



Audit Committee Meeting
Friday, June 25, 2021 at 8:00 a.m.
www.glwater.org

Join by Microsoft Teams
Dial-In: 313-771-3116 Conference ID: 868 434 344#
[GLWA Audit Committee Meeting](#)

AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. May 21, 2021 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
7. NEW BUSINESS
 - A. PFM Financial Advisor Presentation - Municipal Market Update and (Page 7) Refunding Outlook
 - B. Bi-annual Transformation Report (Page 47)
8. REPORTS
 - A. CFO Report (verbal)
 - B. Monthly Financial Report for March 2021 (Page 57)
 - C. Business Inclusion and Diversity Program Update (Page 58)
 - D. Gifts, Grants & Other Resources Report through May 31, 2021 (Page 59)
 - E. Quarterly CWIP Report FY 2021 Q3 (Page 65)
9. COMMUNICATIONS
 - A. *The Procurement Pipeline* for June 2021 (Page 91)
10. LOOK AHEAD
 - A. Next Audit Committee Meeting: July 23, 2021 at 8:00 a.m.
11. OTHER MATTERS
12. ADJOURNMENT



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Friday, May 21, 2021

8:00 AM

Telephonic Meeting

Telephonic Meeting

Call-In Number: 1-313-771-3116 Conference ID: 868 434 344#

1. Call To Order

Chairperson Baker called the meeting to order at 8:03 a.m.

2. Quorum Call

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

Committee Members' Attendance Location:

Chairperson Baker (Clinton Township, Michigan)

Director Brown (Detroit, Michigan)

Director Quadrozzi (Farmington Hills, Michigan)

Note: Director Quadrozzi joined the meeting at 9:24 a.m. under Item 8C.
(Business Inclusion and Diversity Program Update).

3. Approval of Agenda

Chairperson Baker requested a Motion to Approve the Agenda.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

4. Approval of Minutes

[2021-177](#) Meeting Minutes April 23, 2021

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [4A April 23, 2021 Audit Committee Meeting Minutes](#)

Chairperson Baker requested a Motion to Approve the April 23, 2021 Audit Committee Meeting Minutes.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business

None

7. New Business

A. [2021-178](#) FY 2021 3rd Quarter Budget Amendments

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7A FY 2021 Third Quarter Budget Amendment Report binder](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors

Agenda of May 26, 2021

The motion carried by a unanimous vote.

Note: Director Baker supported the motion, subject to receiving additional information regarding certain operations and maintenance budget increases, as well as Security and Integrity \$122,000.00 personnel increase.

- B.** [2021-179](#) Resolution to Adopt the Connors Creek Sewer System (CCSS) Rehabilitation Project FY 2022 Clean Water Revolving Fund Project Plan
- Sponsors:** Nicolette Bateson
- Indexes:** Finance
- Attachments:** [7B Connors Creek Project Plan Approval](#)
- Motion By:** Gary Brown
 Support By: Brian Baker
 Action: Recommended for Approval to the Board of Directors
 Agenda of May 26, 2021
 The motion carried by a unanimous vote.
- C.** [2021-180](#) Resolution to Adopt the In-System Storage Device and Dam Remote and Valve Remote Evaluation and Rehabilitation Project FY 2022 Clean Water Revolving Fund Project Plan
- Sponsors:** Nicolette Bateson
- Indexes:** Finance
- Attachments:** [7C Conveyance Project Plan Approval](#)
- Motion By:** Gary Brown
 Support By: Brian Baker
 Action: Recommended for Approval to the Board of Directors
 Agenda of May 26, 2021
 The motion carried by a unanimous vote.
- D.** [2021-181](#) Scheduling Public Hearings for the Drinking Water State Revolving Fund (DWSRF) Project Plan Submittals for the 96-inch Water Transmission Main (WTM) Relocation Project, Downriver Transmission Main Loop Project, and Ypsilanti Pumping Station Improvements Project
- Sponsors:** Nicolette Bateson
- Indexes:** Finance
- Attachments:** [7D Scheduling of SRF Project Plan Public Hearing](#)
- Motion By:** Gary Brown
 Support By: Brian Baker
 Action: Recommended for Approval to the Board of Directors
 Agenda of May 26, 2021
 The motion carried by a unanimous vote.

- E. [2021-182](#) Resolution to Adopt the city of Detroit Water and Sewerage Department Water Main Replacement - FY 2022 Drinking Water State Revolving Fund (DWSRF) Project Plan

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7E Approval of DWSD DWRF Project Plan](#)

Motion By: Brian Baker

Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of May 26, 2021

The motion carried by a unanimous vote.

8. Reports

- A. [2021-183](#) CFO Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8A CFO Update](#)

In addition to the attached CFO Report, CFO Bateson also gave a verbal update regarding last week's Reconciliation Committee Meeting.

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

- B. [2021-184](#) Monthly Financial Report for February 2021

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8B February 2021 Financial Report_Tagetik](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2021-185](#) Business Inclusion and Diversity Program Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8C B.I.D. Audit Committee Update 5.21.21](#)

Motion By: Jaye Quadrozzi

Support By: Gary Brown

Action: Received and Filed

The motion carried by a unanimous vote.

Note: Director Brown excused himself from the remainder of the meeting at 9:24 a.m.

D. [2021-186](#) Quarterly Debt Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8D Quarterly Debt Report as of 3.31.2021](#)

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

E. [2021-187](#) Quarterly Investment Report

Sponsors: W. Barnett Jones

Indexes: Finance

Attachments: [8E Quarterly Investment Report](#)

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

F. [2021-189](#) Shared Services Update

Sponsors: Nicolette Bateson

Indexes: Finance

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

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

9. Communications

A. [2021-190](#) The Procurement Pipeline for May 2021

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [9A May 2021 Procurement Pipeline](#)

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

10. Look Ahead

A. The next Audit Committee Meeting is scheduled to be held Friday, June 25, 2021 at 8:00 a.m.

Note: A Special Audit Committee Meeting may be scheduled prior to the regular June 25, 2021 Audit Committee Meeting.

11. Other Matters

There were no other matters.

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Jaye Quadrozzi

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 9:38 a.m.



Financial Services Audit Committee Communication

Date: June 25, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: PFM Financial Advisor Presentation - Municipal Market Update and Refunding Outlook

Background: The Great Lakes Water Authority continuously monitors the municipal market to remain engaged with current interest rate activity and rating agency expectations. The Financial Services Area is in regular communication with its bond consultants and works with them to provide the GLWA Audit Committee with an annual update and benchmarking analysis.

Analysis: PFM Financial Advisors LLC will be in attendance to deliver this year's annual presentation on the municipal market and refunding outlook as well as the benchmarking analysis.

Proposed Action: Receive and file this report.



Municipal Market Update and 2021 Outlook

June 25, 2021

PFM Financial Advisors LLC

555 Briarwood Circle
Suite 333
Ann Arbor, MI 48108

734.994.9710
pfm.com



Agenda

- I. 2020 In Review
- II. Municipal Market Update
- III. Debt and Refunding Update
- IV. Status and Impacts of LIBOR Transition
- V. Peer Comparison
- VI. Appendix – Rating Agency 2021 Water/Sewer Sector Outlooks



I. 2020 In Review



2020 Financing Accomplishments

The Series 2020 financings provided the Authority with a strong base with which to weather the COVID-19 crisis and achieve future financial goals.



Secure Rating Upgrades



Highlight Strong Financial Results and Expand the Investor Base for GLWA credits



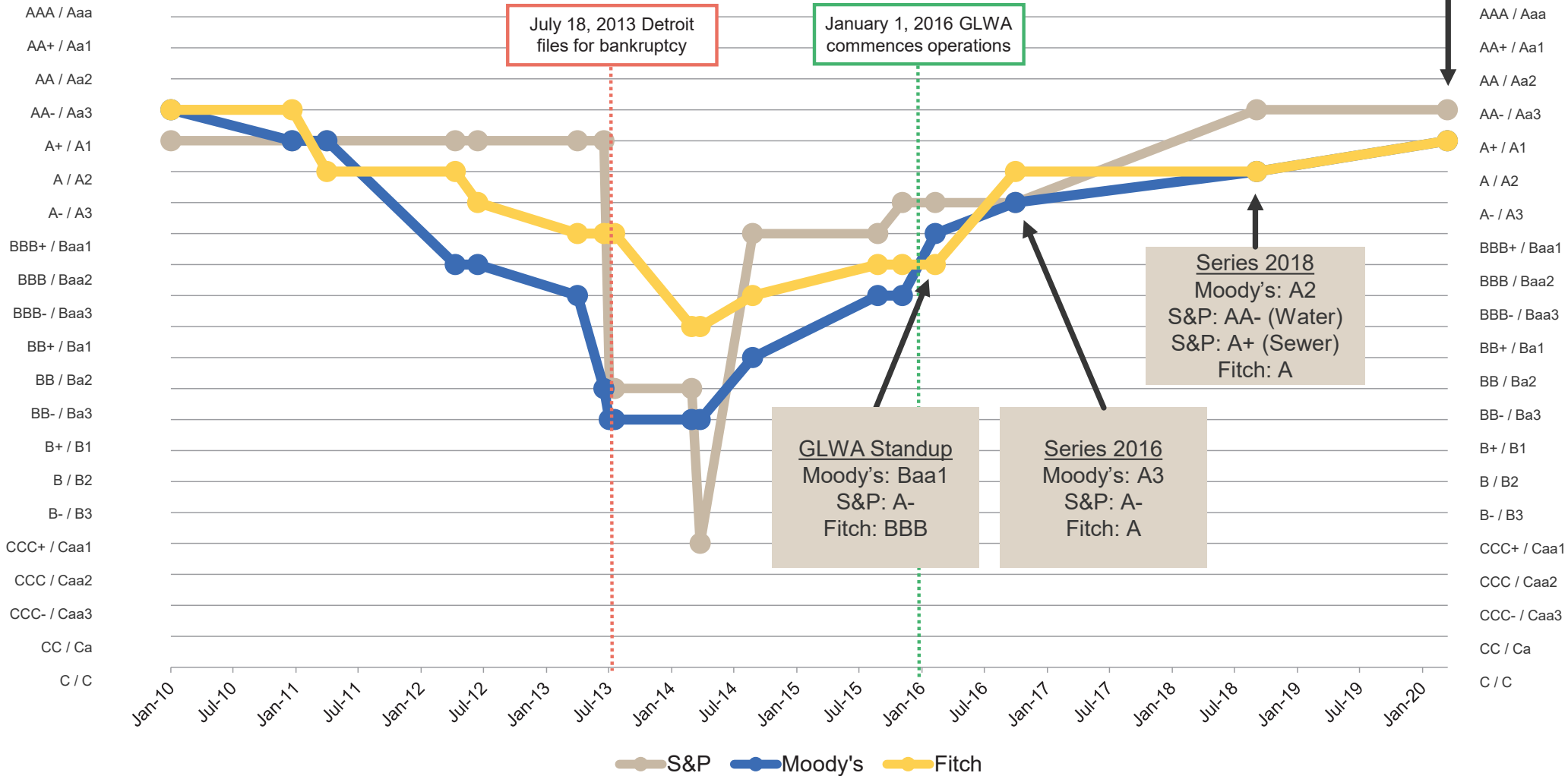
Lock-in Favorable Interest Rates and Substantial Savings



Enhance GLWA's Financial Flexibility

History of Senior Lien Water and Sewer Ratings

GLWA Senior Lien Ratings History (DWSD Prior to January 1, 2016)

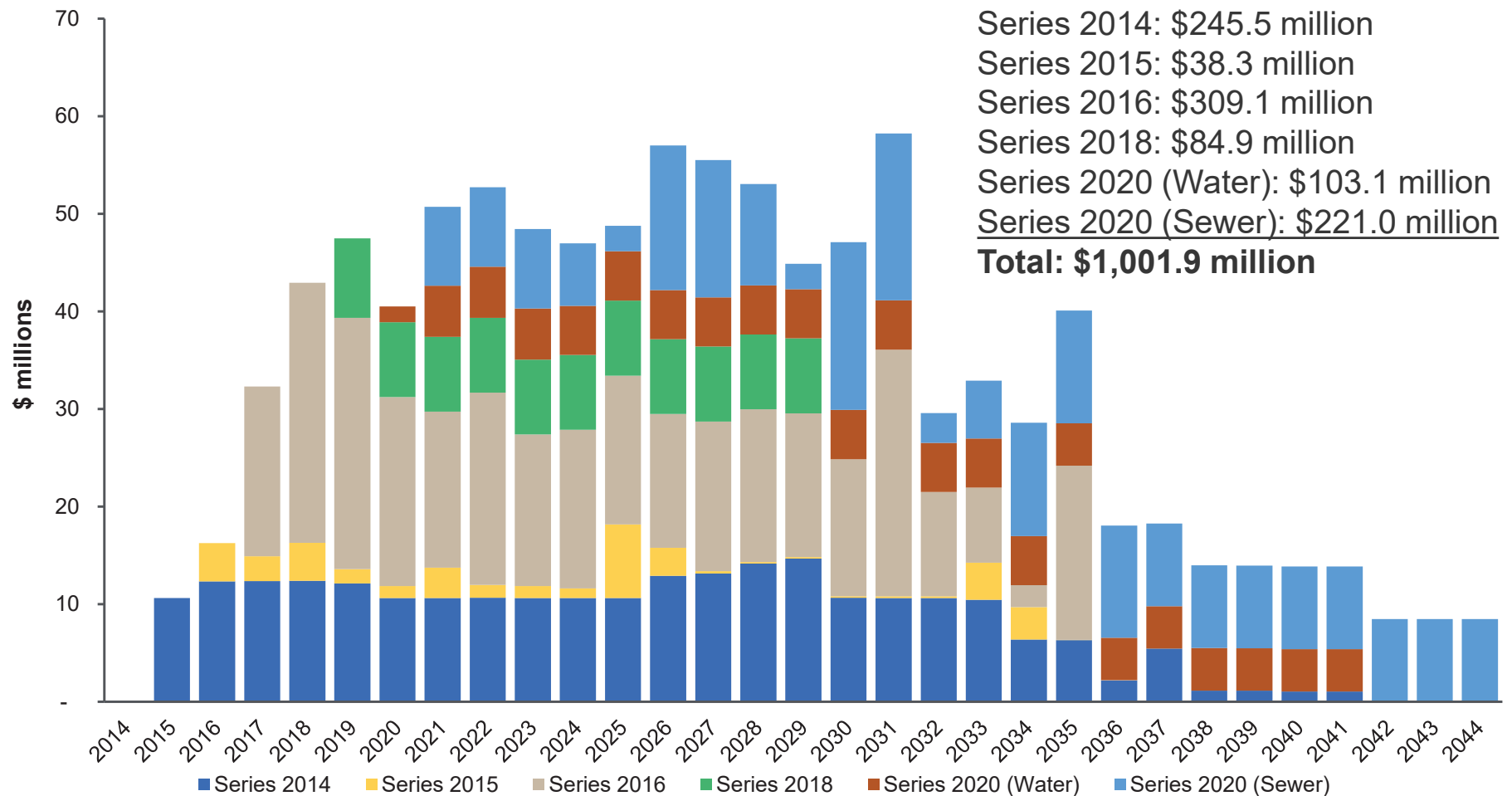


Note: in cases where a rating agency rates Water Senior and Sewer Senior Lien differently, chart displays highest of the two ratings



History of Debt Service Savings Achieved Since 2014

- Through the leadership of the Authority's management team, the financing team has been able to achieve over \$1 billion of cash flow debt service savings for the systems since the tender and refunding transaction in 2014



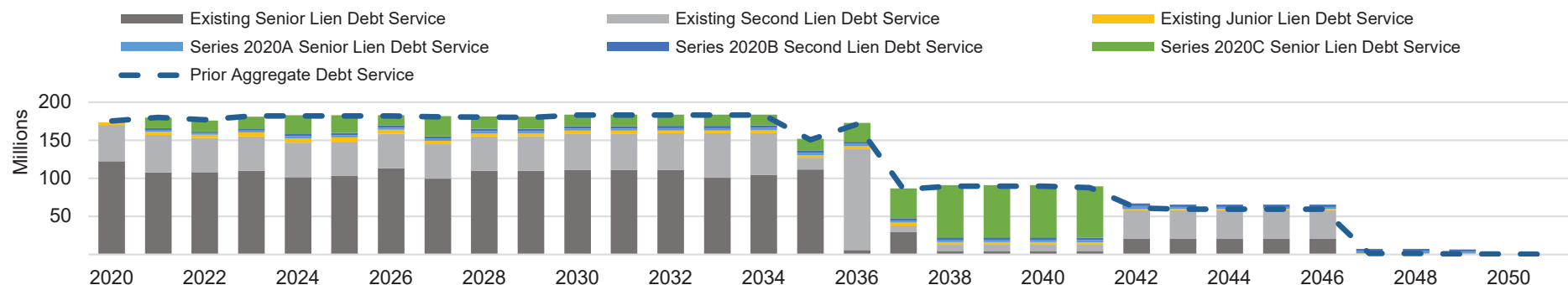
Note: Debt service savings is shown on a cash flow basis

Financing Results – Water System

Through an optimized structure, and aggressive pricing, GLWA was able to generate over \$103m in cash flow savings for the water system

Summary of Results				
Sources of Funds	Series 2020A	Series 2020B	Series 2020C (Federally Taxable)	Aggregate
Par Amount	42,445,000.00	43,135,000.00	377,515,000.00	463,095,000.00
Net Premium	7,554,692.45	6,851,323.80		14,406,016.25
Debt Service Fund Release			7,954,734.37	7,954,734.37
Debt Service Reserve Fund Release			10,548,456.08	10,548,456.08
Total Sources of Funds	49,999,692.45	49,986,323.80	396,018,190.45	496,004,206.70
Uses of Funds				
Deposit to Construction Account	49,774,335.43	49,757,319.55		99,531,654.98
Deposit to Escrow Fund			394,014,099.00	394,014,099.00
Costs of Issuance ¹	100,308.26	101,922.65	891,880.75	1,094,111.66
Underwriter's Discount	125,048.76	127,081.60	1,112,210.70	1,364,341.06
Total Uses of Funds	49,999,692.45	49,986,323.80	396,018,190.45	496,004,206.70
Key Statistics				
Financing & Refunding Results				
All-In TIC (%)	3.694%	3.824%	3.403%	3.480%
Arbitrage Yield (%) ²			-	2.981%
Weighted Avg Maturity	19.234 Years	19.231 Years	16.815 Years	17.321 Years
Principal Amount of Refunded Bonds			366,025,000.00	366,025,000.00
Cashflow Savings			103,077,566.01	103,077,566.01
Net PV Savings (\$) ³			66,489,474.85	66,489,474.85
Net PV Savings (%) ³			18.17%	18.17%

Fiscal Year	Savings (\$)
2020	1,590,947
2021	5,229,182
2022	5,224,933
2023	5,229,123
2024	5,034,411
2025	5,036,086
2026	5,034,381
2027	5,029,679
2028	5,036,257
2029	5,032,369
2030	5,033,901
2031	5,033,982
2032	5,033,167
2033	5,033,904
2034	5,036,268
2035	4,345,060
2036	4,348,508
2037	4,347,473
2038	4,346,274
2039	4,345,412
2040	4,349,349
2041	4,346,902
Total (\$)	103,077,566



1: Costs of Issuance includes any contingency from transaction

2: Arbitrage Yield is blended between tax-exempt Series 2020A and Series 2020B

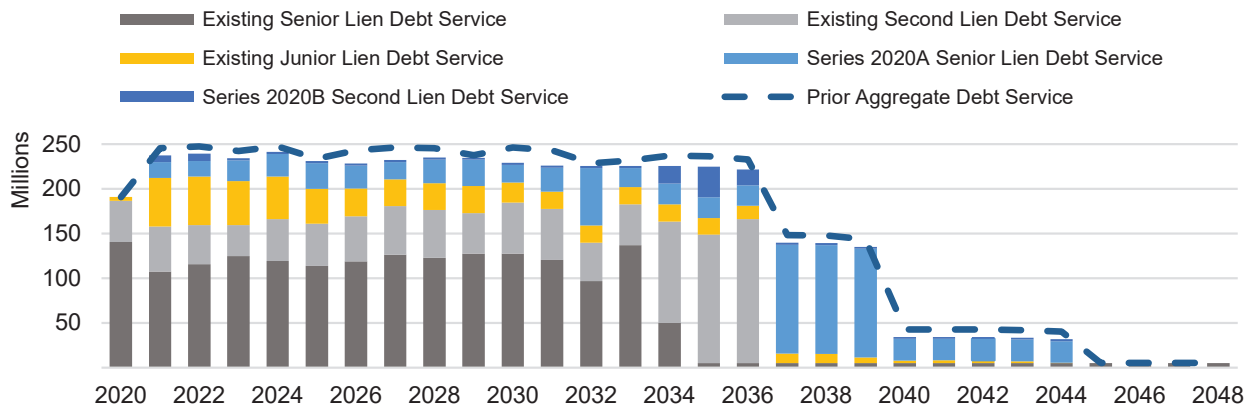
3: PV savings calculated at 3.00%

Note: Debt service graphs represent debt service as of closing on refunding bonds

Financing Results – Sewer System

Through an optimized structure, and aggressive pricing, GLWA was able to generate over \$221m in cash flow savings for the sewer system

Summary of Results			
Sources of Funds	Series 2020A (Federally Taxable)	Series 2020B (Federally Taxable)	Aggregate
Par Amount	594,930,000.00	92,525,000.00	687,455,000.00
Debt Service Fund Release	14,641,931.25	2,169,625.00	16,811,556.25
Debt Service Reserve Fund Release	8,454,576.14	25,142,779.49	33,597,355.63
Total Sources of Funds	618,026,507.39	119,837,404.49	737,863,911.88
Total Uses of Funds			
Deposit to Escrow Fund	615,473,375.78	118,896,293.34	734,369,669.12
Costs of Issuance ¹	965,422.83	156,693.88	1,122,116.71
Underwriter's Discount	1,587,708.78	246,924.44	1,834,633.22
Bond Insurance Premium		537,492.83	537,492.83
Total Uses of Funds	618,026,507.39	119,837,404.49	737,863,911.88
Key Statistics			
Financing & Refunding Results			
True Interest Cost (%)	3.046%	2.843%	3.022%
All-In True Interest Cost (%)	3.059%	2.908%	3.041%
Weighted Avg Maturity	16.79 Years	14.42 Years	16.47 Years
Par of Refunded Bonds	570,460,000.00	86,785,000.00	657,245,000.00
Cashflow Savings	199,495,488.49	21,544,267.47	221,039,755.96
Net PV Savings (\$)²	103,976,431.05	18,904,434.40	122,880,865.45
Net PV Savings (%)²	18.23%	21.78%	18.70%

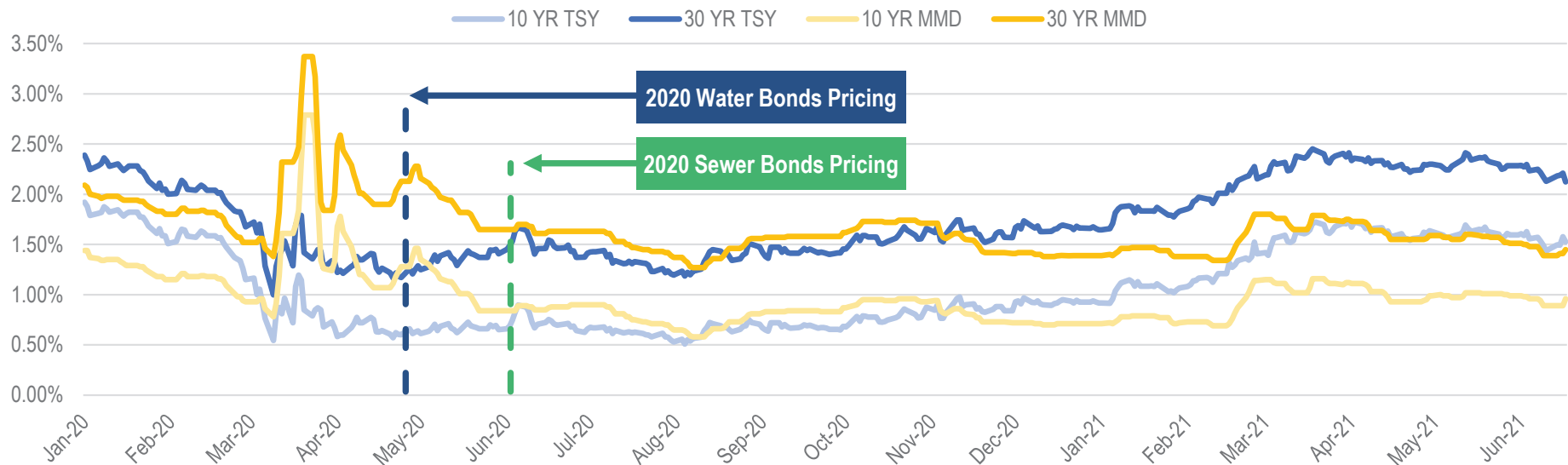


Fiscal Year	Senior Lien Savings (\$)	Second Lien Savings (\$)	Aggregate Savings (\$)
2021	11,215,309	(3,136,851)	8,078,458
2022	11,938,051	(3,788,788)	8,149,262
2023	6,098,051	2,047,002	8,145,052
2024	4,375,476	2,047,002	6,422,478
2025	562,843	2,047,002	2,609,844
2026	12,769,124	2,047,002	14,816,126
2027	12,022,586	2,047,002	14,069,588
2028	8,339,403	2,047,002	10,386,405
2029	566,722	2,047,002	2,613,723
2030	15,147,450	2,047,002	17,194,452
2031	15,060,156	2,047,002	17,107,157
2032	999,175	2,047,002	3,046,177
2033	3,882,126	2,047,002	5,929,127
2034	3,663,914	7,952,002	11,615,915
2035	3,612,489	7,959,973	11,572,462
2036	3,545,823	7,955,021	11,500,843
2037	10,714,427	(2,242,620)	8,471,808
2038	10,708,666	(2,236,678)	8,471,988
2039	10,712,535	(2,238,753)	8,473,782
2040	10,713,588	(2,238,485)	8,475,103
2041	10,710,854	(2,240,872)	8,469,982
2042	10,710,014	(2,240,736)	8,469,278
2043	10,713,442	(2,238,075)	8,475,368
2044	10,713,266	(2,237,890)	8,475,377
Total (\$)	199,495,488	21,544,267	221,039,756

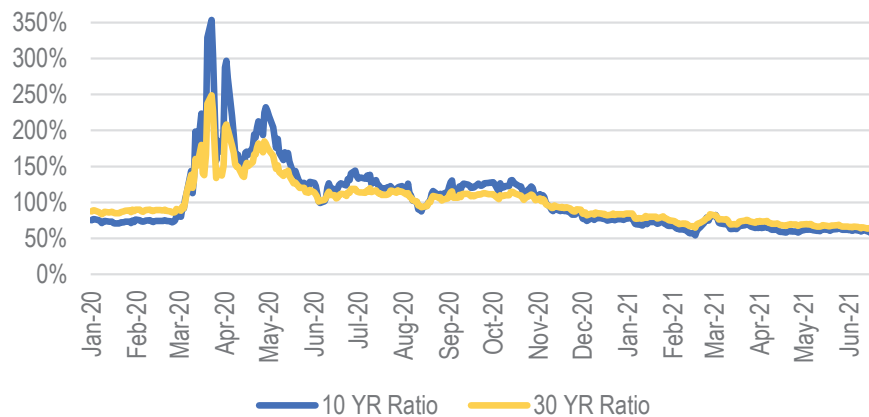


II. Municipal Market Update

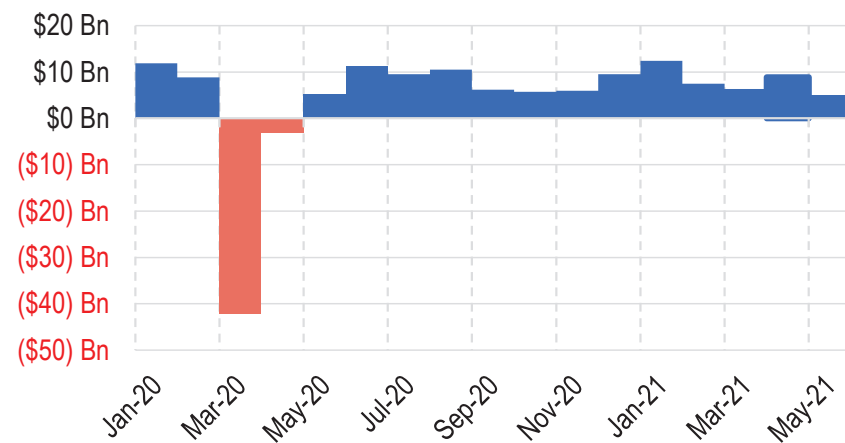
Municipal Market Experienced Significant Volatility Through Pandemic



MMD / Treasury Ratios at All-Time Lows Due to Muni Outperformance

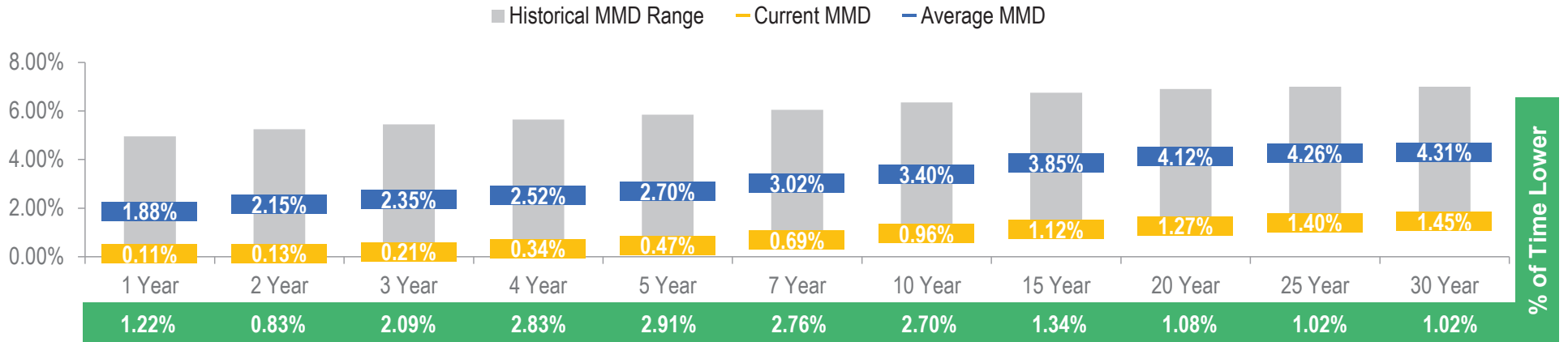


2021YTD Fund Inflows Exceed 2020 Total Fund Inflows

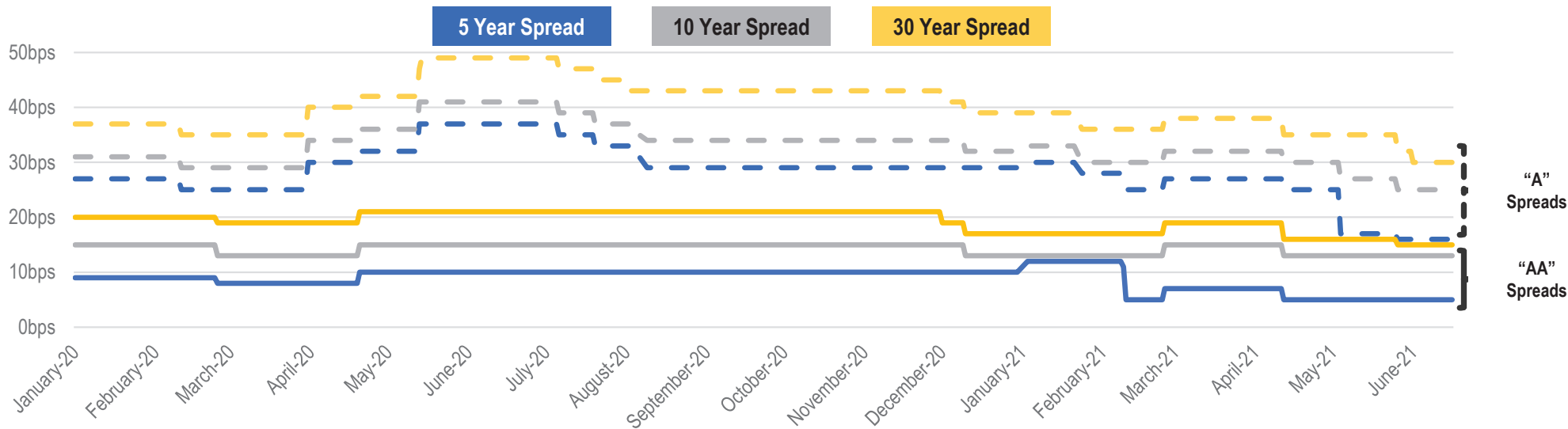


...but tax-exempt rates remain near all-time lows

MMD in Historical Context (30 Year History)



“AA” and “A” MMD Spreads (Since January 2020)





Federal Legislative Initiatives and Impact to GLWA

Given the change in Senate control, PFM expects some sizeable federal initiatives that will impact municipal agencies in 2021

◆ Federal stimulus package

- Was “fast-tracked” under budget reconciliation measures (needing only majority approval in Senate)
- Final package at \$1.9 trillion, with \$350+ billion to state and local governments, approved earlier this year
- Allocation methodology included specific funds to state and local governments, but not directly to utilities

◆ Infrastructure package

- Current question of whether it will be a bipartisan approach versus Democrats go-alone, or a combination of both
- Bipartisan package closer to \$1.2 trillion, while Democratic package could rise to as much \$4-6 billion
- Many measures for public infrastructure likely to be proposed in final package – expansion of SRF programs, reinstatement of BABs program, restoration of tax-exempt advance refunding, expansion of WIFIA program all being discussed
- Tax-exempt advance refunding provision for municipal entities championed by Sen. Stabenow, and while infrastructure bill is expected legislative vehicle, tax-exempt advance refunding provision could move separately

◆ Executive actions

- Already substantially implemented strategy, particularly relating to environmental issues
- May have significant impact to clean water rules and ongoing completion of EPA consent decree mandated projects



III. Debt and Refunding Update

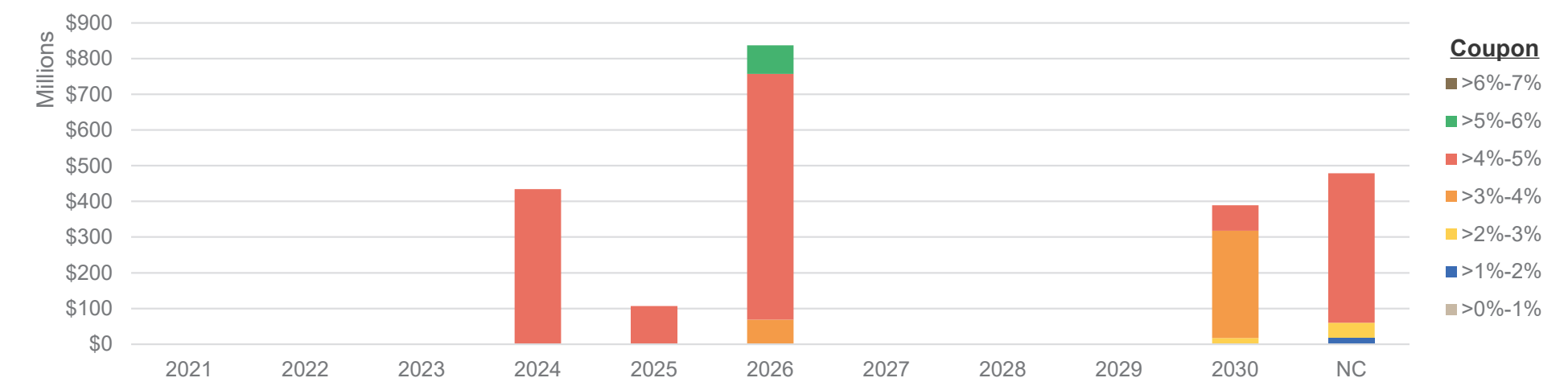


Summary and Recommendation

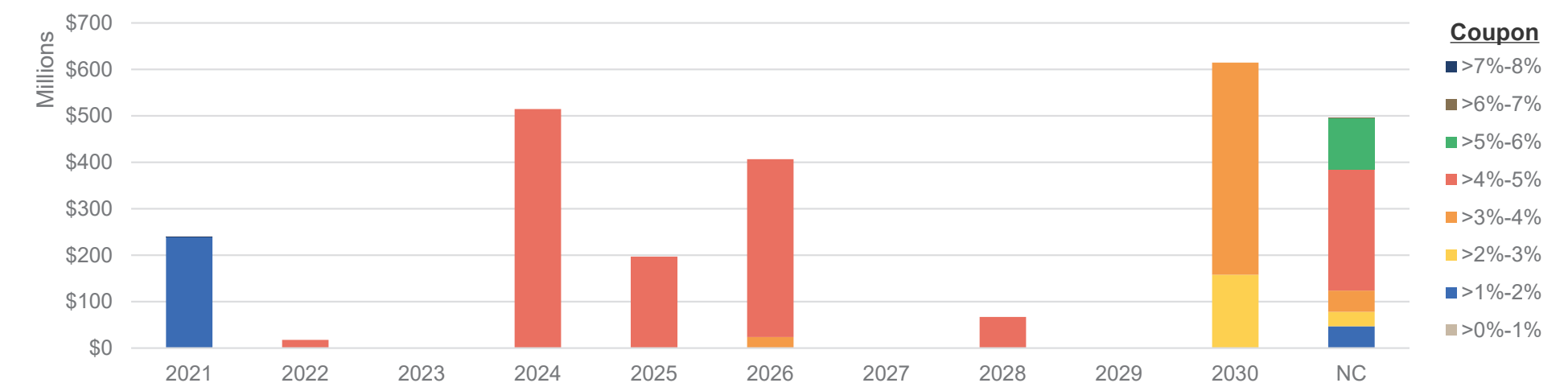
- ◆ **Recommended approach is to continue to monitor interest rates and evaluating alternatives**
- ◆ Opportunities exist for GLWA to take advantage of current historically low interest rates and lock in present value savings, but at levels somewhat less robust than historically executed
 - Increased value of tax-exemption has widened the spread between taxable and tax-exempt financing options
 - Investment rates remain near-zero, generating significant negative arbitrage on an escrow out 3+ years
- ◆ If interest rates remain at their current levels (or lower), significant additional savings would be available to GLWA compared to any options
- ◆ Real potential exists for legislation that reauthorizes tax-exempt advance refundings, which could significantly improve present value savings and allow for immediate cash flow savings
- ◆ No new money public issuance for regional or local projects planned until FY2023, so limited opportunities for combined new money / refunding issuer for economies of scale
- ◆ Tax-exempt forward direct purchase can be a viable option and presents relatively attractive savings, but generally would not provide cash flow savings until at least FY2024, offers a different risk profile from a traditional capital markets transaction, and is available only from a small subset of large banks in underwriting group

Fixed Rate Par Call Options

Distribution of Par Call Options on Water Debt (Senior & Second Lien)



Distribution of Par Call Options on Sewer Debt (Senior & Second Lien)





Projected New Money Needs

- Current GLWA projections contemplate the next water and sewer revenue bond issuance to fund new money projects in FY 2023, with additional issuance in FY 2025

Planned New Money Debt Issuance for Regional System (\$ in Millions)	FY21	FY22	FY23	FY24	FY25
Water Revenue Bonds	-	-	\$220	-	\$175
Water SRF Loan Draws	\$12	\$17	\$19	\$19	\$19
Total Water Borrowing	\$12	\$17	\$239	\$19	\$194
Sewer Revenue Bonds	-	-	\$150	-	\$90
Sewer SRF Loan Draws	\$33	\$15	\$14	-	-
Total Sewer Borrowing	\$33	\$15	\$164	-	\$90

Planned New Money Debt Issuance for Local System (\$ in Millions)	FY21	FY22	FY23	FY24	FY25
Water Revenue Bonds	-	-	-	-	-
Water SRF Loan Draws	\$16	\$25	\$29	-	-
Total Water Borrowing	\$16	\$25	\$29	-	-
Sewer Revenue Bonds	-	-	-	-	-
Sewer SRF Loan Draws	\$8	\$10	\$9	-	-
Total Sewer Borrowing	\$8	\$10	\$9	-	-

Source: Great Lakes Water Authority Audit Committee Meeting, May 21, 2021

GLWA Upcoming Callable Par

Water							
Senior Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2014D-1	Water	Senior	Tax-Exempt	5.00	152,710	7/1/2024	44,190
Series 2014D-2	Water	Senior	Tax-Exempt	5.00	188,455	7/1/2024	136,925
Series 2014D-4	Water	Senior	Tax-Exempt	5.00	209,360	7/1/2024	209,360
Series 2015D-1	Water	Senior	Tax-Exempt	5.00	82,320	7/1/2025	69,275
					632,845		459,750
Second Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2014D-6	Water	Second	Tax-Exempt	5.00	57,925	7/1/2024	43,690
Series 2015D-2	Water	Second	Tax-Exempt	5.00	37,235	7/1/2025	37,235
					95,160		80,925
Sewer							
Senior Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2012A	Sewer	Senior	Tax-Exempt	5.00	41,525	7/1/2022	17,985
Series 2014C-3	Sewer	Senior	Tax-Exempt	5.00	446,170	7/1/2024	303,570
Series 2014C-6	Sewer	Senior	Tax-Exempt	5.00	88,900	7/1/2024	88,900
					576,595		410,365
Second Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2014C-7	Sewer	Second	Tax-Exempt	5.00	62,305	7/1/2024	44,065
Series 2015C-1	Sewer	Second	Tax-Exempt	5.00	197,160	7/1/2025	197,160
					259,465		241,225

Comparison of Savings Opportunities: Water System (> 5% NPV Savings)

Water System												
Candidate					Taxable Advance Refunding		Tax-Exempt Forward Direct Placement		Tax-Exempt Advance Refunding (Not Available Under Current Tax Law)		Future Tax-Exempt Current Refunding	
Series	Lien	Callable Par	Refunded Par	Call Date	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)
Series 2014D-1	Senior	44,190	44,190	7/1/2024	5,756	13.03%	9,181	20.78%	9,988	22.60%	13,694	30.99%
Series 2014D-2	Senior	136,925	22,690	7/1/2024	1,219	5.37%	2,558	11.27%	2,927	12.90%	3,566	15.72%
Series 2014D-4	Senior	209,360	209,360	7/1/2024	19,371	9.25%	35,107	16.77%	38,439	18.36%	49,797	23.79%
Series 2015D-1	Senior	69,275	43,495	7/1/2025	3,450	7.93%	6,382	14.67%	7,406	17.03%	11,101	25.52%
Total Senior		459,750	319,735		29,796	9.32%	53,228	16.65%	58,760	18.38%	78,158	24.44%

Series	Lien	Callable Par	Refunded Par	Call Date	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)
Series 2014D-6	Second	43,690	36,550	7/1/2024	4,028	11.02%	7,037	19.25%	7,704	21.08%	10,339	28.29%
Series 2015D-2	Second	37,235	37,235	7/1/2025	2,609	7.01%	5,271	14.16%	6,093	16.36%	9,569	25.70%
Total Second		80,925	73,785		6,637	9.00%	12,308	16.68%	13,797	18.70%	19,907	26.98%

Total Water		540,675	393,520		36,433	9.26%	65,536	16.65%	72,557	18.44%	98,066	24.92%
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- Availability of tax-exempt options to refund outstanding debt significantly increases the savings available to GLWA
- Presuming the same set of refunding candidates¹, availability of a tax-exempt advance refunding option would roughly double savings as a % of refunded par from ~9.3% to ~18.4%

Assumptions: Matched lien refunding with Delivery Date of September 1, 2021; Interest rates as of June 11, 2021; issuance costs of \$8/bond. All figures present valued at taxable advance refunding yields to September 1, 2021; Future current refunding savings calculated using current tax-exempt rates; Tax-exempt refunding bonds issued with 3% premium coupon structure and 10 year par call; Taxable refunding bonds issued with par coupon structure and 10 year par call; Forward direct placement assumes a forward premium of 3.7bps per month; Includes only bonds which generate greater than 5% NPV savings on a taxable basis

1. Tax-Exempt Advance Refunding option is included for illustrative purposes only, and presumes universe of candidates available for taxable advance refunding is also available for tax-exempt advance refunding. Under prior tax law, only a subset of these bonds would have been available for tax-exempt advance refunding. In the event of changes to current law, tax diligence will need to be conducted to determine applicability and allowable tax-exempt advance refunding candidates.

Comparison of Savings Opportunities: Sewer System (> 5% NPV Savings)

Sewer System												
Candidate					Taxable Advance Refunding		Tax-Exempt Forward Direct Placement		Tax-Exempt Advance Refunding (Not Available Under Current Tax Law)		Future Tax-Exempt Current Refunding	
Series	Lien	Callable Par	Refunded Par	Call Date	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)
Series 2012A	Senior	17,985	N/A	7/1/2022	-	-	-	-	-	-	-	-
Series 2014C-3	Senior	303,570	170,255	7/1/2024	14,918	8.76%	27,702	16.27%	30,563	17.95%	39,141	22.99%
Series 2014C-6	Senior	88,900	88,900	7/1/2024	10,097	11.36%	16,825	18.93%	17,876	20.11%	24,397	27.44%
Total Senior		410,455	259,155		25,016	9.65%	44,527	17.18%	48,439	18.69%	63,538	24.52%

Series	Lien	Callable Par	Refunded Par	Call Date	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)	PV Savings (\$000s)	PV Savings (%)
Series 2014C-7	Second	44,065	23,355	7/1/2024	1,871	8.01%	3,874	16.59%	4,166	17.84%	5,539	23.72%
Series 2015C-1	Second	197,160	173,105	7/1/2025	12,135	7.01%	24,733	14.29%	28,723	16.59%	45,175	26.10%
Total Second		241,225	196,460		14,006	7.13%	28,607	14.56%	32,889	16.74%	50,713	25.81%

Total Sewer		651,680	455,615		39,021	8.56%	73,134	16.05%	81,328	17.85%	114,251	25.08%
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- Availability of tax-exempt options to refund outstanding debt significantly increases the savings available to GLWA
- Presuming the same set of refunding candidates¹, availability of a tax-exempt advance refunding option would roughly double savings as a % of refunded par from ~8.6% to ~17.9%

Assumptions: Matched lien refunding with Delivery Date of September 1, 2021; Interest rates as of June 11, 2021; issuance costs of \$8/bond. All figures present valued at taxable advance refunding yields to September 1, 2021; Future current refunding savings calculated using current tax-exempt rates; Tax-exempt refunding bonds issued with 3% premium coupon structure and 10 year par call; Taxable refunding bonds issued with par coupon structure and 10 year par call; Forward direct placement assumes a forward premium of 3.7bps per month; Includes only bonds which generate greater than 5% NPV savings on a taxable basis

1. Tax-Exempt Advance Refunding option is included for illustrative purposes only, and presumes universe of candidates available for taxable advance refunding is also available for tax-exempt advance refunding. Under prior tax law, only a subset of these bonds would have been available for tax-exempt advance refunding. In the event of changes to current law, tax diligence will need to be conducted to determine applicability and allowable tax-exempt advance refunding candidates.



Bond Reserve Release Contingent on AA-Category Ratings

GLWA has attained all necessary bondholder consents to effectuate the Reserve Fund Amendment and allow for the release of the Bond Reserve Funds once GLWA attains two AA category ratings

- ◆ Reserves are currently funded with a mixture of surety policies and cash / securities
- ◆ Cash and securities balances that remain in Bond Reserve Funds are modest given prior aggressive refunding program structured to maximize releases, but reduction of the Reserve Requirement would avoid potentially substantial future deposit requirements upon expiration of current surety policies (\$29 million in 2027) and in concert with future debt issuance
- ◆ In order to reduce or eliminate the Reserve Requirements, GLWA must attain ratings of at least AA- or Aa3 on the Senior Lien from at least two of Moody's, S&P, and Fitch (S&P previously achieved for both Water and Sewer)
 - Also requires confirmation that ratings will not be reduced solely as a result of the change in the Reserve Requirement
 - Can be triggered separately for each of the Water System and the Sewer System
- ◆ Any releases from the Bond Reserve Funds would be restricted for certain purposes

Bond Reserve Funding Amounts by System and Lien				
	Water System		Sewer System	
	Senior Lien	Second Lien	Senior Lien	Second Lien
Credit Facilities ¹	101,222,754	45,815,645	99,904,379	41,750,000
Cash and Investments ²	1,575,413	2,934,922	14,350,467	6,292,854
Total	102,798,166	48,750,567	114,254,846	48,042,854

1. For series-specific policies, represents amount as of July 1, 2021 that is projected to be the lesser of (a) the maximum amount of the policy or (b) the amount of the Reserve Requirement specifically allocated to the specific series of Bonds covered by such policy.

2. Market value as of June 8, 2021. Certain transfers to or from the Bond Reserve Funds are likely to occur prior to July 1, 2021 in concert with required annual valuation.

Taxable Advance Refunding – Water System

Savings Summary

- About \$46 million in gross cash flow savings can be achieved (>\$38.7 million present value)
- Potential to accelerate savings as desired

Refunding Candidates

- Includes all callable bonds with 2024 and 2025 call dates that generate greater than 5% NPV savings

Assumptions

- Uninsured, matched lien refunding
- Interest rates as of June 11, 2021
- Conservatively assumes no DSRF release
- Contribution of accrued interest from DS fund
- SLGS escrow as of June 11, 2021
- Savings structured for level savings by lien
- Par coupon structure
- Assumes par call on 7/1/2031
- PV at Bond Yields to 9/1/2021

Senior Lien Refunding

Delivery Date:	9/1/2021
Call Date:	7/1/2031
Refunding Par (\$):	367,200,000
Advance Refunded Par (\$):	319,735,000
NPV Savings (\$):	31,691,506
NPV Savings as % :	9.91%
Negative Arbitrage (\$) ¹ :	(20,490,260)
Escrow Efficiency ¹ :	60.73%
TIC:	2.40%
WAM:	9.99 yrs
Refunded Bonds WAM:	10.76 yrs
PV of 0.01% Change in Interest Rates (\$)	320,295

Second Lien Refunding

Delivery Date:	9/1/2021
Call Date:	7/1/2031
Refunding Par (\$):	85,805,000
Advance Refunded Par (\$):	73,785,000
NPV Savings (\$):	7,024,854
NPV Savings as % :	9.52%
Negative Arbitrage (\$) ¹ :	(5,989,426)
Escrow Efficiency ¹ :	53.98%
TIC:	2.75%
WAM:	12.74 yrs
Refunded Bonds WAM:	13.58 yrs
PV of 0.01% Change in Interest Rates (\$)	90,988

DSIR Year	Senior Lien Savings (\$)	Second Lien Savings (\$)	Total Savings (\$)
7/1/2022	2,074,014	476,064	2,550,078
7/1/2023	2,485,442	569,489	3,054,930
7/1/2024	2,484,891	569,765	3,054,656
7/1/2025	2,485,135	571,812	3,056,947
7/1/2026	2,489,797	567,837	3,057,634
7/1/2027	2,485,930	570,831	3,056,761
7/1/2028	2,487,313	572,121	3,059,434
7/1/2029	2,488,057	570,970	3,059,027
7/1/2030	2,487,825	568,545	3,056,369
7/1/2031	2,486,285	570,290	3,056,574
7/1/2032	2,489,219	568,252	3,057,471
7/1/2033	2,486,107	572,489	3,058,596
7/1/2034	2,488,601	572,336	3,060,937
7/1/2035	2,488,873	568,018	3,056,890
7/1/2036	574,233	571,619	1,145,851
7/1/2037	2,489,233		2,489,233
Total	37,470,949	8,460,436	45,931,385

1. Negative arbitrage and escrow efficiency calculated for illustrative purposes assuming earnings cap on investments at refunding bond yield

Taxable Advance Refunding – Sewer System

Savings Summary

- About \$47.5 million in gross cash flow savings can be achieved (>\$41.1 million present value)
- Potential to accelerate savings as desired

Refunding Candidates

- Includes all callable bonds with 2024 and 2025 call dates that generate greater than 5% NPV savings

Assumptions

- Uninsured, matched lien refunding
- Interest rates as of June 11, 2021
- Conservatively assumes no DSRF release
- Contribution of accrued interest from DS fund
- SLGS escrow as of June 11, 2021
- Savings structured for level savings by lien
- Par coupon structure
- Assumes par call on 7/1/2031
- PV at Bond Yields to 9/1/2021

Senior Lien Refunding

Delivery Date:	9/1/2021
Call Date:	7/1/2031
Refunding Par (\$):	296,250,000
Advance Refunded Par (\$):	259,155,000
NPV Savings (\$):	26,156,709
NPV Savings as % :	10.09%
Negative Arbitrage (\$) ¹ :	(15,803,799)
Escrow Efficiency ¹ :	62.34%
TIC:	2.37%
WAM:	9.73 yrs
Refunded Bonds WAM:	10.32 yrs
PV of 0.01% Change in Interest Rates (\$)	254,299

Second Lien Refunding

Delivery Date:	9/1/2021
Call Date:	7/1/2031
Refunding Par (\$):	231,345,000
Advance Refunded Par (\$):	196,460,000
NPV Savings (\$):	15,002,451
NPV Savings as % :	7.63%
Negative Arbitrage (\$) ¹ :	(16,767,175)
Escrow Efficiency ¹ :	47.22%
TIC:	2.68%
WAM:	11.94 yrs
Refunded Bonds WAM:	12.83 yrs
PV of 0.01% Change in Interest Rates (\$)	233,196

DSIR Year	Senior Lien Savings (\$)	Second Lien Savings (\$)	Total Savings (\$)
7/1/2022	2,094,226	1,043,308	3,137,534
7/1/2023	2,511,436	1,257,306	3,768,742
7/1/2024	2,514,192	1,253,532	3,767,724
7/1/2025	2,514,767	1,255,240	3,770,007
7/1/2026	2,513,057	1,254,260	3,767,317
7/1/2027	2,514,737	1,254,191	3,768,928
7/1/2028	2,516,054	1,254,419	3,770,472
7/1/2029	2,514,682	1,257,614	3,772,296
7/1/2030	2,512,480	1,253,932	3,766,412
7/1/2031	2,516,490	1,253,059	3,769,549
7/1/2032	2,515,464	1,256,617	3,772,081
7/1/2033	2,515,512	1,255,526	3,771,038
7/1/2034		1,256,098	1,256,098
7/1/2035		1,255,829	1,255,829
7/1/2036		404,250	404,250
Total	29,753,096	17,765,179	47,518,275

1. Negative arbitrage and escrow efficiency calculated for illustrative purposes assuming earnings cap on investments at refunding bond yield



IV. Status and Impacts of LIBOR Transition



Phase Out of LIBOR Index

- The London Interbank Offered Rate (“LIBOR”) has been used as a benchmark short-term borrowing and lending rate for an estimated \$400 trillion financial products globally, including over \$220 trillion contracts referencing USD LIBOR
- LIBOR is used extensively across a range of industries and business processes, and often referenced in derivative (swaps and options), bond and loan documentation as well as in a range of consumer lending instruments
- The UK’s Financial Conduct Authority, which regulates LIBOR, initially announced in July 2017 that it would no longer compel banks to make LIBOR submissions after the end of 2021
 - Announcement followed intense scrutiny by numerous regulatory bodies and interested parties and determination by FCA that LIBOR is no longer compliant with sound international principals for interest rate benchmarks
- On March 5, 2021, the FCA issued a statement confirming the cessation of the publication of 1-week and 2-month USD LIBOR effective December 31, 2021 and extending the remaining USD LIBOR tenors through June 30, 2023
 - All tenors for other currencies will be discontinued on December 31, 2021

Transition Timetable	
Timing	Step
July 2017	FCA announces it will no longer compel banks to make LIBOR submissions after December 31, 2021
June 2017	ARRC nominates SOFR as preferred rate for USD market
April 2018	SOFR daily publication begins
May 2018	CME SOFR futures contracts launch
October 2018	Trading in cleared OIS referencing SOFR
October 2020	ISDA launches LIBOR Fallback Supplement to the 2006 ISDA Definitions and the ISDA 2020 LIBOR Fallback Protocol
January 2021	ISDA supplement and protocols take effect
March 2021	FCA announces Index Cessation Event and triggers establishment of fixed spread to SOFR for 1&3M USD LIBOR
December 2021	Banks no longer compelled to make LIBOR submissions after December 31, 2021 (non-USD LIBOR and 1-week / 2-month USD LIBOR)
June 2023	Banks no longer compelled to make submissions for remaining USD LIBOR tenors after June 30, 2023



Impact of LIBOR Cessation on Existing GLWA Financings

GLWA will need to address lack of adequate fallback language in Sewer Series 2006D financing documents prior to June 2023 index cessation, but low-cost nature of funding, favorable risk profile, and potential legislative fixes suggest that the best path is to take no action at this time

- Sewer 2006D Bonds (outstanding in the amount of approximately \$240 million), with a final maturity of 2032, are floating rate bonds with an interest rate based on 3-month USD LIBOR plus 0.60%
- Existing Sewer Series 2006D LIBOR index structure provides a low-cost option with a favorable risk profile:
 - Lowest cost funding option, compared to other variable rate options and/or fixed rate refinancings
 - Asset liability match that partially insulates GLWA from reduction in investment income on its cash balances
 - LIBOR note structure has favorable risk allocation, not requiring third party credit support (as other variable rate options would) and/or renewal risk for such credit support
- 3-month USD LIBOR is now scheduled for cessation on June 30, 2023
- Sewer Series 2006D bonds do not have interest rate fallback language that allows for substitution of a replacement index, and will need to be addressed prior to the index cessation date
 - Options for GLWA to address existing Sewer Series 2006D fallback language include a fixed-rate conversion, a refinancing with variable rate debt, and an amendment to existing bonds, but each option involves drawbacks
- Draft legislation has circulated in the US Congress that would provide a fix for substitution of an alternative index in cases (like the Series 2006D bonds) where fallback language is not workable and would obviate the need to pursue alternatives



V. Peer Comparison

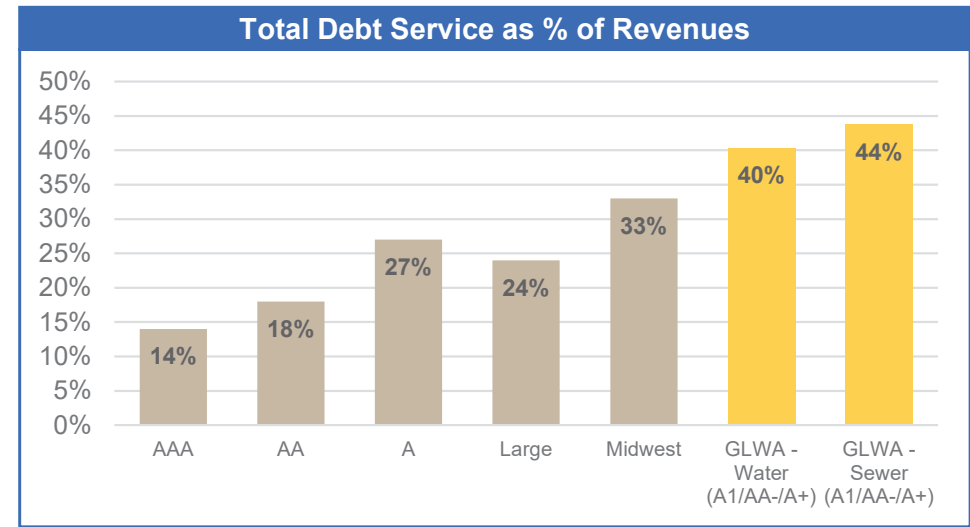
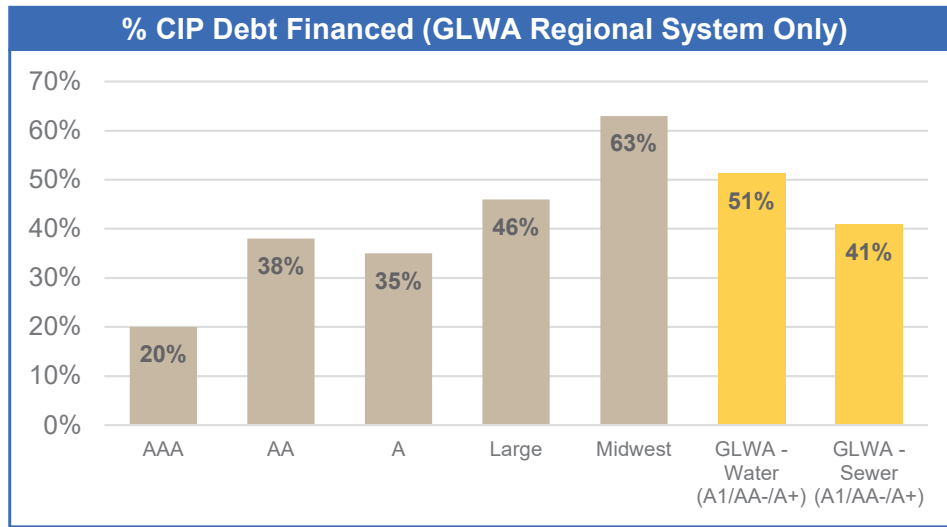
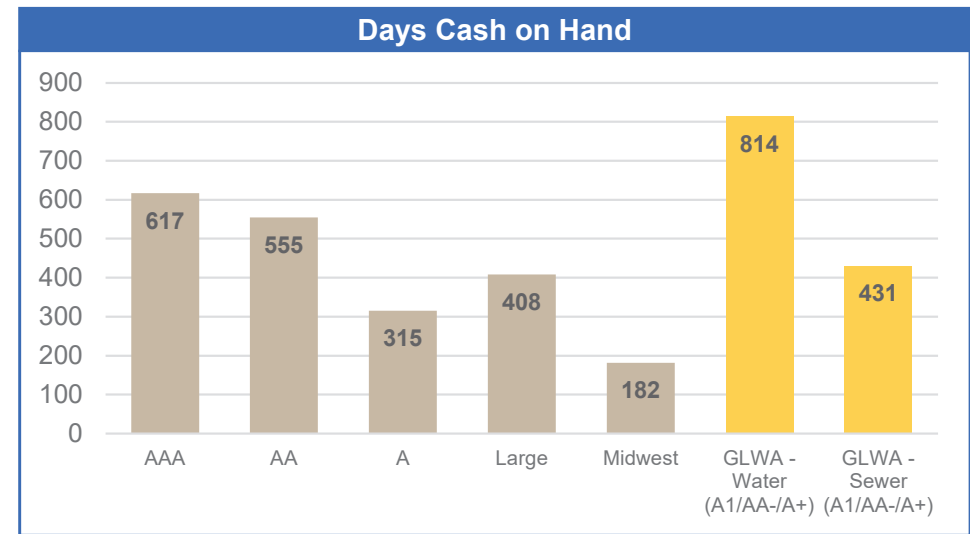
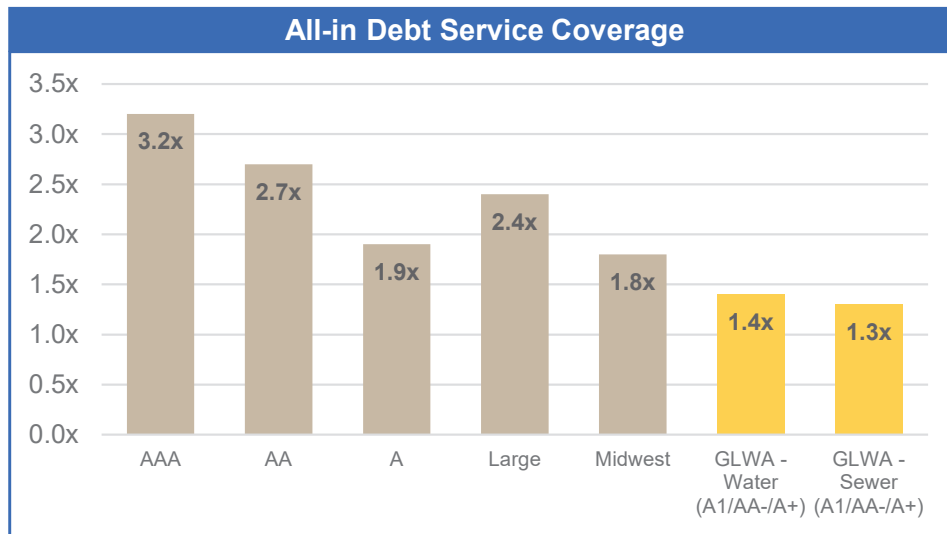


Key Financial Metrics for GLWA

The maintenance of key financial metrics is critically important to GLWA's ongoing positioning for rating upgrades and its objective of lowering GLWA's fixed costs for both the Water and Sewer enterprises.

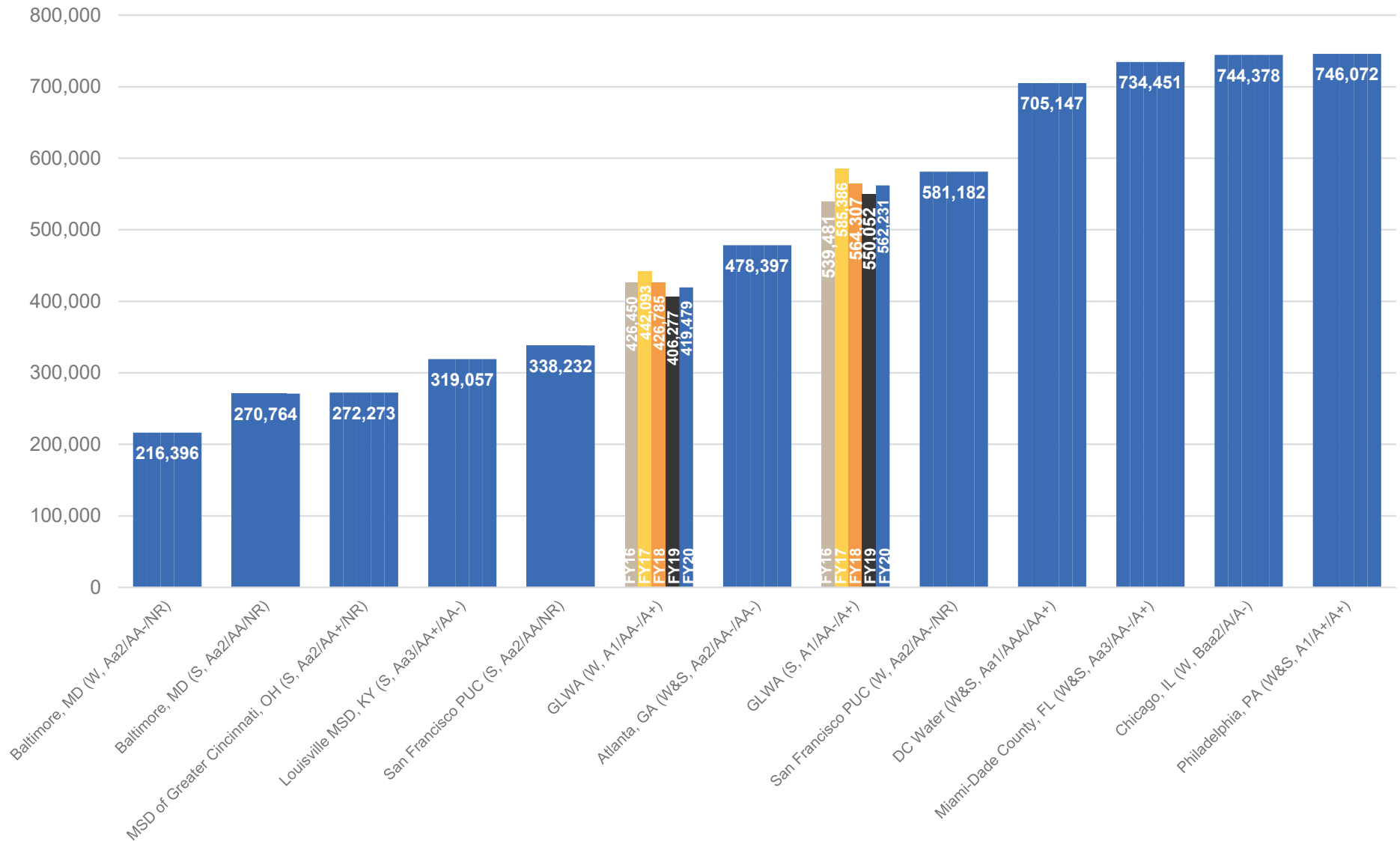
- GLWA highest senior lien water and sewer ratings of A1/AA-/A+ remain among the lower half of utility ratings nationally
- GLWA continues to push forward with efforts to improve all bond ratings up to AA category ratings for both the water and sewer sectors, recognizing that debt service (for planned new money and refinancing bonds) accounts for close to 50% of the annual budget
- With continued improvement in senior lien bond ratings for water and sewer, significant reductions in fixed cost could be achieved relative to the maintenance of current ratings
- GLWA has identified a group of peer utilities against which it is benchmarking performance and establishing targets for key metric of debt service coverage and liquidity to improve bond ratings
- GLWA is also using rating agency medians on a broader range of variables to assess the progress for the upgrade of its senior lien bond ratings
- Ongoing benchmarking and continued progress in improving key financial metrics of GLWA are critical to the achievement of lower debt service cost and a path to higher credit quality

Financial Metrics Compared to 2020 Fitch Medians



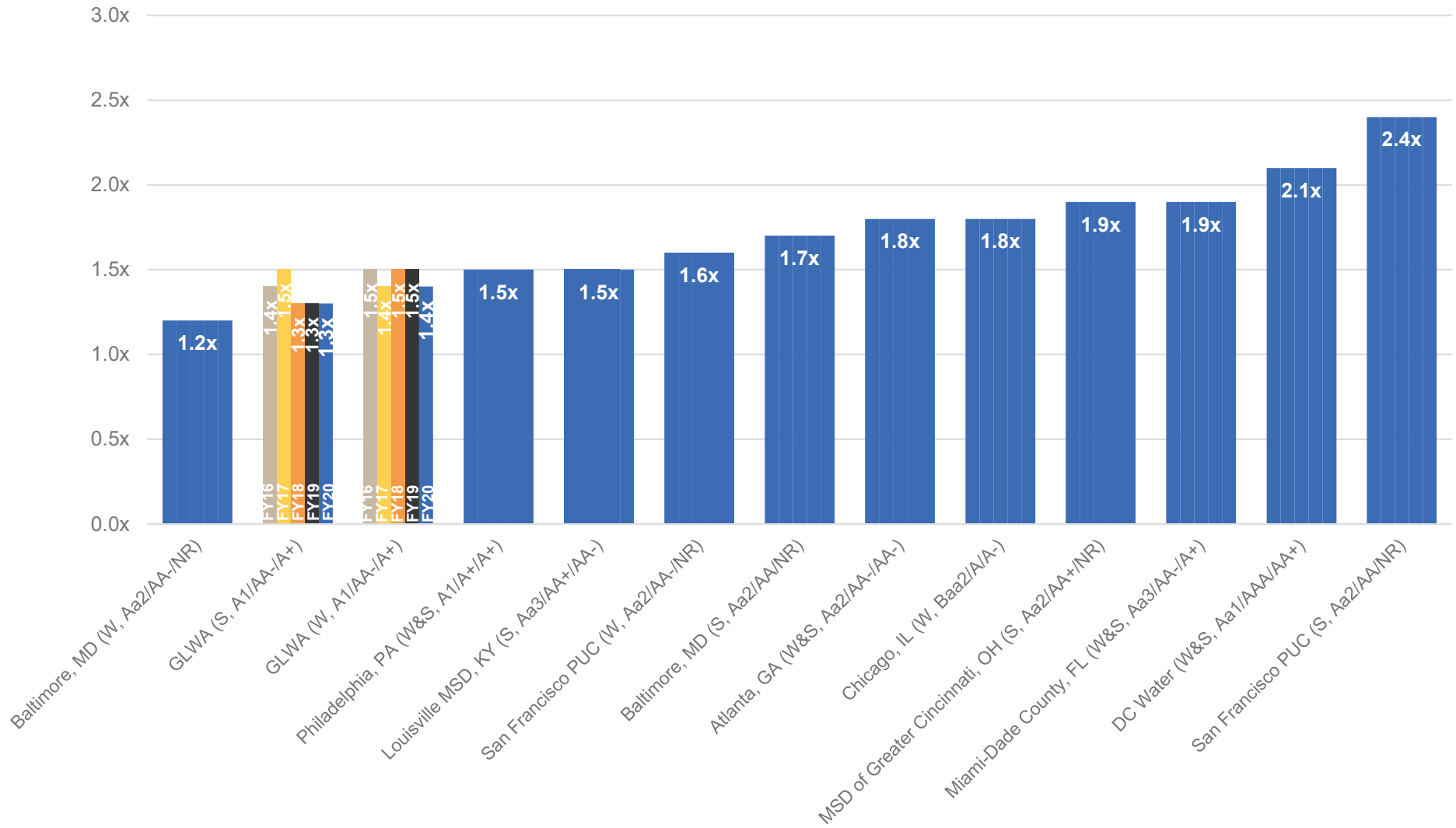
Note: Fitch median data as provided by Fitch in "2020 Water and Sewer Medians" report, dated November 11, 2019. GLWA figures for All-in Debt Service Coverage, Days Cash on Hand, and Total Debt Services as % of Revenues data as of FY2020 and calculated based on FY2020 financial statements. % CIP Debt Financed data as proposed in May 2021 audit committee meeting and is for regional system only, excluding any capital expenditures and bond financings for DWSD

Peer Comparison of Total Operating Revenues



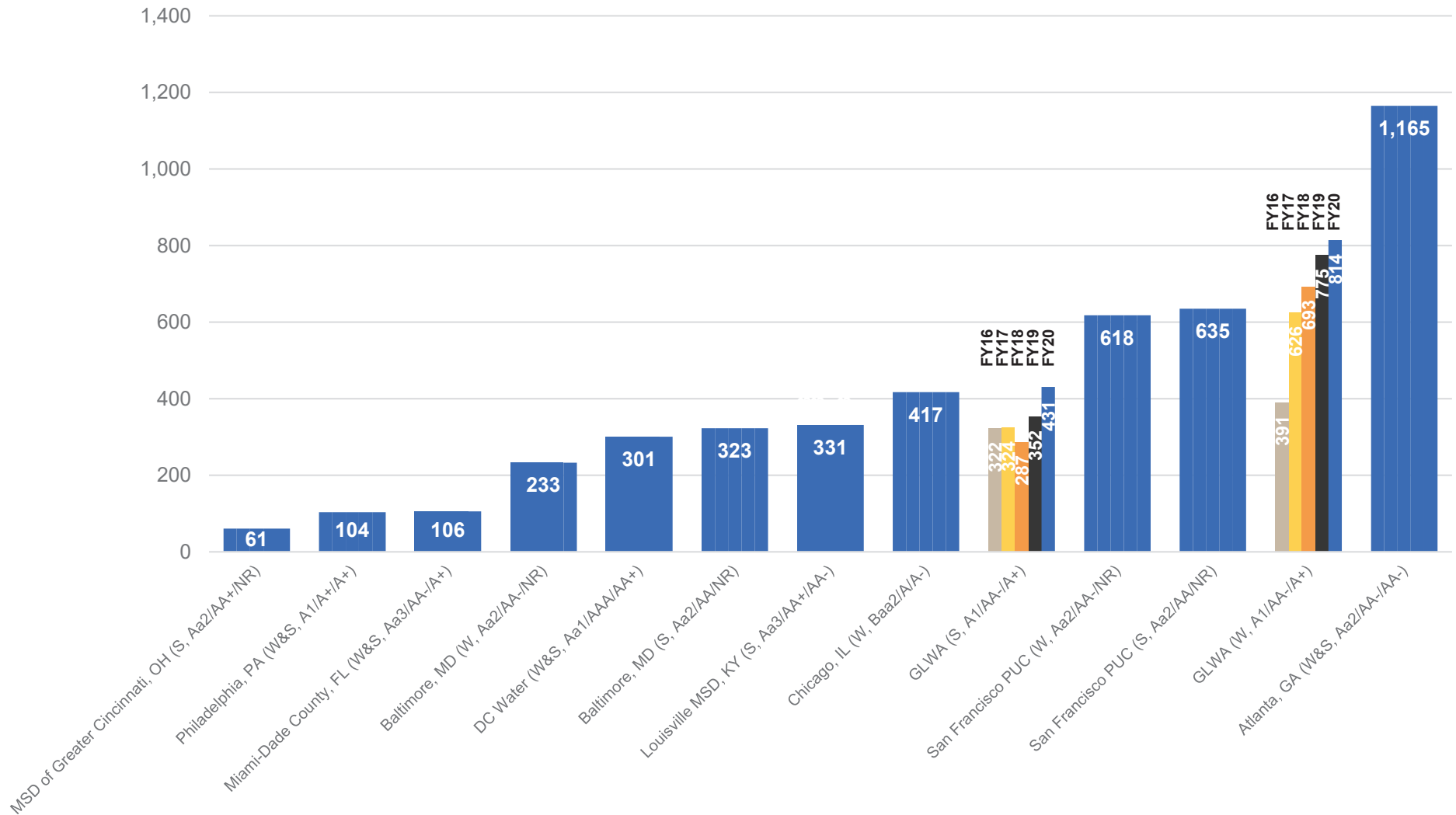
Source: Moody's Financial Ratio Analysis database, as of May 15, 2021; FY2020 GLWA data calculated based on FY2020 financial statements and disclosures; Chicago, DC Water, Miami-Dade County, and MSD of Greater Cincinnati as of FY2019; All other data as of FY2020

Peer Comparison of Total Debt Service Coverage



Source: Moody's Financial Ratio Analysis database, as of May 15, 2021; FY2020 GLWA data calculated based on FY2020 financial statements and disclosures; Chicago, DC Water, Miami-Dade County, and MSD of Greater Cincinnati as of FY2019; All other data as of FY2020

Peer Comparison of Unrestricted Days Cash and Investments



Source: Moody's Financial Ratio Analysis database, as of May 15, 2021; FY2020 GLWA data calculated based on FY2020 financial statements and disclosures; Chicago, DC Water, Miami-Dade County, and MSD of Greater Cincinnati as of FY2019; All other data as of FY2020



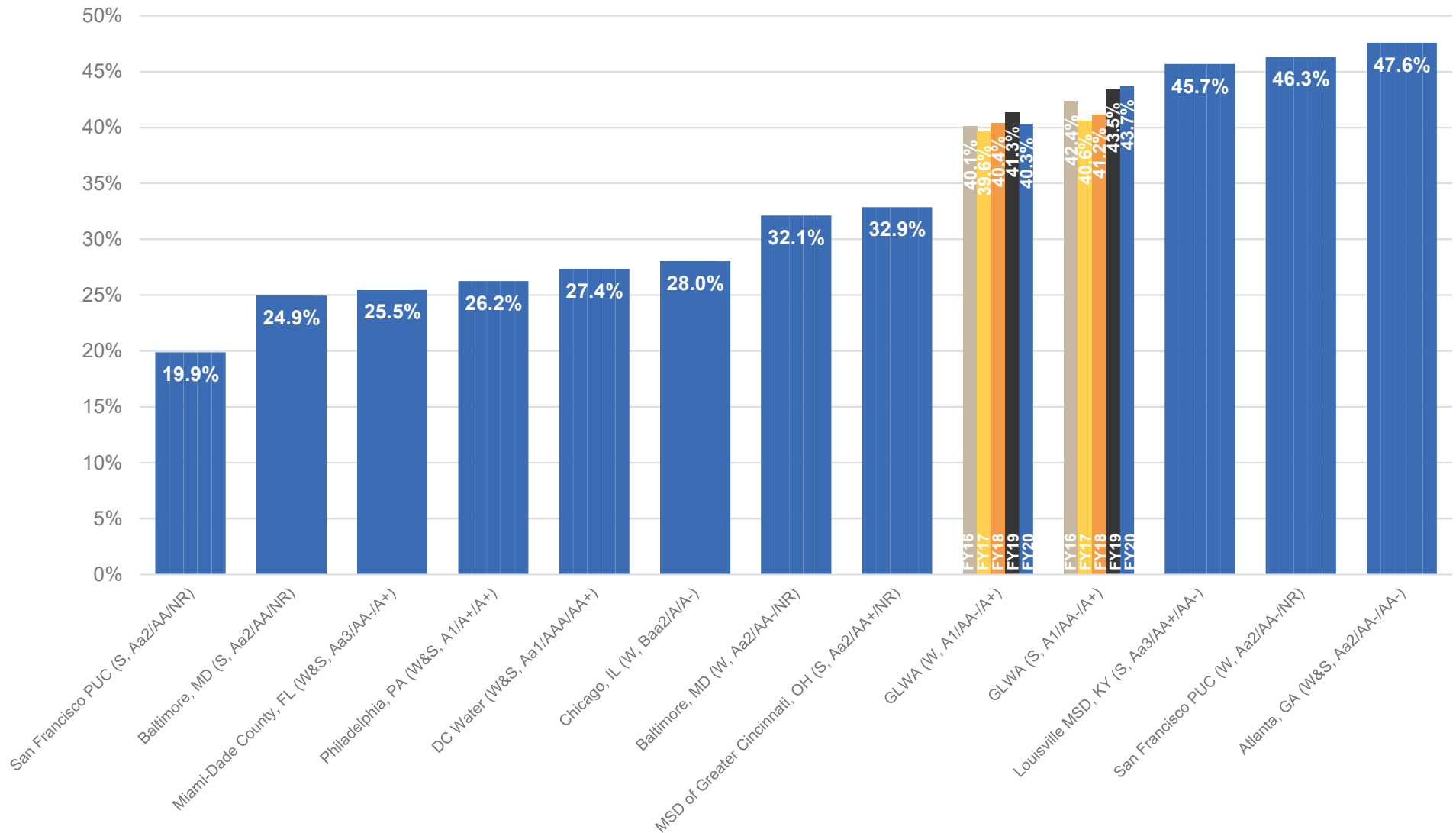
Summary of GLWA Liquidity (Moody's Methodology)

	Water System		Sewer System	
Source	FY 2020 Amount	Days Cash & Investments (days)	FY 2020 Amount	Days Cash & Investments (days)
Receiving Fund	\$65.2 million	135	\$91.7 million	137
Operations and Maintenance Fund	\$16.1 million	33	\$22.9 million	34
Extraordinary Repair and Replacement	\$27.9 million	58	\$44.6 million	67
Improvement & Extension Account - Regional	\$285.3 million	589	\$128.3 million	192
Total Unrestricted Liquidity	\$394.4 million	814	\$287.5 million	431
Operating Expense	FY 2020 Amount		FY 2020 Amount	
Transfer to O&M Fund – Regional	\$137.9 million		\$185.3 million	
Transfer to O&M Fund – Local	\$38.9 million		\$58.1 million	
Total Operating Transfers	\$176.8 million		\$243.4 million	

Source: FY2020 financial statements

Note: Moody's Days Cash Calculation includes O&M transfers related to the local system but excludes local system liquidity; Includes legacy pension obligations

Peer Comparison of Debt Service as a % of Operating Revenues



Source: Moody's Financial Ratio Analysis database, as of May 15, 2021; FY2020 GLWA data calculated based on FY2020 financial statements and disclosures; Chicago, DC Water, Miami-Dade County, and MSD of Greater Cincinnati as of FY2019; All other data as of FY2020



VI. Appendix



Moody's Water & Sewer Sector Outlook

- Anticipate **overall stability** in 2021 despite the effects of the coronavirus pandemic and resulting economic downturn, with fundamental strengths (including the essentiality of its services, its autonomous rate-setting authority and its stable, diverse and largely residential customer bases), precluding material declines in revenues
- Utilities will continue to benefit from stable, largely residential customer bases that mitigate declines in non-residential consumption
- Stable demand and revenue will continue to support strong liquidity, which is a strength of the sector and provides a buffer against revenue declines
- Debt service coverage will remain solid, although impacted by lower non-residential consumption, increased delinquencies, and reductions in planned rate increases
- Asset condition will continue to decline steadily, particularly as utilities defer capital projects from 2021 in order to manage cash flow
- Strong governance remains key to mitigating environmental and social risks including managing water resources, protecting coastal utilities against sea-level rise, and staying ahead of federal regulations
- Increasing certainty over health and economic conditions that leads to positive trends in capital investment, liquidity, and coverage could lead to a positive sector outlook, whereas . Contraction in economic activity exceeding current expectations could lead to a negative sector outlook.

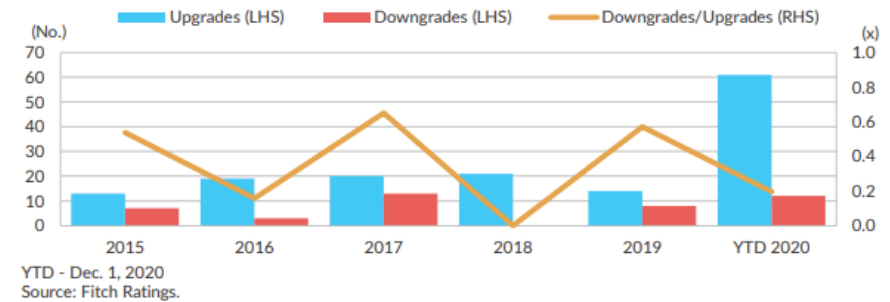
Source: Moody's Report, "2021 outlook stable despite coronavirus challenges and economic slowdown" December 2, 2020



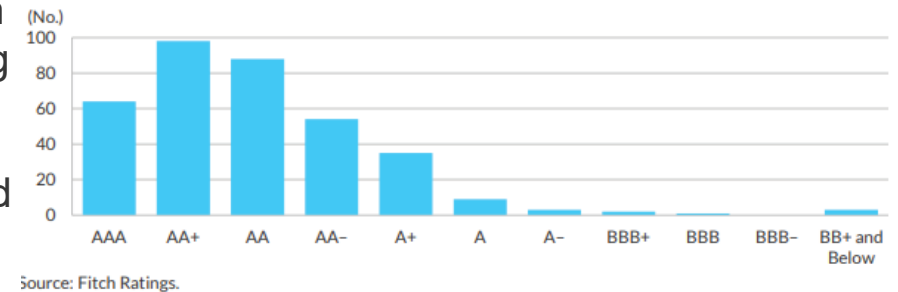
Fitch's Water & Sewer Sector Outlook

- Stable outlook**, with the key factors in the sector's performance stability being strong sector characteristics including essentiality of the services, lack of competition, and generally autonomous rate-setting authority, as well as conservative business model that provides stability even during periods of uncertainty
- Fitch expects sector financial results to remain very strong in 2021, although some weakening is likely given the macro environment and anticipated capital spending
- Fitch expects revenues will climb a little over 2%, as many utilities held rates steady entering fiscal 2021, and most utilities continue to anticipate a higher level of delinquencies versus historical norms due to the pandemic
- Operating expense increases are forecast to approximate changes experienced in recent years and be around 3.5%
- With user charges continuing to outpace inflationary growth, along with the economic shocks related to the pandemic, the issue of affordability is becoming an increasing focus among sector stakeholders and could pressure finance and debt ratios beyond the outlook period

Water & Sewer - Rating Changes



Water & Sewer — Rating Distribution
(As of Dec. 1, 2020)

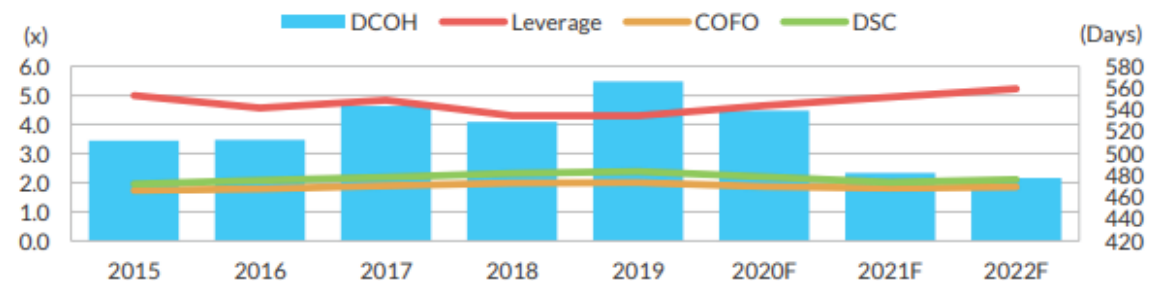




Fitch's Water & Sewer Sector Outlook

- Fitch expects regulatory pressures on operations and capital to increase, with expected further tightening of water and sewer regulations in 2021
- Planned capital spending by utilities is much higher heading into 2021 following planned peak outlays the prior year. As a result, utilities are pointing to a drawdown of cash reserves to fund the bulk of these costs and a corresponding increase in leverage
- Fiscal challenges among local governments resulting from the pandemic and subsequent economic contraction could affect utilities that are components of a local government in that utilities could face increased transfers out of surplus funds or be used as sources of borrowable resources for other units of the respective local government

Key Sector Financial Medians
(FAST Data by Utility Fiscal Year)



Note: Credits rated under Fitch's new criteria (April 2020 through November 2020).
COFO – Coverage of full obligations. DCOH – Current days cash on hand. DSC – Fitch-calculated total debt service coverage. F – Forecast.
Source: Fitch Ratings.



Standard & Poor's Water & Sewer Sector Outlook

- ◆ S&P is revising the sector outlook to **stable**, noting that the negative pressures from COVID-19 may take longer to present themselves, if they materialize at all
- ◆ Most systems have, to date, not experienced a material financial impact related to COVID-19, and have even been the “unsung heroes of the municipal market” during and after the worst of the downturn
- ◆ However, longer-term headwinds are on the horizon, as utilities scale back rate adjustments and defer maintenance and capital spending as a result
- ◆ Continued preservation of cash expected, as in 2020 it became increasingly common for utilities to postpone pay-as-you-go projects in an effort to maintain or even build available reserves in the face of economic uncertainty and cash flow deviations
- ◆ Rating-relevant factors such as declines in median household effective buying income and an increase in the number of households below the poverty line are likely in at least some communities

What We're Watching – U.S. Municipal Water And Sewer Utilities



Vaccination progress

Will normalcy return too late to save FY 2021 for many utilities?



Affordability

Did COVID simply exacerbate the “K-shape”?



Regulation

Lead, PFAS, maybe more. But who pays and what is the magnitude of the capital costs?



Credit conditions

With low rates, will borrowing increase to preserve utility cash? But might stressed local governments take that cash?



Federal policy changes

Does a (barely) blue wave finally mean an infrastructure bill? Will water benefit?



Resilience

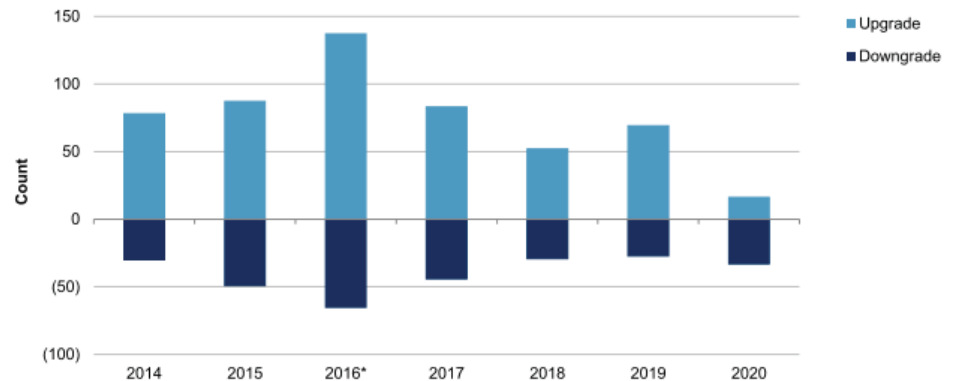
For water utilities, ESG is just a day at the office, though with climate change there's still much work to be done.



Standard & Poor's Water & Sewer Sector Outlook

- Revisiting rate adjustments heightens the risk of deferred maintenance, and creates a snowball effect where improvements that had to be done anyway are going to be more expensive and more critical to operations by the time they are finally addressed
- Many factors that helped steady utility finances in 2020 may be different in 2021, with those utilities most at risk of credit quality headwinds being those that have large operating revenues from multi-family residential customers and small businesses (two customer classes that have a high overlap of the same actual people)
- With the years-in-the-making update to the Lead and Copper Rule finally completed, attention is likely to turn to other unregulated and emerging contaminants, including PFAS
- Discussion of water affordability could reach a fever pitch, and there is potential for federal support in the form of programs modeled after LIHEAP

Sector Downgrades and Upgrades, Last Five Years



*New criteria in January 2016. Data as of Dec. 31, 2020.

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Financial Services Audit Committee Communication

Date: June 25, 2021

To: Great Lakes Water Authority Audit Committee

From: Debra Anderson, Transformation Manager

Re: Transformation Report through March 31, 2021

Background: The Transformation Team is facilitated by Chief Financial Officer (CFO) with dotted line responsibility to the Executive Leadership Team (ELT).

Mission: The mission of the Transformation Team is to develop a culture throughout the organization that cultivates the cycle of Continuous Improvement and Lean Six Sigma methodology by first respecting people, increasing understanding of our current state, providing meaningful training, and working to empower, engage, and inspire team members.

Vision: The vision of the Transformation Team is to create and maintain a safe working environment, be leaders who lead by example, and empower those we work alongside. Through internal partnerships within the organization, we will construct a framework that is built upon Lean Six Sigma structured tools that deliver financial and operational results, reduce risks, improve processes, and identify cost savings opportunities by reducing or eliminating waste.

How We Work: Transformation takes a practical approach to continuous improvement and change management by positioning ourselves in both high executive level and tactical operational level spaces. We document processes to gain a thorough understanding of gaps and Opportunities for Improvement (OFI); followed by documentation with strong audit strategies.

Analysis: The Transformation Team adapts to organizational priorities as needed. See attached report related to current and recurring projects in process.

Proposed Action: Receive and file the report.



The Bi-Annual Transformation Report includes the following two sections.

1. Transformation Span of Influence
2. Photo Journal

Transformation Span of Influence

(see list of acronyms following the table)

Operating Areas	Project Description	Desired Outcomes (Benefits), Core purpose, and EUM attribute	Progress and Outcomes Achieved to Date (Benefits & Cost Impact)
Administrative & Compliance Services	1. Fire Extinguisher Visual Management (see photos)	Increased safety in the workplace	Installation of Mock-ups complete March 2021 (10 WRRF, 5 Water Operations, and 2 Field Services). In progress to begin roll out of enterprise-wide implementation. Target start date July, 2021
	2. P2C2 – Standardize Documentation (Policy, SOP, SWI, and Job Aids)	Communication and compliance improvement Build awareness through training and documentation Create standards to audit against to maintain compliance	Documents and templates uploaded to One Water Connect
Water Operating Services	1. LSS Training – 5S	Reduction in waste and increase efficiency	Process flow improvements made (no cost evidence to date)
	2. Green	EUM – Community Sustainability	Lake Huron - Grass cutting reduction: Cost Avoidance Approx. 10 Acres (\$10,400 \$15,200) Based on these assumptions: 112 days or 16 weeks of spring/summer lawncare Low Range \$650/wk High Range \$950/wk Lake Huron – Printer Default Setting: Reduce copy paper and printer toner cost.



Bi-Annual Transformation Report
for the Period Ending March 31, 2021

Operating Areas	Project Description	Desired Outcomes (Benefits), Core purpose, and EUM attribute	Progress and Outcomes Achieved to Date (Benefits & Cost Impact)
			Recycling Results (Calendar Year 2019): Paper Recycled – 8,690 lbs. Trees – 74 each Crude Oil – 1,651 gals Paper Spared from Landfill – 15 cubic yards Water Conserved – 30,415 gals Energy Conserved – 17,814 Kilowatts Metal (mixed) - \$32,521 Plastic Bottles – 40,000 Homes We Can Power w/Energy Saved – 1 Home for 26.07 months
	3. 5S – WWP Maintenance Area	EUM – Operational Optimization Reduction in waste (time & resource effort) and increase efficiency Increased safety in the workplace Increased team member morale	Project on Hold – COVID-19
	4. Visual Management– Lake Huron Water Treatment Facility (see photos)	Reduction in waste (time & resource effort) and increase efficiency Communication Improvement	Work in Progress – communication improvement (no evidence collected, verbal confirmation)



Bi-Annual Transformation Report
for the Period Ending March 31, 2021

Operating Areas	Project Description	Desired Outcomes (Benefits), Core purpose, and EUM attribute	Progress and Outcomes Achieved to Date (Benefits & Cost Impact)
Wastewater Operating Services	1. LSS Training – 5S, RCA, Effective Meetings, and RRE	EUM – Operational Optimization Increased team member morale	Application of tools are increasing as team members actively use tools (RCA/A3 form, 5S, and Visual Management)
	2. 5S – Pump Station #1	EUM – Operational Optimization Reduction in waste (time & resource effort) and increase efficiency Increased safety in the workplace Increased team member morale	Cost Avoidance - \$2,962,203 Hard Cost - \$33,893 (Calendar Year 2019)
	3. 5S – Lab (photos)	EUM – Operational Optimization Reduction in waste (time & resource effort) and increase efficiency Increased safety in the workplace Process Control and Improved workflow Increased team member morale	Completion scheduled for July 2021
	4. RCA – Pipe Gallery Valve Failure, Scum House Safety Incident, CSO Process Improvement, and various Safety Incidents	EUM – Operational Optimization Process Control and Improved workflow Communication and documentation Improvements Visual Management tools applied	Cost Avoidance (Safety Related) - \$2,823,887 (Dec 2018, Calendar Year 2019)
	5. Visual Management – Pump Station #1 & COVID-19 Related	EUM – Operational Optimization Visual Management tools applied to improve communication	Work in Progress
Planning Services	1. AMSO – Change Management Support	EUM – Operational Optimization & Enterprise Resiliency	Work in Progress
	2. COVID-19 Return to work support	Improve communication and team member safety	Work in Progress



Bi-Annual Transformation Report
for the Period Ending March 31, 2021

Operating Areas	Project Description	Desired Outcomes (Benefits), Core purpose, and EUM attribute	Progress and Outcomes Achieved to Date (Benefits & Cost Impact)
Financial Services	1. LSS Training – 5S, Effective Meetings, and RRE	Build awareness through training and documentation	328 Team Members Trained 483 Confirmed Training Hours
	2. 5S – WWB/MOB 18 th Floor and 16 th Floor	EUM – Operational Optimization Reduction in waste (time & resource effort) and increase efficiency Increased safety in the workplace Process Control and Improved workflow Increased team member morale	Hard Savings - \$12,962 Influence (Removal of Space Heaters) - \$334, 278
	3. VOC – FSA	Improve FSA performance in meeting customer requirements Increase understanding of needs and expectations Identify gaps to create sustainable solutions	Conducted 3 VOC surveys (2017, 2018, 2019) Survey feedback: Positive trend - Increased each survey year. 2017 - Baseline 2018 – Increase 10% 2019 – -Increase 8%
Chief Executive Officer	1. Support Security & Integrity with SOP and SWI templates	Build awareness through training and documentation	DWSD documentation successfully transferred to GLWA templates

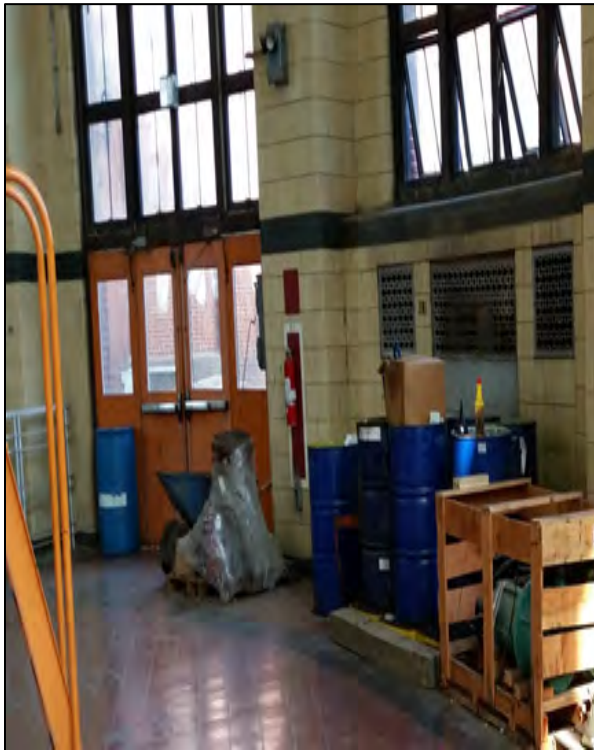
Acronyms:

- OFI – Opportunity for Improvement
- P2C2 – Policy & Procedure Collaboration Council
- SOP – Standard Operating Procedure
- SWI – Standard Work Instruction
- LSS – Lean Six Sigma
- EUM – Effective Utility Management
- RCA – Root Cause Analysis
 - A3 – International paper size (approx. 11”x17”) for RCA data gathering
- RRE – Roles, Responsibilities, and Expectations
- VOC – Voice of the Customer

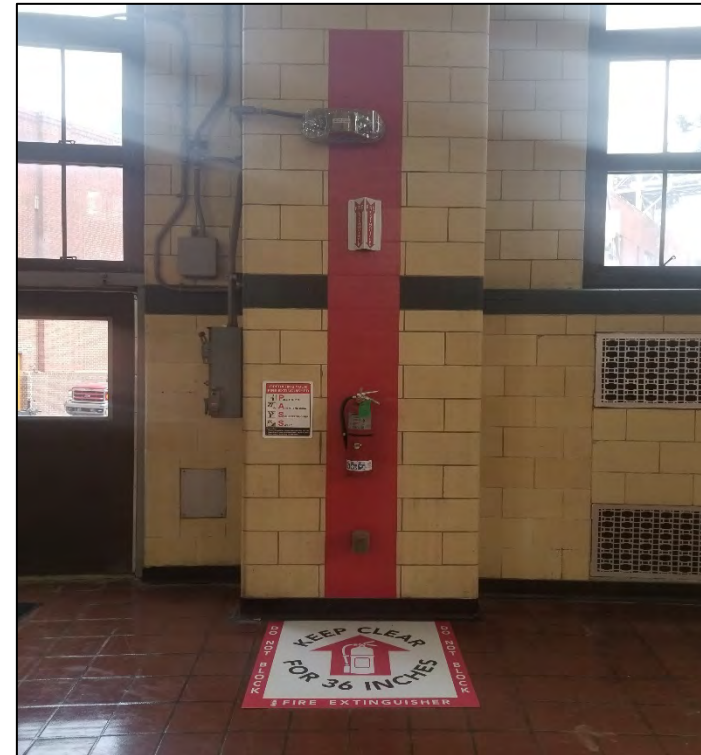
Photo Journal

Fire Extinguisher Visual Management

Before



After





Bi-Annual Transformation Report for the Period Ending March 31, 2021

Lake Huron WTP – Operations Area Communication Boards

Before

High Lift Pumps		Low Lift Pumps	
#2	<ul style="list-style-type: none"> - Check cooling water - Check flow to radiators after startup - Operating Bearing Temp 60-70 - HLP's Run Above Safe Operating Range - 1/5 - VFD 90% (setting drifts) - % on VFD is sensitive & sporadic 	#1	1/5
#3	<ul style="list-style-type: none"> - Gate Valve Closed - Cone Valve not opening past 25% - Fire in Cabinet - NO 	#2	1/5
#4	<ul style="list-style-type: none"> - Have to close dump valves - On fire to admit cone valve - OK 	#3	NO
#5	<ul style="list-style-type: none"> - Cone valve open 81.3% on out on - is actually 100% open - OK 	#4	OK
#6	1/5		
#7	<ul style="list-style-type: none"> - Monitor L.G. B. Temps - if above 74 take out of service - 1/5 		
#8	OK - Bypass Only		
#9	<ul style="list-style-type: none"> - OK - BYP ONLY - VFD Fault - 93-195 		

After

GLWA		Operations Equipment Status				As Directed As Directed Available for Service Available for Replacement			
High Lift / Wash Water	DATE / INITIALS	NOTES	WWTP	DATE / INITIALS	NOTES	Poly Transf pumps	DATE / INITIALS	NOTES	
Wash Water Pumps			Transfer Pumps			#1 AS			
1 AS			1 AS			#2 AS			
2 AS	2-1-21	2-1-21	2 AS			Sediment Basins Pumps			
3 AS	2-1-21	2-1-21	3 AS			1 US			
4 AS	2-1-21	2-1-21	4 AS			2 AS			
Rate Control			Trains			Pre-Dechlor			
N AS			1 AS			1 CL-17			
5 AS			2 AS	2-10-21	2-10-21	2 CL-17			
High Lift			3 AS	2-1-21	2-1-21	3 CL-17			
VFD 2 AS	1-4 AQ	1-4 AQ	4 AS			Post Dechlor			
3 AS			Shade Pump			1 CL-17			
4 AS			1 AS	1-26 GW	1-26 GW	2 CL-17			
5 AS	1-4 AQ	1-4 AQ	2 AS	1-26 GW	1-26 GW	3 CL-17			
6 US			3 AS			Generators			
7 AS			4 AS	1-26 GW	1-26 GW				
VFD 8 AS	1-16 LW	1-16 LW	5 AS			Carts			
VFD 9 AS	1-16 GW	1-16 GW	6 AS						
Barbican Pump AS									

WRRF Lab 5S Project – Project In Progress

Before



After

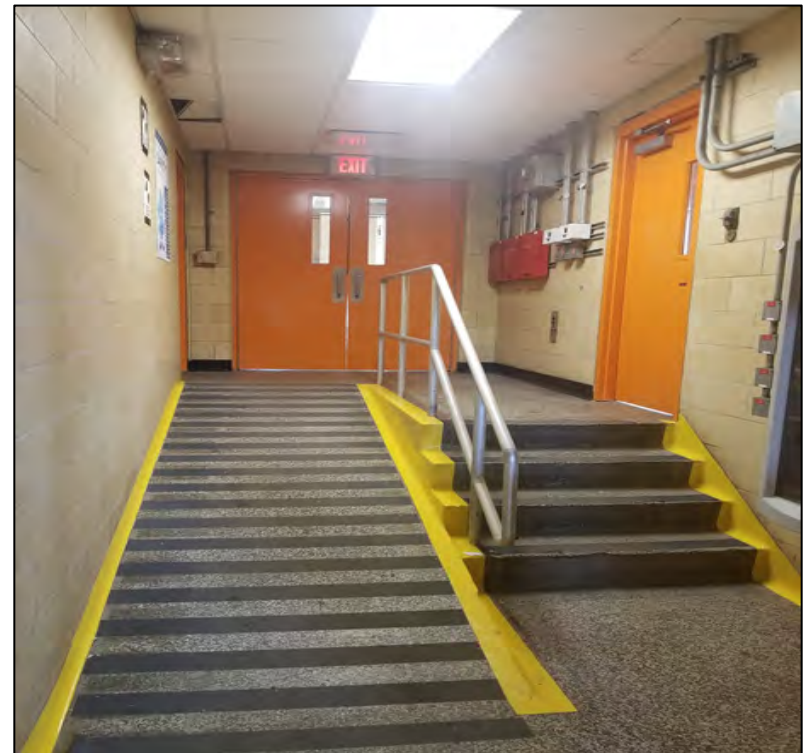


GLWA Safety Improvements

Before



After





Added Safety Signs – Wear Your PPE & Lockout Tagout



GLWA

Great Lakes Water Authority



Monthly Financial Report Binder

March 2021

**Presented to the
Great Lakes Water Authority
Audit Committee on June 25, 2021**

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Key Financial Metrics

The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows:

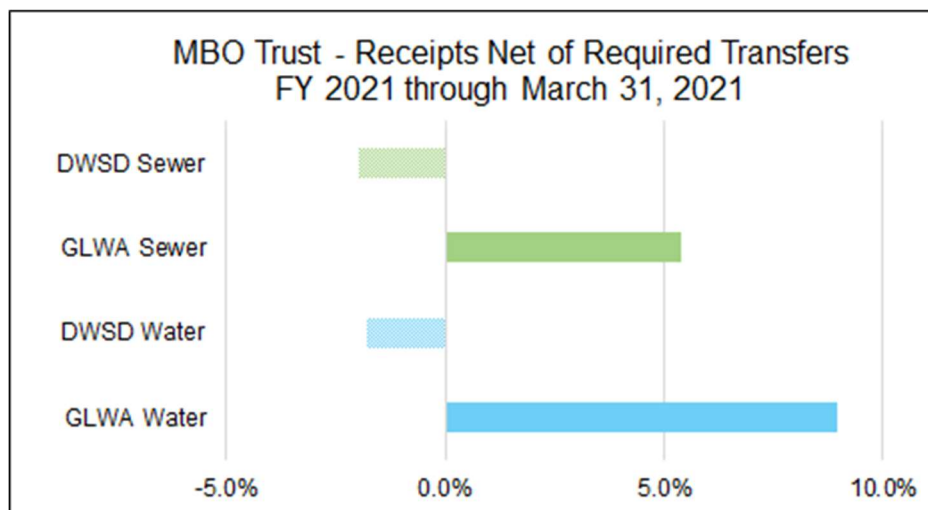
No Risk (green) - Potential (yellow) - Likely (red)

Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information.

As of March 31, 2021				
Metric	FY 2021 Budget	FY 2021 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$237.2	\$242.6	2%	47
Wholesale Water Billed Usage (mcf)	10,234,000	10,699,000	5%	
Wholesale Sewer Billed Revenue (\$M)	\$201.8	\$201.8	0%	49
Wholesale Water Operations & Maintenance (\$M)	\$100.6	\$91.5	-9%	6
Wholesale Sewer Operations & Maintenance (\$M)	\$136.7	\$121.5	-11%	
Investment Income (\$M)	\$5.2	\$5.8	12%	37
Water Prorated Capital Spend w/SRA* (\$M)	\$83.0	\$97.0	17%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$62.0	\$64.0	3%	29

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

Master Bond Ordinance (MBO) Trust Net Receipts (page 52)



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

subsequent year(s). DWSD Water and Sewer report shortfalls of \$1.3 million and \$4.3 million respectively through March 2021. DWSD management is reviewing plans to resolve the current year shortfalls and has proposed a formal plan to end the FY 2021 fiscal year with positive net cash flows.

The current DWSD loan receivable balance for fiscal years 2017 and 2018 is \$12.9 million.

Budget to Actual Analysis (page 3)

- The third quarter budget amendment which was approved by the GLWA Board on May 26, 2021 is reflected in the FY 2021 Amended Budget columns on the tables in the March 2021 Budget to Actual report.
- The total Revenue Requirements are on target through March 2021.
- The total Operations & Maintenance expenses are at 67.3% of budget through March 2021 which is reasonably within the pro-rata benchmark of 75.0%.

Basic Financial Statements (page 10)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for March 2021 is \$74.1 million for the Water fund (28.6% of total revenues) and \$117.4 million for the Sewer fund (33.1% of total revenues).
- Water Net Position decreased by \$6.3 million, and Sewage Disposal Net Position increased by \$26.8 million for the year to date through March 2021.

Capital Improvement Plan Financial Summary (page 27)

- The Water and Sewer system activity are both exceeding the 75% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For March, transfers of \$12.8 million and \$17.6 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for March, transfers of \$4.5 million and \$8.1 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 36)

- Total cash & investments are \$498 million in the Water fund and \$455 million in the Sewer fund.
- The total combined cumulative investment income for FY 2021 through March is \$5.8 million.

DWSD Retail Revenues, Receivables & Collections (page 41)

- Water usage through March 31, 2021 is at 92.60% and revenues at 93.87% of budget.
- Sewer usage through March 31, 2021 is at 94.01% and revenues at 98.84% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$27.6 million over the prior year.
- Past dues over 180 days make up 65.9% of the total accounts receivable balance. The current bad debt allowance covers 100% of past dues over 180 days.

GLWA Wholesale Billing, Receivables & Collections (page 46)

- GLWA accounts receivable past due balance net of Highland Park is less than 4.0% of the total accounts receivable balance.
- The Highland Park past due balance is \$47.0 million. It includes \$35.8 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$9.4 million for water supply services. In FY 2021, Highland Park has made five payments totaling \$2.6 million through March 2021.

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



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

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

The FY 2021 information presented in these sections includes the third quarter budget amendments approved by the GLWA Board on May 26, 2021.

Revenue Requirement Budget Basis Analysis

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

Table 1A – Water Revenue Requirement Budget and **Table 1B – Sewer Revenue Requirement Budget** presents a year-over-year budget to actual performance report. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for March 2021, the pro-rata benchmark is 75.0% (9 of 12 months of the fiscal year).

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

1. **Revenues:** For *both* systems, FY 2021 revenues are either at or above target. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.

Water revenues presented in Table 1A differ from those presented in *Table 2 – Statement of Revenues, Expenses and Changes in Net Position* found in the *Basic Financial Statement* section of this report. Water Revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract as documented in Appendix A-2 of the [Flint Water Agreement](#). Through March 31, 2021 these payments total \$5.0 million for FY 2021.

2. **Investment Earnings:** For *both* systems, investment earnings are above the pro-rata benchmark for FY 2021; the *water* system is at 87.9%; while the *sewer* system is at 81.4%. The market adjustment, previously reported in this section in FY 2020, has been removed. These annual entries are recorded for financial reporting purposes and are not a part of the revenue requirements reporting. Detailed analysis of investment earnings activity to date can be found in the *Cash & Investment Income* section of this financial report binder.
3. **Other Revenues:** These are one-time and unusual items that do not fit an established revenue category. Both the *water* and *sewer* systems actual amount will vary from budget due to the nature of the items recorded in this category.
4. **Operations & Maintenance Expense:** Actual expenses¹ for *both* systems have variances from the pro-rata benchmark. The *water* system is less than the pro-rata benchmark for FY 2021 at 68.2%. The *sewer* system O&M expenses, at 66.6%, is also less than the pro-rata benchmark.
5. **Debt Service:** *Both* systems are slightly above the pro-rata benchmark for FY 2021; the *water* system is at 76.2%; while the *sewer* system is at 76.0%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down.
6. **Operating Reserve Deposit:** GLWA has established a target balance in the O&M Fund of 45 days of operating expense which works in tandem with the I&E Funds to provide liquidity to the utility. Adequate funding is in place to meet this requirement; therefore, it is expected that additional transfers to this reserve will not be required in FY 2021. The approved FY 2021 first quarter budget amendment removed the budgeted amount of \$877 thousand for the *water* system for this line item.
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 2020, DWSD sewer ended the year with a budgetary shortfall through June 30, 2020, of \$10.8 million. The DWSD *water* system experienced a \$937 thousand budgetary shortfall through June 30, 2020. For FY 2021, the DWSD *water* system has a budgetary shortfall of \$1.3 million and the DWSD *sewer* system has a budgetary shortfall of \$4.3 million through March 31, 2021. GLWA and DWSD staff are meeting regularly to discuss steps to mitigate any shortfall as outlined in the 2018 MOU.

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.

8. **Improvement & Extension (I&E) Fund Transfer Pending:** The contribution to the I&E Fund is for improvements, enlargements, extensions, or betterment of the Water System.
9. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12th basis each month in accordance with the Master Bond Ordinance.
10. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

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

	FY2020 AMENDED BUDGET	FY 2020 THRU 3/31/2020	Percent Year-to- Date	FY 2021 BOARD ADOPTED BUDGET	FY 2021 AMENDED BUDGET	FY 2021 THRU 3/31/2021	Percent Year-to- Date
Water System							
Revenues							
Suburban Wholesale Customer Charges	\$ 304,634	\$ 228,970	75.2%	\$ 314,252	\$ 313,134	\$ 237,680	75.9%
Retail Service Charges	21,296	15,972	75.0%	22,555	21,926	16,575	75.6%
Investment Earnings	8,084	7,087	87.7%	4,834	3,956	3,476	87.9%
Other Revenues	2	2	99.8%	-	229	227	0.0%
Total Revenues	\$ 334,016	\$ 252,031	75.5%	\$ 341,642	\$ 339,244	\$ 257,959	76.0%
Revenue Requirements							
Operations & Maintenance Expense	\$ 126,840	\$ 97,062	76.5%	\$ 137,127	\$ 134,127	\$ 91,455	68.2%
General Retirement System Legacy Pension	6,048	4,536	75.0%	6,048	6,048	4,536	75.0%
Debt Service	135,999	99,168	72.9%	143,190	137,436	104,667	76.2%
General Retirement System Accelerated Pension	6,268	4,701	75.0%	6,268	6,268	4,701	75.0%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	1,698	1,274	75.0%	1,669	1,669	1,252	75.0%
Lease Payment	22,500	16,875	75.0%	22,500	22,500	16,875	75.0%
Operating Reserve Deposit	3,976	-	0.0%	877	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund Transfer Pending	1,230	(1,118)	-90.9%	-	-	1,321	0.0%
Total Revenue Requirements	\$ 334,016	\$ 244,590	73.2%	\$ 341,642	\$ 339,244	\$ 247,183	72.9%
Net Difference		\$ 7,442				\$ 10,776	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 1,519				\$ 3,526	
Revenue Requirement Variance		5,923				7,250	
Overall Variance		\$ 7,442				\$ 10,776	

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

	FY 2020 AMENDED BUDGET	FY 2020 THRU 3/31/2020	Percent Year-to- Date	FY 2021 BOARD ADOPTED BUDGET	FY 2021 AMENDED BUDGET	FY 2021 THRU 3/31/2021	Percent Year-to- Date
Sewer System							
Revenues							
Suburban Wholesale Customer Charges	\$ 272,324	\$ 201,485	74.0%	\$ 277,012	\$ 274,054	\$ 202,414	73.9%
Retail Service Charges	185,807	139,355	75.0%	190,112	187,960	141,418	75.2%
Industrial Waste Control Charges	7,834	6,210	79.3%	8,775	7,685	5,973	77.7%
Pollutant Surcharges	5,910	4,683	79.2%	5,263	6,108	4,579	75.0%
Investment Earnings	7,731	5,939	76.8%	5,589	2,778	2,261	81.4%
Other Revenues	400	343	85.7%	-	414	363	0.0%
Total Revenues	\$ 480,005	\$ 358,015	74.6%	\$ 486,751	\$ 478,998	\$ 357,008	74.5%
Revenue Requirements							
Operations & Maintenance Expense	\$ 181,926	\$ 125,351	68.9%	\$ 184,946	\$ 182,296	\$ 121,477	66.6%
General Retirement System Legacy Pension	10,824	8,118	75.0%	10,824	10,824	8,118	75.0%
Debt Service	214,691	158,006	73.6%	209,740	201,780	153,430	76.0%
General Retirement System Accelerated Pension	11,621	8,716	75.0%	11,621	11,621	8,716	75.0%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	2,403	1,802	75.0%	2,415	2,415	1,811	75.0%
Lease Payment	27,500	20,625	75.0%	27,500	27,500	20,625	75.0%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund Transfer Pending	10,244	4,715	46.0%	-	-	4,278	0.0%
Total Revenue Requirements	\$ 480,005	\$ 342,932	71.4%	\$ 486,751	\$ 478,998	\$ 349,617	73.0%
Net Difference		\$ 15,084				\$ 7,391	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ (1,989)				\$ (2,240)	
Revenue Requirement Variance		17,072				9,631	
Overall Variance		\$ 15,084				\$ 7,391	

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of March 31, 2021, is 75.0% (nine months). When comparing FY 2021 to FY 2020 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, it appears that overall spending is consistent.

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

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

Major Budget Categories	FY 2020 AMENDED BUDGET	FY 2020 ACTIVITY THRU 3/31/2020	Percent Year-to- Date	FY 2021 BOARD ADOPTED BUDGET	FY 2021 AMENDED BUDGET	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date
Water	\$ 66,021	\$ 52,759	79.9%	\$ 71,966	\$ 70,820	\$ 50,263	71.0%
Sewer	115,985	78,819	68.0%	115,676	114,975	77,143	67.1%
Centralized	97,731	68,984	70.6%	102,721	100,338	65,290	65.1%
Administrative	29,028	20,778	71.6%	31,709	30,290	20,177	66.6%
Employee Benefits	-	1,074	0.0%	-	-	60	0.0%
Total O&M Budget	\$ 308,766	\$ 222,413	72.0%	\$ 322,073	\$ 316,423	\$ 212,932	67.3%

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 O&M expenses are at 67.3% which is reasonably within the pro-rata benchmark of 75.0%. This positive variance equates to a dollar amount of \$24.4 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is on target with the pro-rata benchmark; coming in at 74.8% through March 2021.

Utilities: The overall category is on target with the pro-rata benchmark; coming in at 74.8% through March 2021. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is higher than the benchmark, coming in at 79.8%. The first three months of GLWA's fiscal year (July, August, and September) are typically peak months for the usage of electricity. June, the last month of GLWA's fiscal year, is typically a peak month as well.
- **Gas** is coming in at 63.9% which is lower than the benchmark of 75.0%. A review of the accounts has confirmed that the usage is variable throughout the year. The gas consumption at the Wastewater Recovery Facility (WRRF) is less than budget due to a) operational changes and b) the fire that occurred in September which took Complex II offline for several weeks.
- **Sewage service** is lower than the benchmark, coming in at 64.9%. A review of this category is being conducted, however, bills for a meter for a large line at the WRRF are being estimated due to a reported fault with the meter. This issue is being addressed.
- **Water service** is lower than the benchmark, coming in at 49.1%. While usage does vary throughout the year, a review of the accounts has shown that the water service bills are coming in lower for Wastewater Operations. Utilization of the new chemical building has required changes to the operational processes which has resulted in the reduction of the use of potable water.

Chemicals: This category is higher than the pro-rate benchmark; coming in at 78.4% through March 2021. Variances within this category are not unexpected as usage varies throughout the year. While this category is being reviewed, this variance is not a concern at this time.

Supplies & Other: This category is lower than the benchmark; coming in at 56.0% through March 2021. The items in this category are subject to one-time expenses that do not occur evenly throughout the year, with an increase in usage being projected for the fourth quarter. A review of this category is being conducted and budget amendments will be processed if needed.

Contractual Services: The overall category is slightly lower than the pro-rata benchmark; coming in at 63.3% through March 2021. Variances in this category, when they occur, are not unexpected as the usage of contracts varies throughout the year (projects scheduled to begin during the latter half of the year as well as contracts that are on an as needed basis). Budget amendments will be processed for those projects in which the actual start dates have been delayed from that in which they were budgeted.

Capital Program Allocation: This category is lower than the benchmark; coming in at 68.4% through March 2021. The amount in the Capital Program Allocation account is shown as negative as this is a "contra" account which represents an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget.

Shared Services: This category is on target with the pro-rata benchmark; coming in at 75.6% through March 2021. 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 2021. In addition, it is important to note that some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount.

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

Expense Categories	FY 2020 AMENDED BUDGET	FY 2020 ACTIVITY THRU 3/31/2020	Percent Year-to- Date at 3/31/2020	FY 2020 ACTIVITY THRU 6/30/2020	Percent Year-to- Date at 6/30/2020	FY 2021 AMENDED BUDGET	FY 2021 PRORATED BUDGET (9 MONTHS)	FY 2021 ACTIVITY THRU 3/31/2021	Percent Year-to- Date	FY 2021 PRORATED BUDGET LESS FY 2021
Entity-wide										
Salaries & Wages	\$ 64,703	\$ 48,008	74.2%	\$ 64,189	74.8%	\$ 70,115	\$ 52,586	\$ 48,974	69.8%	\$ 3,612
Workforce Development	1,271	832	65.5%	1,252	66.5%	936	702	632	67.6%	70
Overtime	7,191	5,729	79.7%	7,494	76.4%	7,121	5,340	5,620	78.9%	(280)
Employee Benefits	22,465	17,932	79.8%	25,001	71.7%	24,359	18,269	19,626	80.6%	(1,357)
Transition Services	5,872	4,796	81.7%	6,330	75.8%	5,887	4,415	6,158	104.6%	(1,743)
Employee Benefits Fund	-	1,074	0.0%	-	0.0%	-	-	60	0.0%	(60)
<i>Personnel Costs</i>	<u>101,503</u>	<u>78,372</u>	<u>77.2%</u>	<u>104,267</u>	<u>75.2%</u>	<u>108,416</u>	<u>81,312</u>	<u>81,070</u>	<u>74.8%</u>	<u>243</u>
Electric	39,549	30,529	77.2%	40,669	75.1%	39,240	29,430	31,308	79.8%	(1,878)
Gas	5,332	3,909	73.3%	5,196	75.2%	6,629	4,972	4,237	63.9%	735
Sewage Service	1,988	1,525	76.7%	2,109	72.3%	2,120	1,590	1,375	64.9%	215
Water Service	3,662	2,451	66.9%	3,179	77.1%	3,948	2,961	1,939	49.1%	1,023
<i>Utilities</i>	<u>50,531</u>	<u>38,413</u>	<u>76.0%</u>	<u>51,153</u>	<u>75.1%</u>	<u>51,937</u>	<u>38,953</u>	<u>38,858</u>	<u>74.8%</u>	<u>94</u>
Chemicals	14,019	10,529	75.1%	14,242	73.9%	13,420	10,065	10,525	78.4%	(460)
Supplies & Other	34,124	24,075	70.6%	35,402	68.0%	37,270	27,952	20,885	56.0%	7,068
Contractual Services	103,975	77,428	74.5%	106,372	72.8%	106,215	79,661	67,284	63.3%	12,377
Capital Program Allocation	(3,122)	(2,395)	76.7%	(3,347)	71.6%	(3,329)	(2,497)	(2,277)	68.4%	(219)
Shared Services	(4,995)	(4,008)	80.2%	(1,734)	231.2%	(4,512)	(3,384)	(3,413)	75.6%	29
Unallocated Reserve	12,731	-	0.0%	-	0.0%	7,006	5,255	-	0.0%	5,255
Total Expenses	<u>\$ 308,766</u>	<u>\$ 222,413</u>	<u>72.0%</u>	<u>\$ 306,354</u>	<u>72.6%</u>	<u>\$ 316,423</u>	<u>\$ 237,318</u>	<u>\$ 212,932</u>	<u>67.3%</u>	<u>\$ 24,385</u>



The Basic Financial Statements report includes the following four tables.

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

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

The June 2020 comparative values shown in the tables below are presented based on final audited figures.

Statement of Net Position – All Funds Combined

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

Table 1 – Statement of Net Position - All Funds Combined
As of March 31, 2021
(\$000)

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2020
Assets				
Cash - unrestricted (a)	\$ 136,185	\$ 153,280	\$ 289,465	\$ 208,357
Cash - restricted (a)	18,610	24,466	43,076	114,415
Investments - unrestricted (a)	229,096	140,039	369,135	473,549
Investments - restricted (a)	101,243	145,499	246,742	157,786
Accounts Receivable	83,873	72,112	155,985	193,719
Due from (to) Other Funds (b)	(1,909)	1,909	-	-
Other Assets (c)	688,966	434,226	1,123,193	1,114,230
Cash Held FBO DWSD Advance (d)	-	14,473	14,473	-
Capital Assets, net of Depreciation	1,328,659	2,189,048	3,517,707	3,689,047
Land	293,157	124,354	417,511	416,645
Construction Work in Process (e)	197,653	239,563	437,217	303,220
Total assets	3,075,534	3,538,969	6,614,503	6,670,969
Deferred Outflows (f)	55,350	138,601	193,951	217,097
Liabilities				
Liabilities - Short-Term (g)	148,904	165,043	313,947	305,598
Due to (from) Other Funds (b)	-	-	-	-
Other Liabilities (h)	2,849	6,712	9,561	9,179
Cash Held FBO DWSD (d)	(73)	-	(73)	1,250
Liabilities - Long-Term (i)	3,029,942	3,561,674	6,591,617	6,683,741
Total liabilities	3,181,623	3,733,429	6,915,052	6,999,768
Deferred Inflows (f)	51,970	42,511	94,481	109,876
Total net position (j)	\$ (102,708)	\$ (98,371)	\$ (201,079)	\$ (221,578)

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 2030 forecast which helps to provide a pathway to a positive Net Position in the future.

Footnotes to Statement of Net Position

- a. *Cash and Investments* are reported at book value. Investments at June 30, 2020 are reported at market value. The March 31, 2021 values differ from the Cash and Investment section of this Financial Report Binder due to timing of certain items recognized on a cash versus accrual basis.
- b. *Due from Other Funds* and *Due to Other Funds* are shown at gross for sub-fund activity.
- c. *Other Assets* primarily consists of the contractual obligation receivable from DWSD related to reimbursement of bonded indebtedness for local system improvements.
- d. *Cash Held FBO Advance (for benefit of) DWSD* and *Cash Held FBO DWSD* represents the net difference between DWSD retail cash received from customers and net financial commitments as outlined in the Master Bond Ordinance.
- e. *Construction Work in Process* represents the beginning balance of CWIP plus any construction spending during the fiscal year. The balance will fluctuate based on the level of spend less any capitalizations or write-offs.
- f. *Deferred Inflow* and *Deferred Outflow* relate mainly to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- g. *Liabilities - Short-term* include accounts payable, retainage payable, and certain accrued liabilities. Some items, such as compensated absences and worker's compensation, are reviewed periodically but only adjusted in the interim if there is a material change.
- h. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- i. *Liabilities – Long-term* include bonds payable, lease payable, and legacy General Retirement System pension liabilities.
- j. *Net Position Deficit* is defined by accounting standards as the residual of all other elements presented in a statement of financial position. It is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. GLWA's net deficit is largely driven by an increase in depreciation expense because of the increase in the acquisition valuation approach for recording capital asset values in the opening Statement of Net Position on January 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.

Statement of Revenues, Expenses and Changes in Net Position

– All Funds Combined

This statement, shown in Table 2, is presented in summary format. The accrual basis of revenues and operations and maintenance expense vary from the revenue requirement basis presented in the *Budget to Actual Analysis* and the *Wholesale Billings, Receivables & Collections* sections of the March 2021 Financial Report Binder. Prior year ending balances are provided in the June 30, 2020 column as a reference for comparative purposes. Explanatory notes follow this statement.

Water revenues presented below in Table 2 differ from those presented in *Table 1A – Water Revenue Requirement Budget* found in the *Budget to Actual Analysis* section of this report because water revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights.

Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Nine Months ended March 31, 2021
(\$000)

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- Type Activities	Comparative June 30, 2020
Revenue						
Wholesale customer charges	\$ 242,669	93.5%	\$ 202,414	57.1%	\$ 445,083	\$ 578,705
Local system charges	16,575	6.4%	141,418	39.9%	157,994	207,103
Industrial waste charges		0.0%	5,973	1.7%	5,973	7,855
Pollutant surcharges		0.0%	4,579	1.3%	4,579	6,449
Other revenues	227	0.1%	363	0.1%	591	778
Total Revenues	259,472	100.0%	354,747	100.0%	614,219	800,889
Operating expenses						
Operations and Maintenance	92,905	35.8%	125,006	35.2%	217,911	309,482
Depreciation	92,443	35.6%	112,336	31.7%	204,779	280,104
Total operating expenses	185,348	71.4%	237,343	66.9%	422,690	589,586
Operating Income	74,124	28.6%	117,405	33.1%	191,529	211,303
Total Nonoperating (revenue) expense	80,423	31.0%	90,607	25.5%	171,030	232,056
Increase/(Decrease) in Net Position	(6,298)	-2.4%	26,797	7.6%	20,499	(20,753)
Net Position (deficit), beginning of year	(96,410)		(125,168)		(221,578)	(200,825)
Net position (deficit), end of year	\$ (102,708)		\$ (98,371)		\$ (201,079)	\$ (221,578)
<i>Totals may be off due to rounding</i>						

Water Fund

- ✓ The decrease in Water Fund Net Position is \$6.3 million.
- ✓ Wholesale water customer charges of \$242.7 million account for 93.5% of Water System revenues.
- ✓ Operating expenses of \$185.3 million represent 71.4% of total operating revenue. Depreciation is the largest operating expense at \$92.4 million or 49.9% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$74.1 million or 28.6% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$62.8 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 \$26.8 million.
- ✓ Wholesale customer charges of \$202.4 million account for 57.1% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$141.4 million account for 39.9% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$237.3 million represent 66.9% of total operating revenue. Depreciation is the largest operating expense at \$112.3 million or 47.3% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$117.4 million or 33.1 % of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$72.6 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

Supplemental Schedule of Operations & Maintenance Expenses – All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown below in Table 3. This accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the March 2021 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
– All Funds Combined
For the Nine Months ended March 31, 2021
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- Type Activities	Percent of Total
Operating Expenses						
Personnel						
Salaries & Wages	17,268	18.6%	38,496	30.8%	55,764	25.6%
Overtime	3,458	3.7%	2,162	1.7%	5,620	2.6%
Benefits	13,086	14.1%	6,600	5.3%	19,686	9.0%
Total Personnel	\$ 33,812	36.4%	\$ 47,258	37.8%	\$ 81,070	37.2%
Utilities						
Electric	20,322	21.9%	10,985	8.8%	31,308	14.4%
Gas	861	0.9%	3,377	2.7%	4,237	1.9%
Sewage	181	0.2%	1,194	1.0%	1,375	0.6%
Water	1	0.0%	1,937	1.5%	1,938	0.9%
Total Utilities	\$ 21,365	23.0%	\$ 17,493	14.0%	\$ 38,858	17.8%
Chemicals	4,573	4.9%	5,952	4.8%	10,525	4.8%
Supplies and other	6,449	6.9%	14,436	11.5%	20,885	9.6%
Contractual services	31,566	34.0%	40,843	32.7%	72,409	33.2%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(1,555)	-1.7%	(722)	-0.6%	(2,277)	-1.0%
Intergovernmental Agreement	(145)	-0.2%	-	0.0%	(145)	-0.1%
Shared services allocation	(3,160)	-3.4%	(254)	-0.2%	(3,413)	-1.6%
Operations and Maintenance Expenses	\$ 92,905	100.0%	\$ 125,006	100.0%	\$ 217,911	100.0%

Totals may be off due to rounding

- ✓ Core expenses for water and sewage disposal systems are utilities (17.8% of total O&M expenses) and chemicals (4.8% of total O&M expenses).
- ✓ Personnel costs (37.2% of total O&M expenses) include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (33.2%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$2.9 million);
 - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$11.5 million); and
 - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, field, planning and other services.
- ✓ The Capital Program Allocation, Intergovernmental Agreement and Shared Services Allocation are shown as negative amounts because they are 'contra' expense accounts representing offsets to associated costs in other Operations and Maintenance expense categories.

Supplemental Schedule of Nonoperating Expenses – All Funds Combined

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

Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined
For the Nine Months ended March 31, 2021
(\$000)

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2020
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (19,019)	\$ (13,210)	\$ (32,229)	\$ (41,136)
Interest income DWSD Shortfall	-	(540)	(540)	(1,299)
Investment earnings	(3,495)	(2,284)	(5,779)	(19,445)
Net (increase)/decrease in fair value of investments	4,946	3,340	8,286	(5,972)
Other nonoperating revenue	(39)	(10)	(48)	(2,552)
Interest Expense				
Bonded debt	81,797	85,788	167,585	243,745
Lease obligation	12,958	15,837	28,795	38,808
Other obligations	3,548	1,165	4,713	6,395
Total interest expense	98,303	102,790	201,093	288,948
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	-
Capital Contribution	-	(5,948)	(5,948)	(5,960)
Amortization, issuance costs, debt	(12,061)	(9,504)	(21,566)	(10,303)
Amortization, raw water rights	2,675	-	2,675	3,567
(Gain) loss on disposal of capital assets	135	243	379	1,317
Loss on impairment of capital assets	-	-	-	1,432
Water Residential Assistance Program	902	1,277	2,180	3,315
Legacy pension expense	8,075	14,453	22,528	20,144
Total Nonoperating (Revenue)/Expense	\$ 80,423	\$ 90,607	\$ 171,030	\$ 232,056

- ✓ Interest income on contractual obligation relates to the portion of the total GLWA debt obligation attributable to DWSD. This interest income offsets the total debt interest expense paid by GLWA on behalf of both entities monthly.
- ✓ Interest income DWSD shortfall represents interest from a budgetary shortfall loan from fiscal years 2016, 2017 and 2018 and is paid in accordance with the 2018 Memorandum of Understanding (MOU).
- ✓ Investment earnings in this report are reflected at book value. Any differences between the Basic Financial report and Cash and Investment section of this Financial Report binder are due to accrued interest. FY 2020 market value adjustments for Water and Sewer totaled \$4.9 million and \$3.3 million,

respectively. FY 2021 market value adjustment will be made as part of audit preparation in June 2021.

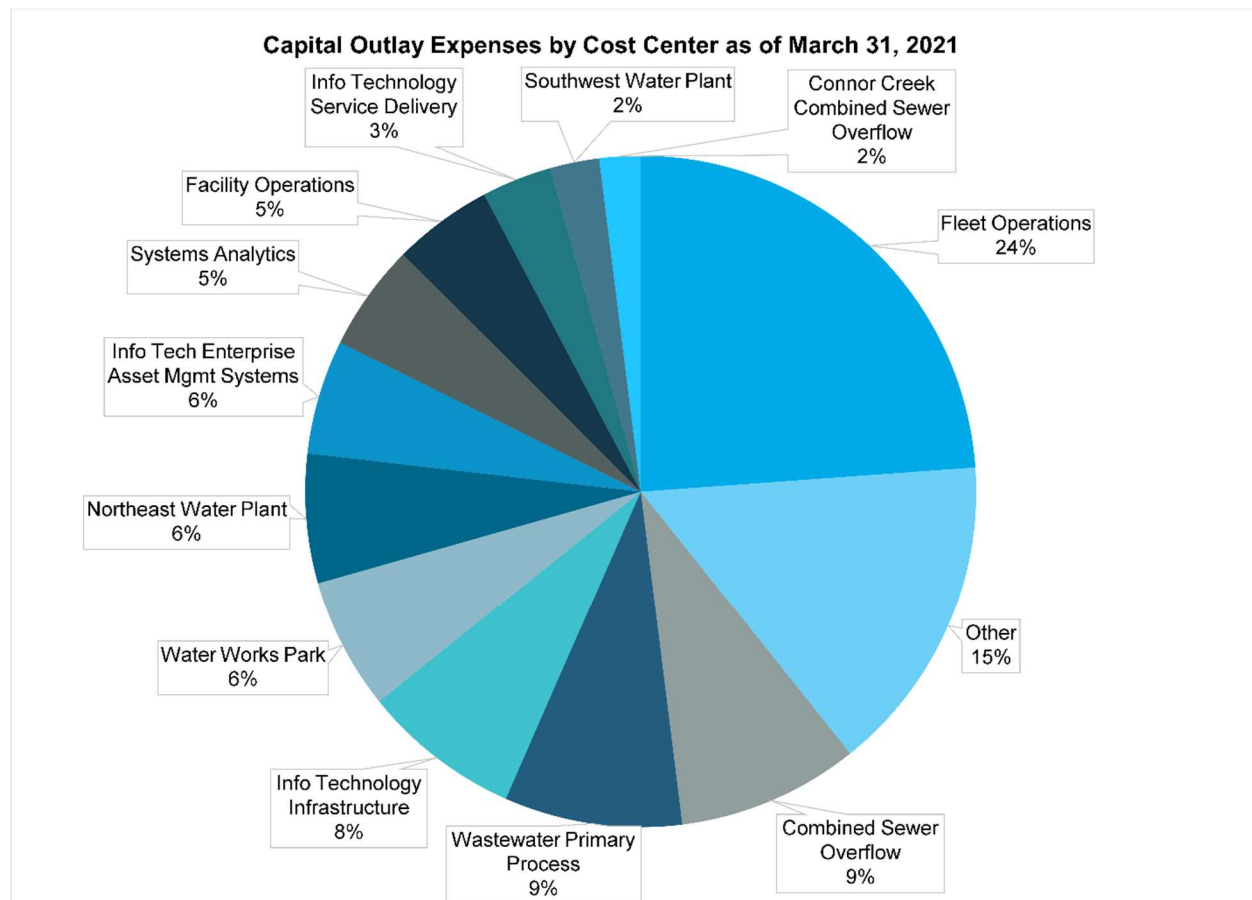
- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
 - Bonded debt;
 - Lease obligation for the regional assets from the City of Detroit; and
 - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.
- ✓ The capital contribution in Nonoperating (revenue) expense represents one-half of an \$11.92 million payment made by Oakland Macomb Interceptor Drainage District (OMIDD). The payment was part of an amendment to the OMIDD Wastewater Disposal Services Contract and was split between FY 2020 and FY 2021 based on budgeted revenue requirements for those respective years.

Financial Activity Charts

Chart 1 – Capital Outlay – Water and Sewer System Combined

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

Through March 31, 2021, total capital outlay spend is \$12.1 million. Following this chart is a sample list of projects and purchases from the total spend of \$12.1 million:



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

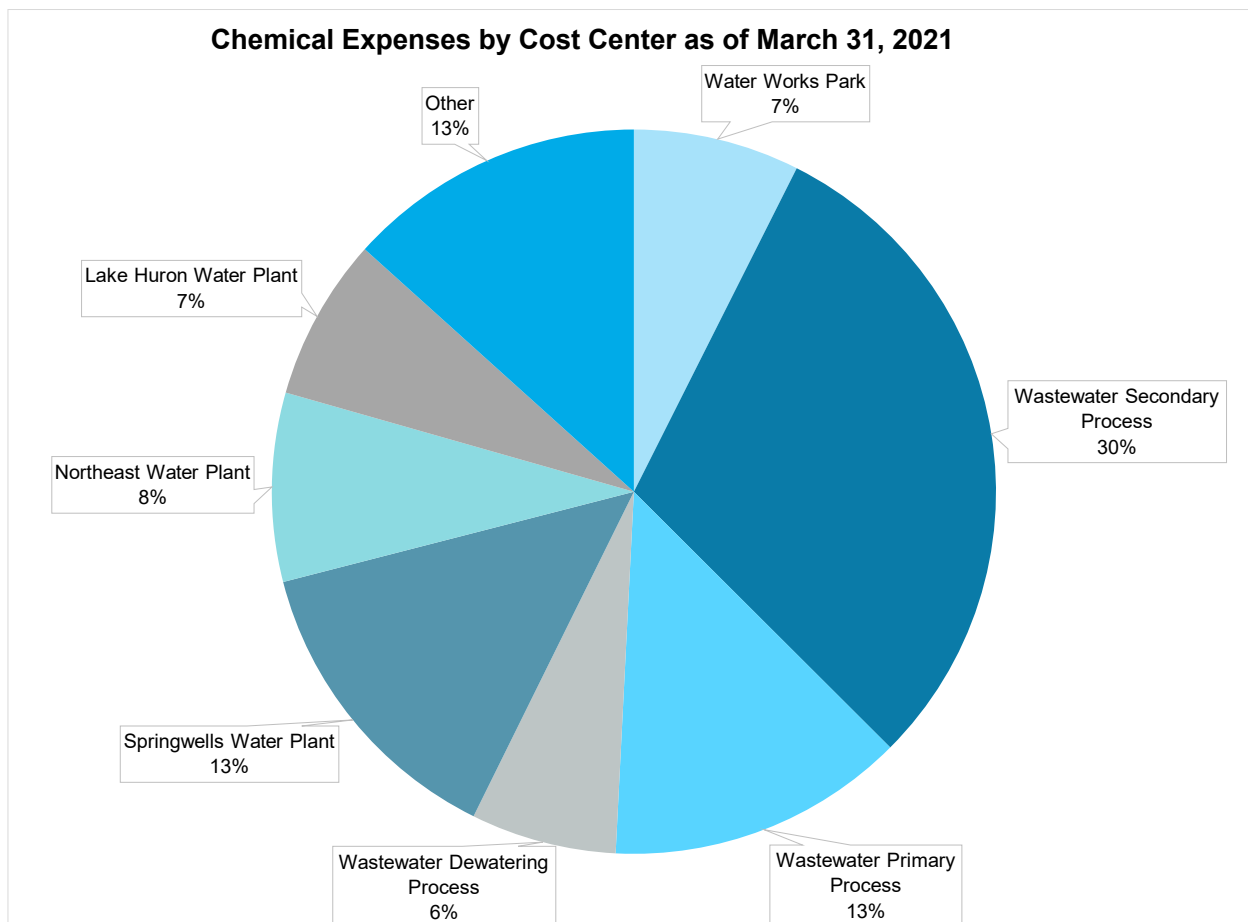
Water Operations: High-pressure water tank (\$341k); Water Works Park generator (\$296k); Water Works Park Ovation upgrade (\$205k); Southwest Water Plant feed system (\$110k); evaporators (\$101k) and water pumps (\$83k).

Wastewater Operations: Chemical containment improvements (\$917k); pump at WRRF (\$742k); B-Houses (\$179k); level and flow instrumentation (\$173k); submersible mixers (\$135k); turbimeter, controller and process head (\$134k); magnetic drive (\$129k); actuators (\$121k); Complex A Bio Solids dryer (\$68k); rotork parts (\$65k); Camera (\$57k) and dilute water control (\$56k).

Centralized & Administrative Facilities: Trucks and vehicles (\$3.76m); IT software (\$964k); bleach design (\$496k); sewer meter support (\$357k); datacenter modernization (\$320k); IT computers (\$149k); SCADA packs (\$105k); universal power supply (\$101k); IT service management (\$84k); server drives (\$61k); and CSF buildout (\$49k).

Chart 2 – Chemical Expenses – Water and Sewer System Combined

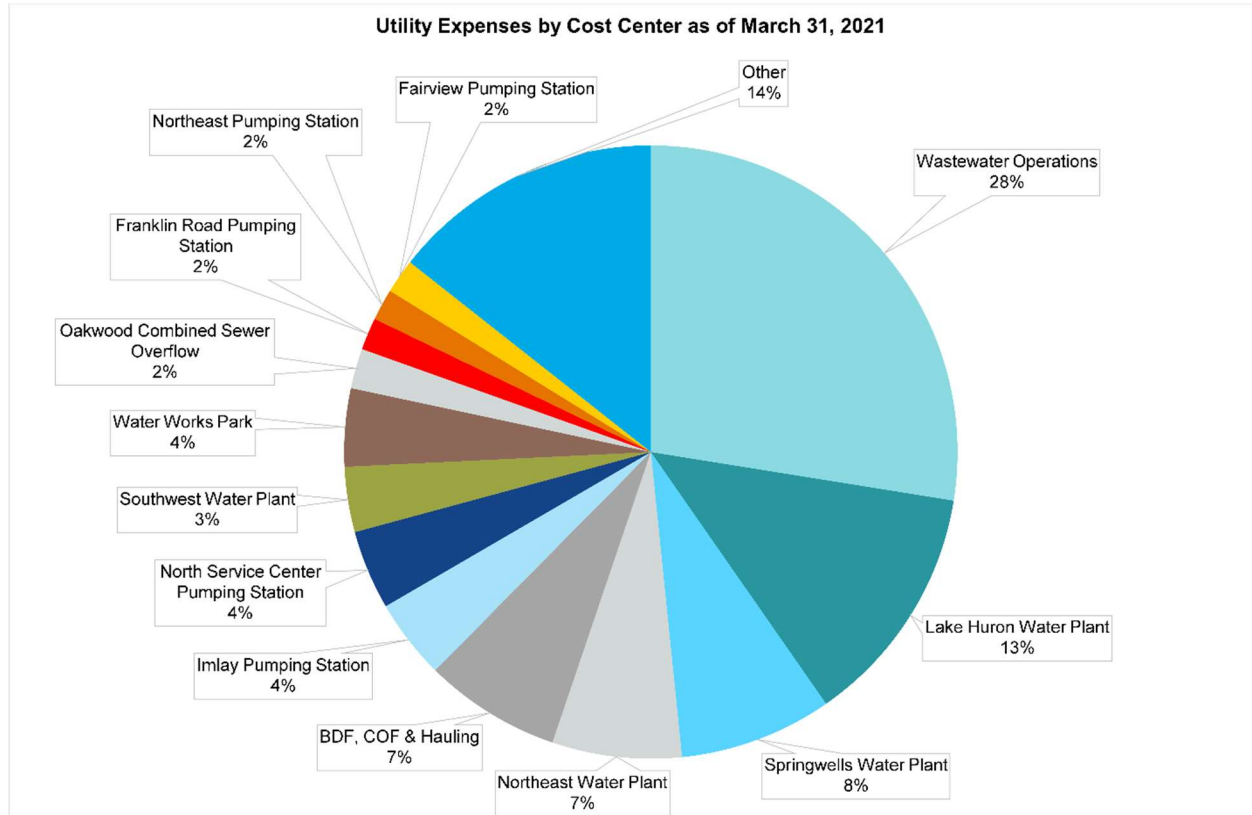
Chemical expenses are \$10.5 million through March 31, 2021. The allocation is shown in the chart below and remains consistent with prior periods.



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 \$38.9 million through March 31, 2021. The allocation is shown in the chart below and consistent with prior periods.



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



Financial Operations KPI

This key performance indicator shown in **Chart 1 – Bank Reconciliation Completion Status** below provides a measure of the progress made in the month-end close process which includes bank reconciliations with a completed status at month end. Through March 31, 2021 all reconciliations are up-to-date and complete.

Six accounts were closed since February 2021. The closed accounts were the restricted accounts for the Water Construction and Sewer Construction funds. These accounts will not be needed until the next bond issue is completed.

Chart 1 – Bank Reconciliation Completion Status

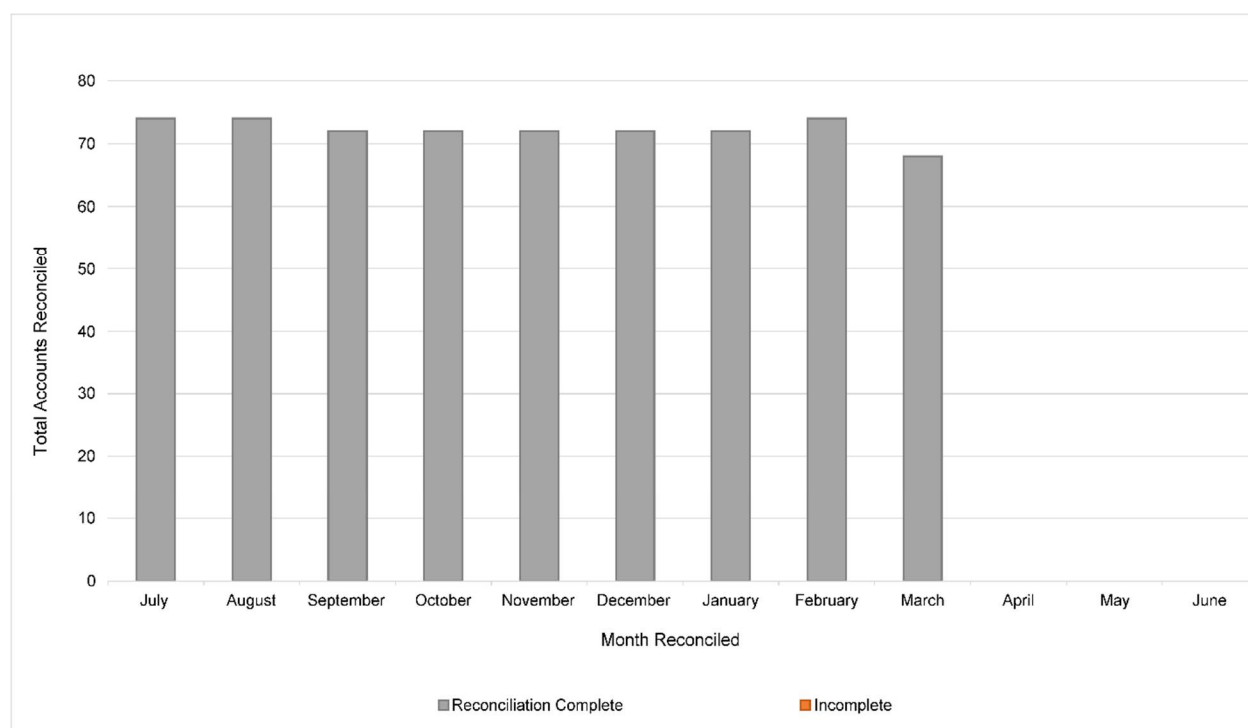


Table 1 – Fiscal Year 2021 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2020	74
New GL Cash accounts	2
Inactivated GL Cash accounts	(8)
Total GL Cash accounts as of March 31, 2021	68



The monthly Budget to Financial Statements Crosswalk includes the following.

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

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

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

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

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

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

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

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

Table 1 – Crosswalk Budget Basis to Financial Reporting Basis (\$000)
For the Nine Months Ended March 31, 2021

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 10,776	\$ 7,391	\$ 18,167
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	8,581	15,357	23,938
Prior year pension contribution accounted for in current year (d)	(8,075)	(14,453)	(22,528)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	41,889	80,852	122,741
Accelerated pension B&C notes obligation portion (g)	139	312	451
Lease payment (h)	3,917	4,788	8,705
WRAP (i)	350	534	884
DWSD short term allocation (j)	1,321	4,278	5,599
Operating Reserve Deposit (j)	-	-	-
Improvement & Extension Fund (j)	20,781	27,632	48,413
Nonbudgeted financial reporting categories adjustments			
Depreciation (k)	(92,443)	(112,336)	(204,779)
Amortization (k)	9,386	9,504	18,890
Other nonoperating income (k)	39	10	49
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	(135)	(243)	(378)
Raw water rights (l)	1,958	-	1,958
Investment earnings for construction fund (m)	19	23	42
Interest on DWSD note receivable (n)	-	540	540
Investment earnings unrealized gain/loss (o)	(4,946)	(3,340)	(8,286)
Interlocal agreement reimbursements to improvement & extension fund (p)	145	-	145
Capital contribution (q)	-	5,948	5,948
Net Position Increase/(Decrease) per Financial Statements (b)	\$ (6,298)	\$ 26,797	\$ 20,499

Table 2- Explanatory Notes for Crosswalk

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

- (e) The administrative fee is part of the O&M Legacy Pension shown as an expense for budget purposes. For financial reporting purposes part of the administrative fee is considered prepaid based on the prior year General Retirement System audit information and therefore not an expense for the current year financial reporting. The prepaid portion is adjusted in June each year.
- (f) Debt service (principal and interest payments) are shown as an expense for budget purposes. Most of the adjustment relates to principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense variances on state revolving fund debt due to the timing of payment draws. The cash set aside basis for interest expense generally is the same as the accrual basis for financial reporting.
- (g) The accelerated pension payment includes the obligation payable for the B&C notes. The pension portion is included in item (c) above. This adjustment relates to the B&C note obligation payments. The principal and interest cash basis payments are treated as an expense for budget purposes. The principal portion is not an expense for financial reporting purposes. For financial reporting purposes interest is expensed on an accrual basis which is different from the cash basis.
- (h) The lease payment is included as an expense for budget and includes both principal and interest payments. Most of the adjustment relates to the principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense which is recorded on an accrual basis for financial reporting which is different from the cash basis.
- (i) WRAP is shown as an expense for budget purposes. For financial reporting purposes the expense is not recognized until the funds have been transferred to the WRAP administrator. The adjustment shown is the amount of current year transfers that have not been transferred to the WRAP administrator. Note that there are funds from the prior year that have not been transferred to the WRAP administrator.
- (j) The DWSD short term allocation, Operating Reserve Deposit, and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes. For FY 2021, the Water Improvement and Extension fund reflects \$1.6 million, and the Sewer Improvement and Extension fund reflects \$3.5 million in expenses relating to repairs paid for through the Water and Sewer Improvement and Extension funds, respectively. These are consolidated expenses for financial reporting purposes but are not reflected in the current Operations and Maintenance budget expenses.

- (k) Certain nonoperating income and expenses are reported in financial statements only.
- (l) The water service contract with Flint includes a license for raw water rights which has been recorded as an asset and liability by the Authority. The contract provides a credit to Flint as Flint satisfies its monthly bond payment obligation to KWA. This KWA credit is treated as a noncash payment of principal and interest on the liability recorded for the raw water rights. For budget, wholesale customer charges are net of the anticipated KWA credits to Flint as that is the cash that will be received and available to meet the budgeted revenue requirements. For financial reporting basis the Flint wholesale charges are recorded at the total amount billed. When the KWA credit is issued, the receivable from Flint is reduced and the principal and interest payments on the liability for the raw water rights are recorded as a noncash transaction. Most of the adjustment shown relates to the principal reduction made for the credits applied which are not an expense for financial reporting basis.
- (m) Investment earnings from the construction fund are not shown as revenue in the budget and are shown as revenue in the financial statements. Construction fund investment earnings are excluded from the definition of revenue for budget purposes as they are used for construction costs and are not used to meet the revenue requirements in the budget.
- (n) Interest on the DWSD note receivable is budgeted as part of the Sewer improvement and extension fund and is transferred directly to that fund as payments are made.
- (o) Unrealized gains and losses are recorded annually as required for financial reporting purposes but do not reflect actual investment earnings and are not included in cash basis reporting.
- (p) GLWA enters Interlocal Agreements with other local governments to coordinate projects and services and reduce overlapping expense. Many of these agreements relate to current capital improvement projects. Where another local government reimburses GLWA for direct expenses associated with a capital improvement project financed using improvement and extension funds, those reimbursements received under the agreement are transferred back to the Improvement and Extension fund.

- (q) The capital contribution is a one-time payment of \$11.92 million made to GLWA by the Oakland Macomb Interceptor Drainage District (OMIDD) as part of an amendment to the OMIDD Wastewater Disposal Services Contract. This contribution is associated with revenue requirements for FY 2020 and 2021 so one-half of the contribution (or \$5.96 million) was recognized in FY 2020 and the remaining \$5.96 million is recognized as a capital contribution in FY 2021.



The Monthly Capital Improvement Plan Financial Summary includes the following.

1. Water System Capital Improvement Plan Spend Incurred to date
2. Sewer System Capital Improvement Plan Spend Incurred to date

Capital Improvement Plan Financial Summary

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

This report presents quarterly and monthly CIP spending against the prorated CIP in total and the CIP adjusted for the SRA. The prorated CIP is calculated by dividing the total fiscal year 2021 board-approved CIP plan by twelve equal months. It should be noted that for operational purposes, GLWA utilizes Primavera P6 for refined monthly projections for cash management and project management.

Beginning January 1, 2021 GLWA has intentionally depleted Bond funds and has moved to solely using I&E and State Revolving Loans to fund CIP expenditures to lower the cost of debt. It is expected that the I&E funds will be sufficient to fund the capital program through FY 2022 including an allowance to provide flexibility in the timing of future bond issues. In line with this change, the charts in this report have been revised as of March 2021 to show actual spend in terms of funding source.

This scope of this report and the associated charts were also expanded to the Capital Improvement Plan where in prior periods the focus had been solely on Construction Work in Progress. This change resulted in an increase of \$1 million in actual I&E spend in FY 2021 Q1 for the Sewer Fund and a slight shift in previously reported amounts for actual I&E and Revenue Bond spend in FY 2021 Q2 for the Sewer Fund.

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

As of March 2021, the Water system incurred nearly \$97 million of construction costs to date. This is 87% of the fiscal year 2021 prorated CIP through March and 117% of the financial plan which is labeled as the FY 2021 CIP w/SRA in the chart below.

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

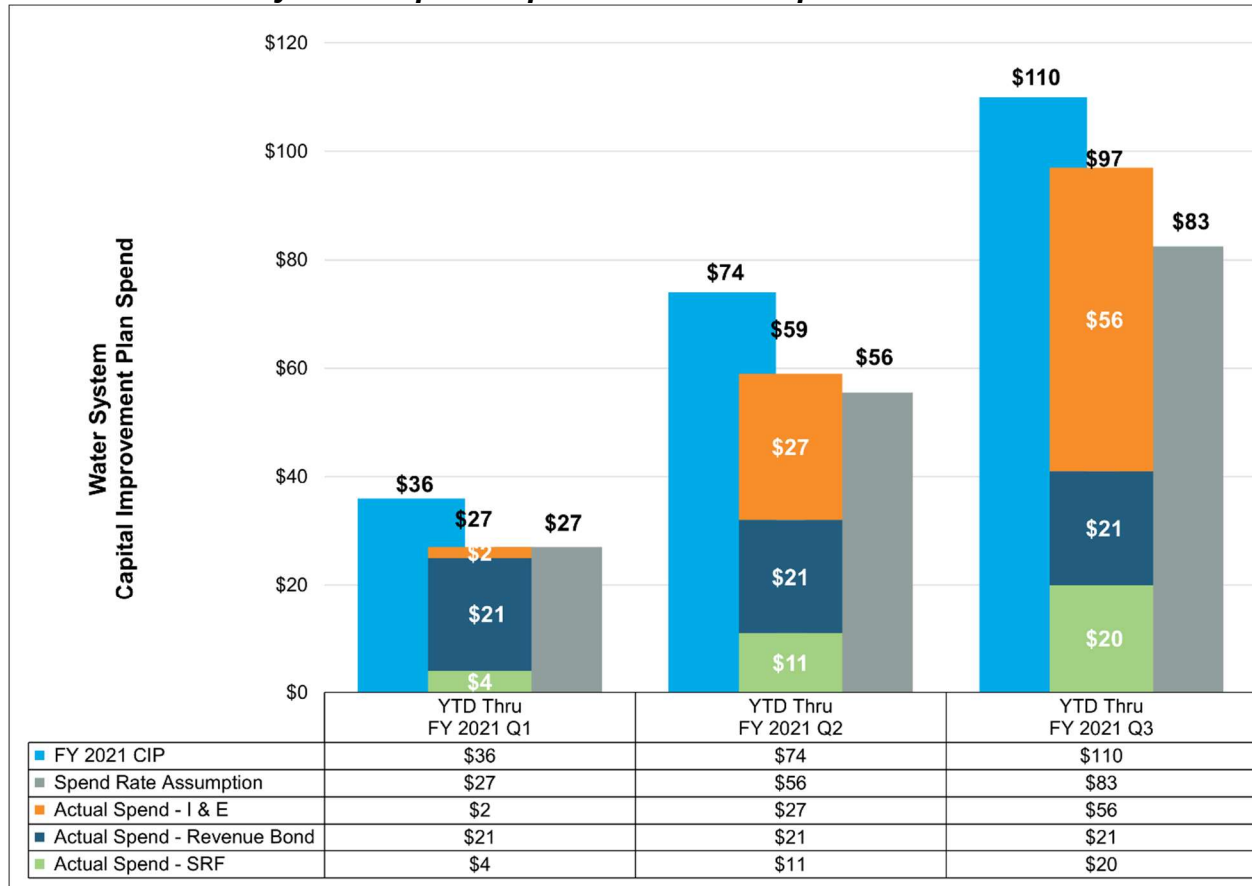
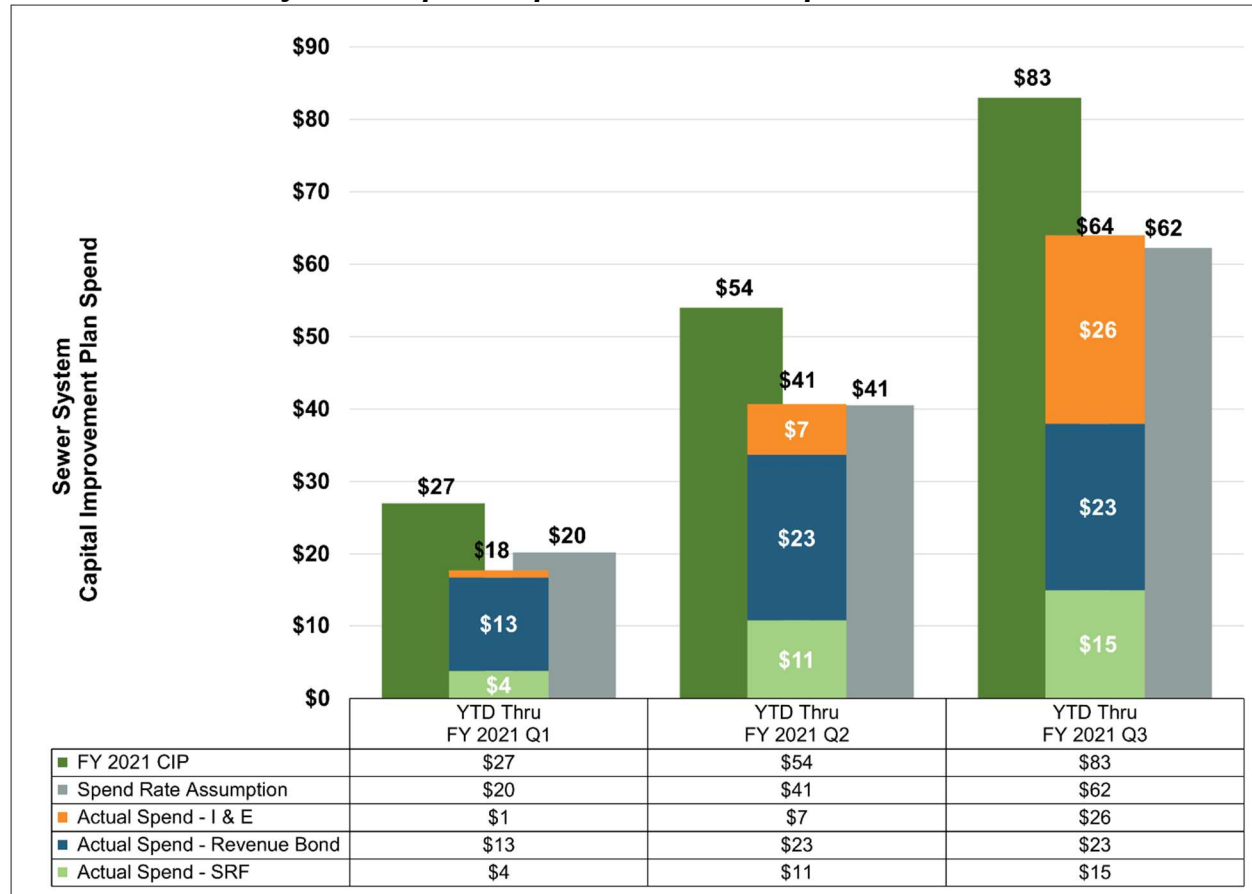


Chart 2 – Sewer System Capital Improvement Plan Spend Incurred to Date

As of March 2021, the Sewer system incurred over \$64 million of construction costs to date. This is 77% of the fiscal year 2021 prorated CIP through March and 103% of the financial plan which is labeled as the FY 2021 CIP w/SRA in the chart below.

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





This report includes the following.

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

MBO Transfers to Accounts Held by GLWA

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

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

Table 1 – GLWA FY 2021 Water MBO Transfers reflects the required transfers for FY 2021 completed through March 1, 2021. MBO transfers for water totaling \$115.6 million have been transferred to GLWA accounts. The total transfer amounts for November and December are different than the prior months due to adjustments to reflect 1st Quarter budget amendments approved at the October 2020 GLWA Board meeting.

Table 2 – GLWA FY 2021 Sewer MBO Transfers reflects the required transfers for FY 2021 completed through March 1, 2021. MBO transfers for sewer totaling \$159.3 million have been transferred to GLWA accounts. The total transfer amounts for November and December are different than the prior months due to adjustments to reflect 1st Quarter budget amendments approved at the October 2020 GLWA Board meeting.

Table 3 – GLWA MBO Transfer History reflects historical transfers for FY 2016 through FY 2021 to date.

Table 1 – GLWA FY 2021 Water MBO Transfers

WATER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
FY 2021							
July 2020	\$ 11,160,517	\$504,000	\$891,308	\$192,608	-	-	\$12,748,433
August 2020	11,160,517	504,000	891,308	192,608	-	-	12,748,433
September 2020	11,160,517	504,000	891,308	192,608	-	-	12,748,433
October 2020	11,160,517	504,000	891,308	192,608	-	-	12,748,433
November 2020	11,994,307	504,000	891,308	197,988	-	-	13,587,603
December 2020	11,177,275	504,000	891,308	193,684	-	-	12,766,267
January 2021	11,177,275	504,000	891,308	193,684	-	-	12,766,267
February 2021	11,177,275	504,000	891,308	193,684	-	-	12,766,267
March 2021	11,177,275	504,000	891,308	193,684	-	-	12,766,267
Total FY 2021	\$ 101,345,475	\$4,536,000	\$8,021,772	\$1,743,156	\$ -	\$ -	\$115,646,403

Table 2 – GLWA FY 2021 Sewer MBO Transfers

SEWER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
FY 2021							
July 2020	\$ 15,194,175	\$902,000	\$1,223,950	\$313,500	-	-	\$17,633,625
August 2020	15,194,175	902,000	1,223,950	313,500	-	-	17,633,625
September 2020	15,194,175	902,000	1,223,950	313,500	-	-	17,633,625
October 2020	15,194,175	902,000	1,223,950	313,500	-	-	17,633,625
November 2020	15,842,491	902,000	1,223,950	314,455	-	-	18,282,896
December 2020	15,191,333	902,000	1,223,950	313,691	-	-	17,630,974
January 2021	15,191,333	902,000	1,223,950	313,691	-	-	17,630,974
February 2021	15,191,333	902,000	1,223,950	313,691	-	-	17,630,974
March 2021	15,191,333	902,000	1,223,950	313,691	-	-	17,630,974
Total FY 2021	\$137,384,523	\$8,118,000	\$11,015,550	\$2,823,219	\$ -	\$ -	\$159,341,292

Table 3 – GLWA MBO Transfer History

GLWA MBO Transfer History							
WATER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
Total FY 2019	121,562,604	6,048,000	10,695,696	2,061,000	-	-	140,367,300
Total FY 2020	126,840,204	6,048,000	10,695,683	1,980,804	-	-	145,564,691
Total FY 2021 (9 months)	101,345,475	4,536,000	8,021,772	1,743,156	-	-	115,646,403
Life to Date	\$654,242,487	\$34,754,300	\$60,703,247	\$12,004,860	\$2,686,900	\$606,000	\$764,997,794
SEWER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
Total FY 2016	\$100,865,600	\$10,838,400	\$14,025,800	\$2,523,400	\$5,591,700	\$779,600	\$134,624,500
Total FY 2017	175,858,800	10,838,400	14,026,800	2,654,400	2,654,400	-	206,032,800
Total FY 2018	191,079,396	10,824,000	14,687,496	2,760,804	-	-	219,351,696
Total FY 2019	191,079,396	10,824,000	14,687,496	2,870,992	-	-	219,461,884
Total FY 2020	181,925,800	10,824,000	14,687,517	2,887,300	-	-	210,324,617
Total FY 2021 (9 months)	137,384,523	8,118,000	11,015,550	2,823,219	-	-	159,341,292
Life to Date	\$978,193,515	\$62,266,800	\$83,130,659	\$16,520,115	\$8,246,100	\$779,600	\$1,149,136,789

MBO Required and Lease Payment Transfers to DWSD

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

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

Table 4 – DWSD FY 2021 Water MBO Transfers reflects the required transfers for FY 2021 completed through March 1, 2021. MBO transfers for Water totaling \$40.7 million have been transferred to accounts held by DWSD. The I&E transfer amounts for November and December are different than the prior months due to adjustments to reflect 1st Quarter budget amendments approved at the October 2020 GLWA Board meeting. For FY 2021, DWSD has requested that \$8,278,300 of the lease payment be utilized to offset a portion of debt service.

Table 5 – DWSD FY 2021 Sewer MBO Transfers reflects the required transfers for FY 2021 completed through March 1, 2021. MBO transfers for Sewer totaling \$72.8 million have been transferred to accounts held by DWSD. The I&E transfer amounts for November and December are different than the prior months due to adjustments to reflect 1st Quarter budget amendments approved at the October 2020 GLWA Board meeting. For FY 2021, DWSD has requested that \$3,257,200 of the lease payment be utilized to offset a portion of debt service.

Table 6 – DWSD Water MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2021 to date.

Table 7 – DWSD Sewer MBO and Lease Payment Transfer History reflects historical transfers for FY 2016 through FY 2021 to date.

Table 4 – DWSD FY 2021 Water MBO Transfers

	WATER			
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Water</u>
FY 2021				
July 2020	\$2,986,158	\$356,000	\$1,139,808	\$4,481,966
August 2020	2,986,158	356,000	1,139,808	4,481,966
September 2020	2,986,158	356,000	1,139,808	4,481,966
October 2020	2,986,158	356,000	1,139,808	4,481,966
November 2020	2,986,158	356,000	1,366,478	4,708,636
December 2020	2,986,158	356,000	1,185,142	4,527,300
January 2021	2,986,158	356,000	1,185,142	4,527,300
February 2021	2,986,158	356,000	1,185,142	4,527,300
March 2021	2,986,158	356,000	1,185,142	4,527,300
Total FY 2021	\$26,875,422	\$3,204,000	\$10,666,278	\$40,745,700

Table 5 – DWSD FY 2021 Sewer MBO Transfers

	SEWER			
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Sewer</u>
FY 2021				
July 2020	\$5,826,308	\$238,000	\$2,109,017	\$8,173,325
August 2020	5,826,308	238,000	2,109,017	8,173,325
September 2020	5,826,308	238,000	2,109,017	8,173,325
October 2020	5,826,308	238,000	2,109,017	8,173,325
November 2020	5,826,308	238,000	1,665,102	7,729,410
December 2020	5,826,308	238,000	2,020,234	8,084,542
January 2021	5,826,308	238,000	2,020,234	8,084,542
February 2021	5,826,308	238,000	2,020,234	8,084,542
March 2021	5,826,308	238,000	2,020,234	8,084,542
Total FY 2021	\$52,436,772	\$2,142,000	\$18,182,106	\$72,760,878

Table 6 – DWSD Water MBO and Lease Payment Transfer History

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
FY 2016 *				
MBO/Lease Requirement	\$26,185,600	\$4,262,700	\$22,500,000	\$52,948,300
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	50,621,400
FY 2017				
MBO/Lease Requirement	33,596,400	4,262,400	22,500,000	60,358,800
Offset to Debt Service	-	-	-	-
Net MBO Transfer	33,596,400	4,262,400	22,500,000	60,358,800
FY 2018				
MBO/Lease Requirement	35,059,704	4,272,000	22,500,000	61,831,704
Offset to Debt Service	-	-	(1,875,000)	(1,875,000)
Net MBO Transfer	35,059,704	4,272,000	20,625,000	59,956,704
FY 2019				
MBO/Lease Requirement	35,484,300	4,272,000	22,500,000	62,256,300
Offset to Debt Service	-	-	(3,972,200)	(3,972,200)
Net MBO Transfer	35,484,300	4,272,000	18,527,800	58,284,100
FY 2020				
MBO/Lease Requirement	34,662,400	4,272,000	22,500,000	61,434,400
Offset to Debt Service	-	-	(3,548,000)	(3,548,000)
Net MBO Transfer	34,662,400	4,272,000	18,952,000	57,886,400
FY 2021 (7 months)				
MBO/Lease Requirement	26,875,422	3,204,000	16,875,000	46,954,422
Offset to Debt Service	-	-	(6,208,722)	(6,208,722)
Net MBO Transfer	26,875,422	3,204,000	10,666,278	40,745,700
Life-to-Date				
MBO/Lease Requirement	191,863,826	24,545,100	129,375,000	345,783,926
Offsets	-	-	(17,930,822)	(17,930,822)
Total Water	191,863,826	24,545,100	111,444,178	327,853,104

Table 7 – DWSD Sewer MBO and Lease Payment Transfer History

	SEWER			
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
FY 2016 *				
MBO/Lease Requirement	\$19,774,300	\$2,861,800	\$27,500,000	\$50,136,100
Offset to Debt Service	-	-	(19,991,500)	(19,991,500)
Total MBO Transfer	19,774,300	2,861,800	7,508,500	30,144,600
FY 2017				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
Total MBO Transfer	41,535,600	2,862,000	27,500,000	71,897,600
FY 2018				
MBO/Lease Requirement	60,517,992	2,856,000	27,500,000	90,873,992
Offset to Debt Service	-	-	(9,166,664)	(9,166,664)
Total MBO Transfer	60,517,992	2,856,000	18,333,336	81,707,328
FY 2019				
MBO/Lease Requirement	56,767,920	2,856,000	27,500,000	87,123,920
Offset to Debt Service	-	-	(4,415,000)	(4,415,000)
Total MBO Transfer	56,767,920	2,856,000	23,085,000	82,708,920
FY 2020				
MBO/Lease Requirement	62,343,500	2,856,000	27,500,000	92,699,500
Offset to address shortfall	(7,100,000)	-	-	(7,100,000)
Offset to Debt Service	-	-	(5,032,700)	(5,032,700)
Total MBO Transfer	55,243,500	2,856,000	22,467,300	80,566,800
FY 2021 (7 months)				
MBO/Lease Requirement	52,436,772	2,142,000	20,625,000	75,203,772
Offset to Debt Service	-	-	(2,442,894)	(2,442,894)
Total MBO Transfer	52,436,772	2,142,000	18,182,106	72,760,878
Life-to-Date				
MBO/Lease Requirement	293,376,084	16,433,800	158,125,000	467,934,884
Offsets	(7,100,000)	-	(41,048,758)	(48,148,758)
Total Sewer	286,276,084	16,433,800	117,076,242	419,786,126

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



This report includes the following:

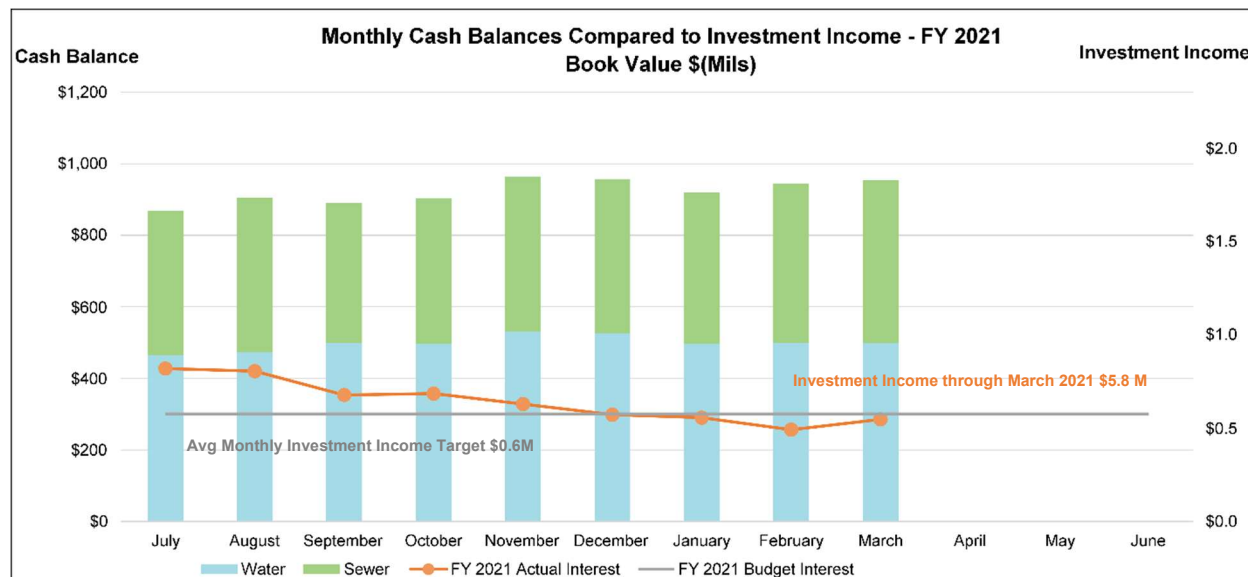
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

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

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. For the month of March 2021, GLWA earned investment income of \$0.5 million and the cumulative FY 2021 earnings through March is \$5.8 million. Total investment income reported includes earnings from revenue requirement funds as well as construction bond funds.

Investment earnings for the remainder of the fiscal year are expected to decline due to maturities of existing investments being reinvested into lower, current market rate investments. GLWA continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment income while meeting the objectives of safety and liquidity.

Chart 1 – Monthly Cash Balances Compared to Investment Income – Through March 2021


\$(Mils)	July	August	September	October	November	December	January	February	March	April	May	June
Water	\$464	\$473	\$499	497	530	525	495	499	498	-	-	-
Sewer	\$403	\$431	\$391	406	433	431	424	445	455	-	-	-
Total	\$867	\$904	\$890	903	963	956	919	944	953	-	-	-
Investment Income	\$0.8	\$0.8	\$0.7	\$0.7	\$0.6	\$0.6	\$0.6	\$0.5	\$0.5	-	-	-

Cash Balance Detail

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

Funds Held Within Trust:

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

Funds Held Outside Trust:

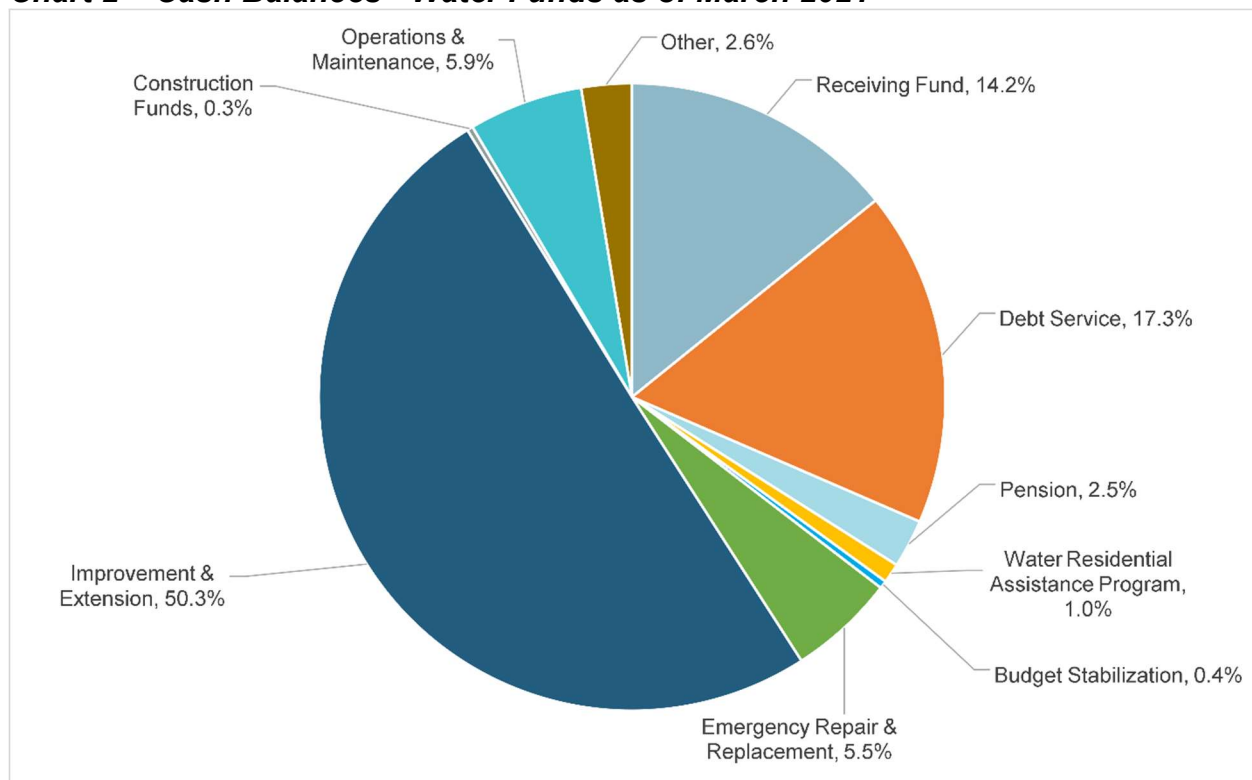
- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors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

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

Chart 2 – Cash Balances - Water Funds as of March 2021 - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of March 31, 2021 is \$498 million. The allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA's commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds will be sufficient to fund the capital program through FY 2022 including an allowance to provide flexibility in the timing of future bond issues.

Chart 2 – Cash Balances - Water Funds as of March 2021



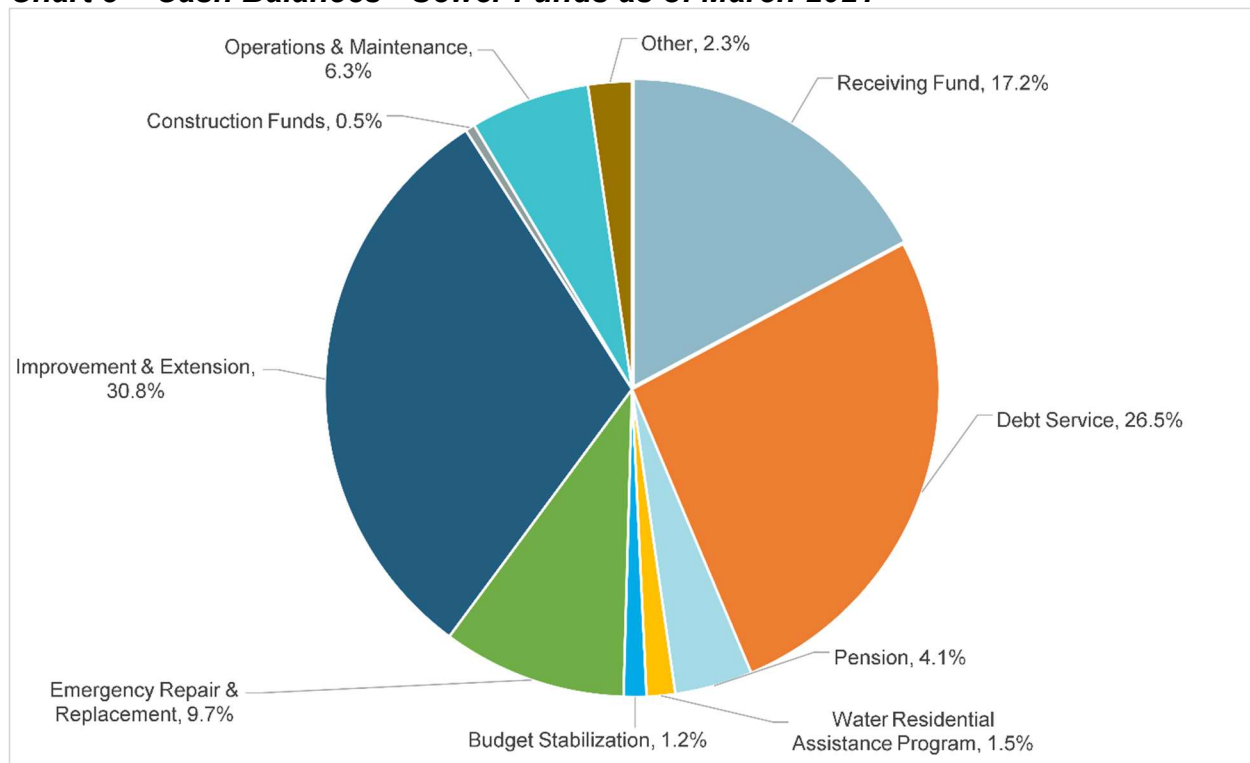
Note: Due to rounding totals may not equal 100%.

Chart 3 – Cash Balances - Sewer Funds as of March 2021 - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of March 31, 2021 is \$455 million. Like the Water Funds, the allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA's commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

It should be noted existing proceeds from revenue bonds are depleted. This means that all capital projects will now be funded with Improvement & Extension (I&E) funds, except for SRF funded projects. It is expected that the I&E funds will be sufficient to fund the capital program through FY 2022 including an allowance to provide flexibility in the timing of future bond issues.

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

Chart 3 – Cash Balances - Sewer Funds as of March 2021



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 2021 water usage and billed revenue which are provided by DWSD staff. As of March 31, 2021, the DWSD usage was at 92.60% of the budget and billed revenue was at 93.87% of budget.

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

Table 2 - Retail Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

Table 1 – DWSD Retail Water Billing

RETAIL WATER CUSTOMERS								
Month (1)	FY 2021 - Original Budget		FY 2021 - Actual		FY 2021 - Variance		FY 2020 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	273,700	10,099,621	265,796	9,747,518	(7,904)	(352,103)	267,054	9,802,572
August	263,300	9,828,389	250,308	9,378,385	(12,992)	(450,004)	259,489	9,601,097
September	239,800	9,215,509	218,840	8,544,457	(20,960)	(671,052)	228,961	8,811,834
October	228,800	8,928,629	197,362	7,978,833	(31,438)	(949,796)	217,031	8,578,738
November	208,200	8,391,381	194,648	7,952,436	(13,552)	(438,945)	200,432	7,879,694
December	208,900	8,409,637	197,125	7,985,955	(11,775)	(423,682)	201,225	7,811,106
January	210,200	8,443,541	190,289	7,827,536	(19,911)	(616,005)	205,993	7,981,382
February	214,600	8,558,293	191,180	7,895,496	(23,420)	(662,797)	196,490	7,748,377
March	216,500	8,607,845	205,631	8,242,563	(10,869)	(365,282)	198,483	7,755,210
April	211,700	8,482,661					191,691	7,550,074
May	221,300	8,733,029					207,387	7,929,281
June	261,800	9,789,269					248,085	8,951,538
Total	2,758,800	107,487,800	1,911,179	75,553,179	(152,821)	(4,929,663)	2,622,321	100,400,903
Subtotals ytd	2,064,000	80,482,842	1,911,179	75,553,179	(152,821)	(4,929,663)		
Achievement of Budget			92.60%	93.87%				

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 2 – DWSD Retail Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
April	5,956,105	8,475,657	(2,519,552)	-29.73%
May	8,109,469	8,415,767	(306,298)	-3.64%
June	7,821,791	7,554,457	267,334	3.54%
July	8,017,490	8,093,394	(75,904)	-0.94%
August	7,135,456	8,671,848	(1,536,392)	-17.72%
September	9,031,966	8,610,801	421,165	4.89%
October	9,079,199	9,619,977	(540,778)	-5.62%
November	10,803,009	7,067,667	3,735,342	52.85%
December	7,409,888	8,597,558	(1,187,670)	-13.81%
January	7,884,889	9,076,091	(1,191,202)	-13.12%
February	6,426,553	8,281,985	(1,855,432)	-22.40%
March	8,458,827	6,948,308	1,510,519	21.74%
Rolling, 12-Month Total	96,134,642	99,413,510		
Rolling, 12-Month Average	8,011,220	8,284,459		

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 2021 sewer billed revenue which are provided by DWSD staff. As of March 31, 2021, the DWSD usage was at 94.01% of the budget and billed revenue was at 98.84% of budget.

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

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

Table 3 - DWSD Retail Sewer Billings

RETAIL SEWER CUSTOMERS								
Month (1)	FY 2021 - Original Budget		FY 2021 - Actual		FY 2021 - Variance		FY 2020 - Actuals	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	252,700	29,612,070	252,929	29,802,377	229	190,307	244,810	28,049,707
August	252,900	29,624,420	240,390	29,261,344	(12,510)	(363,076)	246,989	28,076,649
September	219,800	27,736,625	206,880	27,232,400	(12,920)	(504,225)	215,119	26,430,710
October	245,700	29,214,479	188,816	26,230,683	(56,884)	(2,983,796)	238,202	27,549,787
November	192,400	26,173,181	184,240	25,933,888	(8,160)	(239,293)	188,779	24,726,161
December	192,600	26,184,593	187,397	26,628,891	(5,203)	444,298	186,917	24,853,335
January	195,700	26,361,479	179,115	26,098,738	(16,585)	(262,741)	190,230	24,857,510
February	195,300	26,338,655	185,696	26,370,674	(9,604)	32,019	187,219	24,524,288
March	192,100	26,279,396	197,486	27,090,940	5,386	811,544	186,521	24,784,918
April	188,900	25,973,471					180,397	24,538,664
May	195,300	26,338,655					192,362	25,035,540
June	245,560	29,206,491					238,679	27,572,637
Total	2,568,960	329,043,516	1,822,949	244,649,935	(116,251)	(2,874,964)	2,496,224	310,999,906
<i>Subtotals ytd</i>	<i>1,939,200</i>	<i>247,524,899</i>	<i>1,822,949</i>	<i>244,649,935</i>		<i>(2,874,964)</i>		
<i>Achievement of Budget/Goal</i>				<i>94.01%</i>		<i>98.84%</i>		

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 4 – DWSD Retail Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
April	17,105,146	20,930,511	(3,825,365)	-18.28%
May	23,639,652	22,807,283	832,369	3.65%
June	22,558,827	20,426,151	2,132,676	10.44%
July	20,652,159	20,940,157	(287,998)	-1.38%
August	22,395,220	23,175,643	(780,423)	-3.37%
September	26,463,387	21,972,754	4,490,633	20.44%
October	26,683,109	26,321,010	362,099	1.38%
November	28,730,139	17,546,180	11,183,959	63.74%
December	22,856,217	25,889,823	(3,033,606)	-11.72%
January	22,057,276	23,512,702	(1,455,426)	-6.19%
February	22,777,467	22,682,982	94,485	0.42%
March	25,002,508	19,325,377	5,677,131	29.38%
Rolling 12-Month Total	280,921,107	265,530,573		
Rolling, 12-Month Average	23,410,092	22,127,548		

DWSD Retail Water and Sewer Accounts Receivable Aging Report

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

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of March 31, 2021 with comparative totals from March 31, 2020.

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

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	207,866	\$ 516.34	\$ 11,734,000	\$ 6,863,000	\$ 20,506,000	\$ 68,226,000	\$ 107,329,000
			10.9%	6.4%	19.1%	63.6%	100.0%
Commercial	21,174	1,305.80	6,235,000	2,101,000	5,515,000	13,798,000	27,649,000
			22.6%	7.6%	19.9%	49.9%	100.0%
Industrial	3,481	4,940.60	4,546,000	1,566,000	2,564,000	8,522,000	17,198,000
			26.4%	9.1%	14.9%	49.6%	100.0%
Tax Exempt	3,658	830.50	394,000	157,000	443,000	2,044,000	3,038,000
			13.0%	5.2%	14.6%	67.3%	100.0%
Government	59,083	316.55	1,782,000	1,267,000	3,674,000	11,980,000	18,703,000
			9.5%	6.8%	19.6%	64.1%	100.0%
Drainage	39,870	750.36	2,462,000	1,721,000	5,822,000	19,913,000	29,917,000
			8.2%	5.8%	19.5%	66.6%	100.0%
Subtotal - Active Accounts	335,132	\$ 608.22	\$ 27,153,000	\$ 13,675,000	\$ 38,522,000	\$ 124,483,000	\$ 203,833,000
			13.3%	6.7%	18.9%	61.1%	100.0%
Inactive Accounts	293,642	108.75	39,000	(253,000)	1,173,000	30,975,000	31,934,000
			0.1%	(0.8%)	3.7%	97.0%	100.0%
Total	628,774	\$ 374.96	\$ 27,191,000	\$ 13,422,000	\$ 39,696,000	\$ 155,458,000	\$ 235,767,000
% of Total A/R			11.5%	5.7%	16.8%	65.9%	100.0%
Water Fund	221,827	194.43	\$ 5,352,000	\$ 2,124,000	\$ 6,385,000	\$ 29,270,000	\$ 43,130,000
Sewer Fund	265,729	724.94	\$ 21,839,000	\$ 11,298,000	\$ 33,311,000	\$ 126,188,000	\$ 192,637,000
Total March 31, 2021 (a)	628,774	374.96	\$ 27,191,000	\$ 13,422,000	\$ 39,696,000	\$ 155,458,000	\$ 235,767,000
Water Fund- Allowance							\$ (31,226,000)
Sewer Fund- Allowance							\$ (125,924,000)
Total Bad Debt Allowance							\$ (157,150,000)
Comparative - March 2020 (b)	611,331	339.72	\$ 28,157,000	\$ 12,268,000	\$ 32,918,000	\$ 134,339,000	\$ 207,682,000
Difference (a) - (b)	17,443	35.24	\$ (966,000)	\$ 1,154,000	\$ 6,778,000	\$ 21,119,000	\$ 28,085,000



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

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

Wholesale Water Billings and Collections

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

Service Arrangement Type

Model Contract	83
Emergency	1
Older Contracts	3
Total	<u>87</u>

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

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

Table 1 - Wholesale Water Billings shows the FY 2021 water billed usage and revenues. As of March 31, 2021, the billed usage was at 104.54% of budget and billed revenue at 102.28% of budget. Billings and usage from the City of Flint are included as they were assumed in the FY 2021 Budget. This schedule has been updated to reflect the most recent, Board-approved budget amendments.

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

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The year-over-year rolling average from FY 2020 to FY 2021 reflects the increased usage billed and collected for FY 2021 to date.

Table 1 – FY 2021 Wholesale Water Billings Report

WHOLESALE WATER CHARGES								
Month (1)	FY 2021 - Original Budget		FY 2021 - Amended Budget		FY 2021 - Actual		FY 2021 - Variance	
	Volume	Revenue	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	1,639,200	32,266,700	1,639,200	31,200,500	1,862,791	33,583,619	223,591	2,383,119
August	1,491,400	30,810,000	1,491,400	29,826,800	1,622,324	31,230,027	130,924	1,403,227
September	1,331,600	28,737,000	1,331,600	27,851,500	1,313,440	27,836,560	(18,160)	(14,940)
October	1,034,400	25,778,000	1,034,400	25,055,600	1,070,660	25,454,840	36,260	399,240
November	901,700	24,559,000	901,700	23,897,700	956,542	24,390,303	54,842	492,603
December	982,100	25,192,800	982,100	24,506,200	981,770	24,600,202	(330)	94,002
January	985,300	25,261,300	985,300	25,263,400	969,483	25,235,130	(15,817)	(28,270)
February	884,200	24,343,500	884,200	24,348,400	920,467	24,794,259	36,267	445,859
March	984,200	25,211,000	984,200	25,213,400	1,001,073	25,450,418	16,873	237,018
April	912,200	24,591,700	912,200	24,594,700				
May	1,032,900	25,895,200	1,032,900	25,896,700				
June	1,373,700	29,464,500	1,373,700	29,463,800				
Total	13,552,900	322,110,700	13,552,900	317,118,700	10,698,550	242,575,358	464,450	5,411,858
Subtotals ytd	10,234,100	242,159,300	10,234,100	237,163,500	10,698,550	242,575,358	464,450	5,411,858
Achievement of Budget					104.54%	102.28%		

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

(2) Water Revenues differ from Table 1A because amounts are reduced by the monthly payment to the City of Flint for a license to raw water right Contract in Table 1A

Table 2 - Wholesale Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
April	17,856,644	23,045,654	(5,189,010)	-22.52%
May	24,811,582	20,749,943	4,061,639	19.57%
June	27,098,783	25,676,458	1,422,325	5.54%
July	25,080,575	23,212,979	1,867,596	8.05%
August	26,241,018	28,808,254	(2,567,236)	-8.91%
September	26,078,015	28,336,152	(2,258,137)	-7.97%
October	29,292,690	25,786,774	3,505,916	13.60%
November	32,218,822	29,245,969	2,972,853	10.17%
December	29,609,061	23,292,382	6,316,679	27.12%
January	20,716,948	25,470,795	(4,753,847)	-18.66%
February	25,694,176	24,629,768	1,064,408	4.32%
March	20,854,506	25,017,989	(4,163,483)	-16.64%
Rolling 12-Month Total	305,552,820	303,273,117		
Rolling, 12-Month Average	25,462,735	25,272,760		

Wholesale Sewer Billings and Collections

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

Service Arrangement Type

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

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

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

Table 3 - Wholesale Sewer Billings shows the FY 2021 sewer billed revenue. As of March 31, 2021 the billed revenue is at 100.00% of budget. This schedule has been updated to reflect the most recent, Board-approved budget amendments.

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

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The year-over-year rolling average from FY 2020 to FY 2021 remains consistent.

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received. There are several large accounts whose payments swing between the end of the current month and the beginning of the next month.

Table 3 – FY 2021 Wholesale Sewer Billings Report

WHOLESALE SEWER CHARGES								
Month (1)	FY 2021 - Original Budget		FY 2021 - Amended Budget		FY 2021 - Actual		FY 2021 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
August	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
September	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
October	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
November	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
December	N/A	23,005,800	N/A	22,323,183	N/A	22,323,183	N/A	-
January	N/A	23,005,800	N/A	22,633,025	N/A	22,633,025	N/A	-
February	N/A	23,005,800	N/A	22,633,025	N/A	22,633,025	N/A	-
March	N/A	23,005,800	N/A	22,633,025	N/A	22,633,025	N/A	-
April	N/A	23,005,800	N/A	22,633,025	N/A		N/A	
May	N/A	23,005,800	N/A	22,633,025	N/A		N/A	
June	N/A	23,005,800	N/A	22,633,025	N/A		N/A	
Total		276,069,600		269,737,248		201,838,173		-
Subtotals ytd		207,052,200		201,838,173		201,838,173		-
Achievement of Budget						100.00%		

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

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

Table 4 - Wholesale Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
April	10,024,575	23,203,703	(13,179,128)	-56.80%
May	21,189,047	9,284,000	11,905,047	128.23%
June	28,598,467	32,639,436	(4,040,969)	-12.38%
July	22,297,737	27,222,400	(4,924,663)	-18.09%
August	25,354,280	35,153,500	(9,799,220)	-27.88%
September	19,593,613	18,833,257	760,356	4.04%
October	16,853,983	29,833,760	(12,979,777)	-43.51%
November	18,966,208	19,428,000	(461,792)	-2.38%
December	25,232,649	19,999,642	5,233,007	26.17%
January	25,968,849	17,121,812	8,847,037	51.67%
February	16,872,900	23,284,737	(6,411,837)	-27.54%
March	22,368,124	21,108,100	1,260,024	5.97%
Rolling 12-Month Total	253,320,432	277,112,347		
Rolling, 12-Month Average	21,110,036	23,092,696		

City of Highland Park Billings and Collections

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

As of March 31, 2021, Highland Park had a delinquent balance of \$47.0 million, including \$35.8 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$9.4 million for water supply services.

Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2021 through March 31, 2021. Please note the numbers below reflect the month the billing was sent and not the month the service was provided. A life-to-date summary is provided as an appendix to this monthly financial report.

Table 5 - City of Highland Park Billings and Collections

	Water	Sewer	IWC	Total
April 30, 2020 Balance	8,343,937	33,974,775	1,714,685	44,033,397
May 2020 Billing	92,674	472,500	3,824	568,998
May 2020 Payments	-	(807,648)	-	(807,648)
May 31, 2020 Balance	8,436,611	33,639,627	1,718,509	43,794,747
June 2020 Billing	97,073	472,500	3,831	573,404
June 2020 Payments	-	-	-	-
June 30, 2020 Balance	8,533,684	34,112,127	1,722,340	44,368,151
July 2020 Billing	100,390	472,500	3,831	576,721
July 2020 Payments	-	(926,053)	-	(926,053)
July 31, 2020 Balance	8,634,074	33,658,574	1,726,171	44,018,819
August 2020 Billing	104,325	472,500	3,835	580,660
August 2020 Payments	-	(560,097)	-	(560,097)
August 31, 2020 Balance	8,738,399	33,570,977	1,730,006	44,039,382
September 2020 Billing	105,628	472,500	3,835	581,963
September 2020 Payments	-	(296,930)	-	(296,930)
September 30, 2020 Balance	8,844,027	33,746,547	1,733,841	44,324,415
October 2020 Billing	105,071	472,500	3,862	581,433
October 2020 Payments	-	-	-	-
October 31, 2020 Balance	8,949,098	34,219,047	1,737,703	44,905,848
November 2020 Billing	98,963	472,500	3,929	575,392
November 2020 Payments	-	-	-	-
November 30, 2020 Balance	9,048,061	34,691,547	1,741,632	45,481,240
December 2020 Billing	96,582	472,500	3,929	573,011
December 2020 Payments	-	(227,283)	-	(227,283)
December 31, 2020 Balance	9,144,643	34,936,764	1,745,561	45,826,968
January 2021 Billing	92,525	472,500	3,941	568,966
January 2021 Payments	-	(328,365)	-	(328,365)
January 31, 2021 Balance	9,237,168	35,080,899	1,749,502	46,067,569
February 2021 Billing	95,774	478,900	4,032	578,706
February 2021 Payments	-	-	-	-
February 28, 2021 Balance	9,332,942	35,559,799	1,753,534	46,646,275
March 2021 Billing	95,121	478,900	4,060	578,081
March 2021 Payments	-	(220,241)	-	(220,241)
March 31, 2021 Balance	9,428,063	35,818,458	1,757,594	47,004,115

Wholesale Water & Sewer Accounts Receivable Aging Report

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

Table 6 - Wholesale Accounts Receivable Aging Report Summary is a summary of the total, current and non-current receivables by category as of March 31, 2021.

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park is the same summary *without* the past due balances for the City of Highland Park. One member partner contract dispute accounts for \$2.06 million of the current water past due balance.

GLWA staff is working with each member partner to identify the source of delay and resolve the remaining \$140 thousand in water and \$7 thousand in IWC past due balances. The GLWA Treasury team is also exploring possible payment method alternatives to address ongoing mail service challenges.

Pollutant surcharge invoices are billed to commercial and industrial customers, many of whom have been directly impacted by COVID. GLWA staff continue to stay in close communication with those that are past due and were able to reduce the over 46-day balance by \$40 thousand in early March. The pollutant surcharge balance over 105 days includes \$28 thousand related to a bankruptcy that is currently pending further court action.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 46,130,725.81	\$ 34,688,425.18	\$ 1,251,690.28	\$ 810,664.30	\$ 9,379,946.05
Sewer	\$ 61,392,031.23	\$ 26,052,472.74	\$ 478,900.00	\$ 472,500.00	\$ 34,388,158.49
IWC	\$ 2,330,131.10	\$ 574,039.71	\$ 8,602.10	\$ 5,857.54	\$ 1,741,631.75
Pollutant Surcharge	\$ 627,820.64	\$ 565,467.50	\$ 26,575.10	\$ 2,674.60	\$ 33,103.44
Total	\$ 110,480,708.78	\$ 61,880,405.13	\$ 1,765,767.48	\$ 1,291,696.44	\$ 45,542,839.73
	100.00%	56.01%	1.60%	1.17%	41.22%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 36,702,661.61	\$ 34,497,529.48	\$ 1,159,165.02	\$ 714,082.24	\$ 331,884.87
Sewer	\$ 25,573,572.74	\$ 25,573,572.74	\$ -	\$ -	\$ -
IWC	\$ 572,537.18	\$ 565,947.87	\$ 4,661.02	\$ 1,928.29	\$ -
Pollutant Surcharge	\$ 627,820.64	\$ 565,467.50	\$ 26,575.10	\$ 2,674.60	\$ 33,103.44
Total	\$ 63,476,592.17	\$ 61,202,517.59	\$ 1,190,401.14	\$ 718,685.13	\$ 364,988.31
	100.00%	96.42%	1.88%	1.13%	0.57%

Note: percentages vary from 100% due to rounding.



The Monthly Trust Receipts & Disbursements Report includes the following.

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

GLWA Trust Receipts & Disbursements

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

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

Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2021 reflects nine months of activity to date.

Water fund receipts exceeded required disbursements by 10% through March 31, 2021 with a historical ratio of receipts exceeding required disbursements by 14% since January 1, 2016.

Sewer fund receipts exceeded required disbursements by 6% through March 31, 2021 with a historical ratio of receipts exceeding required disbursements by 6% since January 1, 2016.

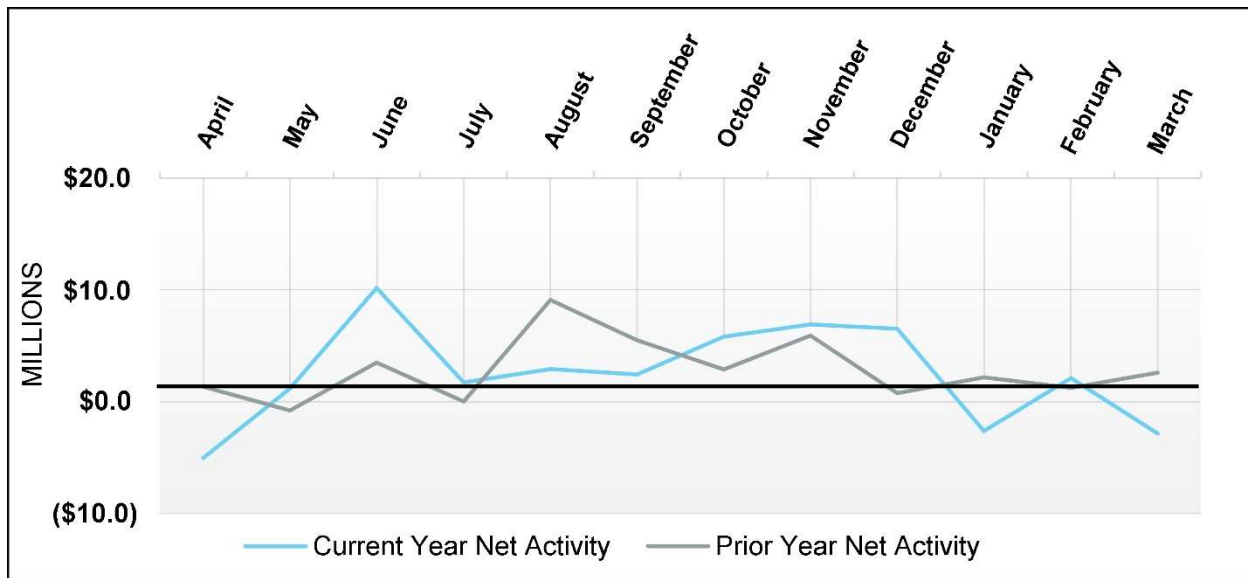
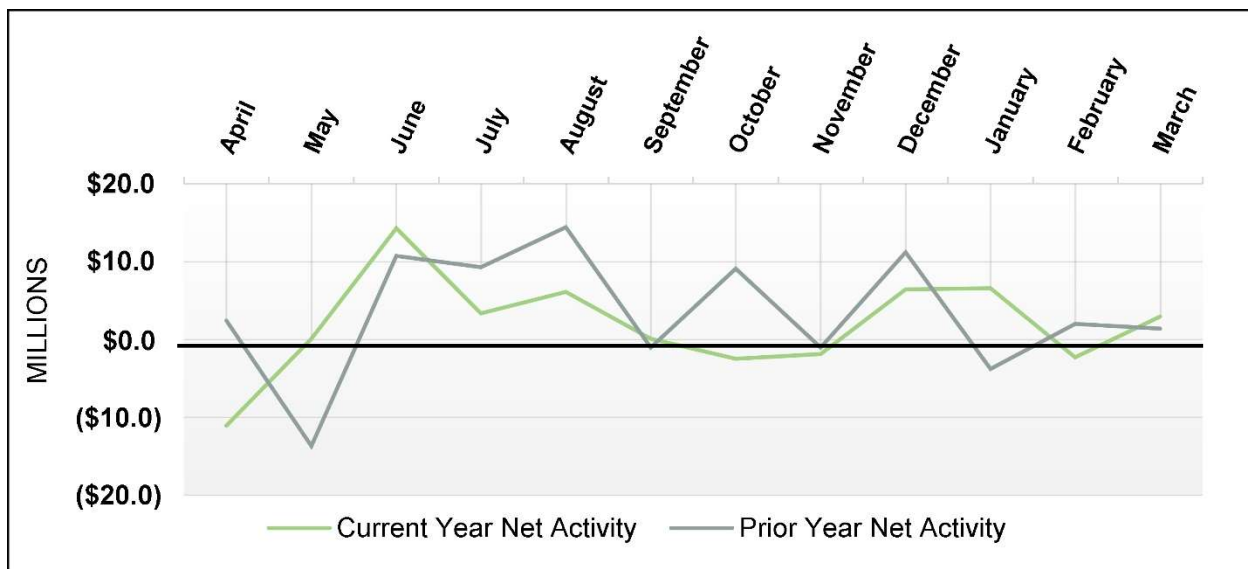
Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

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 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 Thru Mar 31	Life-to-Date Total
Water							
1 Receipts	\$ 149,688,711	\$ 352,941,909	\$ 338,452,001	\$ 336,594,234	\$ 332,606,196	\$ 256,240,162	\$ 1,766,523,213
2 MOU Adjustments	-	-	-	-	-	-	-
3 Adjusted Receipts	149,688,711	352,941,909	338,452,001	336,594,234	332,606,196	256,240,162	1,766,523,213
4 Disbursements	(146,256,185)	(288,777,985)	(297,064,810)	(289,230,481)	(296,190,425)	(233,313,952)	(1,550,833,838)
5 Receipts Net of Required	3,432,526	64,163,924	41,387,191	47,363,753	36,415,771	22,926,210	215,689,375
6 I&E Transfer	-	-	(25,739,700)	(47,695,000)	(25,719,751)	(20,233,043)	(119,387,494)
7 Net Receipts	\$ 3,432,526	\$ 64,163,924	\$ 15,647,491	\$ (331,247)	\$ 10,696,020	\$ 2,693,167	\$ 96,301,881
8 Ratio of Receipts to Required Disbursements (Line 3/Line 4)	102%	122%	114%	116%	112%	110%	114%
Sewer							
9 Receipts	\$ 232,377,715	\$ 469,788,882	\$ 476,269,761	\$ 467,743,744	\$ 490,461,356	\$ 348,948,375	\$ 2,485,589,833
10 MOU Adjustments	-	-	-	-	-	-	-
11 Adjusted Receipts	232,377,715	469,788,882	476,269,761	467,743,744	490,461,356	348,948,375	2,485,589,833
12 Disbursements	(219,538,325)	(441,443,340)	(458,903,335)	(453,406,636)	(445,604,952)	(330,097,363)	(2,348,993,951)
13 Receipts Net of Required	12,839,390	28,345,542	17,366,426	14,337,108	44,856,404	18,851,012	136,595,882
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(25,300,031)	(89,642,031)
15 DWSD Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	-	(53,413,034)
16 Shortfall Repayment (principal)	-	-	-	9,367,355	17,542,669	9,018,674	35,928,699
17 Net Receipts	\$ 11,553,924	\$ 331,008	\$ (29,444,708)	\$ 1,156,763	\$ 43,302,873	\$ 2,569,655	\$ 29,469,516
18 Ratio of Receipts to Required Disbursements (Line 11/Line 12)	106%	106%	104%	103%	110%	106%	106%
Combined							
19 Receipts	\$ 382,066,426	\$ 822,730,791	\$ 814,721,762	\$ 804,337,978	\$ 823,067,552	\$ 605,188,537	\$ 4,252,113,046
20 MOU Adjustments	-	-	-	-	-	-	-
21 Adjusted Receipts	382,066,426	822,730,791	814,721,762	804,337,978	823,067,552	605,188,537	4,252,113,046
22 Disbursements	(365,794,510)	(730,221,325)	(755,968,145)	(742,637,117)	(741,795,377)	(563,411,315)	(3,899,827,789)
23 Receipts Net of Required	16,271,916	92,509,466	58,753,617	61,700,861	81,272,175	41,777,222	352,285,257
24 I&E Transfer	-	-	(48,437,800)	(70,242,700)	(44,815,951)	(45,533,074)	(209,029,525)
25 Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	-	(53,413,034)
26 Shortfall Repayment	-	-	-	9,367,355	17,542,669	9,018,674	35,928,699
27 Net Receipts	\$ 14,986,450	\$ 64,494,932	\$ (13,797,217)	\$ 825,516	\$ 53,998,893	\$ 5,262,822	\$ 125,771,397
28 Ratio of Receipts to Required Disbursements (Line 21/Line 22)	104%	113%	108%	108%	111%	107%	109%

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

Chart 1 – GLWA 12-Month Net Receipts – Water

Chart 2 – GLWA 12-Month Net Receipts – Sewer


DWSD Trust Receipts & Disbursements

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

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

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

provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for DWSD since inception at January 1, 2016. Fiscal year 2021 reflects nine months of activity to date.

Water fund receipts fell short of required disbursements by 2% through March 31, 2021 with a historical ratio of net receipts exceeding required disbursements by 2% since January 1, 2016.

Sewer fund receipts fell short of required disbursements by 2% through March 31, 2021 with a historic ratio of receipts falling short of required disbursements by 5% since January 1, 2016.

Both DWSD Water and Sewer funds closed fiscal year 2020 with shortfalls. However, agreed-upon terms under the April 2018 Memorandum of Understanding (MOU) state that DWSD has until June 30, 2021 to resolve this shortfall prior to establishment of a loan receivable with GLWA. This topic is discussed with executive leadership at quarterly Reconciliation Committee meetings and at regularly scheduled internal DWSD and GLWA management meetings. DWSD is working to address this shortfall resulting largely from this unforeseen COVID-19 pandemic using tax liens on commercial and industrial past due balances and the distribution of CARES Act funding from the State of Michigan.

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

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

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

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

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

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

Table 7 – Total DWSD Loan Receivable Balance – Sewer provides a summary of the FY 2017 and FY 2018 loan receivable balances in a combined total.

Chart 3 – DWSD 12-Month Net Receipts – Water outlines monthly activity trends across two points of reference for the local water system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.

Chart 4 – DWSD 12-Month Net Receipts – Sewer outlines monthly activity trends across two points of reference for the local sewer system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.

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

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 Thru Mar 31	Life-to-Date Total
Water							
1 Receipts	\$ 26,201,881	\$ 96,451,105	\$ 101,233,147	\$ 99,868,219	\$ 96,885,723	\$ 74,248,057	\$ 494,888,132
2 MOU Adjustments	18,446,100	-	-	-	-	-	18,446,100
3 Adjusted Receipts	44,647,981	96,451,105	101,233,147	99,868,219	96,885,723	74,248,057	513,334,232
4 Disbursements	(47,809,552)	(93,066,144)	(93,049,457)	(97,694,600)	(97,823,097)	(75,568,882)	(505,011,732)
5 Receipts Net of Required	(3,161,571)	3,384,961	8,183,690	2,173,619	(937,374)	(1,320,825)	8,322,500
6 I&E Transfer	-	-	-	(8,407,080)	-	-	(8,407,080)
7 Net Receipts	\$ (3,161,571)	\$ 3,384,961	\$ 8,183,690	\$ (6,233,461)	\$ (937,374)	\$ (1,320,825)	\$ (84,580)
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	93%	104%	109%	102%	99%	98%	102%
Sewer							
9 Receipts	\$ 65,256,734	\$ 233,723,367	\$ 242,104,791	\$ 265,339,797	\$ 264,689,559	\$ 217,617,626	\$ 1,288,731,874
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	-	62,282,300
11 Adjusted Receipts	121,011,834	233,723,367	242,104,791	271,866,997	264,689,559	217,617,626	1,351,014,174
12 Disbursements	(122,297,300)	(261,963,973)	(266,217,825)	(271,018,306)	(275,507,374)	(221,895,595)	(1,418,900,373)
13 Receipts Net of Required	(1,285,466)	(28,240,606)	(24,113,034)	848,691	(10,817,815)	(4,277,969)	(67,886,199)
14 I&E Transfer	-	-	-	-	-	-	-
15 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	-	53,413,034
16 Net Receipts (a)	\$ -	\$ (226,072)	\$ -	\$ 848,691	\$ (10,817,815)	\$ (4,277,969)	\$ (14,473,165)
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	99%	89%	91%	100%	96%	98%	95%
Combined							
18 Receipts	\$ 91,458,615	\$ 330,174,472	\$ 343,337,938	\$ 365,208,016	\$ 361,575,282	\$ 291,865,683	\$ 1,783,620,006
19 MOU Adjustments	74,201,200	-	-	6,527,200	-	-	80,728,400
20 Adjusted Receipts	165,659,815	330,174,472	343,337,938	371,735,216	361,575,282	291,865,683	1,864,348,406
21 Disbursements	(170,106,852)	(355,030,117)	(359,267,282)	(368,712,906)	(373,330,471)	(297,464,477)	(1,923,912,105)
22 Receipts Net of Required	(4,447,037)	(24,855,645)	(15,929,344)	3,022,310	(11,755,189)	(5,598,794)	(59,563,699)
23 I&E Transfer	-	-	-	(8,407,080)	-	-	(8,407,080)
24 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	-	53,413,034
25 Net Receipts	\$ (3,161,571)	\$ 3,158,889	\$ 8,183,690	\$ (5,384,770)	\$ (11,755,189)	\$ (5,598,794)	\$ (14,557,745)
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	97%	93%	96%	101%	97%	98%	97%

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

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

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

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

Table 3 – FY 2017 DWSD Loan Receivable – Sewer

Date	Transaction	Amount	Balance
06-30-18	Record Loan Receivable		29,300,000
02-08-19	Payment for July - Dec 2018	4,635,462	24,664,538
02-22-19	Payment for Jan - Mar 2019	2,353,768	22,310,770
04-15-19	Payment for the Apr 2019	789,990	21,520,780
05-08-19	Payment for May 2019	792,705	20,728,075
06-07-19	Payment for June 2019	795,430	19,932,645
07-05-19	Payment for July 2019	798,164	19,134,480
08-08-19	Payment for August 2019	800,908	18,333,572
09-06-19	Payment for September 2019	803,661	17,529,911
10-02-19	Payment for October 2019	806,424	16,723,487
11-04-19	Payment for November 2019	809,196	15,914,291
12-03-19	Payment for December 2019	811,978	15,102,314
01-06-20	Payment for January 2020	814,769	14,287,545
02-04-20	Payment for February 2020	817,570	13,469,975
03-03-20	Payment for March 2020	820,380	12,649,595
04-15-20	Payment for April 2020	823,200	11,826,395
05-06-20	Payment for May 2020	826,030	11,000,366
06-02-20	Payment for June 2020	828,869	10,171,497
07-07-20	Payment for July 2020	831,718	9,339,778
08-04-20	Payment for August 2020	834,577	8,505,201
09-02-20	Payment for September 2020	837,446	7,667,754
10-05-20	Payment for October 2020	840,325	6,827,429
11-03-20	Payment for November 2020	843,214	5,984,216
12-03-20	Payment for December 2020	846,112	5,138,103
01-05-21	Payment for January 2021	849,021	4,289,083
02-02-21	Payment for February 2021	851,939	3,437,143
03-03-21	Payment for March 2021	854,868	2,582,276
		26,717,724	2,582,276

Table 4 – FY 2017 DWSD Loan Receivable Payments – Sewer

Date	Transaction	Principal	Interest	Total Paid
02-08-19	Payment for July - Dec 2018	4,635,462	564,636	5,200,098
02-22-19	Payment for Jan - Mar 2019	2,353,768	246,280	2,600,049
04-15-19	Payment for the Apr 2019	789,990	76,693	866,683
05-08-19	Payment for May 2019	792,705	73,978	866,683
06-07-19	Payment for June 2019	795,430	71,253	866,683
07-05-19	Payment for July 2019	798,164	68,518	866,683
08-08-19	Payment for August 2019	800,908	65,775	866,683
09-06-19	Payment for September 2019	803,661	63,022	866,683
10-02-19	Payment for October 2019	806,424	60,259	866,683
11-04-19	Payment for November 2019	809,196	57,487	866,683
12-03-19	Payment for December 2019	811,978	54,705	866,683
01-06-20	Payment for January 2020	814,769	51,914	866,683
02-04-20	Payment for February 2020	817,570	49,113	866,683
03-03-20	Payment for March 2020	820,380	46,303	866,683
04-15-20	Payment for April 2020	823,200	43,483	866,683
05-06-20	Payment for May 2020	826,030	40,653	866,683
06-02-20	Payment for June 2020	828,869	37,814	866,683
07-07-20	Payment for July 2020	831,718	34,965	866,683
08-04-20	Payment for August 2020	834,577	32,105	866,683
09-02-20	Payment for September 2020	837,446	29,237	866,683
10-05-20	Payment for October 2020	840,325	26,358	866,683
11-03-20	Payment for November 2020	843,214	23,469	866,683
12-03-20	Payment for December 2020	846,112	20,571	866,683
01-05-21	Payment for January 2021	849,021	17,662	866,683
02-02-21	Payment for February 2021	851,939	14,744	866,683
03-03-21	Payment for March 2021	854,868	11,815	866,683
		26,717,725	1,882,813	28,600,537

Table 5 – FY 2018 DWSD Loan Receivable – Sewer

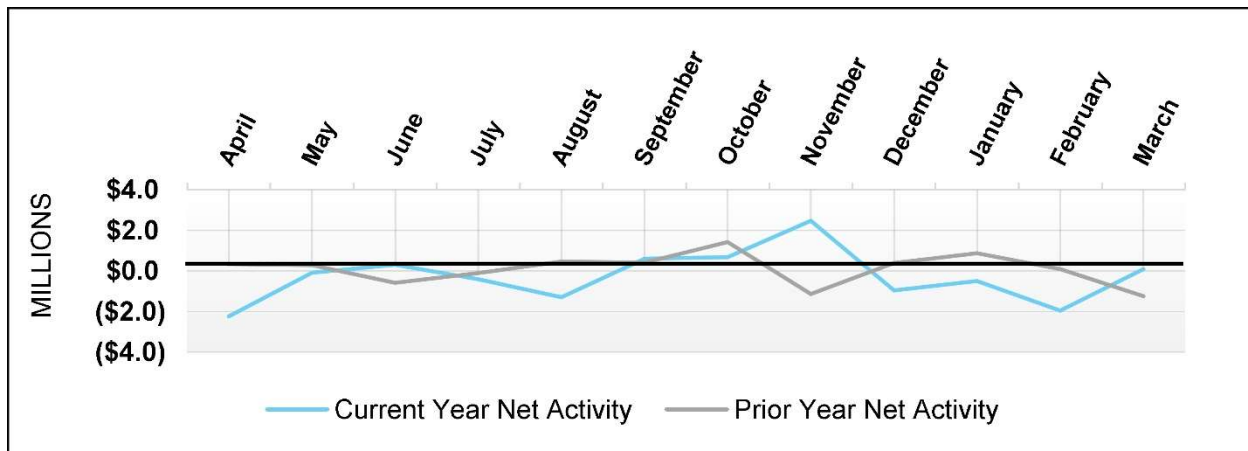
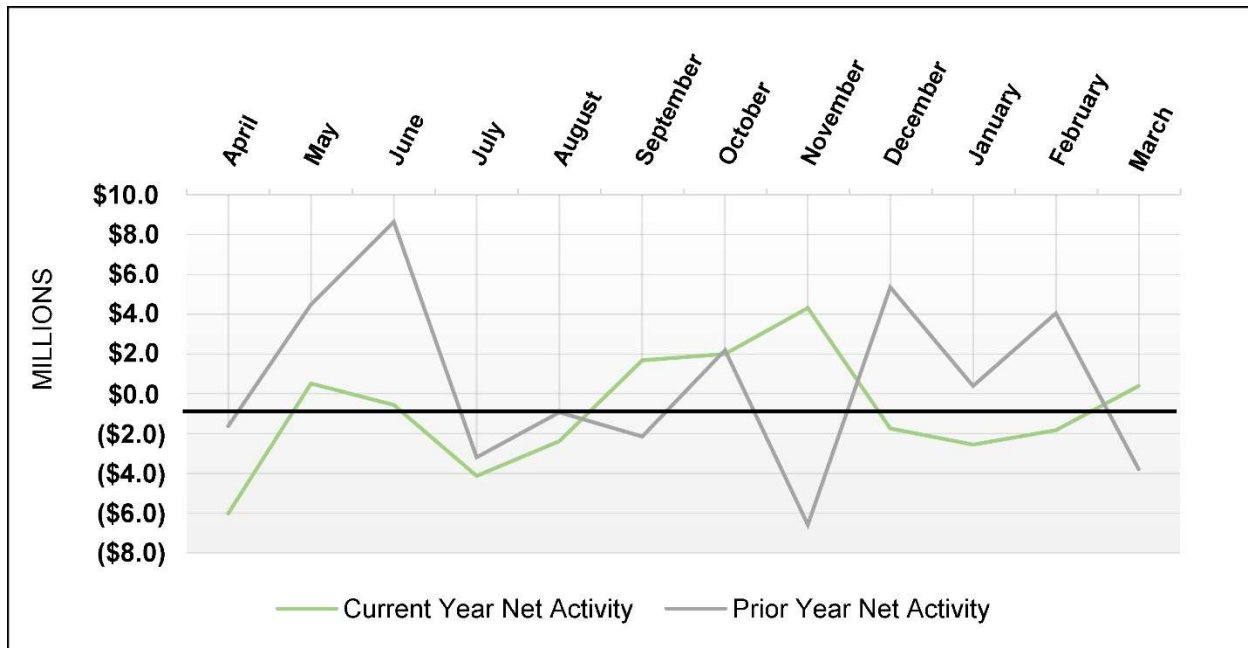
Date	Transaction	Amount	Balance
06-30-19	Record Loan Receivable		24,113,034
07-15-19	Payment for July 2019	638,978	23,474,056
08-08-19	Payment for August 2019	640,686	22,833,370
09-06-19	Payment for September 2019	642,400	22,190,970
10-02-19	Payment for October 2019	644,118	21,546,852
11-04-19	Payment for November 2019	645,840	20,901,012
12-03-19	Payment for December 2019	647,567	20,253,445
01-06-20	Payment for January 2020	649,299	19,604,146
02-04-20	Payment for February 2020	651,035	18,953,111
03-03-20	Payment for March 2020	652,776	18,300,335
04-15-20	Payment for April 2020	654,522	17,645,813
05-06-20	Payment for May 2020	656,272	16,989,541
06-02-20	Payment for June 2020	658,027	16,331,514
07-07-20	Payment for July 2020	659,787	15,671,727
08-04-20	Payment for August 2020	661,551	15,010,176
09-02-20	Payment for September 2020	663,320	14,346,855
10-05-20	Payment for October 2020	665,094	13,681,761
11-03-20	Payment for November 2020	666,873	13,014,888
12-03-20	Payment for December 2020	668,656	12,346,232
01-05-21	Payment for January 2021	670,444	11,675,788
02-02-21	Payment for February 2021	672,237	11,003,551
03-03-21	Payment for March 2021	674,035	10,329,517
		13,783,517	10,329,517

Table 6 – FY 2018 DWSD Loan Receivable Payments – Sewer

Date	Transaction	Principal	Interest	Total Paid
07-15-19	Payment for July 2019	638,978	64,482	703,460
08-08-19	Payment for August 2019	640,686	62,774	703,460
09-06-19	Payment for September 2019	642,400	61,060	703,460
10-02-19	Payment for October 2019	644,118	59,342	703,460
11-04-19	Payment for November 2019	645,840	57,620	703,460
12-03-19	Payment for December 2019	647,567	55,893	703,460
01-06-20	Payment for January 2020	649,299	54,161	703,460
02-04-20	Payment for February 2020	651,035	52,425	703,460
03-03-20	Payment for March 2020	652,776	50,684	703,460
04-15-20	Payment for April 2020	654,522	48,938	703,460
05-06-20	Payment for May 2020	656,272	47,188	703,460
06-02-20	Payment for June 2020	658,027	45,433	703,460
07-07-20	Payment for July 2020	659,787	43,673	703,460
08-04-20	Payment for August 2020	661,551	41,909	703,460
09-02-20	Payment for September 2020	663,320	40,140	703,460
10-05-20	Payment for October 2020	665,094	38,366	703,460
11-03-20	Payment for November 2020	666,873	36,587	703,460
12-03-20	Payment for December 2020	668,656	34,804	703,460
01-05-21	Payment for January 2021	670,444	33,016	703,460
02-02-21	Payment for February 2021	672,237	31,223	703,460
03-03-21	Payment for March 2021	674,035	29,425	703,460
		13,783,517	959,717	14,069,200

Table 7 – Total DWSD Loan Receivable Balance – Sewer

Date	FY17 Loan Balance	FY18 Loan Balance	Total
06-30-18	29,300,000	-	29,300,000
07-31-18	29,300,000	-	29,300,000
08-31-18	29,300,000	-	29,300,000
09-30-18	29,300,000	-	29,300,000
10-31-18	29,300,000	-	29,300,000
11-30-18	29,300,000	-	29,300,000
12-31-18	29,300,000	-	29,300,000
01-31-19	29,300,000	-	29,300,000
02-28-19	24,664,538	-	24,664,538
03-31-19	22,310,770	-	22,310,770
04-30-19	21,520,780	-	21,520,780
05-31-19	20,728,075	-	20,728,075
06-30-19	19,932,645	24,113,034	44,045,679
07-31-19	19,134,480	23,474,056	42,608,537
08-31-19	18,333,572	22,833,370	41,166,942
09-30-19	17,529,911	22,190,970	39,720,881
10-31-19	16,723,487	21,546,852	38,270,340
11-30-19	15,914,291	20,901,012	36,815,303
12-31-19	15,102,314	20,253,445	35,355,759
01-31-20	14,287,545	19,604,146	33,891,691
02-29-20	13,469,975	18,953,111	32,423,086
03-31-20	12,649,595	18,300,335	30,949,930
04-30-20	11,826,395	17,645,813	29,472,208
05-31-20	11,000,366	16,989,541	27,989,906
06-30-20	10,171,497	16,331,514	26,503,010
07-31-20	9,339,778	15,671,727	25,011,505
08-31-20	8,505,201	15,010,176	23,515,376
09-30-20	7,667,754	14,346,855	22,014,610
10-31-20	6,827,429	13,681,761	20,509,190
11-30-20	5,984,216	13,014,888	18,999,104
12-31-20	5,138,103	12,346,232	17,484,336
01-31-21	4,289,083	11,675,788	15,964,871
02-28-21	3,437,143	11,003,551	14,440,695
03-31-21	2,582,276	10,329,517	12,911,792

Chart 3 – DWSD 12-Month Net Receipts – Water

Chart 4 – DWSD 12-Month Net Receipts – Sewer


Combined System Trust Receipts & Disbursements

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

Table 8 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2021 reflects nine months of activity to date.

Water fund net receipts exceeded required disbursements by 7% through March 31, 2021 with a historical ratio of receipts exceeding required disbursements by 11% since January 1, 2016.

Sewer fund receipts exceeded required disbursements by 3% through March 31, 2021 and with a historical ratio of receipts exceeding required disbursements by 2% since January 1, 2016.

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

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 Thru Mar 31	Life-to-Date Total
Water							
1 Receipts	\$ 175,890,592	\$ 449,393,014	\$ 439,685,148	\$ 436,462,453	\$ 429,491,919	\$ 330,488,219	\$2,261,411,345
2 MOU Adjustments	18,446,100	-	-	-	-	-	18,446,100
3 Adjusted Receipts	194,336,692	449,393,014	439,685,148	436,462,453	429,491,919	330,488,219	2,279,857,445
4 Disbursements	(194,065,737)	(381,844,129)	(390,114,267)	(386,925,081)	(394,013,522)	(308,882,834)	(2,055,845,570)
5 Receipts Net of Required	270,955	67,548,885	49,570,881	49,537,372	35,478,397	21,605,385	224,011,875
6 I&E Transfer	-	-	(25,739,700)	(56,102,080)	(25,719,751)	(20,233,043)	(127,794,574)
7 Net Receipts	\$ 270,955	\$ 67,548,885	\$ 23,831,181	\$ (6,564,708)	\$ 9,758,646	\$ 1,372,342	\$ 96,217,301
8 Ratio of Receipts to Required Disbursements (Line 3/Line 4)	100%	118%	113%	113%	109%	107%	111%
Sewer							
9 Receipts	\$ 297,634,449	\$ 703,512,249	\$ 718,374,552	\$ 733,083,541	\$ 755,150,915	\$ 566,566,001	\$3,774,321,707
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	-	62,282,300
11 Adjusted Receipts	353,389,549	703,512,249	718,374,552	739,610,741	755,150,915	566,566,001	3,836,604,007
12 Disbursements	(341,835,625)	(703,407,313)	(725,121,160)	(724,424,942)	(721,112,326)	(551,992,958)	(3,767,894,324)
13 Receipts Net of Required	11,553,924	104,936	(6,746,608)	15,185,799	34,038,589	14,573,043	68,709,683
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(25,300,031)	(89,642,031)
15 Shortfall Advance	-	-	-	-	-	-	-
16 Shortfall Repayment (principal)	-	-	-	9,367,355	17,542,669	9,018,674	35,928,699
17 Net Receipts	\$ 11,553,924	\$ 104,936	\$ (29,444,708)	\$ (7,361,901)	\$ 32,485,058	\$ (1,708,314)	\$ 14,996,351
18 Ratio of Receipts to Required Disbursements (Line 11/Line 12)	103%	100%	99%	102%	105%	103%	102%
Combined							
19 Receipts	\$ 473,525,041	\$1,152,905,263	\$1,158,059,700	\$1,169,545,994	\$1,184,642,834	\$ 897,054,220	\$6,035,733,052
20 MOU Adjustments	74,201,200	-	-	6,527,200	-	-	80,728,400
21 Adjusted Receipts	547,726,241	1,152,905,263	1,158,059,700	1,176,073,194	1,184,642,834	897,054,220	6,116,461,452
22 Disbursements	(535,901,362)	(1,085,251,442)	(1,115,235,427)	(1,111,350,023)	(1,115,125,848)	(860,875,792)	(5,823,739,894)
23 Receipts Net of Required	11,824,879	67,653,821	42,824,273	64,723,171	69,516,986	36,178,428	292,721,558
24 I&E Transfer	-	-	(48,437,800)	(78,649,780)	(44,815,951)	(45,533,074)	(217,436,605)
25 Shortfall Advance	-	-	-	-	-	-	-
26 Shortfall Repayment	-	-	-	9,367,355	17,542,669	9,018,674	35,928,699
27 Net Receipts	\$ 11,824,879	\$ 67,653,821	\$ (5,613,527)	\$ (4,559,254)	\$ 42,243,704	\$ (335,972)	\$ 111,213,652
28 Ratio of Receipts to Required Disbursements (Line 21/Line 22)	102%	106%	104%	106%	106%	104%	105%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$224,614.71	\$224,614.71	\$0.00	\$0.00	\$0.00
ALMONT VILLAGE	\$19,652.20	\$19,652.20	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$67,414.71	\$67,414.71	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$28,787.07	\$28,787.07	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$57,707.52	\$57,707.52	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$282,830.56	\$282,830.56	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$24,837.52	\$24,837.52	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$26,697.22	\$26,697.22	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$804,058.70	\$804,058.70	\$0.00	\$0.00	\$0.00
CENTER LINE	\$42,167.41	\$42,167.41	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$689,569.77	\$689,569.77	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$590,469.14	\$590,469.14	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$540,221.90	\$540,221.90	\$0.00	\$0.00	\$0.00
DEARBORN	\$4,294,467.84	\$2,234,079.62	\$1,014,581.70	\$713,921.65	\$331,884.87
DEARBORN HEIGHTS	\$305,532.13	\$305,532.13	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$273,578.77	\$273,578.77	\$0.00	\$0.00	\$0.00
ECORSE	\$114,866.36	\$114,866.36	\$0.00	\$0.00	\$0.00
FARMINGTON	\$81,841.88	\$81,841.88	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$1,396,420.61	\$1,396,420.61	\$0.00	\$0.00	\$0.00
FERNDAL	\$191,235.80	\$182,768.90	\$8,466.90	\$0.00	\$0.00
FLAT ROCK	\$105,664.32	\$105,664.32	\$0.00	\$0.00	\$0.00
FLINT	\$403,874.44	\$403,874.44	\$0.00	\$0.00	\$0.00
FRASER	\$99,423.70	\$99,423.70	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GARDEN CITY	\$136,276.46	\$136,276.46	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$27,826.62	\$27,826.62	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$89,098.08	\$89,098.08	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$111,649.33	\$111,649.33	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$45,206.89	\$45,206.89	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$113,381.33	\$113,381.33	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$65,337.89	\$65,337.89	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$67,920.98	\$67,920.98	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$124,598.51	\$124,598.51	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$122,607.03	\$63,828.10	\$58,778.93	\$0.00	\$0.00
HIGHLAND PARK	\$9,428,064.20	\$190,895.70	\$92,525.26	\$96,582.06	\$9,048,061.18
HURON TOWNSHIP	\$118,438.99	\$118,438.99	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$109,813.54	\$109,813.54	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,396.13	\$1,396.13	\$0.00	\$0.00	\$0.00
INKSTER	\$117,165.75	\$117,165.75	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$47,833.06	\$47,833.06	\$0.00	\$0.00	\$0.00
LAPEER	\$128,533.34	\$128,533.34	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$70,429.81	\$47,144.92	\$23,124.30	\$160.59	\$0.00
LINCOLN PARK	\$198,510.19	\$198,510.19	\$0.00	\$0.00	\$0.00
LIVONIA	\$883,747.58	\$883,747.58	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$975,251.55	\$975,251.55	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$156,621.22	\$156,621.22	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MAYFIELD TOWNSHIP	\$2,762.64	\$2,762.64	\$0.00	\$0.00	\$0.00
MELVINDALE	\$114,472.76	\$60,259.57	\$54,213.19	\$0.00	\$0.00
NEW HAVEN	\$29,275.67	\$29,275.67	\$0.00	\$0.00	\$0.00
NOCWA	\$3,480,457.87	\$3,480,457.87	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$69,190.74	\$69,190.74	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$421,478.36	\$421,478.36	\$0.00	\$0.00	\$0.00
NOVI	\$686,614.70	\$686,614.70	\$0.00	\$0.00	\$0.00
OAK PARK	\$229,116.42	\$229,116.42	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$4,318.94	\$4,318.94	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$87,759.07	\$87,759.07	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$335,069.34	\$335,069.34	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$260,695.67	\$260,695.67	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$103,684.43	\$103,684.43	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$72,593.68	\$72,593.68	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$23,100.06	\$23,100.06	\$0.00	\$0.00	\$0.00
ROMEO	\$39,504.38	\$39,504.38	\$0.00	\$0.00	\$0.00
ROMULUS	\$700,542.97	\$700,542.97	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$216,218.01	\$216,218.01	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$15,640.89	\$15,640.89	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,137,402.29	\$1,137,402.29	\$0.00	\$0.00	\$0.00
SOCWA	\$3,597,153.78	\$3,597,153.78	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$9,290.46	\$9,290.46	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$184,613.68	\$184,613.68	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR COUNTY-GREENWOOD T	\$62,349.36	\$62,349.36	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$251,483.57	\$251,483.57	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,238,226.37	\$1,238,226.37	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$56,143.60	\$56,143.60	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,683.14	\$18,683.14	\$0.00	\$0.00	\$0.00
TAYLOR	\$372,172.40	\$372,172.40	\$0.00	\$0.00	\$0.00
TRENTON	\$134,542.97	\$134,542.97	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,040,521.83	\$1,040,521.83	\$0.00	\$0.00	\$0.00
UTICA	\$45,093.46	\$45,093.46	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$287,134.24	\$287,134.24	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$64,909.80	\$64,909.80	\$0.00	\$0.00	\$0.00
WARREN	\$1,755,591.31	\$1,755,591.31	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$171,900.13	\$171,900.13	\$0.00	\$0.00	\$0.00
WAYNE	\$266,731.24	\$266,731.24	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,685,033.04	\$1,685,033.04	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,033,377.56	\$1,033,377.56	\$0.00	\$0.00	\$0.00
WIXOM	\$191,633.56	\$191,633.56	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$134,093.81	\$134,093.81	\$0.00	\$0.00	\$0.00
YCUA	\$1,694,504.85	\$1,694,504.85	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$46,130,725.81	\$34,688,425.18	\$1,251,690.28	\$810,664.30	\$9,379,946.05

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$87,299.50	\$87,299.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,944,100.00	\$2,944,100.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$97,200.00	\$97,200.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$400.00	\$400.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$35,818,458.49	\$478,900.00	\$478,900.00	\$472,500.00	\$34,388,158.49
MELVINDALE	\$129,600.00	\$129,600.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,821,000.00	\$3,821,000.00	\$0.00	\$0.00	\$0.00
OMID	\$11,816,773.24	\$11,816,773.24	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,575,900.00	\$4,575,900.00	\$0.00	\$0.00	\$0.00
SOUTHEAST MACOMB SANITATION	\$2,097,000.00	\$2,097,000.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,300.00	\$4,300.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$61,392,031.23	\$26,052,472.74	\$478,900.00	\$472,500.00	\$34,388,158.49

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GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/21

1/4

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$31.90	\$31.90	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,068.69	\$3,068.69	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$39.88	\$39.88	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$2,367.19	\$2,367.19	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$5,515.90	\$5,515.90	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,312.19	\$7,312.19	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$165.60	\$165.60	\$0.00	\$0.00	\$0.00
CENTER LINE	\$3,574.98	\$3,574.98	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,129.63	\$12,129.63	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$194.96	\$194.96	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$17,287.74	\$17,287.74	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,615.19	\$3,615.19	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$7,989.72	\$5,363.46	\$2,626.26	\$0.00	\$0.00
CLINTON TOWNSHIP	\$25,326.78	\$25,326.78	\$0.00	\$0.00	\$0.00
DEARBORN	\$31,505.88	\$31,505.88	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$19,020.67	\$19,020.67	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$207.00	\$207.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EASTPOINTE	\$6,288.19	\$6,288.19	\$0.00	\$0.00	\$0.00
FARMINGTON	\$3,910.16	\$3,910.16	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$4,814.66	\$4,814.66	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$5,974.95	\$5,974.95	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,534.08	\$1,534.08	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,027.35	\$2,027.35	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,147.65	\$1,147.65	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$331.20	\$331.20	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,510.71	\$2,510.71	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,052.03	\$4,052.03	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,826.98	\$1,826.98	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$27.61	\$27.61	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,066.01	\$3,066.01	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,757,593.92	\$8,091.84	\$3,941.08	\$3,929.25	\$1,741,631.75
HUNTINGTON WOODS	\$277.78	\$277.78	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$2,370.36	\$2,370.36	\$0.00	\$0.00	\$0.00
INKSTER	\$5,396.75	\$5,396.75	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$1,559.76	\$1,559.76	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,365.23	\$1,365.23	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$631.52	\$631.52	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$39,122.48	\$39,122.48	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$200.23	\$200.23	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$36,610.09	\$36,610.09	\$0.00	\$0.00	\$0.00
MELVINDALE	\$6,825.40	\$6,825.40	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$596.99	\$596.99	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$1,723.61	\$1,723.61	\$0.00	\$0.00	\$0.00
NOVI	\$17,184.27	\$17,184.27	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,957.05	\$6,957.05	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$3,881.74	\$3,881.74	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$465.55	\$465.55	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,048.93	\$1,048.93	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,221.90	\$1,221.90	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$531.46	\$531.46	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$132.84	\$132.84	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$14,347.01	\$14,347.01	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$35,956.61	\$35,956.61	\$0.00	\$0.00	\$0.00
ROMULUS	\$898.75	\$898.75	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$28,372.90	\$28,372.90	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,484.32	\$13,484.32	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SHELBY TOWNSHIP	\$14,263.05	\$14,263.05	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$54,877.07	\$54,877.07	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$7,712.11	\$7,712.11	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$11,667.97	\$11,667.97	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$30,840.54	\$30,840.54	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UTICA	\$2,958.81	\$2,958.81	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$8,117.19	\$4,154.14	\$2,034.76	\$1,928.29	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,414.77	\$1,414.77	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADM)	\$3,016.10	\$3,016.10	\$0.00	\$0.00	\$0.00
WAYNE	\$4,870.25	\$4,870.25	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$12,472.57	\$12,472.57	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) P	\$460.92	\$460.92	\$0.00	\$0.00	\$0.00
WESTLAND	\$21,836.82	\$21,836.82	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$2,330,131.10	\$574,039.71	\$8,602.10	\$5,857.54	\$1,741,631.75

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$7,687.62	\$3,928.31	\$2,073.15	\$1,686.16	\$0.00
A & R PACKING CO., LLC	\$3,189.79	\$3,189.79	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$55.94	\$55.94	\$0.00	\$0.00	\$0.00
ADORING PET FUNERAL HOME	\$218.57	\$218.57	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$444.77	\$444.77	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$259.94	\$0.00	\$0.00	\$259.94	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$ (158.54)	\$0.00	\$0.00	\$0.00	\$ (158.54)
BARON INDUSTRIES	\$1,228.50	\$1,228.50	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$739.20	\$0.00	\$184.80	\$0.00	\$554.40
BAYS MICHIGAN CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$37.00	\$95.00	\$0.00	\$0.00	\$37.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BETTER MADE SNACK FOOD	\$33,923.16	\$33,923.16	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$58.19	\$58.19	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$3,913.60	\$3,913.60	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CADILLAC STRAITS BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CAPITAL REPRODUCTIONS	\$5.77	\$5.77	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$15,718.03	\$15,718.03	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,864.02	\$27.96	\$17.69	\$16.09	\$1,802.28
CINTAS CORP. - MACOMB TWP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$29,127.44	\$29,127.44	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$11,611.95	\$11,611.95	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$14.04	\$14.04	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$7.04	\$0.00	\$0.00	\$7.04	\$0.00
COCA-COLA REFRESHMENTS USA,	\$896.70	\$896.70	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COUNTRY FRESH DAIRY CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$7,706.95	\$7,706.95	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$103.78	\$0.00	\$16.48	\$0.00	\$87.30
DEARBORN SAUSAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT BEER CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$17.34	\$11.64	\$2.85	\$2.85	\$0.00
DETRONIC INDUSTRIES, INC.	\$40.01	\$40.01	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$155.49	\$155.49	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$5,474.02	\$5,474.02	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$2,213.57	\$2,213.57	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$15.75	\$0.00	\$15.75	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$4,858.69	\$4,858.69	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$1,384.64	\$1,384.64	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$7,481.00	\$7,481.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$122.11	\$122.11	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$167.56	\$167.56	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$16,499.00	\$16,499.00	\$0.00	\$0.00	\$0.00
FIVES CINETIC CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$ (11.49)	\$ (11.49)	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$1,098.76	\$1,098.76	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$6,177.64	\$6,177.64	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (16.18)	\$0.00	\$0.00	\$0.00	\$ (16.18)
GREAT BARABOO BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$2,310.27	\$1,182.96	\$445.24	\$482.11	\$199.96
HENKEL CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOME STYLE FOOD INC.	\$114.82	\$114.82	\$0.00	\$0.00	\$0.00
HOME GROWN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$489.32	\$318.93	\$170.39	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$1,319.21	\$995.06	\$324.15	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$15,840.62	\$9,278.71	\$6,561.91	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$647.40	\$647.40	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$1,434.58	\$1,434.58	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$151.81	\$0.00	\$36.75	\$0.00	\$115.06
KAR NUT PRODUCTS	\$1,101.75	\$1,101.75	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$592.04	\$592.04	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$788.64	\$788.64	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$55.09	\$55.09	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$2,798.39	\$2,798.39	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LIFE TECHNOLOGIES	\$56,563.80	\$41,069.65	\$15,494.15	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$1,523.31	\$1,523.31	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$711.84	\$711.84	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$10.89	\$10.89	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$519.20	\$329.03	\$113.83	\$85.34	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
METROPOLITAN BAKERY	\$444.03	\$444.03	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$179.96	\$179.96	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$165,350.25	\$165,350.25	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MILANO BAKERY	\$473.01	\$473.01	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,139.66	\$2,139.66	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$ (16.45)	\$0.00	\$0.00	\$ (16.45)	\$0.00
MOTOR CITY BREWING WORKS	\$1,820.67	\$0.00	\$78.75	\$0.00	\$1,741.92
NATIONAL CHILI COMPANY	\$297.07	\$297.07	\$0.00	\$0.00	\$0.00
NEAPCO DRIVELINES	\$1,298.83	\$1,298.83	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEAT	\$19.27	\$19.27	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$ (154.14)	\$0.00	\$ (154.14)	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$34,867.12	\$34,867.12	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PERDUE PREMIUM MEAT COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PERSONAL UNIFORM SERVICE, IN	\$ (12.83)	\$ (12.83)	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$14,720.34	\$14,720.34	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$41.04	\$41.04	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$2,952.49	\$2,952.49	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$86.17	\$0.00	\$0.00	\$86.17	\$0.00
QUALA SERVICES, LLC	\$1,040.23	\$1,040.23	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$107.54	\$0.00	\$107.54	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$936.87	\$0.00	\$936.87	\$0.00	\$0.00
ROYAL OAK BREWERY	\$ (574.60)	\$0.00	\$0.00	\$0.00	\$ (574.60)
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$84.08	\$84.08	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$31.50	\$0.00	\$31.50	\$0.00	\$0.00
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$14.52	\$0.00	\$0.00	\$0.00	\$14.52
SUPERNATURAL SPIRITS & BREWI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$1,439.92	\$130.66	\$65.35	\$65.35	\$1,178.56
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$ (31.16)	\$0.00	\$0.00	\$0.00	\$ (31.16)

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TURRI'S ITALIAN FOODS	\$38,598.73	\$38,598.73	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$1,013.52	\$1,013.52	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$52,998.42	\$52,998.42	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,780.15	\$2,780.15	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$9.66	\$9.66	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$238.00	\$238.00	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$52.09	\$0.00	\$52.09	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$193.81	\$193.81	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$1,459.33	\$1,459.33	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$3,241.70	\$3,241.70	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$1,943.09	\$1,943.09	\$0.00	\$0.00	\$0.00
VAUGHAN INDUSTRIES, INC.	\$22.50	\$22.50	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$6,262.85	\$6,262.85	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$2,067.92	\$2,067.92	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (36.26)	\$0.00	\$0.00	\$0.00	\$ (36.26)
WIGLEY'S MEAT PROCESS	\$375.32	\$375.32	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$995.01	\$995.01	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$168.74	\$168.74	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$5,858.86	\$5,858.86	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 03/31/21

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WOLVERINE PACKING CO.	\$2,528.28	\$2,528.28	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$144.24	\$0.00	\$0.00	\$0.00	\$144.24
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$627,820.64	\$565,467.50	\$26,575.10	\$2,674.60	\$33,103.44

City of Highland Park Billings and Collections

	Water	Sewer	IWC	Cumulative Total
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	(65,652)	(2,206,211)	-	(2,271,863)
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	-	(1,612,633)	-	(1,612,633)
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	-	(1,444,623)	-	(1,444,623)
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	-	(2,022,335)	-	(2,022,335)
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	-	(2,309,186)	-	(2,309,186)
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	-	(4,108,108)	-	(4,108,108)
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments	-	(5,241,583)	-	(5,241,583)
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings	1,182,639	5,665,400	47,097	6,895,136
FY 2020 Payments	-	(3,026,117)	-	(3,026,117)
				-
June 30, 2020 Balance	\$ 8,533,684	\$ 34,112,127	\$ 1,722,340	\$ 44,368,151
FY 2021 Billings (9 Months)	894,379	4,265,300	35,254	5,194,933
FY 2021 Payments (9 Months)	-	(2,558,969)	-	(2,558,969)
				-
Balance as of March 31, 2021	\$ 9,428,063	\$ 35,818,458	\$ 1,757,594	\$ 47,004,115



Financial Services Audit Committee Communication

Date: June 25, 2021

To: Great Lakes Water Authority Audit Committee

From: Megan Torti, Vendor Outreach Coordinator

Re: Business Inclusion & Diversity Program Update

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

Analysis: As the B.I.D. Program approaches Phase II implementation on July 1, 2021, the B.I.D. Program Team undertook the following strategic efforts.

1. Delivered a B.I.D. Program presentation to the Michigan Inter-Governmental Trade Network (MITN) Cooperative on June 18, 2021. This meeting was attended by representatives of government agencies throughout Michigan.
2. Updated B.I.D. Program forms, documents, and Bonfire scoring information to reflect lessons learned thus far.
3. Incorporated detailed B.I.D. Program process and requirements overviews to the Procurement Procedures Manual.
4. Began developing a checklist of requirements for B.I.D. Program Diversity Plans to distribute to vendors as a template for future solicitations.

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

- Developing contract language for B.I.D. Program requirements.
- Evaluating the insurance and bonding requirements for small, minority-owned, and disadvantaged business enterprises.
- Identifying meaningful reporting and performances measures.

Proposed Action: Receive and file this report.



Financial Services Audit Committee Communication

Date: June 25, 2021

To: Great Lakes Water Authority Audit Committee

From: Dana Bierer, CPA, Manager - Special Projects

Re: Grants, Gifts, and Other Resources Report through May 31, 2021

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

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

Other resources in this context refer to labor, contributions of money, property, or other things of value from any other person or entity, public or private with the exception for loans, subject to provisions of the GLWA Board Debt Management Policy, and Intergovernmental agreements and other activities that are addressed in the GLWA Board Procurement Policy.

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

Refer to the Grants, Gifts, and Other Resources Delegation Policy at [Grants, Gifts, and Other Resources Delegation Policy - GLWA \(glwater.org\)](https://www.glwater.org/Grants-Gifts-and-Other-Resources-Delegation-Policy).

Analysis: To ensure transparency and timely communication, this report will be provided to the Board, no less than quarterly, documenting activities subject to the policy. The report will, at a minimum, include description, type of activity, dollar amount, compliance and/or performance requirements, if any, and status including, at a minimum, solicitation, acceptance, and close-out. **Bolded items** reflect changes from the prior report.

Table 1 Grant Submissions reflects open FY2020 submissions and FY2021 submissions to date. The summarized activity provided identifies three programs with five reimbursement requests. GLWA has not received any reimbursements to date for COVID-19. The FEMA rules continue to evolve.

Table 1 - Grant Submissions

Reference Number	Request Date	Description	Type of Activity	Amount Requested	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-002a	09/15/2020	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 144208	Federal Grant (Reimbursement Basis)	To Be Determined	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer
2020-002b	11/11/2020	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 149797	Federal Grant (Reimbursement Basis)	To Be Determined	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer
2020-002c	02/09/2021	Federal Emergency Management Agency (FEMA) activity related to COVID-19 Project 149800	Federal Grant (Reimbursement Basis)	\$16,123	Federal Audit Requirements (add to existing audit program)	FEMA is reviewing	Dana Bierer
2021-001	01/01/2021	The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water Asset Management (DWAM) Grant CS-198	State Grant (Reimbursement Basis)	\$998,047	None	Applied	Jody Caldwell

Reference Number	Request Date	Description	Type of Activity	Amount Requested	Compliance and/or Performance Requirements	Status	Team Member Contact
2021-003	02/18/2021	The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Watershed Council Support Program	State Grant (Reimbursement Basis)	\$40,000	Quarterly Progress Reports	Awarded	Dan Gold

Table 2 Participation in Other Federal, State, Local or Intergovernmental Programs reflects open FY2020 projects and FY2021 projects to date. The summarized activity provided identifies 15 research projects with GLWA as a contributor and/or participant in research being conducted by a university.

Table 2 - Participation in Other Federal, State, Local, or Intergovernmental Programs

Reference Number	Start Date	Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-003	Pre-FY 2019	Anaerobic Digestion Project CS-217	Michigan State University Project	\$347,010 (Pre-FY2021) \$355,800 (Contract amount)	None	Ongoing	John Norton
2020-004	Pre-FY 2019	Phosphorus & Oxygen Control; Collection System Optimization; Energy Data Contract 1900169	Multiple Projects with University of Michigan	\$84,690 (Pre-FY2021) \$246,823 (Contract amount)	None	Ongoing	John Norton
2020-005	FY2020	PFAS Health & Ecological Impacts Contract 1902151	Wayne State University Project	\$192,153 (Contract amount)	None	Ongoing	John Norton
2020-007	FY2020	Transport/Fate of Nutrients in Biosolids Contract 1902059	Michigan State University Project	\$140,759 (Pre-FY2021) \$227,498 (Contract amount)	None	Ongoing	John Norton

Reference Number	Start Date	Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-008	FY2020	Surveillance of Covid-19 in Southeast MI Wastewater Contract 2001402	Michigan State University Project	\$267,458 (Contract amount)	None	Ongoing	John Norton
2020-009	07/22/2020	Implementation of LTCP modeling Contract 2001434	University of Michigan Project	\$636,702 (Contract amount)	None	Ongoing	John Norton
2020-010	08/01/2020	Microplastics and Human Health Contract 1904710	Wayne State University Project	\$195,000 (Contract amount)	None	Ongoing	John Norton
2020-011	Pre-FY2020	Smart Pipes Contract 1900902	University of Michigan Project	\$158,687 (Pre-FY2021) \$356,610 (Contract amount)	None	Ongoing	John Norton
2020-012	Pre-FY2020	Phosphorus and Oxygen Control; Collection System Optimization; Energy Data Warehouse Contract 1900169	Multiple Projects with University of Michigan	\$250,000 (Contract amount)	None	Ongoing	John Norton
2020-013a	08/01/2020	Surveillance of Covid-19 in Southeast MI Wastewater-Expanded project scope-Phase 1	State of Michigan/ CDM Smith and Michigan State University	GLWA receiving samples and analytics (Project worth \$400,000)	None	Awarded to CDM Smith and Michigan State University	John Norton

Reference Number	Start Date	Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-013b	08/01/2020	Surveillance of Covid-19 in Southeast MI Wastewater Contract expanded project scope- Phase 2	State of Michigan/ CDM Smith and Michigan State University	GLWA receiving samples and analytics (Project worth \$850,000)	None	Awarded to CDM Smith and Michigan State University	John Norton
2020-014	12/29/2000	Assessing biosolid treatment processes on pollutant environmental fate on plant uptake	US Environmental Protection Agency (EPA)/ Michigan State, Colorado State, and University of Georgia	\$100,000 (Contract amount \$100,000; Project worth \$1,498,000)	None	Applied	John Norton
2021-004	03/17/2021	Project GREEN- Accumulation of Per- and Polyfluoroalkyl Substances in Historically Archived Corn and Wheat Grains	Michigan State University Project	\$20,000 (Contract amount)	None	Awarded	John Norton
2021-005	05/04/2021	Converting Biosolids into Diesel	Department of Energy (DOE)/ Pacific Northwest National Labs (PNNL)	GLWA providing direction to lab and receiving lab results	None	Awarded	John Norton

Reference Number	Start Date	Description	Type of Activity	Amount to be Provided	Compliance and/or Performance Requirements	Status	Team Member Contact
2021-006	06/21/2021	Improving Arrested Anaerobic Digestion Using Vacuum-Based IntensiCarb Reactors	Department of Energy, Office of Energy Efficiency and Renewable Energy/ University of California Irvine	GLWA providing resources	None	Applied	John Norton

Table 3 Closed Programs reflects three programs with six reimbursement requests and receipts in FY2021 through May 31, 2021.

Table 3 - Closed Programs

Reference Number	Request Date	Description	Type of Activity	Amount	Compliance and/or Performance Requirements	Status	Team Member Contact
2020-001	08/31/2020; 09/23/2020; 10/26/2020; 11/23/2020	Wage Incentive used for qualified apprentices	MOU with DESC (Detroit Employment Solutions Corporation) and SER-Metro Detroit	\$12,000 (\$3,000 per month)	Minimum wage and monthly work hour requirements	\$12,000 received	Patricia Butler
2020-006	FY2020	Lake Huron to Lake Erie Monitoring Platform; Photocatalytic UV materials	Multiple Projects with Wayne State University	\$1,284,500 (Contract amount)	None	Program not initiated, no resources provided	John Norton
2021-002	02/01/2021	Southeast Michigan Council of Governments (SEMCOG) Infrastructure Asset Management Program	Organization of Local Governments (Reimbursement Basis)	\$29,951	None	\$29,951 received 02/18/2021	Jody Caldwell

Proposed Action: Receive and file this report.



Financial Services Audit Committee Communication

Date: June 25, 2021

To: Great Lakes Water Authority Audit Committee

From: Andrew Sosnoski, Manager, Construction Accounting & Financial Reporting

Re: FY 2021 Q3 Construction Work-in-Progress Report through March 31, 2021
(Unaudited)

Background: The quarterly construction work-in-progress (CWIP) provides information and analysis related to the execution of the Great Lakes Water Authority capital improvement program (CIP).

Analysis: The attached documents summarize the FY 2021 Q3 CWIP positions and provides a detailed snapshot to inform decision makers and stakeholders.

Proposed Action: Receive and file this report.



**Construction Work-in-Progress Quarterly Report
(Unaudited)**

As of March 31, 2021

For questions, please contact:

Andrew Sosnoski, CCIFP

Construction Accounting and Financial Reporting Manager

Phone: 313.999.2585

Email: Andrew.Sosnoski@glwater.org

DRAFT Issued 4.28.2021

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June 25, 2021**To Our Stakeholders:**

The contents of this report represent the financial presentation of construction work-in-progress activity for the Great Lakes Water Authority (GLWA) as of March 31, 2021. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2022–2026 Capital Improvement Plan (CIP) and look to inform decision makers as we draft the FY 2023–2027 CIP.

As we continue to refine this report to better communicate pertinent information to inform decision makers and stakeholders, content and formatting may be changed. With the summary of active projects now regularly being reported to the Capital Planning Committee the project highlights previously being reported have been removed from this report.

Report Contents and Organization

This report is divided into two sections: one for the Water System and one for the Wastewater System as identified in the table of contents. Each section includes analysis and reporting of the following:

Executive Summary: Presentation of spend information is necessary to report our progress on CIP projects.

Summary Construction Work-in-Progress Rollforward: This table provides a summary listing of at the project category 3 level of all projects in the CIP along with financial activity. This summary table may be used to better understand the CIP at a high level.

Detailed Construction Work-in-Progress Rollforward: This table provides a detailed list of all projects in the CIP along with financial activity. This table may be used to revisit priorities, workload, and phasing.

Project Amendment Summary: The award of CIP contracts and the related execution thereof may result in deviations from the amount and timing of project activity. Project amendments are prepared to fund the related increase or decrease with either an adjustment to Capital Reserve or Program / Allowance accounts to amend the board approved fiscal year CIP accordingly and to inform decision makers in the development of future Capital Improvement Plans.

Financial Information

All project amounts are unaudited. This means that direct contractor costs are generally included in these totals with most pay estimates entered through March 31, 2021. There may, however, be some pay estimates that lag. The totals do not include indirect overhead.

Budget vs. Plan

Generally, GLWA's CIP projects span two or more fiscal years. The GLWA Board of Directors adopts a biennial "budget" and a five-year capital improvement "plan".

- ✓ The adopted **budget** relates to operations and maintenance expense, annual fixed commitments such as debt service, and incremental adjustments to reserves. The budget provides authority to spend within defined amounts. The budget is also referred to as the "revenue requirement" for the utility.
- ✓ After contracts are awarded at amounts variant from the CIP plan and more reliable anticipated spend data becomes available, the amended budget for the current fiscal year may increase or decrease by way of "Capital Reserve" budget amendments.
- ✓ The five-year capital improvement **plan** is a rolling plan that is updated at an administrative tracking level as projects move from estimated to actual bid numbers. An updated mid-cycle CIP would be presented to the Board for approval if the prioritization strategy was revised and/or the plan was in need of material revisions.
- ✓ In addition, the Board of Directors adopts a capital spending ratio assumption (SRA) which allows the realities of capital program delivery to align with the financial plan. The SRA is an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA's control and/or delayed for nonbudgetary reasons. Those limitations, whether financial or non-financial, necessitate the SRA for budgetary purposes, despite the prioritization established.

WATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2021-2025 and related CIP Plan for FY 2021 were based on anticipation of FY 2021 activity resulting in 75% of planned spend. The Water System spend for the period ending March 31, 2021 is 87.3% of the FY 2021 pro-rated board approved CIP, 86.5% of the pro-rated FY 2021 board approved CIP with project amendments, and 116.5% of the FY 2021 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2021 Board Approved CIP was amended from \$147,564,000 to \$149,084,750 is provided in the subsequent Project Amendment Summary section of this report.

Water System Projects		FY 2020	FY 2020 Activity	FY 2020 Percentage	FY 2021	FY 2021 Prorated (Nine Months)	FY 2021 Activity (Unaudited)	FY 2021 Percentage
FY 2020 Board Approved CIP	\$	143,247,000	\$	76,542,465	53.4%			
FY 2020 Board Approved CIP With Project Amendments		124,916,757		76,542,465	61.3%			
FY 2020 Capital Spend Rate Assumption (SRA)		107,435,250		76,542,465	71.2%			
FY 2021 Board Approved CIP					\$ 147,564,000	\$ 110,673,000	\$ 96,672,173	87.3%
FY 2021 Board Approved CIP With Project Amendments					149,084,750	111,813,540	96,672,173	86.5%
FY 2021 Capital Spend Rate Assumption (SRA)					110,673,000	83,004,750	96,672,173	116.5%

Construction Work-in-Progress Rollforward Summary

The purpose of the construction work-in-progress (CWIP) summary rollforward is to provide a high-level overview of the financial status of the projects identified within the current board approved CIP. To better understand the extent of the planned activity within Water System under the responsibility of GLWA, the summary numbering is based on the six digit “smart” numbering system as identified within the CIP Plan. At a summary level this reporting rollup of the first three digits of the project numbers contains a substantial amount of reference information that will help the reader familiarize themselves with the plan of the projects identified within the Board approved CIP and status of projects currently underway.

\$193.1 million is in CWIP as of March 31, 2021 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is in ascending order by the first three digits of the CIP project number.

Great Lakes Water Authority
Water System Summary Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Category-3	Category-3 Description	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
111	Lake Huron	\$ 199,416,920	\$ 15,820,210	\$ 3,558,515	\$ 12,610,068	\$ 10,816,304	\$ 23,426,372	12%
112	Northeast	85,123,169	633,440	557,910	1,169,962	1,191,349	2,361,311	3%
113	Southwest	39,038,010	5,745,461	589,325	6,651,753	536,251	7,188,005	18%
114	Springwells	591,439,652	32,023,773	19,719,185	112,927,354	43,512,683	156,440,037	26%
115	Water Works Park	161,973,452	2,840,253	1,795,534	6,957,032	4,635,788	11,592,820	7%
116	General Purpose	97,061,880	18,513,669	9,055,665	-	27,569,335	27,569,335	28%
122	Transmission System	623,977,856	23,386,102	40,915,663	10,344,092	63,943,957	74,288,049	12%
132	Pump Stations & Reservoirs	312,206,748	6,884,368	5,093,370	2,722,522	10,997,695	13,720,217	4%
170	Programs	177,596,882	13,593,961	11,830,296	8,947,815	23,761,442	32,709,258	18%
171	Roof Replacement Program	26,195,341	2,772,205	222,368	3,354,843	161	3,355,004	13%
331	General Purpose	25,000,000			-	-	-	0%
341	General Purpose	9,169,807	3,977,412	3,334,342	1,138,691	6,173,062	7,311,753	80%
351	General Purpose	699,523	6,667		-	6,667	6,667	1%
380	Programs	2,185,848			-	-	-	0%
381	Energy Management	2,623,926			-	-	-	0%
Grand Total		\$ 2,353,709,015	\$ 126,197,522	\$ 96,672,173	\$ 166,824,132	\$ 193,144,695	\$ 359,968,827	\$ 15%

Construction Work-in-Progress Rollforward

The purpose of the construction work-in-progress (CWIP) rollforward is to analyze the current year activity for each project in relation to the overall capital improvement program as well as the project portfolio overall.

As part of our project life cycle review the CA&FR team identifies when it is appropriate for projects to be capitalized. Projects are to be capitalized when they have been completed in totality or are inclusive of identifiable assets that have been placed in service. Capitalization of project cost occurred in the FY 2021 3rd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
113002	CON-281	High Lift Discharge Valve Actuator SWWTP
114003	CON-133	Water Prod Flow Metering NE, SE, SPW
132026	1802146	Franklin PS Valve Rehab
170401	CON-181	Ypsilanti Pumping Station Bypass

\$193.1 million is in CWIP as of March 31, 2021 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is in ascending order by CIP project number.

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Water System
Construction Work-in-Progress Quarterly Report
As of March 31, 2021

Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ 57,178,250	\$ 212,034	\$ 1,636,000	\$ 1,636,000	\$ 1,126,270	\$ -	\$ 1,338,304	\$ 1,338,304	2%
111002	LHWTP Backflow Replacement	8,705,313	8,529,804	41,000	41,000	32,616	8,717,768	-	8,717,768	100%
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	3,892,689	390	-	-	(390)	3,892,299	-	3,892,299	100%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	16,789,745	1,073,466	235,000	235,000	202,715	-	1,276,180	1,276,180	8%
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	9,181,107	5,887,651	3,392,000	3,392,000	2,165,209	-	8,052,860	8,052,860	88%
111008	LHWTP Architectural Programming - Lab	1,196,283	110	-	-	(110)	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	30,480,734	116,755	1,856,000	1,142,460	32,131	-	148,886	148,886	0%
111010	Lake Huron Water Treatment Plant - Filtration and Pretreatment Improvements	42,206,783	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	3,247,998	-	-	2,200,000	-	-	-	-	0%
111012	LHWTP-Flocculation Improvements	26,538,016	-	-	-	74	-	74	74	0%
112002	Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	1,172,880	2,918	-	-	(2,918)	1,169,962	-	1,169,962	100%
112003	NE WTP High Lift Pumping Electrical	71,545,621	5,785	-	-	142,910	-	148,695	148,695	0%
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	1,088,655	438,463	1,096,000	1,096,000	355,663	-	794,126	794,126	73%
112006	Northeast Water Treatment Plant Flocculator Replacements	11,316,013	186,274	2,773,000	2,773,000	62,255	-	248,528	248,528	2%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	341,324	-	-	2,936	-	344,260	344,260	100%
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	6,728,375	5,272,232	1,094,000	1,094,000	526,693	5,798,535	390	5,798,925	86%
113003	Replacement of Butterfly Valves	21,811,953	110	-	-	-	-	110	110	0%
113004	Residual Handling Facility's Decant Flow Modifications at Southwest WTP	-	1,822	-	-	(1,822)	853,219	-	853,219	100%
113006	SW WTP Chloring Scrubber	7,330,660	129,973	260,000	260,000	61,517	-	191,490	191,490	3%
113007	Architectural and Building Mechanical Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary	3,167,022	-	-	-	-	-	-	-	0%
114001	Facilities	80,828,071	-	-	-	(0)	99,764,892	(0)	99,764,892	123%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
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Water System
Construction Work-in-Progress Quarterly Report
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Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	224,221,541	5,496,115	7,113,000	8,087,759	5,253,717	-	10,749,832	10,749,832	5%
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	8,155,919	8,185,528	-	-	21,709	8,207,237	0	8,207,237	101%
114005	Springwells WTP Admin Building Improvements	9,259,571	943,973	2,302,000	2,302,000	197,145	-	1,141,118	1,141,118	12%
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	-	9,390	-	-	-	1,021,039	9,390	1,030,429	100%
114007	Powder Activated Carbon Systems	4,020,591	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	13,923,254	3,381,909	10,327,000	10,327,000	6,619,035	23,038	9,977,906	10,000,944	72%
114010	Yard Piping Improvements	200,471,687	241,135	1,000	1,000	116,353	-	357,488	357,488	0%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	25,540,354	10,083,734	6,932,000	6,932,000	6,498,269	-	16,582,003	16,582,003	65%
114012	Springwells Water Treatment Plant 1930 Filter Building-Roof Replacement	3,911,148	-	-	-	-	3,911,148	-	3,911,148	100%
114013	Springwells Reservoir Fill Line Improvements	4,923,914	3,586,056	-	-	783,583	-	4,369,639	4,369,639	89%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	2,280,781	94,862	1,663,000	452,000	91,182	-	186,044	186,044	8%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	12,358,115	1,071	315,000	1,501,000	137,470	-	138,541	138,541	1%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	1,544,706	-	-	-	722	-	722	722	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	54,815,232	2,839,127	5,462,000	5,723,332	1,443,654	-	4,282,781	4,282,781	8%
115003	Comprehensive Condition Assessment at Waterworks Park WTP	514,004	-	-	-	-	-	-	-	0%
115004	Water Works Park WTP Chlorine System Upgrade	6,892,656	-	-	-	9,563	6,957,032	9,563	6,966,596	101%
115005	WWP WTP Building Ventilation Improvements	4,923,595	1,126	1,999,000	1,999,000	342,317	-	343,443	343,443	7%
115006	Water Works Park Site/Civil Improvements	5,881,718	-	-	-	-	-	-	-	0%
115007	Water Works Park High Lift Pumping Station Modernization	88,946,247	-	-	-	-	-	-	-	0%

Great Lakes Water Authority
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116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on	94,880,203	18,513,669	14,138,000	14,138,000	9,055,665	-	27,569,335	27,569,335	29%
116005	Belle Isle Seawall Rehabilitation	1,831,677	-	-	-	-	-	-	-	0%
116006	Belle Isle Intake System Rehabilitation and Improvements	350,000	-	-	-	-	-	-	-	0%
122003	New Waterworks Park to Northeast Transmission Main	143,217,044	5,190,146	11,703,000	11,703,000	10,972,090	-	16,162,235	16,162,235	11%
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	144,852,077	1,816,305	5,267,000	5,267,000	6,499,722	-	8,316,026	8,316,026	6%
122005	Replacement Schoolcraft Watermain	15,325,893	1,381,778	13,141,000	13,141,000	3,477,363	-	4,859,141	4,859,141	32%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	22,419,614	5,902,921	9,975,000	12,407,246	9,479,586	-	15,382,507	15,382,507	69%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	22,154,359	1,805	-	-	-	-	1,805	1,805	0%
122011	Park-Merriman Water Main-Final Phase	9,600,066	5,221,921	2,163,000	364,954	2,526,619	-	7,748,540	7,748,540	81%
122012	36-inch Water Main in Telegraph Road	9,870,398	-	-	-	-	9,986,284	-	9,986,284	101%
122013	Lyon Township Transmission Main Extension Project	105,180,009	3,642,904	1,194,000	1,194,000	6,836,788	357,808	10,121,885	10,479,693	10%
122016	Downriver Transmission Loop	37,067,100	224,909	1,748,000	1,748,000	1,112,400	-	1,337,309	1,337,309	4%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,188,759	3,414	1,794,000	1,794,000	11,095	-	14,509	14,509	0%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	54,102,536	-	1,717,000	1,717,000	-	-	-	-	0%
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	1,961,708	1,712	65,000	65,000	35,823	1,742,479	37,535	1,780,014	91%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	3,363,699	1,883,902	987,000	987,000	1,252,214	-	3,136,117	3,136,117	93%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,187,314	167,665	4,211,000	4,211,000	515,478	-	683,144	683,144	13%
132008	Needs Assessment Study for all Water Booster Pumping Stations	1,675,441	-	-	-	-	-	-	-	0%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,142,158	2,460,032	4,323,000	4,323,000	2,856,571	-	5,316,603	5,316,603	12%
132011	Energy Management: West Service Center (WSC) VFD Installation	-	-	-	-	369	-	369	369	100%
132012	Ypsilanti PS Improvements	35,393,046	333,589	846,000	846,000	114,293	-	447,882	447,882	1%
132014	Adams Road Booster Pumping Improvements	52,864,694	83,262	-	-	-	-	83,262	83,262	0%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
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Water System

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Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
132015	Newburgh BPS	45,044,000	350,454	973,000	973,000	71,381	-	421,835	421,835	1%
132016	North Service Center BPS Improvements	68,255,116	266,392	-	-	86,211	-	352,603	352,603	1%
132018	Schoolcraft BPS	47,317	47,317	-	-	-	-	47,317	47,317	100%
132019	Wick Road BPS - Switchgear	9,358,231	56,912	-	-	-	-	56,912	56,912	1%
132020	Franklin BPS - Isolation Gate Valves	2,544,535	93,160	-	-	-	-	93,160	93,160	4%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	749,810	227,346	-	-	-	-	227,346	227,346	30%
132022	Joy Road BPS - Replace Reservoir Pumps	39,613,214	71,380	-	-	-	-	71,380	71,380	0%
132025	Northwest Booster Station Yard Piping Improvements	-	20,155	-	-	152	-	20,306	20,306	100%
132026	Franklin Pumping Station Valve Replacement	1,006,467	821,090	613,000	613,000	160,879	980,043	1,926	981,969	98%
170100	Allowance: WTP/Pump Station	-	-	1,499,000	1,499,000	-	-	-	-	100%
170102	Water Production Plant Flow Metering Improvements at NE, SP & SW WTP	372,374	372,374	-	-	1,266	-	373,640	373,640	100%
170103	Belle Isle Water Supply Intake and Ice Boom Improvements	-	3,278	-	-	(3,278)	286,596	0	286,596	100%
170109	Inspection of Raw Water Intakes and Tunnels	1,656,069	-	-	-	-	-	-	-	0%
170120	Phosphoric Acid Feed System Improvements at Southwest WTP	1,625	-	-	-	-	634,509	-	634,509	39047%
170122	Meter Pit at Brownstown Township	-	133,306	-	-	-	-	133,306	133,306	100%
170200	As Needed Construction Materials, Environmental Media and Special Allowance	1,427,227	-	685,000	685,000	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	13,249,000	-	5,440,000	4,475,000	-	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	-	1,755,142	1,755,142	100%
170302	SW WTP SCADA Improvements	9,000,000	-	-	340,000	66,146	-	66,146	66,146	1%
170303	WWP WTP Power Monitoring Installation	1,700,000	-	-	(1,186,000)	36,275	-	36,275	36,275	2%
170400	Water Transmission Improvement Program	33,171,211	-	1,776,000	1,776,000	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station	1,661,231	1,662,615	-	-	200	1,662,815	-	1,662,815	100%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	5,350,164	-	1,177,000	1,177,000	-	-	-	-	0%
170502	Transmission System Valve Assessment and Rehabilitation/Replacement A	-	2,051,843	-	-	171,513	6,363,896	2,223,357	8,587,253	100%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
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Water System
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Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,071,663	393,559	-	-	2,097,001	-	2,490,560	2,490,560	25%
170600	Water Transmission Main Asset Assessment Program	8,438,215	-	54,000	54,000	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	23,827,344	-	6,087,000	6,087,000	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	15,090,049	2,615,570	-	-	6,490,153	-	9,105,724	9,105,724	60%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	40,718,957	-	2,535,000	2,535,000	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	10,616,499	4,529,883	-	-	2,971,020	-	7,500,903	7,500,903	71%
170902	Brownstown Meter Pit Rehabilitation	1,245,254	76,390	-	-	-	-	76,390	76,390	6%
171500	Roof Replacement - Var Facilities Program	22,710,989	-	173,000	173,000	-	-	-	-	0%
171501	Roof Replacements - Var Facilities Program	3,484,352	2,772,205	-	-	222,368	3,354,843	161	3,355,004	96%
331003	Masonry Replacement and Rehabilitation	25,000,000	-	-	-	-	-	-	-	0%
341001	Security Infrastructure Improvements	9,169,807	3,977,412	4,018,000	4,018,000	3,334,342	1,138,691	6,173,062	7,311,753	80%
351001	Water Facility Lighting Renovations	699,523	6,667	50,000	50,000	-	-	6,667	6,667	1%
380600	General Engineering Services Allowance	55,126	-	-	-	-	-	-	-	0%
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	2,130,722	-	715,000	715,000	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	2,623,926	-	-	-	-	-	-	-	0%
Grand Total		\$ 2,353,709,015	\$ 126,197,522	\$ 147,564,000	\$ 149,084,750	\$ 96,672,173	\$ 166,824,132	\$ 193,144,695	\$ 359,968,827	15%
					Project Amendments \$ 1,520,750					

FY 2021 Project Amendment Summary

The purpose of the Project Amendment Summary is to illustrate the amendments to the current fiscal year board approved CIP for each project with an amendment resulting from the use of allowance and program funding for a specific amount necessitated by contract award.

The award of CIP contracts and the related execution thereof may result in deviation from the amount and timing of planned spend. Acknowledging the aforementioned deviation, project amendments are prepared to fund the related increase or decrease either to or from the Capital Reserve to amend the current fiscal year board approved Capital Improvement Plan accordingly and to inform decision makers in the development of future Capital Improvement Plans. Similar to the project amendments prepared for the Capital Reserve, project amendments are also prepared for contracts that are planned or funded by way of the CIP Program and Allowance accounts. As additional contracts are awarded and other project information becomes available additional project amendments to and from the Capital Reserve will be prepared to amend the board approved FY 2021 Capital Improvement Plan.

\$1,520,750 of Capital Reserve project amendments have been prepared as of March 31, 2021 as shown in the table on the next page along with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of the report on the subsequent page is in ascending order by CIP project number.

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Water System Project Amendment Summary
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Water System
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Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
111009	Lake Huron WTP-35 MGD HLP, Flow Meters		(713,540)	(713,540)
111011	Lake Huron WTP Pilot Plant		2,200,000	2,200,000
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement		(1,211,000)	(1,211,000)
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park		119,550	119,550
122006	Transmission System Water Main Work-Wick Road Parallel Water Main		2,432,246	2,432,246
122011	Park-Merriman Water Main-Final Phase		(1,798,046)	(1,798,046)
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station		974,759	974,759
114017	Springwells Water Treatment Plant Flocculator Drive Replacement		141,782	141,782
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park		(625,000)	(625,000)
170300	Water Treatment Plant Automation Program	(1,526,000)		(1,526,000)
170302	SW WTP SCADA Improvements	340,000		340,000
170303	WWP WTP Power Monitoring Installation	1,186,000		1,186,000
Grand Total		\$ -	\$ 1,520,750	\$ (713,540)

WASTEWATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2021-2025 and related CIP Plan for FY 2021 were based on anticipation of FY 2021 activity resulting in 75% of planned spend. The Wastewater System spend for the period ending March 31, 2021 is 77.2% of the prorated FY 2021 board approved CIP, 77.6% of the prorated FY 2021 board approved CIP with project amendments, and 103% of the FY 2021 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2021 Board Approved CIP was amended from \$110,638,000 to \$110,180,582 is provided in the subsequent Project Amendment Summary section of this report.

		FY 2020	FY 2020	FY 2020	FY 2021	FY 2021	FY 2021
			Activity	Percentage		Prorated (Nine Months)	Activity (Unaudited) FY 2021 Percentage
Wastewater System Projects		FY 2020	Activity	Percentage	FY 2021		
FY 2020 Board Approved CIP	\$	161,480,000	\$ 73,826,521	45.7%			
FY 2020 Board Approved CIP With Project Amendments		156,884,005	73,826,521	47.1%			
FY 2020 Capital Spend Rate Assumption (SRA)		121,110,000	73,826,521	61.0%			
FY 2021 Board Approved CIP					\$ 110,638,000	\$ 82,978,500	\$ 64,092,967 77.2%
FY 2021 Board Approved CIP With Project Amendments					110,180,582	82,635,437	64,092,967 77.6%
FY 2021 Capital Spend Rate Assumption (SRA)					82,978,500	62,233,875	64,092,967 103.0%

Construction Work-in-Progress Rollforward Summary

The purpose of the construction work-in-progress (CWIP) summary rollforward is to provide a high-level overview of the financial status of the projects identified within the current board approved CIP. To better understand the extent of the planned activity within Wastewater System under the responsibility of GLWA, the summary numbering is based on the six digit “smart” numbering system as identified within the CIP Plan. At a summary level this reporting rollup of the first three digits of the project numbers contains a substantial amount of reference information that will help the reader familiarize themselves with the plan of the projects identified within the Board approved CIP and status of projects currently underway.

\$237.3 million is in CWIP as of March 31, 2021 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is in ascending order by the first three digits of the CIP project number.

Great Lakes Water Authority
Water System Summary Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Category-3	Category-3 Description	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
211	Primary Treatment	\$ 371,065,245	\$ 85,469,628	\$ 5,366,260	\$ -	\$ 90,835,888	\$ 90,835,888	24%
212	Secondary Treatment & Disinfection	275,330,750	3,819,646	2,077,887	60,313,606	5,897,533	66,211,139	24%
213	Residuals Management	35,084,246	16,995,587	2,626,191	-	19,621,778	19,621,778	56%
214	Industrial Waste Control	12,651,082	8,301,788	3,582,960	2,282,260	11,884,748	14,167,008	112%
216	General Purpose	98,653,609	4,240,873	1,906,478	580,573	6,110,277	6,690,851	7%
222	Interceptor	126,172,250	20,619,964	14,394,643	-	35,014,606	35,014,606	28%
232	Pump Stations	269,609,584	21,558,237	14,205,187	565,950	35,255,209	35,821,159	13%
233	In System Devices	46,317,488	235	-	-	235	235	0%
260	Programs	470,172,937	14,977,894	17,013,033	23,694,889	30,642,118	54,337,007	12%
270	Multiple CSO facilities	24,680,564	3,545	910,678	908,860	5,364	914,224	4%
274	Leib	10,941,804	-	-	-	-	-	0%
277	Baby Creek	18,825,761	2,283	995,313	983,115	14,481	997,596	5%
278	Oakwood	10,225,804	-	-	-	-	-	0%
331	General Purpose	8,888,476	-	-	1,123,056	-	1,123,056	13%
341	General Purpose	3,533,510	1,033,207	1,014,337	-	2,047,544	2,047,544	58%
Grand Total		\$ 1,782,153,110	\$ 177,022,887	\$ 64,092,967	\$ 90,452,308	\$ 237,329,781	\$ 327,782,090	18%

Construction Work-in-Progress Rollforward

The purpose of the construction work-in-progress (CWIP) rollforward is to analyze the current year activity for each project in relation to the overall capital improvement program as well as the project portfolio overall.

As part of our project life cycle review the CA&FR team identifies when it is appropriate for projects to be capitalized. Projects are to be capitalized when they have been completed in totality or are inclusive of identifiable assets that have been placed in service. Capitalization of project cost occurred in the FY 2021 3rd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
232002	CON-109	Freud and Connor Creek Pump Station Improvements
260609	1804112	Seven Mile RTB - Parking Lot Replacement/Sitework

\$237.3 million is in CWIP as of March 31, 2021 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is in ascending order by CIP project number.

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Wastewater System Construction Work-in-Progress Quarterly Report

As of March 31, 2021

Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	\$ 54,061,159	\$ 52,886,451	\$ 3,775,000	\$ 3,775,000	\$ 1,862,287	\$ -	\$ 54,748,738	\$ 54,748,738	101%
211002	Pump Station No. 2 Pumping Improvements	3,340,152	2,013,956	-	-	478,562	-	2,492,518	2,492,518	75%
211004	Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	23,295,382	27,605,573	-	-	135,572	-	27,741,145	27,741,145	119%
211005	Pump Station No. 2 Improvements	13,797,096	-	-	-	4,290	-	4,290	4,290	0%
211006	Pump Station No. 1 Improvements	68,709,404	1,283,830	645,000	645,000	1,650,530	-	2,934,360	2,934,360	4%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	76,228,576	5,176	3,098,000	3,098,000	879,534	-	884,710	884,710	1%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	11,387,944	1,629,677	5,522,000	2,943,000	249,830	-	1,879,507	1,879,507	17%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	13,007,908	2,734	313,000	313,000	34,063	-	36,798	36,798	0%
211010	Rehabilitation of Sludge Processing Complexes A and B	13,934,471	42,231	-	-	71,592	-	113,823	113,823	1%
211011	WRRF PS1 Screening and Grit Improvements	93,303,153	-	-	-	-	-	-	-	0%
212003	Aeration System Improvements	14,643,450	-	-	-	-	16,524,875	-	16,524,875	113%
212004	Project Chlorination/Dechlorination Process Equipment Improvements	5,742,203	3,803,140	1,850,000	1,850,000	1,692,171	-	5,495,311	5,495,311	96%
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	43,788,731	-	-	-	-	43,788,731	-	43,788,731	100%
212007	Rehabilitation of the Secondary Clarifiers	49,871,040	330	-	-	2,468	-	2,798	2,798	0%
212008	WRRF Rehabilitation of Intermediate Lift	81,931,310	16,175	4,612,000	4,612,000	383,248	-	399,424	399,424	0%
212009	WRRF Aeration Improvements 3 and 4	73,588,564	-	-	-	-	-	-	-	0%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,765,452	-	-	-	-	-	-	-	0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	4,489,934	5,750	174,000	174,000	58,652	-	64,402	64,402	1%
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	22,162,273	16,878,502	2,258,000	2,258,000	2,528,077	-	19,406,579	19,406,579	88%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	8,432,039	111,335	1,338,000	1,338,000	39,461	-	150,797	150,797	2%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Wastewater System
Construction Work-in-Progress Quarterly Report
As of March 31, 2021

Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	12,651,082	8,301,788	1,331,000	1,681,000	3,582,960	2,282,260	11,884,748	14,167,008	112%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	6,645,397	1,637,516	1,300,000	2,882,302	524,367	-	2,161,883	2,161,883	33%
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	23,874,377	73,474	4,291,000	4,291,000	390,761	-	464,235	464,235	2%
216007	DTE Primary Electric 3rd Feed Supply Line to the WRRF	4,544,429	2,354,996	1,296,000	1,296,000	906,657	543,500	3,261,652	3,805,152	84%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,820,651	5,671	1,362,000	1,362,000	65,227	-	70,899	70,899	0%
216009	Logistics & Material Facility	164,904	164,904	253,000	253,000	(18,498)	-	146,406	146,406	89%
216010	WRRF Facility Optimization	10,270,771	4,312	14,000	14,000	890	-	5,202	5,202	0%
216011	WRRF Structural Improvements	12,333,080	-	-	-	-	-	-	-	0%
216012	WRRF Research Facility	-	-	-	-	37,073	37,073	-	37,073	100%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,397,144	-	975,000	553,502	2,652	-	2,652	2,652	0%
222002	Detroit River Interceptor Evaluation and Rehabilitation	72,775,106	20,151,096	23,634,000	23,634,000	13,422,706	-	33,573,802	33,573,802	46%
222004	Collection System Valve Remote Operation Structures Improvements	-	468,867	2,701,000	2,701,000	969,285	-	1,438,153	1,438,153	100%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	40,073,406	14,273,606	5,336,000	5,336,000	11,947,415	-	26,221,021	26,221,021	65%
232002	Freud and Connor Creek Pump Station Improvements	229,278,758	7,284,631	6,445,000	6,445,000	2,257,771	565,950	9,034,187	9,600,137	4%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	257,420	-	286,000	286,000	-	-	-	-	0%
233002	Collection System In System Storage Devices (ISDs) Improvements	-	235	-	-	-	-	235	235	100%
233003	Rouge River In-system Storage Devices	46,317,488	-	-	-	-	-	-	-	0%
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	53,748,897	-	12,976,000	12,938,628	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	32,282,349	960,448	-	-	7,890,834	18,542,127	8,851,282	27,393,409	85%
260202	Conveyance System Interceptor Rehab	-	23,871	-	-	1,904	-	25,775	25,775	100%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	52,157,408	912,742	-	-	(93,998)	-	818,744	818,744	2%
260205	NWI Outfall Rehabilitation	10,937,891	79,226	-	-	135,313	-	214,539	214,539	2%
260206	Conveyance System Rehabilitation - Interceptors	47,821,376	-	-	37,372	1,496	-	1,496	1,496	0%
260207	Rehabilitation of Woodward Sewer System	-	-	-	-	1,067,880	-	1,067,880	1,067,880	100%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Wastewater System
Construction Work-in-Progress Quarterly Report
As of March 31, 2021

Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
260500	CSO Outfall Rehab	5,000,000	-	11,706,000	11,618,747	-	-	-	-	0%
260503	Collection System Backwater Gates	-	760	-	-	(760)	-	(0)	(0)	100%
260504	Rehabilitation of Outfalls - Phase II	5,051,112	2,202,000	-	-	2,656,668	-	4,858,668	4,858,668	96%
260505	Rehabilitation of Outfalls - Phase IV	5,718,385	1,586,323	-	-	3,050,564	-	4,636,887	4,636,887	81%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	100%
260508	B-39 Outfall Rehab	568,620	498	-	-	142,002	-	142,500	142,500	25%
260509	B-40 Outfall Rehab	88,500	66,293	-	-	(7,698)	-	58,595	58,595	66%
260510	Conveyance System Rehabilitation - Outfalls	48,863,036	-	-	87,253	1,564	-	1,564	1,564	0%
260600	CSO Facilities Improvements	126,400,000	-	7,492,000	7,492,000	-	-	-	-	0%
260601	Oakwood Drain Valve Improvements	864,218	26,199	-	-	122,939	804,574	-	804,574	93%
260602	CSO Fire Alarm System Improvements	997,619	-	-	-	-	997,619	-	997,619	100%
260603	Conner Creek CSO Basin Rehab	7,898,362	7,056,367	-	-	386,443	-	7,442,811	7,442,811	94%
260606	Puritan Fenkell Roof Replacement	346,540	-	-	-	-	346,540	-	346,540	100%
260607	Lieb SDF Electrical Improvements	1,032,687	179	-	-	(179)	1,032,508	(0)	1,032,508	100%
260608	Seven Mile RTB - Roof Replacement	496,699	-	-	-	-	496,699	-	496,699	100%
260609	Seven Mile RTB - Parking Lot / Sitework	416,597	369,559	-	-	59,998	429,557	-	429,557	103%
260610	Baby Creek MAU Replacement	275,151	-	-	-	-	275,151	-	275,151	100%
260611	HVAC Improvements At Lieb SDF	395,615	95,887	-	-	237,748	-	333,635	333,635	84%
260613	Baby Creek HVAC Improvements	587,628	51,338	-	-	404,048	-	455,386	455,386	77%
260614	CSO Facilities Structural Improvements	13,794,118	303,795	-	-	14,890	-	318,684	318,684	2%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	801,140	109,660	-	-	176,977	-	286,638	286,638	36%
260616	Baby Creek SCO Anchor & Wedge Improvements	782,863	666,495	-	-	103,619	770,114	-	770,114	98%
260617	St. Aubin Chemical Disinfection Improvements	6,966,364	250,348	-	-	131,483	-	381,831	381,831	5%
260618	Oakwood HVAC Improvements	3,966,512	75,672	-	-	276,248	-	351,920	351,920	9%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	116,179	61,593	-	-	1,173	-	62,766	62,766	54%
260620	Baby Creek Roof Replacement	640,500	-	-	-	25,422	-	25,422	25,422	4%
260621	Connor Creek Berm Improvements	-	-	-	610,778	226,073	-	226,073	226,073	100%
260622	CSO Facilities Emergency Generator Improvements	-	-	-	-	383	-	383	383	100%
260700	Sewer System Infrastructure Improvements & Pumping Stations	35,901,492	-	-	-	-	-	-	-	0%
260701	Conveyance System Infrastructure Improvements	4,586,079	-	-	-	-	-	-	-	0%
260702	Pump Station Assets Updates	669,000	-	-	-	-	-	-	-	0%
270001	Pilot CSO Netting Facility	9,573,092	-	20,000	20,000	-	-	-	-	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,839,631	-	-	-	-	-	-	-	0%
270003	Long Term CSO Control Plan	9,267,841	3,545	2,796,000	2,796,000	910,678	908,860	5,364	914,224	10%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31, 2021

Wastewater System
Construction Work-in-Progress Quarterly Report
As of March 31, 2021

Project	Project Name	Total Project Plan Estimate from FY 2022 - 2026 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through March 31, 2021	Life to date Capitalization/ Expense Through March 31, 2021	CWIP Balance March 31, 2021	Life to date Activity Through March 31, 2021	Life to date Activity / Total Project Plan Estimate
274001	Leib Improvements for Meldrum Diversion	10,941,804	-	-	-	-	-	-	-	0%
277001	Baby Creek Outfall Improvements Project	18,825,761	2,283	1,251,000	1,251,000	995,313	983,115	14,481	997,596	5%
278001	Oakwood Improvements for NWI Diversion	10,225,804	-	-	-	-	-	-	-	0%
331002	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	8,888,476	-	91,000	91,000	-	1,123,056	-	1,123,056	13%
341001	Security Infrastructure Improvements	-	1,033,207	-	-	18,716	-	1,051,922	1,051,922	100%
341002	Security Infrastructure Improvements	3,533,510	-	1,051,000	1,051,000	995,621	-	995,621	995,621	28%
381000	Energy Management: Electric Metering Improvement Program	-	-	446,000	446,000	-	-	-	-	100%
Grand Total		\$ 1,782,153,110	\$ 177,022,887	\$ 110,638,000	\$ 110,180,582	\$ 64,092,967	\$ 90,452,308	\$ 237,329,781	\$ 327,782,090	18%
					Project Amendments	\$ (457,418)				

FY 2021 Project Amendment Summary

The purpose of the Project Amendment Summary is to illustrate the amendments to the current fiscal year board approved CIP for each project with an amendment resulting from the use of allowance and program funding for a specific amount necessitated by contract award.

The award of CIP contracts and the related execution thereof may result in deviation from the amount and timing of planned spend. Acknowledging the aforementioned deviation, project amendments are prepared to fund the related increase or decrease either to or from the Capital Reserve to amend the current fiscal year board approved Capital Improvement Plan accordingly and to inform decision makers in the development of future Capital Improvement Plans. Similar to the project amendments prepared for the Capital Reserve, project amendments are also prepared for contracts that are planned or funded by way of the CIP Program and Allowance accounts. As additional contracts are awarded and other project information becomes available additional project amendments to and from the Capital Reserve will be prepared to amend the board approved FY 2021 Capital Improvement Plan.

\$(457,518) of Capital Reserve project amendments have been prepared as of March 31, 2021 as shown in the table on the next page along with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of the report on the subsequent page is in ascending order by CIP project number.

Great Lakes Water Authority
Wastewater System Project Amendment Summary
Unaudited Activity For the Fiscal Year Ended March 31, 2021

Wastewater System
Construction Work-in-Progress Quarterly Report
 As of March 31, 2021

Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines		(2,579,000)	(2,579,000)
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations		350,000	350,000
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP		1,582,302	1,582,302
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District		(421,498)	(421,498)
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	(37,372)		(37,372)
260206	Conveyence System Rehabilitation - Interceptors	37,372		37,372
260500	CSO Outfall Rehab	(87,253)		(87,253)
260510	Conveyence System Rehabilitation - Outfalls	87,253		87,253
260621	Connor Creek Berm Improvements		610,778	610,778
Grand Total		\$ -	\$ (457,418)	\$ (457,418)



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

Procurement Tip of the Month: Utilizing the GLWA Vendor Webpage

For vendors doing business with GLWA, or for those interested in doing so in the future, utilizing the [GLWA Vendor Webpage](#) is an important way to stay informed. Below you will find an overview of the information, documents, and links that are available on the GLWA Vendor Webpage:

- ✓ The vision, mission, and goals of the GLWA Procurement Team;
- ✓ GLWA's Annual Procurement Report and information on GLWA's commitment to transparency in all its procurements;
- ✓ Access to GLWA's Bonfire Registration Page and Bonfire Procurement Portal;
- ✓ GLWA's most up-to-date Visitor COVID-19 Access Requirements and Safety Protocols as well as a link to the Visitor COVID-19 electronic Questionnaire;
- ✓ GLWA's Procurement Policy, Terms, Conditions, and Forms;
- ✓ The 2021 editions of the monthly *Procurement Pipeline* newsletter (prior editions are archived and searchable);
- ✓ An overview of GLWA's new Business Inclusion and Diversity (B.I.D) Program and B.I.D. program requirements;
- ✓ The 2021 Vendor Outreach Staff Directory;
- ✓ Contact Information for Procurement, Vendor Outreach, and the B.I.D. Program.

Remember to frequently check the GLWA Vendor Webpage for new information and resources!

Reminder: Visitor COVID-19 Badged Access Requirements Beginning on July 1, 2021

On March 9, 2021, GLWA released [Coronavirus Update #112](#) to the Vendor Community. This memorandum detailed the Visitor COVID-19 Badged Access Requirements that will begin on July 1, 2021. By this date, visitors requesting or

maintaining Badged Access to GLWA facilities or project worksites ***must provide documentation of one of the following*** with their daily completion of the Visitor COVID-19 Questionnaire:

- 1) Documentation of a negative COVID-19 test result dated between April 1, 2021 and July 1, 2021. Periodic testing may be required after July 1 on the same cadence as GLWA team members;
- 2) Documentation of COVID-19 vaccination. All Visitors must provide proof that they have received the appropriate dosage(s) of the vaccine and that they have waited the 14 days recommended by the Centers for Disease Control and Prevention (CDC) for the vaccine to take full effect.

Please note that all visitors, including those that are COVID-19 vaccinated, are still required to follow the Visitor PPE and Safety Protocols outlined in [Coronavirus Update #105](#), including wearing face masks, handwashing, and social distancing. For more information on these protocols, please carefully review [Coronavirus Update #112](#). Any additional questions regarding GLWA's Visitor COVID-19 Access Requirements may be directed to [Michael Lasley](#) and [Megan Torti](#).

Virtual Introduction Meetings with GLWA

If you are interested in learning more about doing business with GLWA, contact us at GLWAVendorOutreach@glwater.org to schedule a vendor introductory meeting. Topics include helpful information on submitting a competitive bid or proposal to a GLWA solicitation, as well as the requirements for GLWA's Business Inclusion and Diversity (B.I.D.) Program.

What's Coming Down the Pipe?

Current Solicitations: Be sure to register in [Bonfire](#) for new solicitations and contract award information. *Upcoming Procurements: Next Three to Nine Months* - See page 2

Visit GLWA online! See the Vendors page at www.glwater.org or contact us via email at procurement@glwater.org.

Upcoming Solicitations June 2021

Category	Description	Budget Estimate
Water System (next three months)		
Maintenance Services	Skilled Trades Contract	TBD
Engineering	North Service Center Pumping Station Improvements (CIP #132016)	\$10,000,000
Construction	Northeast WTP Flocculator Improvements (CIP #112006)	\$11,000,000
Construction	Springwells Water Treatment Plant Medium Voltage Electrical System Replacement (CIP #114002 Project B)	\$45,000,000
Design Build	Belle Isle Seawall Rehabilitation (CIP #116005)	\$1,740,000
Design	Reservoir Inspection, Design, Construction Administration, and RPR Services (CIP #170802)	\$5,400,000
Design	Leib Screening & Disinfection Facility Improvements for Meldrum Diversion (CIP #274001) (CSO) & Oakwood CSO Facility Improvements for Northwest Interceptor Diversion (CIP #278001)	\$5,000,000
Progressive Design Build	Water Works Park High Lift Pumping Station Modernization (CIP #115007)	\$89,000,000
Wastewater System (next three months)		
Construction	Rehabilitation of Outfalls – Phase III (B-39) (CIP #260508)	\$7,400,000
Design Build	Control System Upgrade – St. Aubin, Leib, and 7 Mile CSO Facilities (CIP #360619)	\$7,000,000
Construction	Generator Improvements (Controls upgrades, Generator modifications) (JOC) (CIP #260622) (CSO)	\$1,000,000
Construction	Hubbell Southfield CSO Basin Pipe Hanger Replacement	\$1,500,000
Construction	HAZMAT (Hazardous Material) Building Renovation	\$1,500,000
Water System (next four to nine months)		
Progressive Design Build	Lake Huron WTP Instrumentation and Filter Control Improvements (CIP #111006)	\$21,000,000
Construction	Roof Replacement – Lake Huron WTP and Southwest WTP (CIP #171500)	\$3,000,000
Wastewater System (next four to nine months)		
Professional Services	Virtual Tour and Laser Scanning Services	TBD
Design	Pilot Netting Facility Project (CIP #270001) (CSO)	TBD
Construction	Rehabilitation of CSO Outfall Backwater Gates (CIP #260510)	\$5,000,000
Construction	WRRF Administration Building 4 th Floor Renovation	\$2,500,000TBD
Construction	Pump Station #1 Screenings Building HVAC Improvements (CIP #211006)	\$1,000,000
Construction	Connor Creek Sewer System Rehabilitation (CIP #260208)	\$24,400,000
Design Build	WRRF Rehabilitation of Intermediate Lift Pumps (ILPs) 1 & 2 and Modifications to Aeration Decks 1 & 2 to Incorporate Biological Phosphorus Removal and Step Feed (CIP #212008)	\$60,000,000
Construction	WRRF Pump Station #1 Improvements (CIP #211006)	\$55,000,000
Design Build	WRRF Structural Improvements (CIP #216011)	\$12,000,000
Design Build	Sewer Repair Contract (CIP #260209)	\$22,400,000
Construction	Rehabilitation of Northwest Interceptor from 8 Mile Road to Warren Pierson (CIP #260295)	\$7,000,000
Enterprise (next three months)		
Information Technology	Project Management Information System	\$3,000,000
Professional Services	Document Scanning and Management Services (WRRF, Conner Creek, Enterprise)	TBD

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

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