024 SRF-4 Project", and collectively with the 2024 SRF-3 Project, the "2024 SRF 3/4 Projects").

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

- Section 1. <u>Authority for this Series Ordinance</u>. This Series Ordinance (the "2024 SRF-3/4 Series Ordinance") is adopted pursuant to Section 1102(1) of the Ordinance.
- Section 2. <u>Definitions</u>. Except as otherwise provided in this 2024 SRF-3/4 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2024 SRF-3/4 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:
- (a) "2024 SRF-3 Junior Lien Bonds" means the Bonds authorized by Section 5 of this 2024 SRF-3/4 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2024 SRF-3 Project.
- (b) "2024 SRF-4 Junior Lien Bonds" means the Bonds authorized by Section 5 of this 2024 SRF 3/4 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2024 SRF-4 Project.
- (c) "2024 SRF-3/4 Junior Lien Bonds" means, collectively, the 2024 SRF-3 Junior Lien Bonds and the 2024 SRF-4 Junior Lien Bonds.

- (d) "2024 SRF-3 Project" means improvements to the Regional Sewer System, including but not limited to improvements to the existing Northwest Interceptor to Oakwood CSO Sewer, consisting of the construction of an approximately 3,500-foot long, 10-foot finished diameter tunnel between the Northwest Interceptor and the Oakwood CSO Control Facility, to divert wet weather flows to the Oakwood CSO Facility for treatment and discharge into the Rouge River.
- (e) "2024 SRF-4 Project" means improvements to the Local Sewer System, including but not limited to sewer installation and the construction of new stormwater to create capacity within the West Outer Drive Neighborhood upstream of Combined Sewer Overflow (CSO) B063 at West Chicago Street in the City.
- (f) "2024 SRF-3/4 Projects" means, collectively, the 2024 SRF-3 Project and the 2024 SRF-4 Project.
- (g) "Authorized Denomination" means any denomination as determined by an Authorized Officer in the Sale Order.
- (h) "Authorized Officer" means either the Chief Executive Officer or the Chief Financial Officer.
- (i) "Interest Payment Date" means except as otherwise set forth in the Sale Order each April 1 and October 1.
- (j) "Local Construction Fund, Series 2024 SRF-4" means a subaccount of the Construction Fund established in accordance with Section 11 of this 2024 SRF-3/4 Series Ordinance relating to the construction of the 2024 SRF-4 Project to be paid with the proceeds of the 2024 SRF-4 Junior Lien Bonds.
- (k) "Local Sewer System Project Costs" means the costs of acquiring, constructing, equipping, installing and financing the 2024 SRF-4 Project, including Issuance Costs relating to the 2024 SRF-4 Junior Lien Bonds.
- (l) "Maturity Date" means such dates of maturity of the 2024 SRF-3/4 Junior Lien Bonds as determined in the Sale Order.
 - (m) "MFA" means the Michigan Finance Authority.
- (n) "Person" means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.
- (o) "Project Costs" means, collectively, the Local Sewer System Project Costs and the Regional Sewer System Project Costs.
- (p) "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 2024 SRF-3/4 Junior Lien Bonds.

- (q) "Regional Construction Fund, Series 2024 SRF-3" means a subaccount of the Construction Fund established in accordance with Section 11 of this 2024 SRF-3/4 Series Ordinance relating to the construction of the 2024 SRF-3 Project to be paid with the proceeds of the 2024 SRF-3 Junior Lien Bonds.
- (r) "Regional Sewer System Project Costs" means the costs of acquiring, constructing, equipping, installing and financing the 2024 SRF-3 Project, including Issuance Costs relating to the 2024 SRF-3 Junior Lien Bonds.
- (s) "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.
- (t) "Sale Order" means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2024 SRF-3/4 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2024 SRF-3/4 Junior Lien Bonds and to complete the other transactions contemplated herein.
- (u) "Supplemental Agreement" means, collectively, (1) the Supplemental Agreement among the Authority, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, with respect to a Series of the 2024 SRF-3 Junior Lien Bonds; and (2) 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 2024 SRF-4 Junior Lien Bonds.
- (v) "Taxable 2024 SRF-3/4 Junior Lien Bonds" means any 2024 SRF-3/4 Junior Lien Bonds other than Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds.
- (w) "Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds" means any 2024 SRF-3/4 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2024 SRF-3/4 Projects.

- (a) <u>Approval of 2024 SRF-3 Project</u>. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Sewer System to acquire, construct and undertake the 2024 SRF-3 Project, and the 2024 SRF-3 Project is hereby approved and accepted.
- (b) <u>Approval of 2024 SRF-4 Project</u>. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Sewer System to acquire, construct and undertake the 2024 SRF-4 Project, and the 2024 SRF-4 Project is hereby approved and accepted.
- Section 4. <u>Estimated Cost and Period of Usefulness of 2024 SRF-3/4 Projects</u>. The aggregate Project Costs are estimated by the Authority Board to not exceed \$124,414,554, and consist of the following:
- (a) The Regional Sewer System Project Costs are estimated by the Authority Board to not exceed \$103,000,000 and the Regional Sewer System Project Costs are hereby approved and

confirmed. The period of usefulness of the 2024 SRF-3 Project is estimated to be not less than 20 years.

(b) The Local Sewer System Project Costs are estimated by the Authority Board to not exceed \$21,414,554 and the Local Sewer System Project Costs are hereby approved and confirmed. The period of usefulness of the 2024 SRF-4 Project is estimated to be not less than 30 years.

Section 5. Authorization of 2024 SRF-3/4 Junior Lien Bonds.

(a) Authorization of Borrowing.

- (i) The Authority may borrow an amount not in excess of \$60,500,000, as is finally determined in the Sale Order, and issue the 2024 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 2024 SRF-3 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2024 SRF-3 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.
- (ii) The Authority may borrow an amount not in excess of \$5,596,901, as is finally determined in the Sale Order, and issue the 2024 SRF-4 Junior Lien Bonds in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2024 SRF-4 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2024 SRF-4 Junior Lien Bonds authorized in this Section 5(b) shall include the amount of the net original issue premium, if any.

(b) <u>Purpose of 2024 SRF-3/4 Junior Lien Bonds</u>.

- (i) The 2024 SRF-3 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Regional Sewer System Project Costs.
- (ii) The 2024 SRF-4 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Local Sewer System Project Costs.
- (c) <u>Priority of Lien</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be issued as SRF-3/4 Junior Lien Bonds.

(d) <u>Insufficient Proceeds</u>.

- (i) To the extent that proceeds of SRF-3 Junior Lien Bonds are insufficient to pay Regional Sewer System Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Regional Sewer System on hand and legally available therefor, as determined by the Authority Board.
- (ii) To the extent that proceeds of the SRF-4 Junior Lien Bonds are insufficient to pay Local Sewer System Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Local Sewer System on hand and

legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of any Additional Bonds, with the concurrence of the Authority Board.

- (e) <u>Separate Series</u>. The 2024 SRF-3 Junior Lien Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2024 SRF-4 Junior Lien Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2024 SRF-3 Junior Lien Bonds and the 2024 SRF-4 Junior Lien Bonds shall be issued as separate Series.
- (f) <u>Taxable and Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds may be issued as Taxable 2024 SRF-3/4 Junior Lien Bonds or Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds, or as separate subseries of both, as set forth in the applicable Sale Order.
- (g) <u>Source of Payment and Security</u>. The 2024 SRF-3/4 Junior Lien Bonds shall be payable and secured as provided in Section 8.
- (h) <u>Applicability of Ordinance</u>. Except as otherwise provided in this 2024 SRF-3/4 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2024 SRF-3/4 Junior Lien Bonds as if set forth in full in this 2024 SRF-3/4 Series Ordinance, the purpose of this 2024 SRF-3/4 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2024 SRF-3/4 Junior Lien Bonds for the purposes set forth herein.

Section 6. <u>2024 SRF-3/4 Junior Lien Bond Details</u>.

(a) <u>Designation</u>.

- (1) The 2024 SRF-3 Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2024-SRF-3 and shall include such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2024 SRF-3/4 Series Ordinance. The 2024 SRF-4 Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2024-SRF-4 and shall include such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2024 SRF-3/4 Series Ordinance.
- (2) If any Series of the 2024 SRF-3/4 Junior Lien Bonds are not issued in 2024, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2024 SRF-3/4 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2024 SRF-3/4 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

- (b) <u>Numbering</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be numbered in such manner as shall be determined in the applicable Sale Order.
- (c) <u>Principal</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:
 - (1) No 2024 SRF-3/4 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
 - (2) The 2024 SRF-3/4 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.
- (d) <u>Interest</u>. 2024 SRF-3/4 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.75% per annum. Interest on 2024 SRF-3/4 Junior Lien Bonds shall be payable on each Interest Payment Date.
- (e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2024 SRF-3/4 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2024 SRF-3/4 Junior Lien Bonds are owned by the MFA, the 2024 SRF-3/4 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 2024 SRF-3/4 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is due, whether by maturity, redemption or otherwise. If the 2024 SRF-3/4 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2024 SRF-3/4 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.
- (f) <u>Dating</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be dated such date as determined in the Sale Order.
- (g) <u>Reserve Requirement</u>. There shall be no Reserve Requirement with respect to the 2024 SRF-3/4 Junior Lien Bonds.
- (h) <u>Exchange</u>. The registered owner of any 2024 SRF-3/4 Junior Lien Bond may exchange such 2024 SRF-3/4 Junior Lien Bond for a new 2024 SRF-3/4 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2024 SRF-3/4 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an

assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2024 SRF-3/4 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2024 SRF-3/4 Junior Lien Bonds.

- (i) Execution and Delivery of 2024 SRF-3/4 Junior Lien Bonds. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2024 SRF-3/4 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.
- (j) <u>Form of 2024 SRF-3/4 Junior Lien Bonds</u>. Each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2024 SRF-3/4 Series Ordinance:

UNITED STATES OF AMERICA STATE OF MICHIGAN COUNTIES OF MACOMB, OAKLAND AND WAYNE GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL SYSTEM REVENUE BOND, SERIES 2024-SRF-

REGISTERED OWNER:	Michigan Finance Authority
PRINCIPAL AMOUNT:	\$
INTEREST RATE:	%
ORIGINAL ISSUE DATE:	

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

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

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on ______, 202_ 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 "<u>Trustee</u>").

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

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

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

This Bond is one of a series of bonds designated "Sewage Disposal System Revenue Bonds, Series 2024-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. 2015-02 adopted by the Board on October 7,

2015, as amended (the "Bond Ordinance"), (iii) the Series Ordinance Authorizing Issuance and Sale of Sewer Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$66,096,901, adopted by the Board on _______, 2024 (the "Series Ordinance"), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _______, 2024 (the "Sale Order," and, collectively with the Bond Ordinance and the Series Ordinance, the "Ordinance"). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

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

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

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

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

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

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

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

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

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

[Remainder of Page Intentionally Left Blank]

[Seal]

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.

By: Chief Executive Officer Countersigned: By: Secretary, Board of Directors

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the b System Revenue Bond, Series 2024-SRF	bond designated by the Issuer as "Sewage Disposal".
	U.S. Bank Trust Company, National Association, Trustee
	By:
Date of Authentication:, 2024	

ASSIGNMENT

For	value	received,	the	undersigned	sells,	assigns	and	transfers	unto
		thi	is Bon	d and all rights	hereund	er and her	eby irre	evocably ap	points
		at	torney	to transfer thi	s Bond	on the boo	oks kej	ot for regist	tration
thereof wit	h full pov	ver of substit	ution	in the premises.					
D / 1									
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. <u>Concerning the Securities Depository.</u>

(a) As used herein:

"Beneficial Owner" means any Person who indirectly owns 2024 SRF-3/4 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the "Securities Depository") and its Participants, commonly known as the "Book-Entry Only System."

"Participant" means any Person whose ownership of 2024 SRF-3/4 Junior Lien Bonds is shown on books of the Securities Depository.

- (b) The 2024 SRF-3/4 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2024 SRF-3/4 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:
 - (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2024 SRF-3/4 Junior Lien Bonds,
 - the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2024 SRF-3/4 Junior Lien Bonds, including any notice of redemption, or
 - (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2024 SRF-3/4 Junior Lien Bonds.
- (c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2024 SRF-3/4 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority's obligations with respect to the principal (and premium, if any) of, and interest on such 2024 SRF-3/4 Junior Lien Bonds to the extent of the sum or sums so paid.
- (d) If 2024 SRF-3/4 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2024 SRF-3/4 Junior Lien Bonds that they be able to obtain 2024 SRF-3/4 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.
- (e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2024 SRF-3/4 Junior Lien Bonds in certificated form to

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

- (f) Notwithstanding any other provision of this 2024 SRF-3/4 Series Ordinance to the contrary, so long as any 2024 SRF-3/4 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:
 - (1) all payments with respect to the principal, premium, if any, and interest on such 2024 SRF-3/4 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2024 SRF-3/4 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2024 SRF-3/4 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
 - (2) if less than all of the 2024 SRF-3/4 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2024 SRF-3/4 Junior Lien Bonds or portions of 2024 SRF-3/4 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
 - (3) all payments with respect to principal of the 2024 SRF-3/4 Junior Lien Bonds and premium, if any and interest on the 2024 SRF-3/4 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
 - (4) if a 2024 SRF-3/4 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2024 SRF-3/4 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. <u>Payment of 2024 SRF-3/4 Junior Lien Bonds; Confirmation of Statutory Lien.</u>

- (a) The 2024 SRF-3/4 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.
- (b) To secure payment of the 2024 SRF-3/4 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2024 SRF-3/4 Junior Lien Bonds as follows: Such lien in favor of the 2024 SRF-3/4 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.
- Section 9. <u>Funds and Accounts; Flow of Funds</u>. Except as otherwise provided in this 2024 SRF-3/4 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. <u>Disposition of Proceeds</u>.

- (a) <u>Disposition of Accrued Interest and Capitalized Interest</u>. (1)From the proceeds of the sale of the 2024 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 2024 SRF-3 Junior Lien Bonds and any capitalized interest on the 2024 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 2024 SRF-3 Junior Lien Bonds.
- (2) From the proceeds of the sale of the 2024 SRF-4 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2024 SRF-4 Junior Lien Bonds and any capitalized interest on the 2024 SRF-4 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2024 SRF-4 Junior Lien Bonds.
- (b) <u>Construction Fund</u>. The balance of the proceeds of each Series of the 2024 SRF-3/4 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) <u>Construction Fund – Regional Sewer System Improvements.</u>

- (1) A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2024 SRF-3 Junior Lien Bonds and designated the "Regional Construction Fund, Series 2024 SRF-3," and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.
- (2) Moneys in the Regional Construction Fund, Series 2024 SRF-3 shall be applied solely to payment of Regional Sewer System Project Costs (or to the reimbursement of Regional Sewer System Project Costs paid by the Authority from other funds prior to the issuance of the 2024 SRF-3 Junior Lien Bonds).
 - (A) Payments or reimbursements for Regional Sewer System Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with an Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
 - (B) Payment or reimbursement for Regional Sewer System Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to an Authorized Officer.

(b) <u>Construction Fund – Local Sewer System Improvements.</u>

- (1) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2024 SRF-4 Junior Lien Bonds and designated the "Local Construction Fund, Series 2024 SRF-4," and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.
- (2) Moneys in the Local Construction Fund, Series 2024 SRF-4 shall be applied solely to payment of Local Sewer System Project Costs (or to the reimbursement of Local Sewer System Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2024 SRF-4 Junior Lien Bonds).
 - (A) Payments or reimbursements for Local Sewer System Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done pursuant to and in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
 - (B) Payment or reimbursement for Local Sewer System 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 2024 SRF-3/4 Junior Lien Bonds, that so long as any of the Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain, and will refrain from taking any action which would impair, the exclusion of the interest on the Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds from gross income for federal income tax purposes under the Code.
- (b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds, and to prevent Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds from being or becoming "private activity bonds" as that term is used in the Code.

Section 13. <u>Sale of 2024 SRF-3/4 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.</u>

(a) The 2024 SRF-3/4 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2024 SRF-3/4 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer's execution of the Purchase Contract to the MFA.

- (b) The Authority Board hereby determines that the sale of the 2024 SRF-3/4 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2024 SRF-3/4 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA's State Revolving Fund Program.
- (c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2024 SRF-3/4 Junior Lien Bonds subject to the following limitations:
 - (1) The interest rate with respect to any Series of the 2024 SRF-3/4 Junior Lien Bonds shall not exceed 2.75%.
 - (2) The aggregate purchaser's discount at which any Series of the 2024 SRF-3/4 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.
- (d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2024 SRF-3/4 Junior Lien Bonds as required by Section 33 of Act 94.
- Section 14. <u>Delegation of Authority to and Authorization of Actions of Authorized</u> Officers.
- (a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2024 SRF-3/4 Series Ordinance.
- (b) In addition to determinations authorized elsewhere in this 2024 SRF-3/4 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2024 SRF-3/4 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2024 SRF-3/4 Series Ordinance, on the basis of her evaluation of the maximum amount of 2024 SRF-3/4 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2024 SRF-3/4 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.
 - (1) Such determination shall also include the redemption provisions for the 2024 SRF-3/4 Junior Lien Bonds.
 - (2) An Authorized Officer shall also determine and establish, in accordance with this 2024 SRF-3/4 Series Ordinance, the maturities of each Series of the 2024 SRF-3/4 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.
- (c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2024 SRF-3/4 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and

security for the 2024 SRF-3/4 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

- (d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2024 SRF-3/4 Junior Lien Bonds as Additional Bonds have been satisfied.
- (e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2024 SRF-3/4 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2024 SRF-3/4 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.
- Section 15. <u>Advancement of Project Costs</u>. 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 2024 SRF-3/4 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2024 SRF-3/4 Junior Lien Bonds.
- Section 16. <u>Ratification</u>. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2024 SRF-3/4 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.
- Section 17. <u>Additional Authorization</u>. 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 2024 SRF-3/4 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2024 SRF-3/4 Series Ordinance, as determined by such officials executing and delivering the foregoing items.
- Section 18. <u>2024 SRF-3/4 Series Ordinance a Contract</u>. The provisions of this 2024 SRF-3/4 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2024 SRF-3/4 Junior Lien Bond.

Section 19. Professional Services.

- (a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2024 SRF-3/4 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2024 SRF-3/4 Junior Lien Bonds.
- (b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2024 SRF-3/4 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial

Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2024 SRF-3/4 Junior Lien Bonds.

- (c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2024 SRF-3/4 Junior Lien Bonds or other available funds.
- (d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2024 SRF-3/4 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2024 SRF-3/4 Junior Lien Bonds or other available funds.
- Section 20. <u>Severability; Headings; and Conflict</u>. If any section, paragraph, clause or provision of this 2024 SRF-3/4 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2024 SRF-3/4 Series Ordinance. The section and paragraph headings in this 2024 SRF-3/4 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2024 SRF-3/4 Series Ordinance.
- Section 21. <u>Publication and Recordation</u>. This 2024 SRF-3/4 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.
- Section 22. <u>Repeal</u>. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2024 SRF-3/4 Series Ordinance are, to the extent of such conflict, repealed.

4890-2621-4076 v2 [63818-53]

Section 23. <u>Effective Date</u> . This 2024 SRF-3/4 Series Ordinance shall be effective upon adoption.
Adopted and signed on the day of, 2024.
GREAT LAKES WATER AUTHORITY
Signed Chairperson
Signed Secretary

Great Lakes Water Authority

Resolution 2024-195

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount not to Exceed \$66,096,901 Ordinance 2024-04

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 Sewage Disposal System Revenue Bonds in an Aggregate Amount not to Exceed \$66,096,901" (the "2024 SRF-3/4 Series Ordinance"), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-02 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016, August 10, 2016 and February 12, 2020.
Whereas	The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2024 SRF-3/4 Series Ordinance.
Now, Theref	Fore Be It:
Resolved	That the 2024 SRF-3/4 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2024 SRF-3/4 Series Ordinance in the form approved; And Be it Further
Resolved	That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.
Adopted by t	he Great Lakes Water Authority Board on:, 2024
4894-2936-8250 v1 [6381	8-52]

Page 118 AGENDA ITEM #7B



Financial Services Audit Committee Communication

Date: June 17, 2024

To: Great Lakes Water Authority Audit Committee

From: David T. Slowik, Manager, Financial Planning & Analysis

Re: FY 2024 Third Quarter Budget Amendments through March 31, 2024, and Proposed

Budget Amendment Resolution

Background: In accordance with the budget amendment policy, articles, and by-laws for the Great Lakes Water Authority, a quarterly budget amendment report is presented for review by the Audit Committee. When budget amendments are required at the appropriation level as defined by the corresponding fiscal year budget adoption resolution, the Audit Committee reviews the proposed budget amendments and forwards to the Board of Directors with a recommendation.

Analysis: See attached report.

Proposed Action: The Audit Committee recommends that the Board of Directors for the Great Lakes Water Authority adopt the proposed budget resolution for the third quarter FY 2024 budget amendments.

..Title

Resolution to Approve the FY 2024 Third Quarter Budget Amendments

..Body

Agenda of: June 26, 2024 Item No.: **2024-198** 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 26, 2024

RE: Resolution to Approve the FY 2024 Third Quarter Budget

Amendments

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approves the **FY 2024 Third Quarter Budget Amendments as presented**; and authorizes the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The founding legal documents for the Great Lakes Water Authority (GLWA) provide a structure for budget preparation, adoption, and amendment. The Board of Directors adopts a biennial budget by resolution which specifies appropriation amounts which may be modified through budget amendments. To the extent that there is a proposed amendment of the budget among the appropriation categories, the matter is brought to

the Audit Committee for review and consideration of a recommendation to the Board of Directors for their consideration for approval.

JUSTIFICATION

Attached is the communication to the Audit Committee, dated June 17, 2024, which presents the proposed budget amendments for the third quarter of FY 2024. The reports included in this communication include the following.

- 1. Quarterly Budget Amendment Report for FY 2024 ending March 31, 2024.
- 2. Resolution Adopting the Budget Amendments through the Third Quarter of FY 2024.

BUDGET IMPACT

The overall budget, despite amendment, continues to be balanced.

COMMITTEE REVIEW

This matter was reviewed by the Audit Committee at its meeting on June 17, 2024. The Audit Committee [insert action] that the Board of Directors for the Great Lakes Water Authority adopt the proposed FY 2024 third quarter budget amendments.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.



FY 2024 Third Quarter Budget Amendment Report Through March 31, 2024 & Proposed Budget Amendment Resolution

Presented to the Audit Committee June 17, 2024



Financial Services Audit Committee Communication

Background: In accordance with the budget amendment policy, articles, and by-laws for the Great Lakes Water Authority, a quarterly budget amendment report is presented for review by the Audit Committee in addition to a corresponding budget amendment resolution.

Analysis: The budget amendment report is presented with a table followed by commentary in the following order.

1. Appropriation Level - Revenue Requirement - Water and Sewer Systems

- A. Water System Revenue Requirement
- B. Sewer System Revenue Requirement
- C. Operations & Maintenance by Fund Water System and Sewer System*
- D. Operations & Maintenance by Service Area*
- E. Unallocated Reserve by Service Area*

2. Appropriation Level - Debt Service - Water and Sewer Systems

- A. Water System Debt Service Coverage Calculation
- B. Sewer System Debt Service Coverage Calculation

3. Appropriation Level - Improvement & Extension Fund - Water and Sewer Systems

- A. Water System Improvement & Extension Fund
- B. Sewer System Improvement & Extension Fund

4. Appropriation Level - Construction Fund - Water and Sewer Systems

- A. Water System Construction Fund
- B. Sewer System Construction Fund

5. Supplemental Information - Operations & Maintenance

- A. Enterprise-wide Operations & Maintenance by Expense Category
- B. Operations & Maintenance Expense by Service Area and Expense Category
- C. Operations & Maintenance Utilities by Fund Water System and Sewer System

6. Proposed Budget Amendment Resolution

* Denotes Supplemental information



Table 1A - Water System Revenue Requirement - Appropriation Level

Water System	FY 2024 Board Adopted Budget		Total st Quarter FY 2024 nendments		Total and Quarter FY 2024 mendments		Total rd Quarter FY 2024	FY 2024 Amended Budget	,	FY 2024 Activity Thru 3/31/2024
Revenues	Duuget		ile ilaille ilis				Terraments	Dauget		3/3 1/2024
Suburban Wholesale Customer Charges	\$ 340,540,600	\$	(4,000,000)	\$	(811,000)	\$	(2,500,000)	\$ 333,229,600	\$	249,453,300
Less: Bad Debt Expense	-	<u> </u>	-	Ť	-	Ė	-	-	_	-
Less: Pending Bad Debt Recovery Credit	-		-		(5,026,500)		-	(5,026,500)		-
Retail Service Charges	25,537,200		-		,		-	25,537,200		19,152,900
Investment Earnings - Unrestricted	3,067,000		5,463,200		800,000		3,309,800	12,640,000		9,585,500
Investment Earnings - Restricted for Debt Service	994,700		2,536,800		1,200,000		679,500	5,411,000		3,744,900
Investment Earnings	4,061,700		8,000,000		2,000,000		3,989,300	18,051,000		13,330,400
Other Revenues	175,000		265,000		418,200		84,700	942,900		816,600
Total Revenues	\$ 370,314,500	\$	4,265,000	\$	(3,419,300)	\$	1,574,000	\$ 372,734,200	\$	282,753,200
Revenue Requirements										
Operations & Maintenance Expense	\$ 152,906,400	\$	10,194,100	\$	3,782,400	\$	1,990,200	\$ 168,873,100	\$	120,025,000
Debt Service	159,482,800		3,151,200		(397,900)		-	162,236,100		121,975,000
General Retirement System Accelerated Pension	3,395,500		(1,890,000)		<u>-</u>		-	1,505,500		1,505,500
Extraordinary Repair & Replacement Deposit	_		-		-		-	-		-
Water Residential Assistance Program Contribution	1,851,600		_		_		-	1,851,600		1,389,000
Regional System Lease	22,500,000		-		-		-	22,500,000		16,875,000
Receiving Fund Working Capital Requirement	_		1,400,000		(1,400,000)		-	_		_
Improvement & Extension Fund Transfer Pending	30,178,200		(8,590,300)		(5,403,800)		(416,200)	15,767,900		16,190,900
Total Revenue Requirements	\$ 370,314,500	\$	4,265,000	\$	(3,419,300)	\$	1,574,000	\$ 372,734,200	\$	277,960,400
Net Actual to Date	\$ -	\$	-	\$	-	\$	-	\$ -	\$	4,792,800



Table 1A Commentary - Water System - Revenue Requirement - Appropriation Level

Revenues

Increase to the Water System revenues of \$1.6 million is the net of the following.

- > \$2.5 million wholesale revenue decrease Due to the water usage by member communities being less than projected.
- \$4.0 million Investment Earnings increase Based on a detailed analysis of the projected investment earnings and cash flows for the year based on actual through April 30, 2024. Interest rates provided by the Authority's investment advisor used in prior projections were below actual earnings rates due to no cuts in the federal funds rate as anticipated.

Revenue Requirements

Net increase to the Water Operations & Maintenance (O&M) Expense of \$2 million. The primary drivers for this increase include the following.

- ➤ Within the Water System Operations service area increases in Utilities (\$1.6 million), the Capital Program Allocation (\$1.0 million) and Supplies (\$0.6 million) were offset with the use of the Unallocated Reserve (\$3.3 million) resulting in a net \$46 thousand increase for this service area.
- > The allocation of Centralized Services and Administrative Services to Water Operations increased by \$1.9 million.
 - The Centralized Services allocation increase of \$1.5 million is primarily due to contractual services for increased staff augmentation, more repairs, and increased spend on various tasks related to the Lakeshore Global contract.
 - The Administrative Services allocation increase of \$0.4 million is due to increases in personnel for merit adjustments and increased insurance premium that were offset by decreases in other contractual services and use of unallocated reserve.
- Additional detail follows later in this report see Table 5B Supplemental Information Operations & Maintenance Expense by Service Area and Expense Category

The overall net increase in 0&M was offset with the increased investment earnings and a modest decrease to the Improvement & Extension Fund of \$400,000.



Table 1B - Sewer System - Revenue Requirement - Appropriation Level

	FY 2024 Board Adopted		Total st Quarter FY 2024	2	Total 2nd Quarter FY 2024	Total 3rd Quarter FY 2024	FY 2024 Amended	FY 2024 Activity Thru
Sewer System	Budget	Am	nendments	Α	mendments	Amendments	Budget	3/31/2024
Revenues								
Suburban Wholesale Customer Charges	\$ 282,687,600	\$	-	\$	191,000	\$ -	\$ 282,878,600	\$ 211,278,500
Less: Bad Debt Expense	-		-		-	-	-	-
Less: Pending Bad Debt Recovery Credit	-		-		(15,000,000)	_	(15,000,000)	-
Retail Service Charges	196,569,600		-		-	-	196,569,600	147,427,200
Industrial Waste Control Charges	8,584,200		-		(24,000)	_	8,560,200	6,492,500
Pollutant Surcharges	5,328,300		-		-	-	5,328,300	3,004,400
Investment Earnings - Unrestricted	5,567,000		7,832,700		-	2,696,300	16,096,000	12,161,300
Investment Earnings - Restricted for Debt								
Service	1,490,300		1,167,300		1,000,000	3,128,400	6,786,000	4,810,300
Investment Earnings	7,057,300		9,000,000		1,000,000	5,824,700	22,882,000	16,971,600
Other Revenues	400,000		317,000		301,000	111,800	1,129,800	549,400
Total Revenues	\$ 500,627,000	\$	9,317,000	\$	(13,532,000)	\$ 5,936,500	\$ 502,348,500	\$ 385,723,600
Revenue Requirements								
Operations & Maintenance Expense	\$ 205,643,700	\$	14,484,700	\$	1,897,100	\$ 2,848,000	\$ 224,873,500	\$ 163,303,000
Debt Service	228,328,300		3,453,300		(934,900)	-	230,846,700	173,836,000
General Retirement System Accelerated Pension	6,479,300		(3,382,500)		-	-	3,096,800	3,096,800
Extraordinary Repair & Replacement Deposit	-		-		-	-	-	-
Water Residential Assistance Program Contribution	2,503,100		-		-	_	2,503,100	1,877,000
Regional System Lease	27,500,000		-		-	-	27,500,000	20,625,000
Improvement & Extension Fund Transfer Pending	30,172,600		(5,238,500)		(14,494,200)	3,088,500	13,528,400	18,701,000
Total Revenue Requirements	\$ 500,627,000	\$	9,317,000	\$	(13,532,000)	\$ 5,936,500	\$ 502,348,500	\$ 381,438,800
Net Actual to Date	\$ -	\$	-	\$		\$ -	\$ -	\$ 4,284,800



Table 1B Commentary - Sewer System - Revenue Requirement - Appropriation Level

Revenues

Net increase to Sewer System revenues of \$5.9 million is largely due to the following.

\$5.8 million investment earnings increase − Based on a detailed analysis of the projected investment earnings and related cash flows for the year based on actual through April 30, 2024. Interest rates provided by the Authority's investment advisor used in prior projections were below actual earnings rates due to no cuts in the federal funds rate as anticipated.

Revenue Requirements

Increase to the Sewer Operations & Maintenance Expense of \$2.8 million is the result of the following.

- ➤ Within the Wastewater System Operations area increases in Supplies & Other (\$3.1 million) mainly due to repair & maintenance activities, Utilities (\$1.0 million) due to increased commodity rates, Chemicals (\$0.8 million) due to increased commodity rates, Contractual Services (\$0.4 million), Personnel (\$0.3 million), and the Capital Program Allocation (\$0.2 million) increased line items by \$5.8 million. Much of these increases were offset with the use of the remaining Unallocated Reserve (\$3.0 million) established for sewer system 0&M needs.
- > The allocation of Centralized Services and Administrative Services to Wastewater Operations increased by \$0.5 million.
 - o The Centralized Services allocation is nonmaterial as it relates to Wastewater (\$41 thousand).
 - The Administrative Services allocation increase (\$0.4 million) is due to increases in personnel for merit adjustments and increased insurance premium that were offset by decreases in other contractual services and use of unallocated reserve.
- ➤ Additional detail follows later in this report see *Table 5B Supplemental Information –Operations & Maintenance Expense* by Service Area and Expense Category

The I&E recovered by \$3 million due to the budget amendment for increased investment earnings being greater than the increased O&M expenses.

Table 1C - Supplemental Information - Operations & Maintenance by Fund - Water System and Sewer System

System	FY 2024 Board Adopted Budget	Total st Quarter FY 2024 nendments	Total 2nd Quarter FY 2024 Amendments	,	Total 3rd Quarter FY 2024 Amendments	FY 2024 Amended Budget	FY 2024 Activity Thru 3/31/2024
Water System	\$ 152,906,400	\$ 10,194,100	\$ 3,782,400	\$	1,990,200	\$ 168,873,100	\$ 119,158,800
Sewer System	205,643,700	14,484,700	1,897,100		2,848,000	224,873,500	163,824,400
Total	\$ 358,550,100	\$ 24,678,800	\$ 5,679,500	\$	4,838,200	\$ 393,746,600	\$ 282,983,200

Totals may be off due to rounding.

As shown in the table above, there are no budget amendments for transfers of resources between the water and sewer funds. It is unforeseen that such an amendment would occur as each system is accounted for as a stand-alone entity. The purpose of this table is to transparently report that funds from one system do not provide budget support to the other system.

Table 1D - Supplemental Information - Operations and Maintenance by Service Area

Service Area	FY 2024 Board Adopted Budget	Total 1st Quarter FY 2024 Amendments	Total 2nd Quarter FY 2024 Amendments	Total 3rd Quarter FY 2024 Amendments	FY 2024 Amended Budget	FY 2024 Activity Thru 3/31/2024
A Water System Operations	\$ 82,732,800	\$ 5,005,400	\$ 3,025,400	\$ 46,300	\$ 90,809,900	\$ 62,621,900
B Wastewater System Operations	132,934,300	8,721,500	2,692,800	2,373,300	146,721,900	108,233,600
C Centralized Services	106,900,500	9,636,900	(602,200)	1,533,000	117,468,200	84,919,700
D Administrative & Other Services	35,982,500	1,315,000	563,500	885,600	38,746,600	27,209,600
Total	\$ 358,550,100	\$ 24,678,800	\$ 5,679,500	\$ 4,838,200	\$ 393,746,600	\$ 282,984,800

Totals may be off due to rounding.

The \$4.8 million total in FY 2024 Q3 budget amendments is attributable to A) direct cost of water operations, B) direct cost of sewer operations, C) centralized services (e.g., systems resiliency, field services, security, information technology, facilities, and fleet), D) administrative services (e.g., financial services, public affairs, general counsel, and organizational development). The costs of the latter two categories, centralized and administrative, are allocated to the water and sewer systems based upon an



internal cost allocation plan that is performed on an annual basis. Further detail about the proposed amendments is shown in Tables 5A, B, and C.

Table 1E - Supplemental Information - Unallocated Reserve by Service Area

O&M Unallocated Reserves	FY 2024 Board Adopted Budget	Total 1st Quarter FY 2024 Amendments	Total 2nd Quarter FY 2024 Amendments	Total 3rd Quarter FY 2024 Amendments	FY 2024 Amended Budget
Water System Operations	\$ 3,331,400	\$ 9,900	\$ -	\$ (3,341,300)	\$ -
Wastewater System Operations	3,089,900	(9,900)	-	(3,080,000)	-
Centralized Services	1,722,200	-	-	(1,722,200)	-
Administrative & Other Services	652,300	-	-	(652,300)	-
Total	\$ 8,795,800	\$ -	\$ -	\$ (8,795,800)	\$ -

Totals may be off due to rounding.

An Unallocated Reserve account is established for each of the four service areas. A budget is assigned to these accounts to cover expenditures not known at the time the budget is developed (merit increases, fluctuations within maintenance contracts and usage of utilities and chemicals, projects and initiatives not planned at the time the initial budget was developed, etc.). It is GLWA's internal budget directive for each area, group, and team to manage their needs to an amount within the initial budget. If required, an amendment is made from the unallocated reserve. If a service area does not require as much funding as was established in the original budget, that department's budgeted expenses are reduced, and the unallocated reserve is increased.

The Unallocated Reserves have been drawn down by \$8.8 million to offset the increase of \$13.6 million in O&M expenses in Q3 FY 2024 as shown by category in *Table 5B - Supplemental Information – Operations & Maintenance Expense by Service Area and Expense Category.*



Table 2A - Appropriation Level - Debt Service Coverage Calculation - Water System

Water System - Debt Service Coverage Calculation	FY 2024 Adopted Budget	1st Quarter FY 2024 Amendments Regional System	1st Quarter FY 2024 Amendments Local System	Estimated 1Q Adjustment to Local System Budget	FY 2024 Amended Budget	2nd Quarter FY 2024 Amendments Regional System	2nd Quarter FY 2024 Amendments Local System		FY 2024 Amended Budget	3rd Quarter FY 2024 Amendments Regional System	3rd Quarter FY 2024 Amendments Local System	Estimated 3Q Adjustment to Local System Budget	FY 2024 Amended Budget
Revenues													
Regional System Wholesale Revenues	\$ 366,077,800	\$ (4,000,000)	\$ -	\$ -	\$ 362,077,800	\$ (5,837,500)	\$ -	\$ -	\$ 356,240,300	\$ (2,500,000)	\$ -	\$ -	\$ 353,740,300
Local System Revenues	89,140,400	-	-	-	89,140,400	-	-	-	89,140,400	-	-	-	89,140,400
Miscellaneous Revenue (Local System)	4,210,000	-	-	-	4,210,000	-	-	-	4,210,000	-	-	-	4,210,000
4 Non-Operating Revenue (Regional System)	4,236,700	8,265,000	-	-	12,501,700	2,418,200	-	-	14,919,900	4,074,000	-	-	18,993,900
5 Total Revenues	\$ 463,664,900	\$ 4,265,000	\$ -	\$ -	\$ 467,929,900	\$ (3,419,300)	\$ -	\$ -	\$ 464,510,600	\$ 1,574,000	\$ -	\$ -	\$ 466,084,600
Revenue Requirements Operations & Maintenance Expense 6 Regional System Wholesale Expenses 7 Local System Expenses 8 GRS Pension allocable to Regional System 9 GRS Pension allocable to Local System	\$ 152,906,400 44,756,000 -	\$ 10,194,100 - -	\$ - - -	\$ - - -	\$ 163,100,500 44,756,000 -	\$ 3,782,400 - - -	\$ - - -	\$ - - -	\$ 166,882,900 44,756,000 -	\$ 1,990,200 - -	\$ - - -	\$ - - -	\$ 168,873,100 44,756,000 -
10 Total Operations & Maintenance	_				-	_	=	=	-	_	-	<u>-</u>	<u> </u>
Expense	197,662,400	10,194,100	_	_	207,856,500	3,782,400	_	_	211,638,900	1,990,200	_	_	213,629,100
11 Net Revenues after Operations & Maintenance Expense			\$ -	\$ -	,	\$ (7,201,700)	\$ -	\$ -	\$ 252,871,700		\$ -	\$ -	\$ 252,455,500
Debt Service by Lien													
12 Senior Lien Bonds	\$ 136,224,100	\$ 3.653.400	\$ -	\$ -	\$ 139.877.500	\$ -	\$ -	\$ -	\$ 139.877.500	\$ -	\$ -	\$ -	\$ 139.877.500
13 Second Lien Bonds	51.754.500	-	· -	-	51,754,500	_	· -	· -	51,754,500	_	· -	· -	51.754.500
14 SRF Junior Lien Bonds	16,469,500	(502.200)	_	169.300	16,136,600	(397.900)	_	(63.900)		_	_	_	15,674,800
15 Total Debt Service	\$ 204,448,100	\$ 3,151,200	\$ -	\$ 169,300					\$ 207,306,800	s -	\$ -	\$ -	\$ 207,306,800
Debt Service Coverage 16 Senior Lien Bonds (11)/(12)	1.95	(0.09)	0.00	0.00	1.86			0.00	1.81	(0.00)	0.00	0.00	1.80
17 Second Lien Bonds (11) / [(12)+(13)]	1.42	(0.06)	0.00	0.00	1.36	(/	0.00	0.00	1.32	(0.00)	0.00	0.00	1.32
18 SRF Junior Lien Bonds (11) / (15)	1.30	(0.05)	0.00	0.00	1.25		0.00	0.00	1.22	(0.00)	0.00	0.00	1.22

^{*} Rows highlighted in light grey in the above table are designed to align with the DWSD Budget. The approved GLWA budget was based on preliminary DWSD budget information.

For purposes of Debt Service coverage, the Regional and Local (DWSD) revenue less operations & maintenance (O&M) expense is combined to determine net revenues to calculate the Debt Service Coverage. The Board adopts the Debt Service amount shown on line 15 of the Water System Debt Service Coverage Calculation table on the previous page. This is the amount necessary to pay the principal and interest on all Regional Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance.

^{**} Total Debt Service, highlighted in dark grey (Row 15) in the above table, is adopted by the GLWA Board and amended as needed.



Table 2B - Appropriation Level - Debt Service Coverage Calculation - Sewer System

Sewer System - Debt Service Coverage Calculation	FY 2024 Adopted Budget	1st Quarter FY 2024 Amendments Regional System	1st Quarter FY 2024 Amendments Local System	Estimated 10 Adjustment to Local System Budget		2nd Quarter FY 2024 Amendments Regional System	2nd Quarter FY 2024 Amendments Local System		FY 2024 Amended Budget	3rd Quarter FY 2024 Amendments Regional System	3rd Quarter FY 2024 Amendments Local System		FY 2024 Amended Budget
Revenues													
Regional System Wholesale Revenues	\$ 493,169,700	\$ -	\$ -	\$ -	\$ 493,169,700	\$ (14,833,000)	\$ -	\$ -	\$ 478,336,700	\$ -	\$ -	\$ -	\$ 478,336,700
2 Local System Revenues	83,940,300	-	-	-	83,940,300	-	-	-	83,940,300	-	-	-	83,940,300
3 Miscellaneous Revenue (Local System)	8,500,000	-	-	-	8,500,000	-	-	-	8,500,000	-	-	-	8,500,000
4 Non-Operating Revenue (Regional System)	7,457,300	9,317,000	-	-	16,774,300	1,301,000	-	-	18,075,300	5,936,500	-	-	24,011,800
5 Total Revenues	\$ 593,067,300	\$ 9,317,000	\$ -	\$ -	\$ 602,384,300	\$ (13,532,000)	\$ -	\$ -	\$ 588,852,300	\$ 5,936,500	\$ -	\$ -	\$ 594,788,800
Revenue Requirements Operations & Maintenance Expense 6 Regional System Wholesale Expenses 7 Local System Expenses 8 GRS Pension allocable to Regional System 9 GRS Pension allocable to Local System 10 Total Operations & Maintenance	55,655,400	\$ 14,484,700 - - -	\$ - - - -	\$ - - - -	\$ 220,128,400 55,655,400 - -	-	\$ - - - -	\$ - - - -	\$ 222,025,500 55,655,400 - -	-	-	\$ - - -	\$ 224,873,500 55,655,400 - -
Expense 11 Net Revenues after Operations &	261,299,100	14,484,700	-	_	275,783,800	1,897,100	-	-	277,680,900	2,848,000	-	-	280,528,900
Maintenance Expense	\$ 331,768,200	\$ (5,167,700)	\$ -	\$ -	\$ 326,600,500	\$ (15,429,100)	\$ -	\$ -	\$ 311,171,400	\$ 3,088,500	\$ -	\$ -	\$ 314,259,900
Debt Service by Lien													
12 Senior Lien Bonds	\$ 155,429,200	\$ 3,510,900	\$ -	\$ -	\$ 158,940,100	\$ -	\$ -	\$ -	\$ 158,940,100	\$ -	\$ -	\$ -	\$ 158,940,100
13 Second Lien Bonds	53,273,500	106,600	-	-	53,380,100	-	-	-	53,380,100	-	-	-	53,380,100
14 SRF Junior Lien Bonds	51,847,200	(164,200)	-	(48,600	, ,,,,,,	(, ,		(59,500	, ,	-	-	-	50,640,000
15 Total Debt Service	\$ 260,549,900	\$ 3,453,300	\$ -	\$ (48,600) \$ 263,954,600	\$ (934,900)	\$ -	\$ (59,500	\$ 262,960,200	\$ -	\$ -	\$ -	\$ 262,960,200
Debt Service Coverage	0.40	(2.22)			0.05	(0.40)			4.00				
16 Senior Lien Bonds (11)/(12)	2.13	(0.08)	0.00	0.00				0.00	1.96	0.02			1.98
17 Second Lien Bonds (11) / [(12)+(13)]	1.59	(0.05)	0.00	0.00		(0.07)		0.00	1.47	0.01			1.48
18 SRF Junior Lien Bonds (11) / (15)	1.27	(0.04)	0.00	0.00	1.24	(0.05)	0.00	0.00	1.18	0.01	0.00)	1.20

^{*} Rows highlighted in light grey in the above table are designed to align with the DWSD Budget. The approved GLWA budget was based on preliminary DWSD budget information.

For purposes of Debt Service coverage, we look at the combined Regional and Local (DWSD) revenue less operations & maintenance (O&M) expense to determine net revenues to calculate the Debt Service Coverage. The Board adopts the Debt Service amount shown on line 15 of the Sewer System Debt Service Coverage Calculation table on the previous page. This is the amount necessary to pay the principal and interest on all Regional Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance.

^{**} Total Debt Service, highlighted in dark grey (Row 15) in the above table, is adopted by the GLWA Board.

Table 3A - Water System - Improvement & Extension Fund - Appropriation Level

Water Improvement & Extension Fund	FY 2024 Board Adopted Budget	Total 1st Quarter FY 2024 Amendments		Total Ind Quarter FY 2024 mendments	Total 3rd Quarter FY 2024 Amendments	FY 2024 Amended Budget	FY 2024 ctivity Thru 3/31/2024
•	Duuget	Amenaments	-	menuments	 Amenaments	Buuget	3/3 1/2024
Inflows							
Water System Transfers In from General Operating	\$ 30,178,200	\$ (8,590,300)	\$	(5,403,800)	\$ (416,200)	\$ 15,767,900	\$ 16,190,900
Transfer in from Water Construction					4,303,700	\$ 4,303,700	\$ -
Earnings on Investments (a)	1,694,800	510,400		860,000	4,139,800	7,205,000	5,384,400
Net Use (Increase) of Reserves	(10,926,100)	26,139,300		(16,568,100)	(7,049,900)	(8,404,800)	(8,718,400)
Total Inflows	\$ 20,946,900	\$ 18,059,400	\$	(21,111,900)	\$ 977,400	\$ 18,871,800	\$ 12,856,900
Outflows							
Water System Revenue Transfers Out (a)	\$ 1,694,800	\$ 510,400	\$	860,000	\$ 4,139,800	\$ 7,205,000	\$ 3,916,200
Capital Improvement Plan Spending	-	-		-	-	-	-
Capital Outlay	11,539,100	(3,488,000)		2,278,100	1,337,600	11,666,800	8,940,700
Revenue Financed Capital -							
Transfer to Construction Fund	7,713,000	21,037,000		(24,250,000)	(4,500,000)	-	-
Total Outflows	\$ 20,946,900	\$ 18,059,400	\$	(21,111,900)	\$ 977,400	\$ 18,871,800	\$ 12,856,900

⁽a) Note: As outlined in the Master Bond Ordinance, the investment earnings in the I&E Fund are transferred to the Receiving Fund to then offset revenue requirement needs.

Table 3A Commentary – Water System - Improvement & Extension Fund - Appropriation Level *Inflows*

- > Transfers In from General Operating The proposed budget amendment is to match the amount available for transfer from the FY 2024 revenue requirement based upon general operating fund performance. (see Table 1A Appropriation Level Water System Revenue Requirement line item I&E Fund Transfer Pending).
- > Transfer in from Water Construction The Water Construction fund received grant funds for prior year expenditures made with revenue financed capital from the I & E Fund. A transfer will be done to return this funding back to the I&E Fund.



- Earnings on Investments The proposed budget amendment reflects an adjustment based on the projected investment earnings for the year. Interest rates provided by the Authority's investment advisor previously were below actual earnings rates due to no cuts in the federal funds rate as anticipated. Note: There is a corresponding transfer of earnings back to the general operating fund as allowed by the Master Bond Ordinance. The net effect on the I&E Fund is zero as the earnings are budgeted and accounted for in the operating fund to lower revenue requirement for charges.
- ➤ Net Use (Increase) of Reserves This amount represents the net amount of revenues less expenses. A negative amount represents an increase in reserves from current year activity rather than a use of reserves.

Outflows

- ➤ Water System Revenue Transfers Out (Earnings on Investments) The increase is based on the projected investment earnings. Note: This line offsets Earnings on Investments and represents the transfer of earnings back to the general operating fund as required by the Master Bond Ordinance. Any variance in activity between the two lines represents a timing difference.
- ➤ Capital Improvement Plan Spending No budget amendment is required. This line represents an adjustment to the projects in the Board adopted capital improvement plan (CIP) that do not meet the criteria for debt financing as well as other unique, nonrecurring projects/purchases for the betterment of the system.
- ➤ Capital Outlay The proposed budget amendment reflects an increase in spending of \$1.3 million mainly due to the Emerson upgrade project and Q4 Lake Huron Water Plant Monorail project.
- ➤ Revenue Financed Capital Transfer to Construction Fund The proposed budget amendment reflects a rebalancing of use of I&E and Construction funds for Capital Projects.



Table 3B - Sewer System - Improvement & Extension Fund - Appropriation Level

Sewer Improvement & Extension Fund	FY 2024 Board Adopted Budget	Total st Quarter FY 2024 mendments	Total nd Quarter FY 2024 mendments	Total rd Quarter FY 2024 mendments	FY 2024 Amended Budget	FY 2024 ctivity Thru 3/31/2024
Inflows						
Sewer System Transfers In from General Operating	\$ 30,172,600	\$ (5,238,500)	\$ (14,494,200)	\$ 3,088,500	\$ 13,528,400	\$ 18,700,600
Sewer System Transfers In from Construction Fund			12,775,200	1,237,600	14,012,800	12,775,200
Grant Revenues & Capital Contributions				40,000	40,000	-
Earnings on Investments (a)	2,133,000	2,426,700	1,870,700	390,600	6,821,000	5,000,900
Net Use (Increase) of Reserves	(15,202,100)	40,795,300	(35,154,700)	(8,906,100)	(18,467,600)	(27,473,200)
Total Inflows	\$ 17,103,500	\$ 37,983,500	\$ (35,003,000)	\$ (4,149,400)	\$ 15,934,600	\$ 9,003,500
Outflows						
Sewer System Revenue Transfers Out (a)	\$ 2,133,000	\$ 2,426,700	\$ 1,870,700	\$ 390,600	\$ 6,821,000	\$ 4,304,800
Capital Improvement Plan Spending	-	-	-	-	-	-
Capital Outlay	14,970,500	(3,443,200)	1,126,300	(3,540,000)	9,113,600	4,698,700
Revenue Financed Capital -						
Transfer to Construction Fund	-	39,000,000	(38,000,000)	(1,000,000)	-	-
Total Outflows	\$ 17,103,500	\$ 37,983,500	\$ (35,003,000)	\$ (4,149,400)	\$ 15,934,600	\$ 9,003,500

⁽a) Note: As outlined in the Master Bond Ordinance, the investment earnings in the I&E Fund are transferred to the Receiving Fund. The impact is to reduce revenue required from charges when calculating the annual Revenue Requirement budget.

Table 3B Commentary- Sewer System - Improvement & Extension Fund - Appropriation Level *Inflows*

- > Transfers In from General Operating The proposed budget amendment is to match the amount available for transfer from the FY 2024 revenue requirement based upon general operating fund performance. (see Table 1B Appropriation Level Sewer System Revenue Requirement line item I&E Fund Transfer Pending).
- ➤ Transfer in from Sewer Construction The Sewer Construction fund received grant funds for prior year expenditures made with revenue financed capital from the I & E Fund. A transfer will be done to return this funding back to the I&E Fund.
- Grant Revenues & Capital Contributions The budget increase is related to additional grant funds that are expected.



- Earnings on Investments The proposed budget amendment reflects an adjustment based on the projected investment earnings for the year. Interest rates provided by the Authority's investment advisor previously were below actual earnings rates due to no cuts in the federal funds rate as anticipated. Note: There is a corresponding transfer of earnings back to the general operating fund as allowed by the Master Bond Ordinance. The net effect on the I&E Fund is zero as the earnings are budgeted and accounted for in the operating fund to lower revenue requirement for charges.
- ➤ Net Use (Increase) of Reserves This amount represents the net amount of revenues less expenditures. A negative amount represents an increase in reserves from current year activity rather than a use of reserves.

Outflows

- ➤ Sewer System Revenue Transfers Out (Earnings on Investments) The increase is based on the projected investment earnings. Note: This line offsets Earnings on Investments and represents the transfer of earnings back to the general operating fund as required by the Master Bond Ordinance. Any variance in activity between the two lines represents a timing difference.
- ➤ Capital Improvement Plan Spending No budget amendment is required. This line represents an adjustment to the projects in the Board adopted capital improvement plan (CIP) that do not meet the criteria for debt financing as well as other unique, nonrecurring projects/purchases for the betterment of the system.
- > Capital Outlay The proposed budget amendment reflects a decrease in spending of \$3.5 million primarily due to delays in the Ovation and Cyber security upgrade projects thru the end of FY24.
- Revenue Financed Capital Transfer to Construction Fund The proposed budget amendment reflects a rebalancing of use of I&E and Construction funds for Capital Projects.



Table 4A - Water System - Construction Fund - Appropriation Level

Water		FY 2024 Board Adopted	Total 1st Quarter FY 2024		Total 2nd Quarter FY 2024		Total 3rd Quarter FY 2024	FY 2024 Amended	FY 2024 Activity Thru
Construction Fund		Budget	Amendments	Α	mendments	F	mendments	Budget	3/31/2024
Inflows									
Transfer from Improvement & Extension Fund	\$	7,713,000	\$ 21,037,000	\$	(24,250,000)	\$	(4,500,000)	\$ -	\$ -
Bond Proceeds		-	150,000,000		-		570,000	150,570,000	150,570,000
Bond Fund Earnings on Investments		1,864,700	3,500,000		1,500,000		1,286,300	8,151,000	5,997,800
SRF loan proceeds		97,102,000	(34,297,000)		(497,900)		(27,120,100)	35,187,000	31,616,500
Grant Revenues & Capital Contributions		-			5,000,000		3,651,700	8,651,700	-
Net Use (Increase) of Reserves		132,580,300	(154,500,000)		(16,752,100)		30,977,200	(7,694,600)	(63,254,100)
Total Inflows	\$	239,260,000	\$ (14,260,000)	\$	(35,000,000)	\$	4,865,100	\$ 194,865,100	\$ 124,930,200
Outflows									
Transfer to Improvement & Extension Fund						\$	4,303,700	\$ 4,303,700	\$ -
Bond Cost of Issuance							561,400	561,400	561,400
Capital Improvement Plan		239,260,000	-		-		-	239,260,000	124,368,800
Capital Spend Rate Adjustment		-	(14,260,000)		(35,000,000)		-	(49,260,000)	-
Total Outflows	\$	239,260,000	\$ (14,260,000)	\$	(35,000,000)	\$	4,865,100	\$ 194,865,100	\$ 124,930,200
Capital Spending Ratio		100.0%	94.0%		79.4%		79.4%	79.4%	52.0%

Table 4A Commentary - Water System - Construction Fund - Appropriation Level *Inflows*

- > Transfers from Improvement & Extension Fund The proposed budget amendment is to match the amount available for transfer to the FY 2024 Improvement & Extension Fund (see Table 3A Appropriation Level Water System Improvement & Extension Fund line item Revenue Financed Capital Transfer to Construction Fund). The proposed budget amendment reflects a rebalancing of use of I&E and Construction funds for Capital Projects.
- ➤ Bond Proceeds The budget amendment is to align the activity related to the cost of issuance funds received and disbursed.



- Earnings on Investments The proposed budget amendment reflects an adjustment based on the projected investment earnings for the year. Interest rates provided by the Authority's investment advisor previously were below actual earnings rates due to no cuts in the federal funds rate as anticipated.
- > State Revolving Fund Loans State Revolving Fund (SRF) loan disbursements are on a reimbursement basis. The amount and timing of revenues fluctuates with project expenditures incurred. The proposed amendment reflects the timing of project design and construction activity. Details related to the SRF projects are presented in the semiannual debt report. The most recent semiannual debt report is presented in the April 2024 Audit Committee binder which provides details related to the SRF funding and associated projects.
- > Grant Revenues & Capital Contributions The budget increase is related to additional grant funds that are expected.
- ➤ Net Use (increase) of Reserves This amount represents the net amount of revenues less expenditures. A "use of reserves" indicates a spend down of prior year reserves.

Outflows

- > Transfer to Improvement & Extension Fund The Water Construction fund received grant funds for prior year expenditures made with revenue financed capital from the I & E Fund. A transfer will be done to return this funding back to the I&E Fund.
- ➤ Bond Cost of Issuance The budget amendment is to align the activity related to the cost of issuance funds received and disbursed.
- ➤ Capital Improvement Plan No budget amendment is required. This line represents the <u>original CIP Plan approved by</u> the Board for FY 2024.
- Example Capital Spend Rate Assumption Adjustment No budget amendment is required. 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. Amendments to the spend rate assumption are made to align the projected financial use of resources with revised capital



improvement plan spending forecasts. The most recent quarterly construction work-in-progress (CWIP) report is presented in the <u>March 2024 Audit Committee binder</u>

Table 4B - Sewer System - Construction Fund - Appropriation Level

Sewer Construction Fund	FY 2024 Board Adopted Budget		Total 1st Quarter FY 2024 Amendments		Total 2nd Quarter FY 2024 Amendments		Total 3rd Quarter FY 2024 Amendments		FY 2024 Amended Budget		FY 2024 Activity Thru 3/31/2024	
Inflows												
Transfer from Improvement & Extension Fund	\$ -	\$	39,000,000	\$	(38,000,000)	\$	(1,000,000)	\$	-	\$	-	
Bond Proceeds	-		100,000,000		-		315,500		100,315,500		100,315,500	
Bond Fund Earnings on Investments	2,365,600		4,500,000		1,750,000		1,126,400		9,742,000		7,111,800	
SRF loan proceeds	47,253,000		7,423,000		(5,251,500)		(20,402,500)		29,022,000		18,970,300	
Grant Revenues & Capital Contributions					25,000,000		4,743,000		29,743,000		25,000,000	
Net Use (Increase) of Reserves	149,442,400		(184,984,000)		4,276,700		16,762,500		(14,502,400)		(52,784,600)	
Total Inflows	\$ 199,061,000	\$	(34,061,000)	\$	(12,224,800)	\$	1,544,900	\$	154,320,100	\$	98,613,000	
Outflows												
Transfer to Improvement & Extension Fund	\$ -	\$	-	\$	12,775,200	\$	1,237,600	\$	14,012,800	\$	12,775,200	
Bond Cost of Issuance						\$	307,300		307,300		127,900	
Capital Improvement Plan	199,061,000		-		-		-		199,061,000		85,709,900	
Capital Spend Rate Adjustment	-		(34,061,000)		(25,000,000)		-		(59,061,000)		-	
Total Outflows	\$ 199,061,000	\$	(34,061,000)	\$	(12,224,800)	\$	1,544,900	\$	154,320,100	\$	98,613,000	
Capital Spending Ratio	100.0%		82.9%		70.3%		70.3%		70.3%			

Table 4B Commentary - Sewer System - Construction Fund - Appropriation Level *Inflows*

> Transfers from Improvement & Extension Fund - The proposed budget amendment is to match the amount available for transfer from the FY 2024 Improvement & Extension Fund (see Table 3B - Appropriation Level - Sewer System



Improvement & Extension Fund line item Revenue Financed Capital - Transfer to Construction Fund). The proposed budget amendment reflects a rebalancing of use of I&E and Construction funds for Capital Projects.

- ➤ Bond Proceeds The budget amendment is to align the activity related to the cost of issuance funds received and disbursed.
- Earnings on Investments The proposed budget amendment reflects an adjustment based on the projected investment earnings for the year. Interest rates provided by the Authority's investment advisor previously were below actual earnings rates due to no cuts in the federal funds rate as anticipated.
- > State Revolving Fund Loans State Revolving Fund (SRF) loan disbursements are on a reimbursement basis. The amount and timing of revenues fluctuates with project expenditures incurred. The proposed amendment reflects the timing of project design and construction activity. Details related to the SRF projects are presented in the semiannual debt report. The most recent semiannual debt report is presented in the April 2024 Audit Committee binder which provides details related to the SRF funding and associated projects.
- > Grant Revenues & Capital Contributions The budget increase is related to additional grant funds that are expected.
- ➤ Net Use (Increase) of Reserves This amount represents the net amount of revenues less expenditures. A "use of reserves" indicates a spend down of prior year reserves.

Outflows

- > Transfer to Improvement & Extension Fund The Sewer Construction fund received grant funds for prior year expenditures made with revenue financed capital from the I & E Fund. A transfer will be done to return this funding back to the I&E Fund.
- ➤ Bond Cost of Issuance The budget amendment is to align the activity related to the cost of issuance funds received and disbursed.
- ➤ Capital Improvement Plan No budget amendment is required. This line represents the original <u>CIP Plan approved by</u> the Board for FY 2024.
- ➤ Capital Spend Rate Adjustment No budget amendment is required. 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. Amendments to the spend rate assumption are made to align the projected financial use of resources with revised capital improvement plan spending forecasts. The most recent quarterly construction work-in-progress (CWIP) report is presented in the <u>March 2024 Audit Committee binder.</u>

Table 5A - Supplemental Information - Enterprise-wide Operations & Maintenance by Expense Category

O&M Expense Categories	FY 2024 Board Adopted Budget	Total 1st Quarter FY 2024 Amendments	Total 2nd Quarter FY 2024 Amendments	Total 3rd Quarter FY 2024 Amendments	FY 2024 Amended Budget	FY 2024 Activity Thru 3/31/2024
Personnel Costs	\$ 120,887,100	\$ 285,000	\$ 1,834,800	\$ 2,645,600	\$ 125,652,500	\$ 92,386,800
Utilities	63,395,200	8,220,300	(426,100)	2,634,000	73,823,400	54,321,400
Chemicals	30,451,800	2,656,800	(1,148,300)	863,800	32,824,100	22,532,100
Supplies & Other	34,019,500	8,642,500	3,932,500	(79,700)	46,514,800	29,783,600
Contractual Services	106,889,200	4,874,200	2,154,300	6,996,200	120,913,900	86,491,200
Capital Program Allocation	(4,232,700)	-	471,600	1,136,900	(2,624,200)	(1,813,700)
Shared Services	(1,655,800)	-	(551,100)	-	(2,206,900)	(1,739,200)
Unallocated Reserve	8,795,800	-	-	(8,795,800)	-	-
Capital Outlay	-	-	(588,200)	(562,800)	(1,151,000)	990,800
Total	\$ 358,550,100	\$ 24,678,800	\$ 5,679,500	\$ 4,838,200	\$ 393,746,600	\$ 282,953,000

Totals may be off due to rounding.

The table above presents the Operations & Maintenance budget by the major expense categories enterprise wide. Further explanation of the proposed amendment is best viewed and explained by the four service areas: A - Water System Operations, B - Sewer System Operations, C - Centralized Services, and D - Administrative & Other Services.

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GLWA's internal budget directive is for each service area, group, and team to manage their needs to an amount within the initial budget. To the extent that is not possible, an amendment is made from the unallocated reserve. If savings are incurred, or an area appears to not require as much funding as established in the original budget, that department's budgeted expenses are reduced, and the unallocated reserve is increased. In administering the budget, there are several refinements to departments and account categories.

The following table shows the cumulative FY 2024 budget amendments by Expense Category for the four service areas. Explanations for the 3rd quarter budget amendments follow the table for recommended amendments that exceed \$500,000.



Table 5B - Supplemental Information -Operations & Maintenance Expense by Service Area and Expense Category

	Total		Total		Total		Total		
Major Budget Categories		1st Quarter FY 2024		2nd Quarter FY 2024		3rd Quarter FY 2024		FY 2024 Budget	
and Expense Categories		Amendments		Amendments		Amendments		Amendments	
A Water System Operations	\$	5,005,400	\$	3,025,400	\$	46,300	\$	8,077,100	
Capital Outlay		-		24,000		(4,000)		20,000	
Capital Program Allocation		-		-		970,800		970,800	
Chemicals		1,000,000		-		15,000		1,015,000	
Contractual Services		418,000		684,500		102,300		1,204,800	
Personnel		-		934,800		116,800		1,051,600	
Shared Services		-		-		-		-	
Supplies & Other		(174,500)		774,600		581,700		1,181,800	
Unallocated Reserve		9,900		-		(3,341,300)		(3,331,400)	
Utilities		3,752,000		607,500		1,605,000		5,964,500	
B Wastewater System Operations	\$	8,721,500	\$	2,692,800	\$	2,373,300	\$	13,787,600	
Capital Outlay		-		-		176,200		176,200	
Capital Program Allocation		-		471,600		166,100		637,700	
Chemicals		1,656,800		(1,148,300)		848,800		1,357,300	
Contractual Services		1,100,000		1,056,300		442,400		2,598,700	
Personnel		-		880,500		(310,200)		570,300	
Shared Services		-		(216,100)		-		(216,100)	
Supplies & Other		1,506,300		2,682,400		3,086,000		7,274,700	
Unallocated Reserve		(9,900)		-		(3,080,000)		(3,089,900)	
Utilities		4,468,300		(1,033,600)		1,044,000		4,478,700	
C Centralized Services	\$	9,636,900	\$	(602,200)	\$	1,533,000	\$	10,567,700	
Capital Outlay		-		(612,200)		(735,000)		(1,347,200)	
Contractual Services		2,256,200		(319,000)		6,200,500		8,137,700	
Personnel		70,000		61,000		1,595,000		1,726,000	
Shared Services				(296,100)		-		(296,100)	
Supplies & Other		7,310,700		564,100		(3,805,300)		4,069,500	
Unallocated Reserve		-		-		(1,722,200)		(1,722,200)	
D Administrative & Other Services	\$	1,315,000	\$	563,500	\$	885,600	\$	2,764,100	
Contractual Services		1,100,000		732,500		251,000		2,083,500	
Personnel		215,000		(41,500)		1,244,000		1,417,500	
Shared Services		-		(38,900)		-		(38,900)	
Supplies & Other		-		(88,600)		57,900		(30,700)	
Unallocated Reserve		-		-		(652,300)		(652,300)	
Utilities				-		(15,000)		(15,000)	
	\$	24,678,800	\$	5,679,500	\$	4,838,200	\$	35,196,500	



Table 5B Commentary - Supplemental Information - Operations & Maintenance Expense by Service Area and Expense Category

- A Water System Operations Net change = \$46 thousand
 - ➤ Utilities Increase of \$1.6 million Gas is the primary driver at \$0.8 million within Water Plants due to cost per MMBTU (Million British Thermal Units) not decreasing as originally expected. Electric increase of \$0.8 million is due to increases in electricity charges per kWh (kilowatt hour) and includes an additional \$0.6 million increase for electricity charges for pumping stations.
 - > Capital Program Allocation Increase of \$1.0 million Driven by 18 unfilled Water Engineering positions (11.25 FTE) and lower project activity by personnel.
 - > Supplies and Other \$0.6 million increase Related increased costs due to maintenance requirements for lift, pump, cone valve repairs and for other equipment repairs necessary for reliability and criticality considerations.
 - ➤ Personnel \$0.2 million increase Primarily driven by an overtime increase of \$0.3 million due to vacancies and increased work demands, which is offset by (\$0.1) million salary reduction within Water Engineering.
 - ➤ Unallocated Reserve Decrease \$3.3 million Adjusted down to a \$0 balance to offset the increases of 0&M of \$3.4 million.
- *B Wastewater System Operations Net change = \$2.4 million.*
 - ➤ Personnel \$0.3 million decrease Employee Benefits was decreased based on current projected spend (\$0.8 million), this is offset by an increase in Overtime due to unfilled positions (\$0.5 million). Year-to-date personnel increased \$0.6 million primarily due to back filling positions through the Lakeshore facilities contract (\$0.9 million), offset by the reduction noted for Q3 as well as a reduction in salaries (\$0.1 million)
 - ➤ Utilities \$1.0 million increase This increase is for Electricity (\$0.9 million) due to increased rates and Gas (\$0.7 million) due to cost per MMBTU (Million British Thermal Units) not decreasing as expected. This is offset by reduction in Water (\$0.3 million) and Sewage (\$0.3 million) volumes at the Oakwood CSO (Combined Sewer Overflow).
 - ➤ Chemicals \$0.8 million increase This increase is primarily in the CSO's (Combined Sewer Overflow) for Sodium Hypochlorite. The increase is based on conversations with operations personnel regarding the number of truckloads on order and on the current year to date use.



- ➤ Supplies & Other \$3.1 million increase This increase is mostly for equipment repairs (\$2.7 million). Most of the work is being done at the WRRF (Water Resource Recovery Facility), including Incinerator #11 rebuild, grit channel chain, cleaning, and repairs, and electrical work (\$1.6 million). Work done at the CSO's (Combined Sewer Overflow) included sodium hypochlorite tank maintenance, conveyor repairs, and chemical feed pump maintenance (\$1.0 million). There is also a \$0.2 million increase for operating supplies, due to increased lab supplies and safety supplies at the WRRF (Water Resource Recovery Facility).
- Contractual Services \$0.4 million increase This increase is primarily due to the write-off from CIP project 270003, "Long-term CSO Control Plan Update" (\$0.6 million), offset by a reduction in the forecast facilities maintenance contract through the year end (\$0.2 million)
- > Capital Program Allocation \$0.2 million Increase The capitalized labor was adjusted based on the effective rate of capital hours as reported through the BigTime system.
- ➤ Unallocated Reserve Decrease \$3.1 million Adjusted down to a \$0 balance to offset the increases of 0&M of \$5.5 million.

C - Centralized Services - Net Change = \$1.5 million

Centralized Services is comprised of many different operational units. For this reason, variances are organized by business unit/cost center.

- ➤ Planning Services \$ 2.5 million decrease
 - Systems Planning & Development (decrease \$0.5 million)
 - o Regional Flood Mitigation Study moved to Systems Resiliency (\$300K)
 - o Budget for Good Sewer Metering initiative (CDM Michigan) reduced by (\$140K) contract in renewal.
 - Systems Analytics (decrease \$0.3 million)
 - o Transitional labor budget (PCI, Inc) reduced (\$200K) more work is being performed by GLWA personnel.
 - o Remaining budget for Units of Service (Phase I) eliminated (Project Complete) (\$30K)
 - o Remaining budget for Good Sewer Metering (CDM Michigan) eliminated (\$60K)
 - o Information Technology budget (West Coast Labour Systems, Inc) reduced (\$20K)
 - Capital Improvement Planning (decrease \$1.6 million)



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- Budget for I&E expense that was moved to O&M in Q1 will not be used and is transitioned to reserves (\$1.57M)
- All Other Departments (\$0.1 million decrease)
- > Other Centralized Services \$ 6.0 million increase:
 - Systems Operations Control (increase \$3.2 million)
 - o Debris removal with Lakeshore Global Corporation not budgeted \$1.1 million; Wade Trim Associates Inc and other spend not budgeted \$0.5 million.
 - o More repairs with Lakeshore Global Corporation Staff Augmentation contract \$1.2 million.
 - o More PCI LLC spend on professional engineering services for Instrumentation & SCADA Sys \$0.3 million; Gauge-Adjusted Radar Rainfall (GARR) service with Vieux & Associates Inc. not budgeted \$0.1 million.
 - Field Service Operations (increase \$4.3 million)
 - o Higher spend on Staff Augmentation with Lakeshore Global Corporation (\$1.6 million increase).
 - Higher spend on major repairs (water transmission main, valves and other priority repairs) and task orders with Lakeshore Global Corporation (\$1.5 million increase)
 - o Lower spend in emergency and urgent sewer evaluation repair and rehabilitation (increase \$1.2 million).
 - Energy, Research & Innovation (decrease \$0.4 million)
 - o Contractual Professional Services-All Water spend not budgeted in FY24 \$0.4 million.
 - All Other Departments (decrease \$1.1 million)
- ➤ Unallocated Reserve Decrease \$1.7 million Adjusted down to a \$0 balance to offset the increases of O&M of \$3.3 million.

D - Administrative & Other Services - Net change = \$0.9 million

- ➤ Personnel Increase \$1.3 million Primarily due to mid-year merit adjustments to wages and the corresponding benefits.
- ➤ Contractual Services Increase \$0.2 million Primarily due an increase of \$1.6 million in the business insurance premiums in Enterprise Risk Management Insurance Policy since the FY24 budget was created which is offset by



Quarterly Budget Amendment Report FY 2024 Ending March 31, 2024

decreases of \$1.4 million in other administrative contractual services. The insurance premium increases have been accounted for in the FY25-FY29 board adopted budget.

➤ Unallocated Reserve - Decrease \$0.7 million - Adjusted down to a \$0 balance to offset the increases of O&M of \$1.5 million.

Table 5C - Supplemental Information - Operations & Maintenance Utilities by Fund - Water System and Sewer System
This table summarizes the FY 2024 quarterly budget amendments for Utilities by fund and utility type (account type). One of
the primary increases in operations and maintenance costs throughout FY 2024 was utilities. Increases continued in FY 2024
with an increase of \$2.6 million making the total budget amendment increases \$10.4 million for FY 2024.

Utilities		Total st Quarter FY 2024 mendments	Total 2nd Quarter FY 2024 Amendments			Total rd Quarter FY 2024 nendments	Ar	Total FY 2024 Budget nendments
A Water System Operations	\$	3,752,000	\$	607,500	\$	1,605,000	\$	5,964,500
Electric		3,749,000		1,148,500		764,000		5,661,500
Gas		3,000		(580,000)		808,000		231,000
Sewage Service		-		39,000		33,000		72,000
B Wastewater System Operations	\$	4,468,300	\$	(1,033,600)	\$	1,044,000	\$	4,478,700
Electric		200,000		1,124,000		909,800		2,233,800
Gas		(306,000)		(3,082,400)		746,700		(2,641,700)
Sewage Service		309,700		(65,000)		(331,900)		(87,200)
Water Service		4,264,600		989,800		(280,600)		4,973,800
Grand Total	\$	8,220,300	\$	(426,100)	\$	2,649,000	\$	10,443,200



Quarterly Budget Amendment Report FY 2024 Ending March 31, 2024

Table 5C Commentary - Supplemental Information - Operations & Maintenance Utilities by Fund - Water System and Sewer System

- ➤ A Water System Utilities \$1.6 million increase Gas is the primary driver at \$0.8 million within Water Plants due to cost per MMBTU (Million British Thermal Units) not decreasing as originally expected. Electric increase of \$0.8 million is due to increases in electricity charges per kWh (kilowatt hour) and includes an additional \$0.6 million increase for electricity charges for pumping stations.
 - Year-to-date increased \$5.9 million primarily driven by current fiscal year increases in electricity charges per kWh (kilowatt hour).
- ➤ B Wastewater System Utilities \$1.0 million increase This increase is for Electricity (\$0.9 million) due to increased rates and Gas (\$0.7 million) due to cost per MMBTU (Million British Thermal Units) not decreasing as expected. This is offset by reduction in Water (\$0.3 million) and Sewage (\$0.3 million) volumes at the Oakwood CSO (Combined Sewer Overflow).
 - Year-to-date increased \$4.5 million primarily due to water service at the WRRF (\$5.0) million which included resolution of previous years unbilled amounts, offset by reduction in Gas (\$0.4 million)

Great Lakes Water Authority

Resolution 2024-198

Resolution Adopting the Budget Amendments through the Third Quarter of FY 2024

By Board Member:

- 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, further defined by its budget amendment policy, the Board shall amend the budget as needed based upon a quarterly report from the Chief Financial Officer; and
- **WHEREAS** The GLWA Board adopted the FY 2024 budget on February 22, 2023, for the twelve-month fiscal year beginning July 1, 2023;
- WHEREAS Following a review of the budget amendment report through the FY 2024 Third Quarter, the appropriations established with the adoption of the general operating budget for the water system and the sewer system are amended as shown in the table below;

General Operating								
Appropriation Category	Water	Sys	tem			Sewer	Sy	stem
Revenues	Adopted		Amended			Adopted		Amended
Suburban Wholesale Customer Charges	\$ 340,540,600	\$	333,229,600		\$	282,687,600	\$	282,878,600
Less: Bad Debt	-		No Change			-		No Change
Less: Pending Bad Debt Recovery Credit	-		(5,026,500)			-		(15,000,000)
Retail Service Charges	25,537,200		No Change			196,569,600		No Change
Industrial Waste Control Charges	-		No Change			8,584,200		8,560,200
Pollutant Surcharges	-		No Change			5,328,300		No Change
Investment Earnings - Unrestricted	3,067,000		12,640,000			5,567,000		16,096,000
Investment Earnings - Restricted for Debt Service	 994,700		5,411,000		_	1,490,300	_	6,786,000
Investment Earnings	4,061,700		18,051,000			7,057,300		22,882,000
Other Revenues	175,000		942,900			400,000		1,129,800
Total Revenues	\$ 370,314,500	\$	372,734,200		\$	500,627,000	\$	502,348,500
Revenue Requirements				_				
Operations & Maintenance Expense	\$ 152,906,400	\$	168,873,100		\$	205,643,700	\$	224,873,500
Debt Service	159,482,800		162,236,100			228,328,300		230,846,700
General Retirement System Accelerated Pension	3,395,500		1,505,500			6,479,300		3,096,800
Extraordinary Repair & Replacement Deposit	-		No Change			-		No Change
Water Residential Assistance Program Contribution	1,851,600		No Change			2,503,100		No Change
Regional System Lease	22,500,000		No Change			27,500,000		No Change
Receiving Fund Working Capital Requirement	-		No Change			-		No Change
Improvement & Extension Fund Transfer	30,178,200		15,767,900			30,172,600		13,528,400
Total Revenue Requirements	\$ 370,314,500	\$	372,734,200	_	\$	500,627,000	\$	502,348,500

WHEREAS Following a review of the budget amendment report through the FY 2024 Third Quarter, the appropriations established with the adoption of the amounts necessary to pay the principal of and interest on all Regional bonds and to restore any reserves therefore established in the Master Bond Ordinance for the water system and the sewer system are amended as shown in the table below;

Debt Service Coverage Calculation				
Appropriation Category	Water	System	Sewer	System
Debt Service by Lien	Adopted	Amended	Adopted	Amended
Senior Lien Bonds	\$ 136,224,100	\$ 139,877,500	\$ 155,429,200	\$ 158,940,100
Second Lien Bonds	51,754,500	No Change	53,273,500	53,380,100
SRF Junior Lien Bonds	16,469,500	15,674,800	51,847,200	50,640,000
Total Debt Service	\$ 204,448,100	\$ 207,306,800	\$ 260,549,900	\$ 262,960,200

WHEREAS Following a review of the budget amendment report through the FY 2024 Third Quarter, the appropriations established with the adoption of the improvement and extension fund budget for the water system and the sewer system are amended as shown in the table below;

Improvement & Extension Fund									
Appropriation Category		Water	Sys	tem	Sewer System				
Inflows	Adopted Amended		Adopted		Amended				
Transfers In from General Operating	\$	30,178,200	\$	15,767,900	\$ 30,172,600	\$	13,528,400		
Transfers In from Construction Fund		-		4,303,700	-		14,012,800		
Grant Revenues & Capital Contributions		-		-	-		40,000		
Earnings on Investments		1,694,800		7,205,000	2,133,000		6,821,000		
Net Use of Reserves		(10,926,100)		(8,404,800)	(15,202,100)		(18,467,600		
Total Inflows	\$	20,946,900	\$	18,871,800	\$ 17,103,500	\$	15,934,600		
Outflows									
Water/Sewer System Revenue Transfers Out	\$	1,694,800	\$	7,205,000	\$ 2,133,000	\$	6,821,000		
Capital Improvement Plan Spending		-		No Change	-		No Change		
Capital Outlay		11,539,100		11,666,800	14,970,500		9,113,600		
Revenue Financed Capital -									
Transfer to Construction Fund		7,713,000		-	-		No Change		
Total Outflows	\$	20,946,900	\$	18,871,800	\$ 17,103,500	\$	15,934,600		

WHEREAS Following a review of the budget amendment report through the FY 2024 Third Quarter, the appropriations established with the adoption of the construction fund budget for the water system and the sewer system are amended as shown in the table below;

Construction Fund										
Appropriation Category		Water	Sys	tem		Sewer System				
Inflows	Adopted Amended					Adopted		Amended		
Transfer from Improvement & Extension Fund	\$	7,713,000	\$	-	9	-		No Change		
Bond Proceeds		-		150,570,000		-		100,315,500		
Earnings on Investments		1,864,700		8,151,000		2,365,600		9,742,000		
SRF loan proceeds		97,102,000		35,187,000		47,253,000		29,022,000		
Grant Revenues & Capital Contributions		-		8,651,700		-		29,743,000		
Net (Use) Increase of Reserves		132,580,300		(7,694,600)		149,442,400		(14,502,400)		
Total Inflows	\$	239,260,000	\$	194,865,100	9	199,061,000	\$	154,320,100		
Outflows					_					
Transfer to Improvement & Extension Fund		-		4,303,700		-		14,012,800		
Bond Cost of Issuance		-		561,400		-		307,300		
Capital Improvement Plan		239,260,000		No Change		199,061,000		No Change		
Capital Spend Rate Adjustment		-		(49,260,000)		-		(59,061,000)		
Total Outflows	\$	239,260,000	\$	194,865,100	9	199,061,000	\$	154,320,100		
Capital Spending Ratio		100.0%		79.4%		100.0%		70.3%		

- **WHEREAS** The GLWA Audit Committee reviewed the budget amendments at its meeting on June 17, 2024; and
- **WHEREAS** An affirmative vote of five Board Members is necessary for the adoption of this Resolution,

NOW THEREFORE BE IT:

- **RESOLVED** That the GLWA Board approves the FY 2024 Third Quarter Budget Amendments; 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.



Monthly Financial Report Binder

February 2024

Presented to the Great Lakes Water Authority Audit Committee on May 24, 2024 (Postponed to June 17, 2024)

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Key Financial Metrics

The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows: No Risk (green) - Potential (yellow) - Likely (red)

Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Staff reviews the need for budget amendments quarterly and requests necessary amendments when required based on the most current information available. Second quarter budget amendments will be presented to the Board of Directors at the May 22, 2024 meeting and are reflected in this report.

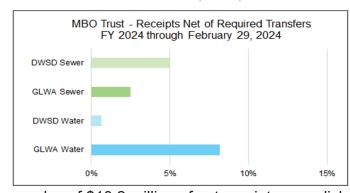
For the current year, water operations and maintenance, water and sewer capital spend, and investment earnings reflect variances to budget outside the normal range. Capital spend variances reflect evolving changes in timing that the Capital Improvement Planning group continues to monitor and review. Operations and maintenance and investment earnings activity is monitored closely and are under review for possible additional budget amendments.

A bond transaction was completed in December 2023 for \$148.5 million to support water system improvements and \$96.8 million to support sewage disposal system improvements.

	As of February 29, 2024											
Metric	FY 2024 Budget	FY 2024 Amended Budget	FY 2024 Actual	Variance from Financial Plan	Report Page Reference							
Wholesale Water Billed Revenue (\$M)	\$231.9	\$227.2	\$227.4	0%	48							
Wholesale Water Billed Usage (mcf)	9,102,000	8,587,000	8,658,000	1%	40							
Wholesale Sewer Billed Revenue (\$M)	\$188.0	\$188.0	\$188.0	0%	50							
Wholesale Water Operations & Maintenance (\$M)	\$101.9	\$111.3	\$103.4	-7%	5							
Wholesale Sewer Operations & Maintenance (\$M)	\$137.1	\$146.7	\$143.5	-2%	5							
Investment Income (\$M)	\$10.2	\$31.1	\$37.8	22%	37							
Water Prorated Capital Spend w/SRA* (\$M)	\$159.5	\$126.7	\$112.4	-11%	28							
Sewer Prorated Capital Spend w/SRA* (\$M)	\$132.7	\$101.8	\$74.7	-27%	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 51)



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 \$0.5 million and DWSD Sewer reports a

surplus of \$10.2 million of net receipts over disbursements through February 2024.



Budget to Actual Analysis (page 3)

- The FY 2024 information includes the proposed second quarter FY 2024 budget amendments pending approval by the GLWA Board of Directors.
- The total Revenue Requirements are on target through February 2024.
- The total overall Operations & Maintenance expenses are at 63.5% of budget through February 2024. This positive variance equates to a dollar amount of \$12.4 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 2024 is \$61.1 million for the Water fund (24.9% of total revenues) and \$77.3 million for the Sewer fund (23.6 % of total revenues).
- Water Net Position increased by \$11.1 million, and Sewage Disposal Net Position increased by \$35.3 million for the year to date through February 2024.

Capital Improvement Plan Financial Summary (page 27)

- Water system costs incurred to date are above the 79.4% Capital Spend Ratio assumption.
- Sewer system costs incurred to date are below the 76.7% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For February, transfers of \$13.8 million and \$18.7 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for February, transfers of \$5.6 million and \$6.9 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 37)

- Total cash & investments are \$645 million for Water and \$764 million in the Sewer fund.
- Total, combined, cumulative, FY 2024 investment income through January is \$37.8 million.

DWSD Retail Revenues, Receivables & Collections (page 41)

- Water revenue through February 29, 2024 is 104.19% and usage is 104.09% of budget.
- Sewer revenue through February 29, 2024 is 98.31% and usage is 100.95% of budget.
- Combined accounts receivable balances for the water and sewer funds report a decrease of \$17.2 million over the prior year.
- Past dues over 180 days make up of 66.8% the total accounts receivable balance. The current bad debt allowance covers over 96.1% of past dues over 60 days.

GLWA Wholesale Billing and Collections (page 47)

- Average wholesale water collections for the period of March 2023 through February 2024 are trending above the prior year.
- Average wholesale sewer collections for the period of March 2023 through February 2024 are trending above the prior year.

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 2024 information presented in these sections includes the proposed second quarter FY 2024 budget amendments pending approval by the GLWA Board of Directors.

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 2024, 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 both systems, total revenues for FY 2024 are above the pro-rata benchmark; the water system is at 68.1% while the sewer system is at 69.0%. 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 29, 2024, these payments total \$4.3 million for FY 2024.



- 2. *Investment Earnings:* For both systems, investment earnings are above the prorata benchmark for FY 2024; the *water* system is at 83.0% while the *sewer* system is at 87.8%. 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 are below the pro-rata benchmark for FY 2024 the *water* system is at 61.9% while the *sewer* system O&M expenses is at 64.7%.
- 5. **Debt Service:** For FY 2024, both systems are slightly above the pro-rata benchmark for debt service; the *water* system is at 67.3% while the *sewer* system is at 67.3%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down.
- 6. **Operating Reserve Deposit:** GLWA has established a target balance in the O&M Fund of 45 days of operating expense which works in tandem with the I&E Funds to provide liquidity to the utility. Funding levels are currently being evaluated to determine if additional transfers to this reserve will be required in FY 2024.
- 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 2023, DWSD ended the year with positive net cash flows for both the DWSD water system and the DWSD sewer system. For FY 2024, neither the DWSD water system nor the DWSD sewer system have a budgetary shortfall through February 29, 2024. 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 – <u>Water</u> Revenue Requirements Budget (year-over-year) – (\$000)

Water System	A	FY 2023 AMENDED		AMENDED		AMENDED		AMENDED		AMENDED				FY 2023 ACTIVITY THRU 2/28/2023	Percent Year-to- Date at 2/28/2023	•	FY 2024 BOARD ADOPTED BUDGET	FY 2024 AMENDED BUDGET			FY 2024 ACTIVITY THRU 2/29/2024	Percent Year-to- Date at 2/29/2024
Revenues	-	DUDGET		2/20/2023	2/20/2023		BUDGET		BUDGET		2/25/2024	2/25/2024										
Suburban Wholesale Customer Charges	\$	333,856	Φ.	223,985	67.1%	\$	340,541	\$	330,703	\$	223,298	67.5%										
Retail Service Charges	Ψ	22,834	Ψ	15,240	66.7%	Ψ	25,537	Ψ	25,537	Ψ	17,025	66.7%										
Investment Earnings		9,670		4,335	44.8%		4,062		14,062		11,678	83.0%										
Other Revenues		995		974	97.9%		175		858		752	87.6%										
Total Revenues	\$	367,356	\$	244,533	66.6%	\$		\$	371,160	\$	252,753	68.1%										
Revenue Requirements	_	,	Ť			Ť	0.0,0.0	_	,													
Operations & Maintenance Expense	\$	156,748	\$	100,542	64.1%	\$	152,906	\$	166,883	\$	103,359	61.9%										
General Retirement System Legacy	*	100,110	Ψ	.00,0.12	0 / 0	Ψ	.02,000	Ψ.	.00,000	Ψ	.00,000	01.070										
Pension		6,048		4,032	66.7%		_		-		_	0.0%										
Debt Service		150,055		102,109	68.0%		159,483		162,236		109,138	67.3%										
General Retirement System Accelerated																						
Pension		6,268		4,179	66.7%		3,396		1,506		1,506	100.0%										
Extraordinary Repair & Replacement																						
Deposit		200		-	0.0%		-		-		-	0.0%										
Water Residential Assistance Program																						
Contribution		1,771		1,180	66.7%		1,852		1,852		1,234	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%										
Receiving Fund Working Capital																						
Requirement		-		-	0.0%		-		-		-	0.0%										
Improvement & Extension Fund																						
Transfer Pending		23,766		18,982	79.9%	_	30,178		16,184		14,392	88.9%										
Total Revenue Requirements	\$	367,356	\$	246,024	67.0%	\$	370,315	\$	371,160	\$	244,629	65.9%										
Net Difference			\$	(1,492)						\$	8,124											
Recap of Net Positive Variance																						
Revenue Variance			\$	(371)						\$	5,313											
Revenue Requirement Variance				(1,121)							2,811	i										
Overall Variance			\$	(1,492)						\$	8,124											

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

Tubic ID - Octob	Table IB - <u>bewer</u> Revenue Req						in cincinis Baager (year-over-year)						
		FY 2023		FY 2023 ACTIVITY	Percent Year-to-		FY 2024 BOARD		FY 2024		FY 2024 ACTIVITY	Percent Year-to-	
		MENDED	-	THRU	Date at	Δ	DOPTED		MENDED	-	THRU	Date at	
Sewer System		UDGET		2/28/2023	2/28/2023		BUDGET		BUDGET	:	2/29/2024	2/29/2024	
Revenues													
Suburban Wholesale Customer Charges	\$	274,907	\$	183,678	66.8%	\$	282,688	\$	267,879	\$	187,807	70.1%	
Retail Service Charges	•	191,042	·	127,361	66.7%	•	196,570	•	196,570	•	131,046	66.7%	
Industrial Waste Control Charges		8,420		5,579	66.3%		8,584		8,560		5,787	67.6%	
Pollutant Surcharges		4,951		3,161	63.8%		5,328		5,328		2,471	46.4%	
Investment Earnings		13,532		6,184	45.7%		7,057		17,057		14,971	87.8%	
Other Revenues		2,355		1,505	63.9%		400		1,018		564	55.4%	
Total Revenues	\$	495,207	\$	327,468	66.1%	\$	500,627	\$	496,412	\$	342,647	69.0%	
Revenue Requirements													
Operations & Maintenance Expense	\$	204,123	\$	129,925	63.7%	\$	205,644	\$	222,026	\$	143,540	64.7%	
General Retirement System Legacy													
Pension		10,824		7,216	66.7%		-		-		-	0.0%	
Debt Service		212,509		142,284	67.0%		228,328		230,976		155,471	67.3%	
General Retirement System Accelerated													
Pension		11,621		7,747	66.7%		6,479		3,097		3,097	100.0%	
Extraordinary Repair & Replacement													
Deposit		-		-	0.0%		-		-		-	0.0%	
Water Residential Assistance Program													
Contribution		2,394		1,596	66.7%		2,503		2,503		1,669	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		-		-	0.0%		-		-		-	0.0%	
Improvement & Extension Fund													
Transfer Pending		26,237		18,717	71.3%		30,173		10,311		16,623	161.2%	
Total Revenue Requirements	\$	495,207	\$	325,817	65.8%	\$	500,627	\$	496,412	\$	338,733	68.2%	
Net Difference			\$	1,651						\$	3,914		
Recap of Net Positive Variance													
Revenue Variance			\$	(2,670)						\$	11,706		
Revenue Requirement Variance				4,321							(7,792)		
Overall Variance			\$	1,651	•					\$	3,914		
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All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 24, 2024



Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of February 29, 2024, is 66.7% (eight months). When comparing FY 2024 to FY 2023 in *Table 2 – Operations & Maintenance Budget – Major Budget Categories*, the overall spending is higher in FY 2024.

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	A	FY 2023 MENDED BUDGET	FY 2023 ACTIVITY THRU 2/28/2023	Percent Year-to- Date at 2/28/2023	FY 2024 BOARD DOPTED BUDGET	FY 2024 AMENDED BUDGET	FY 2024 ACTIVITY THRU 2/29/2024	Percent Year-to- Date at 2/29/2024
Water	\$	85,337	\$ 56,582	66.3%	\$ 82,733	\$ 90,764	\$ 56,213	61.9%
Sewer		136,348	89,175	65.4%	132,934	144,349	97,139	67.3%
Centralized		104,503	63,487	60.8%	106,901	115,935	70,079	60.4%
Administrative		34,682	21,222	61.2%	35,983	37,861	23,468	62.0%
Employee Benefits		-	-	0.0%	-	-	-	0.0%
Total O&M Budget	\$	360,870	\$ 230,466	63.9%	\$ 358,550	\$ 388,908	\$ 246,899	63.5%

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 63.5% which is below the pro-rata benchmark of 66.7%. This positive variance equates to a dollar amount of \$12.4 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is slightly below the pro-rata benchmark; coming in at 66.6% through February 2024.



Utilities: The overall category is above the pro-rata benchmark; coming in at 68.4% through February 2024. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is above the pro-rata benchmark, coming in at 68.5%. 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. This category continues to be monitored.
- **Gas** is coming in at 76.2% which is above the benchmark of 66.7%. Variances within this category are not unexpected as usage varies throughout the year. This category is under review.
- **Sewage service** is lower than the benchmark, coming in at 52.9%. This category is under review.
- Water service is slightly above than the benchmark, coming in at 67.8%. 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. This category continues to be monitored.

Chemicals: This category is lower than the benchmark; coming in at 63.8% through February 2024. The FY 2024 budget was amended for the increase in chemical costs. Variances within this category are not unexpected as usage varies throughout the year.

Supplies & Other: This category is lower than the pro-rata benchmark; coming in at 58.8% through February 2024. 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 63.1% through February 2024. Variances in this category, when they occur, are not unexpected as the usage of contracts varies throughout the year (projects scheduled to begin during the latter half of the year as well as contracts that are on an as needed basis). Budget amendments are processed for those projects in which the actual start dates have been delayed from that in which they were budgeted.

Capital Program Allocation: This category is lower than the benchmark; coming in at 40.8% through February 2024. 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 higher than the benchmark; coming in at 70.6% through February 2024. 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 2024. In addition, it is important to note that some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount.

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

Expense Categories Entity-wide	FY 2023 AMENDED BUDGET	FY 2023 ACTIVITY THRU 2/28/2023	Percent Year-to- Date at 2/28/2023	FY 2023 ACTIVITY THRU 6/30/2023	Percent Year-to- Date at 6/30/2023	FY 2024 AMENDED	FY 2024 PRORATED AMENDED BUDGET 8 MONTHS)	FY 2024 ACTIVITY THRU 2/29/2024	Percent Year-to- Date 2/29/2024	FY 2024 Prorated Amended Budget Less FY 2024 Activity
Salaries & Wages	\$ 71,395	\$ 47,374	66.4%	\$ 70,114	67.6%	,	\$ 50,205	\$ 50,821	67.5%	\$ (616)
Workforce Development	1,326	845	63.7%	1,414	59.7%	1,754	1,169	1,237	70.5%	(67)
Overtime	8,411	5,605	66.6%	8,571	65.4%	7,503	5,002	5,839	77.8%	(837)
Employee Benefits	25,582	16,581	64.8%	24,790	66.9%	28,401	18,934	17,836	62.8%	1,098
Transition Services	9,432	6,240	66.2%	9,920	62.9%	10,041	6,694	6,234	62.1%	460
Employee Benefits Fund	-	-	0.0%		0.0%		-	-	0.0%	-
Personnel Costs	116,145	76,645	66.0%	114,808	66.8%	123,007	82,005	81,967	66.6%	38
Electric	47,963	30,847	64.3%	48,176	64.0%	49,042	32,694	33,613	68.5%	(918)
Gas	12,042	9,019	74.9%	10,821	83.3%	6,203	4,135	4,727	76.2%	(592)
Sewage Service	3,028	1,821	60.1%	3,052	59.7%	2,847	1,898	1,506	52.9%	392
Water Service	11,589	7,136	61.6%	15,228	46.9%	13,098	8,732	8,876	67.8%	(144)
Utilities	74,622	48,823	65.4%	77,277	63.2%	71,189	47,460	48,722	68.4%	(1,262)
Chemicals	29,525	19,194	65.0%	30,542	62.8%	31,960	21,307	20,404	63.8%	903
Supplies & Other	36,163	21,356	59.1%	35,766	59.7%	46,006	30,671	27,062	58.8%	3,609
Contractual Services	106,625	66,752	62.6%	108,726	61.4%	113,918	75,945	71,836	63.1%	4,109
Capital Program Allocation	(2,135)	(1,349)	63.2%	(2,190)	61.6%	(3,761)	(2,507)	(1,533)	40.8%	(974)
Shared Services	(1,571)	(955)	60.8%	(3,270)	29.2%	(2,207)	(1,471)	(1,558)	70.6%	87
Unallocated Reserve	1,497	-	0.0%	-	0.0%	8,796	5,864	-	0.0%	5,864
Total Expenses	\$ 360,870	\$ 230,466	63.9%	\$ 361,658	63.7%	\$ 388,908	\$ 259,272	\$ 246,899	63.5%	\$ 12,373

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 subfunds for each system that are used internally to properly account for sources and uses of Those sub-funds for each system are: Operations & Maintenance Fund, Improvement & Extension Fund, Construction Fund, and Capital Asset Fund.

The June 2023 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 29, 2024 (\$000)

		Sewage	Tota	al Business-	Co	mparative
	Water	Disposal	typ	e Activities	Jun	e 30, 2023
Assets						
Cash - unrestricted (a)	\$ 176,805	\$ 253,215	\$	430,020	\$	482,736
Cash - restricted (a)	224,123	270,177		494,299		470,204
Investments - unrestricted (a)	106,423	106,105		212,528		63,241
Investments - restricted (a)	115,812	154,790		270,602		177,998
Accounts Receivable	78,364	49,459		127,82 4		171,747
Due from (to) Other Funds (b)	2,016	(2,016)		-		-
Other Assets (c)	663,406	401,654		1,065,059		1,056,956
Cash held FBO DWSD Advance	-	-		-		-
Capital Assets, net of Depreciation	1,166,147	1,914,361		3,080,508		3,229,243
Land	293,617	126,816		420,433		420,433
Construction Work in Process (e)	 491,497	334,169		825,666		668,326
Total assets	 3,318,209	3,608,730		6,926,939		6,740,885
Deferred Outflows (f)	41,038	82,968		124,006		181,672
Liabilities						
Liabilities - Liabilities-ST	166,087	193,296		359,383		424,229
Due to (from) Other Funds (b)	-	-		-		-
Other Liabilities (h)	2,215	5,833		8,048		7,500
Cash Held FBO DWSD (d)	22,222	37,803		60,025		42,464
Liabilities - Long-Term (i)	 3,227,565	3,456,831		6,684,396		6,598,619
Total liabilities	3,418,089	3,693,763		7,111,852		7,072,812
Deferred Inflows (f)	53,936	70,354		124,291		81,327
Total net position (j)	\$ (112,778)	\$ (72,420)	\$	(185,198)	\$	(231,582)
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 during the fiscal year are reported at book value. Investments at June 30, 2023 are reported at market value. The February 29, 2024 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 2024 Financial Report Binder. Prior year ending balances are provided in the June 30, 2023 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 29, 2024
(\$000)

	• •	,			Total	
		Percent		Percent	Business-	
		of		of	Type	Comparative
	Water	Revenue	Sewage Disposal	Revenue	Activities	June 30, 2023
Revenue						
Wholesale customer charges	\$ 227,612	92.8%	\$ 187,807	57.3%	\$ 415,420	\$ 616,511
Local system charges	17,025	6.9%	131,046	40.0%	148,071	213,877
Industrial waste charges		0.0%	5,787	1.8%	5,787	8,393
Pollutant surcharges		0.0%	2,471	0.8%	2,471	4,895
Other revenues	 570	0.2%	393	0.1%	963	2,011
Total Revenues	 245,207	100.0%	327,505	100.0%	572,712	845,686
Operating expenses						
Operations and Maintenance	100,570	41.0%	144,673	44.2%	245,243	366,823
Depreciation	81,027	33.0%	105,148	32.1%	186,175	289,957
Amortization of intangible assets	 2,516	1.0%	432	0.1%	2,948	4,006
Total operating expenses	184,113	75.1%	250,253	76.4%	434,366	660,786
Operating Income	61,094	24.9%	77,253	23.6%	138,347	184,900
Total Nonoperating (revenue) expense	 50,012	20.4%	41,950	12.8%	91,963	197,183
Increase/(Decrease) in Net Position	11,081	4.5%	35,302	10.8%	46,384	(12,283)
Net Position (deficit), beginning of year	 (123,860)		(107,722)		(231,582)	(219,299)
Net position (deficit), end of year	\$ (112,778)		\$ (72,420)		\$ (185,198)	\$ (231,582)
Totals may be off due to rounding	 				· · · · · · · · · · · · · · · · · · ·	



Water Fund

- ✓ The increase in Water Fund Net Position is \$11.1 million.
- √ Wholesale water customer charges of \$227.6 million account for 92.8% of Water System revenues.
- ✓ Operating expenses of \$184.1 million represent 75.1% of total operating revenue. Depreciation is the largest operating expense at \$81.0 million or 44.0% of operating expense.
- ✓ Amortization of intangible assets represents activity for raw water rights.
- ✓ Operating income after operating expenses (including depreciation) equals \$61.1 million or 24.9% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$59.1 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 \$35.3 million.
- ✓ Wholesale customer charges of \$187.8 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 \$131.0 million account for 40.0% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$250.3 million represent 76.4% of total operating revenue. Depreciation is the largest operating expense at \$105.1 million or 42.0% of total operating expense.
- ✓ Amortization of intangible assets represents activity for a warehouse lease.
- ✓ Operating income after operating expenses (including depreciation) equals \$77.3 million or 23.6% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$70.3 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).



Supplemental Schedule of Operations & Maintenance Expenses – All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown below in Table 3. This accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the February 2024 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 29, 2024

(\$000)

						Total				
						Business-				
		M -4	Percent of	_		Percent of		Type	Percent of	
	_	Water	Total		Disposal	Total	_A	ctivities	Total	
Operating Expenses										
Personnel										
Salaries & Wages		18,931	18.8%		39,362	27.2%		58,292	23.8%	
Overtime		3,596	3.6%		2,242	1.5%		5,839	2.4%	
Benefits		12,777	12.7%		5,060	3.5%		17,836	7.3%	
Total Personnel	\$	35,304	35.1%	\$	46,664	32.3%	\$	81,967	33.4%	
Utilities										
Electric		21,090	21.0%		12,522	8.7%		33,613	13.7%	
Gas		803	0.8%		3,924	2.7%		4,727	1.9%	
Sewage		234	0.2%		1,272	0.9%		1,506	0.6%	
Water		2	0.0%		8,874	6.1%		8,876	3.6%	
Total Utilities	\$	22,129	22.0%	\$	26,593	18.4%	\$	48,722	19.9%	
Chemicals		7,666	7.6%		12,737	8.8%		20,404	8.3%	
Supplies and other		7,724	7.7%		18,656	12.9%		26,380	10.8%	
Contractual services		32,605	32.4%		41,422	28.6%		74,027	30.2%	
Capital Adjustment		-	0.0%		-	0.0%		-	0.0%	
Capital program allocation		(765)	-0.8%		(769)	-0.5%		(1,533)	-0.6%	
Intergovernmental Agreement		(3,049)	-3.0%		(115)	-0.1%		(3,165)	-1.3%	
Shared services allocation	-	(1,043)	-1.0%		(515)	-0.4%		(1,558)	-0.6%	
Operations and Maintenance Expenses	\$	100,570	100.0%	\$	144,673	100.0%	\$	245,243	100.0%	

Totals may be off due to rounding



- ✓ Core expenses for water and sewage disposal systems are utilities (19.9% of total O&M expenses) and chemicals (8.3% of total O&M expenses).
- ✓ Personnel costs (33.4% 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 (30.2%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$4.2 million);
 - Sewage Disposal System costs for the operation and maintenace of the biosolids dryer facility (approximately \$12.3 million); and
 - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenace, 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 offets 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 29, 2024 (\$000)

			Total					
	_	Water		Sewage Jisposal	Business- type Activities	Comparative June 30, 2023		
Nonoperating (Revenue)/Expense								
Interest income contractual obligation	\$	(16,074)	\$	(10,499)	\$ (26,573)	\$ (41,059)		
Investment earnings		(16,800)		(21,080)	(37,880)	(35,344)		
Net (incr) decr in fair value of invstmt		(1,305)		(2,617)	(3,922)	(2,257)		
Other nonoperating revenue		(182)		(28,036)	(28,219)	(3,872)		
Interest Expense								
Bonded debt		75,174		80,768	155,942	228,066		
Lease obligation		11,062		13,520	24,581	37,319		
Other obligations		2,806		1,080	3,885	5,906		
Total interest expense		89,041		95,367	184,409	271,291		
Other non-capital expense		-		_	_			
Memorandum of Understanding		-		-	-	-		
Capital Contribution		-			-	(2,176)		
Amortization, issuance costs, debt		(9,069)		2,020	(7,049)	(3,998)		
(Gain) loss on disposal of capital assets		4		(16)	(12)	2,119		
Loss on impairment of capital assets		-		-	-	-		
Discontinued Capital Projects		-		-	=	20,903		
Water Residential Assistance Program		1,994		2,511	4,505	12,343		
Legacy pension expense		2,403		4,300	6,703	(20,765)		
Total Nonoperating (Revenue)/Expense	\$	50,012	\$	41,950	\$ 91,963	\$ 197,183		

- ✓ 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.
- ✓ 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 2022 market value adjustments for Water and Sewer total \$2.8 million and \$3.9 million, respectively. FY 2023 market value adjustments for Water and Sewer total \$1.3 million and \$2.6 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 2024 and 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.
- ✓ 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.
- ✓ The FY 2023 Discontinued capital projects represents the cancellation of three Water CIP projects to repurpose the Northeast Water Treatment Plant.

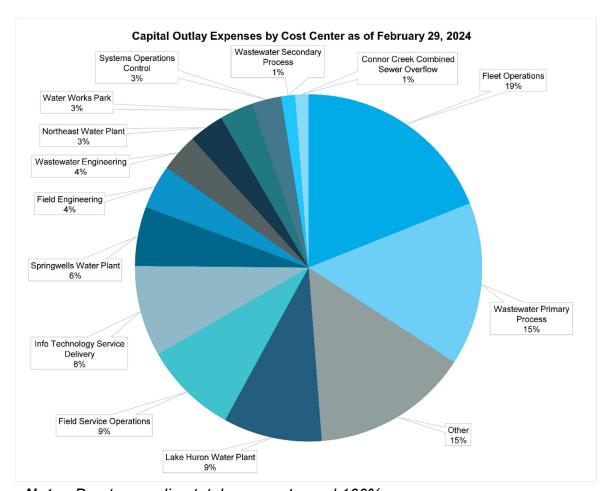


Financial Activity Charts

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 29, 2024, total capital outlay spend is \$13.7 million. Following this chart is a sample list of projects and purchases from the total spend of \$13.7 million:



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

Water Operations: Ovation power supply upgrade (\$884k); Clarifier Drive (\$797k); Water Works Park build out (\$210k); Northeast Water Treatment Plant fluid heater (\$189k); Lake Huron doors and frames (\$132k); STACO energy first line universal



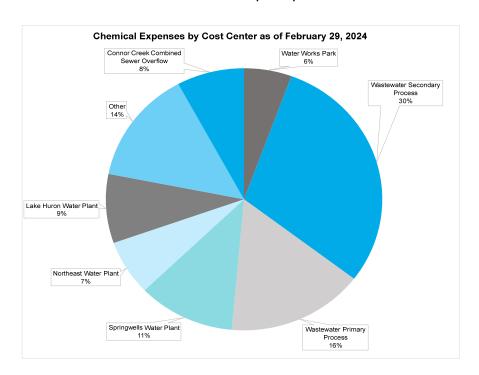
power supply (\$91k); Springwells elevator repairs (\$89k); Ozone vessel refurbish (\$84k); Northeast Water Treatment Plant annual work platform (\$73k) and compact utility tractor (\$57k).

Wastewater Operations: Magnetic Low Meter Replacement (\$1.1m); WRRF flow meter replacement (\$669k); Complex A pump replacement (\$265k); WRRF Incinerator freight elevator (\$255k); CSO's system control center support (\$220k); WRRF Primary area gas detection system (\$158k); Scum hopper pump (\$131k); Multiple CSO's submersible motor (\$92k); Submersible chopper pump (\$89k); WRRF EV charging stations (\$80k); Chlorination scrubber pump (\$70k); Bluehill Pump Station ovation upgrade (\$66k); Baby Creek furniture and supplies (\$64k); Fischer Pump Station ovation upgrade (\$61k); Hubble furniture and supplies (\$61k); 7 mile CSO influent slide gate replacement (\$59k) and collection system level sensors (\$54k).

Centralized & Administrative Facilities: Trucks and vehicles (\$2.5m); Computer hardware and software (\$1.2m); Pump stations ovation upgrade (\$1.1m); Ovation upgrade and cabinet replacement (\$288k); Sewer meter support (\$161k); Database support (\$125k); Forklift (\$86k); WRRF furniture and supplies (\$82k); Base trex platform (\$67k) and Probe (\$58k).

Chart 2 - Chemical Expenses - Water and Sewer System Combined

Chemical expenses are \$20.4 million through February 29, 2024. The allocation is shown in the chart below and remains consistent with prior periods.

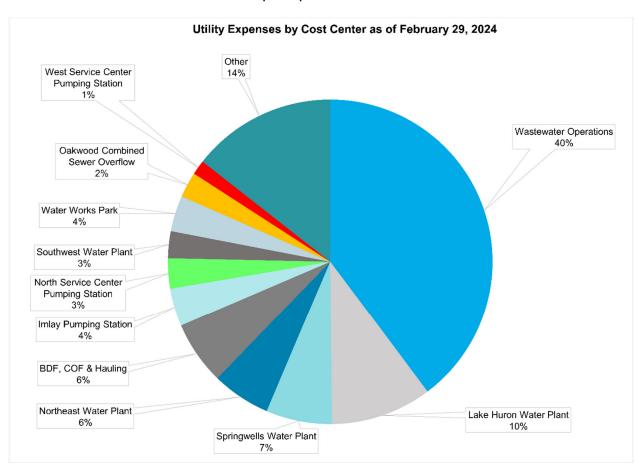




Note: "Other" includes Combined Sewer Overflow (CSO), portions of the Wastewater process and two departments from Water. Due to rounding totals may not equal 100%.

Chart 3 – Utility Expenses – Water and Sewer System Combined

Utility expenses are \$48.7 million through February 29, 2024. 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 29, 2024 all reconciliations are up-to-date and complete.

There were no new accounts added in the general ledger since January 2024.

Chart 1 – Bank Reconciliation Completion Status

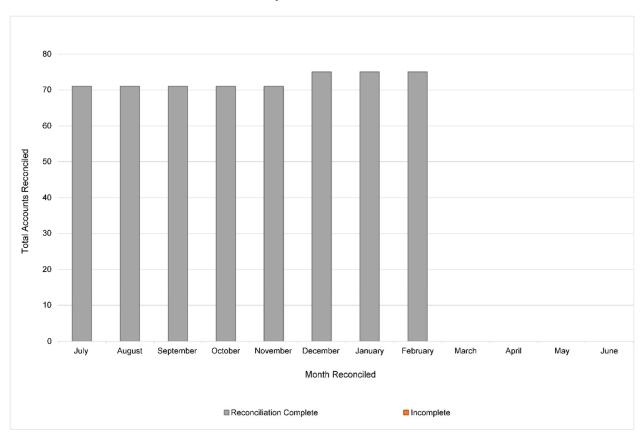


Table 1 - Fiscal Year 2024 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2023	71
New GL Cash accounts	4
Inactivated GL Cash accounts	0
Total GL Cash accounts as of February 29, 2024	75

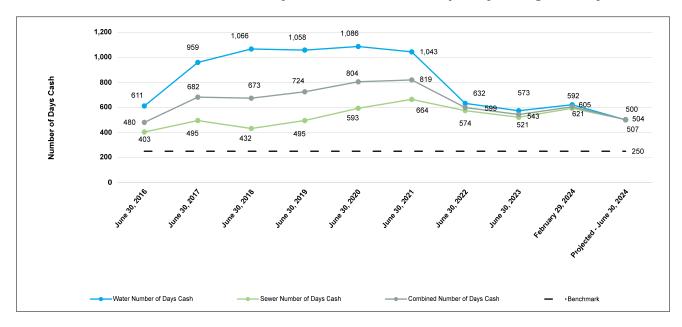


Financial Operations KPI - Liquidity

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 621 and Sewer at 592 days cash on hand as of February 29, 2024. 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 December 2023 revenue bond transaction replenished the construction bond funds and reduced the emphasis on I&E funding. The FY 2024 projection is calculated based on values from the GLWA FY 2024 – 2028 Budget & Five-Year Plan adjusted for 2nd quarter budget amendments.

Chart 1 – Historical Schedule of Days Cash on Hand – Liquidity – Regional System



Note: The GLWA Annual Comprehensive Financial Reports are the source of all historic data referenced. Refer to these reports for detailed calculations by fiscal year.



Table 1 – Schedule of Days Cash on Hand – Liquidity – Regional System

	June 30, 2023	February 29, 2024	Projected June 30, 2024		
Water Fund	· · · · · · · · · · · · · · · · · · ·		<u> </u>		
Cash and Investments - Unrestricted	\$ 243,707,000	\$ 283,228,000	\$ 228,800,000		
Operating Expense					
Operating Expense (a)	\$ 285,220,000	\$ 205,433,000	\$ 308,150,000		
Less: Depreciation (a)	(126,486,000)	(91,800,000)	(137,700,000)		
Less: Amortization of Intangible Asset (a)	(3,567,000)	(2,378,000)	(3,567,000)		
Net Operating Expense	\$ 155,167,000	\$ 111,255,000	\$ 166,883,000		
Operating Expense per Day	\$ 425,000	\$ 456,000	\$ 457,000		
Days Cash					
Number of Days Cash	573	621	500		
Sewage Disposal Fund					
Cash and Investments - Unrestricted	\$ 302,270,000	\$ 359,319,000	\$ 306,100,000		
Operating Expense					
Operating Expense (a)	\$ 375,567,000	\$ 258,350,000	\$ 387,526,000		
Less: Depreciation (a)	(163,471,000)	(110,333,000)	(165,500,000)		
Less: Amortization of Intangible Asset (a)	(440,000)				
Net Operating Expense	\$ 211,657,000	\$ 148,017,000	\$ 222,026,000		
Operating Expense per Day	\$ 580,000	\$ 607,000	\$ 608,000		
Days Cash					
Number of Days Cash	521	592	503		
Combined					
Cash and Investments - Unrestricted	\$ 545,977,000	\$ 642,547,000	\$ 534,900,000		
Operating Expense					
Operating Expense (a)	\$ 660,787,000	\$ 463,783,000	\$ 695,675,000		
Less: Depreciation (a)	(289,957,000)	(202,133,000)	(303,200,000)		
Less: Amortization of Intangible Asset (a)	(4,006,000)	(2,378,000)	(3,567,000)		
Net Operating Expense	\$ 366,824,000	\$ 259,272,000	\$ 388,908,000		
Operating Expense per Day	\$ 1,005,000	\$ 1,063,000	\$ 1,066,000		
Days Cash					
Number of Days Cash	543	605	502		
Totals may be off due to rounding					

⁽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 29, 2024

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 8,124	\$ 3,914	\$ 12,038
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	922	1,784	2,706
Prior year pension contribution accounted for in current year (d)	(2,403)	(4,300)	(6,703)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	50,038	85,202	135,240
Accelerated pension B&C notes obligation portion (g)	143	321	464
Regional System lease (h)	3,938	4,813	8,751
GASB 87 & GASB 96 adjustments (h)	3,184	418	3,602
WRAP (i)	(760)	(842)	(1,602)
Extraordinary Repair & Replacement Fund transfers (j)	-	-	-
Improvement & Extension Fund transfers (j)	14,392	16,623	31,015
Nonbudgeted financial reporting categories adjustments			
Depreciation and amortization (k)	(83,543)	(105,580)	(189, 123)
Amortization - debt related (k)	9,069	(2,020)	7,049
Other nonoperating income (k)	-		-
Other nonoperating expense (k)	-	27,866	27,866
Gain(loss) on disposal of capital assets (k)	(4)	16	12
Raw water rights obligation (I)	1,962	-	1,962
Investment earnings for construction fund (m)	5,122	6,110	11,232
Interest on DWSD note receivable (n)	-	-	-
Investment earnings unrealized gain/loss (o)	1,305	2,617	3,922
Improvement & extension fund operating expenses (p)	(408)	(1,640)	(2,049)
Net Position Increase/(Decrease) per Financial Statements (b)	\$ 11,081	\$ 35,302	\$ 46,384

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) Payments for the warehouse lease and subscription-based information technology arrangements (SBITA) are expensed for budget purposes. For financial reporting purposes, the warehouse lease is recorded under GASB 87 and payments are treated as a reduction in the lease liability and interest expense (which is a nonoperating expense). The SBITA payments are recorded under GASB 96 and are treated as a prepaid subscription asset as the software is currently in the implemented phase.
- (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 Improvement & Extension Fund and Extraordinary Repair & Replacement 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.



- (I) 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. For FY 2024 the original Board approved capital spend rate was 100%. The prorated CIP is calculated by dividing the total fiscal year 2024 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.

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.



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

As of February 2024, the water system incurred \$112 million of construction costs to date. This spend represents 71% of the original Board approved FY 2024 CIP plan and 89% of the spend rate adjusted.

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

In April 2024, GLWA staff presented to the Audit Committee a recommendation to amend the spend rate adjusted for the water system from 100% to 79.4%. This recommended change will go to the full Board of Directors for approval in May 2024 and is reflected in Chart 1 below. Current water system spend represents 89% of that spend rate adjusted.

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

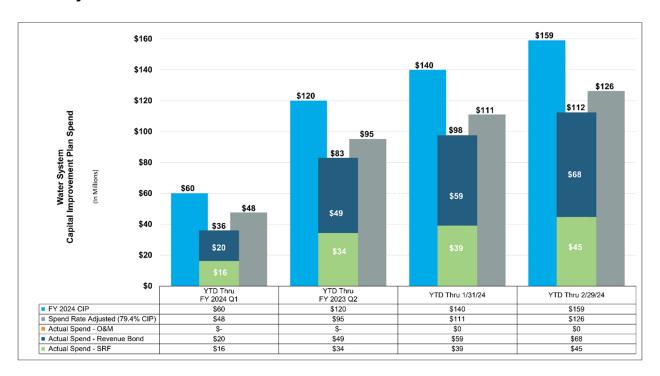




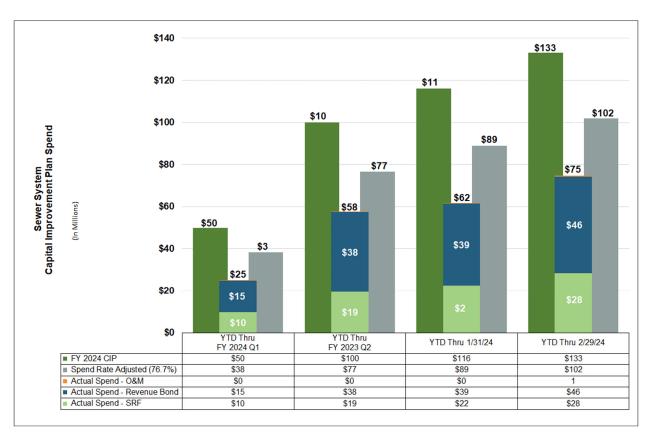
Chart 2 - Sewer System Capital Improvement Plan Spend Incurred to Date

As of February 2024, the Sewer system incurred \$75 million of construction costs to date. This spend represents 56% of the original Board approved FY 2024 CIP plan and 73% of the spend rate adjusted.

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

In April 2024, GLWA staff presented to the Audit Committee a recommendation to amend the spend rate adjusted for the sewer system from 100% to 76.7%. This recommended change will go to the full Board of Directors for approval in May 2024 and is reflected in Chart 2 below. Current sewer system spend represents 73% of that Board approved spend rate adjusted.

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





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.

As of June 30, 2023, GLWA and DWSD have meet the requirements of the Plan of Adjustment requiring contributions to the Detroit General Retirement System (GRS) pension plan through Operational and Maintenance Pension sub-accounts. GLWA and DWSD staff monitor the remaining pension obligation closely. Budgeted, annual contributions toward that remaining obligation, at this time identified as limited administrative fee contributions, are transferred to the Pension Obligation Payment fund and reflected in the reported activity found here.

Table 1 – GLWA FY 2024 <u>Water</u> **MBO Transfers** reflects the required transfers for FY 2024 completed through February 2024. MBO transfers for water totaling \$113.1 million have been transferred to GLWA accounts. In February 2024, an adjustment was made to the non-operating pension to reflect a reduction in the required contribution for FY24. The non-operating pension requirement has been fully funded for the fiscal year.

Table 2 – GLWA FY 2024 <u>Sewer</u> **MBO Transfers** reflects the required transfers for FY 2024 completed through February 2024. MBO transfers for sewer totaling \$153.2 million have been transferred to GLWA accounts. In February 2024, an adjustment was made to the non-operating pension to reflect a reduction in the required contribution for FY24. The non-operating pension requirement has been fully funded for the fiscal year.



Table 3 – GLWA MBO Transfer History reflects historical transfers for FY 2016 through FY 2024 to date.

Table 1 - GLWA FY 2024 Water MBO Transfers

			WATER				
	Operations &	Pension	Pension		Budget Stabilization (For Benefit of	Extraordinary Repair & Replacement	
	Maintenance	Sub Account	Obligation	WRAP	DWSD)	(ER&R)	Total Water
FY 2024							
July 2023	\$ 12,742,200	\$ -	\$ 482,808 \$	225,850	\$ -	\$ -	\$ 13,450,858
August 2023	12,742,200	-	482,808	225,841	-	-	13,450,849
September 2023	12,742,200	-	482,808	225,841	-	-	13,450,849
October 2023	12,742,200	-	482,808	225,841	-	-	13,450,849
November 2023	12,742,200	-	482,808	225,841	-	-	13,450,849
December 2023	12,742,200	-	482,808	225,841	-	-	13,450,849
January 2024	18,688,752	-	(328,148)	225,895	-	-	18,586,499
February 2024 March 2024 April 2024 May 2024 June 2024	13,591,708	-	-	225,895	-	-	13,817,603
Total FY 2024	\$ 108,733,660	\$ -	\$ 2,568,700 \$	1,806,845	\$ -	\$ -	\$113,109,205

Table 2 – GLWA FY 2024 <u>Sewer MBO Transfers</u>

					SEWER							
							5	Budget Stabilization		traordinary Repair &		
	C	perations &	P	ension	Pension		(F	or Benefit of	Re	eplacement		
	<u>N</u>	<u>/laintenance</u>	<u>Sub</u>	Account	<u>Obligation</u>	<u>WRAP</u>		DWSD)		(ER&R)	T	otal Sewer
FY 2024												
July 2023	\$	17,136,975	\$	-	\$ 682,459	\$ 319,700	\$	-	\$	-	\$	18,139,134
August 2023		17,136,975		-	682,459	319,700		-		-		18,139,134
September 2023		17,136,975		-	682,459	319,700		-		-		18,139,134
October 2023		17,136,975		-	682,459	319,700		-		-		18,139,134
November 2023		17,136,975		-	682,459	319,700		-		-		18,139,134
December 2023		17,136,975		-	682,459	319,700		-		-		18,139,134
January 2024		25,586,377		-	(180,254)	319,702		-		-		25,725,825
February 2024		18,344,033		-	-	319,702		-		-		18,663,735
March 2024												
April 2024												
May 2024												
June 2024												
Total FY 2024	\$	146,752,260		-	\$3,914,500	\$2,557,604	\$	-	\$	-	\$	153,224,364



Table 3 – GLWA MBO Transfer History

GLWA MBO Transfer History												
					WATER							
									Budget	Е	xtraordinary	
								5	Stabilization		Repair &	
	Operations &		Pension		Pension			(F	or Benefit of	F	Replacement	
	<u>Maintenance</u>	5	Sub Account		Obligation		<u>WRAP</u>		DWSD)		(ER&R)	 Total Water
Total FY 2016	\$ 71,052,000	\$	6,037,100	\$	10,297,200	\$	1,983,300	\$	2,326,900	\$	606,000	\$ 92,302,500
Total FY 2017	111,879,600		6,037,200		10,297,200		2,077,200		360,000		-	130,651,200
Total FY 2018	121,562,604		6,048,000		10,695,696		2,159,400		-		-	140,465,700
Total FY 2019	121,562,604		6,048,000		10,695,696		2,061,000		-		-	140,367,300
Total FY 2020	126,840,204		6,048,000		10,695,683		1,980,804		-		-	145,564,691
Total FY 2021	134,127,300		6,048,000		10,695,700		2,324,200		-		-	153,195,200
Total FY 2022	143,933,800		6,048,000		10,695,700		2,376,600		-		_	163,054,100
Total FY 2023	156,747,700		6,048,000		10,695,700		2,611,800		-		2,200,000	178,303,200
Total FY 2024 (year to date)	108,733,660		-		2,568,700		1,806,845		-		-	113,109,205
Life to Date	\$1,096,439,472	\$	48,362,300	\$	87,337,275	\$	19,381,149	\$	2,686,900	\$	2,806,000	\$ 1,257,013,096

				SEWER							
							Budget	E	xtraordinary		
						S	tabilization		Repair &		
	Operations &	P	Pension	Pension		(F	or Benefit of	R	eplacement		
	<u>Maintenance</u>	Sub	o Account	<u>Obligation</u>	<u>WRAP</u>		DWSD)		(ER&R)		Total Sewer
Total FY 2016	\$ 100,865,600	\$ 1	10,838,400	\$ 14,025,800	\$ 2,523,400	\$	5,591,700	\$	779,600	\$	134,624,500
Total FY 2017	175,858,800	1 1	10,838,400	14,026,800	2,654,400		2,654,400		-		206,032,800
Total FY 2018	191,079,396	i 1	10,824,000	14,687,496	2,760,804		-		-		219,351,696
Total FY 2019	191,079,396	i 1	10,824,000	14,687,496	2,870,992		-		-		219,461,884
Total FY 2020	181,925,800	1 1	10,824,000	14,687,517	2,887,300		-		-		210,324,617
Total FY 2021	182,296,000	1 1	10,824,000	14,687,500	3,764,300		-		-		211,571,800
Total FY 2022	191,908,600	1 1	10,824,000	14,687,400	3,868,700		-		-		221,288,700
Total FY 2023	204,122,500	1 1	10,824,000	14,687,400	3,673,800		-		-		233,307,700
Total FY 2024 (year to date)	146,752,260		-	3,914,500	2,557,604		-		-		153,224,364
Life to Date	\$1,565,888,352	\$ \$	86,620,800	\$ 120,091,909	\$ 27,561,300	\$	8,246,100	\$	779,600	\$1	,809,188,061



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 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.

As of June 30, 2023, GLWA and DWSD have meet the requirements of the Plan of Adjustment requiring contributions to the Detroit General Retirement System (GRS) pension plan through Operational and Maintenance Pension sub-accounts. GLWA and DWSD staff monitor the remaining pension obligation closely. Budgeted, annual contributions toward that remaining obligation, at this time identified as limited administrative fee contributions, are transferred to the Pension Obligation Payment fund and reflected in the reported activity found here.

Table 4 – DWSD FY 2024 <u>Water MBO Transfers</u> reflects the required transfers for FY 2024 completed through February 2024. MBO transfers for Water totaling \$44.9 million have been transferred to accounts held by DWSD.

Table 5 – DWSD FY 2024 <u>Sewer MBO Transfers</u> reflects the required transfers for FY 2024 completed through February 2024. MBO transfers for Sewer totaling \$55.5 million have been transferred to accounts held by DWSD.

Table 6 – DWSD Water MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2024 to date.

Table 7 – DWSD <u>Sewer</u> MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2024 to date.



Table 4 - DWSD FY 2024 Water MBO Transfers

	WA	ATER		
FY 2024 July 2023 August 2023 September 2023 October 2023 November 2023 December 2023	3,731,400 3,731,400 3,731,400 3,731,400 3,731,400 3,731,400 3,731,400	<u>Pension</u>	ase Payment (I&E Fund) 1,875,000 1,875,000 1,875,000 1,875,000 1,875,000	\$ Total Water 5,606,400 5,606,400 5,606,400 5,606,400 5,606,400 5,606,400
January 2024 February 2024 March 2024 April 2024 May 2024 June 2024	3,731,400 3,731,400	-	1,875,000 1,875,000	5,606,400 5,606,400
Total FY 2024	\$ 29,851,200	-	\$ 15,000,000	\$ 44,851,200

Table 5 - DWSD FY 2024 Sewer MBO Transfers

	SI	EWER			
	perations & aintenance	<u>Per</u>	sion	ase Payment [I&E Fund]	Total Sewer
FY 2024 July 2023 August 2023 September 2023 October 2023 November 2023 December 2023 January 2024 February 2024 March 2024 April 2024 May 2024 June 2024	\$ 4,642,142 4,642,142 4,642,142 4,642,142 4,642,142 4,642,140 4,642,140	\$		\$ 2,291,667 2,291,667 2,291,667 2,291,667 2,291,667 2,291,667 2,291,667 2,291,667	\$ 6,933,809 6,933,809 6,933,809 6,933,809 6,933,809 6,933,807 6,933,807
Total FY 2024	\$ 37,137,132		-	\$ 18,333,336	\$ 55,470,468



Table 6 – DWSD Water MBO and Lease Payment Transfer History

Table 6 – DWSD <u>Wate</u>	<u></u>			to DWSD				
			WA.					
		Operations & Maintenance		perations & aintenance Pension		ase Payment (I&E Fund)		Total Water
FY 2016 *	•	00.40=.000	•		•		•	5 0.040.000
MBO/Lease Requirement Offset to Debt Service	\$	26,185,600 	\$	4,262,700	\$	22,500,000 (2,326,900)	\$	52,948,300 (2,326,900)
Net MBO Transfer FY 2017		26,185,600		4,262,700		20,173,100		50,621,400
MBO/Lease Requirement Offset to Debt Service		33,596,400 -		4,262,400 -		22,500,000		60,358,800
Net MBO Transfer FY 2018		33,596,400		4,262,400		22,500,000		60,358,800
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 FY 2019		35,059,704		4,272,000		20,625,000		59,956,704
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 FY 2020		35,484,300		4,272,000		18,527,800		58,284,100
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 FY 2021		34,662,400		4,272,000		18,952,000		57,886,400
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 FY 2022		35,833,900		4,272,000		14,221,700		54,327,600
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 FY 2023		29,989,000		4,272,000		13,574,600		47,835,600
MBO/Lease Requirement		42,581,600		4,272,000		22,500,000		69,353,600
Offset to Debt Service		-				(2,922,100)		(2,922,100)
Net MBO Transfer FY 2024 (year to date)		42,581,600		4,272,000		19,577,900		66,431,500
MBO/Lease Requirement Offset to Debt Service		29,851,200 -		- -		15,000,000		44,851,200 -
Net MBO Transfer Life-to-Date		29,851,200		-		15,000,000		44,851,200
MBO/Lease Requirement		303,244,104		34,157,100		195,000,000		532,401,204
Offsets		-		-		(31,847,900)		(31,847,900)
Total Water		303,244,104		34,157,100		163,152,100		500,553,304



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 FY 2017	19,774,300	2,861,800	7,508,500	30,144,600
MBO/Lease Requirement Offset to Debt Service	41,535,600	2,862,000	27,500,000	71,897,600 -
Total MBO Transfer FY 2018	41,535,600	2,862,000	27,500,000	71,897,600
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 FY 2019	60,517,992	2,856,000	18,333,336	81,707,328
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 FY 2020	56,767,920	2,856,000	23,085,000	82,708,920
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		<u> </u>	(5,032,700)	(5,032,700)
Total MBO Transfer FY 2021	55,243,500	2,856,000	22,467,300	80,566,800
MBO/Lease Requirement	69,915,700	2,856,000	27,500,000	100,271,700
Offset to Debt Service		<u> </u>	(3,257,200)	(3,257,200)
Total MBO Transfer FY 2022	69,915,700	2,856,000	24,242,800	97,014,500
MBO/Lease Requirement	61,301,000	2,856,000	27,500,000	90,735,453
Offset to Debt Service		<u> </u>	(5,529,297)	(4,607,750)
Total MBO Transfer FY 2023	61,301,000	2,856,000	21,970,703	86,127,703
MBO/Lease Requirement	51,396,400	2,856,000	27,500,000	81,752,400
Offset to Debt Service		<u> </u>	(4,388,300)	(4,388,300)
Total MBO Transfer FY 2024 (year to date)	51,396,400	2,856,000	23,111,700	77,364,100
MBO/Lease Requirement	37,137,132	-	18,333,336	55,470,468
Offset to Debt Service		<u> </u>		-
Total MBO Transfer	37,137,132	-	18,333,336	55,470,468
Life-to-Date				
MBO/Lease Requirement	460,689,544	22,859,800	238,333,336	720,961,133
Offsets	(7,100,000)	-	(51,780,661)	(57,959,114)
Total Sewer	453,589,544	22,859,800	186,552,675	663,002,019

^{*} Note: FY 2016 lease transfer amounts shown do not incude 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
- Cash Balance Detail.

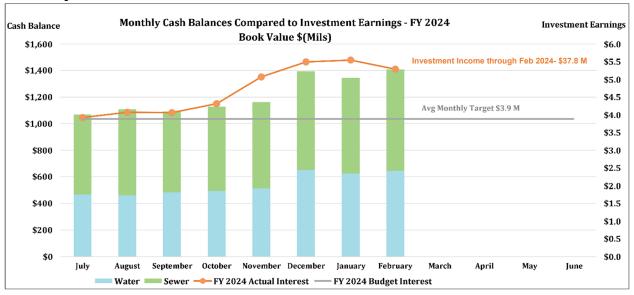
Monthly Cash Balances Compared to Investment Income

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 2024, GLWA earned investment income of \$5.3 million and cumulative FY 2024 earnings through February 2024 of \$37.8 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 2024





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, security deposit funds held on behalf of the City of Flint, and capital contribution funds provided by the Evergreen Farmington Sewer District recognized as related project work is completed

A <u>chart</u> depicting the follow of funds is online at glwater.org as well as the <u>MBO</u> documents.



Chart 2 – Cash Balances - Water Funds as of February 2024 - 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 29, 2024 is \$645 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 \$148.5 million in December 2023 to support water system improvements. These funds along with I&E and SRF low-interest loans are funding the capital program.

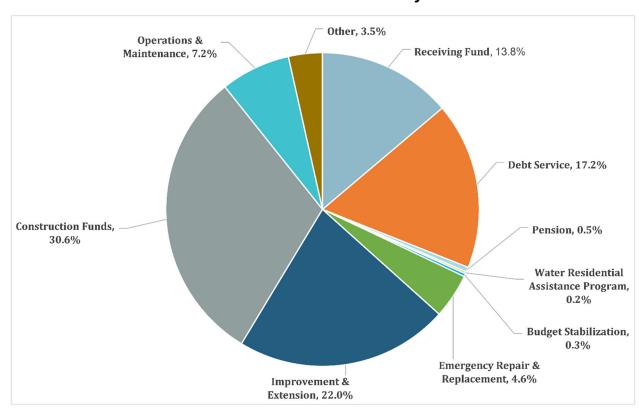


Chart 2 - Cash Balances - Water Funds as of February 2024

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



Chart 3 – Cash Balances - Sewer Funds as of February 2024 - 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 29, 2024 is \$764 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 \$96.8 million in December 2023 to support sewage disposal system improvements. These funds along with I&E and SRF low-interest loans are currently funding the capital program.

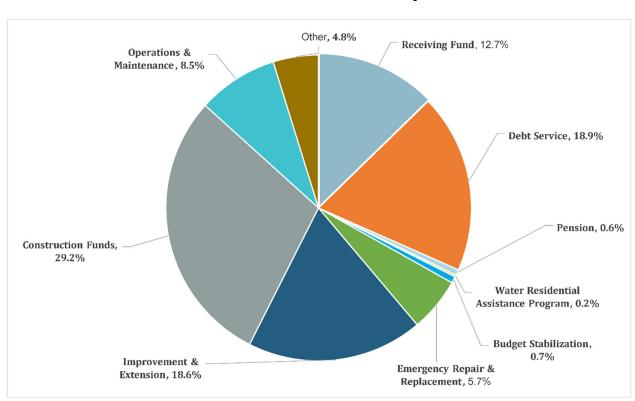


Chart 3 - Cash Balances - Sewer Funds as of February 2024

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 2024 water usage and billed revenue which are provided by DWSD staff. As of February 29, 2024, the DWSD usage was at 104.09% of the budget and billed revenue was at 104.19% 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											
	FY 2024 - Ori	ginal Budget	FY 2024	- Actual	FY 2024 - \	/ariance	FY 2023	- Actuals				
Month (1)	<u>Volume</u> <i>Mcf</i>	<u>Revenue</u> \$	<u>Volume</u> <i>Mcf</i>	Revenue (2) \$	<u>Volume</u> <i>Mcf</i>	<u>Revenue</u> \$	<u>Volume</u> Mcf	<u>Revenue</u> \$				
July	239,000	12,068,200	248,307	12,606,397	9,307	538,197	244,749	9,490,589				
August	237,000	11,985,000	255,079	12,913,868	18,079	928,868	277,313	13,301,941				
September	246,000	12,236,000	214,796	11,119,261	(31,204)	(1,116,739)	234,806	11,591,601				
October	216,000	11,118,000	222,908	11,409,427	6,908	291,427	239,062	11,730,809				
November	205,000	10,664,000	210,687	10,898,684	5,687	234,684	212,663	10,706,519				
December	196,000	10,293,000	214,139	11,246,818	18,139	953,818	222,502	11,073,513				
January	197,000	10,334,000	224,414	11,263,184	27,414	929,184	227,748	11,257,742				
February	208,000	10,788,000	225,041	11,774,408	17,041	986,408	208,568	10,569,468				
March	191,000	10,086,000					229,264	11,383,630				
April	214,000	11,036,000					198,665	10,121,640				
May	186,000	10,000,000					241,525	11,820,301				
June	225,000	11,489,000					257,749	12,567,250				
Total	2,560,000	132,097,200	1,815,372	93,232,046	71,372	3,745,846	2,794,614	135,615,003				
Subtotals ytd	1,744,000	89,486,200	1,815,372	93,232,046	71,372	3,745,846						

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

Table 2 – DWSD Retail Water Collections

	N	/ater		
Month	Current Year	Prior Year	Variance	Ratio
March	10,417,832	11,093,125	(675,293)	-6.09%
April	9,417,449	7,431,900	1,985,549	26.72%
May	12,162,719	7,660,852	4,501,867	58.76%
June	13,467,858	9,123,179	4,344,679	47.62%
July	5,943,286	8,518,373	(2,575,087)	-30.23%
August	11,794,131	9,636,219	2,157,912	22.39%
September	9,790,065	5,082,383	4,707,682	92.63%
October	9,884,937	13,082,745	(3,197,808)	-24.44%
November	10,499,606	10,270,582	229,024	2.23%
December	13,663,688	11,630,994	2,032,694	17.48%
January	8,506,008	8,857,268	(351,261)	-3.97%
February	8,996,740	8,244,713	752,027	9.12%
Polling 12 Month Total	124 544 318	110 632 333	·	· ·

Rolling, 12-Month Total 124,544,318 110,632,333 **Rolling, 12-Month Average** 10,378,693 9,219,361

⁽²⁾ Retail Revenues include Miscellaneous Revenues and Penalties



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 2024 sewer billed revenue which are provided by DWSD staff. As of February 29, 2024, the DWSD usage was at 100.95% of the budget and billed revenue was at 98.31% 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											
	FY 2024 - Ori	ginal Budget	FY 2024	- Actual	FY 2024 - \	/ariance	FY 2023	Actuals				
Month (1)	<u>Volume</u> <i>Mcf</i>	<u>Revenue</u> \$	Volume (2)	Revenue (3)	<u>Volume</u> <i>Mcf</i>	Revenue \$	<u>Volume</u> Mcf	Revenue \$				
July	200,000	29,187,700	207,574	29,192,723	7,574	5,023	223,661	29,297,748				
August	199,000	29,128,000	211,503	29,278,720	12,503	150,720	231,809	29,640,202				
September	203,000	29,340,000	178,576	27,476,376	(24,424)	(1,863,624)	197,455	27,523,933				
October	182,000	28,119,000	184,383	27,700,095	2,383	(418,905)	194,154	27,375,180				
November	172,000	27,526,000	175,498	26,939,338	3,498	(586,662)	172,579	26,525,064				
December	165,000	27,111,000	156,164	26,546,712	(8,836)	(564,288)	174,896	26,676,360				
January	166,000	27,170,000	182,643	26,882,316	16,643	(287,684)	175,562	26,403,544				
February	175,000	27,704,000	179,551	27,455,736	4,551	(248,264)	160,804	25,814,735				
March	161,000	26,873,000					181,217	26,720,229				
April	179,000	27,941,000					167,727	26,120,878				
May	160,000	26,839,000					195,191	27,508,373				
June	188,000	28,475,000					206,163	28,018,277				
Total	2,150,000	335,413,700	1,475,892	221,472,016	13,892	(3,813,684)	2,281,218	327,624,524				
Subtotals ytd	1,462,000	225, 285, 700	1,475,892	221,472,016	13,892	(3,813,684)						
Achievement of	Budget/Goal		100.95%	98.31%								

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

⁽²⁾ Reflects billed volume based on actual usage except for residential customers where the billed volume differs from actual usage due to residential sewer volume caps implemented in FY 2023.

⁽³⁾ Retail Revenues include Miscellaneous Revenues and Penalties



Table 4 – DWSD Retail Sewer Collections

	S	ewer		
Month	Current Year	Prior Year	Variance	Ratio
March	30,697,464	29,410,086	1,287,378	4.38%
April	21,542,671	22,115,076	(572,405)	-2.59%
May	24,419,561	20,952,592	3,466,969	16.55%
June	23,769,626	25,922,279	(2,152,653)	-8.30%
July	32,379,222	30,935,343	1,443,879	4.67%
August	25,391,891	26,064,896	(673,005)	-2.58%
September	23,489,448	15,261,467	8,227,981	53.91%
October	21,610,149	28,182,933	(6,572,784)	-23.32%
November	25,951,736	21,994,899	3,956,838	17.99%
December	23,249,973	23,756,153	(506, 180)	-2.13%
January	26,248,512	23,760,629	2,487,883	10.47%
February	24,230,304	23,867,073	363,230	1.52%

 Rolling 12-Month Total
 302,980,557
 292,223,426

 Rolling, 12-Month Average
 25,248,380
 24,351,952



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 29, 2024 with comparative totals from June 30, 2023, June 30, 2022, and June 30, 2021. This table does not include past due accounts that have been transferred to the City of Detroit for collection as tax liens.

The 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 29, 2024 with comparative totals from February 29, 2023. 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 29, 2024 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			
		Monthly		Receivables		
Period Ending		Sales	Total	Allowance	Net	Days in AR (1)
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
June 30, 2023	\$	39,443,000	\$ 327,023,000	\$ (272,012,000)	\$ 55,011,000	42
February 29, 2024 (2)	\$	39,555,000	\$ 308,759,000	\$ (246,940,000)	\$ 61,819,000	47
Totals may be off due to round	ding					

⁽¹⁾ Days in AR is calculated as net receivables divided by daily sales (monthly sales/30 days).

⁽²⁾ The annual AR Tax Roll Transfer totaling \$22,892,000 was made in October 2023.



Table 6 – DWSD Retail Accounts Receivable Aging Report – <u>Water & Sewer</u> <u>Combined</u>

	# of	Av	100								400 5		S ten Care Ca
Sales Class Residential	Accounts 218,601	Balar \$ 86	1ce 0.82	s.	Current 17,906,000		> 30 Days 9,008,000		> 60 Days 33,779,000		> 180 Days 127,484,000		VR Balance 188,176,000
Residential	210,001	Ψ 00	0.02	Ψ	9.5%	Ψ	4.8%		18.0%	Ψ	67.7%	Ψ	100,170,000
Commercial	21,309	1,23	6.90		7,067,000		2,255,000		6,628,000		10,407,000		26,357,000
					26.8%		8.6%		25.1%		39.5%		100.0%
Industrial	3,671	3 57	0.85		5.435,000		799,000		2,261,000		4,614,000		13,109,000
	-,	-,			41.5%		6.1%		17.2%		35.2%		100.0%
Tax Exempt	3,821	63	7.47		556,000		211,000		521,000		1,148,000		2,436,000
					22.8%		8.6%		21.4%		47.1%		100.0%
Government	46,554	46	5.36		4,500,000		500,000		1,693,000		14,972,000		21,664,000
					20.8%		2.3%		7.8%		69.1%		100.0%
Drainage	45,017	57	3.44		2,073,000		1,276,000		4,166,000		18,299,000		25,815,000
-					8.0%		4.9%		16.1%		70.9%		100.0%
				_		_		_		_			
Subtotal - Active Accounts	338,973	\$ 81	8.82	\$	37,537,000		14,048,000			\$	176,923,000	\$	277,557,000
					13.5%		5.1%		17.7%		63.7%		100.0%
Inactive Accounts	344,950	9	0.45		186,000		116,000		1,431,000		29,469,000		31,202,000
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				0.6%		0.4%		4.6%		94.4%		100.0%
Total	683,923	\$ 45	51.45	\$. , ,	÷	14,165,000	÷	, .,	\$	206,393,000	\$	308,759,000
% of Total A/R					12.2%		4.6%		16.3%		66.8%		100.0%
Water Fund	242,874	25	8.72	\$	11,062,000	\$	3,391,000	\$	11,364,000	\$	37,019,000	\$	62,836,000
Sewer Fund	274,696			\$	26,660,000	\$	10,774,000			\$	169,374,000		245,923,000
Total February 29, 2024 (a)	683,923	\$ 45	1.45	\$	37,722,000	\$	14,165,000	\$	50,479,000	\$	206,393,000	\$	308,759,000
													//= /
Water Fund- Allowance												\$	(47,190,000)
Sewer Fund- Allowance Total Bad Debt Allowance												\$	(199,750,000) (246,940,000)
Total Bad Dept Allowalice												φ	(240,340,000)
Comparative -February 2023 (b)	662,906	\$ 49	1.74	\$	36,896,000	\$	16,625,000	S	48,355,0 <u>00</u>	\$	224,100,000	\$	325,977,000
Difference (a) - (b)	21,017			\$	826,000	\$	(2,460,000)	\$	2,124,000	\$	(17,708,000)	\$	(17,218,000)



The Monthly Wholesale Billings and Collections Report includes the following.

- 1. Wholesale Water Billings and Collections
- 2. Wholesale Sewer Billings and Collections

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 Contracts	85
Emergency	0
No Contracts	1
Total	86

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 2024 water billed usage and revenues. As of February 29, 2024, the billed usage was at 95.12% of the original plan and billed revenue at 98.05% of the original plan. Billings and usage from the City of Flint *are* included as they were assumed in the FY 2024 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 the prior year for the twelve-month period ending February 29, 2024.



Table 1 – FY 2024 Wholesale Water Billings Report

			WHOLESA	LE WATER CHA	RGES			
	FY 2024 C	harges (2)	FY 2024	Actual	FY 2024 V	ariance	FY 2023	Actuals
Month (1)	<u>Volume</u> <i>Mcf</i>	<u>Revenue</u> \$	<u>Volume</u> <i>Mcf</i>	Revenue (4)	<u>Volume</u> <i>Mcf</i>	Revenue \$	<u>Volume</u> Mcf	Revenue \$
July August September October November December January February March April May June Total Subtotals ytd Achievement of Comment	0	34,283,300 32,797,900 30,543,500 27,748,500 26,395,000 26,990,700 27,002,600 26,142,700 26,930,300 26,581,600 29,098,000 32,678,300 347,192,400 231,904,200	1,396,012 1,295,617 1,212,814 1,043,901 899,934 947,841 984,406 877,428 - - - 8,657,953 8,657,953	31,956,320 30,947,078 29,862,077 27,856,141 26,481,380 26,904,465 27,231,881 26,143,840 - - - 227,383,182 227,383,182 98.05%	(211,421) (174,122) (71,491) 6,451 1,158 (18,281) 20,634 3,032 (444,039) (444,039)	(2,326,980) (1,850,822) (681,423) 107,641 86,380 (86,235) 229,281 1,140 (4,521,018) (4,521,018)	1,055,245 906,669 990,177 979,573 869,843 961,541 917,599 1,169,448 1,570,958	34,349,872 31,555,444 30,306,713 27,391,089 25,911,801 26,652,607 26,536,118 25,535,320 26,356,490 25,997,955 28,895,975 33,407,419 342,896,802
Billing Adjustmen	ts (5)		8,009 8,665,962	109,342 227,492,524				
			100.91%	100.13%				

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

Table 2 - Wholesale Water Collections

	V	Vater		
Month	Current Year	Prior Year	Variance	Ratio
March	26,074,213	22,123,572	(22, 123, 572)	-100.00%
April	20,940,451	21,726,941	(786,490)	-3.62%
May	29,265,308	27,717,969	1,547,339	5.58%
June	29,370,704	26,379,503	2,991,201	11.34%
July	22,645,008	14,435,092	8,209,916	56.87%
August	36,275,672	41,154,992	(4,879,320)	-11.86%
September	29,955,755	21,887,632	8,068,123	36.86%
October	26,617,271	38,029,648	(11,412,377)	-30.01%
November	35,490,010	30,903,329	4,586,681	14.84%
December	28,246,829	34,298,469	(6,051,640)	-17.64%
January	24,448,936	19,182,054	5,266,882	27.46%
February	29,100,065	26,553,529	2,546,536	9.59%
Rolling 12-Month Total	338 430 223	324 392 729		

⁽²⁾ Charges are based on the approved FY 2024 water supply system charge schedule.

⁽³⁾ Reflects approved bugdet amendments related to commodity usage

⁽⁴⁾ 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

⁽⁵⁾ Reflects prior period adjustments made in the current year for Madison Heights.



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 Contracts	14
Emergency	0
Older Contracts	4
Total	18

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 2024 sewer billed revenue. As of February 29, 2024 the billed revenue is at 100.00% of the original plan.

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

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received. There are several large accounts whose payments swing between the end of the current month and the beginning of the next month. Current year collections are trending above the twelvemonth period ending February 29, 2024.



Table 3 – FY 2024 Wholesale Sewer Billings Report

			WHOLES	ALE SEWER CH	ARGES			
	FY 2024	Charges	FY 2024	- Actual	FY 2024 -	Variance	FY 2023	- Actuals
Month (1)	Volume (2)	Revenue \$	Volume (2)	<u>Revenue</u> \$	Volume (2)	Revenue \$	Volume Mcf	Revenue \$
July	N/A	23,494,800	N/A	23,494,800	N/A	-	N/A	22,888,100
August	N/A	23,494,800	N/A	23,494,800	N/A	-	N/A	22,888,100
September	N/A	23,494,800	N/A	23,494,800	N/A	-	N/A	22,888,100
October	N/A	23,494,800	N/A	23,494,800	N/A	9	N/A	22,888,100
November	N/A	23,494,800	N/A	23,494,800	N/A		N/A	22,888,100
December	N/A	23,494,800	N/A	23,494,800	N/A	E 1	N/A	22,888,100
January	N/A	23,494,800	N/A	23,494,800	N/A	-	N/A	22,888,100
February	N/A	23,494,800	N/A	23,494,800	N/A	-	N/A	22,888,100
March	N/A	23,494,800	N/A	0	N/A		N/A	22,888,100
April	N/A	23,494,800	N/A	0	N/A		N/A	22,888,100
May	N/A	23,494,800	N/A	0	N/A		N/A	22,888,100
June	N/A	23,494,800	N/A	0	N/A		N/A	22,888,100
Total		281,937,600		187,958,400		-		274,657,200
Subtotals ytd		187,958,400		187,958,400		-		
Achievement of E	Budget	•	•	100.00%				

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

Table 4 - Wholesale Sewer Collections

	Sc	ewer		
Month	Current Year	Prior Year	Variance	Ratio
March	23,746,469	24,713,158	(966,689)	-3.91%
April	17,769,710	19,937,558	(2,167,848)	-10.87%
May	18,213,966	10,226,700	7,987,266	78.10%
June	38,287,549	29,659,245	8,628,304	29.09%
July	22,331,831	28,223,515	(5,891,684)	-20.88%
August	22,377,366	21,036,661	1,340,705	6.37%
September	18,770,419	22,244,437	(3,474,018)	-15.62%
October	23,107,016	24,707,249	(1,600,233)	-6.48%
November	27,958,885	19,882,939	8,075,946	40.62%
December	21,351,498	18,314,222	3,037,276	16.58%
January	21,117,470	17,636,972	3,480,498	19.73%
February	27,856,400	33,102,769	(5,246,369)	-15.85%
Rolling 12-Month Total	282 888 580	269 685 425	-	

Rolling 12-Month Total 282,888,580 269,685,425 **Rolling, 12-Month Average** 23,574,048 22,473,785

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



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 2024 reflects eight months of activity to date.

Water fund receipts exceeded required disbursements by 9% through February 29, 2024 compared to the four-year historical average ratio of required receipts exceeding disbursements by 8% since July 1, 2019.

Sewer fund receipts exceeded required disbursements by 3% through February 29, 2024 in line with the four-year historical average ratio of required receipts exceeding disbursements by 6% since July 1, 2019.

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 2020		FY 2021		FY 2022		FY 2023		FY 2024 Thru Feb 29
Water										
Receipts MOU Adjustments	\$	332,606,196	\$	336,642,021	\$	338,117,694 -	\$	363,335,474 -	\$	258,742,886
3 Adjusted Receipts4 Disbursements5 Receipts Net of Required Transfers		332,606,196 (296,190,425) 36,415,771		336,642,021 (308,713,407) 27,928,614		338,117,694 (316,495,360) 21,622,334		363,335,474 (349,186,375) 14,149,099		258,742,886 (237,590,996) 21,151,890
6 I&E Transfer		(25,719,751)		(31,991,687)		(26,622,862)		(9,898,100)		(28,618,500)
7 Net Receipts	\$		\$	(4,063,073)	\$	(5,000,528)	\$	4,250,999	\$	(7,466,610)
8 Ratio of Receipts to Required Disbursements (Line 3/Line 4)	Ť	112%		109%		107%		104%		109%
Sewer										
9 Receipts 10 MOU Adjustments	\$	490,461,356 -	\$	472,871,853 -	\$	471,979,297 -	\$	498,888,416 -	\$	336,535,156 -
11 Adjusted Receipts		490,461,356		472,871,853		471,979,297		498,888,416		336,535,156
12 Disbursements		(445,604,952)		(436,600,883)		(450,701,751)		(473,516,238)		(328,023,034)
13 Receipts Net of Required Transfers		44,856,404		36,270,970		21,277,546		25,372,178		8,512,122
14 I&E Transfer15 DWSD Shortfall Advance		(19,096,200)		(40,504,727)		(37,651,788)		(26,766,200)		(12,468,000)
16 Shortfall Repayment (principal)		17,542,669		18,206,431		8,296,578		-		-
17 Net Receipts	\$	43,302,873	\$	13,972,674	\$	(8,077,664)	\$	(1,394,022)	\$	(3,955,878)
18 Ratio of Receipts to Required Disbursements (Line 11/Line 12)		110%		108%		105%		105%		103%
Combined										
19 Receipts	\$	823,067,552	\$	809,513,874	\$	810,096,991	\$	862,223,890	\$	595,278,042
20 MOU Adjustments		_		_		_		_		-
21 Adjusted Receipts		823,067,552		809,513,874		810,096,991		862,223,890		595,278,042
22 Disbursements		(741,795,377)		(745,314,290)		(767,197,111)		(822,702,613)		(565,614,030)
23 Receipts Net of Required Transfers		81,272,175		64,199,584		42,899,880		39,521,277		29,664,012
24 I&E Transfer		(44,815,951)		(72,496,414)		(64,274,650)		(36,664,300)		(41,086,500)
25 Shortfall Advance		-		-		-		-		-
26 Shortfall Repayment	<u></u>	17,542,669	•	18,206,431	Φ.	8,296,578	•	- 0.050.077	•	- (44, 400, 400)
27 Net Receipts	\$	53,998,893	\$	9,909,601	\$	(13,078,192)	\$	2,856,977	\$	(11,422,488)
Ratio of Receipts to Required Disbursements (Line 21/Line 22)		111%		109%		106%		105%		105%



Chart 1 - GLWA 12-Month Net Receipts - Water

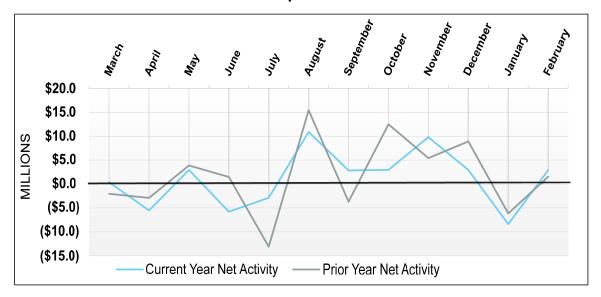
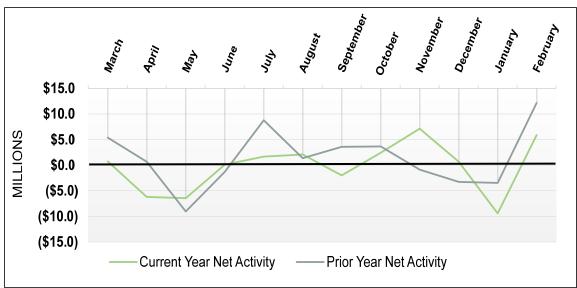


Chart 2 – GLWA 12-Month Net Receipts – Sewer





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 2024 reflects eight months of activity to date.

Water fund receipts exceeded required disbursements by 1% through February 29, 2024 compared to the four-year historical average ratio of required receipts exceeding disbursements by 3% since July 1, 2019.

Sewer fund receipts exceeded required disbursements by 5% through February 29, 2024 compared to the four-year historical average of required receipts exceeding disbursements by 3% since July 1, 2019.



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

			FY 2020		FY 2021		FY 2022		FY 2023		FY 2024 Thru Feb 29
	Water										
1 2	Receipts MOU Adjustments	\$	96,885,723	\$	102,067,423 -	\$	101,964,963 -	\$	123,766,624	\$	79,116,937
3 4	Adjusted Receipts Disbursements		96,885,723 (97,823,097)		102,067,423 (100,707,200)		101,964,963 (94,495,601)		123,766,624 (117,666,100)		79,116,937 (78,585,472)
5	Receipts Net of Required Transfers		(937,374)		1,360,223		7,469,362		6,100,524		531,465
6	I&E Transfer		-		_		-		-		-
7	Net Receipts	\$	(937,374)	\$	1,360,223	\$	7,469,362	\$	6,100,524	\$	531,465
8	Ratio of Receipts to Required Disbursements (Line 3/Line 4)		99%		101%		108%		105%		101%
	Sewer										
9 10	Receipts MOU Adjustments	\$	264,689,559 -	\$	308,210,767 -	\$	291,280,896 -	\$	298,896,942 -	\$	202,642,498
11	Adjusted Receipts		264,689,559		308,210,767		291,280,896		298,896,942		202,642,498
12	Disbursements		(275,507,374)		(295,100,771)		(285,256,000)		(283,095,100)		(192,414,857)
13	Receipts Net of Required Transfers		(10,817,815)		13,109,996		6,024,896		15,801,842		10,227,641
14	I&E Transfer		-		-		-		-		-
15 16	Shortfall Advance from GLWA Net Receipts	\$	(10,817,815)	\$	13,109,996	\$	6,024,896	\$	15,801,842	\$	10,227,641
17	Ratio of Receipts to Required Disbursements (Line 11/Line 12)	Ť	96%		104%		102%	Ψ	106%	Ė	105%
	Combined										
18 19	Receipts MOU Adjustments	\$	361,575,282	\$	410,278,190 -	\$	393,245,859 -	\$	422,663,566	\$	281,759,435 -
20	Adjusted Receipts		361,575,282		410,278,190		393,245,859		422,663,566		281,759,435
21	Disbursements		(373,330,471)		(395,807,971)		(379,751,601)		(400,761,200)		(271,000,329)
22	Receipts Net of Required Transfers		(11,755,189)		14,470,219		13,494,258		21,902,366		10,759,106
23	I&E Transfer		-		-		-		-		-
24 25	Shortfall Advance from GLWA	\$	(11,755,189)	\$	14,470,219	\$	13,494,258	\$	21,902,366	\$	10,759,106
20	Net Receipts Patio of Pagainta to Pagaind	۳	(11,133,109)	Ψ	14,410,219	Ψ	13,434,230	Ψ	21,302,300	Ψ	10,739,100
26	Ratio of Receipts to Required Disbursements (Line 20/Line 21)		97%		104%		104%		105%		104%

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

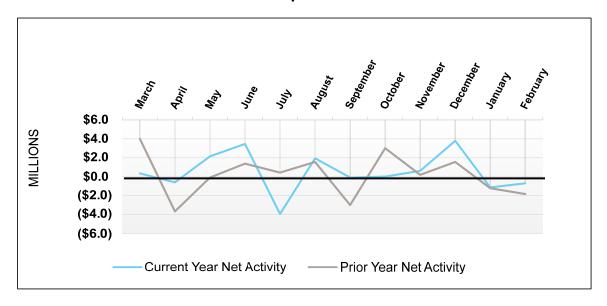
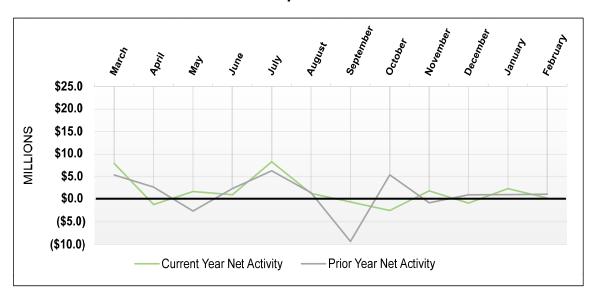


Chart 4 – DWSD 12-Month Net Receipts – Sewer



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 2024 reflects eight months of activity to date.

Water fund net receipts exceeded required disbursements by 7% through February 29, 2024 compared to the four-year historical average ratio of required receipts exceeding disbursements by 7% since July 1, 2019.

Sewer fund receipts exceeded required disbursements by 4% through February 29, 2024 compared to the four-year historical average ratio of required receipts exceeding disbursements by 5% since July 1, 2019.

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

		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024 Thru Feb 29
V	Water					
	Receipts MOU Adjustments	\$ 429,491,919 -	\$ 438,709,444 -	\$ 440,082,657 -	\$ 487,102,098 -	\$ 337,859,823 -
	Adjusted Receipts	429,491,919	438,709,444	440,082,657	487,102,098	337,859,823
	Disbursements	(394,013,522)	(409,420,607)	(410,990,961)	(466,852,475)	(316,176,468)
	Receipts Net of Required Transfers	35,478,397	29,288,837	29,091,696	20,249,623	21,683,355
6 l	&E Transfer	(25,719,751)	(31,991,687)	(26,622,862)	(9,898,100)	(28,618,500)
7 N	Net Receipts	\$ 9,758,646	\$ (2,702,850)	\$ 2,468,834	\$ 10,351,523	\$ (6,935,145)
	Ratio of Receipts to Required Disbursements (Line 3/Line 4)	109%	107%	107%	104%	107%
S	Sewer					
9 F	Receipts	\$ 755,150,915	\$ 781,082,620	\$ 763,260,193	\$ 797,785,358	\$ 539,177,654
10 N	MOU Adjustments	-	-	<u> </u>	<u>-</u>	-
11 A	Adjusted Receipts	755,150,915	781,082,620	763,260,193	797,785,358	539,177,654
12 E	Disbursements	(721,112,326)	(731,701,654)	(735,957,751)	(756,611,338)	(520,437,891)
13 F	Receipts Net of Required Transfers	34,038,589	49,380,966	27,302,442	41,174,020	18,739,763
14 la	&E Transfer	(19,096,200)	(40,504,727)	(37,651,788)	(26,766,200)	(12,468,000)
15 S	Shortfall Advance	-	-	-	-	-
	Shortfall Repayment (principal)	17,542,669	18,206,431	8,296,578	-	-
17 N	Net Receipts	\$ 32,485,058	\$ 27,082,670	\$ (2,052,768)	\$ 14,407,820	\$ 6,271,763
	Ratio of Receipts to Required Disbursements (Line 11/Line 12)	105%	107%	104%	105%	104%
	Combined					
19 F	Receipts	\$ 1,184,642,834	\$ 1,219,792,064	\$ 1,203,342,850	\$ 1,284,887,456	\$ 877,037,477
20 N	MOU Adjustments	-	-	_	-	-
21 A	Adjusted Receipts	1,184,642,834	1,219,792,064	1,203,342,850	1,284,887,456	877,037,477
22 E	Disbursements	(1,115,125,848)	(1,141,122,261)	(1,146,948,712)	(1,223,463,813)	(836,614,359)
23 F	Receipts Net of Required Transfers	69,516,986	78,669,803	56,394,138	61,423,643	40,423,118
24 l	&E Transfer	(44,815,951)	(72,496,414)	(64,274,650)	(36,664,300)	(41,086,500)
25 S	Shortfall Advance	-	-	-	-	-
26 S	Shortfall Repayment	17,542,669	18,206,431	8,296,578		
27 N	Net Receipts	\$ 42,243,704	\$ 24,379,820	\$ 416,066	\$ 24,759,343	\$ (663,382)
	Ratio of Receipts to Required Disbursements (Line 21/Line 22)	106%	107%	105%	105%	105%

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Financial Services Audit Committee Communication

Date: May 24, 2024 (Presented June 17, 2024)

To: Great Lakes Water Authority Audit Committee

From: Nick Simms Grants Management Professional

Re: Grants, Gifts, and Other Resources Report Through April 30, 2024

Highlights: Key activities to note in this month's report through April 30, 2024, includes the following.

- ✓ <u>96 Inch Water Transmission Main Relocation</u> The Great Lakes Water Authority submitted the first a grant reimbursement drawdown of a SRF project (7532-02) for the 96 Inch Water Transmission Main Relocation Phase 2 (Ref #2023-019) with American Rescue plan funds in the amount of \$3,651,730.
- ✓ <u>Safeguarding Tomorrow Revolving Fund Program Proposal</u> The Great Lakes Water Authority provided a proposal for the Safeguarding Tomorrow Revolving Fund Program (Ref #2024-007) in the amount of \$3 million. This proposal assists the State of Michigan with a list of projects from communities to implement hazard mitigation projects. The list of projects helps the state to apply for a request for funds through the Safeguarding Tomorrow program with the Federal Emergency Management Agency (FEMA).
- ✓ Items highlighted in yellow in the attached tables reflect changes from the prior report.

Background: The Great Lakes Water Authority (GLWA) delegated authority to the Chief Executive Officer to oversee and report on activities identified in the GLWA Articles of Incorporation related to solicitation and receipt of grants, gifts, and other resources ⁽¹⁾ as stated in Article 4 – Powers, Section B (4):

(4) Solicit, receive, and accept gifts, grants, labor, loans, contributions of money, property, or other things of value, and other aid or payment from any federal, state, local, or intergovernmental government agency or from any other person or entity, public or private, upon terms and conditions acceptable to the Authority, or participate in any other way in a federal, state, local, or intergovernmental government program⁽²⁾.

(1) Other resources as referenced above refer to labor, contributions of money, property, or other things of value from any other person or entity, public or private with the exception for loans,

subject to provisions of the GLWA Board Debt Management Policy, and Intergovernmental agreements and other activities that are addressed in the GLWA Board Procurement Policy.

(2) Participation in any other way in a federal, state local, or intergovernmental government program includes participation in research projects at universities.

GLWA's Grants, Gifts, and Other Resources Delegation Policy is online at <u>Grants, Gifts, and Other Resources Delegation Policy - GLWA (glwater.org)</u>.

Analysis: The tables in each section of this report present GLWA grant activity by each phase. As a grant moves through each phase, it is shown in the corresponding table.

The **pre-award** phase includes the process of applying for a grant and the period prior to the signing of the grant agreement between the awarding agency and GLWA.

The **award phase** reflects the period after the agreement is executed with the awarding agency. In this phase, GLWA becomes responsible for meeting the administrative, financial, and programmatic reporting requirements of the award.

The **post award** phase is the final stage of grant activity and includes final reporting requirements, auditing, and closeout. There are final financial and programmatic reports that must be submitted to formally close out the grant as defined in each grant agreement.

Items of note related to each table include the following.

Table 1 – Pre-Award Programs reflects open submissions for FY 2023 and FY 2024 to date. The summarized activity provided identifies two earmark EPA Community Grants, seven FEMA Flood projects, three application submissions, two letters of intent to support and collaborate with other entities, one letter of intent to apply by GLWA, a State of Michigan Public Act 53 ARPA grant supporting water infrastructure projects, and the I-94 Modernization Project grant which is in the National Environmental Policy Act (NEPA) process to identify any environmental impacts related to the grant activities.

Table 2 - Awarded Programs reflects all open, awarded grants from FY 2021 through FY 2024. Current month activity below includes one State Revolving Fund American Rescue Plan Act Funding program in which there has been one disbursement request submitted to date, three award receipts related to local nonprofit apprenticeship grants, two disbursement requests submitted for two FEMA projects, and the Department of Energy grant in which only expenses related to the GLWA cost share have been accounted for to date.

Table 3 – Post Award Programs has no current activity to report for April 2024 related. Funds related to these programs have been received in full and the programs are in the process of being closed out, including any closeout reporting requirements.



Financial Services Audit Committee Communication

Table 1 – Pre-Award Programs reflects open submissions for FY 2023 and FY 2024 to date. The Programs listed under this section do not have a grant agreement between the awarding agency and GLWA at this time, but the grant has been applied to or earmarked. The summarized activity provided identifies two earmark EPA Community Grants, seven FEMA Flood projects, three application submissions, two letters of intent to support and collaborate with other entities, one letter of intent to apply by GLWA, a State of Michigan Public Act 53 ARPA grant supporting water infrastructure projects, and the I-94 Modernization Project grant which is in the National Environmental Policy Act (NEPA) process to identify any environmental impacts related to the grant activities.

Table 1 - Pre-Award Programs

Reference Number	Request Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status
2023-002	7/1/2022	FY2022 Environmental Protection Agency Community Grant – Detroit River Interceptor	Federal Grant (Reimbursement Basis)	\$2,000,000 (20% Cost Share)	Federal Audit Requirements	Earmark
2023-003	7/1/2023	FY2023 Environmental Protection Agency Community Grant – PFAS Compounds remediations project	Federal Grant (Reimbursement Basis)	\$3,452,972 (20% Cost Share)	Federal Audit Requirements	Earmark
2023-012	4/4/2023	Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 660110 – Obligated \$319,911 Fairview PS	Federal pass- through State (Reimbursement Basis)	\$319,911	Federal Audit Requirements	Grant Amount is Estimated

Reference Number	Request Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status
2023-009	4/4/2023	Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 660133 – Obligated \$80,129 Puritan Fenkell CSO	Federal pass- through State (Reimbursement Basis)	\$80,129	Federal Audit Requirements	Grant Amount is Estimated
2023-010	4/11/2023	Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 660118 – Obligated \$180,000 WRRF	Federal pass- through State (Reimbursement Basis)	\$180,000	Federal Audit Requirements	Grant Amount is Estimated
2023-011	8/30/2022	Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 668672– Obligated \$43,031 System Wide Emergency Protective Measures	Federal pass- through State (Reimbursement Basis)	\$43,031	Federal Audit Requirements	Grant Amount is Estimated
2023-018		Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 673958 Detroit River Interceptor	Federal pass- through State (Reimbursement Basis)	\$529,731	Federal Audit Requirements	Grant Amount is Estimated
2023-014		Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 660745 East Side Sewers	Federal pass- through State (Reimbursement Basis)	\$3,566,407	Federal Audit Requirements	Grant Amount is Estimated
2023-015		Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 670521 CAT-Z – Allocation of Management Costs	Federal pass- through State (Reimbursement Basis)	\$50,000	Federal Audit Requirements	Grant Amount is Estimated

Reference Number	Request Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status
2024-001	8/30/2023	NFWF Coastal Resilience Challenge	Letter of Intent by University of Michigan	Unknown at this time	Unknown at this time	Grant Amount is Estimated
2024-002	8/30/2023	NOAA Climate Resilience Regional Challenge	Letter of Intent by University of Michigan	Min \$25,000,000	Unknown at this time	Grant Amount is Estimated
2024-003	10/30/2023	Workforce Development Opportunity Grant	Application Submitted by GLWA	\$1,800,000	Federal Audit Requirements	Grant Amount is Estimated and dependent on number of applicants EPA receives
2024-004	11/15/2023	Climate Pollution Reduction Grants Program	Letter of Intent to Apply by GLWA	\$500,000,000	Federal Audit Requirements	Grant Amount is Estimated
2024-005	12/15/2023	Fiscal Year 2023 Building Resilient Infrastructure and Communities (BRIC) Project Scoping	Michigan State Police Application Submitted by GLWA	\$856,000	Federal Audit Requirements	Grant Amount is Estimated
2023-023	8/30/2023	I-94 Modernization Project	MDOT Federal pass- through State (Reimbursement Basis)	\$34,400,000	Federal Audit Requirements	NEPA Review with the State of Michigan
2024-006		American Rescue Plan PA-53 Clean Water Infrastructure Improvements	Federal pass- through State (Reimbursement Basis)	\$5,000,000	Federal Audit Requirements	Grant Amount is Estimated

Reference Number	Request Date	Program Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status
<mark>2024-007</mark>		Safeguarding Tomorrow Revolving Fund Program	Application Submitted by GLWA	\$3,000,000	Federal Audit Requirements	Grant Amount is Estimated

Table 2 Awarded Programs reflects all awarded grants from FY 2021 through FY 2024. These Projects have been awarded by the agency listed and an agreement is in place. Each grant is in process including compliance checks for all required administrative, financial, and programmatic requirements. Current month summarized activity below includes one State Revolving Fund American Rescue Plan Act Funding program in which there has been one disbursement request submitted to date, three award receipts related to local nonprofit apprenticeship grants, two disbursement requests submitted for two FEMA projects, and the Department of Energy grant in which only expenses related to the GLWA cost share have been accounted for to date.

Table 2 - Awarded Programs

Reference Number	Request Date	Program Description	Type of Activity	Grant Amount	Compliance and/or Performance Requirements	Status
2022-004	2/23/2022	Water Technician Registered Apprenticeship Program- \$2,225 per apprentice, 25 apprentices	Macomb Community College Tuition (Nonprofit)	\$55,625	None	Ongoing No activity as of date for FY 2024
2021-012	9/21/2021	Michigan Industrial Cluster Approach (MICA 3.0) Apprenticeship Program - \$1,000 per apprentice, 45 apprentices	Focus Hope (Nonprofit)	\$45,000	None	Received \$24,000 in FY 2024
2024-003	7/7/2023	Detroit Employment Solutions Corporation (DESC) Apprentices \$5,000 per apprentice; 9 apprentices	Detroit At Work (Nonprofit)	\$45,000	None	\$25,000 received in the month of August
2023-005	4/1/2023	Department of Energy – Hydrothermal Liquification Project	Federal Grant (Reimbursement Basis)	\$1,000,000	Federal Audit Requirements	Awarded Ongoing

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Reference Number	Request Date	Program Description	Type of Activity	Grant Amount	Compliance and/or Performance Requirements	Status
2023-013		Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 714729 Outfalls	Federal pass-through State (Reimbursement Basis)	\$1,332,235	Federal Audit Requirements	Disbursement Request of \$275,167.40 submitted in February 2024
2023-022		Federal Emergency Management Agency (FEMA), June 25-26 Flood, DR-4607 Project 664811 Conner Creek Sewer System	Federal pass-through State (Reimbursement Basis)	\$8,888,277	Federal Audit Requirements	Disbursement Request of \$1,805,600 submitted in February 2024
2023-019	3/3/2021	American Rescue Plan – State Revolving Fund (ARPA) Funded Project 7532-02 96 Inch Water Transmission Main Relocation Phase 2 EGLE	Federal pass-through State (Reimbursement Basis)	<mark>\$16,057,500</mark>	Federal Audit Requirements	Disbursement Request of \$3,651,730 submitted in April 2024

Table 3 – Post Award Programs has no current activity to report for April 2024. Funds related to these programs have been received in full and the programs are in the process of being closed out, including any closeout reporting requirements.

Proposed Action: Receive and file this report.

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Financial Services Audit Committee Communication

Date: May 24, 2024 (Presented June 17, 2024)

To: Great Lakes Water Authority Audit Committee

From: Gerri Williams, 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, 2024 (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:
 - o As of As of March 31, 2024: 5.14%
 - o December 31, 2023: 5.03%
- Yield at Market:
 - As of March 31, 2024: 5.27%As of December 31, 2023: 5.12%
- Portfolio Allocation in Cash/Money Market/LGIP Securities:
 - o As of March 31, 2024: 65%
 - o As of December 31, 2023: 67%

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 2024





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- III. Summary Market Overview and Outlook
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Monthly Investment Income Compared to Fed Funds Rate

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Executive Summary

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, 2024, approximately 65% of the funds were held in cash and money market accounts maturing overnight. The percentage is somewhat like what was seen in the prior quarter.
- ➤ Return The overall yield at market increased to 5.27% as of March 31, 2024, versus 5.12% as of December 31, 2023. The higher yield is reflective of the "higher-for-longer" stance and mantra reiterated by the Federal Reserve. GLWA earned over \$43.3 million (unaudited) in investment income for the first nine months of fiscal year 2024 on a book value basis. Investment income includes earnings on all fund types, including restricted and unrestricted funds combined as well as construction and bond proceeds.

AVAILABLE FUNDS (Unaudited)						
Туре	Book Value	Market Value	Yield @ Cost (as of 3/31/24)	Yield @ Market (as of 3/31/24)		
Deposit Accounts	\$15,998,140	\$15,998,140	3.85%	3.85%		
Trust Money Market Fund	\$362,138,693	\$362,138,693	5.18%	5.18%		
Money Market Fund	\$9,458,126	\$9,458,126	5.19%	5.19%		
Local Government Investment Pool	\$486,060,188	\$486,060,188	5.40%	5.40%		
Managed Funds	\$478,603,033	\$476,559,397	4.93%	5.32%		
MARCH 2024 TOTALS:	<u>\$1,352,258,181</u>	<u>\$1,350,214,544</u>	<u>5.14%</u>	<u>5.27%</u>		
PREVIOUS QUARTER TOTALS:	<u>\$1,393,242,230</u>	<i>\$1,391,922,053</i>	<u>5.03%</u>	<u>5.12%</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 5.03% as of 12/31/2023 to 5.14% as of 3/31/2024.
- ➤ The total portfolio had a market yield of 5.27% at the end of March, compared to 5.12% as of December 13, 2023. Yield at market represents what the market would provide in return if the portfolio was purchased on March 31, 2024 (versus purchased in prior months / years); the higher yield is a result of the Federal Reserve's "higher for longer" mantra.
 - We utilize a variety of investment sectors, and because of that, this 5.27% yield at market as of 3/31/2024 is slightly higher than in the prior quarter as the increase in longer-term yields during the quarter outweighed the shift in short-term yields.

PORTFOLIO PERFORMANCE - PROJECTIONS

- ➤ GLWA earned over \$43.3 million (unaudited) in investment interest income for fiscal year-to-date 2024 (as of 3/31/2024) on a book value basis.
- ➤ The fiscal year-to-date 2024 period earnings were higher than 2023 year-to-date earnings, mainly due to the Federal Reserve keeping short-term interest rates higher for longer.

^{*} 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, 2024) 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

- As expected, the Federal Reserve (the "Fed") left the target range for the Federal Funds rate unchanged at the March FOMC meeting (5.25% to 5.50%). The Fed also released the quarterly update to its Summary of Economic Projections, which continued to show three rate cuts in calendar year 2024, but one less cut in 2025. During the press conference, Fed Chair Jerome Powell reiterated that the Fed needs greater confidence that inflation is moving sustainably down toward its 2.0% target before reducing rates. It would also like to see the labor market move into better balance. Stubborn inflation and stronger fundamental economic data will likely delay any rate cuts until later in the year.
- ➤ Inflation readings released in March were mixed: the year-over-year change in the consumer price index ("CPI") fell by 0.1% to 3.8%, while the personal consumption expenditures price index ("PCE") rose slightly to 2.5% in February. In a reversal of recent trends, PCE goods prices rose faster than prices in the services sector largely due to rising energy prices. Housing and utilities inflation remained elevated. The year-over-year change in core PCE (which excludes volatile food and energy components) fell slightly to 2.8%, marking the fourteenth consecutive month of declines.
- ➤ Job growth in March came in at 303,000, well above expectations. The unemployment rate ticked back down to 3.8% from 3.9%, while wage growth continued to outpace inflation.
- The final reading for fourth quarter calendar year 2023 real gross domestic product ("GDP") came in at 3.4%, which was slightly higher than previous estimates. Consumer spending rose at a 3.4% pace in the quarter, even better than the third quarter's robust 3.1% growth rate.
- > The ISM manufacturing index showed the sector expanded for the first time since October of 2022. This was welcome news for the struggling sector as demand appears to still be in the early stages of recovery.

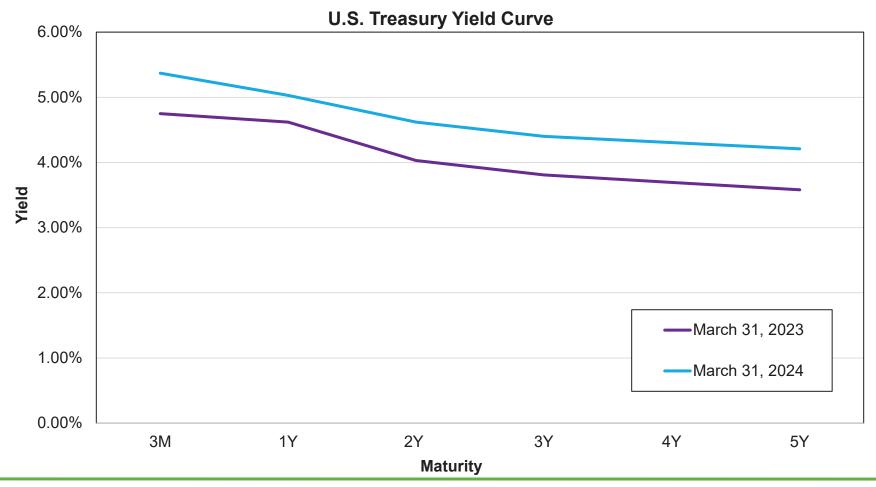
ECONOMIC IMPACT ON PORTFOLIO

- > Despite trading over a 20 40 basis point range during the quarter, U.S. Treasury yields finished the quarter relatively higher.
- > Short-term yields (less than three months) remained above 5.00%, while the yield curve remained deeply inverted with shorter maturities continuing to outyield longer ones.
- > The yields on benchmark 2, 5, and 10-year U.S. Treasuries ended the quarter at 4.62%, 4.21%, and 4.20%, respectively, representing an increase for the quarter.
- > The dollar index ("DXY") inched higher by 0.3% in March, as the markets digested the impact of strong economic data and a comeback of "higher-for-longer" Fed rate rhetoric.
- ➤ Portfolio Impact: Fed guidance continues to suggest lower short-term rates over the course of the year, if inflation continues to ease as expected, although perhaps at a slower pace. As a result, we seek to maintain neutral portfolio durations relative to benchmarks. Spreads on Federal Agencies have remained tight and appear to offer limited value. Short-term money markets continue to benefit from decade-high yields and a patient Federal Reserve. Although short-term credit spreads have tightened compared to historical levels, absolute yield levels on commercial paper investments remain enticing for short-term investors.



Summary Market Overview and Outlook Treasury Yield Curve Presently Inverted

• During the last quarter, the FOMC maintained interest rate levels and continued to signal fewer cuts for 2024 than the market anticipated on the back of some stickier inflation data; all rates beyond one year rose with the largest increases in intermediate maturities and the curve remains inverted as the Fed Funds rate remains elevated.



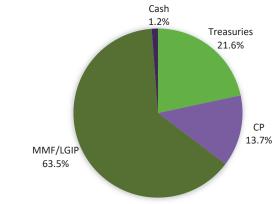


Overall Portfolio Composition Summary

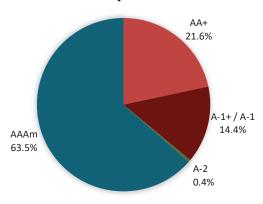
PORTFOLIO STATISTICS

Invested Amount	\$1.350 Billion	
Duration	0.20 Years	
Yield at Cost	5.14%	
Yield at Market	5.27%	

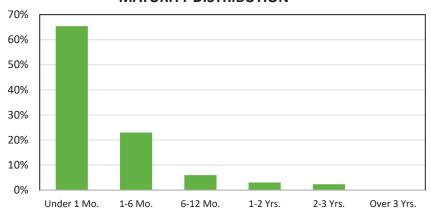
SECTOR ALLOCATION



CREDIT QUALITY



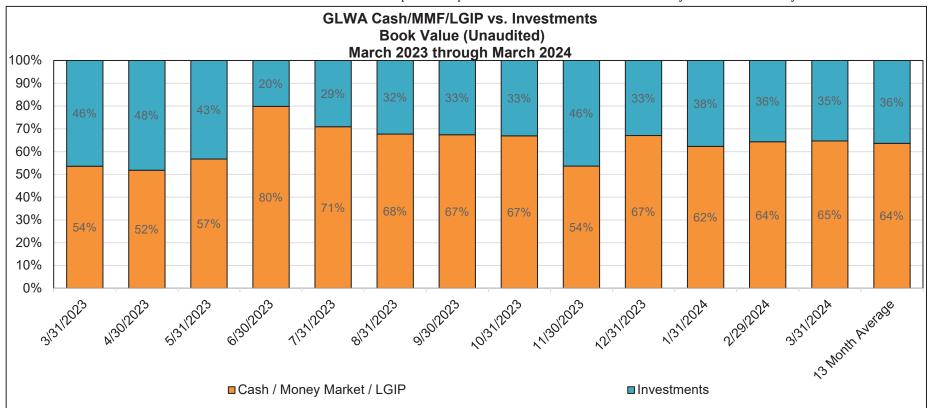
MATURITY DISTRIBUTION





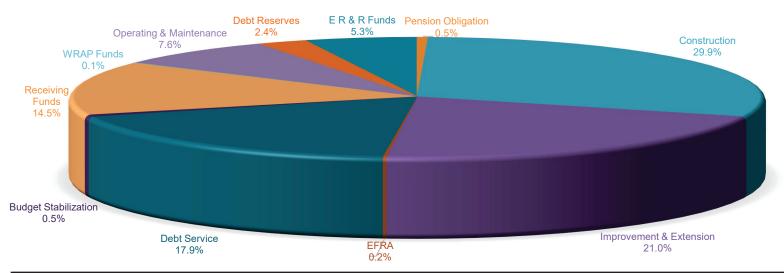
Portfolio Mix - Cash / Money Market vs. Investments

- > 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 2024, around 65% of the overall portfolio was invested in cash, LGIP, and/or overnight money market fund accounts. This is in line with the level seen in the previous quarter and is reflective of the inverted yield curve currently seen in the market.





Portfolio Snapshot Investments – By Account Purpose



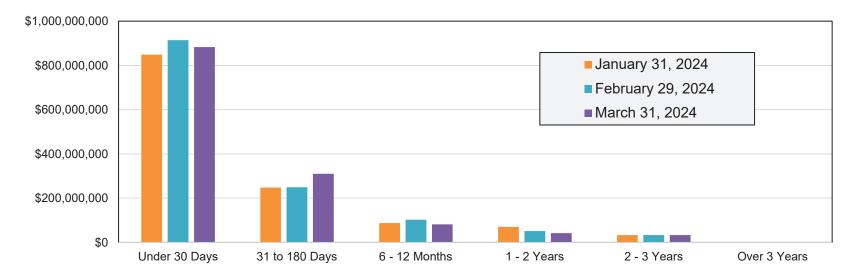
	Value	Allocation	Cost	Market		
Account Purpose	Market	%	Yield at	Yield at	Duration	Strategy
Construction Bond Funds	\$ 403,365,613	29.9%	5.40%	5.40%	0.003 Years	Cash Flow Driven
Improvement & Extension	\$ 283,810,869	21.0%	5.32%	5.23%	0.268 Years	Cash Flow Driven
Debt Service	\$ 242,335,794	17.9%	5.45%	5.46%	0.264 Years	Short-Term
Receiving Funds (includes lockbox account)	\$ 195,343,547	14.5%	5.11%	5.11%	0.003 Years	Short-Term
Operating & Maintenance	\$ 103,233,983	7.6%	5.10%	5.10%	0.003 Years	Short-Term
Extraordinary Repair & Replacement Funds	\$ 71,715,957	5.3%	2.65%	4.83%	1.555 Years	Long-Term
Debt Reserves	\$ 31,850,303	2.4%	4.37%	5.23%	0.234 Years	Long-Term
Budget Stabilization Funds	\$ 7,314,078	0.5%	2.90%	4.77%	1.741 Years	Long-Term
Pension Obligation Funds	\$ 7,090,884	0.5%	5.41%	5.30%	0.167 Years	Short-Term
Evergreen Farmington Regional Account	\$ 2,237,960	0.2%	3.85%	3.85%	0.003 Years	Short-Term
WRAP Funds	\$ 1,915,556	0.1%	5.18%	5.18%	0.003 Years	Short-Term
Total	\$ 1,350,214,544	100.0%	5.14%	5.27%	0.204 Years	

Note: Flint Security Deposit, Evergreen Farmington Local System, and Retainage accounts which are not owned by GLWA are not included in this report.



Portfolio Snapshot Investments – By Maturity

Maturity Distribution	January	⁷ 31, 2024 %	February 29, 202	4 %	March 31, 2024	%
Under 30 Days	\$ 849	0,282,390 66.0%	914,000,976	67.7%	\$ 883,101,727	65.4%
31 to 180 Days	247	7,753,225 19.2%	249,604,296	18.5%	310,562,685	23.0%
6 - 12 Months	87	7,321,872 6.8%	102,410,429	7.6%	81,386,847	6.0%
1 - 2 Years	70),149,547 5.4%	50,991,383	3.8%	41,779,267	3.1%
2 - 3 Years	33	3,241,392 2.6%	32,904,759	2.4%	32,893,561	2.4%
Over 3 Years		- 0.0%		- 0.0%	490,457	0.0%
Totals	\$ 1,287	7,748,426 100.0%	5 \$ 1,349,911,845	100.0%	\$ 1,350,214,544	100.0%





Portfolio Snapshot Investment Accounts – Yield at Cost & Market

	As of March 31, 2024		As of Decem	nber 31, 2023
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Bank A	0.01%	0.01%	0.01%	0.01%
Bank B	3.85%	3.85%	3.61%	3.61%
Sub-Total Bank Deposits	2.40%	2.40%	1.49%	1.49%
Money Market Funds / LGIPs				
Local Government Investment Pool	5.40%	5.40%	5.53%	5.53%
Trust Money Market Fund	5.18%	5.18%	5.25%	5.25%
Money Market Fund	5.19%	5.19%	5.24%	5.24%
Sub-Total MMF / LGIPs	5.30%	5.30%	5.40%	5.40%
Investment Portfolios				
Sewage SR Debt Serv 5403	5.47%	5.46%	5.61%	5.36%
Sewage SR Res 5400	3.32%	5.24%	3.67%	5.11%
Sew 2nd Debt Serv 5403	5.45%	5.48%	5.59%	5.36%
Sewage 2nd Res 5481	4.82%	5.24%	4.82%	5.08%
Sew SRF Debt Serv 5410	5.32%	5.45%	5.57%	5.31%
Sewage ER & R	2.65%	4.84%	2.14%	4.35%
Sewer Improvement & Extension	5.46%	5.35%	5.48%	5.16%
Sewer Pension Obligation	5.42%	5.32%	5.49%	5.38%
Sewer Wrap Fund	0.00%	0.00%	5.64%	7.39%
Sewer Budget Stabilization Fund	2.89%	4.77%	2.14%	4.34%
Sewer Bond Fund	0.00%	0.00%	5.33%	5.56%
Sewer O&M Pension Sub Account	5.31%	5.16%	5.31%	5.30%
Water SR Debt Ser 5503	5.48%	5.47%	5.64%	5.38%
Water SR Reserve 5500	4.70%	5.27%	5.02%	5.18%
Water 2nd Debt Serv 5503	5.49%	5.50%	5.62%	5.39%
Water 2nd Res 5581	5.16%	5.27%	5.15%	5.23%
Water SRF Debt Serv 5575	5.33%	5.46%	5.63%	5.38%
Water ER & R	2.64%	4.82%	2.20%	4.34%
Water Improvement & Extension	5.46%	5.35%	5.48%	5.16%
Water Pension Obligation	5.43%	5.32%	5.52%	5.39%
Water Wrap Fund	0.00%	0.00%	5.59%	11.22%
Water Budget Stabilization Fund	2.93%	4.76%	2.17%	4.33%
Water O&M Pension Sub Account	5.31%	5.16%	5.31%	5.30%
Sub-Total Investment Portfolios	4.93%	5.32%	4.86%	5.15%
Grand Total	<u>5.14%</u>	<u>5.27%</u>	<u>5.03%</u>	<u>5.12%</u>

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 similarly 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, 2024				
	Market Value	YTM @ Mark et	Effective Duration	Weighted Average Maturity	
GLWA					
Great Lakes Water Authority	\$1,350,214,544	5.27%	0.20 Years	75 Days	
Short/Intermediate-Term Indices					
S&P Rated Government Investment Pool Index		5.36%	0.08 Years	30 Days	
BoA / ML 3-Month Treasury Index		5.12%	0.16 Years	59 Days	
BoA / ML 6-Month Treasury Index		5.19%	0.41 Years	150 Days	
BoA / ML 1-Year Treasury Index		5.08%	0.88 Years	322 Days	
BoA / ML 1-3 Year Treasury Index		4.72%	1.76 Years	644 Days	
BoA / ML 1-5 Year Treasury Index		4.56%	2.52 Years	922 Days	
Peer Analysis (Water Entities / Utilities)					
District of Columbia Water & Sewer Authority, DC	\$345,925,957	4.94%	1.13 Years	451 Days	
DuPage Water Commission, IL	\$198,569,712	4.81%	2.09 Years	1,003 Days	
Fairfax County Water Authority, VA	\$185,374,349	4.83%	1.78 Years	685 Days	
Metro Wastewater Reclamation District, CO	\$210,316,290	4.65%	2.49 Years	1,000 Days	
Metropolitan Water District of Southern California, CA	\$739,063,457	4.96%	1.84 Years	811 Days	
Philadelphia Water Department, PA	\$240,377,416	5.21%	0.87 Years	332 Days	
San Bernardino Valley Municipal Water District, CA	\$348,360,453	4.82%	1.72 Years	676 Days	
Tohopekaliga Water Authority, FL	\$204,423,983	4.59%	1.77 Years	882 Days	
Truckee Meadows Water Authority, NV	\$74,127,933	5.03%	1.06 Years	392 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.



Monthly Investment Income

(Book Value in 000's)

FY 2024 INVESTMENT INCOME BY MONTH (Unaudited)

Month	Interest Earned During Period (in thousands)	Realized Gain / Loss (in thousands)	Investment Income (in thousands)
July 2023	\$3,920.9	\$0.0	\$3,920.9
August 2023	\$4,068.8	\$0.0	\$4,068.8
September 2023	\$4,060.2	\$0.0	\$4,060.3
October 2023	\$4,313.0	\$0.0	\$4,313.0
November 2023	\$5,068.5	\$0.0	\$5,068.5
December 2023	\$5,491.7	(\$0.1)	\$5,491.6
January 2024	\$5,544.6	\$0.7	\$5,545.3
February 2024	\$5,287.8	\$0.0	\$5,287.8
March 2024	\$5,571.1	\$0.0	\$5,571.1
FY 2024 Y-T-D	<u>\$43,326.6</u>	<u>\$0.7</u>	<u>\$43,327.3</u>

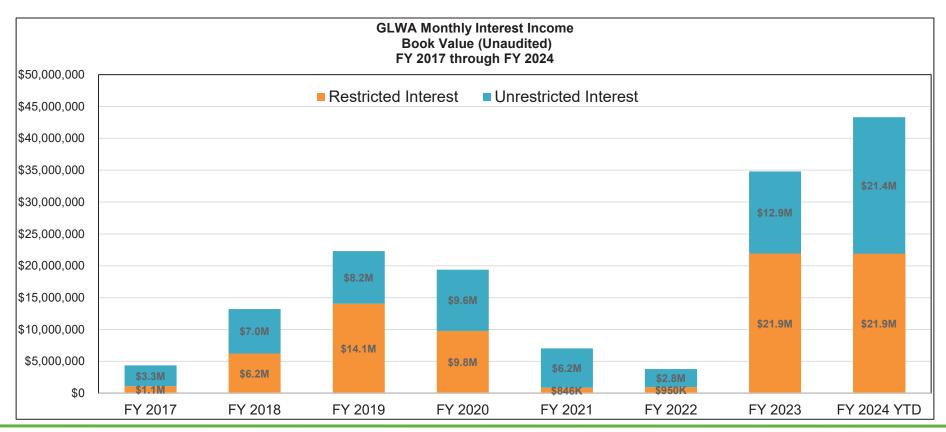
^{*} The realized loss in December of 2023 was due to the sale of investments in the Sewer Second Reserve account in anticipation of liquidity requirements and liquidity needed in the Reserve Fund. The trade settled on December 1st and was available ahead of the bond closing on December 5th.

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

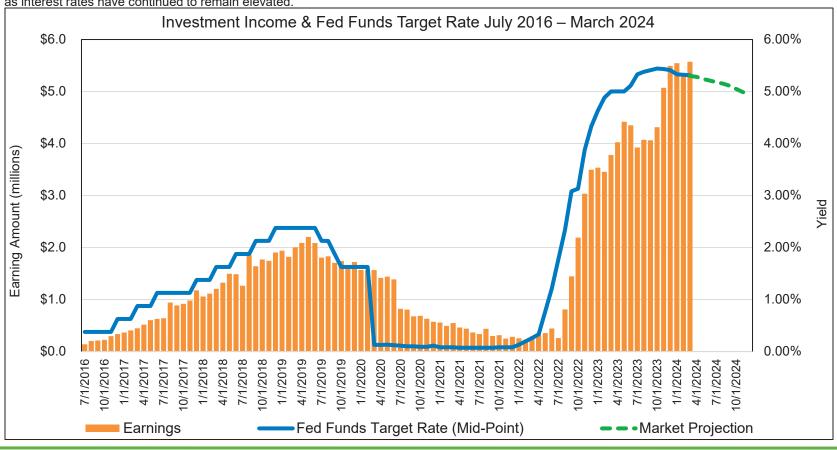
- > GLWA earned \$43.3 million in investment income for the first nine months of fiscal year 2024 on a book value basis compared to \$21.9 million for the first six months of fiscal year 2024.
- ➤ Based on current market assumptions and the addition of assets and proceeds from GLWA's recent bond fund issue, projected investment income for fiscal year 2024 is forecasted to be much higher than in FY 2023 (both restricted fund income and unrestricted fund income combined), as the market expects the Federal Reserve to hold overnight rates "higher for longer" over the next several months.





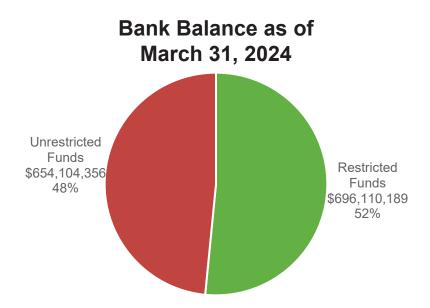
Monthly Investment Income Compared to Fed Funds Rate

- 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 Federal Open Market Committee ("FOMC") continued to hold rates steady in March at a range of 5.25% to 5.50% as Fed officials need "greater confidence" that inflation is slowing sustainably to 2.0%. Looking forward, while the committee revised both their projections for growth and inflation slightly higher, at least one rate cut is still expected for 2024. Nonetheless, GLWA is expected to have higher interest earnings for FY 2024 than in previous years as interest rates have continued to remain elevated.





Allocation and Income by Fund Type





Restricted Principal Restricted Interest

Construction Bond Funds

Debt Reserves

Debt Service

Evergreen Farmington Regional Account

Unrestricted Principal Unrestricted Interest

Extraordinary Repair & Replacement Funds

Improvement & Extension

Operating & Maintenance

Receiving Funds (includes lockbox account)

Note: Interest in I&E accounts is sent to the Receiving Funds and can be used for operations; DWSD's portion of the Receiving Funds is restricted and held in trust.

Restricted Principal Unrestricted Interest

Budget Stabilization Funds

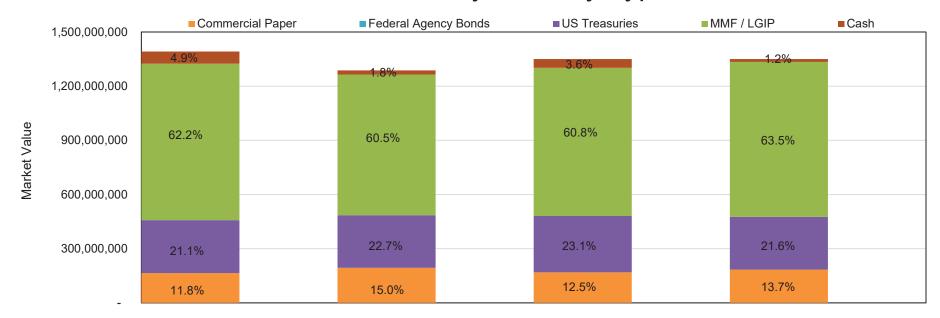
Pension Obligation Funds

WRAP Funds

Note: Interest is sent to the Receiving Funds and can be used for operations



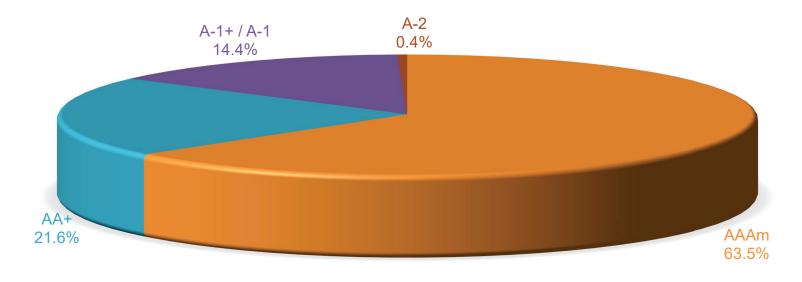
Portfolio Snapshot Investments – By Security Type



	December		January		February		March	
Security Type	Market Value	Asset Allocation	Market Value	Asset Allocation		Asset Allocation	Market Value	Asset Allocation
Commercial Paper	164,781,332	11.8%	193,624,879	15.0%	169,169,161	12.5%	184,327,347	13.7%
Federal Agencies	-	0.0%	-	0.0%	-	0.0%	-	0.0%
U.S. Treasuries	293,495,328	21.1%	291,765,426	22.7%	311,900,934	23.1%	292,199,371	21.6%
MMF / LGIP	866,076,046	62.2%	778,926,934	60.5%	820,917,969	60.8%	857,689,687	63.5%
Cash	67,569,347	4.9%	23,431,186	1.8%	47,923,780	3.6%	15,998,140	1.2%
Total	1,391,922,053	100.0%	1,287,748,426	100.0%	1,349,911,843	100.0%	1,350,214,544	100.0%



Investments – By Credit Quality



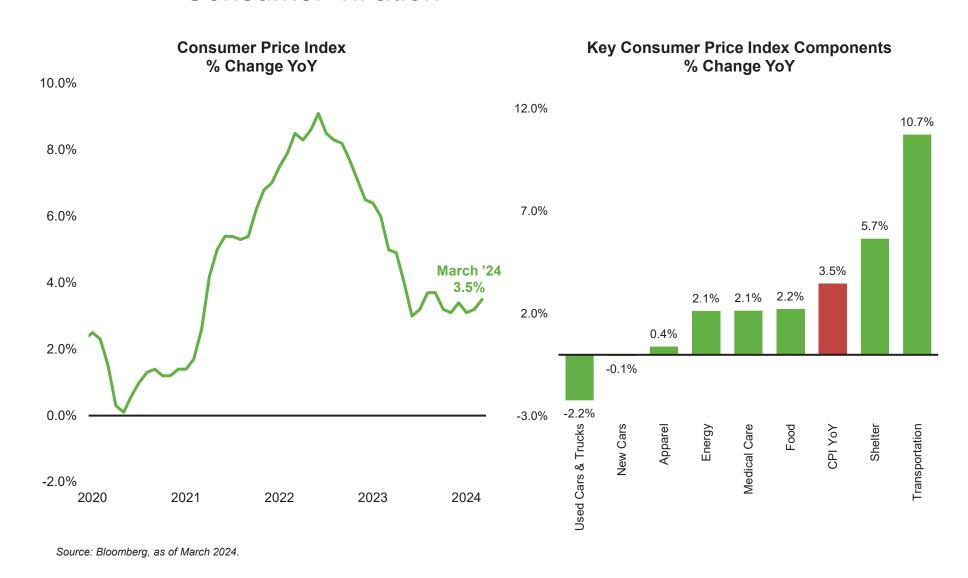
Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	857,657,008	63.5%
AA+	292,192,069	21.6%
A-1 + / A-1	194,333,643	14.4%
A-2	6,031,825	0.4%
NR	-	0.0%
Totals	1,350,214,544	100.0%



Appendix I: Economic Update



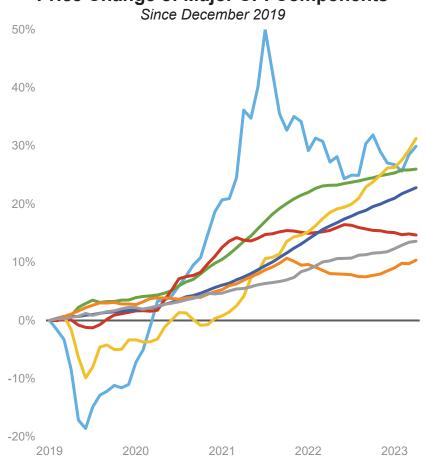
Consumer Inflation





CPI Disinflation Signals Potential for Soft Landing

Price Change of Major CPI Components



CPI Component	12-mo. Change	Weight ¹	Contribution to YoY CPI
Energy	2.1%	6.7%	0.1%
Food	2.2%	13.5%	0.3%
Transportation	10.7%	6.4%	0.7%
Shelter	5.6%	36.2%	2.0%
Goods	-0.7%	18.8%	-0.1%
Other Services ²	3.0%	11.9%	0.4%
Medical Services	2.1%	6.5%	0.1%
Overall	3.5%		

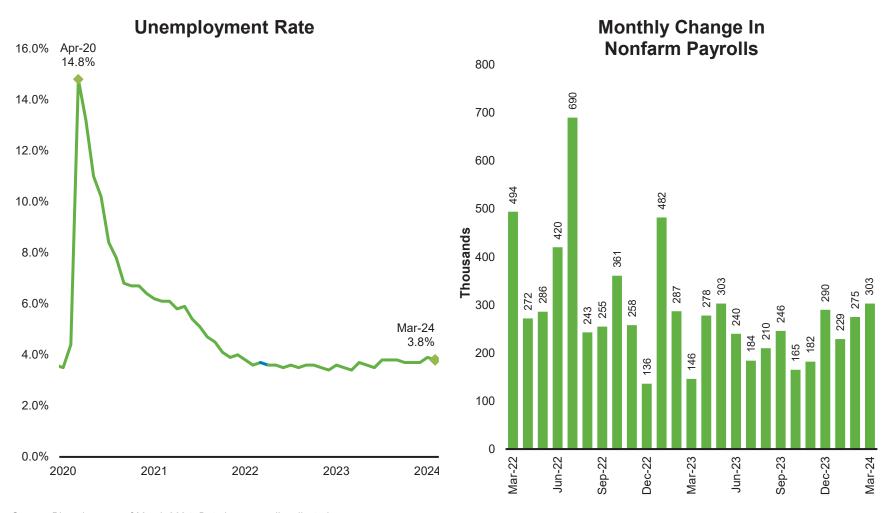
Source: Bloomberg, Bureau of Labor Statistics as of March 2024.

¹ Index weights are as of February 2024 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.



Unemployment Rate Increased to 3.9%

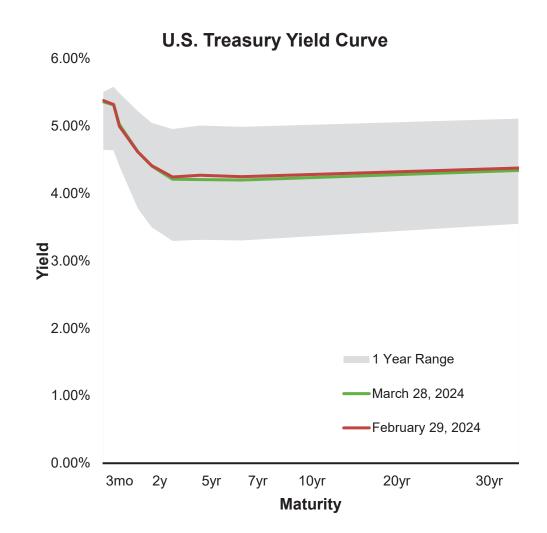


Source: Bloomberg, as of March 2024. Data is seasonally adjusted.



Treasury Yield Curve

	<u>2/29/2024</u>	<u>3/31/2024</u>	<u>Change</u>
3 month	5.38%	5.36%	-0.02%
6 month	5.32%	5.32%	0.00%
1 year	5.00%	5.02%	0.02%
2 year	4.62%	4.62%	0.00%
3 year	4.41%	4.41%	0.00%
5 year	4.24%	4.21%	-0.03%
10 year	4.25%	4.20%	-0.05%
30 year	4.38%	4.34%	-0.04%



Source: Bloomberg, as of 02/29/2024 and 03/31/2024, as indicated.



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- > The U.S. economy is characterized by:
 - Robust growth that continues to show surprising strength
 - Sticky inflation that remains above the Federal Reserve's 2.0% target
 - Labor markets continuing to show impressive job gains and low unemployment
 - Resilient consumer spending supported by wage growth that is outpacing inflation
- > Federal Reserve reaffirms rate cut expectations
 - Forecast of 75 basis points of cuts this year
 - After entering the year expecting 6 cuts in 2024, markets have adjusted their expectations to only 2 to 3 cuts in 2024
 - Fed officials reaffirm that restoring price stability is the priority, but further confidence in inflation moving toward the 2.0% target is needed, which may delay the timing of rate cuts
 - Chair Powell: "...the Committee needs to see more evidence to build our confidence that inflation is moving down sustainably toward our 2.0% goal, and we do not expect that it will be appropriate to begin to reduce rates until we are mor confident that that is the case
- > Treasury yields increase following the change in market expectations
 - Yields on maturities between 2 and 10 years rose 30 40 basis points during the quarter
 - Yield curve inversion persists
 - Spreads in most sectors fell to multi-year lows given the strong economic environment



Fixed Income Market Overview and Outlook

FIXED INCOME MARKET - ECONOMIC HIGHLIGHTS

- > The past quarter was characterized by continued economic resilience led by strong consumer spending, inflation that continues to slowly grind lower, and a robust labor market
- The Federal Reserve (the "Fed") kept the overnight rate at its current target range of 5.25% to 5.50% at its March 20th meeting, as expected, marking the fifth consecutive pause following the last rate hike in July of 2023
 - The Fed's updated "dot plot" implies three 0.25% rate cuts through 2024 while the number of cuts implied for 2025 was reduced from three to two
 - Markets entered the year pricing in over six cuts in 2024 but since have now converged to Fed projections
 - The Fed Chair has said they need more confidence that inflation is moving toward its 2.0% target before the first rate cut
 - Yields moved higher in the quarter with the return of the Fed's "higher-for-longer" stance
- > The market spent the majority of the quarter adjusting its expectations as strong economic data and Fed commentary pushed back on the notion that a rate cut was imminent
 - As a result, Fed Funds futures recalibrated expectations throughout the quarter and are now priced for the first rate cut to occur in July, a four-month delay from expectations at the beginning of the year
- > Reflecting the market adjustment to delayed rate cuts expectations, U.S. Treasury yields increased notably over the quarter
 - The yield on the 2, 5, and 10-year Treasuries rose 37, basis points, 37 basis points, and 32 basis points, respectively
 - As a result of higher absolute yields, U.S. Treasury indices with longer durations generated negative returns, with the breakeven point around the two-year maturity



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Procurement Pipeline

AGENDA ITEM #9A



Great Lakes Water Authority

(313) 964-9157

www.glwater.org

May 2024 - Volume 59

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).

GLWA's FY 2023 Annual Procurement Report

Each year, GLWA produces a report detailing all procurement activity for the last fiscal year. The FY 2023 Annual Procurement Report demonstrates GLWA's commitment to transparency in public procurement by providing detailed information on GLWA purchasing and spending. Key report highlights for FY 2023, which spans July 2022 through June 2023, are below.

- ✓ Procurements awarded totaled \$594.9 million:
- ✓ Procurement executed 4,036 new purchase orders:
- ✓ The total payment to vendors was \$566.3 million: and
- ✓ 93% of all awarded purchases were connected to a formal contract.

The report also demonstrates how GLWA is a significant contributor to the regional economy of Southeast Michigan by including the top ten dollar value projects, top ten Capital Improvement Projects (CIP) invoiced and the top ten vendors by total spend. In addition, detailed appendices conclude the report which provide information on four subjects.

- 1. All contracts awarded, including contract number, vendor, and total amount of the contract:
- 2. All vendors awarded, including the contract number, the vendor, and the total amount of the contract:
- 3. All contracts invoiced; and
- 4. All vendor payments by invoice.

GLWA's mission is to exceed our member partners' expectations by providing water of unquestionable quality as well as efficient and effective wastewater services—but also, and importantly, to promote and support economic growth in the region we serve through our strategic sourcing practices.

Reminder: June 2024 New Solicitation Pause

During the month of June 2024, the GLWA Procurement Team will pause the advertisement of new solicitations in the Bonfire Procurement Portal and the issuance of new purchase orders. This temporary pause will allow Procurement to fully migrate data on existing purchase orders and contracts into GLWA's new Enterprise Resource Planning (ERP) system Workday, which will launch on July 1, 2024. For more information about the June Pause, please review the April 2024 **Procurement Pipeline**. Additional questions may be directed to GLWAVendorOutreach@glwater.org.

Virtual Vendor Introduction Meetings

If you are interested in learning more about doing business with GLWA, contact 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 2024 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.

May 2024 Page 186

Upcoming Solicitations May 2024

Category	CIP#	Description/Project Title	Budget Estimate	
Water System (next four to nine months)				
		Lake Huron Water Treatment Plant – LH-401 Switchgear and Low		
Construction	111001	Lift Improvements	\$100,000,000	
Construction	112008	Northeast WTP Filter Rehabilitation	\$85,550,000	
Design	113010	Southwest WTP Flocculation Improvements	\$4,933,000	
Construction	122016	Downriver Transmission Main Loop – Phase 1 – Inkster Rd	\$21,000,000	
Professional Services	O&M	Specialized Services – Task assigned	\$12,550,000	
Wastewater Systems (next four to nine months)				
Construction	260510	CSO Outfall Rehabilitation Phase VI	\$10,000,000	
Construction	260206	Rehabilitation of 7 Mile Sewer System	\$30,000,000	
Construction	211005.2	WRRF Pump Station 2 VFD Replacements	\$12,000,000	
Design	270007	CSO Facility Disinfection Improvements	\$2,000,000	
Construction	270006	CSO Facility Improvements II	\$15,000,000	
Water System (next three months)				
Construction (Design Build)	122004	96-Inch Water Transmission Main Relocation - Phase III	\$90,000,000	
Wastewater (next three months)				
Design	270001	Pilot Netting and Disinfection Facilities at B03, B04, and B05	\$8,000,000	
Design	270010	Puritan Fenkell and Seven Mile HVAC improvements	\$1,200,000	
Projects moved to Procurement Team (Preparing for solicitation on Bonfire)				
Professional Services	0&M	Lake Huron Water Treatment Plant Sludge Removal and Disposal	\$3,300,000	
Professional Services	O&M	Emergency Standby Generator Preventative Maintenance	\$2,910,225	
Construction	170306	Instrumentation and Control System Plant - wide SCADA Upgrade	\$3,340,000	
Professional Services	O&M	Water and Wastewater Services Charges Consultant	\$300,000	
Professional Services	O&M	Internal Auditor	\$650,000	
Professional Services	O&M	Environmental Health and Safety Assistance	\$2,000,000	
Professional Services	O&M	Refuse and Recycling Waste Pickup and Disposal Services	\$655,000	
Professional Services	O&M	Fleet Management Services Including Leasing and Upfitting Vehicles	\$14,667,500	
Professional Services	O&M	Water and Wastewater Pumping Stations LED Lighting Upgrades	\$7,500,000	
Professional Services	O&M	Staffing Services	\$750,000	

Vendors should continue to monitor Bonfire for solicitation updates and status

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