GLWA Great Lakes Water Authority

Audit Committee

Friday, March 27, 2020 at 8:00 a.m.

Telephonic Meeting

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

AGENDA

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF AGENDA
- 4. APPROVAL OF MINUTES
 - A. February 12, 2020 (Page 1)
 - B. February 21, 2020 (Page 4)
- 5. PUBLIC PARTICIPATION
- 6. OLD BUSINESS
- 7. NEW BUSINESS
 - A. Proposed Contract Extension- GLWA CS-010 Water Residential (Page 10) Assistance Program
- 8. REPORTS
 - A. CFO Update (Binder 2)
 - B. Monthly Financial Report for December 2019 (Page 15)
 - C. FY 2020 Q2 Construction Work-in-Progress Report through (Page 16) December 31, 2019
- 9. COMMUNICATIONS
 - A. Rating Agency Upgrades (Binder 2)
 - B. The Procurement Pipeline for March 2020 (Binder 2)

10. LOOK AHEAD

Next Audit Committee Meetings

- A. Regular Meeting April 17, 2020 at 8:00 a.m.
- 11. OTHER MATTERS
- 12. ADJOURNMENT



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Wednesday, February 12, 2020	10:00 AM	Water Board Building 5th Floor
	Special Meeting	

1. Call To Order

Chairperson Baker called the meeting to order at 10:06 a.m.

2. Quorum Call

Present: 3 - Chairperson Brian Baker, Director Gary Brown, and Director Abe Munfakh

Director Brown joined the meeting at 10:15 a.m. under Item 7A.

3. Approval of Agenda

Chairman Baker requested a Motion to approve the Agenda.

Motion By: Brian Baker Support By: Abe Munfakh Action: Approved

The motion carried by a unanimous vote.

4. Approval of Minutes

None

5. Public Comment

There were no public comments.

6. Old Business

None

7. New Business

A. 2020-062 Review of Draft Feasibility Consultant Report- 2020 Water and Sewer

Bond Transactions

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7A1 Audit Committee Memo-Prelim Feas Rpt 02.12.2020

7A2 Prelim Feas Rpt 021220pw

Motion By: Gary Brown Support By: Abe Munfakh Action: Received and Filed

The motion carried by a unanimous vote.

B. 2020-063 Approval of Series Ordinance Authorizing Issuance and Sale of Water

Supply System Revenue and Revenue Refunding Bonds in an Amount Not

to Exceed \$515,000,000

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7B1 Audit Committee Memo- Water Revenue and Revenue Refunding

Series Ordinance 02.12.2020

7B2 Board Letter- Water Revenue and Revenue Refunding Series

Ordinance 2.12.2020

7B3 Water Revenue and Revenue Refunding Series Ordinance FINAL

2.12.2020

7B4 Resolution- Approval of Water Revenue and Revenue Refunding

Series Ordinance FINAL 2.12.2020

Motion By: Abe Munfakh Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors Workshop Meeting

Agenda of February 12, 2020

The motion carried by a unanimous vote.

C. 2020-064 Approval of Series Ordinance Authorizing Issuance and Sale of Sewage

Disposal System Revenue Refunding Bonds in an Amount Not to Exceed

\$800,000,000

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7C1 Audit Committee Memo- Sewer Revenue Refunding Series

Ordinance 02.12.2020

7C2 Board Letter- Sewer Revenue Refunding Series Ordinance

02.12.2020

7C3 Sewer Revenue Refunding Series Ordinance FINAL 2.12.2020

7C4 Resolution- Approval of Sewer Revenue Refunding Series

Ordinance FINAL 2.12.2020

Motion By: Abe Munfakh Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors Workshop Meeting

Agenda of February 12, 2020

The motion carried by a unanimous vote.

8. Reports

None

9. Look Ahead

The next Audit Committee Meeting will be held Friday, February 21, 2020 at 8:00 a.m.

10. Information

None

11. Other Matters

None

12. Adjournment

Chairman Baker requested a Motion to Adjourn.

Motion By: Abe Munfakh Support By: Gary Brown Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 10:56 a.m.



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Friday, February 21, 2020

8:00 AM

Water Board Building 5th Floor

1. Call To Order

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

2. Quorum Call

Present: 3 - Chairperson Brian Baker, Director Gary Brown, and Director Abe Munfakh

Note: Director Brown attendance via teleconference.

3. Approval of Agenda

Chairperson Baker requested a Motion to approve the Agenda.

Motion By: Abe Munfakh Support: Gary Brown Action: Approved

The motion carried unanimously.

4. Approval of Minutes

2020-069 Approval of Minutes of January 27, 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 4A Audit Committee Meeting Minutes - January 27, 2020

Chairperson Baker requested a Motion to approve the January 27, 2020 Audit

Committee Meeting Minutes.

Motion By: Abe Munfakh Support By: Gary Brown

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business

A. 2020-070 Water Residential Assistance Program Reallocation Request for

Uncommitted FY 2019 Funds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 6A1 Audit Committee Memo- WRAP Reallocation of FY 2019 Funds

6A1a 2020-066 Board Letter Water Residential Assistance Program

Reallocation Request for Uncommitted FY 2019 Funds

6A2 2020-066 Attachment 1 6A2 2020-066 Attachment 2 6A2 2020-066 Attachment 3 6A2 2020-066 Attachment 4

6A3 Wayne Metro Reallocation Req. Letter 1.10.20v2

6A4 WRAP Reallocation Request & Program Change presentation

FINAL

Chairperson Baker made a Motion, Supported by Director Munfakh, to recommend approval to the Board, subject to Board vote after Item 6B (Proposed Water Residential Assistance Program Changes for FY 2021) and the budget adoption.

Motion By: Brian Baker Support By: Abe Munfakh

Action: Recommended for Approval to the Board of Directors

Agenda of February 26, 2020

The motion carried by a unanimous vote.

B. 2020-071 Proposed Water Residential Assistance Program Changes for FY 2021

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 6B1 WRAP Program Changes for FY 2021 2.21.2020

6B2 Wayne Metro Program plan design recommended changes

FINAL

6B3 GLWA Board Resolution 2020-037 6B4 ALICE Report for Southeast Michigan

6B4 ALICE Report for Southeast Mich

Motion By: Brian Baker Support By: Abe Munfakh Action: Received and Filed

The motion carried by a unanimous vote.

C. 2020-072 Industrial Pretreatment Program Financial Analysis & Charges Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 6C IPP Financial Analysis & Charges Update

B 6C01 Continued Review - Proposed FY 2021 & FY 2022 Biennial

Budget and Five-Year Financial Plan

B1 FY 2021 Budget Highlights Presentation-02.21

C DRAFT FY 2020.2021 Budget Resolution BOARD LETTER

D 2020-xxx DRAFT FY 2021 & FY 2022 Biennial Budget Resolution

E 2021 Charges Board Communication and Resolution

F Proposed FY 2021 Water and Sewer Charges

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

D. 2020-073 Continued Review - Proposed FY 2021 & FY 2022 Biennial Budget &

Five-Year Financial Plan

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 6D1 Continued Review - Proposed FY 2021 & FY 2022 Biennial

Budget and Five-Year Financial Plan

6D2

FY-2021-and-FY-2022-Proposed-Biennial-Budget-and-FY-2021-Propos

ed-Schedule-of-Charges-1.24.2020

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

7. New Business

A. 2020-074 Authorizing Publication of Notice of Intent to Issue Sewage Disposal

System Revenue Bonds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7A1 Notice of Intent to Issue Sewer Revenue Bonds

7A2 Board Letter- Notice of Intent to Issue Sewer Revenue Bonds

2.26.2020

7A3 Resolution Regarding Publication of Notice of Intent to Issue

Bonds (Sewer) 2020

Motion By: Abe Munfakh Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of February 26, 2020

The motion carried by a unanimous vote.

B. 2020-075 Authorizing Publication of Notice of Intent to Issue Water Supply System

Revenue Bonds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7B1 Notice of Intent to Issue Water Revenue Bonds

7B2 Board Letter- Notice of Intent to Issue Water Revenue Bonds

2.26.2020

7B3 Resolution Regarding Publication of Notice of Intent to Issue

Bonds (Water) 2020

Motion By: Abe Munfakh Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of February 26, 2020

The motion carried by a unanimous vote.

C. <u>2020-076</u> Water Residential Assistance Program Contract CS-010 Update

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 7C1 WRAP Contract CS-010 Status Update

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

8. Reports

A. 2020-077 Monthly Financial Report for November 2019

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8A GLWA Monthly Financial Report November 2019

Motion By: Gary Brown Support By: Abe Munfakh Action: Received and Filed

The motion carried by a unanimous vote.

B. 2020-078 Quarterly Investment Report

Sponsors: Nicolette Bateson

Indexes: Finance

<u>Attachments:</u> 8B1 Quarterly Investment Report Cover Memo December 2019

Investment Report

8B2 GLWA Quarterly Report December 2019

Motion By: Gary Brown Support By: Abe Munfakh Action: Received and Filed

The motion carried by a unanimous vote.

C. 2020-079 Quarterly Construction Work in Progress Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 8C 20190930 Quarterly CWIP

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

9. Communications

A. 2020-080 The Procurement Pipeline for February 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 9A Feb 2020 Procurement Pipeline 2.19.20

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

B. 2020-081 Government Finance Officers Association Budget Award

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: 9B1 GFOA Budget Award FY 2019

9B2 GFOA Budget Award 2019

Motion By: Abe Munfakh Support By: Gary Brown Action: Received and Filed

The motion carried by a unanimous vote.

10. Look Ahead

The next Audit Committee Meeting will be held on Friday, March 20, 2020 at 8:00 a.m.

11. Other Matters

Director Baker made an inquiry regarding Arbitration impact on the Budget, and an inquiry on the Bond Sale.

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Abe Munfakh Support By: Gary Brown

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 10:02 a.m.



Financial Services Audit Committee Communication

Date: March 27, 2020

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Proposed Change Order 3 – GLWA CS-010 Water Residential Assistance Program

Background: The current contract with Wayne Metropolitan Communication Action Agency (GLWA CS-010) expires on June 30, 2020.

Analysis: It is recommended that the contract with Wayne Metropolitan Communication Action Agency be extended for six months to provide time for stakeholder input into program design before issuing a request for proposal for these services in accordance with the Great Lakes Water Authority (GLWA) procurement policy. The recommended contract extension (Change Order 3) would be for six months in the amount of \$276,550.00, for a total cost not-to-exceed \$2,532,450.00, and a time extension of six months for a total contract duration of fifty-nine months.

Attached is a draft Great Lakes Water Authority ("GLWA") Board letter. Typically, this matter would be brought to the Board at their meeting on April 22, 2020. Given the COVID-19 impact on meetings scheduled, it is recommended that the Chief Executive Officer (CEO) proceed with executing this change order in accordance with Resolution 2020-114 adopted on March 20, 2020 regarding "Delegation of Additional Authority to CEO During COVID-19 Emergency". This will also allow staff to begin the change order and then focus on the stakeholder engagement work plan.

Proposed Action: The Audit Committee recommends that the CEO executes Change Order 3 of Contract No. GLWA CS-010, "Water Residential Assistance Program (WRAP)" with Wayne Metropolitan Communication Action Agency, at a cost increase of \$276,550.00, for a total cost not-to-exceed \$2,532,450.00, and a time extension of six months for a total contract duration of fifty-nine months. Said action to be reported to the Great Lakes Water Authority Board at their next regular meeting. Said action is consistent with Resolution 2020-114 adopted on March 20, 2020 regarding "Delegation of Additional Authority to CEO During COVID-19 Emergency".

..Title

Proposed Change Order No. 3 - GLWA CS-010 Water Residential Assistance Program

..Body

Agenda of: To Be Determined

Item No.: 2020-117

Amount: Original Contract: \$825,000.00

 Change Order No. 1:
 \$ 480,000.00

 Change Order No. 2:
 \$ 950,000.00

 Proposed Change Order No. 3:
 \$ 276,550.00

 Total Revised Contract:
 \$2,532,450.00

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: March 27, 2020

RE: Proposed Change Order No. 3 - GLWA CS-010 Water Residential

Assistance Program

MOTION

Upon recommendation of Nicolette N. Bateson, Chief Financial Officer/Treasurer, The Board of Directors (Board) of the Great Lakes Water Authority (GLWA), ratify the action of the Chief Executive Officer to execute Change Order 3 for Contract No. GLWA CS-010, "Water Residential Assistance Program (WRAP)" with Wayne Metropolitan Communication Action Agency, at a cost increase of \$276,550.00, for a total cost not-to-exceed \$2,532,450.00, and a time extension of six months for a total contract duration of fifty-nine months, as authorized by Resolution 2020-114 adopted on March 20, 2020 regarding "Delegation of Additional Authority to CEO During

COVID-19 Emergency" and authorizes the Chief Executive Officer or Chief Financial Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Water Residential Assistance Program ("WRAP") provides sustainable funding for qualifying low-income residents served by the Great Lakes Water Authority's ("GLWA") customers. The program is currently funded by GLWA at an amount equal to 0.5 percent of budgeted revenues with the budgeted FY 2021 funding level of \$6.1 million combined for water and sewer services.

The WRAP began providing assistance to residents in the GLWA service area on March 1, 2016 and as of October 31, 2019 has committed over \$14.2 million in assistance and conservation funds to over 19,000 qualified WRAP participants. Wayne Metro has been the WRAP program administrator for GLWA since the program's inception.

The current contract with Wayne Metro (GLWA CS-010) expires on June 30, 2020 and has been in place for nearly four and a half years. GLWA is recommending that the contract for the WRAP program administrator be bid out again through a competitive procurement process before the end of the current contract. If a new vendor is selected, the current contract with Wayne Metro will need to be extended in order to transition responsibilities to the new vendor. Therefore, GLWA is recommending the extension of the current contract (GLWA CS-010) through December 31, 2020 through a contract amendment (Change Order 3). The current status of GLWA CS-010 is summarized below:

PROJECT MANAGEMENT STATUS

Original Start Work Date:

Original Contract End Date:

Change Order 1 Contract End Date:

Change Order 2 Contract End Date:

Proposed Change Order 3 Contract End Date:

December 31, 2020

Contract Estimate

 Original Contract Price:
 \$825,000.00

 Change Order No. 1:
 \$480,900.00

 Change Order No. 2:
 \$950,000.00

 Contract Total:
 \$2,255,900.00

 Proposed Change Order No. 3
 \$276,550.00

 Proposed New Contract Total:
 \$2,532,450.00

JUSTIFICATION

The contract with Wayne Metro specifies the not-to-exceed administrative fee amount based on the anticipated allocation of assistance dollars to each county. Change Order 3 extends the GLWA CS-010 contract six months to December 31, 2020 increasing the contract amount based on the total budgeted WRAP funding amounts. (See Table 1- FY 2021 WRAP Budget Attachment 1). This extension of time will provide for stakeholder input into program design before issuing a request for proposal for these services.

BUDGET IMPACT

The funding of the proposed administration fees for WRAP are paid from the 0.5% of the budgeted WRAP funds each year and do not impact the FY 2021 Budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on March 27, 2020. The Audit Committee [3/26/2020 pending action: recommended that the CEO executes Change Order 3 of Contract No. GLWA CS-010, "Water Residential Assistance Program (WRAP)" with Wayne Metropolitan Communication Action Agency, at a cost increase of \$276,550.00, for a total cost not-to-exceed \$2,532,450.00, and a time extension of six months for a total contract duration of fifty-nine months. Said action to be reported to the Great Lakes Water Authority Board at their next regular meeting. Said action is consistent with in accordance with Resolution 2020-114 adopted on March 20, 2020 regarding "Delegation of Additional Authority to CEO During COVID-19 Emergency".]

Table 1 - FY 2021 WRAP Budget

	Budgeted	Budgeted	Budgeted	Total	
C	Direct	Conservation	Administration	Budgeted	A11 + :
Community	Assistance	Assistance	Costs	Revenue	Allocation
CITY OF DETROIT					
SHARE OF WHOLESALE FUNDING	\$776,087	\$194,022	\$116,400	\$1,086,509	26.60%
LOCAL WRAP FUNDING	1,431,440	357,860	214,700	2,004,000 (1)	
TOTAL DETROIT	\$2,207,527	\$551,882	\$331,100	\$3,090,509 (2)	26.60%
WAYNE COUNTY	736,129	184,032	73,600	993,761	24.33%
OAKLAND COUNTY	851,554	212,889	85,200	1,149,643	28.15%
MACOMB COUNTY	551,503	137,876	55,100	744,479	18.23%
GENESEE COUNTY	18,150	4,538	1,800	24,488	0.60%
WASHTENAW COUNTY	40,932	10,233	4,100	55,265	1.35%
LAPEER COUNTY	12,891	3,223	1,300	17,414	0.43%
MONROE COUNTY	6,536	1,634	600	8,771	0.21%
ST. CLAIR COUNTY	3,097	774	300	4,171	0.10%
FY 2021 TOTAL	\$4,428,320	\$1,107,080	\$553,100 (3)	\$6,088,500	100.00%
FY 2020 TOTAL	\$3,528,422	\$882,105	\$457,573	\$4,868,100	100.00%

- (1) Includes Local WRAP of 1.0% of Budgeted Base Revenues
- (2) Total allocated FY 2020 WRAP funding for Detroit was \$1,968,243
- (3) Based on FY 2021 Budgeted WRAP Funding of:

Wholesale Funding	\$4,084,500
Detroit Local Funding	2,004,000
Total WRAP Funding	\$6,088,500

50% Administration Fees: \$276,550



Monthly Financial Report Binder

December 2019

Presented to the Great Lakes Water Authority Audit Committee on March 27, 2020

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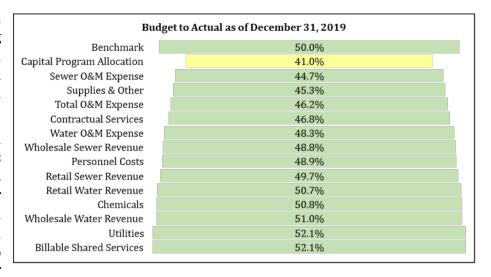
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Revenue and Expense Budget to Actual¹ - Pro-rata Benchmark of 50%

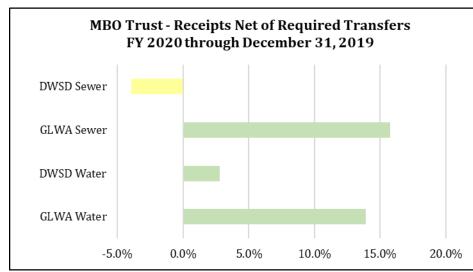
Most revenue and expense reporting categories fall within 7.5% of the pro-rata budget to actual benchmark.

The Capital Program Allocation variation is due to two reasons. Through December 31, 2019, GLWA team member hours posted to projects is 10% less than the prior



year due to increased focus on large maintenance projects versus capital projects. The remaining difference is due to a new element this year which is the AECOM Capital Program Management project. To date, no fees have been incurred that have been identified for capitalization.

Master Bond Ordinance (MBO) Trust Net Receipts



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

subsequent year(s). DWSD Water and Sewer also report positive cash flows through December. DWSD Sewer reported positive net receipts of \$5.4 million for December 2019 decreasing the cumulative FY 2020 DWSD Sewer shortfall to \$5.3 million. Looking ahead, this shortfall is remedied by the end of February 2020 with cash replenishment transfers to GLWA; the DWSD Operations & Maintenance budgeted transfer request was reduced by \$1 million for March 2020 to hedge any future cashflow timing issues.

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

 $^{^{\}rm 1}$ All amounts are GLWA entity-wide unless noted as water, sewer, and/or retail.



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

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

Revenue Requirement Budget Basis Analysis

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

Table 1A - Water Revenue Requirement Budget and **Table 1B - Sewer Revenue Requirement Budget** presents a year-over-year budget to actual performance report. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for December 2019, the pro-rata benchmark is 50.0% (6 of 12 months of the fiscal year).

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

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



- 4. *Operations & Maintenance Expense:* Actual expenses¹ for *both* systems have variances from the pro-rata benchmark. The *water* system is slightly under the pro-rata benchmark for FY 2020 at 48.3%. The *sewer* system 0&M expenses, at 44.7%, is less than the pro-rata benchmark.
- 5. **Debt Service:** Both systems are less than the pro-rata benchmark for FY 2020; the water system is at 47.4%; while the *sewer* system is at 48.4%. The activity is based on the payment schedules adjusted for the State Revolving Fund loans that are still being drawn down. In addition, the monies invested in FY 2019 realized a higher return than projected. This gain was applied to the debt requirements which reduced the payments for July and August.
- 6. **DWSD Budget Shortfall Pending:** To the extent that the local (DWSD) system experiences budgetary shortfalls as defined by the Water & Sewer Services Agreement, the GLWA budget is impacted.² Steps to proactively detect, and ideally prevent, this shortfall scenario were put into place with the 2018 Memorandum of Understanding (dated June 27, 2018). For FY 2019, DWSD sewer had a shortfall through December 31, 2018, of \$4.1 million (FY 2019 ended with a small surplus). In order to achieve the goal of positive, net cash flows for FY 2019, DWSD reduced its sewer system 0&M transfers in May and June. The transfers reduced were \$5,676,792 each for a total of \$11,353,584. For FY 2020, the DWSD water system has budgetary surplus of \$1.4 million and the DWSD sewer system has a budgetary shortfall of \$5.3 million through December 31, 2019. Looking ahead, this shortfall is remedied by the end of February 2020 with cash replenishment transfers to GLWA; the DWSD Operations & Maintenance budgeted transfer request was reduced by \$1 million for March 2020 to hedge any future cashflow timing issues.
- 7. *Improvement & Extension (1&E) Fund Transfer Pending:* The contribution to the I&E Fund is for improvements, enlargements, extensions or betterment of the Water System. Transfers to the I&E Fund from net revenues are now completed monthly.
- 8. *Other Revenue Requirements:* The remaining revenue requirements for *both* systems are funded on a 1/12th basis each month in accordance with the Master Bond Ordinance.
- 9. *Overall:* Total revenue requirements for *both* systems are in line with the benchmark.

All amounts are unaudited unless otherwise noted.

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

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



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

				0								
W. days Condains	FY2019 AMENDED BUDGET		FY 2019 THRU 12/31/2018		Percent Year-to- Date		FY 2020 BOARD ADOPTED BUDGET		FY 2020 MENDED BUDGET	FY 2020 THRU 12/31/2019		Percent Year-to- Date
Water System		DODGET	14	/31/2010	Date		DODGET	DODGET		14	/31/2019	Date
Revenues		227.222		464.470	50.40/		222 225		222 225		450450	F4 40/
Suburban Wholesale Customer Charges	\$	307,383	\$	161,170	52.4%	\$	309,285	\$	309,285	\$	158,158	51.1%
Retail Service Charges		20,181		10,163	50.4%		21,296		21,296		10,648	50.0%
Investment Earnings		9,425		4,631	49.1%		9,084		9,084		3,198	35.2%
Other Revenues		-		25	0.0%		-		-			0.0%
Total Revenues	\$	336,989	\$	175,989	52.2%	\$	339,664	\$	339,664	\$	172,004	50.6%
Revenue Requirements												
Operations & Maintenance Expense	\$	121,563	\$	58,671	48.3%	\$	131,491	\$	131,491	\$	63,539	48.3%
General Retirement System Legacy Pension		6,048		3,024	50.0%		6,048		6,048		3,024	50.0%
Debt Service		131,242		65,610	50.0%		137,558		137,558		65,180	47.4%
General Retirement System Accelerated												
Pension		6,268		3,134	50.0%		6,268		6,268		3,134	50.0%
Extraordinary Repair & Replacement												
Deposit		_		_	0.0%		_		-		_	0.0%
Water Residential Assistance Program												
Contribution		1,673		837	50.0%		1,698		1,698		849	50.0%
Lease Payment		22,500		11,250	50.0%		22,500		22,500		11,250	50.0%
Operating Reserve Deposit		_		_	0.0%		3,976		3,976		1,988	50.0%
Improvement & Extension Fund							•		,		,	
Transfer Pending		47,695		23,848	50.0%		30,126		30,126		15,063	50.0%
Total Revenue Requirements	\$	336,989	\$	166,373	49.4%	\$	339,664	\$	339,664	\$	164,026	48.3%
Net Difference		-	\$	9,617						\$	7,978	
Recap of Net Positive Variance												
Revenue Variance			\$	7,495						\$	2,172	
Revenue Requirement Variance			-	2,122						-	5,806	
Overall Variance			\$	9,617						\$	7,978	
over all variance				2,017						-	1,270	

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

Tuble 1B Bewer Revenu	- L	orer ye	٠.,	, (40,	, ,							
Sewer System	Al	FY 2019 AMENDED BUDGET		D THRU Year-to-			FY 2020 BOARD ADOPTED BUDGET	A	FY 2020 AMENDED BUDGET		FY 2020 THRU /31/2019	Percent Year-to- Date
Revenues	_	, o b a b i		751/2010	Date		DODGEI		DODGEI			Date
Suburban Wholesale Customer Charges	\$	271,296	•	137,477	50.7%	\$	272,324	\$	272,324	\$	134,205	49.3%
Retail Service Charges	J	181,159	Ψ	91,504	50.5%	9	185,807	J	185,807	J	92,904	50.0%
Industrial Waste Control Charges		15,001		4,608	30.7%		13,744		13,744		4,186	30.5%
Pollutant Surcharges		13,001		3,012	0.0%		13,711		13,711		3,057	0.0%
Investment Earnings		6,879		4,358	63.4%		8,731		8,731		4,141	47.4%
Other Revenues				267	0.0%						247	0.0%
Total Revenues	\$	474,335	\$	241,225	50.9%	\$	480,605	\$	480,605	\$	238,740	49.7%
Revenue Requirements		,				_	,		,			
Operations & Maintenance Expense	s	191,079	\$	85,870	44.9%	\$	187,057	\$	187,057	\$	83,639	44.7%
General Retirement System Legacy Pension	•	10,824	•	5,412	50.0%		10,824	•	10,824	•	5,412	50.0%
Debt Service		208,389		101,995	48.9%		215,739		215,739		104,497	48.4%
General Retirement System Accelerated		,		,			,		,		,	
Pension		11,621		5,810	50.0%		11,621		11,621		5,810	50.0%
Extraordinary Repair & Replacement												
Deposit		-		-	0.0%		-		-		-	0.0%
Water Residential Assistance Program												
Contribution		2,374		1,187	50.0%		2,403		2,403		1,202	50.0%
Lease Payment		27,500		13,750	50.0%		27,500		27,500		13,750	50.0%
Operating Reserve Deposit		-		-	0.0%		-		-		-	0.0%
DWSD Budget Shortfall Pending		-		4,129	0.0%		-		-		5,337	0.0%
Improvement & Extension Fund												
Transfer Pending		22,548		11,274	50.0%		25,462		25,462		12,731	50.0%
Total Revenue Requirements	\$	474,335	\$	229,428	48.4%	\$	480,605	\$	480,605	\$	232,378	48.4%
Net Difference			\$	11,797						\$	6,362	
Recap of Net Positive Variance												
Revenue Variance			\$	4,058						\$	(1,563)	
Revenue Requirement Variance				7,740							7,925	
Overall Variance			\$	11,797						\$	6,362	



Operations & Maintenance Budget - Major Budget Categories

The year-over-year benchmark ratio as of December 31, 2019, is 50.0% (six months). When comparing FY 2020 to FY 2019 in *Table 2 – Operations & Maintenance Budget – Major Budget Categories*, it appears that overall spending is consistent.

In addition to the four major budget categories, an internal charge cost center for employee benefits is shown in the table below. If the number is positive, it indicates that the internal cost allocation rate charges to other cost centers is not sufficient. A negative number indicates a surplus in the internal cost center. A moderate surplus is preferred as it provides a hedge for mid-year benefit program cost adjustments (premiums adjust on January 1 each year) as well as managing risk as the program is partially self-insured. An analysis of the benefits is currently being conducted using updated benefit information. A budget amendment may be needed to increase the budget for the FY 2020 employee benefits.

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

Major Budget Categories	A	FY 2019 MENDED BUDGET	A	FY 2019 CTIVITY THRU /31/2018	Percent Year-to- Date	I Al	FY 2020 BOARD DOPTED BUDGET	A	FY 2020 MENDED BUDGET	A	FY 2020 CTIVITY THRU /31/2019	Percent Year-to- Date
Water	\$	66,596	\$	34,552	51.9%	\$	66,021	\$	66,021	\$	34,780	52.7%
Sewer		118,319		54,265	45.9%		115,985		115,985		53,139	45.8%
Centralized		99,045		44,250	44.7%		106,914		106,914		45,836	42.9%
Administrative		28,683		12,716	44.3%		29,628		29,628		14,178	47.9%
Employee Benefits		-		(1,242)	0.0%		-		-		(756)	0.0%
Total 0&M Budget	\$	312,642	\$	144,541	46.2%	\$	318,548	\$	318,548	\$	147,178	46.2%

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 46.2% which is reasonably within the pro-rata benchmark of 50.0%. This positive variance equates to a dollar amount of \$12.1 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 48.9% through December 2019.



Utilities: The overall category is higher than the benchmark; coming in at 52.1% through December 2019. This variance is not unexpected as usage varies throughout the year.

- **Electric** is higher than the benchmark, coming in at 54.7%. This increase is primarily due to the pumps being required to run longer than normal as a result of the wet weather that Michigan has been experiencing. In addition, the first three months of GLWA's fiscal year (July, August, and September) are typically peak months for the usage of electricity. June, the last month of GLWA's fiscal year, is typically a peak month as well.
- **Gas** is coming in at 40.3%. While this is lower than the benchmark of 50.0%, it is consistent with the prior year (FY 2019). A review of the accounts has confirmed that the usage is variable throughout the year. It is anticipated that actuals will come in at the anticipated budgeted amount for FY 2020.
- **Water service** is lower than the benchmark, coming in at 45.1%. 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. Processing efficiencies through the use of the new chemical building has reduced the use of potable water during wet weather events.

Chemicals: This category is on target with the pro-rata benchmark; coming in at 50.8% through December 2019.

Supplies & Other: This category is lower than the benchmark; coming in at 45.3% through December 2019. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time.

Contractual Services: The overall category is lower than the benchmark; coming in at 46.8% through December 2019. Variances in this category 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 41.0% through November 2019. The amount in the Capital Program Allocation account is shown as negative as this is a "contra" account which represents an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget. A new element this year is the addition of contracted AECOM Capital Program Management services. The variance is due to two primary reasons. First, through December 31, 2019, GLWA team member hours posted to projects is 10% less than the prior year. This is due to increased focus on large maintenance projects versus capital projects. Second, no AECOM fees have been incurred that have been identified for capitalization.



Shared Services: This category is higher than the benchmark; coming in at 52.1% through December 2019. The shared services reimbursement is comprised of both labor (tracked via BigTime) and expenses, such as annual fees for software licensing. Staff from both GLWA and DWSD have been working together to evaluate and refine the budget for the shared services agreements. Based on these evaluations, adjustments have been made to both the billings and accounting accruals to more accurately reflect the forecasted activity for FY 2020. A budget amendment was entered in December 2019 to adjust the shared services budget to this revised FY 2020 forecast.

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

Tubic 5 Open	ш	nons (<u> </u>	·Ium	chance		хрспз	c varia	,,,,	C TITTO		313 (Ψ	,,,,			
		FY 2019		FY 2019 CTIVITY	Percent Year-to- Date at		FY 2019 ACTIVITY	Percent Year-to-		FY 2020	PI A	FY 2020 RORATED MENDED		FY 2020 CTIVITY	Percent	В	ORATED UDGET LESS
Expense Categories		MENDED	40	THRU	12/31/201		THRU	Date at		MENDED		BUDGET	40	THRU	Year-to-		Y 2020
Entity-wide	_	BUDGET		/31/2018	8		/30/2019	6/30/2019		UDGET	_	MONTHS)		/31/2019	Date		CTIVITY
Salaries & Wages	\$	63,631	\$	30,025	47.2%	\$,	50.1%	\$	68,233	\$	34,116	\$	32,257	47.3%	\$	1,859
Workforce Development		751		368	49.0%		794	46.3%		1,001		501		456	45.5%		45
Overtime		7,612		3,761	49.4%		7,554	49.8%		6,153		3,077		3,691	60.0%		(614)
Employee Benefits		23,656		12,481	52.8%		21,998	56.7%		22,957		11,479		12,697	55.3%		(1,218)
Transition Services		8,572		3,723	43.4%		8,322	44.7%		6,048		3,024		2,677	44.3%		347
Employee Benefits Fund		-		(1,242)	0.0%		-	0.0%		-		-		(756)	0.0%		756
Personnel Costs		104,221		49,118	47.1%		98,589	49.8%		104,392		52,196		51,022	48.9%		1,174
								-									
Electric		39,019		20,953	53.7%		39,103	53.6%		38,386		19,193		20,994	54.7%		(1,801)
Gas		6,631		2,700	40.7%		6,568	41.1%		6,451		3,225		2,597	40.3%		628
Sewage Service		2,491		1,036	41.6%		2,094	49.5%		1,847		923		996	54.0%		(73)
Water Service		3,648		2,085	57.2%		3,631	57.4%		3,658		1,829		1,651	45.1%		178
Utilities		51,789		26,774	51.7%		51,396	52.1%		50,341		25,170		26,238	52.1%		(1,068)
Chemicals		13,385		6,712	50.1%		13,276	50.6%		13,899		6,949		7,066	50.8%		(117)
Supplies & Other		36,226		14,231	39.3%		37,121	38.3%		37,263		18,631		16,890	45.3%		1,742
Contractual Services		100,856		53,815	53.4%		101,873	52.8%		107,012		53,506		50,055	46.8%		3,451
Capital Program Allocation		(3,356)		(1,571)	46.8%		(3,381)	46.5%		(3,515)		(1,758)		(1,442)	41.0%		(315)
Shared Services		(9,005)		(4,538)	50.4%		(7,139)	63.6%		(5,089)		(2,545)		(2,651)	52.1%		106
Unallocated Reserve		18,524		-	0.0%		-	0.0%		14,246		7,123		-	0.0%		7,123
Total Expenses	\$	312,642	\$	144,541	46.2%	\$	291,734	49.5%	\$	318,548	\$	159,274	\$	147,178	46.2%	\$	12,096
-	_	,	_	,		_	-,	-		,	_	,	_	,			,

Total Pucinocc Comparative



The Basic Financial Statements report includes the following four tables.

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

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

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

Statement of Net Position - All Funds Combined

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

Table 1 – Statement of Net Position - All Funds Combined
As of December 31, 2019
(\$000)

		_		Total Business-	Comparative
	Water	Sev	age Disposal	type Activities	June 30, 2019
Assets					
Cash - unrestricted (a)	\$ 109,035	\$	142,060	\$ 251,095	\$ 309,016
Cash - restricted (a)	90,251		113,799	204,050	261,999
Investments - unrestricted (a)	276,986		137,601	414,587	274,246
Investments - restricted (a)	82,052		126,015	208,067	185,831
Accounts Receivable	85,652		77,602	163,254	208,914
Due from (to) Other Funds (b)	(707)		707	-	2,890
Other Assets (c)	592,025		449,729	1,041,754	1,046,518
Cash Held FBO DWSD Advance (d)	-		4,714	4,714	
Capital Assets, net of Depreciation	1,356,476		2,278,847	3,635,323	3,747,784
Land	292,799		124,858	417,657	417,657
Construction Work in Process (e)	172,900		222,162	395,063	368,748
Total assets	3,057,470		3,678,095	6,735,564	6,823,603
Deferred Outflows (f)	91,800		174,703	266,503	273,596
Liabilities					
Liabilities - Short-Term (g)	137,228		169,582	306,810	321,270
Due to (from) Other Funds (b)	-		-	-	2,890
Other Liabilities (h)	2,707		6,275	8,982	9,097
Cash Held FBO DWSD (d)	3,611		-	3,611	2,807
Liabilities - Long-Term (i)	3,030,429		3,740,351	6,770,780	6,853,419
Total liabilities	3,173,975		3,916,208	7,090,182	7,189,483
Deferred Inflows (f)	58,374		52,556	110,930	108,541
Total net position (j)	\$ (83,079)	\$	(115,967)	\$ (199,045)	\$ (200,825)
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Totals may be off due to rounding



In general, the Statement of Net Position - Draft reflects a mature organization with no unexpected trends. Cash balances as of December 31, 2019 are lower when compared to June 30, 2019 (highlighted in gold on Table 1). This is because of the high liquidity needs at June 30, 2019 to meet annual debt and interest payments, legacy pension obligation payments, and annual operational requirements whereas more funds are being invested as of December 31, 2019.

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

Footnotes to Statement of Net Position

- a. *Cash and Investments* are reported at book value. Investments at June 30, 2019 are reported at market value. The December 31, 2019 values differ from the Cash and Investment section of this Financial Report Binder due to timing of certain items recognized on a cash versus accrual basis.
- b. *Due from (to) Other Funds* and *Due to (from) Other Funds* is shown at the gross level for sub-fund activity.
- c. *Other Assets* primarily consists of the contractual obligation receivable from DWSD related to reimbursement of bonded indebtedness for local system improvements.
- d. Cash Held FBO Advance (for benefit of) DWSD and Cash Held FBO DWSD represents the net difference between DWSD retail cash received from customers and net financial commitments as outlined in the Master Bond Ordinance.
- e. *Construction Work in Process* represents the beginning balance of CWIP plus any construction spending during the fiscal year. The balance will fluctuate based on the level of spend less any capitalizations or write-offs.
- f. Deferred Inflow and Deferred Outflow relate to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- g. *Liabilities Short-term* include accounts payable, retainage payable, and certain accrued liabilities. Some items, such as compensated absences and worker's compensation, are reviewed periodically but are only adjusted on an interim basis if there is a material change.
- h. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- i. *Liabilities Long-term* include bonds payable, lease payable, and legacy General Retirement System pension liabilities.
- j. *Net Position Deficit* is defined by accounting standards as the residual of all other elements presented in a statement of financial position. It is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. GLWA's net deficit is largely driven by an increase in depreciation



expense as a result of the increase in the acquisition valuation approach for recording capital asset values in the opening Statement of Net Position on January 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.

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

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

Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Six Months ended December 31, 2019
(\$000)

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Susiness- type Activities	mparative June 30, 2019
Revenue						
Wholesale customer charges	\$ 161,484	93.8%	\$ 134,205	57.2%	\$ 295,689	\$ 584,172
Local system charges	10,648	6.2%	92,904	39.6%	103,551	201,341
Industrial waste charges	-	0.0%	4,186	1.8%	4,186	9,106
Pollutant surcharges	-	0.0%	3,057	1.3%	3,057	5,933
Other revenues		0.0%	247	0.1%	247	528
Total Revenues	\$ 172,132	100%	\$ 234,599	100%	\$ 406,731	\$ 801,079
Operating expenses Operations and Maintenance	63,677	37.0%	84,387	36.0%	148,064	293,863
Depreciation	68,186	39.6%	80,577	34.3%	148,763	309,115
Total operating expenses	131,862	76.6%	164,964	70.3%	296,827	602,978
Operating income	40,270	23.4%	69,634	29.7%	109,904	198,101
Total Nonoperating (revenue) expense	46,467	27.0%	61,658	26.3%	108,125	220,170
Increase/(Decrease) in Net Position	(6,197)	-3.6%	7,976	3.4%	1,779	(22,070)
Net position (deficit), beginning of year	(76,882)		(123,943)		(200,825)	(178,755)
Net position (deficit), end of year	\$ (83,079)		\$ (115,967)	= :	\$ (199,045)	\$ (200,825)
Totals may be off due to rounding						



Water Fund

- ✓ The decrease in Water Fund Net Position is \$6.2 million.
- ✓ Wholesale water customer charges of \$161.5 million account for 93.8% of Water System revenues.
- ✓ Operating expenses of \$131.9 million represent 76.6% of total operating revenue. Depreciation is the largest operating expense at \$68.2 million or 51.7% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$40.3 million or 23.4% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$44.6 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 \$8.0 million.
- ✓ Wholesale customer charges of \$134.2 million account for 57.2% 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 \$92.9 million account for 39.6% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$165.0 million represent 70.3% of total operating revenue. Depreciation is the largest operating expense at \$80.6 million or 48.8% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$69.6 million or 29.7% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$57.9 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 December 2019 Financial Report Binder. Explanatory notes follow this schedule.

Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
– All Funds Combined
For the Six Months ended December 31, 2019
(\$000)

							Bı	Total ısiness-	
		TA7 - 4	Percent		Sewage	Percent		type	Percent
	-	Water	of Total	<u>U</u>	isposal	of Total	A	ctivities	of Total
Operating expenses									
Personnel									
Salaries & Wages		11,685	18.4%		23,705	28.1%		35,390	23.9%
Overtime		2,179	3.4%		1,512	1.8%		3,691	2.5%
Benefits		7,322	11.5%		4,619	5.5%		11,941	8.1%
Total Personnel	\$	21,186	33.3%	\$	29,836	35.4%	\$	51,022	34.5%
Utilities									
Electric		13,662	21.5%		7,332	8.7%		20,994	14.2%
Gas		407	0.6%		2,190	2.6%		2,597	1.8%
Sewage		154	0.2%		843	1.0%		996	0.7%
Water		1	0.0%		1,650	2.0%		1,651	1.1%
Total Utilities	\$	14,222	22.3%	\$	12,015	14.2%	\$	26,238	17.7%
Chemicals		2,668	4.2%		4,397	5.2%		7,066	4.8%
Supplies and other		5,886	9.2%		11,005	13.0%		16,890	11.4%
Contractual services		23,141	36.3%		27,801	32.9%		50,942	34.4%
Capital Adjustment		-	0.0%		-	0.0%		-	0.0%
Capital program allocation		(942)	-1.5%		(500)	-0.6%		(1,442)	-1.0%
Shared services allocation		(2,485)	-3.9%		(166)	-0.2%		(2,651)	-1.8%
Operations and Maintenance									
Expenses		63,677	100.0%	\$	84,387	100.0%	\$	148,064	100.0%

Totals may be off due to rounding.



- ✓ Core expenses for water and sewage disposal systems are utilities (17.7% of total 0&M expenses) and chemicals (4.8%).
- ✓ Personnel costs (34.5% of total O&M expenses) include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (34.4%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$3.6 million);
 - Sewage Disposal System costs for the operation and maintenace of the biosolids dryer facility (approximately \$7.5 million); and
 - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenace, field, planning and other services.



Supplemental Schedule of Nonoperating Expenses – All Funds Combined

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

Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined For the Six Months ended December 31, 2019 (\$000)

	Water	Sewage Disposal	tal Business- be Activities	nparative 30, 2019
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (11,176)	\$ (9,097)	\$ (20,273)	\$ (40,673)
Interest income DWSD Shortfall	-	(731)	(731)	(1,104)
Investment earnings	(4,009)	(4,170)	(8,179)	(26,518)
Other nonoperating revenue	(11)	(6)	(17)	(420)
Interest expense				-
Bonded debt	55,753	66,998	122,751	250,966
Lease obligation	8,758	10,704	19,462	39,264
Other obligations	2,428	786	3,215	6,368
Total interest expense	66,939	78,489	145,428	296,597
Other non-capital expense	-	-	-	-
Memoram of Understanding	-	-	-	6,527
Capital Contribution	-	(5,960)	(5,960)	-
Amortization, issuance costs, debt	(8,068)	927	(7,141)	(3,995)
Amortization, raw water rights	1,783	-	1,783	3,567
(Gain) loss on disposal of capital assets	(1)	815	814	(81)
Loss on impairment of capital assets	-	-	-	1,025
Water Residential Assistance Program	1,010	1,392	2,402	2,024
Legacy pension expense	-	-	-	(16,778)
Total Nonoperating (Revenue)/Expense	\$ 46,467	\$ 61,658	\$ 108,125	\$ 220,170

Totals may be off due to rounding.

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



- FY 2019. FY 2019 market value adjustments for Water and Sewer totaled of \$1.6 million and \$600 thousand, respectively.
- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
 - Bonded debt;
 - o Lease obligation for the regional assets from the City of Detroit; and
 - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.

FY 2019 Items of note:

- ✓ Legacy Pension expense is reflected as income due to changes in actuarial assumptions and rates from the June 30, 2018 City of Detroit General Retirement System Component II audited financial statement.
- ✓ Sewer Other Non-operating expense includes the 2018 MOU Item 8a from June 27, 2018 for a final sewer lookback adjustment for DWSD of \$6.5 million.

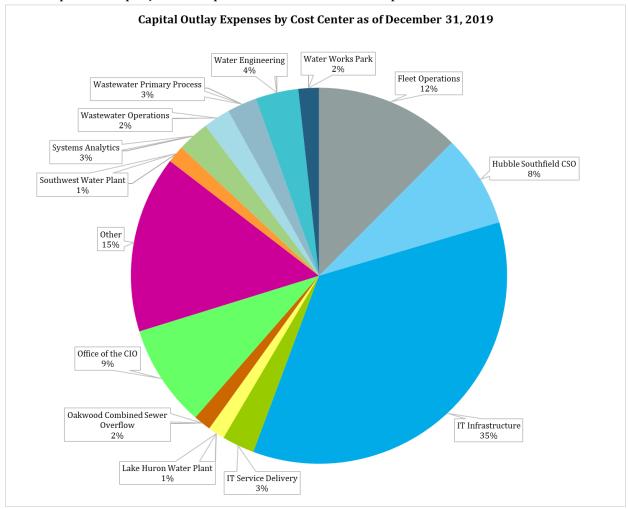


Financial Activity Charts

Chart 1 - Capital Outlay - Water and Sewer System Combined

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

Through December 31, 2019, total capital outlay spend is \$6.8 million. Following this chart is a sample list of projects and purchases from the total spend of \$6.8 million:



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

Water Operations: Trucks (\$225k); Water Works Park South garage renovation (\$170k); various water location building improvements (\$80k); Turbid meters (\$53k) and skid steer loader (\$88k) under 'other' for the Southwest Water Plant.

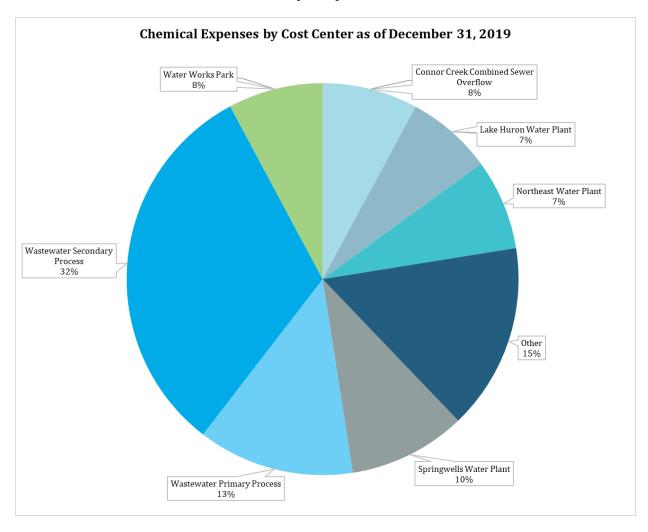


Wastewater Operations: Accusonic flow meters (\$540k); transformer C structure at Water Resource Recovery Facility (\$99k); chemical feed pump (\$96k); Flygt pump (\$78k); water heater for Scum building (\$76k); HVAC controls upgrade (\$52k); boilers (\$50k); Rotork actuators (\$49k); belt cooker (\$45k) and loaders (\$44k).

Centralized & Administrative Facilities: Low voltage wiring services (\$1.8m); IT & 17th floor renovation and furniture (\$583k); trucks and vehicles (\$527k); IT software (\$310k); transmitters (\$118k); IT premium hardware support (\$74k); Sewer meter support (\$66k); IT computers (\$61k); 2nd floor furniture at CSF (\$49k); 'Other' category expenses include: bathroom renovation (\$75k) for the Logistics and Materials team.

Chart 2 - Chemical Spend - Water and Sewer System Combined

Chemical spend is \$7.0 million through December 31, 2019. The allocation is shown in the chart below and remains consistent with prior periods.

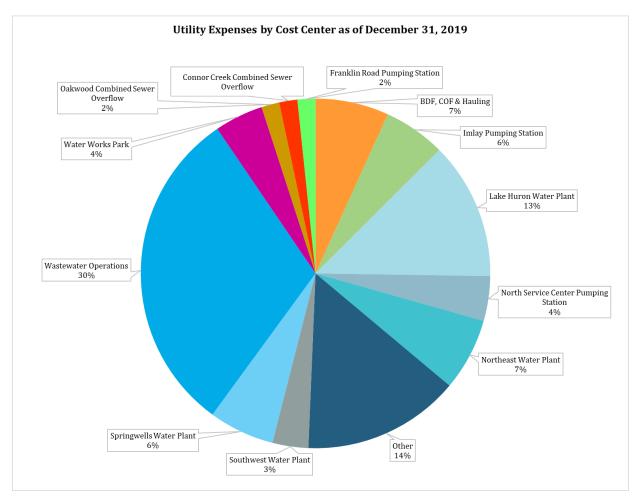


Note: "Other" includes Combined Sewer Overflow (CSO), portions of the Wastewater process and two departments from Water. Due to rounding totals may not equal 100%.



Chart 3 - Utility Spend - Water and Sewer System Combined

Utility spend is \$26.2 million through December 31, 2019. 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.

There were no changes in accounts from November 2019.

Chart 1 - Bank Reconciliation Completion Status

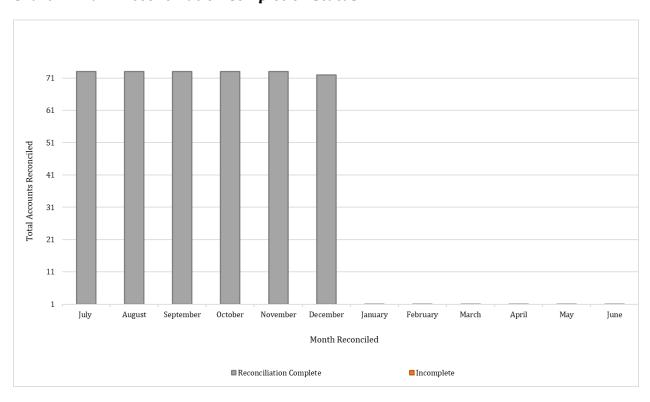


Table 1 - Fiscal Year 2020 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2019	71
New GL Cash accounts	2
Inactivated GL Cash accounts	(1)
Total GL Cash accounts as of December 31, 2019	72

All AP checks are being processed from a new checking account. The old AP checking account was closed in December 2019 after all checks had finally cleared.



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 $1/12^{th}$ 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 Five Months Ended December 31, 2019

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 7,978	\$ 6,362	\$ 14,340
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	5,720	10,238	15,958
Prior year pension contribution accounted for in current year (d)	-	-	-
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	20,603	46,596	67,199
Accelerated pension B&C notes obligation portion (g)	88	199	287
Lease payment (h)	2,492	3,046	5,538
WRAP (i)	(161)	(190)	(351)
DWSD short term allocation (j)	-	5,337	5,337
Operating Reserve Deposit (j)	1,988	-	1,988
Improvement & Extension Fund (j)	14,925	11,983	26,908
Nonbudgeted financial reporting categories adjustments			
Depreciation (k)	(68,186)	(80,577)	(148,763)
Amortization (k)	6,285	(927)	5,358
Other nonoperating income (k)	10	4	14
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	1	(815)	(814)
Raw water rights (I)	1,248	-	1,248
Investment earnings construction fund (m)	812	760	1,572
Capital contribution (n)		 5,960	 5,960
Net Position Increase/(Decrease) per Financial Statements (b)	\$ (6,197)	\$ 7,976	\$ 1,779

Table 2- Explanatory Notes for Crosswalk

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



- (d) Prior year pension payments are accounted for in the current year financial statements.
- (e) The administrative fee is part of the O&M Legacy Pension shown as an expense for budget purposes. For financial reporting purposes part of the administrative fee is considered prepaid based on the prior year General Retirement System audit information and therefore not an expense for the current year financial reporting. The prepaid portion is adjusted in June each year.
- (f) Debt service (principal and interest payments) are shown as an expense for budget purposes. Most of the adjustment relates to principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense variances on state revolving fund debt due to the timing of payment draws. The cash set aside basis for interest expense generally is the same as the accrual basis for financial reporting.
- (g) The accelerated pension payment includes the obligation payable for the B&C notes. The pension portion is included in item (c) above. This adjustment relates to the B&C note obligation payments. The principal and interest cash basis payments are treated as an expense for budget purposes. The principal portion is not an expense for financial reporting purposes. For financial reporting purposes interest is expensed on an accrual basis which is different from the cash basis.
- (h) The lease payment is included as an expense for budget and includes both principal and interest payments. Most of the adjustment relates to the principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense which is recorded on an accrual basis for financial reporting which is different from the cash basis.
- (i) WRAP is shown as an expense for budget purposes. For financial reporting purposes the expense is not recognized until the funds have been transferred to the WRAP administrator. The adjustment shown is the amount of current year transfers that have not been transferred to the WRAP administrator. Note that there are funds from the prior year that have not been transferred to the WRAP administrator.
- (j) The DWSD short term allocation, Operating Reserve Deposit, and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes. For FY 2020, the Sewer Improvement and Extension Fund adjustments also reflect \$748 thousand in Sewer Improvement and Extension Fund expenses relating to repairs paid for through the Sewer Improvement and Extension Fund. The Water Improvement and Extension Fund



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

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



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

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

Construction Work in Progress

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

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

Chart 1 - Water System Construction in Work in Progress Spend

As of December 2019, the Water system incurred nearly \$30 million of construction costs to date. This is 42% of the fiscal year 2020 prorated CIP through December and 56% of the financial plan. It is anticipated that the gap will be reduced by the end of the fiscal year.

Chart 2 - Sewer System Construction in Work in Progress Spend

As of December 2019, the Sewer system incurred nearly \$30 million of construction costs to date. This is 37% of the fiscal year 2020 prorated CIP through December and 49% of the financial plan. It is anticipated that the gap will be reduced by the end of the fiscal year.



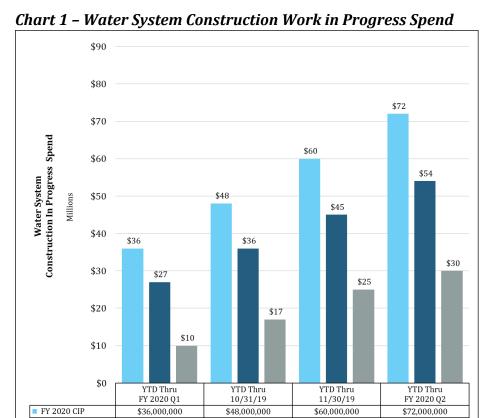


Chart 2 - Sewer System Construction Work in Progress Spend

\$36,000,000

\$17,000,000

\$45,000,000

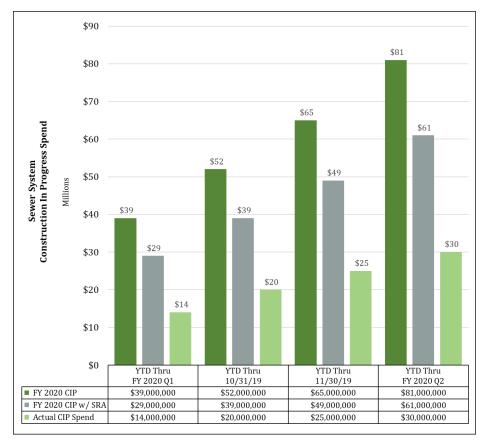
\$25,000,000

\$54,000,000

\$30,000,000

\$27,000,000

\$10,000,000



■ FY 2020 CIP w/ SRA

■ Actual CIP Spend



This report includes the following.

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

MBO Transfers to Accounts Held by GLWA

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

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

Table 1 – GLWA FY 2020 Water MBO Transfers reflects the required transfers for FY 2020 completed through December 2, 2019. MBO transfers for water totaling \$75.1 million have been transferred to GLWA accounts.

Table 2 – GLWA FY 2020 <u>Sewer</u> MBO Transfers reflects the required transfers for FY 2020 completed through December 2, 2019. MBO transfers for sewer totaling \$107.7 million have been transferred to GLWA accounts.

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



Table 1 - GLWA FY 2020 Water MBO Transfers

			WATER				
	Operations & <u>Maintenance</u>	Pension Sub Account	Pension <u>Obligation</u>	<u>WRAP</u>	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
FY 2020							
July 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
August 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
September 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
October 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
November 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
December 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
Total FY 2020	\$65,745,252	\$3,024,000	\$5,347,848	\$990,402	\$0	\$0	\$75,107,502

Table 2 - GLWA FY 2020 <u>Sewer</u> MBO Transfers

			SEWER				
	Operations & <u>Maintenance</u>	Pension Sub Account	Pension Obligation	<u>WRAP</u>	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
FY 2020							
July 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
August 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
September 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
October 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
November 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
December 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
Total FY 2020	\$93,528,600	\$5,412,000	\$7,343,754	\$1,443,648	\$0	\$0	\$107,728,002

Table 3 - GLWA MBO Transfer History

		GLV	VA MBO Transfer	History			
			WATER				
	Operations &	Pension	Pension		Budget Stabilization	Extraordinary Repair & Replacement	
	<u>Maintenance</u>	Sub Account	<u>Obligation</u>	WRAP	(For Benefit of DWSD)	(ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
Total FY 2019	121,562,604	6,048,000	10,695,696	2,061,000	-	-	140,367,300
Total FY 2020 (6 months)	65,745,252	3,024,000	5,347,848	990,402	-	-	75,107,502
Life to Date	\$491,802,060	\$27,194,300	\$47,333,640	\$9,271,302	\$2,686,900	\$606,000	\$578,894,202

			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 (6 months)	93,528,600	5,412,000	7,343,754	1,443,648	-	-	107,728,002
Life to Date	\$752,411,792	\$48,736,800	\$64,771,346	\$12,253,244	\$8,246,100	\$779,600	\$887,198,882



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 0&M and 0&M Pension are one-twelfth of the annual, budgeted amount. The annual lease payment, as stated in the Water & Sewer Lease Agreements, is \$22,500,000 for Water and \$27,500,000 for Sewer. The monthly lease transfer is one-twelfth of the amount as stated in the Lease agreements unless otherwise designated by DWSD. Per Section 3.5 of the Lease, the Lease payment may be used for (a) bond principal and interest for Local System Improvements, (b) bond principal and interest for the City's share of common-to-all System Improvements, and (c) Local System improvements.

Table 4 – DWSD FY 2020 <u>Water</u> **MBO Transfers** reflects the required transfers for FY 2020 completed through December 2, 2019. MBO transfers for Water totaling \$28.9 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$3,548,000 of the lease payment be utilized to offset a portion of debt service of which one-twelfth is applied monthly.

Table 5 – DWSD FY 2020 Sewer MBO Transfers reflects the required transfers for FY 2020 completed through December 2, 2019. MBO transfers for Sewer totaling \$46.3 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$5,032,700 of the lease payment be utilized to offset a portion of debt service of which one-twelfth is applied monthly. DWSD has also requested that for December 2019 – June 2020, \$1 million be withheld each month from the Operations & Maintenance transfer to address FY 2020 projected shortfall in retail revenue collections.

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



Table 4 - DWSD FY 2020 Water MBO Transfers

	W	/AT	ER			
FY 2020	perations & laintenance		<u>Pension</u>	ase Payment [<u>I&E Fund]</u>	<u>-</u>	Гotal Water
July 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333	\$	4,823,866
August 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333		4,823,866
September 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333		4,823,866
October 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333		4,823,866
November 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333		4,823,866
December 2019	\$ 2,888,533	\$	356,000	\$ 1,579,333		4,823,866
Total FY 2020	\$ 17,331,198	\$	2,136,000	\$ 9,475,998	\$	28,943,196

Table 5 - DWSD FY 2020 <u>Sewer</u> MBO Transfers

	S	EW	ER			
	perations & aintenance		<u>Pension</u>	ease Payment (<u>I&E Fund)</u>	<u>,</u>	<u> Total Sewer</u>
FY 2020						
July 2019	\$ 5,778,625	\$	238,000	\$ 1,872,275	\$	7,888,900
August 2019	\$ 5,778,625	\$	238,000	\$ 1,872,275		7,888,900
September 2019	\$ 5,778,625	\$	238,000	\$ 1,872,275		7,888,900
October 2019	\$ 5,778,625	\$	238,000	\$ 1,872,275		7,888,900
November 2019	\$ 5,778,625	\$	238,000	\$ 1,872,275		7,888,900
December 2019	\$ 4,778,625	\$	238,000	\$ 1,872,275		6,888,900
Total FY 2020	\$ 33,671,750	\$	1,428,000	\$ 11,233,650	\$	46,333,400



Table 6 - DWSD MBO and Lease Payment Transfer History

		Trar	sfers	to DWSD			
			WA	ΓER			
			0	perations &			
	Opera	ations &	M	aintenance	Le	ase Payment	
	Main	tenance	Pension		(I&E Fund)		 Total Water
FY 2016 *							
MBO/Lease Requirement	\$ 26	5,185,600	\$	4,262,700	\$	22,500,000	\$ 52,948,300
Offset to Debt Service		-		-		(2,326,900)	(2,326,900)
Net MBO Transfer	26	5,185,600		4,262,700		20,173,100	50,621,400
FY 2017							
MBO/Lease Requirement	33	3,596,400		4,262,400		22,500,000	60,358,800
Offset to Debt Service		-		-		-	-
Net MBO Transfer	33	3,596,400		4,262,400		22,500,000	60,358,800
FY 2018							
MBO/Lease Requirement	35	5,059,704		4,272,000		22,500,000	61,831,704
Offset to Debt Service						(1,875,000)	 (1,875,000)
Net MBO Transfer	35	5,059,704		4,272,000		20,625,000	59,956,704
FY 2019							
MBO/Lease Requirement	35	5,484,300		4,272,000		22,500,000	62,256,300
Offset to Debt Service		-		-		(3,972,200)	 (3,972,200)
Net MBO Transfer	35	5,484,300		4,272,000		18,527,800	58,284,100
FY 2020 (6 months)							
MBO/Lease Requirement	17	7,331,198		2,136,000		11,250,000	30,717,198
Offset to Debt Service		-		-		(1,774,002)	 (1,774,002)
Net MBO Transfer	17	7,331,198		2,136,000		9,475,998	28,943,196
Life-to-Date							
MBO/Lease Requirement	147	7,657,202		19,205,100		101,250,000	268,112,302
Offset to Debt Service		-		=		(9,948,102)	(9,948,102)
Total Water	\$ 147	7,657,202	\$	19,205,100	\$	91,301,898	\$ 258,164,200

		SEV	VER		
	Operations &		perations & laintenance	ease Payment	
	 Maintenance		Pension	 (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 (6 months)					
MBO/Lease Requirement	33,671,750		1,428,000	13,750,000	48,849,750
Offset to Debt Service	 =		-	 (2,516,350)	 (2,516,350)
Total MBO Transfer	33,671,750		1,428,000	11,233,650	46,333,400
Life-to-Date					
MBO/Lease Requirement	212,267,562		12,863,800	123,750,000	348,881,362
Offset to Debt Service	 =		=	(36,089,514)	(36,089,514)
Total Sewer	\$ 212,267,562	\$	12,863,800	\$ 87,660,486	\$ 312,791,848

 $^{^{*}}$ Note: FY 2016 lease transfer amounts shown do not incude prepayment on the lease amount for the 6 months period before bifurcation.



This report includes the following:

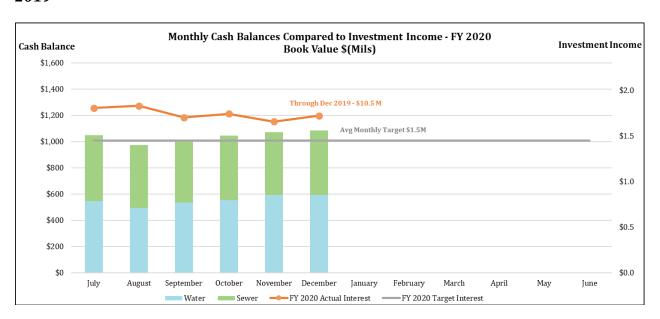
- 1. Monthly Cash Balances Compared to Investment Income
- 2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

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

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The cumulative investment earnings through December 2019 of \$10.5 million is 60% of the FY 2020 target of \$17.4 million. As the market environment fluctuates, GLWA will continue to monitor the FY 2020 target.

Chart 1 - Monthly Cash Balances Compared to Investment Income - Through December 2019



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



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



Chart 2 – Cash Balances - Water Funds as of December 31, 2019 - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of December 31, 2019 is \$592 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.

Other, 1.8% Operations & Maintenance, 5.3% Receiving Fund, 14.2% Bond Proceeds, 11.2% Debt Service, 14.2% Pension, 1.4% Water Residential Assistance Program, 0.7% Budget Stabilization, 0.3% Emergency Repair & Improvement & Replacement, 4.6% Extension, 46.1%

Chart 2 - Cash Balances - Water Funds as of December 31, 2019

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



Chart 3 – Cash Balances - Sewer Funds as of December 31, 2019 - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of December 31, 2019 is \$493 million. Like the Water Funds, the allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA's commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

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

Operations & Other, 2.2%

Maintenance, 7.3%

Debt Service, 28.8%

Improvement & Extension, 23.1%

Pension, 2.6%

Water Residential Assistance Program, 1.1%

Emergency Repair & Replacement, 8.9%

Budget Stabilization, 1.1%

Chart 3 - Cash Balances - Sewer Funds as of December 31, 2019

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



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

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

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

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

DWSD Retail Water Billings and Collections

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

Table 1 - DWSD Retail Billings shows the FY 2020 water usage and billed revenue which are provided by DWSD staff. As of December 31, 2019, the DWSD usage was at 92.48% of the budget and billed revenue was at 98.85% 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 - FY 2020 DWSD Retail Water Billings Report

			RETAIL	WATER CUSTO	MERS			
	FY 20	020 - Budget/Go	al	F	Y 2020 - Actual		FY 2020 -	Variance
			Unit			Unit		
Month (1)	<u>Volume</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Volume</u>	Revenue (2)	Revenue	<u>Volume</u>	<u>Revenue</u>
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	286,871	9,909,302	34.54	267,054	9,802,572	36.71	(19,817)	(106,730)
August	288,810	9,698,584	33.58	259,489	9,601,097	37.00	(29,321)	(97,487)
September	246,846	9,159,992	37.11	228,961	8,828,511	38.56	(17,885)	(331,481)
October	228,814	8,288,490	36.22	217,031	8,578,738	39.53	(11,783)	290,248
November	218,154	8,078,402	37.03	200,432	7,879,694	39.31	(17,722)	(198,708)
December	216,372	7,975,070	36.86	201,225	7,811,106	38.82	(15,147)	(163,964)
January	228,259	8,282,968	36.29					
February	225,150	8,294,177	36.84					
March	222,601	8,159,386	36.65					
April	215,049	8,120,879	37.76					
May	230,957	8,499,721	36.80					
June	254,554	9,084,129	35.69					
Total	2,862,437	103,551,100	36.18	1,374,192	52,501,718	38.21	(111,675)	(608,122)
Subtotals ytd	1,485,867	53,109,840	35.74	1,374,192	52,501,718	38.21	(111,675)	(608,122)
Achievement of	D			02 4 9 0 4	00 0504			

Achievement of Budget

92.48% 98.85%

Table 2 - DWSD Retail Water Collections

		Water		
Month	Current Year	Prior Year	Variance	Ratio
January	8,158,817	8,066,448	92,369	1.15%
February	7,927,299	6,432,245	1,495,054	23.24%
March	8,707,578	8,280,635	426,943	5.16%
April	8,475,657	9,226,675	(751,018)	-8.14%
May	8,415,767	8,969,019	(553,252)	-6.17%
June	7,554,457	7,940,939	(386,482)	-4.87%
July	8,093,394	7,858,272	235,122	2.99%
August	8,671,848	8,692,784	(20,936)	-0.24%
September	8,610,801	9,766,449	(1,155,648)	-11.83%
October	9,619,977	9,015,400	604,577	6.71%
November	7,067,667	7,938,517	(870,850)	-10.97%
December	8,597,558	7,297,698	1,299,860	17.81%
		00.105.001		

Rolling, 12-Month Total Rolling, 12-Month Average 99,900,820 8,325,068 99,485,081 8,290,423

⁽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



DWSD Retail Sewer Billings and Collections

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

Table 3 - DWSD Retail Sewer Billings shows the FY 2020 sewer billed revenue which are provided by DWSD staff. As of December 31, 2019, the DWSD usage was at 94.33% of the budget and billed revenue was at 98.72% 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 - FY 2020 DWSD Retail Sewer Billings Report

		RETAIL :	SEWER CUST	OMERS				
	FY 2020 - B	udget/Goal	FY 202	0 - Actual	FY 2020	FY 2020 - Variance		
<u>Month (1)</u>	Volume Revenue Mcf \$		<u>Volume</u> _{Mcf}	Revenue (2)	<u>Volume</u> Mcf	Revenue \$		
July	251,738	28,535,420	244,810	28,049,587	(6,928)	(485,833)		
August	258,984	28,327,270	246,989	28,076,624	(11,995)	(250,646)		
September	255,527	26,788,442	215,119	26,430,692	(40,408)	(357,750)		
October	227,141	26,444,548	238,202	27,549,768	11,061	1,105,220		
November	211,617	25,759,684	188,779	24,726,066	(22,838)	(1,033,618)		
December	195,192	25,905,017	186,917	24,853,335	(8,275)	(1,051,682)		
January	197,099	26,341,264						
February	206,164	26,312,394						
March	200,672	26,467,728						
April	204,606	25,894,612						
May	203,480	27,185,600						
June	218,340	27,376,921						
Total	2,630,560	321,338,900	1,320,816	159,686,072	(79,383)	(2,074,309)		
Subtotals ytd	1,400,199	161,760,381	1,320,816	159,686,072	(79,383)	(2,074,309)		

Achievement of Budget/Goal

^{94.33% 98.72%}

⁽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 <u>Sewer</u> Collections

	Sewer										
Month	Current Year	Prior Year	Variance	Ratio							
January	21,140,835	18,308,458	2,832,377	15.47%							
February	20,758,852	17,495,563	3,263,289	18.65%							
March	22,111,691	23,015,525	(903,834)	-3.93%							
April	20,930,511	16,159,844	4,770,667	29.52%							
May	22,807,283	18,341,298	4,465,985	24.35%							
June	20,426,151	21,461,926	(1,035,775)	-4.83%							
July	20,940,157	27,332,605	(6,392,448)	-23.39%							
August	23,175,643	21,746,714	1,428,929	6.57%							
September	21,972,754	23,727,505	(1,754,751)	-7.40%							
October	26,321,010	23,938,933	2,382,077	9.95%							
November	17,546,180	20,624,039	(3,077,859)	-14.92%							
December	25,889,823	19,612,154	6,277,669	32.01%							
Rolling 12-Month Total	264,020,890	251,764,564		_							

DWSD Retail Water and Sewer Accounts Receivable Aging Report

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

Rolling, 12-Month Average 22,001,741 20,980,380

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of December 31, 2019 with comparative totals from December 31, 2018.

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

							Accounts Receivable
Sales Class	# of Accounts		Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	286,984	\$ 338.01	\$ 13,625,950	\$ 7,406,461	\$ 18,733,875	\$ 57,236,064	\$ 97,002,349
			14.0%	7.6%	19.3%	59.0%	100.0%
Commercial	28,484	1,452.70	8,535,389	2,948,723	7,931,291	21,963,259	41,378,663
	•	,	20.6%	7.1%	19.2%	53.1%	100.0%
Industrial	4,838	4,051.53	4,599,582	1,540,408	2,833,221	10,628,094	19,601,305
	4,000	4,002.00	23.5%	7.9%	14.5%	54.2%	100.0%
Tax Exempt Entities	7,997	1,775.95	1,813,757	1,146,317	2,362,633	8,879,571	14,202,278
			12.8%	8.1%	16.6%	62.5%	100.0%
Government Entities	3,118	1,975.81	1,125,669	324,638	1,041,259	3,669,002	6,160,568
			18.3%	5.3%	16.9%	59.6%	100.0%
Subtotal - Active Accounts	331,421	\$ 538.12	\$ 29,700,348	\$ 13,366,547	\$ 32,902,279	\$ 102,375,990	\$ 178,345,163
			16.7%	7.5%	18.4%	57.4%	100.0%
Inactive Accounts	274,885	87.68	120,499	213,935	(115,660)	23,884,153	24,102,928
			0.5%	0.9%	(0.5%)	99.1%	100.0%
Total	606,306	\$ 333.90	\$ 29,820,847	\$ 13,580,482	\$ 32,786,619	\$ 126,260,143	\$ 202,448,091
% of Total A/R			14.7%	6.7%	16.2%	62.4%	100.0%
Water Fund	230,913	171.26	\$ 6,783,000	\$ 2,949,000	\$ 4,779,000	\$ 25,035,000	\$ 39,546,000
Sewer Fund	288,653	564.35	\$ 23,037,000	\$ 10,632,000	\$ 28,007,000	\$ 101,225,000	\$ 162,902,000
Total December 31, 2019	606,306	333.90	\$ 29,821,000	\$ 13,580,000	\$ 32,787,000	\$ 126,260,000	\$ 202,448,000
Water Fund- Allowance							\$ (28,136,000)
Sewer Fund- Allowance							\$ (98,640,000)
Total December 31, 2019 Bad Debt Allowance							\$ (126,776,000)
Comparative Totals from December 31, 2018	585,755	322.66	\$ 30,802,000	\$ 14,012,000	\$ 34,098,000	\$ 110,085,000	\$ 188,998,000



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

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

Wholesale Water Billings and Collections

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

Service Arrangement Type

Model Contract	82
Emergency	1
Older Contracts	4
Total	87

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

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

Table 1 - Wholesale Water Billings shows the FY 2020 water billed usage and revenues. As of December 31, 2019, the billed usage was at 94.64% of budget and billed revenue at 97.76% of budget. Billings and usage from the City of Flint *are* included as they were assumed in the FY 2020 Budget.

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

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The difference in rolling average from current year to prior year reflects the gentle downward trend in water usage over time.



Table 1 -FY 2020 Wholesale Water Billings Report

	WHOLESALE WATER CUSTOMERS											
	FY 20	20 - Budget/Go	oal	FY	2020 - Actual		FY 2020 - Variance					
		Unit Unit										
Month (1)	<u>Volume</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>				
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$				
1 July	1,777,138	32,544,400	18.31	1,545,631	30,356,570	19.64	(231,507)	(2,187,830)				
2 August	1,549,587	30,383,100	19.61	1,554,426	30,501,606	19.62	4,839	118,506				
3 September	1,368,496	28,270,400	20.66	1,257,111	27,278,750	21.70	(111,385)	(991,650)				
4 October	1,066,653	25,351,200	23.77	1,026,086	25,007,145	24.37	(40,567)	(344,055)				
5 November	917,034	24,049,100	26.22	905,016	23,933,012	26.44	(12,018)	(116,088)				
6 December	1,004,420	24,714,000	24.61	983,589	24,535,948	24.95	(20,831)	(178,052)				
7 January	1,018,192	24,861,000	24.42									
8 February	893,007	23,780,800	26.63									
9 March	1,008,766	24,753,300	24.54									
10 April	948,751	24,262,000	25.57									
11 May	1,073,966	25,549,300	23.79									
12 June	1,383,200	28,595,300	20.67									
Total	14,009,210	317,113,900	22.64	7,271,859	161,613,031	22.22	(411,469)	(3,699,169)				
Subtotals ytd	7,683,328	165,312,200	21.52	<i>7,271,859</i>	161,613,031	22.22	(411,469)	(3,699,169)				
Achievement	of Budget			94.64%	97.76%			<u>. </u>				

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

Table 2 - Wholesale <u>Water</u> Collections

	Water										
Month	Current Year	Prior Year	Variance	Ratio							
January	23,430,974	32,002,334	(8,571,360)	-26.78%							
February	26,147,082	21,352,903	4,794,179	22.45%							
March	24,967,335	27,715,696	(2,748,361)	-9.92%							
April	23,045,654	18,489,754	4,555,900	24.64%							
May	20,755,103	30,447,581	(9,692,478)	-31.83%							
June	25,676,458	21,815,013	3,861,445	17.70%							
July	23,212,979	21,923,590	1,289,389	5.88%							
August	28,808,254	31,920,586	(3,112,332)	-9.75%							
September	28,336,152	26,037,313	2,298,839	8.83%							
October	25,786,774	27,827,722	(2,040,948)	-7.33%							
November	29,245,969	29,238,260	7,709	0.03%							
December	23,292,382	27,720,646	(4,428,264)	-15.97%							
Rolling 12-Month Total	302,705,116	316,491,398									
Rolling, 12-Month Average	25,225,426	26,374,283									



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	18

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

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

Table 3 - Wholesale Sewer Billings shows the FY 2020 sewer billed revenues. As of December 31, 2019, the billed revenue is at 99.72% of budget.

Activity to date has been adjusted to reflect the results of the March 2019 Oakland Macomb Interceptor Drainage District contract amendment with terms effective July 1, 2019.

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

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

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



Table 3 - FY 2020 Wholesale <u>Sewer</u> Billings Report

		WHOLESAI	LE SEWER CUSTO	MERS		
	FY 2020 - B	udget/Goal	FY 2020	- Actual	FY 2020	- Variance
<u>Month (1)</u>	<u>Volume (2)</u>	<u>Revenue</u>	Volume (2)	<u>Revenue</u>	Volume (2)	<u>Revenue</u>
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
August	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
September	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
October	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
November	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
December	N/A	22,385,833	N/A	22,323,183	N/A	(62,650.00)
January	N/A	22,385,833	N/A		N/A	
February	N/A	22,385,833	N/A		N/A	
March	N/A	22,385,833	N/A		N/A	
April	N/A	22,385,833	N/A		N/A	
May	N/A	22,385,833	N/A		N/A	
June	N/A	22,385,833	N/A		N/A	
Total		268,629,996		133,939,098		(375,900)
Subtotals ytd		134,314,998		133,939,098		(375,900)

Achievement of Budget

99.72%

Table 4 - Wholesale <u>Sewer</u> Collections

	S	ewer		
Month	Current Year	Prior Year	Variance	Ratio
January	26,874,927	22,057,972	4,816,955	21.84%
February	13,895,100	30,280,800	(16,385,700)	-54.11%
March	22,388,600	15,552,000	6,836,600	43.96%
April	23,203,703	27,812,417	(4,608,714)	-16.57%
May	9,284,000	15,342,700	(6,058,700)	-39.49%
June	32,639,436	28,810,500	3,828,936	13.29%
July	27,222,400	16,179,117	11,043,283	68.26%
August	35,153,500	28,384,600	6,768,900	23.85%
September	18,833,257	22,672,400	(3,839,143)	-16.93%
October	29,833,760	16,105,200	13,728,560	85.24%
November	19,428,000	28,633,300	(9,205,300)	-32.15%
December	19,999,642	24,440,000	(4,440,358)	-18.17%
Dolling 12 Month Total	270 757 227	276 271 006	·	·

Rolling 12-Month Total 278,756,326 276,271,006 **Rolling, 12-Month Average** 23,229,694 23,022,584

⁽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.



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 December 31, 2019, Highland Park had a delinquent balance of \$43.3 million, including \$33.6 million for wastewater treatment services, \$1.7 million for industrial waste control services, and \$8.0 million for water supply services.

Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2020 through December 31, 2019. 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
January 31, 2019 Balance	6,853,926	31,629,183	1,655,435	40,138,544
February 2019 Billing	98,898	467,900	3,932	570,731
February 2019 Payments	-	-	-	-
February 28, 2019 Balance	6,952,824	32,097,083	1,659,368	40,709,275
March 2019 Billing	98,353	467,900	3,881	570,134
March 2019 Payments	-	-	-	-
March 31, 2019 Balance	7,051,177	32,564,983	1,663,248	41,279,409
April 2019 Billing	99,879	467,900	4,101	571,880
April 2019 Payments	-	(1,089,003)	-	(1,089,003)
April 30, 2019 Balance	7,151,056	31,943,880	1,667,350	40,762,286
May 2019 Billing	98,118	467,900	3,963	569,981
May 2019 Payments	-	-	-	-
May 31, 2019 Balance	7,249,174	32,411,780	1,671,312	41,332,267
June 2019 Billing	101,871	467,900	3,931	573,702
June 2019 Payments	-	(1,406,836)	-	(1,406,836)
June 30, 2019 Balance	7,351,045	31,472,844	1,675,243	40,499,132
July 2019 Billing	104,702	467,900	4,121	576,722
July 2019 Payments	-	-	-	-
July 31, 2019 Balance	7,455,747	31,940,744	1,679,363	41,075,854
August 2019 Billing	106,638	472,500	4,026	583,164
August 2019 Payments	-	-	-	-
August 31, 2019 Balance	7,562,385	32,413,244	1,683,389	41,659,018
September 2019 Billing	108,007	472,500	4,014	584,521
September 2019 Payments	-	(656,657)	-	(656,657)
September 30, 2019 Balance	7,670,392	32,229,087	1,687,403	41,586,882
October 2019 Billing	107,422	472,500	3,933	583,855
October 2019 Payments	-	-	-	-
October 31, 2019 Balance	7,777,814	32,701,587	1,691,336	42,170,737
November 2019 Billing	101,003	472,500	3,948	577,451
November 2019 Payments	-	-	-	-
November 30, 2019 Balance	7,878,817	33,174,087	1,695,284	42,748,188
December 2019 Billing	98,501	472,500	3,845	574,846
December 2019 Payments	-	-	-	-
December 31, 2019 Balance	7,977,318	33,646,587	1,699,129	43,323,034



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 December 31, 2019.

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. The small past due balance for Water is due to a payment not received from the City of Dearborn until January 10, 2020.

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA is a summary *without* the past due balances for the City of Highland Park and net of pending credits for certain Western Township Utilities Authority (WTUA). Credits for billed services are pending receipt of a final agreement from Wayne County to effectuate a transfer retroactive to July 1, 2018.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total		Current		46-74 Days	7	5-104 Days		>105 Days
Water	\$ 39,561,082.94	\$	30,630,285.66	\$	1,260,405.87	\$	108,007.06	\$	7,562,384.35
Sewer	\$ 40,466,286.23	\$	7,292,199.50	\$	472,500.00	\$	472,500.00	\$	32,229,086.73
IWC	\$ 3,631,210.22	\$	668,162.50	\$	72,850.83	\$	-	\$	2,890,196.89
Pollutant Surcharge	\$ 820,734.45	\$	684,105.38	\$	74,227.45	\$	13,518.95	\$	48,882.67
Total	\$ 84,479,313.84	\$	39,274,753.04	\$	1,879,984.15	\$	594,026.01	\$	42,730,550.64
	100.00%		46.49%		2.23%		0.70%		50.58%

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

		Total	Current		46-74 Days	7.	5-104 Days		>105 Days	
Water	\$	31,583,764.87	\$ 30,430,781.42	\$	1,152,983.45	\$	-	\$	-	
Sewer	\$	6,819,699.50	\$ 6,819,699.50	\$	-	\$	-	\$	-	
IWC	\$	1,932,081.97	\$ 660,369.91	\$	68,918.20	\$	-	\$	1,202,793.86	
Pollutant Surcharge	\$	820,734.45	\$ 684,105.38	\$	74,227.45	\$	13,518.95	\$	48,882.67	
Total	\$	41,156,280.79	\$ 38,594,956.21	\$	1,296,129.10	\$	13,518.95	\$	1,251,676.53	
	100.00%		93.78%		3.15%		0.03%		3.04%	

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

	Total	Current	t 46-74 Days		75-104 Days		>105 Days
Water	\$ 31,583,764.87	\$ 30,430,781.42	\$	1,152,983.45	\$	-	\$ -
Sewer	\$ 6,819,699.50	\$ 6,819,699.50	\$	-	\$	-	\$ -
IWC	\$ 625,550.84	\$ 591,211.73	\$	34,339.11	\$	-	\$ -
Pollutant Surcharge	\$ 820,734.45	\$ 684,105.38	\$	74,227.45	\$	13,518.95	\$ 48,882.67
Total	\$ 39,849,749.66	\$ 38,525,798.03	\$	1,261,550.01	\$	13,518.95	\$ 48,882.67
	100.00%	96.68%		3.17%		0.03%	0.12%

Note: percentages vary from 100% due to rounding.



The Monthly Trust Receipts & Disbursements Report includes the following.

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

GLWA Trust Receipts & Disbursements

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

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

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

Water fund activity exceeded required MBO disbursements by 16% through December 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 15% since January 1, 2016.

Sewer fund cash receipts exceeded disbursements by 19% through December 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 6% since January 1, 2016. Strong receipts in December was due in part to a one-time capital contribution of \$11.9 million by the Oakland Macomb Interceptor Drainage District as part of a recent contract amendment.

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



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 to Date	Life-to-Date Total
Water						
1 Receipts2 MOU Adjustments	\$ 149,688,711 -	\$ 352,941,909	\$ 338,452,001 -	\$ 336,594,234 -	\$ 173,319,301 -	\$ 1,350,996,156 -
3 Adjusted Receipts4 Disbursements	149,688,711 (146,256,185)	352,941,909 (288,777,985)	338,452,001 (297,064,810)	336,594,234 (289,230,481)	173,319,301 (149,182,120)	1,350,996,156 (1,170,511,581)
5 Receipts Net of Required Transfers 6 I&E Transfer	3,432,526	64,163,924	41,387,191 (25,739,700)	47,363,753 (47,695,000)	24,137,181 (15,062,500)	180,484,575 (88,497,200)
7 Net Receipts	\$ 3,432,526	\$ 64,163,924	\$ 15,647,491	\$ (331,247)	\$ 9,074,681	\$ 91,987,375
Ratio of Receipts to Required Disbursements (Line 3/Line 4)	102%	122%	114%	116%	116%	115%
Sewer						
9 Receipts 10 MOU Adjustments	\$ 232,377,715	\$ 469,788,882 -	\$ 476,269,761 -	\$ 467,743,744 -	\$ 266,102,855 -	\$ 1,912,282,957 -
11 Adjusted Receipts	232,377,715	469,788,882	476,269,761	467,743,744	266,102,855	1,912,282,957
12 Disbursements	(219,538,325)	(441,443,340)	(458,903,335)	(453,406,636)	(224,199,199)	(1,797,490,835)
13 Receipts Net of Required Transfers	12,839,390	28,345,542	17,366,426	14,337,108	41,903,656	114,792,122
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(12,730,800)	(57,976,600)
15 DWSD Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
16 Shortfall Repayment (principal)	-	-	-	9,367,355	8,689,920	18,057,275
17 Net Receipts	\$ 11,553,924	\$ 331,008	\$ (29,444,708)	\$ 1,156,763	\$ 37,862,776	\$ 21,459,763
Ratio of Receipts to Required Disbursements (Line 11/Line 12)	106%	106%	104%	103%	119%	106%
Combined						
19 Receipts20 MOU Adjustments	\$ 382,066,426	\$ 822,730,791 -	\$ 814,721,762 -	\$ 804,337,978 -	\$ 439,422,156 -	\$ 3,263,279,113 -
21 Adjusted Receipts	382,066,426	822,730,791	814,721,762	804,337,978	439,422,156	3,263,279,113
22 Disbursements	(365,794,510)	(730,221,325)	(755,968,145)	(742,637,117)	(373,381,319)	(2,968,002,416)
23 Receipts Net of Required Transfers	16,271,916	92,509,466	58,753,617	61,700,861	66,040,837	295,276,697
24 I&E Transfer	-	-	(48,437,800)	(70,242,700)	(27,793,300)	(146,473,800)
25 Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
26 Shortfall Repayment	-	-	-	9,367,355	8,689,920	18,057,275
27 Net Receipts	\$ 14,986,450	\$ 64,494,932	\$ (13,797,217)	\$ 825,516	\$ 46,937,457	\$ 113,447,138
Ratio of Receipts to Required Disbursements (Line 21/Line 22)	104%	113%	108%	108%	118%	110%

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



Chart 1 - GLWA 12-Month Net Receipts - Water

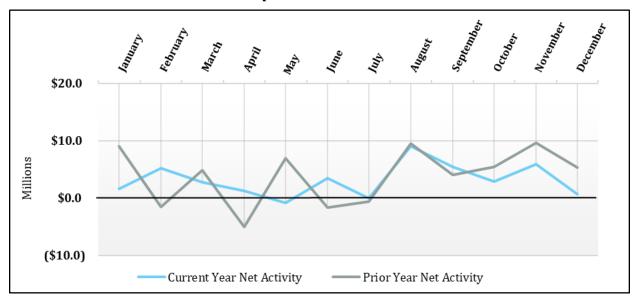
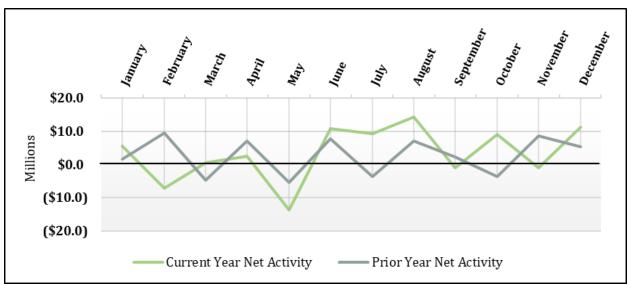


Chart 2 - GLWA 12-Month Net Receipts - Sewer





DWSD Trust Receipts & Disbursements

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

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

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

Water fund cash receipts exceeded required MBO disbursements by 3% through December 31, 2019 with a historical ratio of 3% since January 1, 2016.

Sewer fund cash receipts fell short of required MBO disbursements by 4% through December 31, 2019 with a historic shortfall of 5% since January 1, 2016. DWSD has recognized this issue and proactively implemented plans in December 2019 to resolve the current shortfall.

On December 3, DWSD transferred \$2.6 million from Sewer Operations & Maintenance back to the Sewer Receiving Fund. The remaining current year shortfall will be remedied by the end of February 2020 with an additional \$4.5 million cash replenishment transfer to GLWA; the DWSD Operations & Maintenance budgeted transfer request was reduced by \$1 million for March 2020 to hedge any future cashflow timing issues.

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

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

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



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

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

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

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



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

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Date	Life-to-Date Total
w	Vater					Date	Total
	eceipts	\$ 26,201,881	\$ 96,451,105	\$ 101,233,147	\$ 99,868,219	\$ 50,678,567	\$ 374,432,919
	OU Adjustments	18,446,100	-	-	_	-	18,446,100
3 Ad	djusted Receipts	44,647,981	96,451,105	101,233,147	99.868.219	50,678,567	392,879,019
	isbursements	(47,809,552)	(93,066,144)	(93,049,457)	(97,694,600)	(49,251,246)	(380,870,999)
5 Re	eceipts Net of Required Transfers	(3,161,571)	3,384,961	8,183,690	2,173,619	1,427,321	12,008,020
6 I&	&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
7 Ne	et Receipts	\$ (3,161,571)	\$ 3,384,961	\$ 8,183,690	\$ (6,233,461)	\$ 1,427,321	\$ 3,600,940
8	atio of Receipts to Required isbursements (Line 3/Line 4)	93%	104%	109%	102%	103%	103%
	ewer						
9 Re	eceipts	\$ 65,256,734	\$ 233,723,367	\$ 242,104,791	\$ 265,339,797	\$ 135,862,928	\$ 942,287,617
10 M	OU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Ad	djusted Receipts	121,011,834	233,723,367	242,104,791	271,866,997	135,862,928	1,004,569,917
12 Di	isbursements	(122,297,300)	(261,963,973)	(266,217,825)	(271,018,306)	(141,199,944)	(1,062,697,348)
	eceipts Net of Required Transfers	(1,285,466)	(28,240,606)	(24,113,034)	848,691	(5,337,016)	(58,127,431)
	&E Transfer	-	-	-	-	-	-
	nortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	53,413,034
	et Receipts (a)	\$ -	\$ (226,072)	\$ -	\$ 848,691	\$ (5,337,016)	\$ (4,714,397)
	atio of Receipts to Required isbursements (Line 11/Line 12)	99%	89%	91%	100%	96%	95%
Co	ombined						
	eceipts	\$ 91,458,615	\$ 330,174,472	\$ 343,337,938	\$ 365,208,016	\$ 186,541,495	\$1,316,720,536
19 M	OU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
20 Ad	djusted Receipts	165,659,815	330,174,472	343,337,938	371,735,216	186,541,495	1,397,448,936
21 Di	isbursements	(170,106,852)	(355,030,117)	(359,267,282)	(368,712,906)	(190,451,190)	(1,443,568,347)
	eceipts Net of Required Transfers	(4,447,037)	(24,855,645)	(15,929,344)	3,022,310	(3,909,695)	(46,119,411)
	E Transfer	-	-		(8,407,080)	-	(8,407,080)
	nortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	e (E 204 770)	- (2,000,00°)	53,413,034
	et Receipts	\$ (3,161,571)	\$ 3,158,889	\$ 8,183,690	\$ (5,384,770)	\$ (3,909,695)	\$ (1,113,457)
	atio of Receipts to Required isbursements (Line 20/Line 21)	97%	93%	96%	101%	98%	97%

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 unti 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

Data	Tuenesetien	Amount	Palango
Date	Transaction	Amount	Balance
6/30/2019	Record FY 16 and FY 17 Loan Receivable		29,300,000
2/8/2019	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	24,664,538
2/22/2019	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	22,310,770
4/15/2019	Loan Receivable Payment (for the month of Apr)	789,990	21,520,780
5/8/2019	Loan Receivable Payment (for the month of May)	792,705	20,728,075
6/7/2019	Loan Receivable Payment (for the month of June)	795,430	19,932,645
7/5/2019	Loan Receivable Payment (for the month of July)	798,164	19,134,480
8/8/2019	Loan Receivable Payment (for the month of August)	800,908	18,333,572
9/6/2019	Loan Receivable Payment (for the month of September)	803,661	17,529,911
10/2/2019	Loan Receivable Payment (for the month of October)	806,424	16,723,487
11/4/2019	Loan Receivable Payment (for the month of November)	809,196	15,914,291
12/3/2019	Loan Receivable Payment (for the month of December)	811,978	15,102,314
		14.197.686	15.102.314

Table 4 - FY 2017 DWSD Loan Receivable Payments - Sewer

Date	Transaction	Principal	Interest	Total Paid
2/8/2019	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	564,636	5,200,098
2/22/2019	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	246,280	2,600,049
4/15/2019	Loan Receivable Payment (for the month of Apr)	789,990	76,693	866,683
5/8/2019	Loan Receivable Payment (for the month of May)	792,705	73,978	866,683
6/7/2019	Loan Receivable Payment (for the month of June)	795,430	71,253	866,683
7/5/2019	Loan Receivable Payment (for the month of July)	798,164	68,518	866,683
8/8/2019	Loan Receivable Payment (for the month of August)	800,908	65,775	866,683
9/6/2019	Loan Receivable Payment (for the month of September)	803,661	63,022	866,683
10/2/2019	Loan Receivable Payment (for the month of October)	806,424	60,259	866,683
11/4/2019	Loan Receivable Payment (for the month of November)	809,196	57,487	866,683
12/3/2019	Loan Receivable Payment (for the month of December)	811,978	54,705	866,683
		14,197,687	1,402,606	15,600,293

Table 5 - FY 2018 DWSD Loan Receivable - Sewer

Date	Transaction	Amount	Balance
6/30/2019	Record FY 18 Loan Receivable		24,113,034
7/15/2019	Loan Receivable Payment (for the month of July)	638,978	23,474,056
8/8/2019	Loan Receivable Payment (for the month of August)	640,686	22,833,370
9/6/2019	Loan Receivable Payment (for the month of September)	642,400	22,190,970
10/2/2019	Loan Receivable Payment (for the month of October)	644,118	21,546,852
11/4/2019	Loan Receivable Payment (for the month of November)	645,840	20,901,012
12/3/2019	Loan Receivable Payment (for the month of December)	647,567	20,253,445
		3,859,589	20,253,445



Table 6 - FY 2018 DWSD Loan Receivable Payments - Sewer

Date	Transaction	Principal	Interest	Total Paid
7/15/2019	Loan Receivable Payment (for the month of July)	638,978	64,482	703,460
8/8/2019	Loan Receivable Payment (for the month of August)	640,686	62,774	703,460
9/6/2019	Loan Receivable Payment (for the month of September)	642,400	61,060	703,460
10/2/2019	Loan Receivable Payment (for the month of October)	644,118	59,342	703,460
11/4/2019	Loan Receivable Payment (for the month of November)	645,840	57,620	703,460
12/3/2019	Loan Receivable Payment (for the month of December)	647,567	55,893	703,460
		3,859,589	361,171	4,220,760

Chart 3 - DWSD 12-Month Net Receipts - Water

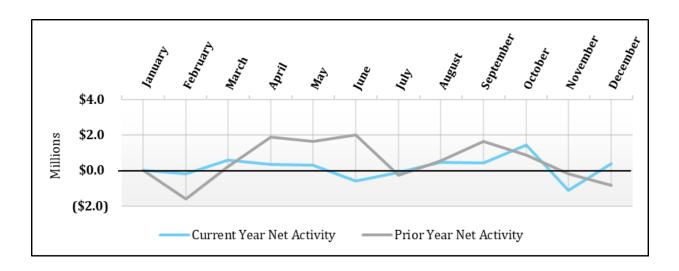
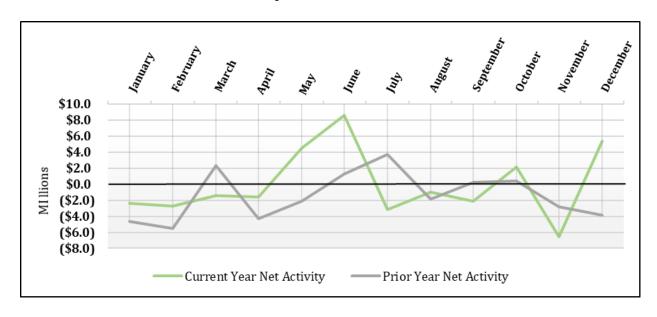


Chart 4 - DWSD 12-Month Net Receipts - Sewer





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

Water fund cash receipts exceeded required MBO disbursements by 13% through December 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 12% since January 1, 2016.

Sewer fund cash receipts exceeded required MBO disbursements by 10% through December 31, 2019 and with a historical ratio of cash receipts exceeding MBO disbursements by 2% since January 1, 2016.



Table 7 - Combined Net Cash Flows from Trust Receipts & Disbursements

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Date	Life-to-Date Total
	Water						
1	Receipts	\$ 175,890,592	\$ 449,393,014	\$ 439,685,148	\$ 436,462,453	\$ 223,997,868	\$ 1,725,429,075
2	MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3	Adjusted Receipts	194,336,692	449,393,014	439,685,148	436,462,453	223,997,868	1,743,875,175
4	Disbursements	(194,065,737)	(381,844,129)	(390,114,267)	(386,925,081)	(198,433,366)	(1,551,382,580)
5	Receipts Net of Required Transfers	270,955	67,548,885	49,570,881	49,537,372	25,564,502	192,492,595
6	I&E Transfer	-	-	(25,739,700)	(56,102,080)	(15,062,500)	(96,904,280)
7	Net Receipts	\$ 270,955	\$ 67,548,885	\$ 23,831,181	\$ (6,564,708)	\$ 10,502,002	\$ 95,588,315
8	Ratio of Receipts to Required Disbursements (Line 3/Line 4)	100%	118%	113%	113%	113%	112%
	Sewer						
9		\$ 297,634,449	\$ 703,512,249	\$ 718,374,552	\$ 733,083,541	\$ 401,965,783	\$ 2,854,570,574
	MOU Adjustments	55,755,100	\$ 703,312,249	\$ 710,374,332	6,527,200	\$ 401,903,763	62,282,300
	•		_				
	Adjusted Receipts	353,389,549	703,512,249	718,374,552	739,610,741	401,965,783	2,916,852,874
	Disbursements	(341,835,625)	(703,407,313)	(725,121,160)	(724,424,942)	(365,399,143)	(2,860,188,183)
	Receipts Net of Required Transfers I&E Transfer	11,553,924	104,936	(6,746,608)	15,185,799	36,566,640	56,664,691
	Shortfall Advance	-	-	(22,698,100)	(22,547,700)	(12,730,800)	(57,976,600)
	Shortfall Repayment (principal)	-	-	-	9,367,355	8,689,920	18,057,275
	Net Receipts	\$ 11,553,924	\$ 104,936	\$ (29,444,708)	\$ (7,361,901)	\$ 32,525,760	\$ 16,745,367
18	Ratio of Receipts to Required Disbursements (Line 11/Line 12)	103%	100%	99%	102%	110%	102%
	Combined						
19	Receipts	\$ 473,525,041	\$ 1,152,905,263	\$ 1,158,059,700	\$ 1,169,545,994	\$ 625,963,651	\$ 4,579,999,649
	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	625,963,651	4,660,728,049
	Disbursements	(535,901,362)	(1,085,251,442)	(1,115,235,427)	(1,111,350,023)	(563,832,509)	(4,411,570,763)
	Receipts Net of Required Transfers	11,824,879	67,653,821	42,824,273	64,723,171	62,131,142	249,157,286
	I&E Transfer		-	(48,437,800)	(78,649,780)	(27,793,300)	(154,880,880)
25	Shortfall Advance	-	-	-	`	-	
26	Shortfall Repayment	-	-	-	9,367,355	8,689,920	18,057,275
27	Net Receipts	\$ 11,824,879	\$ 67,653,821	\$ (5,613,527)	\$ (4,559,254)	\$ 43,027,762	\$ 112,333,682
28	Ratio of Receipts to Required Disbursements (Line 21/Line 22)	102%	106%	104%	106%	111%	106%

APPENDIX



Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$186,585.70	\$186,585.70	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$66,659.12	\$66,659.12	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$27,625.15	\$27,625.15	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$56,745.31	\$56,745.31	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$277,983.55	\$277,983.55	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$25,045.16	\$25,045.16	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$23,583.16	\$23,583.16	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$795,067.62	\$795,067.62	\$0.00	\$0.00	\$0.00
CENTER LINE	\$38,451.83	\$38,451.83	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$646,441.08	\$646,441.08	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$581,971.68	\$581,971.68	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$264,571.37	\$264,571.37	\$0.00	\$0.00	\$0.00
DEARBORN	\$2,798,394.80	\$1,645,411.35	\$1,152,983.45	\$0.00	\$0.00
DEARBORN HEIGHTS	\$294,673.08	\$294,673.08	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$255,470.88	\$255,470.88	\$0.00	\$0.00	\$0.00
ECORSE	\$119,141.29	\$119,141.29	\$0.00	\$0.00	\$0.00
FARMINGTON	\$79,165.12	\$79,165.12	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$684,032.89	\$684,032.89	\$0.00	\$0.00	\$0.00
FERNDALE	\$159,748.28	\$159,748.28	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$212,693.75	\$212,693.75	\$0.00	\$0.00	\$0.00
FLINT	\$328,644.94	\$328,644.94	\$0.00	\$0.00	\$0.00
FRASER	\$96,768.19	\$96,768.19	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$141,590.85	\$141,590.85	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$27,551.35	\$27,551.35	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$(21,039.13)	\$(21,039.13)	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$171,136.73	\$171,136.73	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$117,279.73	\$117,279.73	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$44,784.38	\$44,784.38	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$113,845.85	\$113,845.85	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$65,600.59	\$65,600.59	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$152,470.80	\$152,470.80	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$120,634.87	\$120,634.87	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$59,263.01	\$59,263.01	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$7,977,318.07	\$199,504.24	\$107,422.42	\$108,007.06	\$7,562,384.35
HURON TOWNSHIP	\$118,661.66	\$118,661.66	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$131,221.48	\$131,221.48	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,061.45	\$1,061.45	\$0.00	\$0.00	\$0.00
INKSTER	\$100,004.91	\$100,004.91	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$23,425.95	\$23,425.95	\$0.00	\$0.00	\$0.00
LAPEER	\$251,977.62	\$251,977.62	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$41,101.05	\$41,101.05	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$197,287.18	\$197,287.18	\$0.00	\$0.00	\$0.00
LIVONIA	\$878,967.44	\$878,967.44	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$924,591.91	\$924,591.91	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$153,799.99	\$153,799.99	\$0.00	\$0.00	\$0.00

Charles Non-	Make 1 Days	Champs = = t	46 74 D	75 104 D	>10F D
Customer Name MAYFIELD TOWNSHIP	Total Due \$3,073.42	Current \$3,073.42	46 - 74 Days \$0.00	75 - 104 Days \$0.00	>105 Days \$0.00
MELVINDALE	\$102,357.39	\$102,357.39	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$28,683.15	\$28,683.15	\$0.00	\$0.00	\$0.00
NOCWA	\$1,687,692.64	\$1,687,692.64	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$137,694.92	\$137,694.92	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$838,190.38	\$838,190.38	\$0.00	\$0.00	\$0.00
NOVI	\$664,461.01	\$664,461.01	\$0.00	\$0.00	\$0.00
OAK PARK	\$113,355.22	\$113,355.22	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$5,497.43	\$5,497.43	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$87,113.03	\$87,113.03	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$337,529.73	\$337,529.73	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$255,201.13	\$255,201.13	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$60,647.28	\$60,647.28	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$70,750.75	\$70,750.75	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$22,198.81	\$22,198.81	\$0.00	\$0.00	\$0.00
ROMEO	\$19,822.08	\$19,822.08	\$0.00	\$0.00	\$0.00
ROMULUS	\$330,197.00	\$330,197.00	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$216,278.00	\$216,278.00	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$16,293.25	\$16,293.25	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,013,541.01	\$1,013,541.01	\$0.00	\$0.00	\$0.00
SOCWA	\$3,601,117.54	\$3,601,117.54	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$9,113.38	\$9,113.38	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$184,812.80	\$184,812.80	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$508,475.69	\$508,475.69	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,165,630.88	\$1,165,630.88	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$55,082.66	\$55,082.66	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,105.93	\$18,105.93	\$0.00	\$0.00	\$0.00
TAYLOR	\$749,943.07	\$749,943.07	\$0.00	\$0.00	\$0.00
TRENTON	\$135,029.82	\$135,029.82	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,035,300.65	\$1,035,300.65	\$0.00	\$0.00	\$0.00
UTICA	\$89,397.66	\$89,397.66	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$294,454.36	\$294,454.36	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$18,661.35	\$18,661.35	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$62,748.11	\$62,748.11	\$0.00	\$0.00	\$0.00
WARREN	\$817,518.25	\$817,518.25	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$162,545.74	\$162,545.74	\$0.00	\$0.00	\$0.00
WAYNE	\$337,213.59	\$337,213.59	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,585,313.25	\$1,585,313.25	\$0.00	\$0.00	\$0.00
WESTLAND	\$968,093.39	\$968,093.39	\$0.00	\$0.00	\$0.00
WIXOM	\$186,757.15	\$186,757.15	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$130,692.20	\$130,692.20	\$0.00	\$0.00	\$0.00
YCUA	\$1,622,496.15	\$1,622,496.15	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$39,561,082.94	\$30,630,285.66	\$1,260,405.87	\$108,007.06	\$7,562,384.35

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$86,099.50	\$86,099.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$18,300.00	\$18,300.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$33,646,586.73	\$472,500.00	\$472,500.00	\$472,500.00	\$32,229,086.73
MELVINDALE	\$127,800.00	\$127,800.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,513,500.00	\$4,513,500.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,069,800.00	\$2,069,800.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,200.00	\$4,200.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$40,466,286.23	\$7,292,199.50	\$472,500.00	\$472,500.00	\$32,229,086.73

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,532.83	\$1,532.83	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$10,787.27	\$10,787.27	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$348.14	\$348.14	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$1,969.62	\$1,969.62	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$1,570.01	\$1,570.01	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,197.71	\$7,197.71	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$684,837.98	\$36,253.88	\$18,126.94	\$0.00	\$630,457.16
DETROIT METRO WC AIRPORT	\$101.40	\$101.40	\$0.00	\$0.00	\$0.00
CENTER LINE	\$3,501.68	\$3,501.68	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$23,156.38	\$23,156.38	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$24,303.89	\$24,303.89	\$0.00	\$0.00	\$0.00
DEARBORN	\$105,440.79	\$70,293.86	\$35,146.93	\$0.00	\$0.00
DEARBORN HEIGHTS	\$8,688.29	\$8,688.29	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$12,272.78	\$12,272.78	\$0.00	\$0.00	\$0.00
FARMINGTON	\$3,837.99	\$3,837.99	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$23,142.86	\$23,142.86	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$190.97	\$190.97	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$8,466.90	\$8,466.90	\$0.00	\$0.00	\$0.00
FRASER	\$4,715.20	\$4,715.20	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$5,803.46	\$5,803.46	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,123.85	\$1,123.85	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$302.51	\$302.51	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,458.95	\$2,458.95	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GROSSE POINTE	\$1,502.41	\$1,502.41	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$1,985.75	\$1,985.75	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$3,968.12	\$3,968.12	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,884.35	\$1,884.35	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,009.89	\$3,009.89	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,063.97	\$3,063.97	\$0.00	\$0.00	\$0.00
INKSTER	\$5,286.32	\$5,286.32	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$664.17	\$664.17	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$618.54	\$618.54	\$0.00	\$0.00	\$0.00
LIVONIA	\$38,731.42	\$38,731.42	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$196.04	\$196.04	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$6,901.96	\$6,901.96	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$584.74	\$584.74	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$3,954.60	\$3,883.62	\$70.98	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$164,318.05	\$8,696.74	\$4,348.37	\$0.00	\$151,272.94
NOVI	\$16,512.99	\$16,512.99	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,465.94	\$6,465.94	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$3,472.95	\$3,472.95	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$441.69	\$441.69	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$3,707.86	\$3,707.86	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$457,375.10	\$24,207.56	\$12,103.78	\$0.00	\$421,063.76

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
REDFORD TOWNSHIP	\$10,433.31	\$10,433.31	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$17,515.16	\$17,515.16	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$11,963.51	\$11,963.51	\$0.00	\$0.00	\$0.00
LAKE ORION	\$763.88	\$763.88	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,054.04	\$14,054.04	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$(887.25)	\$0.00	\$(887.25)	\$0.00	\$0.00
ROYAL OAK	\$13,102.57	\$13,102.57	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$11,471.72	\$11,471.72	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$29,934.97	\$29,934.97	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$35,464.65	\$35,464.65	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$365.04	\$365.04	\$0.00	\$0.00	\$0.00
UTICA	\$5,717.27	\$5,717.27	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$1,755.91	\$1,755.91	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,804.92	\$1,804.92	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) A	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$12,097.02	\$12,097.02	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$2,682.03	\$2,682.03	\$0.00	\$0.00	\$0.00
WAYNE	\$4,770.87	\$4,770.87	\$0.00	\$0.00	\$0.00
WESTLAND	\$21,569.47	\$21,569.47	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,004.82	\$3,004.82	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$949.78	\$949.78	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$1,008.93	\$1,008.93	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$10,645.31	\$10,636.86	\$8.45	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BIRMINGHAM (E-F)	\$2,315.30	\$2,315.30	\$0.00	\$0.00	\$0.00
CLARKSTON	\$263.64	\$263.64	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$2,626.26	\$2,626.26	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,699,128.25	\$7,792.59	\$3,932.63	\$0.00	\$1,687,403.03
HUNTINGTON WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CHARTER TOWNSHIP OF INDEPENI	\$4,650.88	\$4 ,650.88	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,336.79	\$1,336.79	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$410.67	\$410.67	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$381.94	\$381.94	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$961.61	\$961.61	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,196.52	\$1,196.52	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$260.26	\$260.26	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,540.55	\$3,540.55	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$27,065.35	\$27,065.35	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,711.24	\$3,711.24	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$62.53	\$62.53	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW	\$11,831.69	\$11,831.69	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADMI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROMULUS	\$880.49	\$880.49	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable-IWC ACCOUNTS

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Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TOTAL IWC ACCOUNTS	\$3,631,210.22	\$668,162.50	\$72,850.83	\$0.00	\$2,890,196.89

GLWA Aged Accounts Receivable-POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$4,519.46	\$4,519.46	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$9,568.58	\$9,568.58	\$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	\$68.27	\$68.27	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$21,655.92	\$21,655.92	\$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
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$16,533.05	\$0.00	\$0.00	\$0.00	\$16,533.05
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$11,263.62	\$11,263.62	\$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	\$470.45	\$0.00	\$121.80	\$0.00	\$348.65
BARON INDUSTRIES	\$1,671.46	\$1,671.46	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$4.83	\$4.83	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$13,788.26	\$13,788.26	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$61.25	\$0.00	\$0.00
BOZEK'S MARKET	\$74.00	\$74.00	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$5,843.53	\$5,843.53	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$17.08	\$17.08	\$0.00	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$108.06	\$0.00	\$108.06	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$59.87	\$0.00	\$59.87	\$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	\$3.13	\$1.51	\$0.00	\$0.00	\$1.62
CF BURGER CREAMERY	\$18,348.07	\$18,348.07	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,589.96	\$114.20	\$48.26	\$25.74	\$1,401.76
CINTAS CORP MACOMB TWP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$23,776.86	\$23,776.86	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$11,924.54	\$11,924.54	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$1.20	\$1.20	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$1,967.75	\$1,967.75	\$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 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$7,303.99	\$3,341.59	\$3,962.40	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$19,866.86	\$19,866.86	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
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	\$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	\$39.84	\$25.61	\$14.23	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$75.88	\$75.88	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$21,498.54	\$21,498.54	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$140.37	\$140.37	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,792.32	\$1,792.32	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$706.57	\$706.57	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$4,462.38	\$4,462.38	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMPF	\$180.65	\$0.00	\$180.65	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$27,444.06	\$0.00	\$27,444.06	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$1,553.73	\$1,553.73	\$0.00	\$0.00 \$0.00	
EQ DETROIT, INC.	\$19,907.60	\$19,907.60	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLF	\$(0.10)	\$0.00	\$0.00	\$(0.10)	\$0.00
EXTRUDE HONE CORPORATION	\$186.07	\$186.07	\$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.	\$15,008.99	\$15,008.99	\$0.00	\$0.00	\$0.00
FORD NEW MODEL PROGRAM	\$497.99	\$497.99	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$(62.83)	\$ (62.83)	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G20 ENERGY, LLC	\$1,961.84	\$1,961.84	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$16,084.96	\$16,084.96	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$(100.13)	\$0.00	\$(100.13)	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$53.43	\$0.00	\$53.43	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$185.02	\$0.00	\$90.90	\$0.00	\$94.12
GREAT BARABOO BREWING CO.	\$110.25	\$0.00	\$110.25	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$2,732.45	\$1,159.90	\$524.65	\$847.94	\$199.96
HENKEL CORPORATION	\$220.21	\$220.21	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable-POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOME STYLE FOOD INC.	\$6,042.16	\$6,042.16	\$0.00	\$0.00	\$0.00
HOMEGROWN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$203.63	\$203.63	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$128.83	\$128.83	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$2,169.30	\$2,169.30	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IDP, INC.	\$169.79	\$169.79	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$673.64	\$673.64	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$793.71	\$793.71	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$11.26	\$11.26	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$2.85	\$2.85	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$40.38	\$0.00	\$40.38	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$860.88	\$860.88	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLF	\$1,415.12	\$1,415.12	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILL	\$69.98	\$69.98	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE (\$4,714.62	\$4,714.62	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$2,094.92	\$2,094.92	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$13,624.62	\$586.06	\$470.46	\$12,568.10	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MCNICHOLS POLISHING & ANODIZ	\$0.00	\$0.00	\$0.00 \$0.00		\$0.00
MELLO MEATS INC, - KUBISCH S	\$56.92	\$56.92	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$677.19	\$677.19	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$183.11	\$183.11	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$191,717.76	\$191,717.76	\$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	\$707.60	\$707.60	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$5,835.43	\$5,835.43	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$36.15	\$3.49	\$2.78	\$1.75	\$28.13
MOTOR CITY BREWING WORKS	\$1,135.06	\$0.00	\$178.07	\$0.00	\$956.99
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEF	\$38.44	\$38.44	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$312.96	\$312.96	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$2,379.19	\$2,379.19	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$108,136.55	\$69,790.70	\$38,345.85	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable-POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PINE TREE ACRES, INC.	\$62,854.49	49 \$62,854.49 \$0.00 \$0.0		\$0.00	\$0.00
PLATING SPEC	PEC \$0.00 \$0.00		\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$170.59	\$170.59	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$1,256.25	\$1,256.25	\$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
ROAK BREWING CO. LLC	\$757.25	\$0.00	\$757.25	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$1,543.04	\$0.00	\$1,543.04	\$0.00	\$0.00
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$87.91	\$87.91	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$934.47	\$0.00	\$100.35	\$0.00	\$834.12
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$30.96	\$30.96	\$0.00	\$0.00	\$0.00
SUPERNATURAL SPIRITS & BREWI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$1,869.67	\$158.29	\$88.59	\$75.52	\$1,547.27
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$(1,031.09)	\$0.00	\$0.00	\$0.00	\$(1,031.09)
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$41.66	\$0.00	\$21.00	\$0.00	\$20.66

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$1,180.80	\$1,180.80	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$58,507.87	\$58,507.87	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$1,964.01	\$1,964.01	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$9.44	\$9.44	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$277.79	\$277.79	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$712.21	\$712.21	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$3,557.03	\$3,557.03	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$4,536.53	\$4,536.53	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$702.28	\$702.28	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$9,028.37	\$9,028.37	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$241.38	\$241.38	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (36.26)	\$0.00	\$0.00	\$0.00	\$ (36.26)
WIGLEY'S MEAT PROCESS	\$637.48	\$637.48	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$887.92	\$887.92	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$145.14	\$145.14	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$9,336.65	\$9,336.65	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$3,144.73	\$3,144.73	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable-POLLUTANT SURCHARGE ACCOUNTS Balances as of 12/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days	
WOODWARD AVENUE BREWERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$820,734.45	\$684,105.38	\$74,227.45	\$13,518.95	\$48,882.67	

City of Highland Park Billings and Collections

	Water	Sewer	IWC	Cumulative Total
June 30, 2012 Balance FY 2013 Billings FY 2013 Payments	\$ - 485,887 (65,652)	\$ 10,207,956 4,987,635 (2,206,211)	\$ 852,987 154,444 	\$ 11,060,943 5,627,966 (2,271,863)
June 30, 2013 Balance FY 2014 Billings FY 2014 Payments	\$ 420,235 1,004,357	\$ 12,989,380 6,980,442 (1,612,633)	\$ 1,007,431 161,951	\$ 14,417,046 8,146,750 (1,612,633)
June 30, 2014 Balance FY 2015 Billings FY 2015 Payments	\$ 1,424,592 1,008,032	\$ 18,357,189 5,553,123 (1,444,623)	\$ 1,169,382 165,739 	\$ 20,951,163 6,726,894 (1,444,623)
June 30, 2015 Balance FY 2016 Billings FY 2016 Payments	\$ 2,432,625 1,157,178	\$ 22,465,689 5,612,167 (2,022,335)	\$ 1,335,121 106,431 -	\$ 26,233,435 6,875,776 (2,022,335)
June 30, 2016 Balance FY 2017 Billings FY 2017 Payments	\$ 3,589,803 1,245,267	\$ 26,055,521 5,802,000 (2,309,186)	\$ 1,441,551 101,999 -	\$ 31,086,875 7,149,265 (2,309,186)
June 30, 2017 Balance FY 2018 Billings FY 2018 Payments	\$ 4,835,070 1,277,179	\$ 29,548,335 5,657,101 (4,108,108)	\$ 1,543,550 80,472	\$ 35,926,954 7,014,752 (4,108,108)
June 30, 2018 Balance FY 2019 Billings (12 Months) FY 2019 Payments (12 Months)	\$ 6,112,248 1,238,797	\$ 31,097,327 5,617,100 (5,241,583)	\$ 1,624,022 51,220	\$ 38,833,597 6,907,117 (5,241,583)
June 30, 2019 Balance FY 2020 Billings (6 Months) FY 2020 Payments (6 Months)	\$ 7,351,045 626,273	\$ 31,472,844 2,830,400 (656,657)	\$ 1,675,243 23,886	\$ 40,499,132 3,480,559 (656,657)
Balance as of December 31, 2019	\$ 7,977,318	\$ 33,646,587	\$ 1,699,129	\$ 43,323,034



Financial Services Audit Committee Communication

Date: March 27, 2020

To: Great Lakes Water Authority Audit Committee

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

Re: FY 2020 Q2 Construction Work-in-Progress Report through December 31, 2019

(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 2020 Q2 CWIP activity 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 December 31, 2019

For questions, please contact:

Andrew Sosnoski

Construction Accounting and Financial Reporting Manager

Phone: 313.999.2585

Email: Andrew.Sosnoski@glwater.org

Issued 3.20.2020

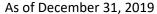


As of December 31, 2019

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Construction Work-in-Progress Quarterly Report





December 20, 2019

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 December 31, 2019. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2020–2024 Capital Improvement Plan (CIP) and look to inform decision makers as we finalize the FY 2021–2025 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.

Construction Work-in-Progress Rollforward: This table provides a 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 December 31, 2019. 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.





As of December 31, 2019

WATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2020-2024 and related CIP Plan for FY 2020 were based on anticipation of FY 2020 activity resulting in 75% of planned spend. The Water System spend for the period ending December 31, 2019 is 41.7% of the FY 2020 prorated board approved CIP, 46.4% of the FY 2020 prorated board approved CIP with project amendments, and 55.6% of the FY 2020 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2020 Board Approved CIP was amended from \$143,247,000 to \$128,871,025 is provided in the subsequent Project Amendment Summary section of this report.

Water System Projects	FY 2019 CIP	FY 2019 Activity	FY 2019 Percentage			FY 2020 Prorated (Six Months)	FY 2020 Activity (Unaudited)	FY 2020 Percentage
FY 2019 Board Approved CIP FY 2019 Board Approved CIP With Project Amendments	\$ 66,038,000 72,348,044	\$ 61,583,574 61,583,574	93.3% 85.1%					
FY 2020 Board Approved CIP FY 2020 Board Approved CIP With Project Amendments FY 2020 Capital Spend Rate Assumption (SRA)				\$ 143,247,000 128,871,025 107,435,250	\$ \$ \$	71,623,500 64,435,513 53,717,625	\$ 29,887,218 29,887,218 29,887,218	41.7% 46.4% 55.6%



As of December 31, 2019

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 2020 2nd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
122001	WS-681	42-Inch Parallel Water Main
122009	WS-691	Water System Improvements in Joy Road from Southfield Road to Trinity

\$171.6 million is in CWIP as of December 31, 2019 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.



As of December 31, 2019

					FY 2020		Life to Date			
					FY 2020 Board		Capitalization		Life to Date	Life to Date
		Total Project Plan		FY 2020	Approved CIP	FY 2020	Through	CWIP Balance	Activity through	Activity /
		Estimate From	CWIP Balance	Board	With Project	Activity through	December 31,	December 31,	December 31,	Total
Project	Project Name	FY 2020 - 2024 CIP	July 1, 2019	Approved CIP	Amendments	December 31, 2019	2019	2019	2019	Project Plan
	Energy Management: Lake Huron Water									
111001	Treatment Plant Low Lift Pumping	\$ 52.388.000	t 14002	¢ 401.000	d 402 E00	\$ 20.498	\$ -	\$ 34.581	¢ 24 F01	0%
111001 111002	Improvements LHWTP Backflow Replacement	\$ 52,388,000 : 8,324,000	\$ 14,083 6,836,980	\$ 401,000 1,882,000	\$ 493,500 1,882,000	1,443,750	155,348	\$ 34,581 8,280,730	\$ 34,581 8,436,078	101%
111002	Electrical Tunnel Rehabilitation at Lake	8,324,000	0,830,980	1,882,000	1,882,000	1,443,750	155,348	8,280,730	8,430,078	101%
111004	Huron WTP	4,749,000	2,768,607	4,296,000	1,275,214	1,056,798	_	3,825,405	3,825,405	81%
111004	Replacement of Filter Instrumentation and	4,749,000	2,700,007	4,290,000	1,273,214	1,030,790	-	3,023,403	3,023,403	0170
	Raw Water Flow Metering Improvements at									
111006	Lake	10,789,000	777,960	3,333,000	3,333,000	262,882		1,040,842	1,040,842	10%
111000	Lake	10,707,000	777,500	3,333,000	3,333,000	202,002		1,040,042	1,040,042	10 /0
	Lake Huron WTP-Raw Sludge Clarifier and									
111007	Raw Sludge Pumping System Improvements	9,799,000	639,986	4,660,000	3,738,368	2,117,689	_	2,757,675	2,757,675	28%
111007	LHWTP Architectural Programming - Lab	300,000	-	-	-	110		110	110	0%
111000	2111111 In Cintectural Freguenium g 200	500,000				110		110	110	0 70
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	26,106,000	35,864	9,030,000	9.030.000	44,180	_	80,044	80,044	0%
111007	Low Lift Pumping Plant Caisson	20,100,000	55,501	3,000,000	3,000,000	11,100		00,011	00,011	070
112002	Rehabilitation at Northeast WTP	1,565,000	1,134,767	203,000	203,000	21,786	_	1,156,553	1,156,553	74%
112003	NE WTP High Lift Pumping Electrical	62,234,000	-,201,101	-	-		-	-,200,000	-,	0%
	Northeast Water Treatment Plant -	0=,=0 1,000								2,0
	Replacement of Covers for Process Water									
112005	Conduits	813,000	13,356	166,000	310,000	2,022	-	15,378	15,378	2%
	Northeast Water Treatment Plant Flocculator									
112006	Replacements	2,718,000	2,891	1,356,000	1,356,000	28,643	-	31,534	31,534	1%
	High Lift Pump Discharge Valve Actuators									
113002	Replacement at Southwest WTP	5,432,000	2,479,490	2,876,000	3,028,000	1,826,843	-	4,306,334	4,306,334	79%
113003	Replacement of Butterfly Valves	148,286,000	-	-	-	110	-	110	110	0%
	Residual Handling Facility's Decant Flow									
113004	Modifications at Southwest WTP	898,000	-	380,000	380,000	1,822	853,219	1,822	855,041	95%
113006	SW WTP Chloring Scrubber	7,032,000	-	-	-	-	-	-	-	0%
113007	Architectural and Building Mechanical	37,336,000	-	-	-	-	-	-	-	0%
	Springwells Water Treatment Plant 1958									
114001	Filter Rehabilitation and Auxiliary Facilities	97,288,000	73,955,623	-	1,255,609	3,550,074	22,738,455	77,505,698	100,244,153	103%
	Springwells Water Treatment Plant - Low Lift									
114002	and High Lift Pump Station	114,816,000	2,080,861	5,985,000	6,308,877	725,873	-	2,806,735	2,806,735	2%
	Water Production Flow Metering									
114003	Improvements at NE, SW, and SPW WTP	7,105,000	6,331,921	80,000	713,282	891,578	-	7,223,499	7,223,499	102%
	Springwells WTP Admin Building									
114005	Improvements	8,125,000	10,555	413,000	527,664	437,705	-	448,260	448,260	6%
444006	Replacement of Rapid Mix Units at	4.404.000	•	64.000	64.000	0.000	4 004 000	0.000	4 000 400	0001
114006	Springwells WTP 1958 Process Train	1,124,000	0	61,000	61,000	9,390	1,021,039	9,390	1,030,429	92%
114007	Powder Activated Carbon Systems	3,938,000	-	-	-	-	-	-	-	0%
	1930 Sedimentation Basin Sluice Gates,									
111000	Guides & Hoists Improvements at Springwells	17 125 000	105 644	4.452.000	2.405.000	(15 505		011 240	011 210	Fo.
114008	WTP	17,125,000	195,644	4,153,000	2,185,000	615,597	-	811,240	811,240	5%
114000	Springwells Water Treatment Plant Service	211 000								00/
114009	Area Redundancy Study	311,000	2.047	-	-	0.434	-	12.200	12.200	0%
114010	Yard Piping Improvements	110,650,000	3,947	-	-	8,434	-	12,380	12,380	0%



As of December 31, 2019

		Total Project Plan		FY 2020	FY 2020 Board Approved CIP	FY 2020	Life to Date Capitalization Through	CWIP Ralance	Life to Date Activity through	Life to Date
Project	Project Name	Estimate From FY 2020 - 2024 CIP	CWIP Balance July 1, 2019	Board Approved CIP	With Project Amendments	Activity through	December 31, 2019	December 31, 2019	December 31,	Total Project Plan
	Steam, Condensate Return, and Compressed									
114011	Air Piping Improvements at Springwells WTP	24,989,000	2,373,087	5,392,000	5,453,373	4,320,279	_	6,693,366	6,693,366	27%
	Springwells Water Treatment Plant 1930									
114012	Filter Building-Roof Replacement	3,912,000	-	-	-	-	3,911,148	-	3,911,148	100%
	Springwells Reservoir Fill Line									
114013	Improvements	4,732,000	2,829,864	1,551,000	1,551,000	542,116	-	3,371,981	3,371,981	71%
444045	Emergency Grating Replacement at	2.466.000					2.265.002		2.265.002	050/
114015	Springwells WTP Springwells Water Treatment Plant 1958	3,466,000	•	•	-	-	3,365,903	-	3,365,903	97%
	Settled Water Conduits Concrete Pavement									
114016	Replacement	862,000	802	206,000	206,000	2.271	_	3.072	3,072	0%
111010	Springwells Water Treatment Plant	002,000	002	200,000	200,000	2,27 1		5,072	3,072	070
114017	Flocculator Drive Replacement	2,328,000	-	-	-		_	-	-	0%
	Yard Piping, Valves and Venturi Meters	, ,								
115001	Replacement at Water Works Park	53,580,000	1,758,683	17,333,000	17,333,000	475,213	-	2,233,897	2,233,897	4%
	Comprehensive Condition Assessment at									
115003	Waterworks Park WTP	855,000	513,538	153,000	153,000	55,898	-	569,437	569,437	67%
44=004	ater Works Park WTP Chlorine System	0.771.000		0.04=.000	0.04=.000	20= 400				=00/
115004	Upgrade WWP WTP Building Ventilation	8,771,000	6,685,754	2,047,000	2,047,000	207,182	-	6,892,936	6,892,936	79%
115005	Improvements	5,071,000		507,000	507,000	517		517	517	0%
113003	mprovements	3,071,000	-	307,000	307,000	317	-	317	317	0 70
	Pennsylvania, Springwells and Northeast Raw									
116002	Water Supply Tunnel Improvements based on	30,090,000	10,200,085	5,467,000	5,467,000	118,489	-	10,318,574	10,318,574	34%
	· · ·									
	Parallel 42-Inch Main in 24 Mile Road from									
122001	Rochester Station to Romeo Plank Road	33,566,000	33,241,721	-	-	-	33,241,721	-	33,241,721	99%
	Replacement of Five (5) PRV Pits of Treated									
122002	Water Transmission System	2,648,000	-	-	-	-	2,785,001	-	2,785,001	105%
122003	New Waterworks Park to Northeast Transmission Main	122 272 000	2 (15 102	071 000	(F0.222	901,588		2 517 701	2 51 6 701	3%
122003	96-inch Main Relocation, Isolation Valves	133,272,000	2,615,193	871,000	658,233	901,588	-	3,516,781	3,516,781	3%
122004	Installations, and New Parallel Main	132,666,000	1,787,389	5,000,000	5,000,000	13,133	_	1,800,523	1,800,523	1%
122005	Replacement Schoolcraft Watermain	18,062,000	141,171	8,100,000	2,328,644	10,589	-	151,760	151,760	1%
	Transmission System Water Main Work-Wick	2,722 ,722	,	-,,	,,-	.,		,	,	
122006	Road Parallel Water Main	31,918,000	416,882	18,028,000	8,401,361	754,646	-	1,171,527	1,171,527	4%
	Design and Construction of a new Newburgh									
	Road 24" Main along Newburgh Road									
122007	between Ch	5,239,000	783	-	-	802	-	1,585	1,585	0%
122000	Water System Improvements in Joy Road	107.000	106.001				106.004		106.004	1000/
122009	from Southfield Road to Trinity	107,000	106,881	4 727 000	2 027 000	700.406	106,881	1 705 510	106,881	100%
122011 122012	Park-Merriman Water Main-Final Phase 36-inch Water Main in Telegraph Road	8,203,000 9,573,000	986,024	4,737,000	3,937,000	799,486	9,986,284	1,785,510	1,785,510 9,986,284	22% 104%
144014	Lyon Township Transmission Main Extension	9,373,000	<u>-</u>	<u>-</u>	<u> </u>	<u> </u>	7,700,204	<u> </u>	7,700,204	10470
122013	Project	54,426,000	637,635	751,000	2,628,978	1,799,085	_	2,436,720	2,436,720	4%
122016	Downriver Transmission Loop	37,197,000	24,251	297,000	820,965	7,729	-	31,980	31,980	0%
	r	- , . , ,	,	. ,	,	7. = 2		- ,	- /	. 70



As of December 31, 2019

Project	Project Name	Total Project Plan Estimate From FY 2020 - 2024 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through December 31, 2019	Life to Date Capitalization Through December 31, 2019	CWIP Balance December 31, 2019	Life to Date Activity through December 31, 2019	Life to Date Activity / Total Project Plan
	7 Mile/Nevada Transmission Main Rehab and									
122017	Carrie/Nevada Flow Control Station	20,500,000	-	1,040,000	1,040,000	-	-	-	-	0%
132001	Wick Road Station Rehabilitation	165,000	135,073	-	-	-	-	135,073	135,073	82%
	Isolation Gate Valves for Line Pumps for West									
132003	Service Center Pumping Station	1,814,000	247,754	490,000	1,522,316	771,218	-	1,018,972	1,018,972	56%
	Hydraulic Surge Control for North Service									
132004	Center Pumping Station	215,000	214,771	-	-	-	-	214,771	214,771	100%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	2,929,000	289,594	2,515,000	2,399,138	296,487	-	586,081	586,081	20%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	2,160,000	97,185	592,000	592,000	19,837	-	117,022	117,022	5%
	Needs Assessment Study for all Water									
132008	Booster Pumping Stations	1,677,000	1,838,406	-	-	1,881	-	1,840,287	1,840,287	110%
	West Service Center/Duval Rd Division Valve									
132010	Upgrades	37,136,000	607,504	2,620,000	2,620,000	13,688	-	621,192	621,192	2%
132012	Ypsilanti PS Improvements	9,861,000	20,539	585,000	510,490	3,374	-	23,913	23,913	0%
132014	Adams Road Booster Pumping Improvements	5,674,000	-	-	-	-	-	-	-	0%
132015	Newburgh BPS	12,169,000	2,811	16,000	458,245	1,726	-	4,537	4,537	0%
132016	North Service Center BPS Improvements	24,920,000	-	-	-	-	-	-	-	0%
132017	North Service Center BPS - On-Site & Off	5,076,000	-	6,000	6,000	-	-	-	-	0%
132018	Schoolcraft BPS	10,564,000	-	-	-	-	-	-	-	0%
132019	Wick Road BPS - Switchgear	5,569,000	-	-	-	-	-	-	-	0%
132020	Franklin BPS - Isolation Gate Valves	10,109,000	-	-	-	-	-	-	-	0%
132021 132022	Imlay BPS - Replace VFDs, Pumps & Motors Joy Road BPS - Replace Reservoir Pumps	12,109,000 6,109,000	-	-	-	-	<u>-</u>	-	-	0%
132022	Northwest Booster Station Yard Piping	0,107,000								0 70
132025	Improvements	5,500,000	971	_	_	_	_	971	971	0%
170100	Allowance: WTP/Pump Station	39,811,000	-	3,000,000	3,000,000				- 7/1	0%
170100	Water Production Plant Flow Mettering	33,011,000		3,000,000	3,000,000					0 70
170102	Improvements at NE, SP & SW WTP		359.259	_	_	6.302	_	365,561	365,561	100%
	Belle Isle Water Supply Intake and Ice Boom		001,201			0,00		000,002	000,002	
170103	Improvements	_	3.278	_	_	_	286,596	3,278	289,874	100%
	Orion and Newburgh Pumping Stations		3,2.0							
170104	Improvements	-	170,664	-	-	7,104	1,907,825	177,768	2,085,593	100%
170109	Inspection of Raw Water Intakes and Tunnels	_	3,102,765	_	_	38,396	_	3,141,161	3,141,161	100%
170110	Raw Water Sampling Improvements	-	2,926	-	-	-	-	2,926	2,926	100%
170121	Franklin PS Valve Rehab	-	38,681	-	-	416,786	-	455,467	455,467	100%
170122	Meter Pit at Brownstown Township	-	133,306	-	-	71,090	-	204,396	204,396	100%
			,3			,. >0		,		,
	As Needed Construction Materials,									
170200	Environmental Media and Special Allowance	1,618,000		572,000	572,000			-		0%
170201	Construction & Environmental Testing	-	63,443	-	-	(24,045)	-	39,397	39,397	100%



As of December 31, 2019

Project	Project Name	Total Project Plan Estimate From FY 2020 - 2024 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through December 31, 2019	Life to Date Capitalization Through December 31, 2019	CWIP Balance December 31, 2019	Life to Date Activity through December 31, 2019	Life to Date Activity / Total Project Plan
170300	Water Treatment Plant Automation Program	7,740,000	_	1,561,000	1,561,000	_	-	-	-	0%
170301	Water Plant Automation	-	1,657,645	-	-	97,497	-	1,755,142	1,755,142	100%
170400	Water Transmission Improvement Program	110,656,000	-	1,500,000	1,500,000	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station Transmission System Valve Assessment and	-	1,643,165	-	-	15,800	-	1,658,965	1,658,965	100%
170500	Rehabilitation/Replacement Program	36,704,000	-	4,000,000	4,000,000	-	-	-	-	0%
170502	Transmission System Valve Assessment and Rehabilitation/Replaceme Water Transmission Main Asset Assessment	-	0	-	-	1,288,209	6,029,544	1,288,209	7,317,753	100%
170600	Program Reservoir Inspection, Design and	48,500,000	-	3,000,000	3,000,000	-	-	-	-	0%
170800	Rehabilitation Program Reservoir Inspection, Design and	59,164,000	-	5,128,000	632,000	-	-	-	-	0%
170801	Rehabilitation Suburban Water Meter Pit Rehabilitation and	-	456,574	-	4,513,500	556,363	-	1,012,938	1,012,938	100%
170900	Meter Replacement Program Suburban Water Meter Pit Rehabilitation and	43,797,000	-	4,000,000	925,000	-	-	-	-	0%
170901	Meter Replacement	-	1,237,565	-	3,075,000	1,171,576	_	2,409,140	2,409,140	100%
171400	Energy Management Program	5,787,000	-	-	-	-	-	-	-	0%
171500	Roof Replacement - Var Facilities Program	6,707,000	-	2,657,000	-	-	-	-	-	0%
171501	Roof Replacement - Var Facilities Program	-	119,283	-	2,948,089	1,142,543	-	1,261,826	1,261,826	100%
331001	Roof Replacement - Var Water Facilities	5,425,000	-	-	-	-	-	-	-	0%
341001	Security Infrastructure Improvements	-	962,673	-	1,173,179	916,122	-	1,878,795	1,878,795	100%
351001	Water Facility Lighting Renovations Data Center Reliability/Availability	500,000	6,211	250,000	250,000	457	-	6,667	6,667	1%
361002	Improvements	_	16.080	_	_		_	16.080	16.080	100%
380600	General Engineering Services Allowance	95,000	-	-	-	-	-	-	-	0%
380601	General Engineering Services Allowance	-	674	-	-	-	-	674	674	100%
	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services									
380700	Allowance	620,000	-	-	-	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	2,500,000	-	-	-	-	-	-	-	0%
Grand Total		\$ 1,888,664,000	· · · · · · · · · · · · · · · · · · ·	\$ 143,247,000	· · · · · · · · · · · · · · · · · · ·	\$ 29,887,218	\$118,844,199	\$ 171,569,699	\$ 290,413,898	15%
			Pro	ject Amendments	\$ (14,375,975)					





As of December 31, 2019

FY 2020 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 2020 Capital Improvement Plan.

\$14.4 million of Capital Reserve project amendments have been prepared as of December 31, 2019 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.





As of December 31, 2019

Great Lakes Water Authority Water System Project Amendment Summary Unaudited Activity For the Fiscal Year Ended December 31, 2019

		Program /		
Project	Project	Allowance	Capital Reserve Gra	and Total
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements		\$ 92,500 \$	92,500
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP		(3,020,786)	(3,020,786)
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements		(921,633)	(921,633)
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits		144,000	144,000
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP		152,000	152,000
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities		1,255,609	1,255,609
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station		323,877	323,877
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP		633,282	633,282
114005	Springwells WTP Admin Building Improvements		114,664	114,664
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP		(1,968,000)	(1,968,000)
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP		61,373	61,373
122003	New Waterworks Park to Northeast Transmission Main		(212,767)	(212,767)
122005	Replacement Schoolcraft Watermain		(5,771,356)	(5,771,356)
122006	Transmission System Water Main Work-Wick Road Parallel Water Main		\$ (9,626,639) \$	(9,626,639)
122011	Park-Merriman Water Main-Final Phase		(800,000)	(800,000)
122013	Lyon Township Transmission Main Extension Project		1,877,978	1,877,978
122016	Downriver Transmission Loop		523,965	523,965
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station		1,032,316	1,032,316
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica		(115,862)	(115,862)
132012	Ypsilanti PS Improvements		\$ (74,510) \$	(74,510)
132015	Newburgh BPS		442,245	442,245
170800	Reservoir Inspection, Design and Rehabilitation Program	(4,496,000)		(4,496,000)
170801	Reservoir Inspection, Design and Rehabilitation	4,496,000	17,500	4,513,500
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	(3,075,000)		(3,075,000)
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	3,075,000		3,075,000
171500	Roof Replacement - Var Water Facilities Program		(2,657,000)	(2,657,000)
171501	Roof Replacement - Var Water Facilities		2,948,089	2,948,089
341001	Security Infrastructure Improvements		\$ 1,173,179 \$	1,173,179
Grand Total		\$ -	\$ (14,375,974) \$	(14,375,974)



WASTEWATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2020-2024 and related CIP Plan for FY 2020 were based on anticipation of FY 2020 activity resulting in 75% of planned spend. The Water System spend for the period ending December 31, 2019 is 37.1% of the FY 2020 prorated board approved CIP, 38.2% of the FY 2020 prorated board approved CIP with project amendments, and 49.4% of the FY 2020 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2020 Board Approved CIP was amended from \$161,480,000 to \$156,584,005 is provided in the subsequent Project Amendment Summary section of this report.

						FY 2020	FY 2020	
			FY 2019	FY 2019		Prorated	Activity	FY 2020
Wastewater System Projects		FY 2019 CIP	Activity	Percentage	FY 2020 CIP	(Six Months)	(Unaudited)	Percentage
FY 2019 Board Approved CIP	Ş	105,183,000	82,133,532	78.1%				
FY 2019 Board Approved CIP With Project Amendments		100,264,934	82,133,532	81.9%				
FY 2020 Board Approved CIP				\$	161,480,000	80,740,000	29,924,759	37.1%
FY 2020 Board Approved CIP With Project Amendments					156,584,005	78,292,003	29,924,759	38.2%
FY 2020 Capital Spend Rate Assumption (SRA)					121,110,000	60,555,000	29,924,759	49.4%



As of December 31, 2019

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 2020 2nd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
213005	CON-229	Complex I Incineration Heating
260606	1802791	Puritan Fenkell Roof Replacement
331002	1803227	Dewatering Complex II Roof Replacement

\$186.7 million is in CWIP as of December 31, 2019 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 2020 Rollforward
Unaudited Activity For the Fiscal Quarter Ended December 31, 2019

		Total Project Plan		FY 2020	FY 2020 Board Approved CIP	FY 2020	Life to Date Capitalization Through		Life to Date Activity through	Life to Date Activity /
Project	Project Name	Estimate From FY 2020 - 2024 CIP	CWIP Balance July 1, 2019	Board Approved CIP	With Project Amendments	Activity through December 31, 2019	December 31, 2019	CWIP Balance December 31, 2019	December 31, 2019	Total Project Plan
	Roof Replacement - Var Facilities		, , ,			,		,		
171501	Program	\$ - \$	- \$	- \$	83,000	\$ 83,000	- :	\$ 83,000	\$ 83,000	100%
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	54,858,000	45,368,717	7,982,000	7,982,000	5,645,273	-	51,013,990	51,013,990	93%
	Pump Station No. 2 Pumping									
211002	Improvments	3,812,000	1,911,850	1,222,000	1,222,000	51,227	-	1,963,077	1,963,077	51%
	Pump Station 1 Rack & Grit and MPI Sampling Station 1									
211004	Improvements	27,198,000	26,502,582	869,000	869,000	809,970	-	27,312,552	27,312,552	100%
211005	Pump Station No. 2 Improvements	21,599,000	1,002	-	-	(1,002)	-	0	0	0%
211006	Pump Station No. 1 Improvements	22,315,000	6,307	1,803,000	1,803,000	833,334	_	839,641	839,641	4%
211000	Replacement of Bar Racks and Grit Collection System at Pump Station	22,313,000	0,507	1,000,000	1,000,000	000,001		007,011	007,011	170
211007	No. 2	17,836,000	628	269,000	269,000	133	-	761	761	0%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station - 1 and Complex B Sludge Lines Rehabilitation of the Circular Primary Clarifier Scum Removal	10,566,000	200,048	2,950,000	3,950,000	876,828	-	1,076,877	1,076,877	10%
211009	System	11,394,000	30	_	_		_	30	30	0%
212002	Study, Design, & Construction,Management Services for Modified Detroit River Outfall No. 2 - WRRF	-	10,821,153	-	-	(1,853)	-	10,819,300	10,819,300	100%
212003	Aeration System Improvements	16,682,000	16,356,789			162,620		16,519,409	16,519,409	99%
212003	ProjectChlorination/Dechlorinatio n Process Equipment	10,082,000	10,330,769	-	-	102,020	-	10,319,409	10,319,409	99%
212004	Improvements	5,045,000	192,917	2,345,000	2,903,000	87,859	-	280,776	280,776	6%
	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services									
212006	Contract	48,033,000	41,691,377	4,583,000	4,731,155	1,013,560	-	42,704,937	42,704,937	89%
212007	Rehabilitation of the Secondary	20 110 000								001
212007	Clarifiers WRRF Rehabilitation of	30,118,000	-	-	-	-	-	<u>-</u>	-	0%
212008	Intermediate Lift	20,833,000	_	229,000	229,000	-			_	0%
	Rehabilitation of Central Offload	_=,,==,=00			,					370
213002	Facility	16,179,000	-	7,696,000	7,696,000	-	-	-	-	0%
213005	Complex I Incinerators Decommissioning and Reusability	4,452,000	369,648	_	_	22	369,671	-	369,671	8%
	3,	, - ,	,-				,-		, . =	0



Great Lakes Water Authority Wastewater System Construction Work-in-Progress (CWIP) FY 2020 Rollforward Unaudited Activity For the Fiscal Quarter Ended December 31, 2019

Project	Project Name	Total Project Plan Estimate From FY 2020 - 2024 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through December 31, 2019	Life to Date Capitalization Through December 31, 2019	CWIP Balance December 31, 2019	Life to Date Activity through December 31, 2019	Life to Date Activity / Total Project Plan
Project	Improvements to Sludge Feed	FY 2020 - 2024 CIP	July 1, 2019	Approved CIP	Amenuments	December 31, 2019	2019	December 31, 2019	2019	Project Plan
213006	Pumps at Dewatering Facilities	3,726,000	4,856	_	_	_	_	4,856	4,856	0%
213000	Construction of the Improved	3,720,000	1,030					1,030	1,030	0 70
	Sludge Conveyance and Lighting									
213007	System at the WWTP	20,049,000	10,809,195	8,711,000	8,711,000	3,350,805	-	14,160,000	14,160,000	71%
	Rehabilitation of the Wet and Dry	.,,	.,,	, , , , , , , , , , , , , , , , , , , ,	-, ,	-,,		,,	,,	
213008	Ash Handling Systems	18,505,000	85	111,000	111,000	31,192	-	31,276	31,276	0%
	Phosphorous Recovery Facility at									
213009	the WWRF	•	(99)	•		99	-	-	-	100%
	Relocation of Industrial Waste									
	Division and Analytical Laboratory									
214001	Operations	10,968,000	17,017	7,567,000	8,367,000	926,845	2,282,260	943,863	3,226,122	29%
	Rehabilitation of Various Sampling									
	Sites and PS# 2 Ferric Chloride			0.001.111	0.001.001					
216004	System at WWTP	5,576,000	814,368	3,921,000	3,921,000	416,868	-	1,231,236	1,231,236	22%
	Rehabilitation of the Screened Final Effluent (SFE) Pump Station									
216006	and Secondary Water System	24,853,000	17,581	323,000	323,000	16,951	-	34,532	34,532	0%
	DTE Primary Electric 3rd Feed									
216007	Supply Line to the WRRF	7,447,000	2,194,169	1,381,000	1,381,000	•	543,500	2,194,169	2,737,669	37%
216008 216009	Rehabilitation of Screened Final Effluent (SFE) Pump Station Logistics & Material Facility	24,948,000		1,091,000	1,091,000	2,951	-	- 2,951	- 2,951	0% 100%
210009	Intercommunity Relief Sewer	-	•	-		2,731	-	2,731	2,731	10070
	Modifications in Detroit Oakwood									
222001	District	38,031,000	_	_	_	_	_	_	_	0%
222001	Detroit River Interceptor	50,051,000								070
222002	Evaluation and Rehabilitation	49,071,000	10,611,644	10,000,000	4,049,445	5,997,970	-	16,609,614	16,609,614	34%
222003	North Interceptor East Arm (NIEA) Evaluation and Rehabilitation	30,000,000	<u>-</u>	15,000,000	15,000,000	-		-	<u>-</u>	0%
	Collection System Valve Remote									
222004	Operation Structures	07 022 000	4 246	2 500 000	2 500 000	22.072		20 100	20 100	007
222004	Improvements Fairview Pumping Station -	87,033,000	4,246	3,500,000	3,500,000	23,863		28,109	28,109	0%
232001	Replace Four Sanitary Pumps	30,442,000	3,475,448	18,000,000	16,265,405	1,943,244		5,418,692	5,418,692	18%
232001	Freud and Connor Creek Pump	30,444,000	3,473,440	10,000,000	10,403,403	1,743,444	-	3,410,092	3,410,074	10%
232002	Station Improvements	162,429,000	5,573,334	17,029,000	17,229,000	318,622	57,734	5,891,956	5,949,691	4%
202002	Northeast Pump Station	102,127,000	0,070,001	17,027,000	17,227,000	310,022	37,731	3,071,730	5,717,071	1 /0
232003	Improvements	31,500,000	_	7,000,000	7,000,000	_	_	_	_	0%
	Collection System In System Storage Devices(ISDs)	52,555,555		7,000,000	7,000,000					
233002	Improvements	-	235	-	-	-	-	235	235	100%
251002	Wastewater System Wide Instrumentation & Controls Software and Hardware Upgrade	-	71	-	<u>-</u>	-	-	71	71	100%



Great Lakes Water Authority Wastewater System Construction Work-in-Progress (CWIP) FY 2020 Rollforward Unaudited Activity For the Fiscal Quarter Ended December 31, 2019

					FY 2020		Life to Date			
		Total Project Plan		FY 2020	Board Approved CIP	FY 2020	Capitalization Through		Life to Date Activity through	Life to Date Activity /
		Estimate From	CWIP Balance	Board	With Project	Activity through	December 31,	CWIP Balance	December 31,	Total
Project	Project Name	FY 2020 - 2024 CIP	July 1, 2019	Approved CIP	Amendments	December 31, 2019	2019	December 31, 2019	2019	Project Plan
	Water Resource Recovery Facility (WRRF), Lift Station & Wastewater									
260100	Collection System Allowance	34,038,000	-	1,100,000	1,100,000	-	-	-	-	0%
260200	Sewer and Interceptor Evaluation	102.164.000		45 000 000	6.550.040					00/
260200	and Rehabilitation Program Conveyance System Interceptor	192,164,000	-	15,000,000	6,550,048	-	-	-		0%
260201	Rehab	_	4,810,116	_	7,400,000	3,388,808	9,176,553	8,198,924	17,375,476	100%
200201	Conveyance System Interceptor		1,010,110		7,100,000	3,500,000	3,17,0,000	0,170,721	17,070,170	10070
260202	Rehab	-	17,031	-	-	2,420	-	19,451	19,451	100%
	Conveyance System Interceptor									
260203	Rehab	-	4,642,133	-	-	-	-	4,642,133	4,642,133	100%
	Energy Services for Rehabilitation									
260204	of Conveyance Sewer System	-	133	-	1,049,952	144,555	_	144,688	144,688	100%
260500	CSO Outfall Rehab	89,188,000	-	15,102,000	10,302,925	-	-	-	-	0%
260503	Collection System Backwater Gates	-	760	-	-	-	-	760	760	100%
260504	Rehabilitation of Outfalls - Phase II				3,000,000	252,114	_	252,114	252,114	100%
200304	Rehabilitation of Outfalls - Phase				3,000,000	232,114		232,114	232,114	10070
260505	IV	-	-	-	1,799,075	-	-	<u>-</u>	-	100%
260600	CSO Facilities Improvements	63,591,000	-	5,604,000	3,421,000	-	-	-	-	0%
	Oakwood Drain Valve									
260601	Improvements	-	539,857	-	33,000	75,429	-	615,286	615,286	100%
260602	CSO Fire Alarm System Improvements		812,407			176.946	_	989,353	989,353	100%
260603	Conner Creek CSO Basin Rehab	-	4,404,704	-	775,000	1,299,834	-	5,704,538	5,704,538	100%
260605	CSO Faciliaties CA	-	16,914	-	-	(16,914)	-	-	-	100%
260606	Puritan Fenkell Roof Replacement	-	1,944	-	-	344,596	346,540	-	346,540	100%
0.000	1:1 CDD El . : 11		244 542		450.000	EE2 ((0		005 404	005 101	1000/
260607	Lieb SDF Electrical Improvements Seven Mile RTB - Roof	-	241,513	-	450,000	753,668	-	995,181	995,181	100%
260608	Replacement	-	12,451	_	300,000	375,548	_	387,999	387,999	100%
200000	Seven Mile RTB - Parking Lot /		12,101		200,000	0, 0,010		507,555	001,333	10070
260609	Sitework	-	23,197	-	400,000	15,554	-	38,751	38,751	100%
260610	Baby Creek MAU Replacement	-	1,773	-	-	245,699	-	247,473	247,473	100%
000011	THIAGI.		F 202		225 000	42.204		10.665	40.665	1000/
260611	HVAC Improvements At Lieb SDF	-	5,283	-	225,000	13,381	-	18,665	18,665	100%
260613	Baby Creek HVAC Improvements	_	76	-	_	403	-	479	479	100%
200013	CSO Facilities Structural		70			103		1/9	17.7	10070
260614	Improvements	-	335,143	-	-	(109,570)	-	225,573	225,573	100%
	PF & Lieb CSO Facilities Site &									
260615	Drainage Improvements	-	-	-	-	1,520	-	1,520	1,520	100%
260617	St. Aubin Chemical Disinfection					49,800		49,800	49,800	100%
200017	Improvements	-	-	-	-	49,800	-	49,800	49,800	100%



Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2020 Rollforward
Unaudited Activity For the Fiscal Quarter Ended December 31, 2019

		Total Project Plan Estimate From	CWIP Balance	FY 2020	FY 2020 Board Approved CIP With Project	FY 2020	Life to Date Capitalization Through	CWIP Balance	Life to Date Activity through December 31,	Life to Date Activity / Total
Project	Project Name	FY 2020 - 2024 CIP	July 1, 2019	Board Approved CIP	Amendments	Activity through December 31, 2019	December 31, 2019	December 31, 2019	2019	Project Plan
	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening									
331002	Disinfection Facilities (SDF)	9,709,000	802,470	1,092,000	1,092,000	320,586	1,123,056	-	1,123,056	12%
341001	Security Infrastructure Improvements General Engineering Services		102,924	-	-	-	-	102,924	102,924	100%
380600	Allowance	1,000	_	_	_	-	_	-	_	0%
380601	General Engineering Services Allowance	-	632	-	-	-	-	632	632	100%
381000	Energy Management: Electric Metering Improvement Program	2,500,000		_		_				0%
Grand Total		\$ 1,246,689,000	Ψ 1,0,,10,00,	\$ 161,480,000 Sect Amendments	5 156,584,005 6 (4,895,995)	\$ 29,924,759	\$ 190,362,461	\$ 221,802,152	\$ 412,164,613	33%



As of December 31, 2019

FY 2020 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 2020 Capital Improvement Plan.

\$4.9 million of Capital Reserve project amendments have been prepared as of December 31, 2019 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.



As of December 31, 2019

Great Lakes Water Authority Wastewater System Project Amendment Summary Unaudited Activity For the Fiscal Year Ended December 31, 2019

		Program /			
Project	Project	_	Capital Reserve	Gran	d Total
171501	Roof Replacement - Var Water Facilities		83,000		83,000
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines		1,000,000		1,000,000
212004	Chlorination/Dechlorination Process Equipment Improvements		558,000		558,000
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	:	\$ 148,155	\$	148,155
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	:	\$ 800,000	\$	800,000
222002	Detroit River Interceptor Evaluation and Rehabilitation	:	\$ (5,950,555)	\$	(5,950,555)
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	:	\$ (1,734,595)	\$	(1,734,595)
232002	Freud and Connor Creek Pump Station Improvements	:	\$ 200,000	\$	200,000
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	(8,449,952)			(8,449,952)
260201	Conveyance System Interceptor Rehab	7,400,000			7,400,000
260204	Energy Services for Rehabilitation of Conveyance Sewer System	1,049,952			1,049,952
260500	CSO Outfall Rehab	(4,799,075)			(4,799,075)
260504	Rehabilitation of Outfalls - Phase II	3,000,000			3,000,000
260505	Rehabilitation of Outfalls - Phase IV	\$ 1,799,075		\$	1,799,075
260600	CSO Facilities Improvements	\$ (2,183,000)		\$	(2,183,000)
260601	Oakwood Drain Valve Improvements	\$ 33,000		\$	33,000
260603	Conner Creek CSO Basin Rehab	\$ 775,000		\$	775,000
260607	Lieb SDF Electrical Improvements	\$ 450,000		\$	450,000
260608	Seven Mile RTB - Roof Replacement	\$ 300,000		\$	300,000
260609	Seven Mile RTB - Parking Lot / Sitework	\$ 400,000		\$	400,000
260611	HVAC Improvements At Lieb SDF	\$ 225,000		\$	225,000
Grand Total		\$ - :	\$ (4,895,995)	\$	(4,895,995)