



Audit Committee

Friday, August 21, 2020 at 8:00 a.m.

GLWater.org

Join by phone Dial-In: 313-771-3116

Conference ID: 50197058

AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. July 17, 2020 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
 - A. Update - Water Residential Assistance Program Evaluation/Redesign (Page 6)
& Request for Proposal Process
7. NEW BUSINESS
 - A. Lead & Copper Rule Sample Testing Fees (Page 9)
8. REPORTS
 - A. CFO Update (page 13)
 - B. Monthly Financial Report for May 2020 (Page 19)
 - C. Quarterly Investment Report (Page 20)
 - D. Quarterly Debt Report (Page 51)
 - E. Shared Services Status Report (Page 64)
9. COMMUNICATIONS
 - A. *The Procurement Pipeline* for July 2020 (Page 66)
 - B. *The Procurement Pipeline* for August 2020 (Page 68)
10. LOOK AHEAD
 - A. Next Audit Committee Meeting: September 18, 2020 at 8:00 a.m.
11. OTHER MATTERS
12. ADJOURNMENT

Note: Binders 1 and 2 have been combined in agenda order and the document was renumbered.

Note: PDF page 100 has been updated.



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Friday, July 17, 2020

8:00 AM

Telephonic Meeting

Call-In Number: 1-313-771-3116

Conference ID: 312055538

Telephonic Meeting

Call-In Number: 1-313-771-3116 Conference ID: 312055538

1. Call To Order

Chairperson Baker called the meeting to order at 8:04 a.m.

2. Quorum Call

Present: 3 - Chairperson Brian Baker, Director Gary Brown, and Director John J. Zech

Note: Director Zech joined the meeting at 8:15 a.m. under New Business Item 7A.

3. Approval of Agenda

Chairperson Baker requested a Motion to approve the Agenda.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

4. Approval of Minutes

A. [2020-237](#) Audit Committee Minutes of June 19, 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [4A Audit Committee Meeting Minutes - June 19, 2020](#)

Chairperson Baker requested a Motion to approve the June 19, 2020 Audit Committee Meeting Minutes.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

B. [2020-238](#) Audit Committee Minutes of June 24, 2020 Special Meeting

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [4B Special Audit Committee Meeting Minutes - June 24, 2020](#)

Chairperson Baker requested a Motion to approve the June 24, 2020 Special Audit Committee Meeting Minutes.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

There were no public comments.

6. Old Business

None

7. New Business**A.** [2020-243](#) Year-End Cash Review Status

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7A Year-End Cash Review 7.17.2020 Audit Committee REVISED](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2020-239](#) FY 2020 Yearend Financial Audit Planning

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7B 1 FY 2020 Annual Financial Audit Update Memo](#)
[7B 2 FY 2020 Annual Financial Audit Update BT Timeline](#)
[7B 3 Great Lakes Water Authority AUD 6-30-2020 - PS - Audit engagement letter](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2020-240](#) Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7C1 Approval of Series Ordinance- Water Supply System 7.17.2020](#)
[7C2 Board Letter- Approval of Water Supply System Series Ordinance 07.22.2020](#)
[7C3 Water Supply System Series Ordinance 2020-05](#)
[7C4 Water Supply System Series Ordinance Resolution](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Recommended for Approval to the Board of Directors

Agenda of July 22, 2020

The motion carried by a unanimous vote.

D. [2020-241](#) Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7D1 Approval of Series Ordinance- Sewage Disposal System 7.17.2020](#)
[7D2 Board Letter- Approval of Sewage Disposal System Series Ordinance 07.22.2020](#)
[7D3 Sewage Disposal System Series Ordinance 2020-06](#)
[7D4 Sewage Disposal System Series Ordinance Resolution](#)

Motion By: John J. Zech

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors

Agenda of July 22, 2020

The motion carried by a unanimous vote.

E. [2020-242](#) Proposed Policy Related to Acceptance of Gifts and Grants

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [7E1 Grants, Gifts, and Other Resources Delegation Policy](#)

[7E2 Proposed Grants Gift and Other Policy](#)

[7E3 Grants Gifts and other Resources Sample Report](#)

CFO Bateson will amend the policy to add an additional section entitled, "Scope," which will include "all" known activity.

Motion By: Gary Brown

Support By: John J. Zech

Action: Recommended for Approval to the Board of Directors as Amended
Agenda of July 22, 2020

The motion carried by a unanimous vote.

8. Reports

A. [2020-244](#) CFO Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8A1 CFO Update July 2020](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2020-245](#) Monthly Financial Report for April 2020

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8B - GLWA Monthly Financial Report April 2020](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2020-246](#) Capital Finance Report

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [8C Capital Finance Report thru April 2020](#)

Motion By: Gary Brown

Support By: John J. Zech

Action: Received and Filed

The motion carried by a unanimous vote.

9. Communications

None

10. Look Ahead

The next Audit Committee Meeting is scheduled for Friday, August 21, 2020 at 8:00 a.m.

11. Other Matters

None

12. Adjournment

Chairperson Baker requested a Motion to Adjourn.

Motion By: Gary Brown

Support By: John J. Zech

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 9:23 a.m.



Financial Services Audit Committee Communication

Date: August 21, 2020

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Update - Water Residential Assistance Program Evaluation/Redesign & Request for Proposal Process

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 scope of funding uses includes a) payment assistance and b) water audit and water conservation measures. Eligible residential customers with a past due bill and/or who are in active shut off can receive assistance with paying down arrears and receive \$25 toward monthly bill payment assistance annually up to \$1,000. High volume water users can receive a one-time home audit and home water conservation services of an average \$1,500 per household. To participate in WRAP, an applicant must have household gross incomes at or below 200% of the federal poverty income thresholds. Customers with water usage at or above 120% of the average residential usage are eligible to participate in a water audit and install water conservation measures. WRAP participants are also encouraged to participate in both financial coaching and water conservation workshops as well as other support services. The program is administered by Wayne Metro Community Action Agency (“Wayne Metro”), a nonprofit agency.

The WRAP began providing assistance to residents in the GLWA service area on March 1, 2016 and as of March 1, 2020 has committed over \$15.1 million in assistance and conservation funds to over 19,700 qualified WRAP participants. WRAP has the potential to serve over 100 communities within the GLWA service area, but in order to assist qualified households, each community must opt into the program and sign a Memorandum of Agreement (MOA) with Wayne Metro. To date, 77 communities have opted into WRAP.

The current contract for Water Residential Assistance Program Third Party Administrator (CS-010) with Wayne Metro will expire on December 31, 2020. There are two key tasks to

accomplish prior to the expiration of that contract. Both tasks rely heavily on stakeholder engagement.

Analysis: Before developing the request for proposals for the WRAP Administrator, GLWA first solicited quotations for a WRAP Advisor to evaluate the current program. The purpose of the WRAP Advisor engagement is to a) strengthen program effectiveness, b) develop scope and performance criteria for WRAP program provider performance, and c) better define and conduct program evaluation.

Through that process, GLWA engaged Public Sector Consultants (PSC) to serve as the WRAP Advisor. PSC is an objective, nonpartisan research and consulting firm based in Lansing and Detroit. They have been conducting program evaluations for more than 20 years and are well versed in a variety of process and impact evaluation methods, including developing theories of change and logic models, qualitative and quantitative data collection using tools such as focus groups and multimode surveys, in-depth informant interviews, cost-effectiveness analyses, and comprehensive data analyses to yield deep insights and actionable findings.

PSC began work on July 6, 2020 and since that time has completed meetings with GLWA's Chief Financial Officer and Financial Services team members, Detroit Water and Sewerage Department's (DWSD) Chief Financial Officer and Finance staff, Wayne Metro and GLWA's Chief Executive Officer and DWSD's Director and their respective General Counsels. PSC and GLWA will also have a focus group with GLWA Member Partners on August 20, 2020 which will be facilitated by Bridgeport Consulting. One-on-one meetings with each GLWA Board member are also being scheduled for the week of August 17th. A more detailed timeline is included in this report.

These meetings, and the feedback gathered, will be the basis for PSC's draft report and recommendations which is scheduled to be completed the week of September 7, 2020.

Once the evaluation of WRAP is complete, PSC will assist GLWA in drafting the scope of services for the WRAP Administrator Request for Proposal (RFP) with the recommended program changes and performance criteria. Based on the updated time schedule, the WRAP Administrator RFP will be advertised the week of September 21, 2020 the selected WRAP Administrator will start the first week of December 2020.

Timeline

See attached timeline for both tasks, as updated on August 13, 2020.

Budget Impact: None.

Proposed Action: Receive and file the report.

**Great Lakes Water Authority
Water Residential Assistance Program
Project Timeline as of August 13, 2020**

	<u>WRAP Program Advisor Engaged?</u>	<u>Original Week of:</u>	<u>Updated Week of:</u>
Task 1 - Program Evaluation and Redesign (Invitation to Quote)			
Phase 0 - Pre-Procurement		4/27/2020	4/27/2020
Phase 1 - Solicitation Development		4/27/2020	4/27/2020
Phase 2A - Advertisement		5/11/2020	5/11/2020
Phase 2B - Proposals Due		5/25/2020	5/25/2020
Phase 3 - Evaluation		6/1/2020	6/1/2020
Phase 4 - Contract Development		6/8/2020	6/8/2020
Phase 5 - Board Requirements		n/a	n/a
Phase 6 - Start Work	Yes	6/21/2020	7/6/2020
Task 2 – Core WRAP Administration (Structured Request for Proposal Process)			
Phase 0 - Pre-Procurement			
Develop RFP Background		5/11/2020	5/11/2020
GLWA Internal Kick-off Call	Yes	N/A	7/27/2020 *
Kick-off Meeting with Bridgeport- GLWA Member Partner Outreach	Yes	N/A	7/30/2020 *
Kick-off Meeting with GLWA CFO/Finance and DWSD CFO/Finance	Yes	N/A	8/6/2020 *
Meeting with GLWA 3rd Party WRAP Administrator	Yes	N/A	8/6/2020 *
Kick-off Meeting with GLWA CEO/DWSD Director	Yes	N/A	8/14/2020 *
Focus Group: Board	Yes	6/28/2020	8/17/2020
Focus Group: Member Partners	Yes	6/28/2020	8/20/2020 *
Focus Group: Original Program Designers	Yes	7/5/2020	8/24/2020
Program Design Report to Stakeholders	Yes	7/26/2020	9/7/2020
Phase 1 - Solicitation Development			
Draft 1 - Front End/Background	Yes	7/12/2020	8/31/2020
Draft 2 - post Stakeholder Report	Yes	8/2/2020	9/14/2020
Phase 2 - Advertisement			
Finalize RFP		8/16/2020	9/21/2020
Advertise date for RFP		8/16/2020	9/21/2020
Questions due		8/30/2020	10/5/2020
Pre-proposal conference		9/6/2020	10/12/2020
Proposals due		9/20/2020	10/26/2020
Phase 3 - Evaluation			
Minimum qualifications verified		9/20/2020	10/26/2020
Evaluations due		9/27/2020	11/2/2020
Oral interviews		10/4/2020	11/9/2020
Additional questions compiled		10/4/2020	11/9/2020
Responses from proposers		10/4/2020	11/9/2020
Responses distributed to Eval Team		10/4/2020	11/9/2020
Evaluation Team final selection		10/11/2020	11/16/2020
Phase 4 - Contract Development			
Negotiation		10/11/2020	11/16/2020
Preliminary Draft		10/11/2020	11/16/2020
Final Draft		10/25/2020	11/23/2020
Phase 5 - Board Requirements			
Prepare summary documents		10/11/2020	11/16/2020
Audit Committee Review		10/16/2020	11/20/2020
Board review/requested approval		10/28/2020	11/25/2020
Contract award			
Phase 6 - Project Execution and Management			
Contract execution		11/2/2020	11/30/2020
Start work		11/16/2020	12/7/2020

* Actual meeting date



Financial Services Audit Committee Communication

Date: August 21, 2020

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Lead & Copper Rule Water Sample Testing Fees for Member Partners

Background: The U.S. Environmental Protection Agency (EPA) now requires increased Lead and Copper rule (LCR) testing. This change significantly increased the volume of testing required by the Great Lakes Water Authority (GLWA) and its member partners starting with the testing cycle beginning June 2019. Based on input from the GLWA Water Quality Work Group, the GLWA's Water Quality Lab began offering LCR water sample testing as an optional service to assist member partners. GLWA seeks reimbursement of Water Quality Lab direct costs incurred for this service. The GLWA Legal team has determined the GLWA Board of Directors is required to adopt this water sample testing fee for use; however, since this is an optional fee for service, a simple majority approval is required.

Analysis: See attached Board Letter.

Proposed Action: The GLWA Audit Committee recommends the FY 2020 water sample testing fee of \$61.88 for FY 2020 and FY 2021 for approval by the GLWA Board of Directors at its meeting on Wednesday, August 26, 2020.

..Title

Approval to Implement FY 2020 Lead & Copper Rule Sample Testing Fee for Member Partners

..Body

Agenda of: August 26, 2020

Item No.: **2020-201**

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: August 26, 2020

RE: Adoption of FY 2020 and FY 2021 Lead & Copper Rule Sample Testing Fee for Member Partners

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **approves the FY 2020 and FY 2021 Lead & Copper Rule Sample Testing Fee for Member Partners** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The U.S. Environmental Protection Agency (EPA) now requires increased Lead and Copper Rule testing. This change significantly increased the volume of testing required by the Great Lakes Water Authority (GLWA) and its member partners, starting with the testing cycle beginning June 2019. Based on input from the GLWA Water Quality Work Group, GLWA's Water Quality Lab began offering Lead and Copper Rule water sample testing as an optional service to assist member partners. GLWA seeks reimbursement of Water Quality Lab direct costs incurred for this service. The GLWA Legal team has

determined the GLWA Board of Directors is required to adopt this water sample testing fee for use; however, since this is an optional fee for service, a simple majority approval is required.

JUSTIFICATION

The LCR sample testing process and related fee concept was originally discussed with member partners at a February 27, 2018 Water Quality Work Group meeting. The preliminary fee shared at that time was \$59.17. That fee was based on the calculation used to determine the amount for LCR water sample testing charged to the Detroit of Water and Sewerage Department (DWSD) as part of the Water Quality shared service (OPS-004) for FY 2017.

Since that time, the Shared Services and Water Quality teams have finalized Shared Services charges for FY 2017 through FY 2019 utilizing that same basis of calculation. The calculated rate increased 2% for FY 2018 to \$60.51 and increased 2% again in FY 2019 to \$61.88.

For sampling completed in fiscal year 2020, GLWA staff proposes a per sample fee of \$61.88 basing the fee on the most current annual cost data available (that is, fiscal year 2019) and the calculation established by the Shared Services team to support the OPS-004 agreement.

This fee includes GLWA actual costs for sample preservation, preparation, analyses, administration, coordination, and reporting to the State of Michigan. This sample testing fee is based on actual costs incurred during the year. In FY 2020, sixty member partners participated in the sample testing process and 2,828 samples were tested. With the proposed fee of \$61.88 GLWA would recover the direct costs of \$175,000.

Sample testing invoices for services provided in FY 2020 will be processed and sent to member partners following approval of this fee. Moving forward, this fee will be presented Board of Directors for review annually with the schedule of charges. The lead and copper rule sample testing fee will be adjusted annually in an amount equal to the change in the GLWA Water Quality Lab budget with a detailed fee analysis conducted by the Financial Services Area (FSA) and the Water Quality Lab every five years.

For FY 2021, the Water Quality Lab budget changed by less than one half of one percent (0.34%). As a result, FSA proposes no increase in the LCR water sample testing fee for FY 2021.

BUDGET IMPACT

Implementation of this process will result in a positive budget variance for the water system as a result of the direct cost recovery as noted above. If the level of activity for the current year (FY 2021) is consistent with the prior year (FY 2020), that amount is \$175,000. This activity will be reviewed as part of the quarterly budget amendments.

COMMITTEE REVIEW

This matter was reviewed by the Audit Committee at its meeting on August 21, 2020. The Audit Committee **[action pending]** that the GLWA Board approve the water sample testing fee for this optional member partner service as presented.

SHARED SERVICES IMPACT

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



Financial Services Audit Committee Communication

Date: August 21, 2020

To: Great Lakes Water Authority Audit Committee

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

Re: CFO Update

There are a number of matters that continue to evolve as we begin FY 2021.

FY 2021 Budget

At a recent Board meeting, staff was asked to evaluate the feasibility of further deferring the effective date of the charges from October 1, 2021. We are reviewing that topic as well as other recent developments.

1. The reality of COVID-19's impact on the investment portfolio is becoming evident. A rough estimate is a potential decrease in revenues equates to \$8 to \$10 million downward pressure on the budget.
2. The budgetary shortfall advance to DWSD is dependent on the level of collections versus the budget requirements. Attached are reports that the DWSD and GLWA team use to monitor the shortfall. While collections are within a reasonable amount compared with the prior year, the increase in budgeted expenditures increased. The combined shortfall total for FY 2021 to date is \$5 million (\$4.4 million for July 2020 and \$600 thousand for August 2020 through August 19, 2020). DWSD is presently evaluating measures to close that gap that has quickly evolved early in this fiscal year.
3. The upside to this report is that wholesale water system usage and revenue is above budget through August 7, 2020 for FY 2021. The increased usage of 608 mcf equates to a positive revenue variance of \$6.2 million.
4. Looming on the horizon is increased concern of the funding level of the City of Detroit's General Retirement System (GRS) given current economic conditions. Given that GLWA is a party to funding the closed system liability, this may impact the long-term financial plan. The GRS Board recently met on August 17, 2020 and has engaged a number of advisors to evaluate different actuarial and investment strategies. GLWA's staff and actuary continue to monitor the situation so that we are prepared as well.

Water Residential Assistance Program Evaluation

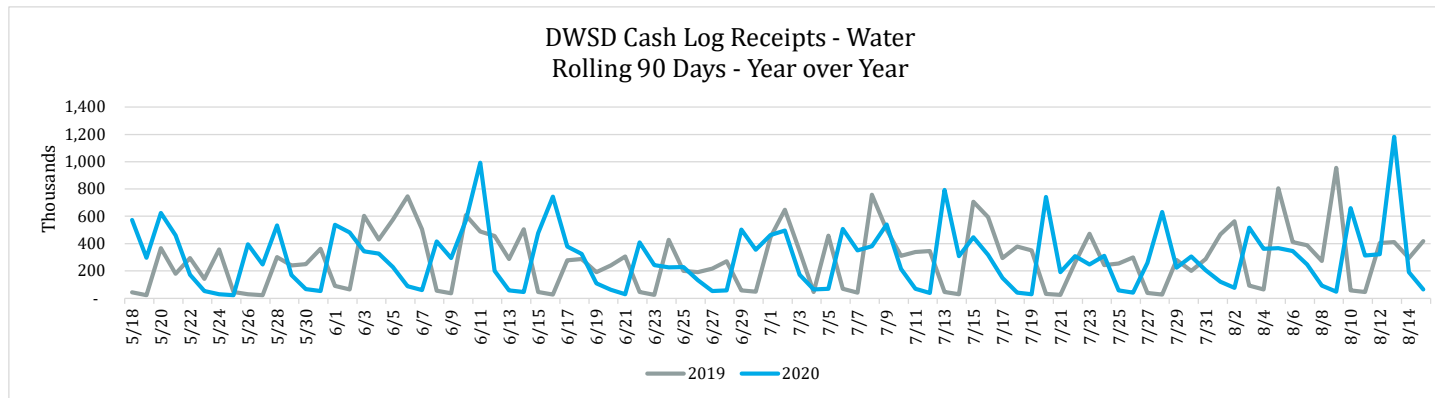
As you may recall, GLWA engaged Public Sector Consultants (PSC) to help GLWA evaluate WRAP to determine what parts of the program are working, which are not, and to gather suggestions about possible program changes. Based on the stakeholder feedback, PSC will create a report which will be used in developing the scope of services for the upcoming WRAP Program Administrator RFP. To date, PSC has interviewed GLWA's CEO, DWSD's Director, DWSD's CFO and Finance Team (twice), Wayne Metro (current program administrator), and a panel of suburban member partners yesterday. Board member interviews are being scheduled as well as other stakeholders. The project is going very well and we look forward to PSC's report in September.

FY 2022 + Charges Rollout Season Schedule

As we began working on the schedule for the upcoming budget and charges season, it became apparent that we would need to bring a proposed budget to the Board in December 2020. Given the lack of current year actual information that will be available for the effort for no other reason than calendar logistics, as well as being peak time for presenting the annual audit and related subsequent filings, we have begun to outline an alternative schedule for the implementation of charges from July 1 each year to October 1. This slide in the schedule would provide for additional time to present and deliberate on a budget and charges package rather than the rushed process that has occurred each year. This concept was shared at the One Water Co-Chair meeting and received positive feedback – in particular this may be a way to address frustration expressed by Member Partners in the annual survey related to the condensed schedule in receiving the charges worksheet with little time to react.

Sewer and Water Charges Methodology Schedule

We are also updating the GLWA One Water Charge Methodology Initiatives planner. The sewer charges work group continues their efforts with a report to the Board expected over the next few months. Given that many of the stakeholders engaged in that project will also be engaged in the water methodology discussion, it was determined that we should allow a "break: in between efforts. The new likely start date for that effort will be mid-calendar year 2021. An updated gannt chart will be presented next month.

**Monthly Analysis**

	2019	2020	Difference	
July:	9,118,700	8,972,787	(145,913)	-2%
June:	8,311,599	8,968,933	657,334	8%
May:	9,654,603	8,856,274	(798,329)	-8%
April:	9,225,296	6,563,586	(2,661,711)	-29%
March:	9,325,101	7,917,587	(1,407,514)	-15%
February:	8,645,312	9,229,561	584,249	7%
January:	8,569,406	10,097,681	1,528,275	18%

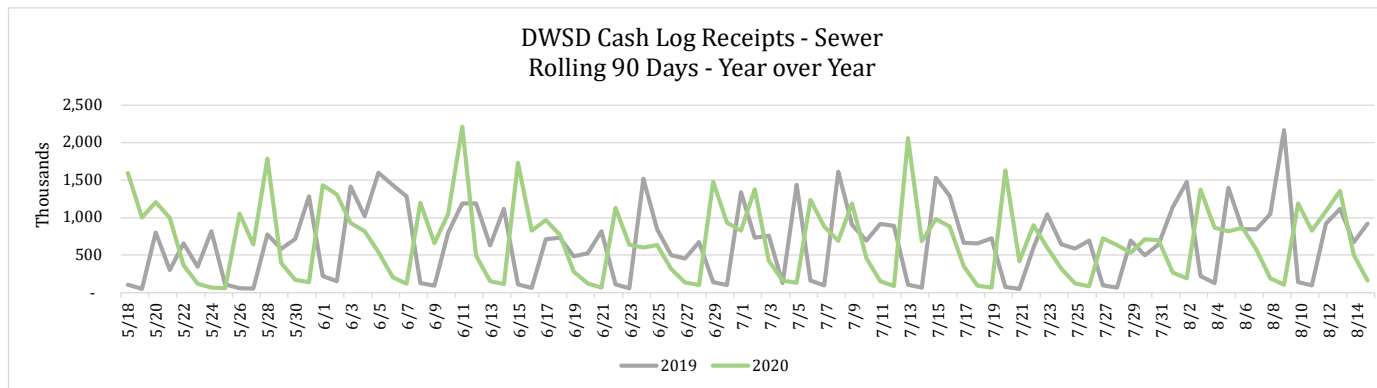
The purpose of this metric is to indicate the relative change in DWSD Water Cash Receipt Activity during the current 2020 pandemic in comparison to receipts over the same period in 2019. This % difference can be used as an assumption to drive potential net receipt projections.

DWSD Water System Cash Log Receipts - Weekly Analysis

	2019	2020	Difference	Variance
May 1-2	859,323	494,827	(364,497)	-42%
May 3-9	2,692,038	2,575,037	(117,000)	-4%
May 10-16	3,261,898	2,045,126	(1,216,772)	-37%
May 17-23	1,233,687	2,224,124	990,437	80%
May 24-31	1,607,657	1,517,160	(90,497)	-6%
May Total	9,654,603	8,856,274	(798,329)	-8%
June 1-6	2,510,662	2,002,049	(508,613)	-20%
June 7-13	2,437,227	2,593,174	155,947	6%
June 14-20	1,575,299	2,142,187	566,888	36%
June 21-27	1,411,282	1,316,750	(94,532)	-7%
June 28-30	377,128	914,772	537,644	143%
June Total	8,311,599	8,968,933	657,334	8%
July 1-4	1,485,158	1,198,167	(286,991)	-19%
July 5-11	2,474,111	2,135,059	(339,051)	-14%
July 12-18	2,391,145	2,090,576	(300,569)	-13%
July 19-25	1,637,429	1,885,844	248,415	15%
July 26-31	1,130,857	1,663,141	532,285	47%
July Total	9,118,700	8,972,787	(145,913)	-2%
August 1-8	3,064,844	2,134,070	(930,775)	-30%
August 9-15	2,586,957	2,781,093	194,136	8%
August to Date	5,651,802	4,915,163	(736,639)	-13%

The DWSD Cash Log does not take into account credit transfers between water and sewer or reductions due to NSF/Chargeback/Adjustment activity. A separate analysis is available to review net receipt activity.

Source file name: DWSD Cash Log Trend Analysis.xlsx

**Monthly Analysis**

	2019	2020	Difference	
July:	20,391,039	20,099,188	(291,851)	-1%
June:	20,100,899	21,962,798	1,861,899	9%
May:	21,292,676	22,585,148	1,292,472	6%
April:	20,478,348	16,687,255	(3,791,093)	-19%
March:	21,466,652	18,712,086	(2,754,566)	-13%
February:	20,259,062	22,233,662	1,974,600	10%
January:	20,571,500	22,857,168	2,285,668	11%

The purpose of this metric is to indicate the relative change in DWSD Water Cash Receipt Activity during the current 2020 pandemic in comparison to receipts over the same period in 2019. This % difference can be used as an assumption to drive potential net receipt projections.

The DWSD Cash Log does not take into account credit transfers between water and sewer or reductions due to NSF/Chargeback/Adjustment activity. A separate analysis is available to review net receipt activity.

DWSD Sewer System Cash Log Receipts - Weekly Analysis

	2019	2020	Difference	Variance
May 1-2	2,356,163	1,039,285	(1,316,879)	-56%
May 3-9	4,715,988	6,307,341	1,591,352	34%
May 10-16	6,912,801	5,525,000	(1,387,800)	-20%
May 17-23	2,908,869	5,397,576	2,488,707	86%
May 24-31	4,398,855	4,315,947	(82,908)	-2%
May Total	21,292,676	22,585,148	1,292,472	6%
June 1-6	5,837,818	5,234,634	(603,184)	-10%
June 7-13	5,308,152	5,886,139	577,987	11%
June 14-20	3,735,607	4,812,306	1,076,699	29%
June 21-27	4,304,579	3,515,509	(789,070)	-18%
June 28-30	914,743	2,514,210	1,599,467	175%
June Total	20,100,899	21,962,798	1,861,899	9%
July 1-4	2,956,265	2,784,195	(172,070)	-6%
July 5-11	5,821,961	4,736,037	(1,085,924)	-19%
July 12-18	5,201,281	5,142,456	(58,825)	-1%
July 19-25	3,720,221	4,049,346	329,126	9%
July 26-31	2,691,311	3,387,153	695,842	26%
July Total	20,391,039	20,099,188	(291,851)	-1%
August 1-8	7,096,527	5,149,610	(1,946,918)	-27%
August 9-15	6,033,964	5,223,970	(809,994)	-13%
August to Date	13,130,492	10,373,580	(2,756,911)	-21%

Source file name: DWSD Cash Log Trend Analysis.xlsx

Great Lakes Water Authority

Daily Dashboard

Sufficiency of Daily Cash Receipts vs. "Minimum Daily Requirement of Disbursements" (Daily Breakeven)

February 2020 thru August 2020

Date	Per GLWA Treasury			Forecast
	DWSD Gross Revenue Receipts to Trust Lockbox (Water + Sewer)	Minimum Daily Requirement of Disbursements	Other Activity	Cash Held for Benefit of DWSD - Total Water + Sewer
January Ending Cash Held Balance				151,768 ^a
February Ending Cash Held Balance			4,500,000 ^b	3,723,025 ^a
<i>Total February 2020 Net</i>			3,571,257	
March Ending Cash Held Balance				455,888 ^a
<i>March 11 - March 31, Net</i>			(9,529,485)	
<i>Total March 2020, Net</i>			(3,817,547)	
April Ending Cash Held Balance				(7,273,347) ^a
<i>Total April 2020, Net</i>			(6,482,038)	
May Ending Cash Held Balance				(10,250,187) ^a
<i>Total May 2020, Net</i>			(1,174,312)	
Monday, June 1, 2020	1,619,670	1,425,142	194,528	(8,487,081) ^a
Tuesday, June 2, 2020	2,011,052	1,425,142	585,910	(7,901,171)
Wednesday, June 3, 2020	1,287,557	1,425,142	(137,585)	(8,038,756)
Thursday, June 4, 2020	1,615,680	1,425,142	190,538	(7,848,217)
Friday, June 5, 2020	1,122,337	1,425,142	(302,805)	(8,151,023)
Monday, June 8, 2020	2,277,689	1,425,142	852,547	(7,298,476)
Tuesday, June 9, 2020	987,252	1,425,142	(437,890)	(7,736,366)
Wednesday, June 10, 2020	2,082,441	1,425,142	657,299	(7,079,067)
Thursday, June 11, 2020	1,759,824	1,425,142	334,682	(6,744,385)
Friday, June 12, 2020	1,284,272	1,425,142	(140,870)	(6,885,255)
Monday, June 15, 2020	1,791,057	1,425,142	365,915	(6,519,340)
Tuesday, June 16, 2020	1,260,938	1,425,142	(164,204)	(6,683,544)
Wednesday, June 17, 2020	721,196	1,425,142	(703,946)	(7,387,490)
Thursday, June 18, 2020	1,272,380	1,425,142	(152,762)	(7,540,252)
Friday, June 19, 2020	1,309,771	1,425,142	(115,371)	(7,655,624)
Monday, June 22, 2020	1,117,188	1,425,142	(307,954)	(7,963,578)
Tuesday, June 23, 2020	719,899	1,425,142	(705,243)	(8,668,821)
Wednesday, June 24, 2020	835,079	1,425,142	(590,063)	(9,258,884)
Thursday, June 25, 2020	505,296	1,425,142	(919,846)	(10,178,730)
Friday, June 26, 2020	1,813,436	1,425,142	388,294	(9,790,436)
Monday, June 29, 2020	1,259,561	1,425,142	(165,581)	(9,956,018)
Tuesday, June 30, 2020	1,048,358	1,425,142	(376,784)	(10,332,801)
June Ending Cash Held Balance				(10,332,801) ^a
<i>Total June 2020, Net</i>			(1,651,192)	
Wednesday, July 1, 2020	1,088,790	1,444,367	(355,577)	(9,300,812) ^a
Thursday, July 2, 2020	1,498,750	1,444,367	54,383	(9,246,429)
Friday, July 3, 2020	1,539,458	1,444,367	95,091	(9,151,337)
Monday, July 6, 2020	1,373,708	1,444,367	(70,659)	(9,221,997)
Tuesday, July 7, 2020	1,164,925	1,444,367	(279,442)	(9,501,438)
Wednesday, July 8, 2020	1,587,855	1,444,367	143,488	(9,357,951)
Thursday, July 9, 2020	1,794,791	1,444,367	350,424	(9,007,526)
Friday, July 10, 2020	1,902,974	1,444,367	458,607	(8,548,919)
Monday, July 13, 2020	1,347,549	1,444,367	(96,818)	(8,645,737)
Tuesday, July 14, 2020	1,297,138	1,444,367	(147,229)	(8,792,966)
Wednesday, July 15, 2020	1,290,235	1,444,367	(154,132)	(8,947,097)
Thursday, July 16, 2020	1,353,761	1,444,367	(90,606)	(9,037,704)
Friday, July 17, 2020	2,179,036	1,444,367	734,669	(8,303,035)
Monday, July 20, 2020	876,060	1,444,367	(568,307)	(8,871,341)
Tuesday, July 21, 2020	1,132,569	1,444,367	(311,798)	(9,183,139)
Wednesday, July 22, 2020	595,167	1,444,367	(849,200)	(10,032,339)
Thursday, July 23, 2020	590,256	1,444,367	(854,111)	(10,886,450)
Friday, July 24, 2020	769,245	1,444,367	(675,122)	(11,561,572)
Monday, July 27, 2020	1,470,923	1,444,367	26,556	(11,535,016)
Tuesday, July 28, 2020	906,153	1,444,367	(538,214)	(12,073,230)
Wednesday, July 29, 2020	912,166	1,444,367	(532,201)	(12,605,430)
Thursday, July 30, 2020	1,238,250	1,444,367	(206,117)	(12,811,547)
Friday, July 31, 2020	854,200	1,444,367	(590,167)	(13,401,715)
July Ending Cash Held Balance				(13,401,715) ^a
<i>Total July 2020, Net</i>			(4,456,480)	
Monday, August 3, 2020	1,475,693	1,581,926	(106,233)	(13,578,191) ^a
Tuesday, August 4, 2020	1,664,829	1,581,926	82,904	(13,495,287)
Wednesday, August 5, 2020	1,531,431	1,581,926	(50,495)	(13,545,782)
Thursday, August 6, 2020	1,599,357	1,581,926	17,431	(13,528,351)
Friday, August 7, 2020	1,352,822	1,581,926	(229,103)	(13,757,454)
Monday, August 10, 2020	1,922,119	1,581,926	340,194	(13,417,261)
Tuesday, August 11, 2020	1,228,221	1,581,926	(353,705)	(13,770,966)
Wednesday, August 12, 2020	2,417,514	1,581,926	835,588	(12,935,377)
Thursday, August 13, 2020	1,065,559	1,581,926	(516,366)	(13,451,744)
Friday, August 14, 2020	1,752,769	1,581,926	170,844	(13,280,900)
Monday, August 17, 2020	1,340,498	1,581,926	(241,428)	(13,522,328)
Tuesday, August 18, 2020	1,769,537	1,581,926	187,611	(13,334,717)
Wednesday, August 19, 2020	806,391	1,581,926	(775,534)	(14,110,251)
<i>Total August 2020 to Date, Net</i>			(638,293)	

^a Cash Held Forecast reflects prior month actual Trust Receipts & Disbursement (TRD) reconciled balance. Any differences from the prior month ending balance are due to intransit items at month end and current day net activity.

^b Payment of \$4.5 million received from DWSD to address February 2020 shortfall

Great Lakes Water Authority
Daily Dashboard
Year over Year Retail Receipts
For the Months of February - August 19, 2020

Date	Per GLWA Treasury DWSD Gross Revenue Receipts to Trust		Variance	Variance %
	Lockbox			
	(Water + Sewer)			
	FY 2020	FY 2019		
Total February	30,424,381	28,379,134	2,045,246	7.2%
February Daily Average	1,521,219	1,418,957	102,262	7.2%
Total March	27,535,577	30,047,523	(2,511,945)	-8.4%
March Daily Average	1,251,617	1,430,834	(179,217)	-12.5%
Since March 11	11,847,645	19,352,956	(7,505,310)	-38.8%
Daily Average Since March 11	789,843	1,382,354	(592,511)	-42.9%
Total April	24,871,087	30,380,799	(5,509,712)	-18.1%
April Daily Average	1,130,504	1,380,945	(250,441)	-18.1%
Total May	30,178,812	30,363,560	(184,749)	-0.6%
May Daily Average	1,508,941	1,380,162	128,779	9.3%
Total June	29,701,932	28,740,068	961,864	3.3%
June Daily Average	1,350,088	1,437,003	(86,916)	-6.0%
Total July	28,763,960	29,230,591	(466,630)	-1.6%
July Daily Average	1,250,607	1,328,663	(78,056)	-5.9%
August				
Day 1	1,475,693	1,135,180	340,513	
Day 2	1,664,829	1,114,542	550,287	
Day 3	1,531,431	3,077,552	(1,546,121)	
Day 4	1,599,357	1,879,398	(280,041)	
Day 5	1,352,822	1,520,736	(167,914)	
Day 6	1,922,119	1,483,169	438,950	
Day 7	1,228,221	1,687,688	(459,467)	
Day 8	2,417,514	1,829,670	587,844	
Day 9	1,065,559	2,598,731	(1,533,171)	
Day 10	1,752,769	971,273	781,496	
Day 11	1,340,498	1,440,034	(99,536)	
Day 12	1,769,537	992,162	777,375	
Day 13	806,391	2,141,495	(1,335,104)	
Total August to Date	19,926,741	21,871,630	(1,944,889)	-8.9%
August Daily Average	1,532,826	1,682,433	(149,607)	-8.9%

GLWA

Great Lakes Water Authority



Monthly Financial Report Binder

May 2020

**Presented to the
Great Lakes Water Authority
Audit Committee on August 21, 2020**

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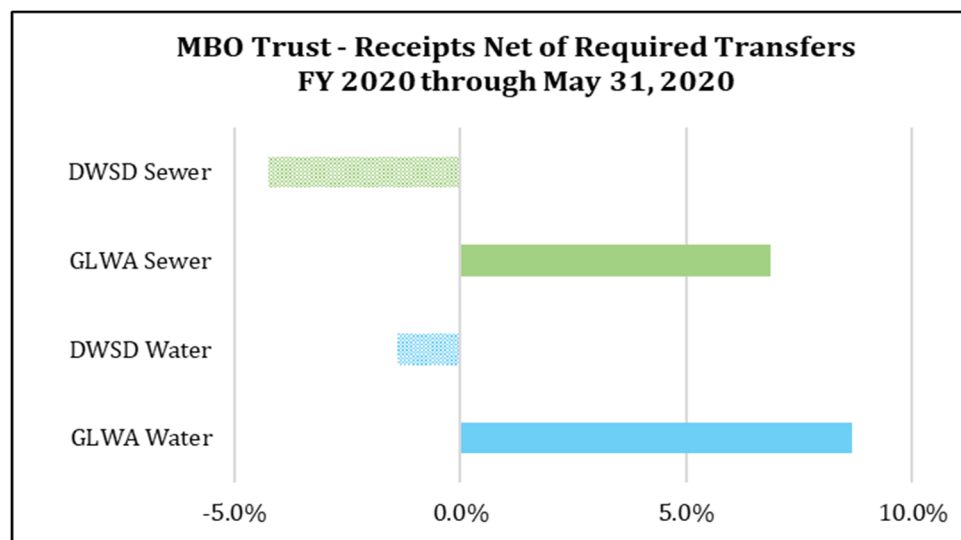
Key Financial Metrics

The indicators below focus on a financial risk management lens of preventing a budget shortfall. Green indicates no risk of a budget shortfall; yellow indicates a potential shortfall by year-end; and red indicates a likely budget shortfall by year-end. Each of these variances is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Looking forward, the items in **red** below resulted in FY 2020 Board-approved budget amendments in June 2020.

As of May 31, 2020				
Metric	FY 2020 Budget	FY 2020 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$288.5	\$282.8	-2%	41
Wholesale Water Billed Usage (mcf)	12,626,000	11,969,000	-5%	
Wholesale Sewer Billed Revenue (\$M)	\$245.6	\$245.6	0%	43
Wholesale Water Operations & Maintenance (\$M)	\$120.5	\$117.1	-3%	4
Wholesale Sewer Operations & Maintenance (\$M)	\$171.5	\$153.7	-10%	
Investment Income (\$M)	\$16.0	\$18.0	13%	32
Water Prorated Capital Spend w/SRA* (\$M)	\$99.0	\$68.0	-31%	25
Sewer Prorated Capital Spend w/SRA* (\$M)	\$111.0	\$67.0	-40%	26

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

Master Bond Ordinance (MBO) Trust Net Receipts



Net cash flow receipts are 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 net receipt shortfalls are \$1.2 and \$10.2 million respectively for May 2020 attributed to the impact of the COVID-19 pandemic. GLWA and DWSD staff meet regularly to discuss steps to mitigate this shortfall as outlined in the 2018 MOU. Prospective COVID-19 financial impacts are being monitored closely and are addressed in the monthly CFO Report section of the August 21, 2020 Audit Committee binder.

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



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

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

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 May 2020, the pro-rata benchmark is 91.7% (11 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 slightly below target while the prior year's (FY 2019) revenues are either at or slightly above target. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.

Water revenues presented in Table 1A differ from those presented in *Table 2 – Statement of Revenues, Expenses and Changes in Net Position* found in the *Basic Financial Statement* section of this report. Water Revenues presented in Table 1A for revenue requirement purposes are reduced by the monthly payment to the City of Flint for a license to raw water rights under the Flint Raw Water Contract as documented in Appendix A-2 of the [Flint Water Agreement](#). Through May 31, 2020 these payments total \$6,098,018 for FY 2021.

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 89.1%. The *sewer* system O&M expenses, at 82.2%, 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 89.0%; while the *sewer* system is at 90.1%. 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 May 31, 2019, of \$7.8 million (FY 2019 ended with a small surplus). To achieve the goal of positive, net cash flows for FY 2019, DWSD reduced its *sewer* system O&M transfers in May and June. The transfers reduced were \$5,676,792 each for a total of \$11,353,584. The DWSD *water* system experienced a \$2.8 million budgetary surplus through May 31, 2019. For FY 2020, the DWSD *water* system has a budgetary shortfall of \$1.2 million and the DWSD *sewer* system has a budgetary shortfall of \$10.2 million through May 31, 2020. GLWA and DWSD staff are meeting regularly to discuss steps to mitigate this shortfall as outlined in the 2018 MOU.
7. **Improvement & Extension (I&E) Fund Transfer Pending:** The contribution to the I&E Fund is for improvements, enlargements, extensions or betterment of the Water System. 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.

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

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

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

	FY2019 AMENDED BUDGET	FY 2019 THRU 5/31/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 5/31/2020	Percent Year-to- Date
Water System							
Revenues							
Suburban Wholesale Customer Charges	\$ 307,383	\$ 279,090	90.8%	\$ 309,285	\$ 309,285	\$ 276,707	89.5%
Retail Service Charges	20,181	18,536	91.8%	21,296	21,296	19,521	91.7%
Investment Earnings	9,425	9,217	97.8%	9,084	9,084	7,007	77.1%
Other Revenues	-	21	0.0%	-	-	43	0.0%
Total Revenues	\$ 336,989	\$ 306,864	91.1%	\$ 339,664	\$ 339,664	\$ 303,278	89.3%
Revenue Requirements							
Operations & Maintenance Expense	\$ 121,563	\$ 104,184	85.7%	\$ 131,491	\$ 131,491	\$ 117,139	89.1%
General Retirement System Legacy Pension	6,048	5,544	91.7%	6,048	6,048	5,544	91.7%
Debt Service	131,242	120,185	91.6%	137,558	137,558	122,370	89.0%
General Retirement System Accelerated Pension	6,268	5,746	91.7%	6,268	6,268	5,746	91.7%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	1,673	1,534	91.7%	1,698	1,698	1,557	91.7%
Lease Payment	22,500	20,625	91.7%	22,500	22,500	20,625	91.7%
Operating Reserve Deposit	-	-	0.0%	3,976	3,976	3,645	91.7%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund	-	(2,757)	0.0%	-	-	1,230	0.0%
Transfer Pending	47,695	43,721	91.7%	30,126	30,126	22,594	75.0%
Total Revenue Requirements	\$ 336,989	\$ 298,781	88.7%	\$ 339,664	\$ 339,664	\$ 300,450	88.5%
Net Difference		\$ 8,083				\$ 2,829	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ (2,043)				\$ (8,080)	
Revenue Requirement Variance		10,126				10,909	
Overall Variance		\$ 8,083				\$ 2,829	

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

	FY 2019 AMENDED BUDGET	FY 2019 THRU 5/31/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 5/31/2020	Percent Year-to- Date
Sewer System							
Revenues							
Suburban Wholesale Customer Charges	\$ 271,296	\$ 252,041	92.9%	\$ 272,324	\$ 272,324	\$ 246,300	90.4%
Retail Service Charges	181,159	166,525	91.9%	185,807	185,807	170,323	91.7%
Industrial Waste Control Charges	15,001	8,346	55.6%	13,744	13,744	7,476	54.4%
Pollutant Surcharges	-	5,189	0.0%	-	-	5,470	0.0%
Investment Earnings	6,879	9,080	132.0%	8,731	8,731	7,667	87.8%
Other Revenues	-	440	0.0%	-	-	436	0.0%
Total Revenues	\$ 474,335	\$ 441,621	93.1%	\$ 480,605	\$ 480,605	\$ 437,672	91.1%
Revenue Requirements							
Operations & Maintenance Expense	\$ 191,079	\$ 157,220	82.3%	\$ 187,057	\$ 187,057	\$ 153,722	82.2%
General Retirement System Legacy Pension	10,824	9,922	91.7%	10,824	10,824	9,922	91.7%
Debt Service	208,389	192,121	92.2%	215,739	215,739	194,356	90.1%
General Retirement System Accelerated Pension	11,621	10,652	91.7%	11,621	11,621	10,652	91.7%
Extraordinary Repair & Replacement Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program Contribution	2,374	2,176	91.7%	2,403	2,403	2,203	91.7%
Lease Payment	27,500	25,208	91.7%	27,500	27,500	25,208	91.7%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending Improvement & Extension Fund	-	7,787	0.0%	-	-	10,244	0.0%
Transfer Pending	22,548	20,669	91.7%	25,462	25,462	19,096	75.0%
Total Revenue Requirements	\$ 474,335	\$ 425,756	89.8%	\$ 480,605	\$ 480,605	\$ 425,403	88.5%
Net Difference		\$ 15,865				\$ 12,269	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 6,814				\$ (2,883)	
Revenue Requirement Variance		9,051				15,152	
Overall Variance		\$ 15,865				\$ 12,269	

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of May 31, 2020, is 91.7% (eleven 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.

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

Major Budget Categories	FY 2019 AMENDED BUDGET	FY 2019 ACTIVITY THRU 5/31/2019	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 ACTIVITY THRU 5/31/2020	Percent Year-to- Date
Water	\$ 66,596	63,122	94.8%	\$ 66,021	\$ 66,021	\$ 62,371	94.5%
Sewer	118,319	102,143	86.3%	115,985	115,985	95,347	82.2%
Centralized	99,045	75,552	76.3%	106,914	106,914	87,136	81.5%
Administrative	28,683	23,282	81.2%	29,628	29,628	25,423	85.8%
Employee Benefits	-	(2,695)	0.0%	-	-	584	0.0%
Total O&M Budget	\$ 312,642	\$ 261,404	83.6%	\$ 318,548	\$ 318,548	\$ 270,861	85.0%

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 85.0% which is reasonably within the pro-rata benchmark of 91.7%. This positive variance equates to a dollar amount of \$21.1 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is higher than the pro-rata benchmark; coming in at 93.4% through May 2020.

Utilities: The overall category is on target with the pro-rata benchmark; coming in at 92.2% through May 2020. Variances within this category, when they occur, are not unexpected as usage varies throughout the year.

- **Electric** is higher than the benchmark, coming in at 93.1%. This increase is primarily due to the pumps being required to run longer than normal as a result of the wet weather that Michigan had 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 90.5% which is slightly lower than the benchmark of 91.7%. A review of the accounts has confirmed that the usage is variable throughout the year.
- **Sewage service** is higher than the benchmark, coming in at 99.0%. The primary reasons for the variance in FY 2020 are due to the following: flushing projects conducted at the Southwest Water Plant to clean the pits; an increase in the frequency of flushing projects at the CSO's to provide facility access for needs assessments; and both estimated and inconsistent sewer billings being received at the Wastewater facility for meters that are registering issues with the automated reader systems (service has been requested on these meters).
- **Water service** is lower than the benchmark, coming in at 81.7%. While usage does vary throughout the year, a review of the accounts has shown that the water service bills are coming in lower for Wastewater Operations. Utilization of the new chemical building has required changes to the operational processes which has resulted in the reduction of the use of potable water.

Chemicals: This category is on target with the pro-rate benchmark; coming in at 91.0% through May 2020.

Supplies & Other: This category is lower than the benchmark; coming in at 87.0% through May 2020. 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. A review of this category is being conducted.

Contractual Services: The overall category is on target with the pro-rata benchmark; coming in at 91.0% through May 2020. Variances in this category, when they occur, are not unexpected as the usage of contracts varies throughout the year (projects scheduled to begin during the latter half of the year as well as contracts that are on an as needed basis). Budget amendments will be processed for those projects in which the actual start dates have been delayed from that in which they were budgeted.

Capital Program Allocation: This category is higher than the benchmark; coming in at 95.6% through May 2020. The amount in the Capital Program Allocation account is shown as negative as this is a "contra" account which represents an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget.

Shared Services: This category is higher than the benchmark; coming in at 93.3% through May 2020. 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. Some of the shared services agreements are not billed at a monthly rate of 1/12 of the annual budgeted amount. This accounts for the variance reported between budget and actual through May 2020. It is anticipated that shared services will be on target by year end.

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

Expense Categories	FY 2019 AMENDED BUDGET	FY 2019 ACTIVITY THRU 5/31/2019	Percent Year- to-Date at 5/31/2019	FY 2019 ACTIVITY THRU 6/30/2019	Percent Year- to-Date at 6/30/2019	FY 2020 AMENDED BUDGET	FY 2020 PRORATED AMENDED BUDGET (11 MONTHS)	FY 2020 ACTIVITY THRU 5/31/2020	Percent Year-to- Date	PRORATED BUDGET LESS FY 2020 ACTIVITY
Entity-wide										
Salaries & Wages	\$ 63,631	\$ 54,660	85.9%	\$ 59,922	91.2%	\$ 64,703	\$ 59,311	\$ 58,317	90.1%	\$ 995
Workforce Development	751	691	92.0%	794	87.0%	1,271	1,165	1,127	88.7%	38
Overtime	7,612	6,981	91.7%	7,553	92.4%	7,191	6,592	6,862	95.4%	(270)
Employee Benefits	23,656	22,670	95.8%	21,997	103.1%	22,466	20,593	22,231	99.0%	(1,638)
Transition Services	8,572	8,103	94.5%	8,323	97.4%	5,872	5,383	5,726	97.5%	(343)
Employee Benefits Fund	-	(2,695)	0.0%	-	0.0%	-	-	584	0.0%	(584)
Personnel Costs	<u>104,221</u>	<u>90,411</u>	<u>86.7%</u>	<u>98,589</u>	<u>91.7%</u>	<u>101,503</u>	<u>93,045</u>	<u>94,846</u>	<u>93.4%</u>	<u>(1,801)</u>
Electric	39,019	35,907	92.0%	39,103	91.8%	39,549	36,253	36,815	93.1%	(562)
Gas	6,631	6,181	93.2%	6,568	94.1%	5,332	4,888	4,825	90.5%	63
Sewage Service	2,491	1,886	75.7%	2,094	90.1%	1,988	1,822	1,967	99.0%	(145)
Water Service	3,648	3,307	90.6%	3,631	91.1%	3,662	3,357	2,991	81.7%	367
Utilities	<u>51,789</u>	<u>47,281</u>	<u>91.3%</u>	<u>51,395</u>	<u>92.0%</u>	<u>50,531</u>	<u>46,320</u>	<u>46,598</u>	<u>92.2%</u>	<u>(278)</u>
Chemicals	13,385	11,949	89.3%	13,276	90.0%	14,019	12,850	12,761	91.0%	89
Supplies & Other	36,227	29,346	81.0%	37,121	79.1%	34,124	31,281	29,679	87.0%	1,602
Contractual Services	100,856	93,766	93.0%	101,873	92.0%	103,975	95,310	94,624	91.0%	687
Capital Program Allocation	(3,356)	(3,092)	92.1%	(3,381)	91.5%	(3,122)	(2,861)	(2,986)	95.6%	124
Shared Services	(9,005)	(8,257)	91.7%	(7,139)	115.7%	(4,995)	(4,579)	(4,662)	93.3%	82
Unallocated Reserves	18,524		0.0%		0.0%	22,513	20,637		0.0%	20,637
Total Expenses	<u>\$ 312,643</u>	<u>\$ 261,404</u>	<u>83.6%</u>	<u>\$ 291,734</u>	<u>89.6%</u>	<u>\$ 318,548</u>	<u>\$ 292,003</u>	<u>\$ 270,861</u>	<u>85.0%</u>	<u>\$ 21,142</u>



The Basic Financial Statements report includes the following four tables.

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

At a macro level GLWA has two primary funds for financial reporting purposes: *Water Fund* and *Sewage Disposal Fund*. These funds represent the combined total of four sub-funds for each system that are used internally to properly account for sources and uses of funds. Those sub-funds for each system are: *Operations & Maintenance Fund, Improvement & Extension Fund, Construction Bond 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 May 31, 2020
(\$000)

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2019
Assets				
Cash - unrestricted (a)	\$ 118,937	\$ 128,180	\$ 247,117	\$ 309,016
Cash - restricted (a)	55,404	67,520	122,925	261,999
Investments - unrestricted (a)	257,848	143,414	401,262	274,246
Investments - restricted (a)	122,219	214,850	337,069	185,831
Accounts Receivable	98,018	84,328	182,345	208,914
Due from (to) Other Funds (b)	1,993	(1,993)	-	2,890
Other Assets (c)	684,691	449,749	1,134,440	1,046,518
Cash Held FBO DWSD Advance (d)	-	9,621	9,621	
Capital Assets, net of Depreciation	1,309,940	2,293,714	3,603,655	3,747,784
Land	292,799	123,846	416,645	417,657
Construction Work in Process (e)	210,343	185,969	396,313	368,748
Total assets	3,152,192	3,699,198	6,851,391	6,823,603
Deferred Outflows (f)	53,510	163,699	217,208	273,596
Liabilities				
Liabilities - Short-Term (g)	146,880	189,797	336,677	321,270
Due to (from) Other Funds (b)	-	-	-	2,890
Other Liabilities (h)	2,738	6,377	9,115	9,097
Cash Held FBO DWSD (d)	939	-	939	2,807
Liabilities - Long-Term (i)	3,094,548	3,733,344	6,827,892	6,853,419
Total liabilities	3,245,105	3,929,518	7,174,622	7,189,483
Deferred Inflows (f)	59,766	56,765	116,531	108,541
Total net position (j)	\$ (99,169)	\$ (123,386)	\$ (222,554)	\$ (200,825)

Totals may be off due to rounding

In general, the Statement of Net Position reflects a mature organization with no unexpected trends. Cash balances as of May 31, 2020 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 May 31, 2020.

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 May 31, 2020 values differ from the Cash and Investment section of this Financial Report Binder due to timing of certain items recognized on a cash versus accrual basis.
- b. *Due from Other Funds* and *Due to Other Funds* 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 May 2020 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.

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

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Eleven Months Month ended May 31, 2020
(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- Type Activities	Comparative June 30, 2019
Revenue						
Wholesale customer charges	\$ 282,805	93.5%	\$ 246,300	57.3%	\$ 529,105	\$ 584,172
Local system charges	19,521	6.5%	170,323	39.6%	189,844	201,341
Industrial waste charges		0.0%	7,476	1.7%	7,476	9,106
Pollutant surcharges		0.0%	5,470	1.3%	5,470	5,933
Other revenue	43	0.0%	436	0.1%	479	528
Total Revenues	302,369	100.0%	430,005	100.0%	732,374	801,079
Operating expenses						
Operations and Maintenance	117,278	38.8%	155,559	36.2%	272,837	293,863
Depreciation	117,343	38.8%	140,411	32.7%	257,754	309,115
Total operating expenses	234,621	77.6%	295,970	68.8%	530,591	602,978
Operating Income	67,748	22.4%	134,034	31.2%	201,782	198,101
Total Nonoperating (revenue) expense	90,035	29.8%	133,477	31.0%	223,512	220,170
Increase/(Decrease) in Net Position	(22,287)	-7.4%	557	0.1%	(21,730)	(22,070)
Net Position (deficit), beginning of year	(76,882)		(123,943)		(200,825)	(178,755)
Net position (deficit), end of year	\$ (99,169)		\$ (123,386)		\$ (222,554)	\$ (200,825)
<i>Totals may be off due to rounding</i>						

Water Fund

- ✓ The decrease in Water Fund Net Position is \$22.3 million.
- ✓ Wholesale water customer charges of \$282.8 million account for 93.5% of Water System revenues.
- ✓ Operating expenses of \$234.6 million represent 77.6% of total operating revenue. Depreciation is the largest operating expense at \$117.3 million or 50.0% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$67.7 million or 22.4 % of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$76.9 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 \$557 thousand.
- ✓ Wholesale customer charges of \$246.3 million account for 57.3% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$170.3 million account for 39.6% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$296.0 million represent 68.8% of total operating revenue. Depreciation is the largest operating expense at \$140.4 million or 47.4% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$134.0 million or 31.2 % of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$109.3 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

Supplemental Schedule of Operations & Maintenance Expenses – All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown below in Table 3. This accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the May 2020 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
– All Funds Combined
For the Eleven Months ended May 31, 2020
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- Type Activities	Percent of Total
Operating Expenses						
Personnel						
Salaries & Wages	21,708	18.5%	43,461	27.9%	65,169	23.9%
Overtime	4,003	3.4%	2,859	1.8%	6,862	2.5%
Benefits	14,821	12.6%	7,994	5.1%	22,815	8.4%
Total Personnel	\$ 40,532	34.6%	\$ 54,314	34.9%	\$ 94,846	34.8%
Utilities						
Electric	23,239	19.8%	13,576	8.7%	36,815	13.5%
Gas	1,035	0.9%	3,790	2.4%	4,825	1.8%
Sewage	523	0.4%	1,444	0.9%	1,967	0.7%
Water	1	0.0%	2,989	1.9%	2,991	1.1%
Total Utilities	\$ 24,799	21.1%	\$ 21,799	14.0%	\$ 46,598	17.1%
Chemicals	4,928	4.2%	7,833	5.0%	12,761	4.7%
Supplies and other	10,643	9.1%	19,036	12.2%	29,679	10.9%
Contractual services	42,641	36.4%	53,959	34.7%	96,600	35.4%
Capital Adjustment	-	0.0%	-	0.0%	-	0.0%
Capital program allocation	(1,908)	-1.6%	(1,078)	-0.7%	(2,986)	-1.1%
Shared services allocation	(4,358)	-3.7%	(304)	-0.2%	(4,662)	-1.7%
Operations and Maintenance Expenses	\$ 117,278	100.0%	\$ 155,559	100.0%	\$ 272,837	100.0%

Totals may be off due to rounding.

- ✓ Core expenses for water and sewage disposal systems are utilities (17.1 % of total O&M expenses) and chemicals (4.7%).
- ✓ Personnel costs (34.8% 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 (35.4%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$6.2 million);
 - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$ 14.3 million); and
 - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, 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 Eleven Months ended May 31, 2020
(\$000)

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2019
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (20,492)	\$ (16,674)	\$ (37,167)	\$ (40,673)
Interest income DWSD Shortfall	-	(1,216)	(1,216)	(1,104)
Investment earnings	(8,209)	(7,517)	(15,727)	(26,518)
Other nonoperating revenue	(1,659)	(10)	(1,669)	(420)
Interest Expense				
Bonded debt	97,391	126,012	223,404	250,966
Lease obligation	16,016	19,575	35,592	39,264
Other obligations	4,432	1,442	5,874	6,368
Total interest expense	117,840	147,030	264,869	296,597
Other non-capital expense	-	-	-	-
Memorandum of Understanding	-	-	-	6,527
Capital Contribution	-	(5,960)	(5,960)	-
Amortization, issuance costs, debt	(9,377)	1,714	(7,664)	(3,995)
Amortization, raw water rights	3,269	-	3,269	3,567
(Gain) loss on disposal of capital assets	51	1,266	1,317	(81)
Loss on impairment of capital assets	-	-	-	1,025
Water Residential Assistance Program	1,393	1,922	3,315	2,024
Legacy pension expense	7,221	12,923	20,144	(16,778)
Total Nonoperating (Revenue)/Expense	\$ 90,035	\$ 133,477	\$ 223,512	\$ 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;
 - 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.
- ✓ Legacy Pension expense is calculated by GLWA annually based upon information provided by the City of Detroit General Retirement System (GRS). The expense varies each year based upon benefits paid, investment earnings and changes in actuarial assumptions. The FY 2020 entry was made in April based on required reports GLWA recently received from GRS. While typically an expense, changes in actuarial assumptions caused this item to be reflected as income for the year ending June 30, 2019.

FY 2019 Items of note:

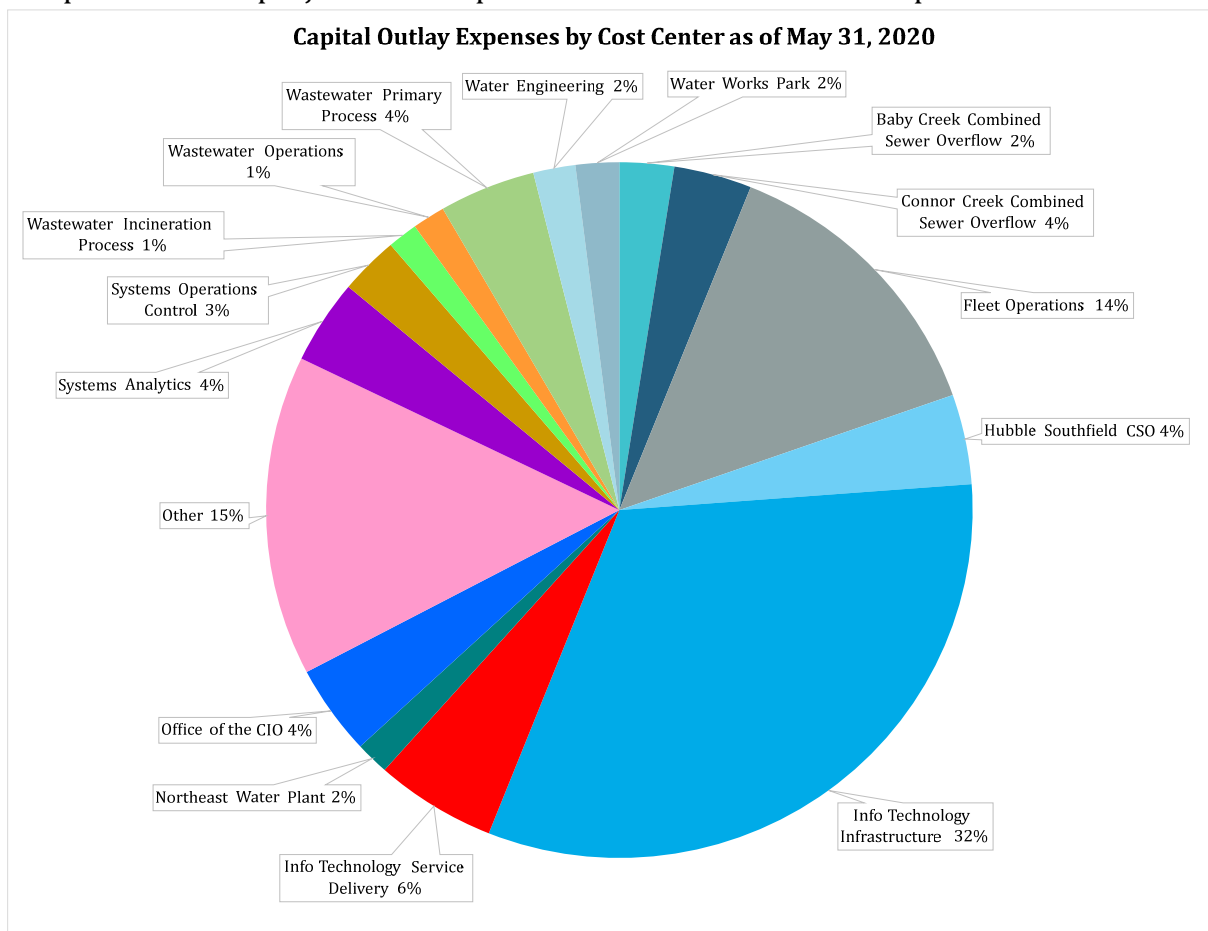
- ✓ Sewer Other Non-operating expense includes the 2018 MOU Item 8a from June 27, 2018 for a final bad debt lookback adjustment for DWSD of \$6.5 million.

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 May 31, 2020, total capital outlay spend is \$13.0 million. Following this chart is a sample list of projects and purchases from the total spend of \$13.0 million:



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

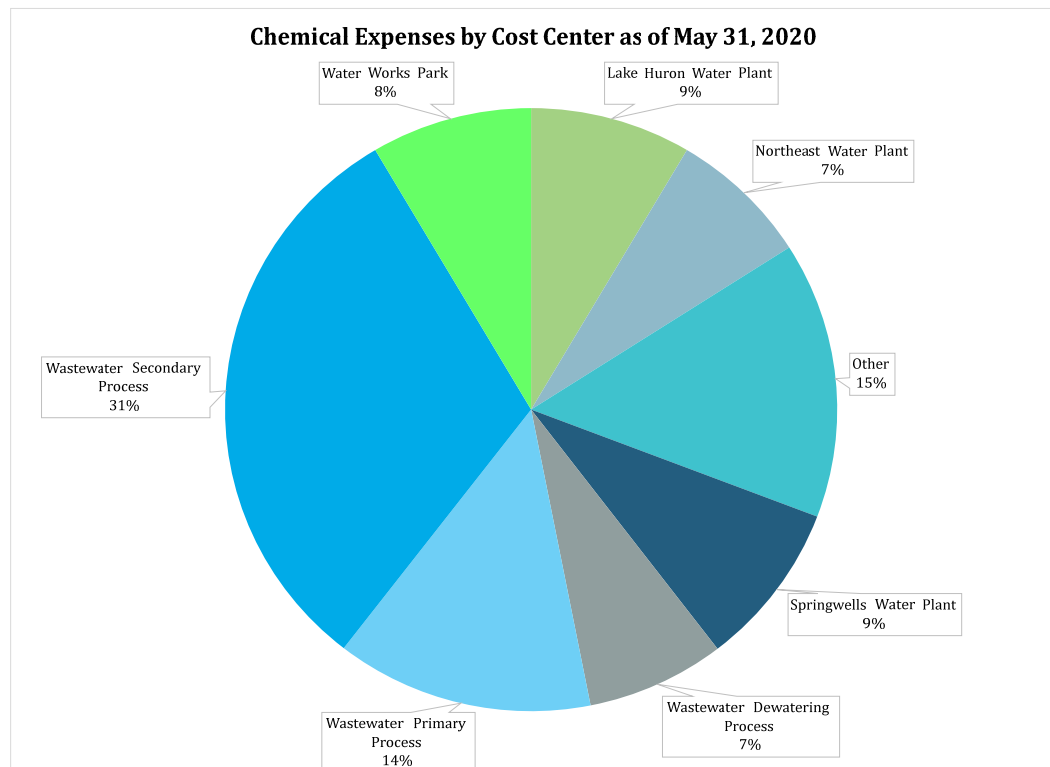
Water Operations: Water Works Park South Garage renovation (\$171k); various Water location building improvements (\$134k); level and flow instrumentation (\$113k); actuators (\$108k); power monitor (\$90k); submersible pressure sensor (\$83k); low lift elevator repair (\$59k); turbid meters (\$54k) and skid steer loader (\$44k).

Wastewater Operations: Accusonic flow meters (\$540k); pumps at various CSO's (\$297k); pinion gears (\$254k); roll off truck at Water Resource Recovery Facility (WRRF) (\$188k); chemical induction unit (\$179k); boilers (\$177k); Transformer C structure at WRRF (\$143k); chemical feed pump (\$96k); Flygt pump (\$78k); water heater for Scum building (\$76k); and skid steer loader (\$44k).

Centralized & Administrative Facilities: Low voltage wiring services (\$3.1m); trucks and vehicles (\$1.6m); IT & 17th floor renovation and furniture (\$636k); IT software (\$622k); IT computers (\$416k); Sewer meter support (\$211k); IT Hardware/software (\$187k); CSF meter operations (\$137k); transmitters (\$118k); multimeter (\$91k); IT firewalls (\$82k); supplies (\$75k); and IT premium hardware support (\$74k) and vehicle up-lifting (\$72k); 'other' category expenses include: bathroom renovation (\$83k) for the Logistics and Materials team.

Chart 2 – Chemical Expenses – Water and Sewer System Combined

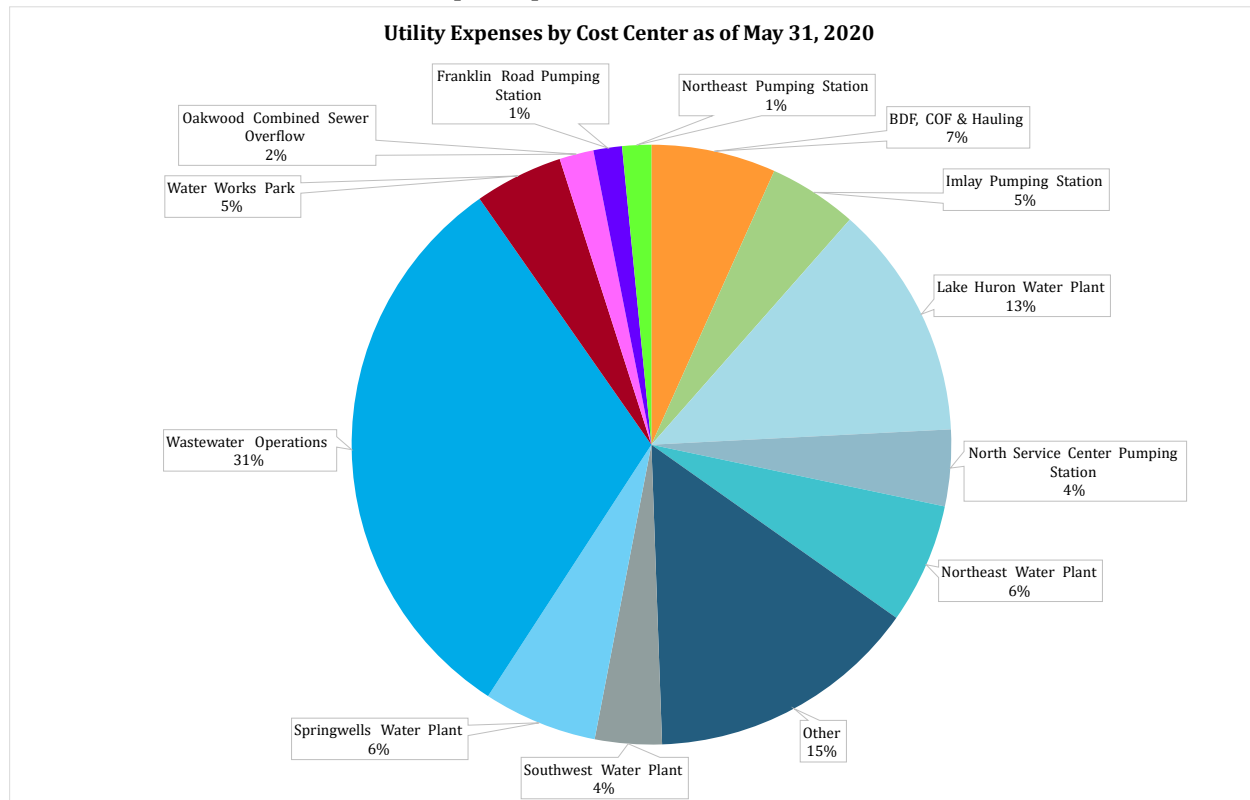
Chemical expenses are \$12.8 million through May 31, 2020. The allocation is shown in the chart below and remains consistent with prior periods.



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

Chart 3 – Utility Expenses – Water and Sewer System Combined

Utility expenses are \$46.6 million through May 31, 2020. The allocation is shown in the chart below and consistent with prior periods.



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

Financial Operations KPI

This key performance indicator shown in **Chart 1 – Bank Reconciliation Completion Status** below provides a measure of the progress made in the month-end close process which includes bank reconciliations with a completed status at month end. Through May 31, 2020 all reconciliations are up-to-date and complete.

There was one new account for Cost of Issuance from April 2020.

Chart 1 – Bank Reconciliation Completion Status

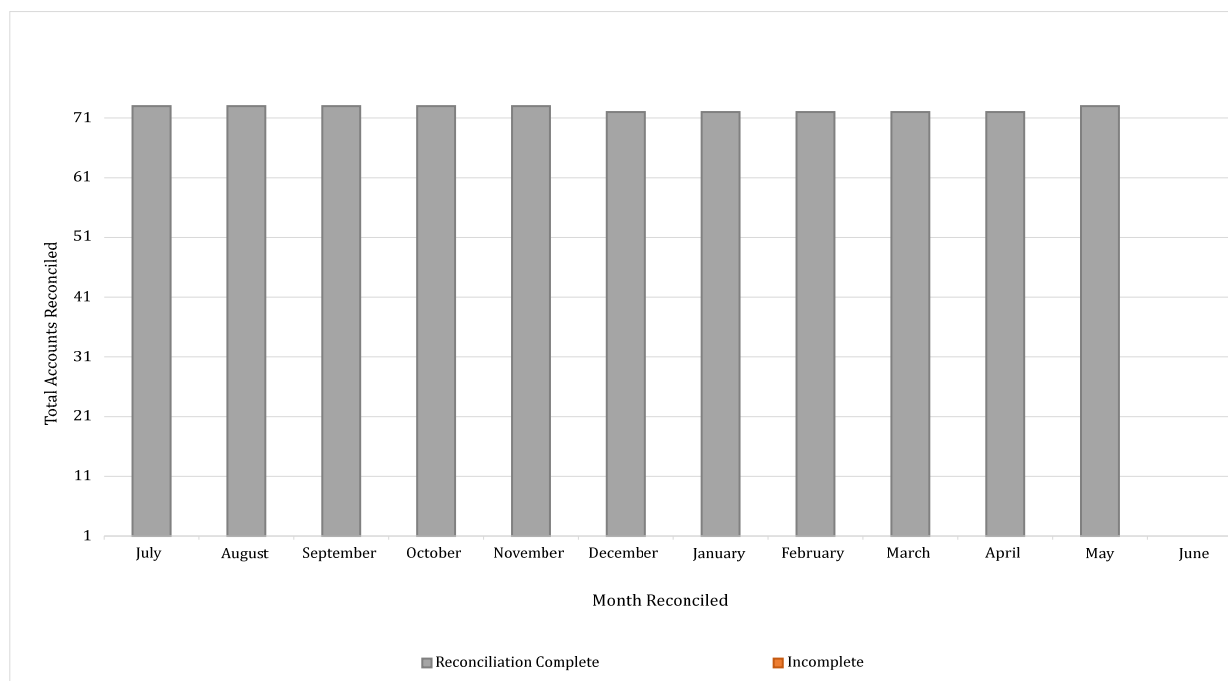


Table 1 – Fiscal Year 2020 GL Cash Account Rollforward

Total GL Cash accounts as of July 1, 2019	71
New GL Cash accounts	3
Inactivated GL Cash accounts	(1)
Total GL Cash accounts as of May 31, 2020	<u>73</u>



The monthly Budget to Financial Statements Crosswalk includes the following.

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

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

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

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

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

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

Financial Reporting: The Authority’s financial statements are prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The

Authority maintains its records on the accrual basis of accounting to conform to GAAP. Revenues from operations, investments and other sources are recorded when earned. Expenses (including depreciation) are recorded when incurred.

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

Table 1 – Crosswalk Budget Basis to Financial Reporting Basis (\$000)
For the Eleven Months Ended May 31, 2020

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 2,829	\$ 12,269	\$ 15,098
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	10,487	18,769	29,256
Prior year pension contribution accounted for in current year (d)	(7,221)	(12,923)	(20,144)
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	45,471	85,018	130,489
Accelerated pension B&C notes obligation portion (g)	162	363	525
Lease payment (h)	4,609	5,633	10,242
WRAP (i)	164	281	445
DWSD short term allocation (j)	1,230	10,244	11,474
Operating Reserve Deposit (j)	3,645	-	3,645
Improvement & Extension Fund (j)	22,456	17,258	39,714
Nonbudgeted financial reporting categories adjustments			
Depreciation (k)	(117,343)	(140,411)	(257,754)
Amortization (k)	6,108	(1,714)	4,394
Other nonoperating income (k)	1,658	10	1,668
Other nonoperating expense (k)	-	-	-
Gain(loss) on disposal of capital assets (k)	(51)	(1,266)	(1,317)
Raw water rights (l)	2,307	-	2,307
Investment earnings construction fund (m)	1,202	1,066	2,268
Capital contribution (n)	-	5,960	5,960
Net Position Increase/(Decrease) per Financial Statements (b)	\$ (22,287)	\$ 557	\$ (21,730)

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 \$1.8 million 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 May 2020, the Water system incurred over \$ 68 Million of construction costs to date. This is 52% of the fiscal year 2020 prorated CIP through May and 69% of the financial plan which is labeled as the FY 2020 CIP w/SRA in the chart below. 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 May 2020 the Sewer system incurred nearly \$ 67 Million of construction costs to date. This is 45% of the fiscal year 2020 prorated CIP through May and 60% of the financial plan which is labeled as the FY 2020 CIP w/SRA in the chart below. It is anticipated that the gap will be reduced by the end of the fiscal year.

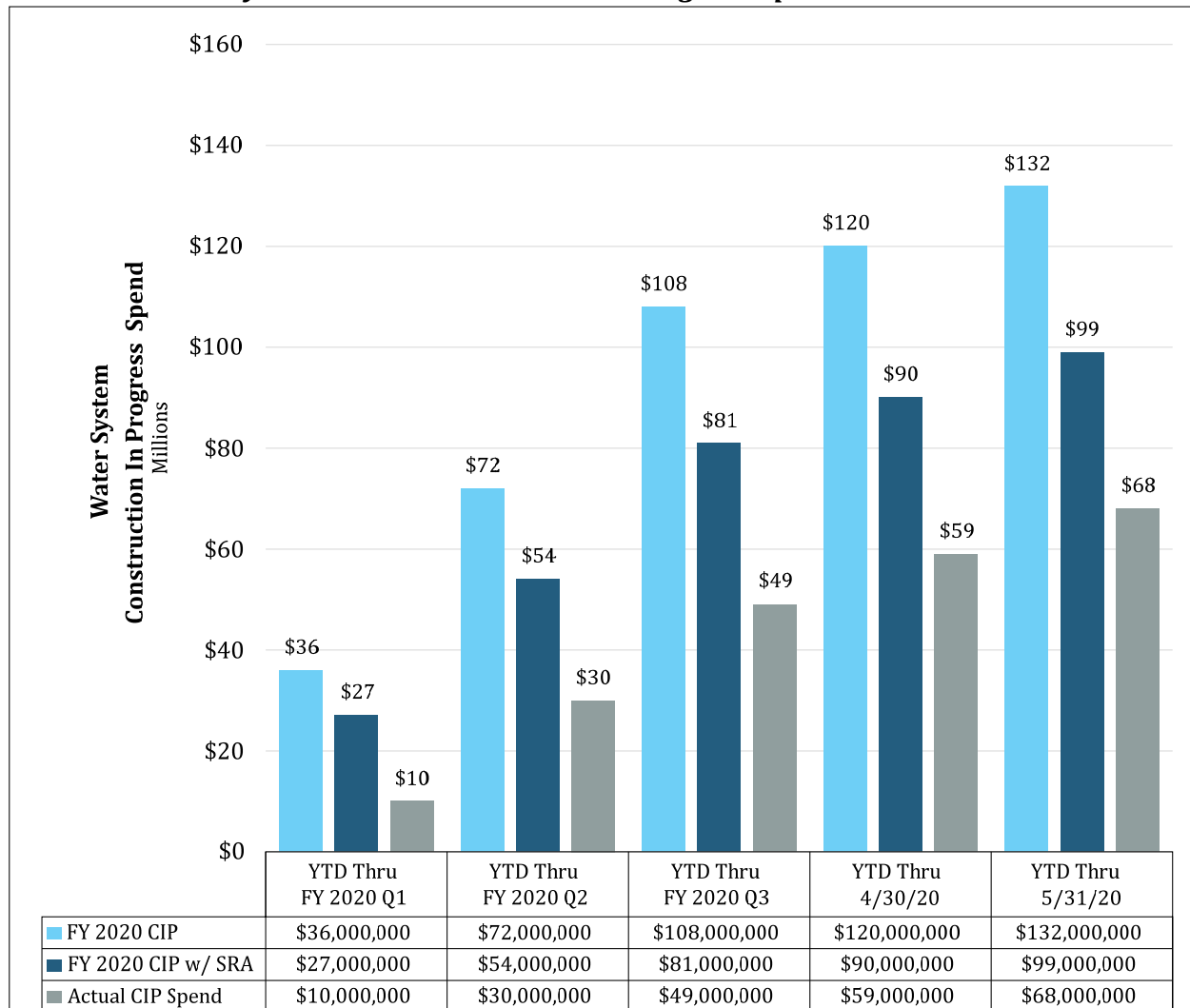
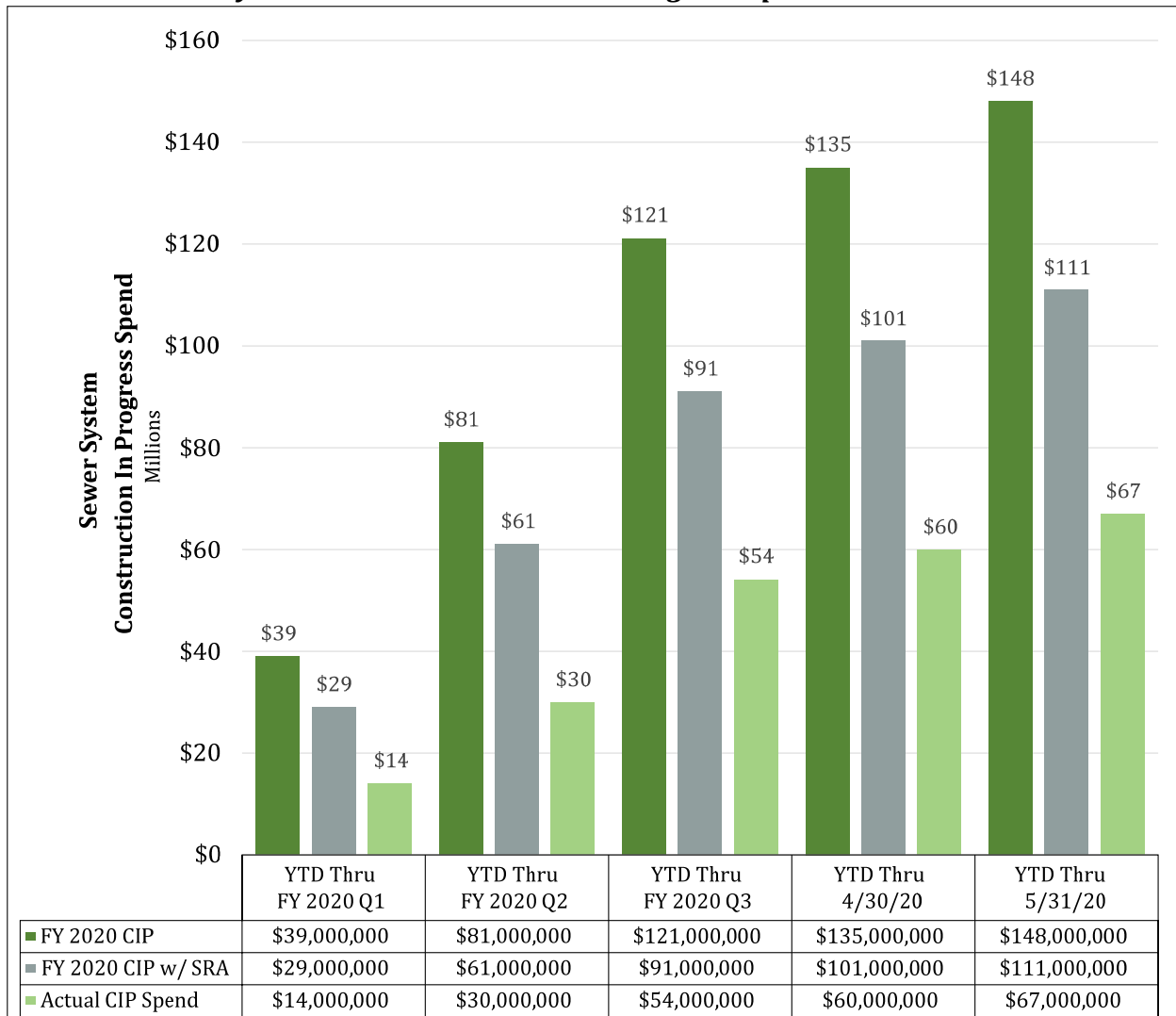
Chart 1 – Water System Construction Work in Progress Spend


Chart 2 – Sewer System Construction Work in Progress 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 May 1, 2020. MBO transfers for water totaling \$137.7 million have been transferred to GLWA accounts.

Table 2 - GLWA FY 2020 Sewer MBO Transfers reflects the required transfers for FY 2020 completed through May 1, 2020. MBO transfers for sewer totaling \$197.5million 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 & Maintenance	Pension Sub Account	Pension Obligation	WRAP	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
January 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
February 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
March 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
April 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
May 2020	10,957,542	504,000	891,308	165,067	-	-	12,517,917
Total FY 2020	\$120,532,962	\$5,544,000	\$9,804,388	\$1,815,737	\$0	\$0	\$137,697,087

Table 2 – GLWA FY 2020 Sewer MBO Transfers

SEWER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
FY 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
January 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
February 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
March 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
April 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
May 2020	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
Total FY 2020	\$171,469,100	\$9,922,000	\$13,463,549	\$2,646,688	\$0	\$0	\$197,501,337

Table 3 – GLWA MBO Transfer History

GLWA MBO Transfer History							
WATER							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
Total FY 2019	121,562,604	6,048,000	10,695,696	2,061,000	-	-	140,367,300
Total FY 2020 (11 months)	120,532,962	5,544,000	9,804,388	1,815,737	-	-	137,697,087
Life to Date	\$546,589,770	\$29,714,300	\$51,790,180	\$10,096,637	\$2,686,900	\$606,000	\$641,483,787
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 (11 months)	171,469,100	9,922,000	13,463,549	2,646,688	-	-	197,501,337
Life to Date	\$830,352,292	\$53,246,800	\$70,891,141	\$13,456,284	\$8,246,100	\$779,600	\$976,972,217

MBO Required and Lease Payment Transfers to DWSD

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

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

Table 4 – DWSD FY 2020 Water MBO Transfers reflects the required transfers for FY 2020 completed through May 1, 2020. MBO transfers for Water totaling \$53.1 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.

Table 5 – DWSD FY 2020 Sewer MBO Transfers reflects the required transfers for FY 2020 completed through May 1, 2020. MBO transfers for Sewer totaling \$80.8 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. Lastly, Operations & Maintenance transfers of \$2.6 million in December 2019 and \$4.5 million in February 2020 have been returned from DWSD to address the FY 2020 projected shortfall. This return of funds adjusts the total MBO transfers through May 1, 2020 to \$73.7 million.

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

WATER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Water</u>
FY 2020				
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
January 2020	2,888,533	356,000	1,579,333	4,823,866
February 2020	2,888,533	356,000	1,579,333	4,823,866
March 2020	2,888,533	356,000	1,579,333	4,823,866
April 2020	2,888,533	356,000	1,579,333	4,823,866
May 2020	2,888,533	356,000	1,579,333	4,823,866
Total FY 2020	\$31,773,863	\$3,916,000	\$17,372,663	\$53,062,526

Table 5 – DWSD FY 2020 Sewer MBO Transfers

SEWER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</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
January 2020	4,778,625	238,000	1,872,275	6,888,900
February 2020	4,778,625	238,000	1,872,275	6,888,900
March 2020	4,778,625	238,000	1,872,275	6,888,900
April 2020	4,778,625	238,000	1,872,275	6,888,900
May 2020	4,778,625	238,000	1,872,275	6,888,900
Total MBO Transfers	57,564,875	2,618,000	20,595,025	80,777,900
<u>Adjustment to MBO Transfers</u>				
December 2019	(2,600,000)	-	-	(2,600,000)
February 2020	(4,500,000)	-	-	(4,500,000)
Total FY 2020	50,464,875	\$2,618,000	\$20,595,025	73,677,900

Table 6 – DWSD MBO and Lease Payment Transfer History

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
FY 2016 *				
MBO/Lease Requirement	\$26,185,600	\$4,262,700	\$22,500,000	\$52,948,300
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	50,621,400
FY 2017				
MBO/Lease Requirement	33,596,400	4,262,400	22,500,000	60,358,800
Offset to Debt Service	-	-	-	-
Net MBO Transfer	33,596,400	4,262,400	22,500,000	60,358,800
FY 2018				
MBO/Lease Requirement	35,059,704	4,272,000	22,500,000	61,831,704
Offset to Debt Service	-	-	(1,875,000)	(1,875,000)
Net MBO Transfer	35,059,704	4,272,000	20,625,000	59,956,704
FY 2019				
MBO/Lease Requirement	35,484,300	4,272,000	22,500,000	62,256,300
Offset to Debt Service	-	-	(3,972,200)	(3,972,200)
Net MBO Transfer	35,484,300	4,272,000	18,527,800	58,284,100
FY 2020 (11 months)				
MBO/Lease Requirement	31,773,863	3,916,000	20,625,000	56,314,863
Offset to Debt Service	-	-	(3,252,337)	(3,252,337)
Net MBO Transfer	31,773,863	3,916,000	17,372,663	53,062,526
Life-to-Date				
MBO/Lease Requirement	162,099,867	20,985,100	110,625,000	293,709,967
Offsets	-	-	(11,426,437)	(11,426,437)
Total Water	\$162,099,867	\$20,985,100	\$99,198,563	\$282,283,530
SEWER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
FY 2016 *				
MBO/Lease Requirement	\$19,774,300	\$2,861,800	\$27,500,000	\$50,136,100
Offset to Debt Service	-	-	(19,991,500)	(19,991,500)
Total MBO Transfer	19,774,300	2,861,800	7,508,500	30,144,600
FY 2017				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
Total MBO Transfer	41,535,600	2,862,000	27,500,000	71,897,600
FY 2018				
MBO/Lease Requirement	60,517,992	2,856,000	27,500,000	90,873,992
Offset to Debt Service	-	-	(9,166,664)	(9,166,664)
Total MBO Transfer	60,517,992	2,856,000	18,333,336	81,707,328
FY 2019				
MBO/Lease Requirement	56,767,920	2,856,000	27,500,000	87,123,920
Offset to Debt Service	-	-	(4,415,000)	(4,415,000)
Total MBO Transfer	56,767,920	2,856,000	23,085,000	82,708,920
FY 2020 (11 months)				
MBO/Lease Requirement	57,564,875	2,618,000	25,208,333	85,391,208
Offset to address shortfall	(7,100,000)	-	-	(7,100,000)
Offset to Debt Service	-	-	(4,613,308)	(4,613,308)
Total MBO Transfer	50,464,875	2,618,000	20,595,025	73,677,900
Life-to-Date				
MBO/Lease Requirement	236,160,687	14,053,800	135,208,333	385,422,820
Offsets	(7,100,000)	-	(38,186,472)	(45,286,472)
Total Sewer	\$229,060,687	\$14,053,800	\$97,021,861	\$340,136,348

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



This report includes the following:

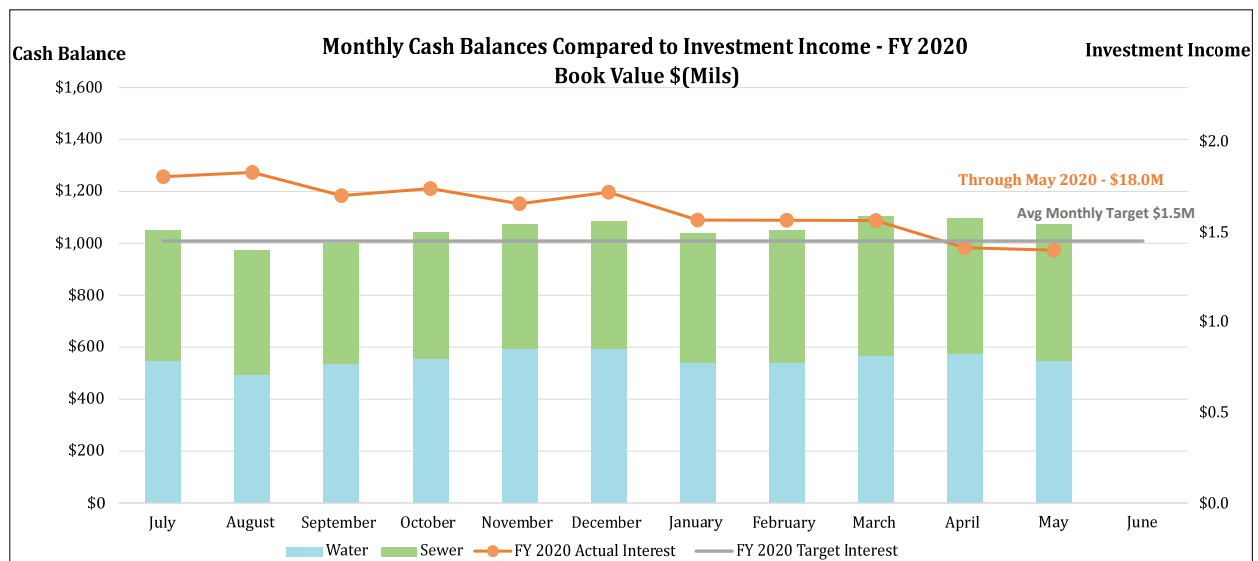
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

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

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The cumulative investment income through May 2020 of \$18.0 million, has exceeded the FY 2020 target of \$17.4 million.

Chart 1 – Monthly Cash Balances Compared to Investment Income – Through May 2020



\$(Mils)	July	August	September	October	November	December	January	February	March	April	May	June
Water	549	494	536	555	594	592	541	541	566	575	547	
Sewer	501	479	464	489	479	493	498	510	536	524	526	
Total	1,050	973	1,000	1,044	1,073	1,085	1,039	1,052	1,102	1,099	1,073	
Investment Income	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.4	1.4	

Cash Balance Detail

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

Funds Held Within Trust:

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

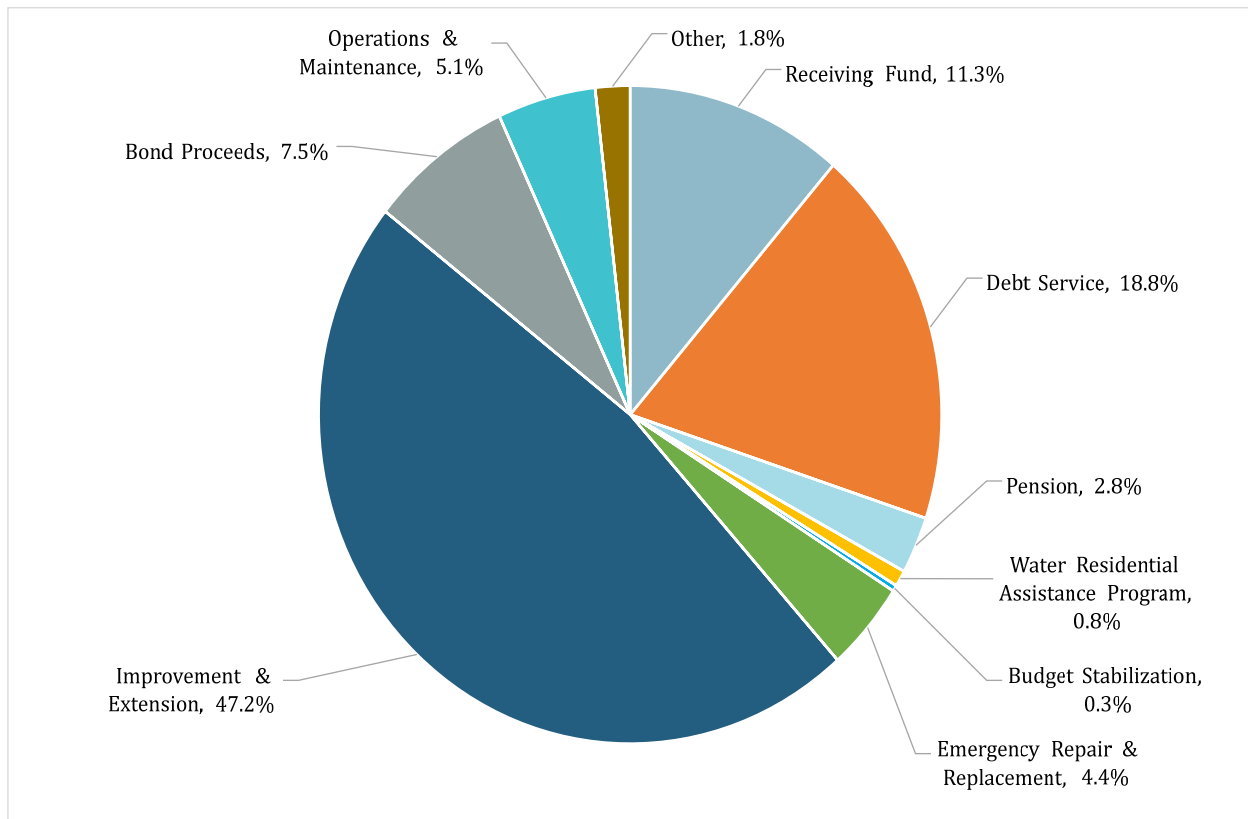
Funds Held Outside Trust:

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

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

Chart 2 – Cash Balances - Water Funds as of May 31, 2020 - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of May 31, 2020 is \$547 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.

Chart 2 – Cash Balances - Water Funds as of May 31, 2020

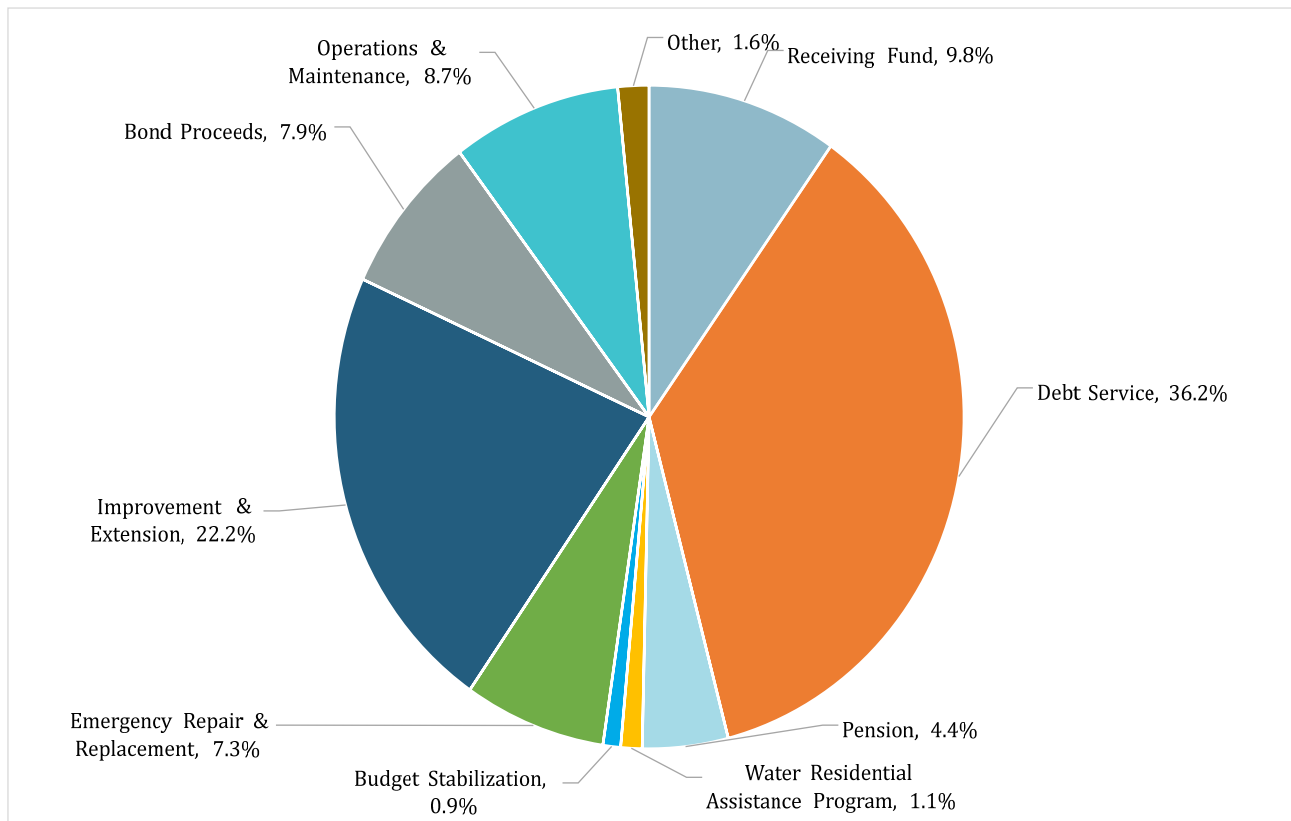


Note: Due to rounding totals may not equal 100%.

Chart 3 – Cash Balances - Sewer Funds as of May 31, 2020 - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of May 31, 2020 is \$526 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.

Chart 3 – Cash Balances - Sewer Funds as of May 31, 2020



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 May 31, 2020, the DWSD usage was at 91.04% of the budget and billed revenue was at 96.81% of budget.

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

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

Table 1 – DWSD Retail Water Billing

RETAIL WATER CUSTOMERS								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit	Volume	Revenue (2)	Unit	Volume	Revenue
	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	8,811,834	38.49	(17,885)	(348,158)
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	205,993	7,981,382	38.75	(22,266)	(301,586)
February	225,150	8,294,177	36.84	196,490	7,748,377	39.43	(28,660)	(545,800)
March	222,601	8,159,386	36.65	198,483	7,755,210	39.07	(24,118)	(404,176)
April	215,049	8,120,879	37.76	191,691	7,550,074	39.39	(23,358)	(570,805)
May	230,957	8,499,721	36.80	207,387	7,929,281	38.23	(23,570)	(570,440)
June	254,554	9,084,129	35.69					
Total	2,862,437	103,551,100	36.18	2,374,236	91,449,365	38.52	(233,647)	(3,017,606)
Subtotals ytd	2,607,883	94,466,971	36.22	2,374,236	91,449,365	38.52	(233,647)	(3,017,606)
Achievement of Budget				91.04%	96.81%			

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 2 – DWSD Retail Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
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%
January	9,076,091	8,158,817	917,274	11.24%
February	8,281,985	7,927,299	354,686	4.47%
March	6,948,308	8,707,578	(1,759,270)	-20.20%
April	5,956,105	8,475,657	(2,519,552)	-29.73%
May	8,109,469	8,415,767	(306,298)	-3.64%
Rolling, 12-Month Total	96,587,660	100,195,177		
Rolling, 12-Month Average	8,048,972	8,349,598		

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 May 31, 2020, the DWSD usage was at 93.59% of the budget and billed revenue was at 96.42% of budget.

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

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

Table 3 - DWSD Retail Sewer Billings

RETAIL SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	251,738	28,535,420	244,810	28,049,707	(6,928)	(485,713)
August	258,984	28,327,270	246,989	28,076,649	(11,995)	(250,621)
September	255,527	26,788,442	215,119	26,430,710	(40,408)	(357,732)
October	227,141	26,444,548	238,202	27,549,787	11,061	1,105,239
November	211,617	25,759,684	188,779	24,726,161	(22,838)	(1,033,523)
December	195,192	25,905,017	186,917	24,853,335	(8,275)	(1,051,682)
January	197,099	26,341,264	190,230	24,857,510	(6,869)	(1,483,754)
February	206,164	26,312,394	187,219	24,524,288	(18,945)	(1,788,106)
March	200,672	26,467,728	186,521	24,784,918	(14,151)	(1,682,810)
April	204,606	25,894,612	180,397	24,538,664	(24,209)	(1,355,948)
May	203,480	27,185,600	192,362	25,035,540	(11,118)	(2,150,060)
June	218,340	27,376,921				
Total	2,630,560	321,338,900	2,257,545	283,427,269	(154,675)	(10,534,710)
<i>Subtotals ytd</i>	<i>2,412,220</i>	<i>293,961,979</i>	<i>2,257,545</i>	<i>283,427,269</i>	<i>(154,675)</i>	<i>(10,534,710)</i>
<i>Achievement of Budget/Goal</i>			<i>93.59%</i>	<i>96.42%</i>		

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 4 – DWSD Retail Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
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%
January	23,512,702	19,612,154	3,900,548	19.89%
February	22,682,982	20,624,039	2,058,943	9.98%
March	19,325,377	22,111,691	(2,786,314)	-12.60%
April	17,105,146	20,930,511	(3,825,365)	-18.28%
May	23,639,652	22,807,283	832,369	3.65%
Rolling 12-Month Total	262,537,577	264,529,554		
Rolling, 12-Month Average	21,878,131	22,044,130		

DWSD Retail Water and Sewer Accounts Receivable Aging Report

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

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of May 31, 2020 with comparative totals from May 31, 2019.

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

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	204,482	\$ 442.91	\$ 12,934,000 14.3%	\$ 6,667,000 7.4%	\$ 16,322,000 18.0%	\$ 54,645,000 60.3%	\$ 90,568,000 100.0%
Commercial	20,673	1,600.42	6,140,000 18.6%	3,145,000 9.5%	5,556,000 16.8%	18,244,000 55.1%	33,086,000 100.0%
Industrial	2,148	5,607.24	3,074,000 25.5%	1,895,000 15.7%	1,168,000 9.7%	5,907,000 49.0%	12,044,000 100.0%
Tax Exempt	3,443	848.69	402,000 13.7%	194,000 6.7%	429,000 14.7%	1,897,000 64.9%	2,922,000 100.0%
Government	65,461	371.72	2,654,000 10.9%	2,905,000 11.9%	5,241,000 21.5%	13,533,000 55.6%	24,333,000 100.0%
Drainage	34,062	818.83	2,421,000 8.7%	971,000 3.5%	4,362,000 15.6%	20,137,000 72.2%	27,891,000 100.0%
Subtotal - Active Accounts	330,269	\$ 577.84	\$ 27,624,000 14.5%	\$ 15,778,000 8.3%	\$ 33,078,000 17.3%	\$ 114,364,000 59.9%	\$ 190,844,000 100.0%
Inactive Accounts	283,140	99.97	41,000 0.1%	79,000 0.3%	845,000 3.0%	27,341,000 96.6%	28,305,000 100.0%
Total	613,409	\$ 357.26	\$ 27,665,000 12.6%	\$ 15,856,000 7.2%	\$ 33,923,000 15.5%	\$ 141,705,000 64.7%	\$ 219,149,000 100.0%
<i>% of Total A/R</i>							
Water Fund	233,114	174.13	\$ 5,225,000	\$ 2,884,000	\$ 6,002,000	\$ 26,481,000	\$ 40,592,000
Sewer Fund	287,791	620.44	\$ 22,440,000	\$ 12,972,000	\$ 27,921,000	\$ 115,224,000	\$ 178,557,000
Total May 31, 2020 (a)	613,409	357.26	\$ 27,665,000	\$ 15,856,000	\$ 33,923,000	\$ 141,705,000	\$ 219,149,000
Water Fund- Allowance							\$ (32,255,000)
Sewer Fund- Allowance							\$ (110,739,000)
Total May 31, 2019 Bad Debt Allowance							\$ (142,994,000)
Comparative - May 2019 (b)	593,279	323.55	\$ 28,854,000	\$ 13,206,000	\$ 34,122,000	\$ 115,771,000	\$ 191,953,000
Difference (a) - (b)	20,130	33.72	\$ (1,190,000)	\$ 2,650,000	\$ (199,000)	\$ 25,935,000	\$ 27,196,000



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	<u>4</u>
Total	<u>87</u>

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

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

Table 1 - Wholesale Water Billings shows the FY 2020 water billed usage and revenues. As of May 31, 2020, the billed usage was at 94.80% of budget and billed revenue at 98.02% 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								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,777,138	32,544,400	18.31	1,545,631	30,356,570	19.64	(231,507)	(2,187,830)
August	1,549,587	30,383,100	19.61	1,554,426	30,501,606	19.62	4,839	118,506
September	1,368,496	28,270,400	20.66	1,257,111	27,278,750	21.70	(111,385)	(991,650)
October	1,066,653	25,351,200	23.77	1,026,086	25,007,145	24.37	(40,567)	(344,055)
November	917,034	24,049,100	26.22	905,016	23,933,012	26.44	(12,018)	(116,088)
December	1,004,420	24,714,000	24.61	983,589	24,535,948	24.95	(20,831)	(178,052)
January	1,018,192	24,861,000	24.42	945,874	24,246,312	25.63	(72,318)	(614,688)
February	893,007	23,780,800	26.63	878,794	23,689,167	26.96	(14,213)	(91,633)
March	1,008,766	24,753,300	24.54	971,559	24,450,282	25.17	(37,207)	(303,018)
April	948,751	24,262,000	25.57	884,232	23,725,074	26.83	(64,519)	(536,926)
May	1,073,966	25,549,300	23.79	1,017,096	25,087,428	24.67	(56,870)	(461,872)
June	1,383,200	28,595,300	20.67					
Total	14,009,210	317,113,900	22.64	11,969,414	282,811,294	23.63	(656,596)	(5,707,306)
Subtotals ytd	12,626,010	288,518,600	22.85	11,969,414	282,811,294	23.63	(656,596)	(5,707,306)
Achievement of Budget				94.80%	98.02%			

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

Table 2 - Wholesale Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
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%
January	25,470,795	23,430,974	2,039,821	8.71%
February	24,629,768	26,147,082	(1,517,314)	-5.80%
March	25,017,989	24,967,264	50,725	0.20%
April	17,856,644	23,045,654	(5,189,010)	-22.52%
May	24,811,582	20,749,943	4,061,639	19.57%
Rolling 12-Month Total	302,145,746	304,824,047		
Rolling, 12-Month Average	25,178,812	25,402,004		

Wholesale Sewer Billings and Collections

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

Service Arrangement Type

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

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

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

Table 3 - Wholesale Sewer Billings shows the FY 2020 sewer billed revenue. As of May 31, 2020 the billed revenue is at 100.00% of budget.

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 Sewer Billings Report

WHOLESALE SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,323,183	N/A	22,323,183	N/A	-
August	N/A	22,323,183	N/A	22,323,183	N/A	-
September	N/A	22,323,183	N/A	22,323,183	N/A	-
October	N/A	22,323,183	N/A	22,323,183	N/A	-
November	N/A	22,323,183	N/A	22,323,183	N/A	-
December	N/A	22,323,183	N/A	22,323,183	N/A	-
January	N/A	22,323,183	N/A	22,323,183	N/A	-
February	N/A	22,323,183	N/A	22,323,183	N/A	-
March	N/A	22,323,183	N/A	22,323,183	N/A	-
April	N/A	22,323,183	N/A	22,323,183	N/A	-
May	N/A	22,323,183	N/A	22,323,183	N/A	-
June	N/A	22,323,183	N/A	22,323,183	N/A	-
Total		267,878,196		245,555,013		-
<i>Subtotals ytd</i>		245,555,013		245,555,013		-
<i>Achievement of Budget</i>				100.00%		

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

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

Table 4 - Wholesale Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
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%
January	17,121,812	26,874,927	(9,753,115)	-36.29%
February	23,284,737	13,895,100	9,389,637	67.58%
March	21,108,100	22,388,600	(1,280,500)	-5.72%
April	10,024,575	23,203,703	(13,179,128)	-56.80%
May	21,189,047	9,284,000	11,905,047	128.23%
Rolling 12-Month Total	275,838,266	260,871,447		
Rolling, 12-Month Average	22,986,522	21,739,287		

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 May 31, 2020, Highland Park had a delinquent balance of \$43.7 million, including \$33.6 million for wastewater treatment services, \$1.7 million for industrial waste control services, and \$8.4 million for water supply services.

Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2020 through May 31, 2020. 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
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	7,455,746	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	7,562,384	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	7,670,391	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
January 2020 Billing	85,342	472,500	3,853	561,695
January 2020 Payments	-	(1,561,812)	-	(1,561,812)
January 31, 2020 Balance	8,062,660	32,557,275	1,702,982	42,322,917
February 2020 Billing	93,589	472,500	3,892	569,981
February 2020 Payments	-	-	-	-
February 28, 2020 Balance	8,156,249	33,029,775	1,706,874	42,892,898
March 2020 Billing	92,950	472,500	3,906	569,356
March 2020 Payments	-	-	-	-
March 31, 2020 Balance	8,249,199	33,502,275	1,710,780	43,462,254
April 2020 Billing	94,738	472,500	3,905	571,143
April 2020 Payments	-	-	-	-
April 30, 2020 Balance	8,343,937	33,974,775	1,714,685	44,033,397
May 2020 Billing	92,674	472,500	3,824	568,998
May 2020 Payments	-	(807,648)	-	(807,648)
May 31, 2020 Balance	8,436,611	33,639,627	1,718,509	43,794,747

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 May 31, 2020. The water past due balance of \$227 thousand and the sewer past due balance of \$333 thousand relates to payment delays associated with the COVID-19 pandemic. The past due amounts were paid in June.

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

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and 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). GLWA received a final agreement from Wayne County in late February to effectuate a transfer retroactive to July 1, 2018 and the credits were processed in June 2020.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 41,297,783.99	\$ 32,821,138.42	\$ 320,396.76	\$ 93,588.92	\$ 8,062,659.89
Sewer	\$ 59,677,233.41	\$ 26,177,098.45	\$ 805,508.16	\$ 472,500.00	\$ 32,222,126.80
IWC	\$ 3,556,590.01	\$ 429,034.31	\$ -	\$ 83,464.03	\$ 3,044,091.67
Pollutant Surcharge	\$ 894,157.81	\$ 777,706.06	\$ 28,028.69	\$ 18,351.13	\$ 70,071.93
Total	\$ 105,425,765.22	\$ 60,204,977.24	\$ 1,153,933.61	\$ 667,904.08	\$ 43,398,950.29
	100.00%	57.11%	1.09%	0.63%	41.17%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 32,861,172.65	\$ 32,633,726.02	\$ 227,446.63	\$ -	\$ -
Sewer	\$ 26,037,606.61	\$ 25,704,598.45	\$ 333,008.16	\$ -	\$ -
IWC	\$ 1,838,080.84	\$ 421,304.25	\$ -	\$ 75,666.37	\$ 1,341,110.22
Pollutant Surcharge	\$ 894,157.81	\$ 777,706.06	\$ 28,028.69	\$ 18,351.13	\$ 70,071.93
Total	\$ 61,631,017.91	\$ 59,537,334.78	\$ 588,483.48	\$ 94,017.50	\$ 1,411,182.15
	100.00%	96.60%	0.95%	0.15%	2.29%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 32,861,172.65	\$ 32,633,726.02	\$ 227,446.63	\$ -	\$ -
Sewer	\$ 26,037,606.61	\$ 25,704,598.45	\$ 333,008.16	\$ -	\$ -
IWC	\$ 427,812.44	\$ 421,304.25	\$ -	\$ 6,508.19	\$ -
Pollutant Surcharge	\$ 894,157.81	\$ 777,706.06	\$ 28,028.69	\$ 18,351.13	\$ 70,071.93
Total	\$ 60,220,749.51	\$ 59,537,334.78	\$ 588,483.48	\$ 24,859.32	\$ 70,071.93
	100.00%	98.87%	0.98%	0.04%	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 eleven months of activity to date.

Water fund receipts exceeded required disbursements by 10% through May 31, 2020 with a historical ratio of receipts exceeding required disbursements by 14% since January 1, 2016.

Sewer fund receipts exceeded required disbursements by 7% through May 31, 2020 with a historical ratio of receipts exceeding required disbursements by 5% since January 1, 2016. FY 2020 activity is high due in part to a one-time capital contribution of \$11.9 million by the Oakland Macomb Interceptor Drainage District in December 2019 as part of a recent contract amendment.

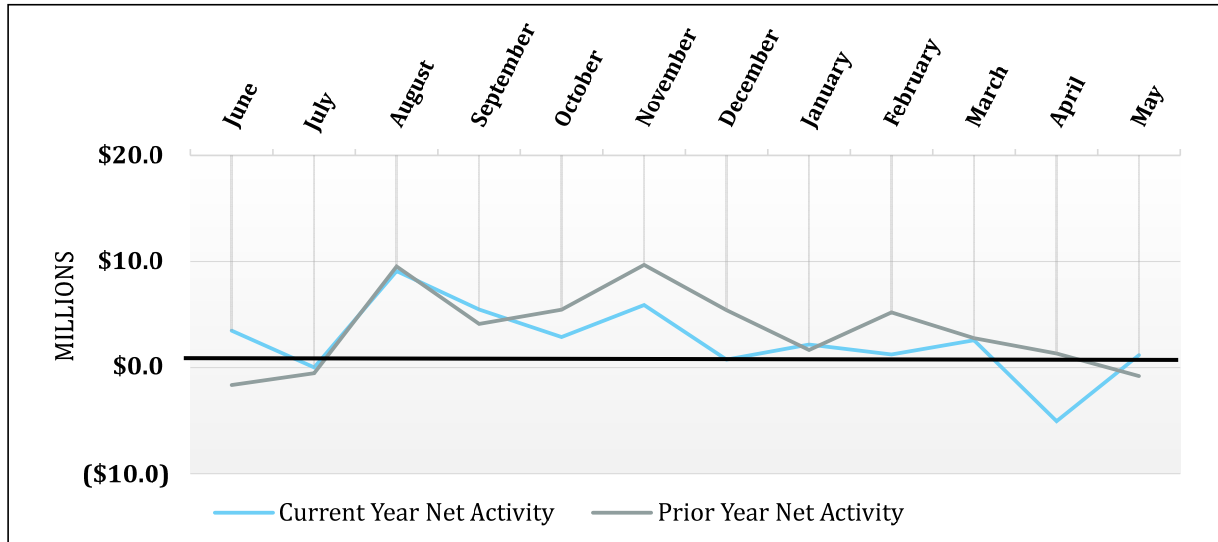
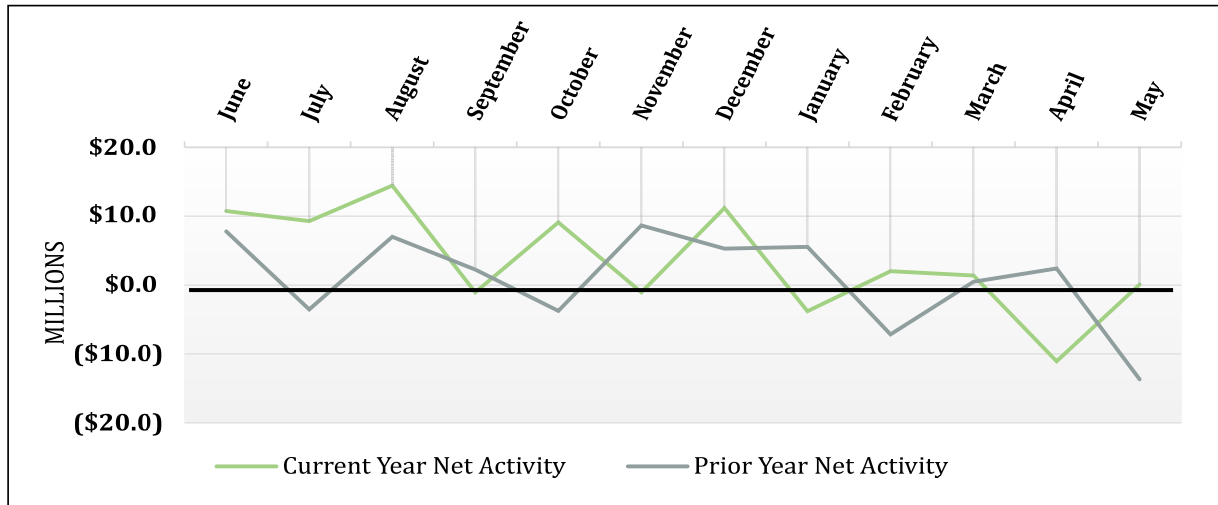
Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

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 Thru May 31	Life-to-Date Total
Water						
1 Receipts	\$ 149,688,711	\$ 352,941,909	\$ 338,452,001	\$ 336,594,234	\$ 302,645,804	\$ 1,480,322,659
2 MOU Adjustments	-	-	-	-	-	-
3 Adjusted Receipts	149,688,711	352,941,909	338,452,001	336,594,234	302,645,804	1,480,322,659
4 Disbursements	(146,256,185)	(288,777,985)	(297,064,810)	(289,230,481)	(276,375,031)	(1,297,704,492)
5 Receipts Net of Required Transfers	3,432,526	64,163,924	41,387,191	47,363,753	26,270,773	182,618,167
6 I&E Transfer	-	-	(25,739,700)	(47,695,000)	(22,593,751)	(96,028,451)
7 Net Receipts	\$ 3,432,526	\$ 64,163,924	\$ 15,647,491	\$ (331,247)	\$ 3,677,022	\$ 86,589,716
8 Ratio of Receipts to Required Disbursements (Line 3/Line 4)	102%	122%	114%	116%	110%	114%
Sewer						
9 Receipts	\$ 232,377,715	\$ 469,788,882	\$ 476,269,761	\$ 467,743,744	\$ 444,380,210	\$ 2,090,560,312
10 MOU Adjustments	-	-	-	-	-	-
11 Adjusted Receipts	232,377,715	469,788,882	476,269,761	467,743,744	444,380,210	2,090,560,312
12 Disbursements	(219,538,325)	(441,443,340)	(458,903,335)	(453,406,636)	(413,810,667)	(1,987,102,303)
13 Receipts Net of Required Transfers	12,839,390	28,345,542	17,366,426	14,337,108	30,569,543	103,458,009
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(64,342,000)
15 DWSD Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
16 Shortfall Repayment (principal)	-	-	-	9,367,355	16,055,773	25,423,128
17 Net Receipts	\$ 11,553,924	\$ 331,008	\$ (29,444,708)	\$ 1,156,763	\$ 27,529,116	\$ 11,126,103
18 Ratio of Receipts to Required Disbursements (Line 11/Line 12)	106%	106%	104%	103%	107%	105%
Combined						
19 Receipts	\$ 382,066,426	\$ 822,730,791	\$ 814,721,762	\$ 804,337,978	\$ 747,026,014	\$ 3,570,882,971
20 MOU Adjustments	-	-	-	-	-	-
21 Adjusted Receipts	382,066,426	822,730,791	814,721,762	804,337,978	747,026,014	3,570,882,971
22 Disbursements	(365,794,510)	(730,221,325)	(755,968,145)	(742,637,117)	(690,185,698)	(3,284,806,795)
23 Receipts Net of Required Transfers	16,271,916	92,509,466	58,753,617	61,700,861	56,840,316	286,076,176
24 I&E Transfer	-	-	(48,437,800)	(70,242,700)	(41,689,951)	(160,370,451)
25 Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
26 Shortfall Repayment	-	-	-	9,367,355	16,055,773	25,423,128
27 Net Receipts	\$ 14,986,450	\$ 64,494,932	\$ (13,797,217)	\$ 825,516	\$ 31,206,138	\$ 97,715,819
28 Ratio of Receipts to Required Disbursements (Line 21/Line 22)	104%	113%	108%	108%	108%	109%

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

Chart 1 – GLWA 12-Month Net Receipts – Water

Chart 2 – GLWA 12-Month Net Receipts – Sewer


DWSD Trust Receipts & Disbursements

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

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

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

Water fund receipts fell short of required disbursements by 1% through May 31, 2020 with a historical ratio of net receipts exceeding required disbursements by 2% since January 1, 2016.

Sewer fund receipts fell short of required disbursements by 4% through May 31, 2020 with a historic ratio of receipts falling short of required disbursements by 5% since January 1, 2016. DWSD has recognized this issue and proactively implemented plans in December 2019 to resolve that mid-year shortfall.

On December 3, DWSD transferred \$2.6 million from Sewer Operations & Maintenance back to the Sewer Receiving Fund, with an additional \$4.5 million cash replenishment transfer to GLWA in February 2020; the DWSD Operations & Maintenance budgeted transfer request has been reduced by \$1 million each month since December 2019 to further offset future cashflow timing issues.

March cash receipts reflected the initial impact of the COVID-19 pandemic which continued into April while May and June receipts show improvement. DWSD and GLWA management are closely monitoring these balances and developing plans to address any yearend shortfall resulting from this unforeseen pandemic.

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

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

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

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

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

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

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

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

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

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

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Thru May 31	Life-to-Date Total
Water						
1 Receipts	\$ 26,201,881	\$ 96,451,105	\$ 101,233,147	\$ 99,868,219	\$ 89,063,522	\$ 412,817,874
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	44,647,981	96,451,105	101,233,147	99,868,219	89,063,522	431,263,974
4 Disbursements	(47,809,552)	(93,066,144)	(93,049,457)	(97,694,600)	(90,293,952)	(421,913,705)
5 Receipts Net of Required Transfers	(3,161,571)	3,384,961	8,183,690	2,173,619	(1,230,430)	9,350,269
6 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
7 Net Receipts	\$ (3,161,571)	\$ 3,384,961	\$ 8,183,690	\$ (6,233,461)	\$ (1,230,430)	\$ 943,189
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	93%	104%	109%	102%	99%	102%
Sewer						
9 Receipts	\$ 65,256,734	\$ 233,723,367	\$ 242,104,791	\$ 265,339,797	\$ 242,130,657	\$ 1,048,555,346
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	121,011,834	233,723,367	242,104,791	271,866,997	242,130,657	1,110,837,646
12 Disbursements	(122,297,300)	(261,963,973)	(266,217,825)	(271,018,306)	(252,374,204)	(1,173,871,608)
13 Receipts Net of Required Transfers	(1,285,466)	(28,240,606)	(24,113,034)	848,691	(10,243,547)	(63,033,962)
14 I&E Transfer	-	-	-	-	-	-
15 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	53,413,034
16 Net Receipts (a)	\$ -	\$ (226,072)	\$ -	\$ 848,691	\$ (10,243,547)	\$ (9,620,928)
17 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	99%	89%	91%	100%	96%	95%
Combined						
18 Receipts	\$ 91,458,615	\$ 330,174,472	\$ 343,337,938	\$ 365,208,016	\$ 331,194,179	\$ 1,461,373,220
19 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
20 Adjusted Receipts	165,659,815	330,174,472	343,337,938	371,735,216	331,194,179	1,542,101,620
21 Disbursements	(170,106,852)	(355,030,117)	(359,267,282)	(368,712,906)	(342,668,156)	(1,595,785,313)
22 Receipts Net of Required Transfers	(4,447,037)	(24,855,645)	(15,929,344)	3,022,310	(11,473,977)	(53,683,693)
23 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
24 Shortfall Advance from GLWA	1,285,466	28,014,534	24,113,034	-	-	53,413,034
25 Net Receipts	\$ (3,161,571)	\$ 3,158,889	\$ 8,183,690	\$ (5,384,770)	\$ (11,473,977)	\$ (8,677,739)
26 <i>Ratio of Receipts to Required Disbursements (Line 20/Line 21)</i>	97%	93%	96%	101%	97%	97%

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

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

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

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

Table 3 – FY 2017 DWSD Loan Receivable – Sewer

Date	Transaction	Amount	Balance
06-30-18	Record FY 16 and FY 17 Loan Receivable		29,300,000
02-08-19	Loan Receivable Payment <i>(for the months of Jul - Dec)</i>	4,635,462	24,664,538
02-22-19	Loan Receivable Payment <i>(for the months of Jan - Mar)</i>	2,353,768	22,310,770
04-15-19	Loan Receivable Payment <i>(for the month of Apr)</i>	789,990	21,520,780
05-08-19	Loan Receivable Payment <i>(for the month of May)</i>	792,705	20,728,075
06-07-19	Loan Receivable Payment <i>(for the month of June)</i>	795,430	19,932,645
07-05-19	Loan Receivable Payment <i>(for the month of July)</i>	798,164	19,134,480
08-08-19	Loan Receivable Payment <i>(for the month of August)</i>	800,908	18,333,572
09-06-19	Loan Receivable Payment <i>(for the month of September)</i>	803,661	17,529,911
10-02-19	Loan Receivable Payment <i>(for the month of October)</i>	806,424	16,723,487
11-04-19	Loan Receivable Payment <i>(for the month of November)</i>	809,196	15,914,291
12-03-19	Loan Receivable Payment <i>(for the month of December)</i>	811,978	15,102,314
01-06-20	Loan Receivable Payment <i>(for the month of January)</i>	814,769	14,287,545
02-04-20	Loan Receivable Payment <i>(for the month of February)</i>	817,570	13,469,975
03-03-20	Loan Receivable Payment <i>(for the month of March)</i>	820,380	12,649,595
04-15-20	Loan Receivable Payment <i>(for the month of April)</i>	823,200	11,826,395
05-06-20	Loan Receivable Payment <i>(for the month of May)</i>	826,030	11,000,366
		18,299,634	11,000,366

Table 4 – FY 2017 DWSD Loan Receivable Payments – Sewer

Date	Transaction	Principal	Interest	Total Paid
02-08-19	Loan Receivable Payment <i>(for the months of Jul - Dec)</i>	4,635,462	564,636	5,200,098
02-22-19	Loan Receivable Payment <i>(for the months of Jan - Mar)</i>	2,353,768	246,280	2,600,049
04-15-19	Loan Receivable Payment <i>(for the month of Apr)</i>	789,990	76,693	866,683
05-08-19	Loan Receivable Payment <i>(for the month of May)</i>	792,705	73,978	866,683
06-07-19	Loan Receivable Payment <i>(for the month of June)</i>	795,430	71,253	866,683
07-05-19	Loan Receivable Payment <i>(for the month of July)</i>	798,164	68,518	866,683
08-08-19	Loan Receivable Payment <i>(for the month of August)</i>	800,908	65,775	866,683
09-06-19	Loan Receivable Payment <i>(for the month of September)</i>	803,661	63,022	866,683
10-02-19	Loan Receivable Payment <i>(for the month of October)</i>	806,424	60,259	866,683
11-04-19	Loan Receivable Payment <i>(for the month of November)</i>	809,196	57,487	866,683
12-03-19	Loan Receivable Payment <i>(for the month of December)</i>	811,978	54,705	866,683
01-06-20	Loan Receivable Payment <i>(for the month of January)</i>	814,769	51,914	866,683
02-04-20	Loan Receivable Payment <i>(for the month of February)</i>	817,570	49,113	866,683
03-03-20	Loan Receivable Payment <i>(for the month of March)</i>	820,380	46,303	866,683
04-15-20	Loan Receivable Payment <i>(for the month of April)</i>	823,200	43,483	866,683
05-06-20	Loan Receivable Payment <i>(for the month of May)</i>	826,030	40,653	866,683
		18,299,634	1,634,073	19,933,708

Table 5 – FY 2018 DWSD Loan Receivable – Sewer

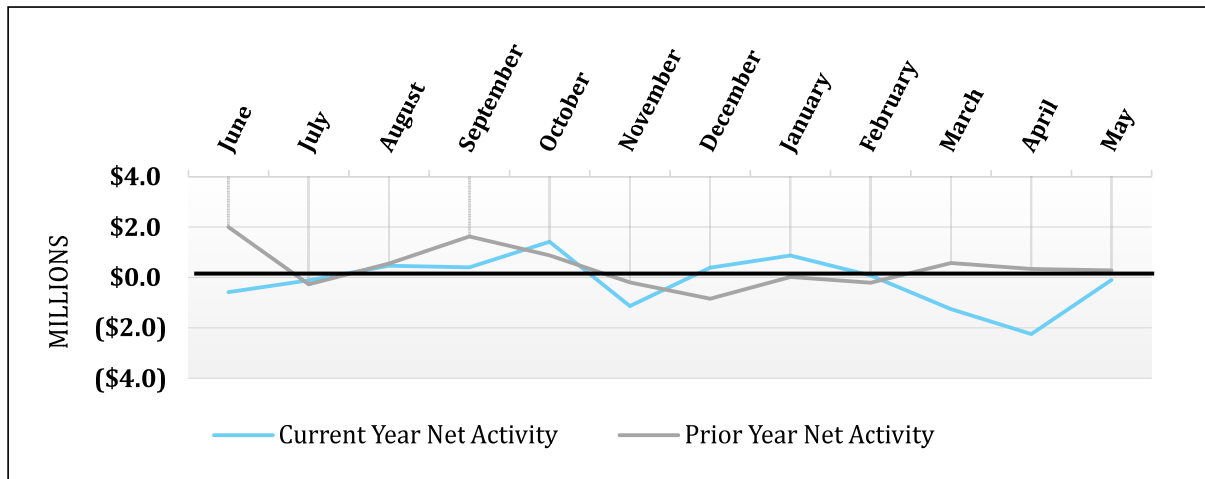
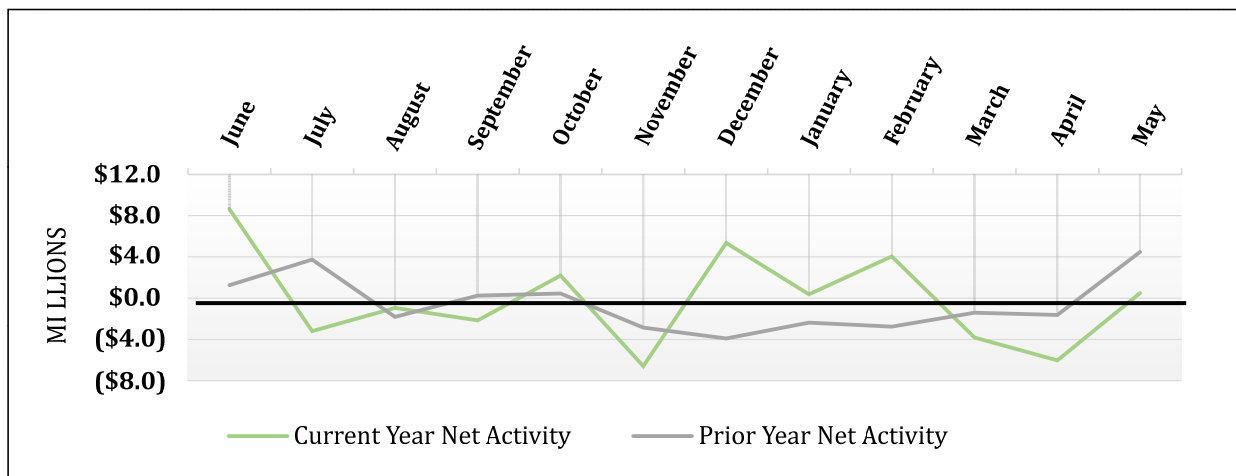
Date	Transaction	Amount	Balance
06-30-19	Record FY 18 Loan Receivable		24,113,034
07-15-19	Loan Receivable Payment <i>(for the month of July)</i>	638,978	23,474,056
08-08-19	Loan Receivable Payment <i>(for the month of August)</i>	640,686	22,833,370
09-06-19	Loan Receivable Payment <i>(for the month of September)</i>	642,400	22,190,970
10-02-19	Loan Receivable Payment <i>(for the month of October)</i>	644,118	21,546,852
11-04-19	Loan Receivable Payment <i>(for the month of November)</i>	645,840	20,901,012
12-03-19	Loan Receivable Payment <i>(for the month of December)</i>	647,567	20,253,445
01-06-20	Loan Receivable Payment <i>(for the month of January)</i>	649,299	19,604,146
02-04-20	Loan Receivable Payment <i>(for the month of February)</i>	651,035	18,953,111
03-03-20	Loan Receivable Payment <i>(for the month of March)</i>	652,776	18,300,335
04-15-20	Loan Receivable Payment <i>(for the month of April)</i>	654,522	17,645,813
05-06-20	Loan Receivable Payment <i>(for the month of May)</i>	656,272	16,989,541
		7,123,493	16,989,541

Table 6 – FY 2018 DWSD Loan Receivable Payments – Sewer

Date	Transaction	Principal	Interest	Total Paid
07-15-19	Loan Receivable Payment <i>(for the month of July)</i>	638,978	64,482	703,460
08-08-19	Loan Receivable Payment <i>(for the month of August)</i>	640,686	62,774	703,460
09-06-19	Loan Receivable Payment <i>(for the month of September)</i>	642,400	61,060	703,460
10-02-19	Loan Receivable Payment <i>(for the month of October)</i>	644,118	59,342	703,460
11-04-19	Loan Receivable Payment <i>(for the month of November)</i>	645,840	57,620	703,460
12-03-19	Loan Receivable Payment <i>(for the month of December)</i>	647,567	55,893	703,460
01-06-20	Loan Receivable Payment <i>(for the month of January)</i>	649,299	54,161	703,460
02-04-20	Loan Receivable Payment <i>(for the month of February)</i>	651,035	52,425	703,460
03-03-20	Loan Receivable Payment <i>(for the month of March)</i>	652,776	50,684	703,460
04-15-20	Loan Receivable Payment <i>(for the month of April)</i>	654,522	48,938	703,460
05-06-20	Loan Receivable Payment <i>(for the month of May)</i>	656,272	47,188	703,460
		7,123,493	614,567	7,738,060

Table 7 – Total DWSD Loan Receivable Balance – Sewer

Date	FY17 Loan Balance	FY18 Loan Balance	Total
06-30-18	29,300,000	-	29,300,000
07-31-18	29,300,000	-	29,300,000
08-31-18	29,300,000	-	29,300,000
09-30-18	29,300,000	-	29,300,000
10-31-18	29,300,000	-	29,300,000
11-30-18	29,300,000	-	29,300,000
12-31-18	29,300,000	-	29,300,000
01-31-19	29,300,000	-	29,300,000
02-28-19	24,664,538	-	24,664,538
03-31-19	22,310,770	-	22,310,770
04-30-19	21,520,780	-	21,520,780
05-31-19	20,728,075	-	20,728,075
06-30-19	19,932,645	24,113,034	44,045,679
07-31-19	19,134,480	23,474,056	42,608,537
08-31-19	18,333,572	22,833,370	41,166,942
09-30-19	17,529,911	22,190,970	39,720,881
10-31-19	16,723,487	21,546,852	38,270,340
11-30-19	15,914,291	20,901,012	36,815,303
12-31-19	15,102,314	20,253,445	35,355,759
01-31-20	14,287,545	19,604,146	33,891,691
02-29-20	13,469,975	18,953,111	32,423,086
03-31-20	12,649,595	18,300,335	30,949,930
04-30-20	11,826,395	17,645,813	29,472,208
05-31-20	11,000,366	16,989,541	27,989,906

Chart 3 – DWSD 12-Month Net Receipts – Water

Chart 4 – DWSD 12-Month Net Receipts – Sewer


Combined System Trust Receipts & Disbursements

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

Table 8 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by

fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2020 reflects eleven months of activity to date.

Water fund net receipts exceeded required disbursements by 7% through May 31, 2020 with a historical ratio of receipts exceeding required disbursements by 11% since January 1, 2016.

Sewer fund receipts exceeded required disbursements by 3% through May 31, 2020 and with a historical ratio of receipts exceeding required disbursements by 1% since January 1, 2016.

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

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Thru May 31	Life-to-Date Total
Water						
1 Receipts	\$ 175,890,592	\$ 449,393,014	\$ 439,685,148	\$ 436,462,453	\$ 391,709,326	\$ 1,893,140,533
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	194,336,692	449,393,014	439,685,148	436,462,453	391,709,326	1,911,586,633
4 Disbursements	(194,065,737)	(381,844,129)	(390,114,267)	(386,925,081)	(366,668,983)	(1,719,618,197)
5 Receipts Net of Required Transfers	270,955	67,548,885	49,570,881	49,537,372	25,040,343	191,968,436
6 I&E Transfer	-	-	(25,739,700)	(56,102,080)	(22,593,751)	(104,435,531)
7 Net Receipts	\$ 270,955	\$ 67,548,885	\$ 23,831,181	\$ (6,564,708)	\$ 2,446,592	\$ 87,532,905
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	100%	118%	113%	113%	107%	111%
Sewer						
9 Receipts	\$ 297,634,449	\$ 703,512,249	\$ 718,374,552	\$ 733,083,541	\$ 686,510,867	\$ 3,139,115,658
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	353,389,549	703,512,249	718,374,552	739,610,741	686,510,867	3,201,397,958
12 Disbursements	(341,835,625)	(703,407,313)	(725,121,160)	(724,424,942)	(666,184,871)	(3,160,973,911)
13 Receipts Net of Required Transfers	11,553,924	104,936	(6,746,608)	15,185,799	20,325,996	40,424,047
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	(19,096,200)	(64,342,000)
15 Shortfall Advance	-	-	-	-	-	-
16 Shortfall Repayment (principal)	-	-	-	9,367,355	16,055,773	25,423,128
17 Net Receipts	\$ 11,553,924	\$ 104,936	\$ (29,444,708)	\$ (7,361,901)	\$ 17,285,569	\$ 1,505,176
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	103%	100%	99%	102%	103%	101%
Combined						
19 Receipts	\$ 473,525,041	\$ 1,152,905,263	\$ 1,158,059,700	\$ 1,169,545,994	\$ 1,078,220,193	\$ 5,032,256,191
20 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
21 Adjusted Receipts	547,726,241	1,152,905,263	1,158,059,700	1,176,073,194	1,078,220,193	5,112,984,591
22 Disbursements	(535,901,362)	(1,085,251,442)	(1,115,235,427)	(1,111,350,023)	(1,032,853,854)	(4,880,592,108)
23 Receipts Net of Required Transfers	11,824,879	67,653,821	42,824,273	64,723,171	45,366,339	232,392,483
24 I&E Transfer	-	-	(48,437,800)	(78,649,780)	(41,689,951)	(168,777,531)
25 Shortfall Advance	-	-	-	-	-	-
26 Shortfall Repayment	-	-	-	9,367,355	16,055,773	25,423,128
27 Net Receipts	\$ 11,824,879	\$ 67,653,821	\$ (5,613,527)	\$ (4,559,254)	\$ 19,732,161	\$ 89,038,081
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	102%	106%	104%	106%	104%	105%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$176,620.55	\$176,620.55	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$68,321.33	\$68,321.33	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$26,780.75	\$26,780.75	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$57,627.72	\$57,627.72	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$276,647.69	\$276,647.69	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$45,505.16	\$45,505.16	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$26,886.30	\$26,886.30	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$786,619.42	\$786,619.42	\$0.00	\$0.00	\$0.00
CENTER LINE	\$37,814.91	\$37,814.91	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$322,603.62	\$322,603.62	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$591,427.08	\$591,427.08	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$522,959.78	\$522,959.78	\$0.00	\$0.00	\$0.00
DEARBORN	\$804,155.66	\$804,155.66	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$294,091.35	\$294,091.35	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$256,124.88	\$256,124.88	\$0.00	\$0.00	\$0.00
ECORSE	\$120,142.35	\$120,142.35	\$0.00	\$0.00	\$0.00
FARMINGTON	\$78,501.93	\$78,501.93	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$1,337,085.97	\$1,337,085.97	\$0.00	\$0.00	\$0.00
FERNDAL	\$263,739.51	\$177,877.54	\$85,861.97	\$0.00	\$0.00
FLAT ROCK	\$201,990.23	\$200,212.00	\$1,778.23	\$0.00	\$0.00
FLINT	\$274,263.06	\$274,263.06	\$0.00	\$0.00	\$0.00
FRASER	\$94,029.22	\$94,029.22	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$270,364.67	\$270,364.67	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$26,889.98	\$26,889.98	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$89,109.58	\$89,109.58	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$113,700.24	\$113,700.24	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$90,210.96	\$90,210.96	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$111,588.37	\$111,588.37	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$134,093.65	\$134,093.65	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$64,814.05	\$64,814.05	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$122,882.86	\$122,882.86	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$58,725.02	\$58,725.02	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$8,436,611.34	\$187,412.40	\$92,950.13	\$93,588.92	\$8,062,659.89
HURON TOWNSHIP	\$116,925.50	\$116,925.50	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$226,822.54	\$226,822.54	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,183.81	\$1,183.81	\$0.00	\$0.00	\$0.00
INKSTER	\$297,747.36	\$200,199.03	\$97,548.33	\$0.00	\$0.00
KEEGO HARBOR	\$47,184.74	\$47,184.74	\$0.00	\$0.00	\$0.00
LAPEER	\$114,182.77	\$114,182.77	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$69,185.13	\$46,199.04	\$22,986.09	\$0.00	\$0.00
LINCOLN PARK	\$196,961.33	\$196,961.33	\$0.00	\$0.00	\$0.00
LIVONIA	\$842,515.35	\$842,515.35	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$945,412.46	\$945,412.46	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$138,831.58	\$138,831.58	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$5,674.65	\$5,674.65	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELVINDALE	\$51,325.33	\$51,325.33	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$28,912.78	\$28,912.78	\$0.00	\$0.00	\$0.00
NOCWA	\$3,340,545.07	\$3,340,545.07	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$65,153.74	\$65,153.74	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$411,792.16	\$411,792.16	\$0.00	\$0.00	\$0.00
NOVI	\$659,750.54	\$659,750.54	\$0.00	\$0.00	\$0.00
OAK PARK	\$115,610.56	\$115,610.56	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$9,437.33	\$9,437.33	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$79,973.74	\$79,973.74	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$663,468.54	\$663,468.54	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$255,836.05	\$255,836.05	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$58,624.96	\$58,624.96	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$143,041.29	\$143,041.29	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$22,218.74	\$22,218.74	\$0.00	\$0.00	\$0.00
ROMEO	\$55,893.60	\$36,621.59	\$19,272.01	\$0.00	\$0.00
ROMULUS	\$695,164.62	\$695,164.62	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$206,338.99	\$206,338.99	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$30,933.74	\$30,933.74	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$2,073,742.34	\$2,073,742.34	\$0.00	\$0.00	\$0.00
SOCWA	\$3,486,202.82	\$3,486,202.82	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$9,237.04	\$9,237.04	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$173,818.82	\$173,818.82	\$0.00	\$0.00	\$0.00
ST. CLAIR COUNTY-GREENWOOD T	\$90,410.94	\$90,410.94	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$259,901.34	\$259,901.34	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,131,102.33	\$1,131,102.33	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$55,308.86	\$55,308.86	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,091.19	\$18,091.19	\$0.00	\$0.00	\$0.00
TAYLOR	\$743,274.33	\$743,274.33	\$0.00	\$0.00	\$0.00
TRENTON	\$137,565.52	\$137,565.52	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,010,062.87	\$1,010,062.87	\$0.00	\$0.00	\$0.00
UTICA	\$41,114.98	\$41,114.98	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$268,801.76	\$268,801.76	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$37,321.23	\$37,321.23	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$122,325.21	\$122,325.21	\$0.00	\$0.00	\$0.00
WARREN	\$785,487.27	\$785,487.27	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$165,361.19	\$165,361.19	\$0.00	\$0.00	\$0.00
WAYNE	\$241,121.01	\$241,121.01	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,599,000.28	\$1,599,000.28	\$0.00	\$0.00	\$0.00
WESTLAND	\$504,667.49	\$504,667.49	\$0.00	\$0.00	\$0.00
WIXOM	\$372,571.58	\$372,571.58	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$260,369.88	\$260,369.88	\$0.00	\$0.00	\$0.00
YCUA	\$1,631,345.52	\$1,631,345.52	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$41,297,783.99	\$32,821,138.42	\$320,396.76	\$93,588.92	\$8,062,659.89

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$71,200.00	\$71,200.00	\$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	\$2,903,300.00	\$2,903,300.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$151,000.00	\$151,000.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$665,800.00	\$332,900.00	\$332,900.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$33,639,626.80	\$472,500.00	\$472,500.00	\$472,500.00	\$32,222,126.80
MELVINDALE	\$127,908.16	\$127,800.00	\$108.16	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,772,000.00	\$3,772,000.00	\$0.00	\$0.00	\$0.00
OMID	\$11,672,798.95	\$11,672,798.95	\$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	\$59,677,233.41	\$26,177,098.45	\$805,508.16	\$472,500.00	\$32,222,126.80

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$3,065.66	\$3,065.66	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O) ADMIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BERKLEY	\$6,009.64	\$6,009.64	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$1,008.93	\$1,008.93	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$2,320.37	\$2,320.37	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$5,309.98	\$5,309.98	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$1,570.01	\$1,570.01	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,158.84	\$7,158.84	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$739,218.80	\$0.00	\$0.00	\$36,253.88	\$702,964.92
CENTER LINE	\$3,501.68	\$3,501.68	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$11,742.12	\$11,742.12	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$190.97	\$190.97	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$16,933.80	\$16,933.80	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLARKSTON (C-O) ADMIN	\$65.94	\$65.94	\$0.00	\$0.00	\$0.00
CLAWSON	\$2,626.26	\$2,626.26	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$24,526.97	\$24,526.97	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$9,188.53	\$9,188.53	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$202.80	\$202.80	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EASTPOINTE	\$6,146.53	\$6,146.53	\$0.00	\$0.00	\$0.00
FARMINGTON	\$3,829.54	\$3,829.54	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$23,261.16	\$23,261.16	\$0.00	\$0.00	\$0.00
FRASER	\$4,715.10	\$4,715.10	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$35.49	\$35.49	\$0.00	\$0.00	\$0.00
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
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
HAMTRAMCK	\$7,936.24	\$7,936.24	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,799.85	\$1,799.85	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,035.24	\$3,035.24	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,030.17	\$3,030.17	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,718,509.17	\$7,730.06	\$0.00	\$7,797.66	\$1,702,981.45
HUNTINGTON WOODS	\$272.09	\$272.09	\$0.00	\$0.00	\$0.00
INDEPENDENCE (C-O) ADMIN	\$2,329.24	\$2,329.24	\$0.00	\$0.00	\$0.00
INKSTER	\$5,286.32	\$5,286.32	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$667.55	\$667.55	\$0.00	\$0.00	\$0.00
LAKE ORION	\$763.88	\$763.88	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,336.79	\$1,336.79	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$618.54	\$618.54	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
LIVONIA	\$0.00	\$0.00	\$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	\$3,234.66	\$3,234.66	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$584.74	\$584.74	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$3,633.50	\$3,633.50	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$177,363.16	\$0.00	\$0.00	\$8,696.74	\$168,666.42
NOVI	\$16,715.79	\$16,715.79	\$0.00	\$0.00	\$0.00
OAK PARK	\$19,527.95	\$13,019.76	\$0.00	\$6,508.19	\$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
ORION TOWNSHIP (C-O)	\$153.79	\$153.79	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O) ADMIN	\$18.17	\$18.17	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$ (961.61)	\$ (961.61)	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$260.26	\$260.26	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$493,686.44	\$0.00	\$0.00	\$24,207.56	\$469,478.88
REDFORD TOWNSHIP	\$12,367.54	\$12,367.54	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$17,521.92	\$17,521.92	\$0.00	\$0.00	\$0.00
ROMULUS	\$1,760.98	\$1,760.98	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$13,830.96	\$13,830.96	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,188.76	\$13,188.76	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ROYAL OAK TOWNSHIP	\$887.25	\$887.25	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,032.80	\$12,032.80	\$0.00	\$0.00	\$0.00
SOUTHFIELD (E-F)	\$27,100.84	\$27,100.84	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,711.24	\$3,711.24	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$11,427.78	\$11,427.78	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$60,339.76	\$60,339.76	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UTICA	\$2,854.41	\$2,854.41	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$1,755.91	\$1,755.91	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$62.53	\$62.53	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,358.76	\$1,358.76	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP DPW (ADMI	\$2,957.26	\$2,957.26	\$0.00	\$0.00	\$0.00
WAYNE	\$4,770.87	\$4,770.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,094.14	\$6,094.14	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP. (C-O) A	\$225.63	\$225.63	\$0.00	\$0.00	\$0.00
WESTLAND	\$21,547.50	\$21,547.50	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$3,556,590.01	\$429,034.31	\$0.00	\$83,464.03	\$3,044,091.67

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$11,112.07	\$11,112.07	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$4,652.43	\$4,652.43	\$0.00	\$0.00	\$0.00
AACTRON	\$96.18	\$96.18	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$52.12	\$52.12	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$33,794.69	\$24,325.41	\$9,469.28	\$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	\$228.43	\$228.43	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$32,344.53	\$32,344.53	\$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	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$289.88	\$289.88	\$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 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$18,172.61	\$18,172.61	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$61.25	\$0.00	\$0.00	\$0.00	\$61.25
BOZEK'S MARKET	\$48.38	\$48.38	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$5,454.81	\$5,454.81	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$ (37.39)	\$0.00	\$0.00	\$ (37.39)	\$0.00
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CADILLAC STRAITS BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CAPITAL REPRODUCTIONS	\$1.24	\$1.24	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$17,394.86	\$17,394.86	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,702.55	\$38.60	\$17.69	\$35.39	\$1,610.87
CINTAS CORP. - MACOMB TWP.	\$49,317.82	\$49,317.82	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$18,931.76	\$18,931.76	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$8,077.11	\$8,077.11	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$28.93	\$7.97	\$11.22	\$9.74	\$0.00
CLASSIC CONTAINER CORP.	\$6.80	\$6.80	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$1,832.82	\$1,832.82	\$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 05/31/20

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.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$1,909.22	\$862.95	\$0.00	\$1,046.27	\$0.00
DARLING INGREDIENTS, INC.	\$7,415.66	\$7,415.66	\$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 CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$8.55	\$8.55	\$0.00	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$86.86	\$38.18	\$48.68	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$75,255.39	\$26,495.64	\$12,993.51	\$17,041.53	\$18,724.71
DIVERSIFIED CHEM TECH. INC.	\$91.91	\$91.91	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$ (963.93)	\$ (963.93)	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$405.06	\$405.06	\$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.	\$2,871.51	\$2,871.51	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$181.55	\$0.00	\$0.00	\$0.00	\$181.55
ENVIROSOLIDS, L.L.C.	\$ (1,544.97)	\$0.00	\$0.00	\$0.00	\$ (1,544.97)

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$2,080.11	\$2,080.11	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$10,313.57	\$10,313.57	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$110.22	\$110.22	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$319.23	\$211.68	\$107.55	\$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.	\$20,460.55	\$20,460.55	\$0.00	\$0.00	\$0.00
FORD NEW MODEL PROGRAM	\$680.62	\$680.62	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$258.00	\$258.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$ (3,780.55)	\$ (3,780.55)	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$14,004.57	\$3,814.41	\$10,190.16	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$ (16.01)	\$0.00	\$0.00	\$0.00	\$ (16.01)
GRANITE CITY FOOD & BREWERY	\$53.43	\$0.00	\$0.00	\$0.00	\$53.43
GRANITE CITY FOOD & BREWERY	\$ (85.95)	\$0.00	\$0.00	\$0.00	\$ (85.95)
GREAT BARABOO BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$1,252.09	\$1,052.13	\$199.96	\$0.00	\$0.00
HENKEL CORPORATION	\$420.51	\$117.57	\$0.00	\$175.02	\$127.92

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOME STYLE FOOD INC.	\$421.02	\$421.02	\$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.	\$561.02	\$561.02	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$286.75	\$286.75	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$2,813.44	\$2,813.44	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$487.34	\$487.34	\$0.00	\$0.00	\$0.00
IDP, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$207.21	\$207.21	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$2,693.48	\$2,022.67	\$670.81	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$4.83	\$3.22	\$1.61	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$48.39	\$48.39	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$81.07	\$0.00	\$0.00	\$0.00	\$81.07
KAR NUT PRODUCTS	\$924.72	\$924.72	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$678.47	\$678.47	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$629.58	\$629.58	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$2,694.07	\$2,694.07	\$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.	\$4,534.29	\$4,534.29	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$682.85	\$682.85	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 05/31/20

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	\$199.22	\$113.84	\$85.38	\$0.00	\$0.00
METROPOLITAN BAKERY	\$579.07	\$579.07	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$387.48	\$231.54	\$155.94	\$0.00	\$0.00
MICHIGAN DAIRY	\$95,831.76	\$95,831.76	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$2,260.57	\$2,260.57	\$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	\$993.35	\$993.35	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$19.85	\$19.85	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$1,990.25	\$1,990.25	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$48.71	\$2.10	\$3.83	\$0.70	\$42.08
MOTOR CITY BREWING WORKS	\$1,313.13	\$0.00	\$0.00	\$0.00	\$1,313.13
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 & MEA	\$27.89	\$27.89	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$38,047.78	\$38,047.78	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$77.01	\$40.46	\$36.55	\$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 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PINE TREE ACRES, INC.	\$73,630.82	\$73,630.82	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$495.23	\$495.23	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$270.35	\$270.35	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$1,120.60	\$1,120.60	\$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	\$5.79	\$5.79	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$1,180.47	\$0.00	\$0.00	\$0.00	\$1,180.47
ROCHESTER MILLS BEER COMPANY	\$285.99	\$0.00	\$0.00	\$0.00	\$285.99
ROCHESTER MILLS PROD BREWERY	\$1,253.77	\$0.00	\$0.00	\$0.00	\$1,253.77
ROYAL OAK BREWERY	\$ (885.14)	\$0.00	\$0.00	\$0.00	\$ (885.14)
RTT	\$27,772.36	\$0.00	\$0.00	\$0.00	\$27,772.36
SEAFARE FOODS, INC.	\$70.90	\$70.90	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$1,034.82	\$0.00	\$0.00	\$0.00	\$1,034.82
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$14.52	\$14.52	\$0.00	\$0.00	\$0.00
SUPERNATURAL SPIRITS & BREWI	\$75.08	\$0.00	\$0.00	\$0.00	\$75.08
SWEETHEART BAKERY, INC.	\$2,235.63	\$119.08	\$87.14	\$79.87	\$1,949.54
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$62.66	\$0.00	\$0.00	\$0.00	\$62.66

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 05/31/20

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	\$184,681.65	\$184,681.65	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$2,390.65	\$2,390.65	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$66,587.20	\$66,587.20	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,422.09	\$2,422.09	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$6.64	\$6.64	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$269.00	\$269.00	\$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	\$807.83	\$807.83	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$2,249.08	\$2,249.08	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$4,884.72	\$4,884.72	\$0.00	\$0.00	\$0.00
VALICOR ENVIROMENTAL SERVICE	\$4,285.09	\$2,733.73	\$1,551.36	\$0.00	\$0.00
VERNDALE PRODUCTS	\$7,613.51	\$7,613.51	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$ (7,601.98)	\$0.00	\$ (7,601.98)	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (36.26)	\$0.00	\$0.00	\$0.00	\$ (36.26)
WIGLEY'S MEAT PROCESS	\$463.87	\$463.87	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$859.46	\$859.46	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$184.98	\$184.98	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$1,484.46	\$1,484.46	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,276.72	\$2,276.72	\$0.00	\$0.00	\$0.00

Balances as of 05/31/20

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
WOODWARD AVENUE BREWERS	\$85.18	\$0.00	\$0.00	\$0.00	\$85.18
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$894,157.81	\$777,706.06	\$28,028.69	\$18,351.13	\$70,071.93

City of Highland Park Billings and Collections

	<u>Water</u>	<u>Sewer</u>	<u>IWC</u>	<u>Cumulative Total</u>
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	<u>(65,652)</u>	<u>(2,206,211)</u>	<u>-</u>	<u>(2,271,863)</u>
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	<u>-</u>	<u>(1,612,633)</u>	<u>-</u>	<u>(1,612,633)</u>
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	<u>-</u>	<u>(1,444,623)</u>	<u>-</u>	<u>(1,444,623)</u>
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	<u>-</u>	<u>(2,022,335)</u>	<u>-</u>	<u>(2,022,335)</u>
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	<u>-</u>	<u>(2,309,186)</u>	<u>-</u>	<u>(2,309,186)</u>
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	<u>-</u>	<u>(4,108,108)</u>	<u>-</u>	<u>(4,108,108)</u>
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments	<u>-</u>	<u>(5,241,583)</u>	<u>-</u>	<u>(5,241,583)</u>
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings (11 Months)	1,085,566	5,192,900	43,266	6,321,732
FY 2020 Payments (11 Months)	<u>-</u>	<u>(3,026,117)</u>	<u>-</u>	<u>(3,026,117)</u>
				-
Balance as of May 31, 2020	<u>\$ 8,436,611</u>	<u>\$ 33,639,627</u>	<u>\$ 1,718,509</u>	<u>\$ 43,794,747</u>



Financial Services Audit Committee Communication

Date: August 21, 2020

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report through June 30, 2020 (Unaudited)

Background: As stated in section 14 of the Great Lakes Water Authority (GLWA) Investment Policy, quarterly reporting shall be presented to provide a clear picture of the status of the current GLWA investment portfolio. The attached report, prepared and presented by PFM Asset Management LLC, summarizes portfolio information through June 30, 2020 (unaudited).

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

- Yield to Market at Cost compared to market index:
 - As of June 30, 2020: 0.19% vs 0.15% (3-Month Treasury Index)
 - As of March 31, 2020: 0.66% vs 0.08% (3-Month Treasury Index)
- Portfolio Allocation in Cash/Money Market Securities
 - As of June 30, 2020: 34%
 - As of March 31, 2020: 32%

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

Proposed Action: Receive and file this report.

Great Lakes Water Authority

Investment Performance Report – June 2020





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Executive Summary

PORTFOLIO RECAP

- **Safety** – The overall portfolio is diversified amongst cash, bank deposits, U.S. Treasuries, Federal Agencies, commercial paper, SEC-registered money market funds, and a local government investment pool. The total credit profile of the portfolio is strong with over 97% of the assets invested in bank deposits or securities that are rated within the two highest short and long-term rating classifications as established by S&P.
- **Liquidity** – Great Lakes Water Authority (“GLWA”) has continued to monitor its portfolio with the goal of limiting the allocation to cash and bank deposit accounts and maximizing the use of short-term investments to meet liquidity requirements. As of June 30, 2020, around 34% of the funds were held in cash and money market accounts maturing overnight.
- **Return** – The overall market yield decreased to 0.19% as of June 30, 2020 versus 0.66% as of March 31, 2020. The lower yield is a result of the decreasing interest rate environment. GLWA earned over \$19.3 million (unaudited) in investment income for fiscal year 2020 on a book value basis. Based on current market assumptions and the present interest rate environment, we expect that the investment income for GLWA in FY 2021 will be significantly lower than the prior year.

AVAILABLE FUNDS (Unaudited)

Type	Financial Institution	Book Value	Market Value	Yield @ Cost (as of 6/30/20)	Yield @ Market (as of 6/30/20)
Deposit Account	Comerica	\$5,537,008	\$5,537,008	0.15%	0.15%
Deposit Account - Retainage	First Independence	\$15,122,036	\$15,122,036	0.05%	0.05%
Deposit Account – Flint Security Deposit	Chase	\$3,812,527	\$3,812,527	0.15%	0.15%
Deposit Account	Chase	\$9,750,442	\$9,750,442	0.15%	0.15%
Trust Money Market Fund	U.S. Bank	\$209,632,027	\$209,632,027	0.06%	0.06%
Money Market Fund	JP Morgan	\$18,721,715	\$18,721,715	0.10%	0.10%
Local Government Investment Pool	GovMIC	\$63,566,538	\$63,566,538	0.57%	0.57%
Managed Funds	PFM	\$623,049,346	\$631,335,433	1.61%	0.21%
<u>TOTAL</u>		<u>\$949,191,639</u>	<u>\$957,477,726</u>	<u>1.12%</u>	<u>0.19%</u>

The accounts at Comerica Bank get an earnings credit to offset bank fees. The funds and earnings in the Retainage account are held on behalf of the contractors and do not belong to GLWA. The funds and earnings in the Flint Security Deposit account are held on behalf of the City of Flint and do not belong to GLWA. In addition to the above, there also exists surety bonds in the amount of \$324,309,258 as of 6/30/2020.



Investment Strategy

GLWA INVESTMENT STRATEGY

- The overall portfolio is in compliance with GLWA’s investment policy and Michigan Public Act 20.
- To date, GLWA has continued to invest its funds in a mixture of short and intermediate-term investments to ensure adequate liquidity to cover future debt and pension payments.
- The total portfolio was yielding 0.19% at the end of June.*
 - This compares to the 0.15% yield of the Bank of America / Merrill Lynch 3-Month U.S. Treasury Bill Index as of 6/30/2020, which is a comparable market indicator.
- GLWA continues to implement a very disciplined investment plan to provide improved safety and diversification and putting every dollar to work for its constituents.
- For the first quarter of fiscal year 2021, PFM Asset Management LLC (“PFM”), GLWA’s investment advisor, will continue to actively manage long-term portfolios with full discretion and align short-term balances with expected liabilities, subject to GLWA’s investment policy and Michigan state statutes.
- GLWA will continue to work with PFM to identify strategies in this extremely low interest rate environment to maximize future investment income while meeting the primary objectives of safety and liquidity.

** Current market yield as of June 30, 2020.*



Summary Market Overview and Outlook

ECONOMIC HIGHLIGHTS UPDATE

- As summer began, a resurgence of COVID-19 cases spread across parts of the U.S., threatening the economic recovery, summer's lure, and the economic consequences of prolonged lockdowns. This prompted U.S. states to reopen – perhaps prematurely. Whether a continuation of the first wave of the emergence of a new wave, one thing is certain: COVID-19 remains a rising public health threat, and the U.S. is struggling in a riptide of uncertainty.
- In his semiannual monetary policy report to Congress in mid-June, Federal Reserve Chairman Jerome Powell painted a guarded view of the economy, noting “the levels of output and employment remain far below their pre-pandemic levels, and significant uncertainty remains about the timing and strength of the recovery.” Meanwhile, the Fed’s balance sheet grew to a historic high of \$7.1 trillion as the central bank added to its holdings of open market securities, and the Fed continued to expand its use of liquidity and credit market support programs.

ECONOMIC IMPACT ON PORTFOLIO

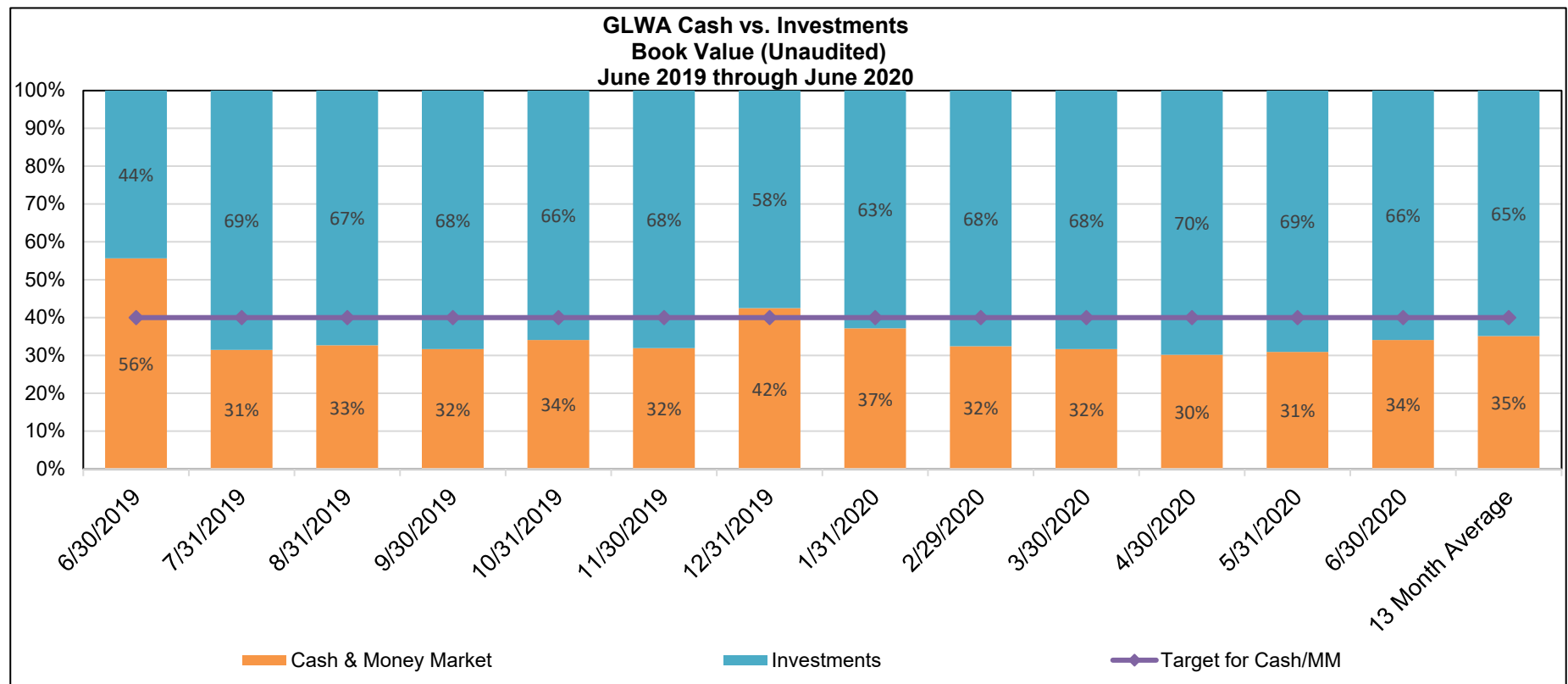
- The U.S. Treasury yield curve drifted marginally lower and it remains at a historically low level with the 10-year benchmark ending June at 0.66%.
- The U.S. Treasury continued to borrow at a record pace to fund the unprecedented series of stimulus packages by selling nearly a half-trillion of bills and bonds. The federal budget deficit in June alone was nearly equivalent to the deficit for the entire prior fiscal year.
- Given low and very stable rates, Treasury returns were muted during the quarter. Commercial paper investments generated strong excess returns as spreads tightened to near pre-crisis levels. Market appetite for both new and secondary inventory remained strong, helping to pressure credit spreads narrow. As most all non-U.S. Treasury sectors again benefited from a continued retracement of spreads from peak crisis levels in mid-March, sector diversification helped to buoy portfolio performance in the quarter.
- There is little opportunity presented by the shape of the Treasury yield curve, especially with bond market volatility low. Value persists in the Federal Agency sector, with new issues offering attractive concessions to lure buyers.



Portfolio Mix

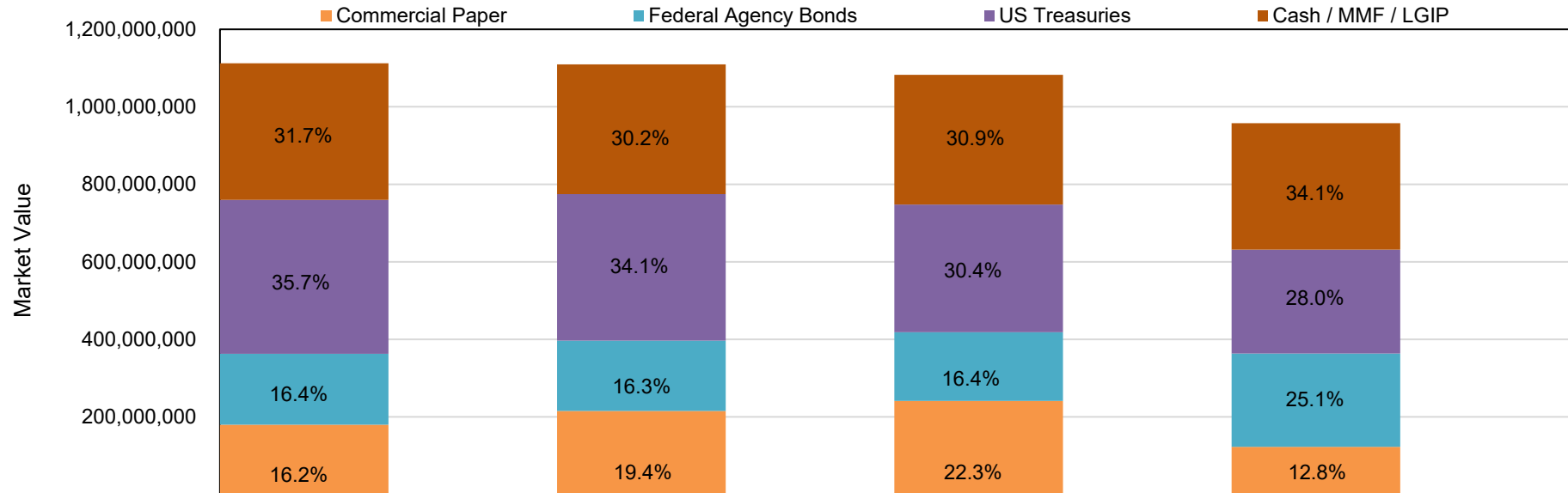
Cash / Money Market vs. Investments

- GLWA's liquidity requirements fluctuate each month based on operational requirements, capital funding, and debt payments. Based on a review of historical activity and refinement of cash flow projections, GLWA has set a target ratio of 40% cash & money market accounts and 60% investments for the portfolio holdings. The 13-month average at the end of June of 2020 was ahead of the target.
- The chart below compares the monthly allocation of the portfolio holdings to the 13-month average and the target. The allocation between cash and investments will vary each month based on liquidity requirements. For June of 2020, 34% of the portfolio was invested in cash & money market accounts. This percentage is slightly higher at the end of June due to liquidity needed for July 1st debt payments.





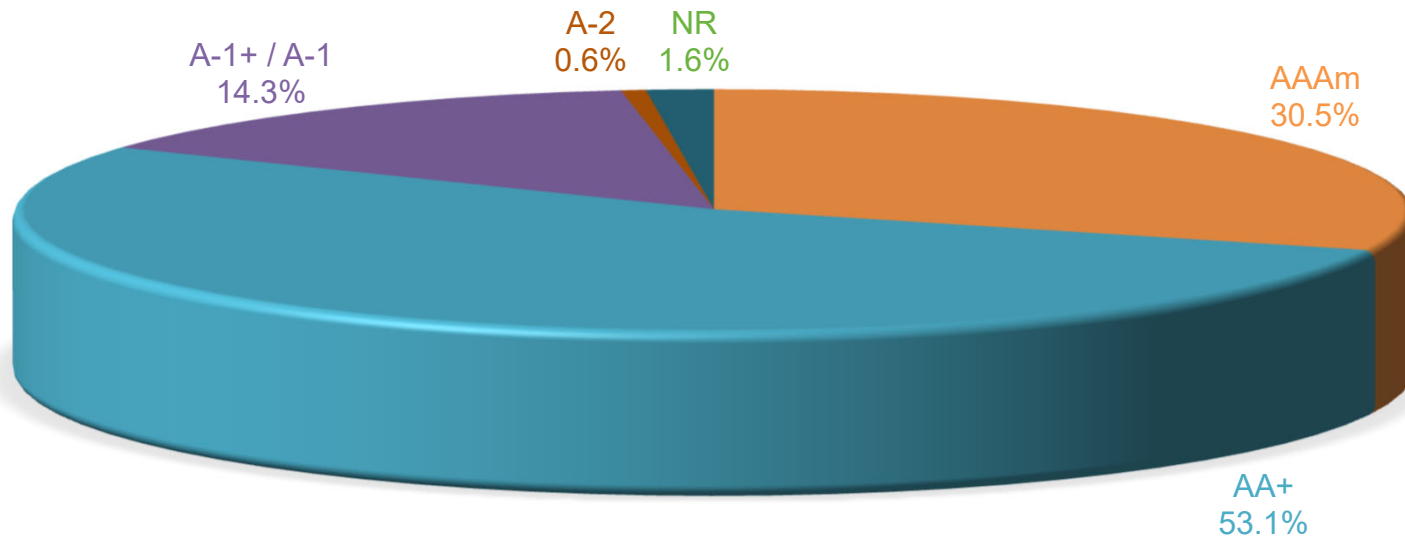
Investments – By Security Type



Security Type	March		April		May		June	
	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation
Commercial Paper	180,085,293	16.2%	215,521,717	19.4%	241,276,687	22.3%	122,917,184	12.8%
Federal Agencies	182,803,984	16.4%	181,232,839	16.3%	177,337,074	16.4%	240,552,126	25.1%
U.S. Treasuries	396,952,391	35.7%	377,979,620	34.1%	329,021,019	30.4%	267,906,040	28.0%
Cash / MMF / LGIP	352,144,134	31.7%	334,699,846	30.2%	334,725,025	30.9%	326,102,376	34.1%
Total	1,111,985,803	100.0%	1,109,434,023	100.0%	1,082,359,806	100.0%	957,477,726	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.

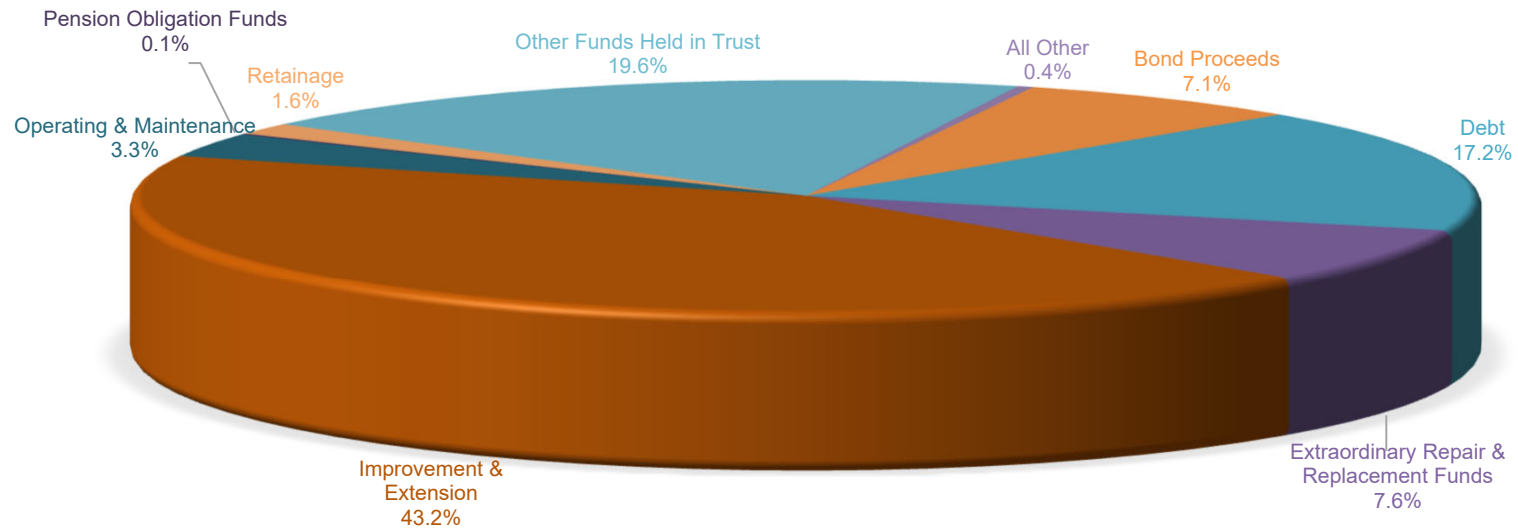
Investments – By Credit Quality



Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	291,920,280	30.5%
AA+	508,413,512	53.1%
A-1 + / A-1	136,484,890	14.3%
A-2	5,537,008	0.6%
NR	15,122,036	1.6%
Totals	957,477,726	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.

Investments – By Account Purpose



Account Purpose	Market Value	% Allocation
Bond Proceeds	\$ 67,731,348	7.1%
Debt	\$ 164,350,883	17.2%
Extraordinary Repair & Replacement Funds	\$ 72,528,922	7.6%
Improvement & Extension	\$ 413,546,153	43.2%
Operating & Maintenance	\$ 31,728,413	3.3%
Pension Obligation Funds	\$ 1,349,881	0.1%
Retainage	\$ 15,122,036	1.6%
Other Funds Held in Trust	\$ 187,307,563	19.6%
All Other	\$ 3,812,527	0.4%
Total	\$ 957,477,726	100.0%

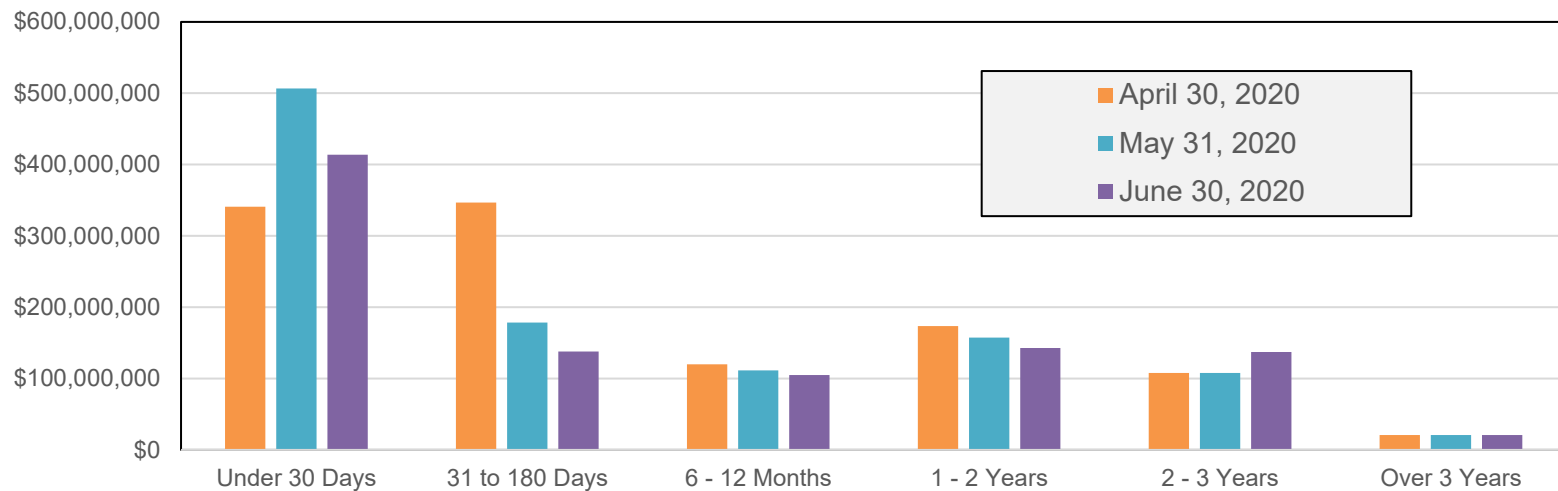
Other Funds Held in Trust	Market Value	% Allocation
Budget Stabilization Funds	\$ 7,634,554	4.1%
Receiving Funds	\$ 169,017,504	90.2%
WRAP Funds	\$ 10,655,505	5.7%
Total	\$ 187,307,563	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020. "All Other" funds includes the Flint Security Deposit account which is held on behalf of the City of Flint and do not belong to GLWA.



Investments – By Maturity

Maturity Distribution	April 30, 2020		%	May 31, 2020		%	June 30, 2020		%
Under 30 Days	\$	340,706,714	30.7%	\$	506,582,748	46.8%	\$	413,728,146	43.2%
31 to 180 Days		346,630,269	31.2%		178,359,569	16.5%		137,938,068	14.4%
6 - 12 Months		120,021,796	10.8%		111,517,662	10.3%		104,944,295	11.0%
1 - 2 Years		173,587,292	15.6%		157,281,036	14.5%		142,845,624	14.9%
2 - 3 Years		107,720,922	9.7%		107,809,103	10.0%		137,192,218	14.3%
Over 3 Years		20,767,030	1.9%		20,809,688	1.9%		20,829,375	2.2%
Totals	\$	1,109,434,023	100.0%	\$	1,082,359,806	100.0%	\$	957,477,726	100.0%



In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.



Investment Accounts – Yield at Cost & Market

	As of June 30, 2020		As of March 31, 2020	
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Comerica	0.15%	0.15%	0.15%	0.15%
First Independence	0.05%	0.05%	0.05%	0.05%
Flint Deposit Account	0.15%	0.15%	0.34%	0.34%
JP Morgan Chase	0.15%	0.15%	0.34%	0.34%
Sub-Total Bank Deposits	0.11%	0.11%	0.19%	0.19%
Money Market Funds / LGIPs				
GovMIC	0.57%	0.57%	1.36%	1.36%
U.S. Bank - First American MMF	0.06%	0.06%	0.37%	0.37%
JP Morgan Securities - Blackrock MMF	0.10%	0.10%	0.79%	0.79%
Sub-Total MMF / LGIPs	0.17%	0.17%	0.78%	0.78%
Investment Portfolios				
Sewage SR Debt Serv 5403	0.94%	0.18%	1.67%	1.54%
Sewage SR Res 5400	1.80%	0.17%	1.69%	0.24%
Sew 2nd Debt Serv 5403	0.45%	0.20%	1.61%	1.47%
Sewage 2nd Res 5481	1.80%	0.17%	1.74%	0.25%
Sew SRF Debt Serv 5410	1.49%	0.24%	1.94%	1.32%
Sewage ER & R	1.90%	0.20%	2.20%	0.32%
Sewer Improvement & Extension	1.57%	0.21%	1.80%	0.37%
Sewer Pension Obligation	0.00%	0.00%	1.52%	0.37%
Sewer Wrap Fund	0.82%	0.25%	1.52%	1.44%
Sewer Budget Stabilization Fund	2.00%	0.20%	2.28%	0.32%
Sewer Bond Fund	1.61%	0.23%	1.61%	1.82%
Sewer O&M Pension Sub Account	0.00%	0.00%	2.00%	0.37%
Water SR Debt Ser 5503	1.00%	0.17%	1.66%	1.52%
Water SR Reserve 5500	1.80%	0.17%	2.18%	0.27%
Water 2nd Debt Serv 5503	1.13%	0.19%	1.66%	1.45%
Water 2nd Res 5581	1.80%	0.17%	1.84%	0.24%
Water SRF Debt Serv 5575	1.48%	0.25%	2.03%	1.57%
Water ER & R	1.91%	0.20%	2.19%	0.32%
Water Improvement & Extension	1.76%	0.21%	2.06%	0.39%
Water Pension Obligation	0.00%	0.00%	1.53%	0.37%
Water Wrap Fund	0.70%	0.24%	1.50%	1.35%
Water Budget Stabilization Fund	2.00%	0.20%	2.28%	0.32%
Water Bond Fund	1.61%	0.23%	2.33%	0.82%
Water O&M Pension Sub Account	0.00%	0.00%	2.00%	0.37%
Sub-Total Investment Portfolios	1.61%	0.21%	1.91%	0.64%
Grand Total	1.12%	0.19%	1.53%	0.66%

The accounts at Comerica Bank get an earnings credit to offset bank fees. The earnings in the accounts at First Independence Bank is credited to the contractors and not the Authority. The funds in the Flint Security Deposit account are held on behalf of the City of Flint and the earnings do not belong to GLWA. YTM @ Cost is the expected return, based on the original cost, the annual interest receipts, maturity value and the time period from purchase date to maturity, stated as a percentage, on an annualized basis. YTM @ Market is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.



Demonstration of Yield to Maturity vs. Duration

- The comparison agencies included in the list below were selected based on type and/or other non-performance based criteria to show a broad range of water entities/utilities. This peer group list does not represent an endorsement of any of the public agencies or their services. The types of funds (e.g., bond proceeds, debt service, etc.) and duration of the overall portfolios listed below as well as the various differences in permitted investments and allowable credit capacity in state statutes (i.e., the ability or non-ability to invest in long-term corporate credit) will have a direct impact on the corresponding yields at market.
- The overall yield of GLWA's aggregate portfolio compares somewhat favorably to those of other short-term market indices (i.e., the S&P LGIP index and the 3-month U.S. Treasury index), despite the inverted yield curve environment.
- GLWA does not have a potential for a longer duration portfolio when compared to other similar water entities/utilities as the Authority's covenants limits and restricts its ability in managing assets to a longer-term strategy.

As of June 30, 2020

	Market Value	YTM @ Market	Effective Duration	Weighted Average Maturity
GLWA				
Great Lakes Water Authority	\$957,477,726	0.19%	0.82 Years	301 Days
Short/Intermediate-Term Indices				
S&P Rated Government Investment Pool Index		0.08%	0.08 Years	30 Days
BoA / ML 3-Month Treasury Index		0.15%	0.16 Years	58 Days
BoA / ML 6-Month Treasury Index		0.17%	0.41 Years	150 Days
BoA / ML 1-Year Treasury Index		0.17%	0.91 Years	332 Days
BoA / ML 1-3 Year Treasury Index		0.17%	1.82 Years	664 Days
BoA / ML 1-5 Year Treasury Index		0.19%	2.58 Years	942 Days
Peer Analysis (Water Entities / Utilities)				
District of Columbia Water & Sewer Authority, DC	\$324,118,818	0.34%	0.81 Years	310 Days
DuPage Water Commission, IL	\$159,204,153	0.68%	2.47 Years	1,344 Days
Fairfax County Water Authority, VA	\$167,850,238	0.32%	1.95 Years	737 Days
Metro Wastewater Reclamation District, CO	\$199,875,322	0.36%	2.57 Years	1,043 Days
Metropolitan Water District of Southern California, CA	\$491,447,925	0.49%	0.48 Years	278 Days
Philadelphia Water Department, PA	\$211,297,645	0.27%	0.89 Years	377 Days
San Bernardino Valley Municipal Water District, CA	\$369,115,105	0.37%	1.84 Years	687 Days
Tohopekaliga Water Authority, FL	\$156,527,366	0.77%	1.82 Years	980 Days
Truckee Meadows Water Authority, NV	\$107,102,954	0.28%	2.07 Years	779 Days

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



Monthly Investment Income (Book Value)

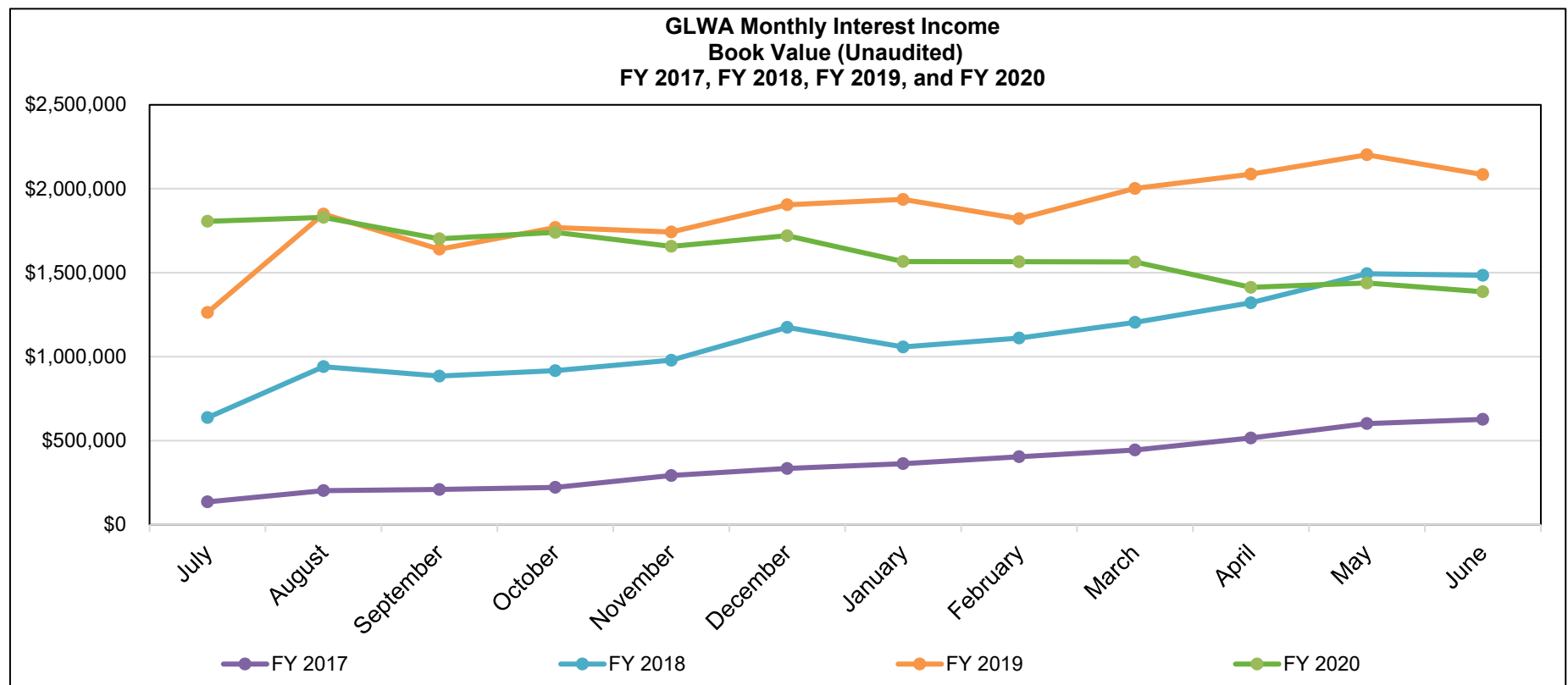
FY 2020 INVESTMENT INCOME BY MONTH (Unaudited)

Month	Interest Earned During Period	Realized Gain / Loss	Investment Income
July 2019	\$1,763,209.65	\$43,136.83	\$1,806,346.48
August 2019	\$1,829,826.44	\$0.00	\$1,829,826.44
September 2019	\$1,700,961.33	\$1,005.57	\$1,701,966.90
October 2019	\$1,740,610.53	\$0.00	\$1,740,610.53
November 2019	\$1,656,964.78	\$0.00	\$1,656,964.78
December 2019	\$1,720,392.03	\$0.00	\$1,720,392.03
January 2020	\$1,566,652.22	\$0.00	\$1,566,652.22
February 2020	\$1,565,502.42	\$0.00	\$1,565,502.42
March 2020	\$1,563,729.94	\$0.00	\$1,563,729.94
April 2020	\$1,412,937.34	\$0.00	\$1,412,937.34
May 2020	\$1,276,364.43	\$162,459.42	\$1,438,823.85
June 2020	\$1,010,693.55	\$376,103.28	\$1,386,796.83
<u>FY 2020</u>	<u>\$18,807,844.66</u>	<u>\$582,705.10</u>	<u>\$19,390,549.76</u>

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

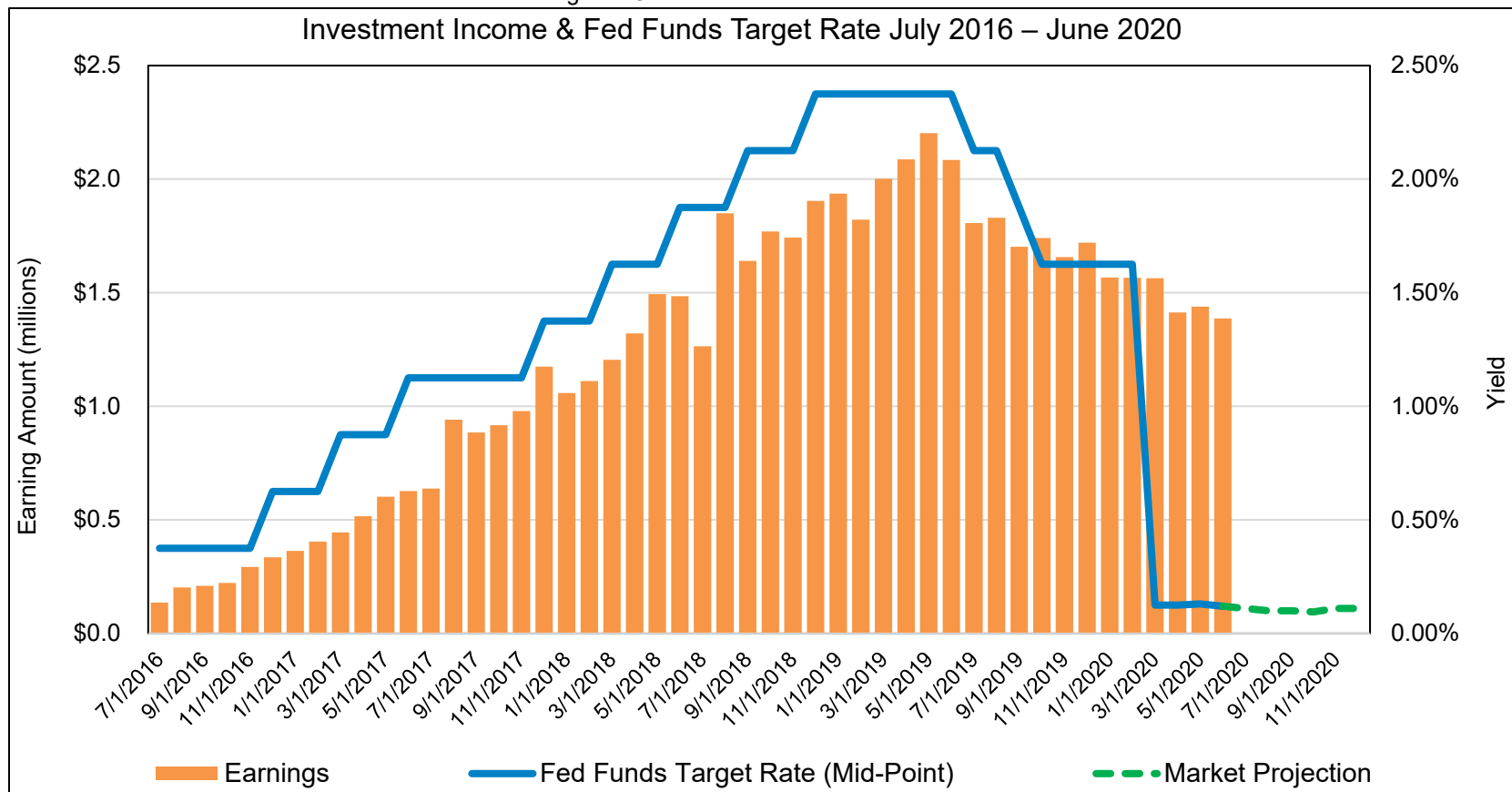
Year-Over-Year Investment Income

- GLWA earned \$19,390,550 in investment income for fiscal year 2020 on a book value basis compared to \$22,302,384 for fiscal year 2019.
- Projected investment income for fiscal year 2021 is expected to be significantly lower than the prior year due to market expectations that the overnight Fed Funds target lending rate will be maintained at its current range of 0.00% to 0.25% through the end of the fiscal year.



Monthly Investment Income Compared to Fed Funds Rate

- As a result of the short-term duration of GLWA's portfolio, it is heavily impacted by changes in the Fed Funds target rate; the chart below illustrates that GLWA's investment income has consistently followed the trend of the Fed Funds rate.
- Earnings in fiscal year 2020 did not drop as fast as the Fed Funds rate due to the fact that GLWA held individual securities in its various accounts that were purchased before the Fed cut rates, and some of these investments had original yields of over 1.00%.
- According to Fed Funds futures, rate actions are not expected through 2021; based on the historical trend, the current zero interest rate policy by the Federal Reserve will translate into lower interest earnings for GLWA.



Appendix I: Portfolio Holdings



Portfolio Holdings As of June 30, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
<u>Short-Term Bank Deposits / MMF / LGIP</u>									
COMERICA BANK		\$ 5,537,008	7/1/2020	6/30/2020	0.15%	\$ 5,537,008	1	\$ -	\$ 5,537,008
FIRST INDEPENDENCE BANK		15,122,036	7/1/2020	6/30/2020	0.05%	15,122,036	1	-	15,122,036
FLINT DEPOSIT ACCOUNT		3,812,527	7/1/2020	6/30/2020	0.15%	3,812,527	1	-	3,812,527
JP MORGAN CHASE		9,750,442	7/1/2020	6/30/2020	0.15%	9,750,442	1	-	9,750,442
GovMIC		63,566,538	7/1/2020	6/30/2020	0.57%	63,566,538	1	-	63,566,538
U.S. BANK - FIRST AMERICAN MMF		209,632,027	7/1/2020	6/30/2020	0.06%	209,632,027	1	-	209,632,027
JP MORGAN SECURITIES - BLACKROCK MMF		18,721,715	7/1/2020	6/30/2020	0.10%	18,721,715	1	-	18,721,715

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.



Portfolio Holdings As of June 30, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Commercial Paper									
Apple Inc 0 7/1/2020	03785DG18	\$ 3,820,000	7/1/2020	3/23/2020	1.09%	\$ 3,808,434	1	\$ -	\$ 3,820,000
Cooperatieve Rabobank 0 7/1/2020	21687AG15	4,017,000	7/1/2020	12/6/2019	1.79%	3,975,919	1	-	4,017,000
MUFG Bank NY 0 7/1/2020	62479LG17	3,985,000	7/1/2020	5/14/2020	0.16%	3,984,150	1	-	3,985,000
Royal Bank of Canada 0 7/1/2020	78009AG16	3,999,000	7/1/2020	4/14/2020	0.65%	3,993,368	1	-	3,999,000
Toyota Motor Credit 0 7/1/2020	89233GG18	1,250,000	7/1/2020	1/6/2020	1.88%	1,238,569	1	-	1,250,000
Toyota Motor Credit 0 7/1/2020	89233GG18	4,017,000	7/1/2020	2/7/2020	1.69%	3,989,818	1	-	4,017,000
Cooperatieve Rabobank 0 7/1/2020	21687AG15	3,550,000	7/1/2020	12/6/2019	1.79%	3,513,695	1	-	3,550,000
MUFG Bank NY 0 7/1/2020	62479LG17	2,370,000	7/1/2020	5/14/2020	0.16%	2,369,494	1	-	2,370,000
Royal Bank of Canada 0 7/1/2020	78009AG16	2,350,000	7/1/2020	4/14/2020	0.65%	2,346,690	1	-	2,350,000
Apple Inc 0 7/1/2020	03785DG18	550,000	7/1/2020	3/23/2020	1.09%	548,335	1	-	550,000
MUFG Bank NY 0 7/1/2020	62479LG17	3,820,000	7/1/2020	5/14/2020	0.16%	3,819,185	1	-	3,820,000
Royal Bank of Canada 0 7/1/2020	78009AG16	3,831,000	7/1/2020	4/14/2020	0.65%	3,825,605	1	-	3,831,000
Apple Inc 0 7/1/2020	03785DG18	7,290,000	7/1/2020	3/23/2020	1.09%	7,267,928	1	-	7,290,000
Cooperatieve Rabobank 0 7/1/2020	21687AG15	11,675,000	7/1/2020	12/6/2019	1.79%	11,555,604	1	-	11,675,000
MUFG Bank NY 0 7/1/2020	62479LG17	11,665,000	7/1/2020	5/14/2020	0.16%	11,662,511	1	-	11,665,000
Royal Bank of Canada 0 7/1/2020	78009AG16	11,720,000	7/1/2020	4/14/2020	0.65%	11,703,494	1	-	11,720,000
Toyota Motor Credit 0 7/1/2020	89233GG18	1,983,000	7/1/2020	2/7/2020	1.69%	1,969,582	1	-	1,983,000
MUFG Bank NY 0 7/1/2020	62479LG17	260,000	7/1/2020	2/7/2020	1.67%	258,262	1	-	260,000
Citigroup Global Markets 0 7/17/2020	17327AGH4	1,225,000	7/17/2020	4/8/2020	1.20%	1,220,917	17	-	1,224,914
Svenska Handelsbanken 0 7/28/2020	86960JGU3	1,000,000	7/28/2020	3/12/2020	1.00%	996,167	28	-	999,890
MUFG Bank NY 0 8/25/2020	62479LHR9	1,500,000	8/25/2020	2/24/2020	1.61%	1,487,800	56	-	1,499,408
MUFG Bank NY 0 8/25/2020	62479LHR9	1,750,000	8/25/2020	2/24/2020	1.61%	1,735,767	56	-	1,749,309
Citigroup Global Markets 0 9/3/2020	17327AJ32	1,285,000	9/3/2020	4/8/2020	1.31%	1,278,132	65	-	1,284,563
Citigroup Global Markets 0 9/18/2020	17327AJJ7	347,000	9/18/2020	4/13/2020	1.26%	345,096	80	-	346,854
MUFG Bank NY 0 9/18/2020	62479LJJ5	245,000	9/18/2020	1/3/2020	1.91%	241,686	80	-	244,897
MUFG Bank NY 0 9/18/2020	62479LJJ5	245,000	9/18/2020	2/7/2020	1.68%	242,469	80	-	244,897
Pfizer Inc 0 9/18/2020	71708EJJ5	250,000	9/18/2020	3/23/2020	2.51%	246,917	80	-	249,895
Toyota Motor Credit 0 9/18/2020	89233GJJ6	244,000	9/18/2020	5/13/2020	1.12%	243,028	80	-	243,898
Toyota Motor Credit 0 9/18/2020	89233GJJ6	212,000	9/18/2020	6/4/2020	0.29%	211,819	80	-	211,911
BNP Paribas NY 0 9/18/2020	09659BJJ0	3,750,000	9/18/2020	2/7/2020	1.65%	3,711,967	80	-	3,748,425
Citigroup Global Markets 0 9/18/2020	17327AJJ7	5,415,000	9/18/2020	4/13/2020	1.26%	5,385,293	80	-	5,412,726
MUFG Bank NY 0 9/18/2020	62479LJJ5	5,119,000	9/18/2020	1/3/2020	1.91%	5,049,763	80	-	5,116,850
Pfizer Inc 0 9/18/2020	71708EJJ5	5,175,000	9/18/2020	3/23/2020	2.51%	5,111,187	80	-	5,172,827
Toyota Motor Credit 0 9/18/2020	89233GJJ6	5,149,000	9/18/2020	5/13/2020	1.12%	5,128,496	80	-	5,146,837
Toyota Motor Credit 0 9/18/2020	89233GJJ6	4,711,000	9/18/2020	6/4/2020	0.29%	4,706,977	80	-	4,709,021
Exxon Mobil 0 10/2/2020	30229AK24	1,000,000	10/2/2020	6/3/2020	0.24%	999,193	94	-	999,410
Credit Agricole 0 10/5/2020	22533TK54	300,000	10/5/2020	6/3/2020	0.18%	299,814	97	-	299,817
BNP Paribas NY 0 10/5/2020	09659BK58	615,000	10/5/2020	5/8/2020	0.30%	614,231	97	-	614,625
Credit Agricole 0 10/5/2020	22533TK54	250,000	10/5/2020	6/3/2020	0.18%	249,845	97	-	249,848
Swedbank 0 11/2/2020	87019RL20	1,000,000	11/2/2020	6/3/2020	0.28%	998,818	125	-	999,100

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.



Portfolio Holdings As of June 30, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Federal Agencies									
FHLMC 2.375 2/16/2021	3137EAEL9	\$ 3,500,000	2/16/2021	8/8/2018	2.79%	\$ 3,465,210	231	\$ 30,941	\$ 3,546,900
FHLMC 2.375 2/16/2021	3137EAEL9	20,000,000	2/16/2021	8/8/2018	2.79%	19,801,200	231	176,806	20,268,000
FHLMC 2.375 2/16/2021	3137EAEL9	250,000	2/16/2021	8/9/2018	2.78%	247,563	231	2,210	253,350
FHLMC 2.375 2/16/2021	3137EAEL9	685,000	2/16/2021	8/9/2018	2.78%	678,321	231	6,056	694,179
FNMA 2.5 4/13/2021	3135G0U27	3,500,000	4/13/2021	8/8/2018	2.82%	3,471,685	287	18,715	3,563,945
FNMA 2.5 4/13/2021	3135G0U27	20,000,000	4/13/2021	8/8/2018	2.82%	19,838,200	287	106,944	20,365,400
FNMA 2.5 4/13/2021	3135G0U27	250,000	4/13/2021	8/9/2018	2.81%	247,985	287	1,337	254,568
FNMA 2.5 4/13/2021	3135G0U27	3,400,000	4/13/2021	8/8/2018	2.81%	3,372,698	287	18,181	3,462,118
FNMA 2.5 4/13/2021	3135G0U27	685,000	4/13/2021	8/9/2018	2.81%	679,479	287	3,663	697,515
FNMA 2.5 4/13/2021	3135G0U27	5,750,000	4/13/2021	8/8/2018	2.81%	5,703,828	287	30,747	5,855,053
FHLB 2.25 6/11/2021	3130A1W95	10,000,000	6/11/2021	7/11/2019	1.94%	10,058,200	346	11,875	10,187,900
FHLB 2.25 6/11/2021	3130A1W95	25,000,000	6/11/2021	7/11/2019	1.94%	25,145,500	346	29,688	25,469,750
FHLB 1.875 7/7/2021	3130AGLD5	3,715,000	7/7/2021	6/10/2019	1.96%	3,708,982	372	33,474	3,777,672
FHLB 1.875 7/7/2021	3130AGLD5	3,910,000	7/7/2021	6/10/2019	1.96%	3,903,666	372	35,231	3,975,962
FHLMC 2.375 1/13/2022	3137EADB2	10,000,000	1/13/2022	7/11/2019	1.89%	10,118,700	562	110,174	10,333,400
FHLMC 2.375 1/13/2022	3137EADB2	25,000,000	1/13/2022	7/11/2019	1.89%	25,296,750	562	275,434	25,833,500
FHLB 2.125 6/10/2022	313379Q69	10,000,000	6/10/2022	7/11/2019	1.92%	10,059,200	710	11,806	10,359,300
FHLB 2.125 6/10/2022	313379Q69	25,000,000	6/10/2022	7/11/2019	1.92%	25,148,000	710	29,514	25,898,250
FHLMC 0.375 5/5/2023	3137EAER6	6,000,000	5/5/2023	6/5/2020	0.38%	6,000,060	1,039	3,313	6,015,600
FHLMC 0.375 5/5/2023	3137EAER6	14,650,000	5/5/2023	6/5/2020	0.38%	14,650,147	1,039	8,088	14,688,090
FNMA 0.25 5/22/2023	3135G04Q3	10,000,000	5/22/2023	6/5/2020	0.36%	9,968,400	1,056	2,639	9,989,500
FNMA 0.25 5/22/2023	3135G04Q3	25,000,000	5/22/2023	6/5/2020	0.36%	24,921,000	1,056	6,597	24,973,750
FNMA 0.25 5/22/2023	3135G04Q3	240,000	5/22/2023	6/5/2020	0.35%	239,292	1,056	63	239,748
FNMA 0.25 5/22/2023	3135G04Q3	3,400,000	5/22/2023	6/5/2020	0.35%	3,389,970	1,056	897	3,396,430
FNMA 0.25 5/22/2023	3135G04Q3	670,000	5/22/2023	6/5/2020	0.35%	668,024	1,056	177	669,297
FNMA 0.25 5/22/2023	3135G04Q3	5,750,000	5/22/2023	6/5/2020	0.35%	5,733,038	1,056	1,517	5,743,963

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.



Portfolio Holdings As of June 30, 2020

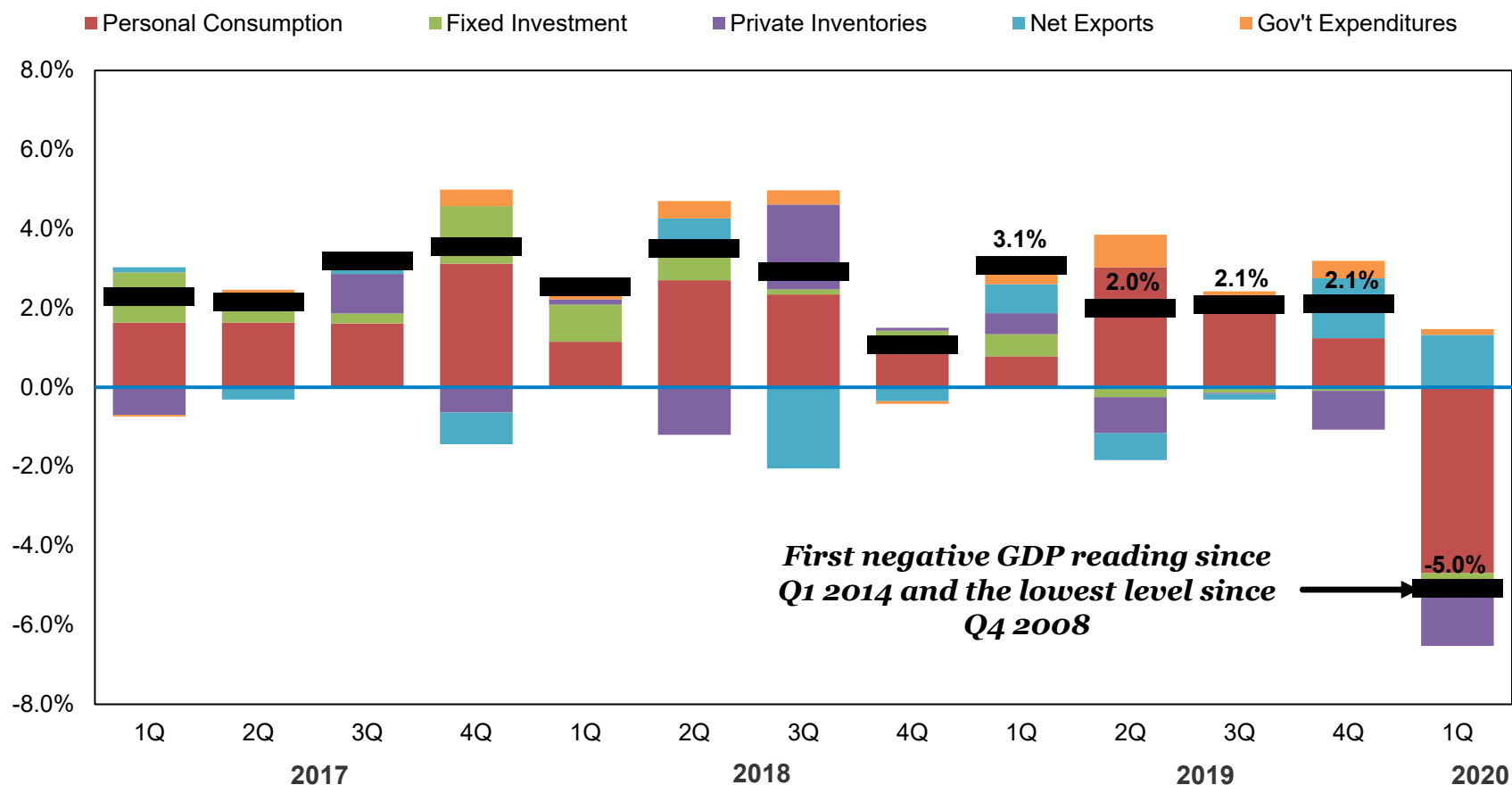
DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
U.S. Treasuries									
T-Note 2.125 8/31/2020	912828VV9	\$ 3,500,000	8/31/2020	8/8/2018	2.69%	\$ 3,460,762	62	\$ 24,657	\$ 3,511,270
T-Note 2.125 8/31/2020	912828VV9	5,000,000	8/31/2020	7/11/2019	1.95%	5,009,570	62	35,224	5,016,100
T-Note 2.125 8/31/2020	912828VV9	20,000,000	8/31/2020	8/8/2018	2.69%	19,775,781	62	140,897	20,064,400
T-Note 2.125 8/31/2020	912828VV9	250,000	8/31/2020	8/9/2018	2.69%	247,188	62	1,761	250,805
T-Note 2.125 8/31/2020	912828VV9	3,400,000	8/31/2020	8/8/2018	2.69%	3,361,883	62	23,952	3,410,948
T-Note 2.125 8/31/2020	912828VV9	685,000	8/31/2020	8/9/2018	2.69%	677,294	62	4,826	687,206
T-Note 2.125 8/31/2020	912828VV9	5,750,000	8/31/2020	8/8/2018	2.69%	5,685,537	62	40,508	5,768,515
T-Note 1.375 9/15/2020	9128282V1	5,134,000	9/15/2020	12/6/2019	1.62%	5,124,374	77	20,526	5,146,681
T-Note 1.375 9/15/2020	9128282V1	79,000	9/15/2020	1/3/2020	1.60%	78,877	77	316	79,195
T-Note 1.75 10/31/2020	912828WC0	4,915,000	10/31/2020	11/20/2019	1.64%	4,919,992	123	14,258	4,940,411
T-Note 1.75 10/31/2020	912828WC0	13,595,000	10/31/2020	11/20/2019	1.64%	13,608,807	123	39,437	13,665,286
T-Note 2 11/30/2020	912828A42	3,500,000	11/30/2020	8/8/2018	2.72%	3,444,082	153	5,738	3,525,690
T-Note 2 11/30/2020	912828A42	6,100,000	11/30/2020	9/6/2019	1.74%	6,119,539	153	10,000	6,144,774
T-Note 2 11/30/2020	912828A42	20,000,000	11/30/2020	8/8/2018	2.72%	19,680,469	153	32,787	20,146,800
T-Note 2 11/30/2020	912828A42	250,000	11/30/2020	8/9/2018	2.72%	246,006	153	410	251,835
T-Note 2 11/30/2020	912828A42	3,400,000	11/30/2020	9/17/2018	2.81%	3,341,828	153	5,574	3,424,956
T-Note 2 11/30/2020	912828A42	685,000	11/30/2020	8/9/2018	2.72%	674,056	153	1,123	690,028
T-Note 2 11/30/2020	912828A42	5,750,000	11/30/2020	9/17/2018	2.81%	5,651,621	153	9,426	5,792,205
T-Note 1.875 12/15/2020	9128283L2	120,000	12/15/2020	7/10/2019	1.91%	119,944	168	92	120,928
T-Note 2.625 5/15/2021	9128284P2	245,000	5/15/2021	2/7/2019	2.49%	245,708	319	804	250,206
T-Note 2.625 5/15/2021	9128284P2	3,455,000	5/15/2021	2/7/2019	2.49%	3,464,852	319	11,337	3,528,419
T-Note 2.625 5/15/2021	9128284P2	700,000	5/15/2021	2/7/2019	2.49%	702,023	319	2,297	714,875
T-Note 2.625 5/15/2021	9128284P2	5,685,000	5/15/2021	2/7/2019	2.49%	5,701,211	319	18,654	5,805,806
T-Note 1.25 10/31/2021	912828T67	10,000,000	10/31/2021	7/11/2019	1.83%	9,870,703	488	20,720	10,143,400
T-Note 1.25 10/31/2021	912828T67	2,500,000	10/31/2021	7/11/2019	1.83%	2,467,676	488	5,180	2,535,850
T-Note 1.25 10/31/2021	912828T67	17,500,000	10/31/2021	9/6/2019	1.55%	17,388,574	488	36,260	17,750,950
T-Note 1.25 10/31/2021	912828T67	270,000	10/31/2021	9/6/2019	1.55%	268,313	488	559	273,872
T-Note 1.25 10/31/2021	912828T67	3,405,000	10/31/2021	9/6/2019	1.55%	3,383,586	488	7,055	3,453,828
T-Note 1.25 10/31/2021	912828T67	730,000	10/31/2021	9/6/2019	1.55%	725,438	488	1,513	740,468
T-Note 1.25 10/31/2021	912828T67	5,765,000	10/31/2021	9/6/2019	1.55%	5,728,744	488	11,945	5,847,670
T-Note 2.625 12/15/2021	9128285R7	2,700,000	12/15/2021	7/10/2019	1.80%	2,752,945	533	2,905	2,796,201
T-Note 2.625 12/15/2021	9128285R7	1,500,000	12/15/2021	7/10/2019	1.80%	1,529,414	533	1,614	1,553,445
T-Note 2.625 12/15/2021	9128285R7	6,050,000	12/15/2021	7/10/2019	1.80%	6,168,637	533	6,509	6,265,562
T-Note 2.625 12/15/2021	9128285R7	10,900,000	12/15/2021	7/10/2019	1.80%	11,113,742	533	11,726	11,288,367
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	929	103,228	15,502,800
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	929	103,228	15,502,800
T-Note 0.5 3/15/2023	912828ZD5	10,000,000	3/15/2023	3/16/2020	0.58%	9,977,344	988	14,538	10,087,100
T-Note 0.5 3/15/2023	912828ZD5	20,000,000	3/15/2023	3/16/2020	0.58%	19,954,688	988	29,076	20,174,200
T-Note 0.5 3/15/2023	912828ZD5	250,000	3/15/2023	3/16/2020	0.59%	249,336	988	363	252,178
T-Note 0.5 3/15/2023	912828ZD5	3,410,000	3/15/2023	3/16/2020	0.59%	3,400,942	988	4,957	3,439,701
T-Note 0.5 3/15/2023	912828ZD5	688,000	3/15/2023	3/16/2020	0.59%	686,173	988	1,000	693,992
T-Note 0.5 3/15/2023	912828ZD5	5,765,000	3/15/2023	3/16/2020	0.59%	5,749,687	988	8,381	5,815,213
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	1,141	-	10,422,720
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	1,141	-	10,422,720

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,309,258 as of June 30, 2020.

Appendix II: Economic Update

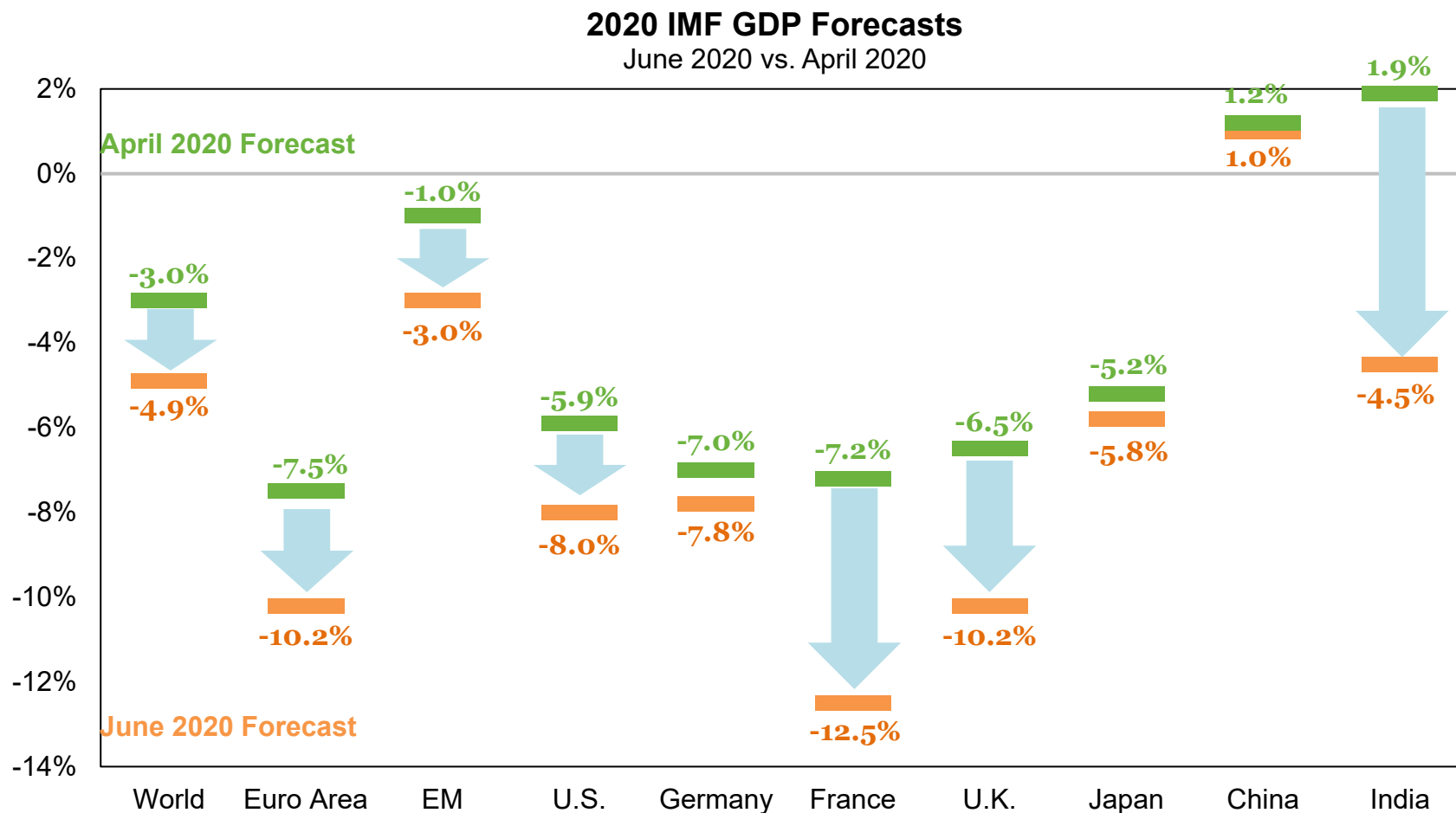
Economic Growth Slowed 5.0% in Q1 as Personal Consumption Plummeted

U.S. GDP Contributors and Detractors



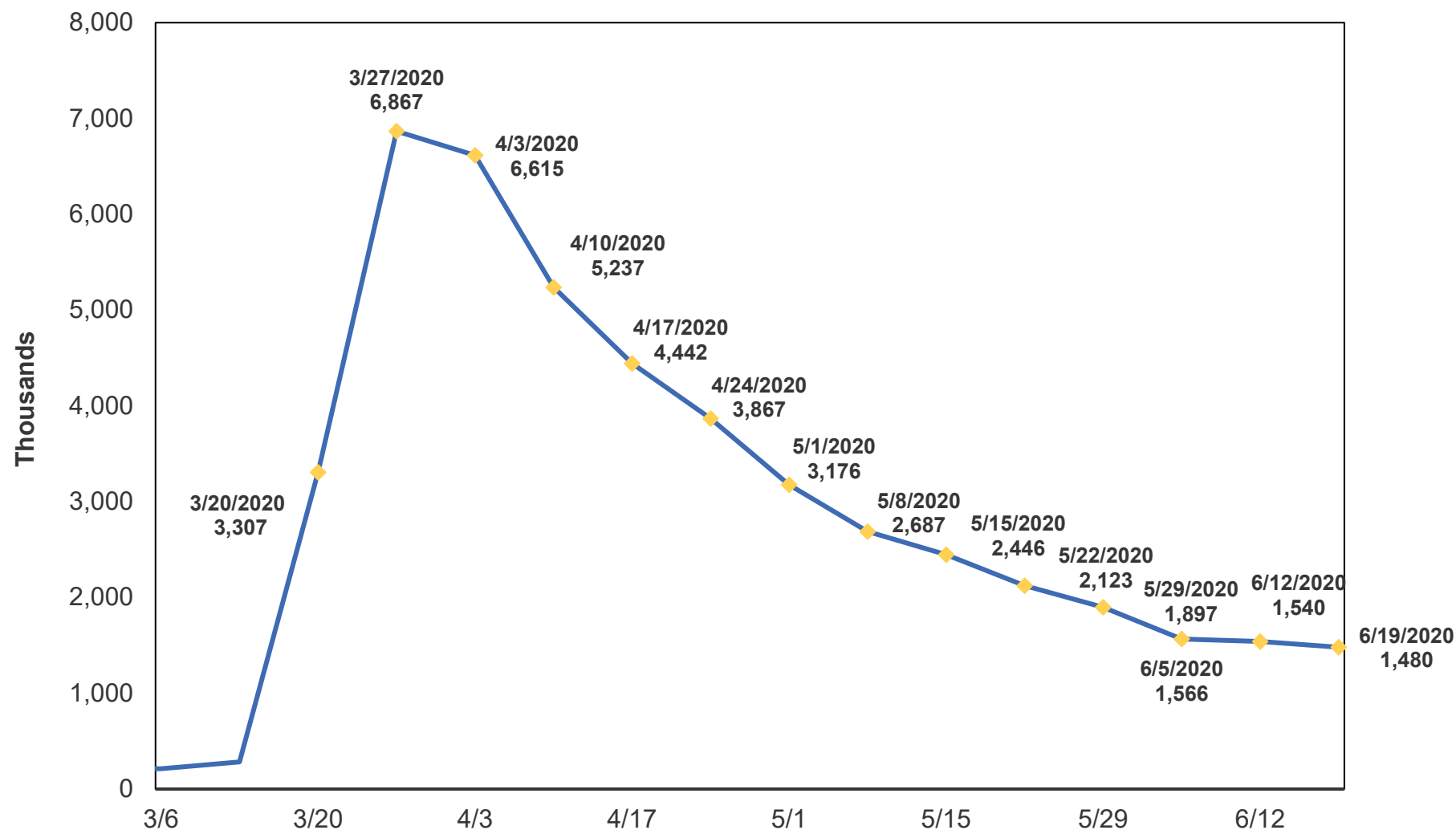
Source: Bloomberg, as of 5/31/2020.

Global Growth Expectations Revised Downward



Source: Bloomberg, as of 5/31/2020.

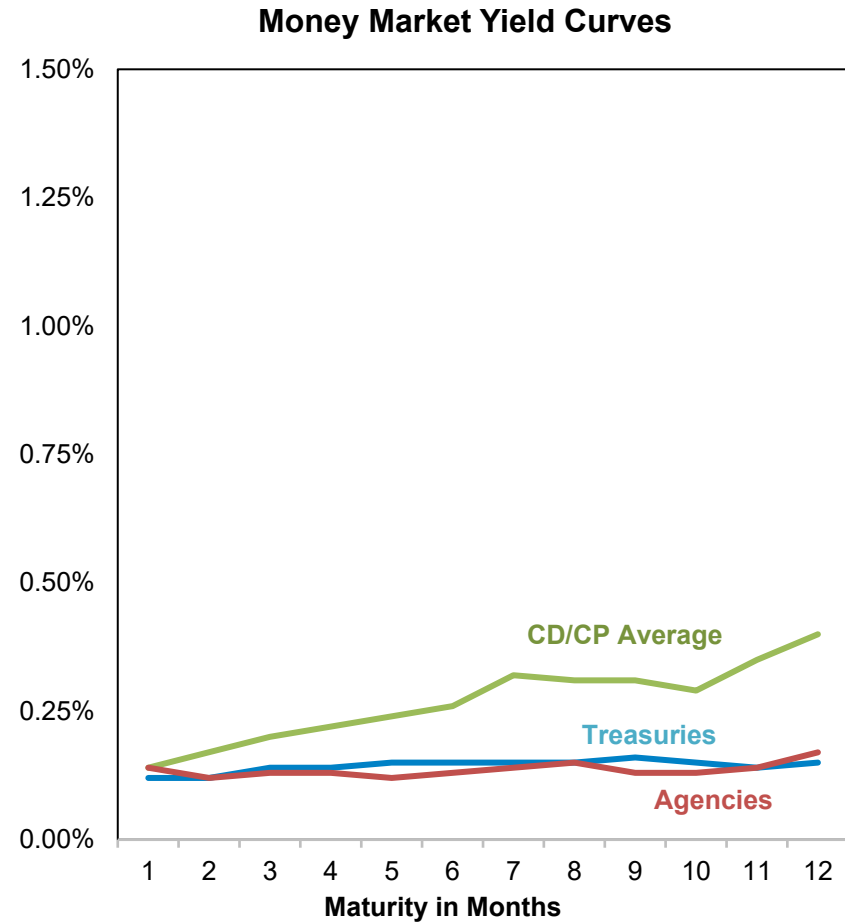
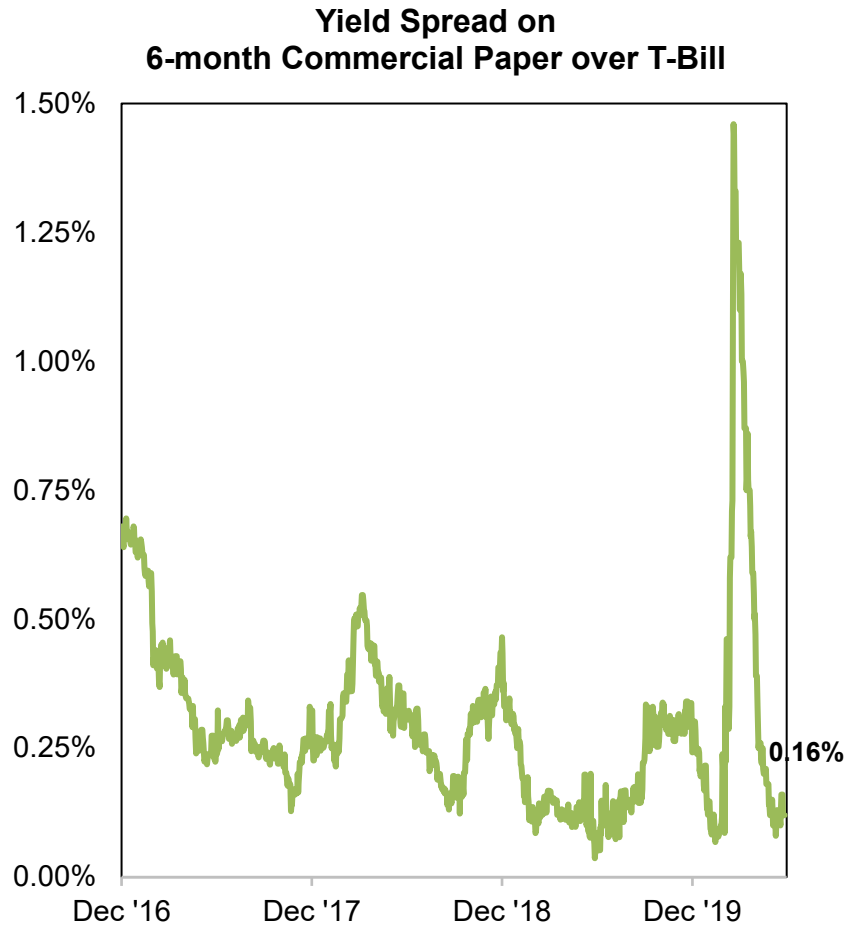
Initial Jobless Claims Declining, But Remain Historically High



Source: Bloomberg, as of 6/29/2020. Data is seasonally adjusted.



Short-Term Credit Spreads Back to Pre-Coronavirus Levels

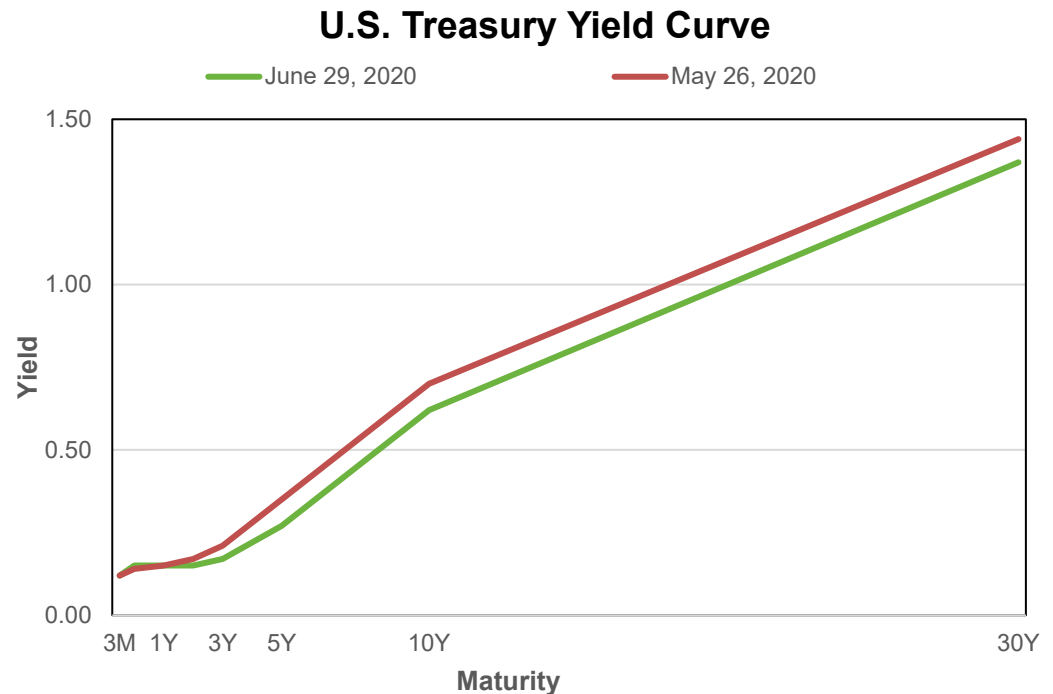


Sources: Bloomberg & PFM Trading Desk, as of 5/29/2020. 6-mo CP yield spread based on A1/P1 rated CP index (left). PFM Trading Desk, as of 5/29/2020 (right).

U.S. Treasury Yield Curve Continues to Fall

- The U.S. Treasury yield curve remained relatively unchanged month-over-month on maturities less than a year
- Longer-term U.S. Treasuries rose in price, as yields declined, with investors more cautious about long-term U.S. GDP growth

	<u>5/26/2020</u>	<u>6/29/2020</u>	<u>Change</u>
3 month	0.12%	0.12%	0.00%
6 month	0.14%	0.15%	0.03%
1 year	0.15%	0.15%	0.00%
2 year	0.17%	0.15%	-0.02%
3 year	0.21%	0.17%	-0.04%
5 year	0.35%	0.27%	-0.08%
10 year	0.70%	0.62%	-0.08%
30 year	1.44%	1.37%	-0.07%



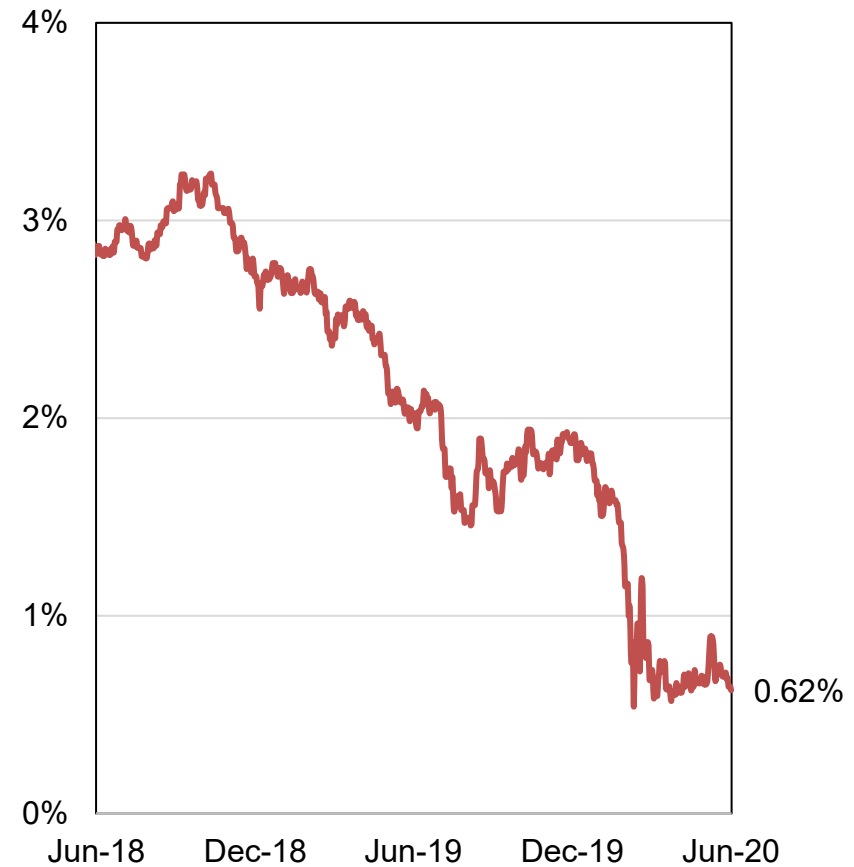
Source: Bloomberg, as of 6/29/2020.

Treasury Yields Remain Range-Bound

2-Year Treasury Yield



10-Year Treasury Yield



Source: Bloomberg, as of 6/29/2020.

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- The pandemic-induced, three-fold crisis continued to affect the U.S. in the second quarter of calendar year 2020:
 - Global health crisis – Broad lockdowns and stay-at-home orders were effective in initially slowing the spread of COVID-19 and easing stress on the U.S. healthcare system, but late in the quarter as social distancing measures were eased, daily confirmed coronavirus cases in the U.S. began to spike sharply higher.
 - Economic shutdown – The pandemic upended economies across the globe. U.S. GDP actually fell at an annualized rate of -5.0% in the first quarter of calendar year 2020 and the pandemic-induced shutdown shocked the labor market, which shed 17 million jobs from February to June, causing the unemployment rate to spike to 11.1%. Economic data improved markedly in May and also in early June, bouncing off cyclical lows, but the resurgence of virus cases near the end of the quarter may limit further improvement in the near term.
 - Financial markets – After having reduced rates to zero in March, the Federal Reserve mobilized its arsenal of emergency lending programs to stabilize fragile markets and shore up market liquidity. The Fed's balance sheet expanded from \$4 trillion to more than \$7 trillion and included the first purchases of corporate bond exchange-traded funds and individual corporate bonds. Measures of market stress experienced notable improvements as a result.
- Following the plunge in the U.S. Treasury yield curve during the first quarter of calendar year 2020, yields were relatively stable over the second quarter, leading to muted returns for Treasury indexes.
 - Yield spreads on all other asset classes retraced significantly from the wide levels experienced in March, as unprecedented fiscal and monetary stimulus helped support the economy and financial markets.
 - In stark contrast to the first quarter of calendar year 2020, allocations to commercial paper investments were all strongly additive to performance in the second quarter.

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- Our strategy for the second quarter of calendar year 2020 encompassed the following:
 - PFM remained proactive and hyper-vigilant in response to the market effects and uncertainty created by the pandemic and dynamic markets. We continued our redoubled efforts with regards to credit analysis, reassessing every issuer for the short and intermediate-term impact of the disrupted economy.
 - PFM also positioned portfolios with an emphasis on increased liquidity, and generally larger allocations to U.S. Treasuries. As market conditions stabilized, we began to cautiously reallocate this “dry powder” into sectors and issuers that offered opportunities to safely enhance earnings.
 - Throughout much of the quarter, yield spreads on Federal Agencies were wide and attractive. We utilized this opportunity to add notable new allocations back to the Federal Agency sector. As yields began to narrow back to pre-crisis lows, especially in maturities under 3 years, portfolios benefitted from incremental performance.
 - Short-term credit (commercial paper) spreads completely reversed the brief, crisis-induced sell-off in March which suppressed the value of most money market instruments. Allocations were reduced in favor of Treasury Bills whose yields ticked up on the back of huge issuance.
 - U.S. Treasury Bills became relatively attractive during the quarter, even relative to ultra-short, high quality credit, as the Treasury Department issued a record amount of Treasury Bills to finance a myriad of stimulus packages.
- A cloud of uncertainty hangs over the U.S. and global economies entering the second half of calendar year 2020. Economic data has rebounded significantly from the April lows, but remains well below pre-pandemic levels.
 - To recapture previous economic highs, it will be important that COVID-19 hotspots are contained so that public confidence can be restored.

Disclosure

This material is based on information obtained from sources generally believed to be reliable and available to the public, however PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.



Debt Summary
for the Quarter Ended June 30, 2020

The Quarterly Debt Summary Report includes the following:

1. Key Takeaways
2. Look Ahead – Five Year Capital Financing Plan
3. Existing Debt
4. Debt Service Coverage
5. Refinancing Opportunities

Pursuant to leases that became effective on January 1, 2016, the Great Lakes Water Authority (GLWA) assumed possession and control of the regional assets of both the water supply and sewage disposal systems owned by the City of Detroit (City), which were previously operated by the Detroit Water and Sewerage Department (DWSD). GLWA assumed certain liabilities including State Revolving Fund loans and 100% of the revenue bond debt issued by DWSD prior to January 1, 2016.

The bonds are repaid by the revenues of the water and sewage systems including the DWSD retail system (local system) revenues which are the exclusive property of GLWA in accordance with Section 5.7 of each lease agreement. The DWSD is GLWA's agent for purposes of billing and collection of the retail system revenues for both the water and sewer system, as set forth in a water and sewer services agreement between the City and GLWA. All revenue receipts are deposited into a trust and administered in compliance with the Master Bond Ordinance, applicable to each system (referred to herein collectively as the "MBO").

The leases also provide that GLWA will finance local system improvements of DWSD. GLWA is the obligor of 100% of the debt payable which is recorded in GLWA's books. An "obligation receivable" is recorded by GLWA which represents the amount related to the DWSD retail system improvements. Accordingly, DWSD records an "obligation payable" for a like amount.

GLWA maintains detailed records of all debt issuances and how the responsibility for payment of debt is allocated between the regional system and local system, as well as between the water and sewer systems. GLWA and DWSD regularly reconcile interrelated accounts between the entities.

The lease agreements, water and sewer services agreement, and MBO noted above are available on GLWA's website at www.glwater.org. The above explanation is a synopsis of key points and is not intended to fully represent the agreements or any sub-sections thereof.

Key Takeaways

- ✓ The purpose of this report is to provide a resource for stakeholders and to support management decisions as capital financing needs evolve.
- ✓ GLWA continues to enhance transparency by including the Debt Summary Report in the Audit Committee Binder quarterly.
- ✓ Currently, GLWA has seven open State Revolving Fund (SRF) loans, three for water and four for sewer.
- ✓ In May 2020, GLWA completed a \$377.5 million taxable water system bond refinancing transaction with an additional \$85.6 million in tax-exempt new money transaction to support DWSD water capital improvements. The refunding transaction resulted in \$66.5 million of present value savings.
- ✓ In June 2020, GLWA completed a \$687 million sewage disposal system taxable bond refunding transaction resulting in present value savings of \$123 million.
- ✓ Other key items of interest include the following balances as of June 30, 2020.

	As of June 30, 2020 (\$ Millions)	
	Water	Sewer
FY 2020 Approved SRF Projects - Table 5	\$258.4	\$16.5
DWSD Obligation Receivable - Table 6	\$550.2	\$404.1
GLWA Outstanding Debt - Table 7	\$2,301.3	\$3,039.2

Look Ahead - Five Year Capital Financing Plan

The following tables summarize the projected Capital Improvement Program (CIP) funding to be provided by proceeds received from the issuance of new revenue bonds and draws on committed SRF loans. *The financing plan is dynamic and changes with the pace of capital spending and alignment with refunding opportunities.* Table 1 is based on the FY 2021 to FY 2025 Capital Improvement Plan (CIP) for the regional system recently approved by the GLWA Board of Directors. Table 2 is based on the current local system CIP approved by the DWSD's Board of Water Commissioners. It is important to note the amounts represented in Revenue Bonds reflect the anticipated par amount of the bonds to be issued and not the net proceeds needed to support the capital plan.

Table 1 - GLWA Projected Bond Financing FY 2021 – FY 2025

	Projected Funding Needs for Regional System				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water					
Revenue Bonds	\$ -	\$ -	\$ 220,000,000	\$ -	\$ 175,000,000
SRF loan draws	\$ 12,365,800	\$ 16,590,200	\$ 18,889,800	\$ 18,549,900	\$ 18,956,900
Total projected funding Water	\$ 12,365,800	\$ 16,590,200	\$ 238,889,800	\$ 18,549,900	\$ 193,956,900
Sewer					
Revenue Bonds	\$ -	\$ -	\$ 150,000,000	\$ -	\$ 90,000,000
SRF loan draws	\$ 33,200,000	\$ 15,112,000	\$ 13,500,000	\$ -	\$ -
Total projected funding Sewer	\$ 33,200,000	\$ 15,112,000	\$ 163,500,000	\$ -	\$ 90,000,000

Table 2 - DWSD Projected Bond Financing FY 2021 – FY 2025

	Projected Funding Needs for Local System				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water					
Revenue Bonds	\$ -		\$ -	\$ -	\$ -
SRF loan draws	\$ 15,892,000	\$ 25,000,000	\$ 28,500,000	\$ -	\$ -
Total projected funding Water	\$ 15,892,000	\$ 25,000,000	\$ 28,500,000	\$ -	\$ -
Sewer					
Revenue Bonds	\$ -	\$ -	\$ -	\$ -	\$ -
SRF loans draws	\$ 8,000,000	\$ 10,000,000	\$ 8,628,000	\$ -	\$ -
Total projected funding Sewer	\$ 8,000,000	\$ 10,000,000	\$ 8,628,000	\$ -	\$ -

Note: Information presented is as of June 30, 2020. Financing plans continue to evolve based on the needs of the system.

Existing Debt

Current Debt Ratings: Bond ratings are a key measure of an organization's financial strength. Ratings are established by independent agencies that conduct detailed reviews of an organization's operational and financial performance to assist those seeking to invest in an organization through the purchase of bonds. GLWA actively monitors its debt ratings and continually seeks to make operational and financial improvements to improve its bond ratings. Achieving higher ratings will allow GLWA to finance its capital needs at lower interest rates.

Table 3 – Debt Ratings by System provides a summary of the debt ratings assigned in March 2020 in advance of the most recent bond refinancing and new money issuance in May and June 2020.

	Current Debt Ratings		
	S&P Global Ratings	Moody's Investors Service	Fitch Ratings
Water Supply System Revenue Bonds			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable
Sewage Disposal System Revenue Bonds			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable

Debt Allocation: GLWA has \$2.3 billion in water system debt and \$3.0 billion in sewer system debt for a combined total of over \$5.3 billion. Debt within each system is prioritized according to its security interest, or lien category, with senior lien debt having the highest security interest, followed by second lien and finally junior lien.

Chart 1 - Debt Type by Lien – Water provides a breakdown of the total water system debt for both the regional and local systems by lien type.

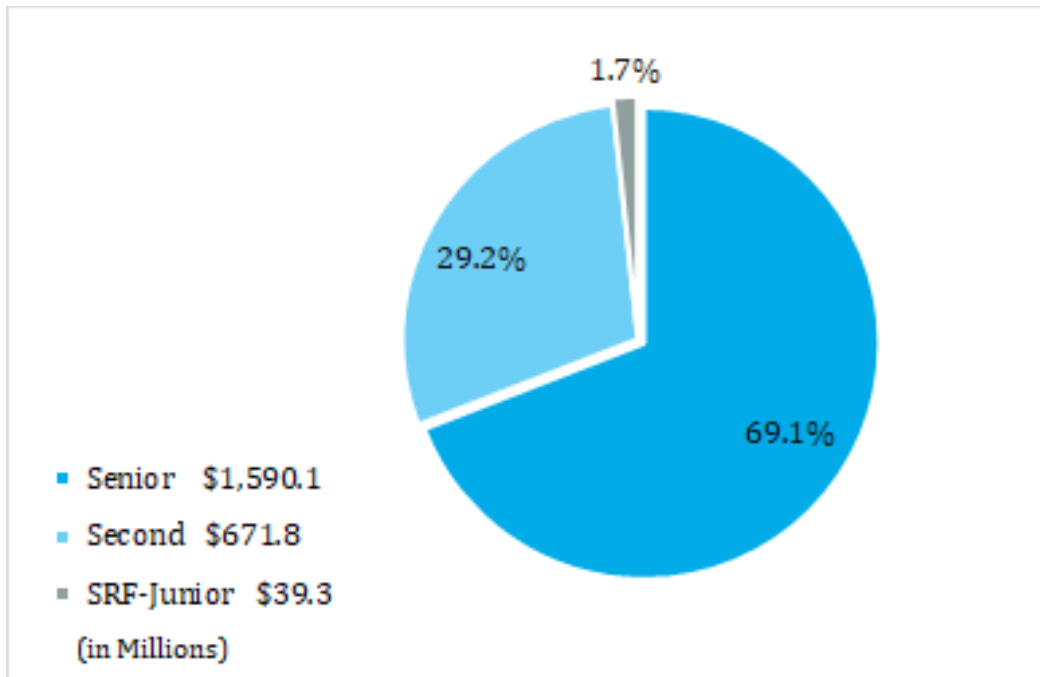


Chart 2 - Debt Type by Lien – Sewer provides a breakdown of the total sewer system debt for both the regional and local systems by lien type.

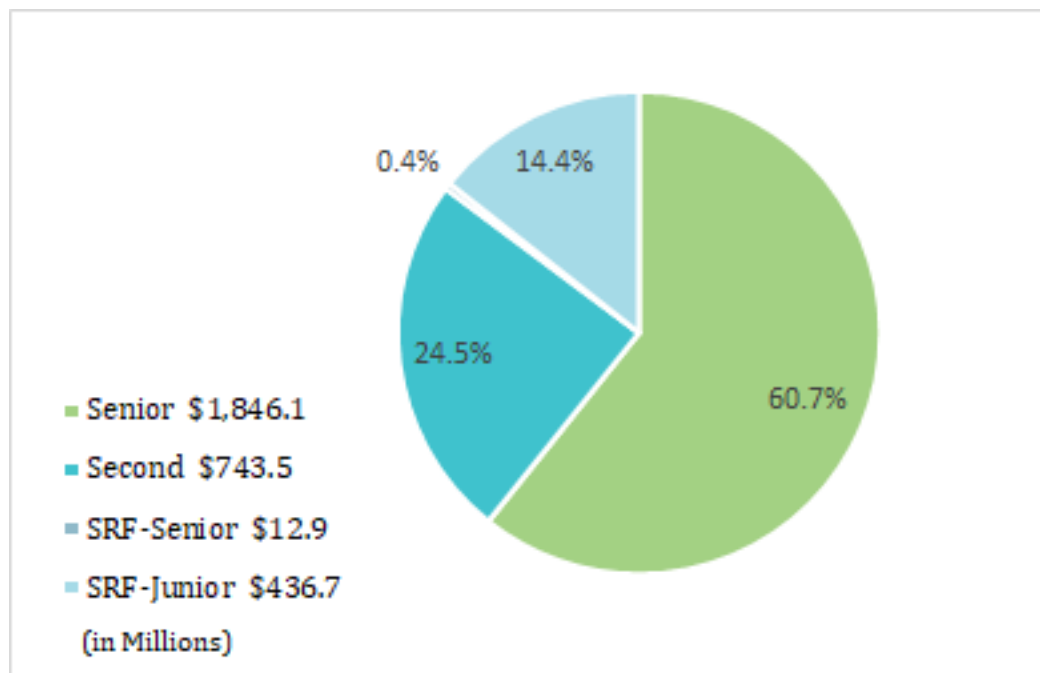


Chart 3 – Annual Debt Service Payments by Lien – Water provides the annual debt service installment requirements for each fiscal year.

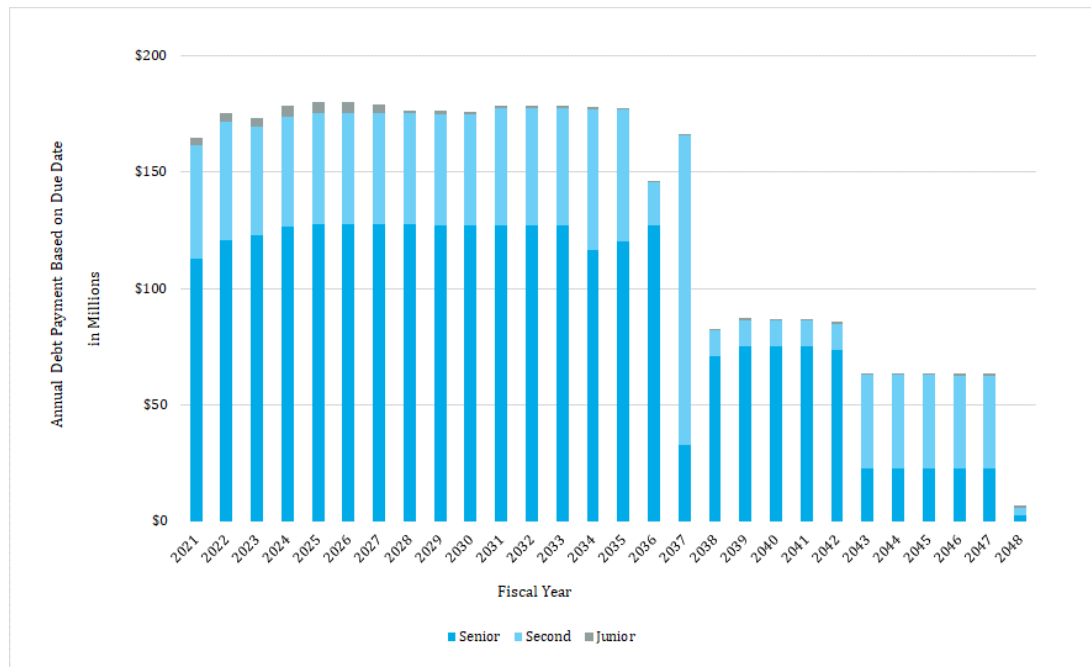
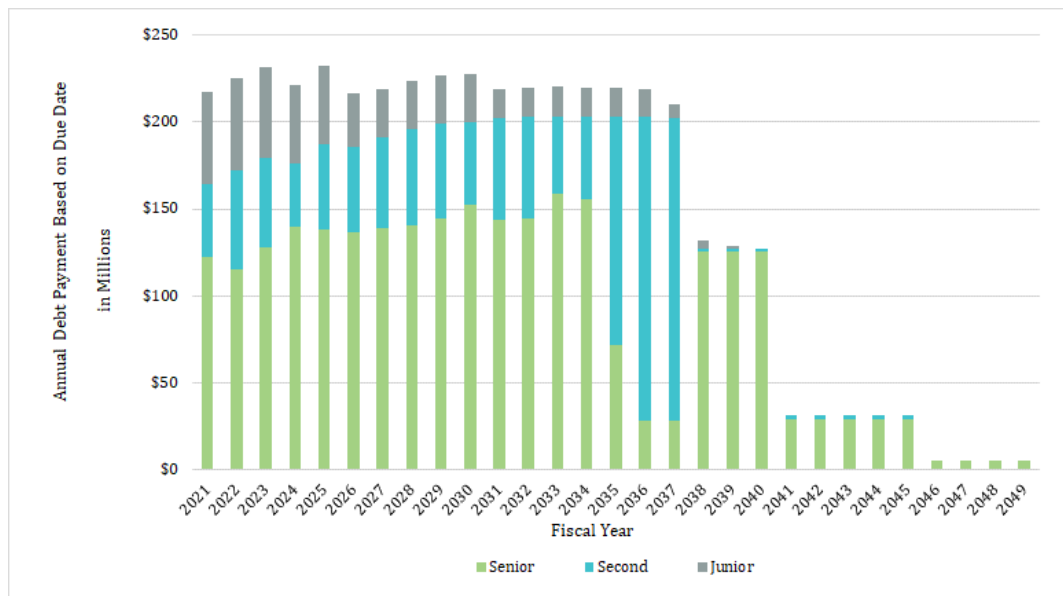


Chart 4 – Annual Debt Service Payments by Lien – Sewer provides the annual debt service installment requirements for each fiscal year.



Note: The figures in these charts reflect the debt service installment requirements for each fiscal year, which are required by the MBO to be set aside monthly in advance of actual payment dates. This information will differ from the Comprehensive Annual Financial Report which reflects when the actual payments are made to the bond paying agent.

State of Michigan's State Revolving Fund (SRF) Programs: GLWA participates in the State's Clean Water Revolving Fund (CWRF) to finance qualified sewage disposal system projects and the State's Drinking Water Revolving Fund (DWRF) to finance qualified water supply system projects. For the purposes of this report, both water and sewer projects financed through these programs will be referred to as either water or sewer SRF loans.

These loan programs have interest rates that are well below open market interest rates (usually between 2.0% and 2.5%) and are repaid over 20-30 years. Funds are disbursed as construction payments are made. Interest on each loan is based on the amount of funds drawn and not the full loan amount. GLWA must submit project plans to the Michigan Department of Environment, Great Lakes, and Energy ("EGLE", and formerly known as the Michigan Department of Environmental Quality or MDEQ) for each project by the annual submission date (May 1 for DWRF and July 1 for CWRF) in order to be considered for the State's funding pool for the following fiscal year.

State Revolving Fund Loans: GLWA's strategy is to maximize its use of SRF loans to finance qualified capital projects. GLWA currently has \$39.3 million in outstanding water SRF loans and \$449.7 million in outstanding sewer SRF loans.

Table 4 - Active SRF Project Summary provides information regarding each loan including the loan award date which is also referred to as the Order of Approval date by the State of Michigan.

State Loan #	Description	Order of Approval	Project Total (\$ Millions)
SRF Water - DWSD Projects			
7447-01	Water Main Replacement (WS-707 & 714)	8/9/2019	\$16.5
SRF Water - GLWA Projects			
7445-01	Northeast Transmission Phase 1	8/9/2019	\$30.0
7446-01	Lake Huron Sludge System-Raw Sludge Clarifiers	5/17/2019	\$8.3
Total Water			\$54.8
SRF Sewer - GLWA Projects			
5636-01	Rehab Rectangular Primary Clarifiers, Electrical/Mechanical Buildings and Pipe Gallery	8/24/2016	\$51.3
5651-01	RRO Disinfection (Phase II)	3/13/2015	\$38.5
5655-01	Detroit River Interceptor Segment 1	8/23/2018	\$17.5
5655-02	Detroit River Interceptor Segment 2	3/27/2020	\$28.4
Total Sewer			\$135.7

Chart 5 - Open State Revolving Fund Loans summarizes all current SRF loans held by GLWA (including financings on behalf of DWSD) that are active (reference Table 4 above for project descriptions). It summarizes the original award amount remaining and the amount drawn down as of June 30, 2020 for each loan. On June 30, 2020, the amount of SRF loans authorized and unissued is \$39.1 million for the Water fund and \$42.2 million for the Sewerage Disposal Fund.

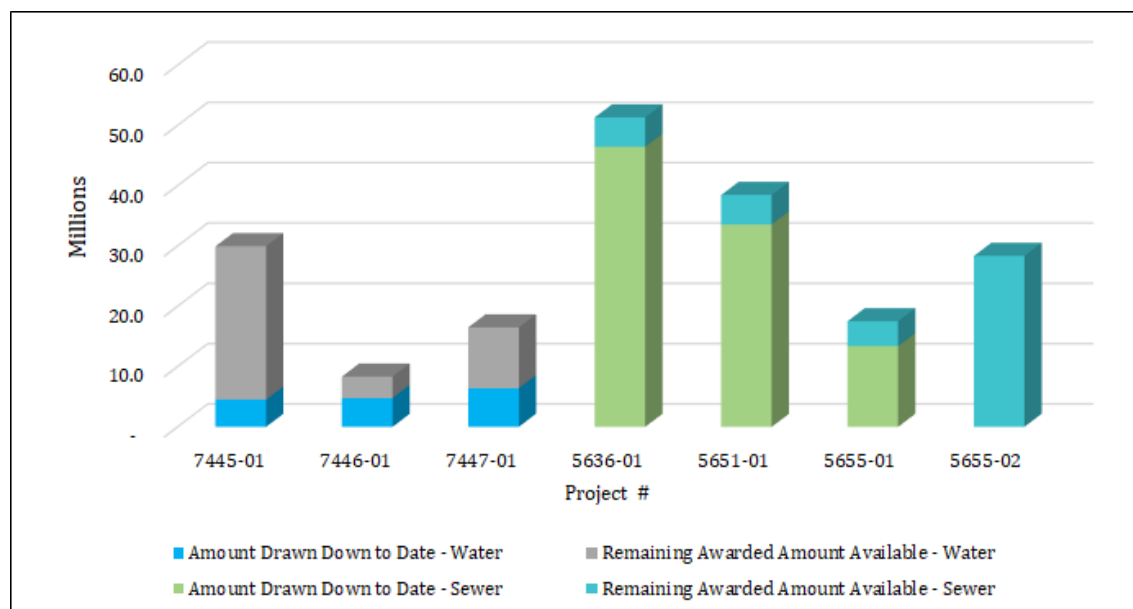


Table 5 - Project Plan Approved by EGLE identifies projects approved by the EGLE but for which applications had not yet been submitted for funding as of June 2020.

Project Owner	Description	Project Total	Anticipated Funding Date
Water SRF			
DWSD	Water Main Replacement (WS-710 & WS-711)	\$ 22,570,000	3Q 2020
GLWA	Northeast Transmission Main - Phase 2a	\$ 9,000,000	3Q 2020
GLWA	Northeast Transmission Main - Phase 2b	\$ 92,000,000	FY 2022
GLWA	Northeast Transmission Main - Phase 3	\$ 55,000,000	FY 2021
GLWA	14 Mile Transmission Main Loop - Phase 1	\$ 8,960,000	3Q 2020
GLWA	14 Mile Transmission Main Loop - Phase 2	\$ 46,000,000	FY 2021
DWSD	Water Main Replacement (WS-715 & WS-718)	\$ 24,865,000	3Q 2020
Total Water SRF		\$ 258,395,000	
Sewer SRF			
GLWA	PS-1 Ferric Chloride System Rehabilitation	\$ 10,500,000	2Q 2021
DWSD	Sewer Main Rehabilitation/Replacement - Phase 1	\$ 6,000,000	3Q 2020
Total Sewer SRF		\$ 16,500,000	

DWSD Obligation Receivable: GLWA holds an obligation receivable from DWSD as an asset to account for the amount due for financing local system capital projects. DWSD carries a like amount of this as an obligation payable on its statement of net assets.

There are three components to the calculation of the DWSD obligation receivable. These are:

- a) an agreed upon amount for pre-January 1, 2016 (i.e. “pre-bifurcation”) debt as documented in a 2018 Memorandum of Understanding (\$455 million for water system and \$370 million for sewer per agreed-upon amortization schedules),
- b) new revenue bonds issued after January 1, 2016 to specifically fund the DWSD local system capital improvement projects which are payable based on the allocable share of the actual bonds debt service schedule, and
- c) SRF loans issued after January 1, 2016 for specific DWSD capital projects which are payable based on the allocable share of the actual loan payment schedule.

All retail customer revenues are deposited into a trust to fund these financial obligations in accordance with the MBO flow of funds.

Chart 6 - DWSD Obligation Receivable by Type summarizes the total DWSD obligation receivable balance for both Water and Sewer as of June 30, 2020 by pre-bifurcation, revenue bond and SRF component.

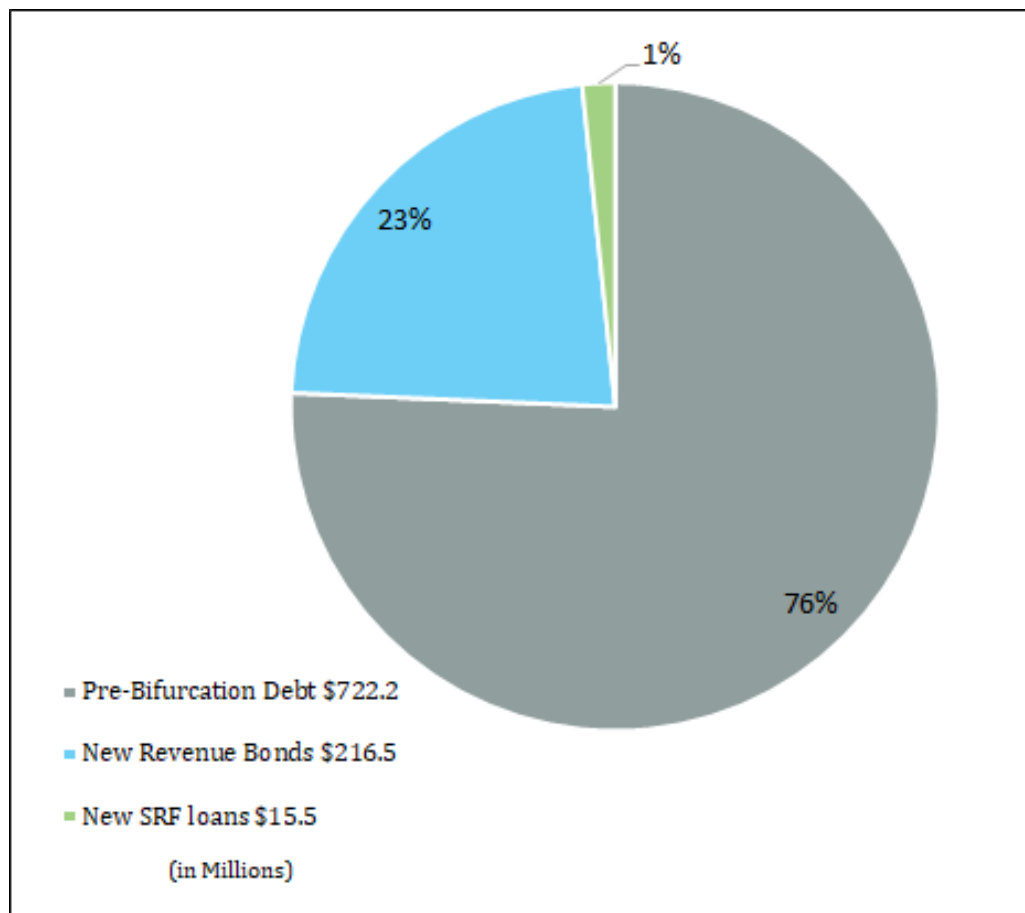


Chart 7 – Obligation Receivable Compared to Total Debt - Water provides context by comparing the Water System Obligation Receivable to the Total Water Debt (excludes unamortized premiums).

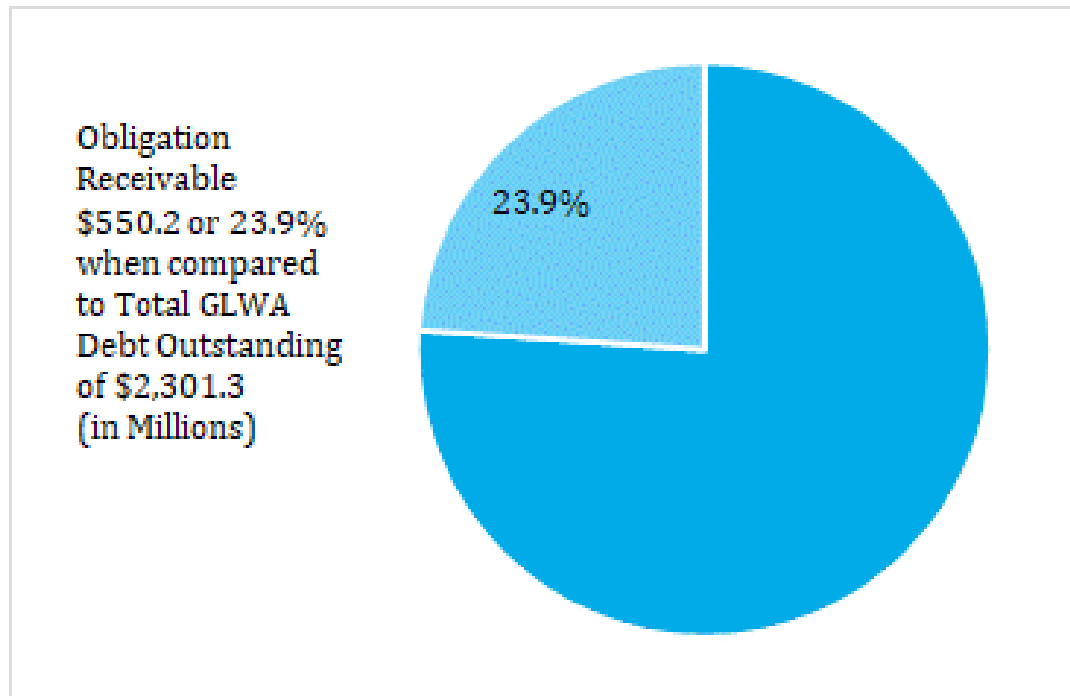


Chart 8 – Obligation Receivable Compared to Total Debt - Sewer provides context by comparing the Sewer System Obligation Receivable to the Total Sewer Debt (excludes unamortized premiums).

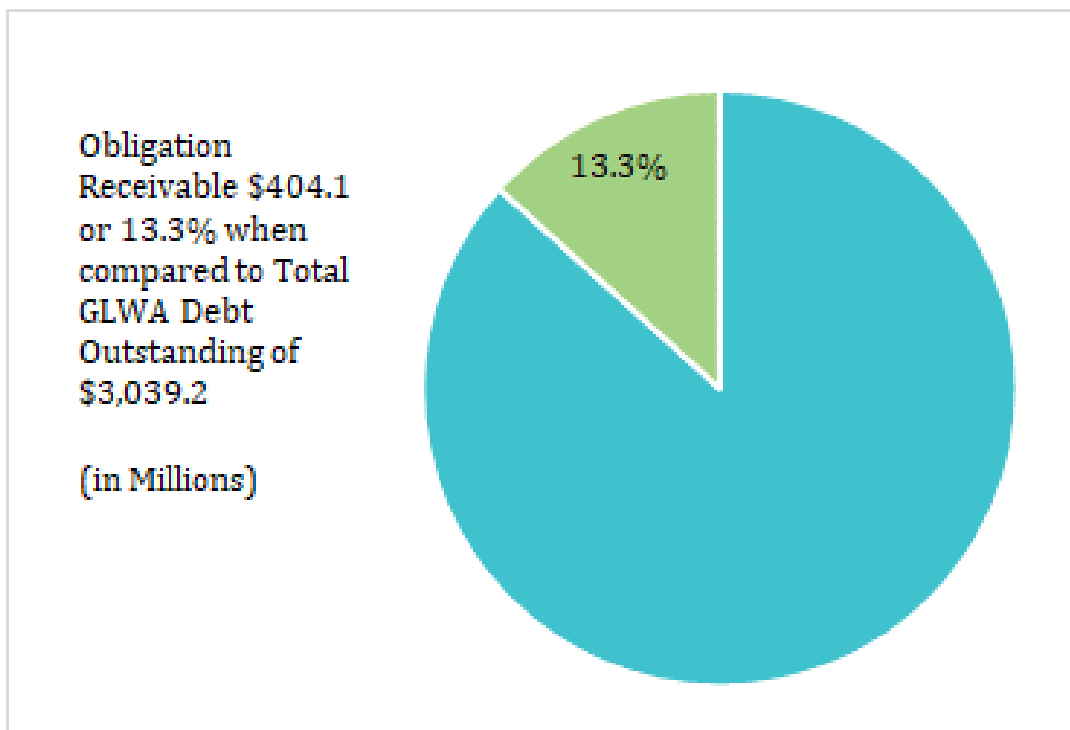


Table 6 - DWSD Obligation Receivable provides obligation receivable detail including fiscal year 2020 beginning balances by debt type and loan issue (for revenue bonds and SRF loans), year-to-date activity and ending balances as of June 30, 2020. Total DWSD debt totals \$984 million. This differs slightly from the total in Chart 8 due to the inclusion of unamortized premiums.

(In Thousands)				
Debt Type	July 1, 2019 Beg Balance	Increase	Decrease	June 30, 2020 End Balance
DWSD Water				
Pre-Bifurcation Debt	\$ 412,141	\$ -	\$ (13,821)	\$ 398,320
Revenue Bond - 2016A	17,725	-	-	17,725
Revenue Bond - 2016B	33,015	-	-	33,015
Revenue Bond - 2020A	-	42,445	-	42,445
Revenue Bond - 2020B	-	43,135	-	43,135
SRF 7412-01	5,084	-	(121)	4,963
SRF 7413-01	3,299	-	(80)	3,219
SRF 7414-01	5,420	388	(150)	5,658
SRF 7447-01	-	6,404	(4,712)	1,692
Total DWSD Obligation	476,683	92,372	(18,884)	550,171
Unamortized Premiums	6,127	14,406	(142)	20,391
Subtotal: Water	482,810	106,778	(19,025)	570,562
DWSD Sewer				
Pre-Bifurcation Debt	335,575	-	(11,741)	323,833
Revenue Bond - 2018A	81,595	-	(1,370)	80,225
Total DWSD Obligation	417,170	-	(13,111)	404,058
Unamortized Premiums	9,687	-	(349)	9,339
Subtotal: Sewer	426,857	-	(13,460)	413,397
Total DWSD Debt	\$ 909,667	\$ 106,778	\$ (32,485)	\$ 983,959

Annual Change in Outstanding Debt: It is the goal of GLWA to ensure the long-term sustainability of the water and sewer systems. One of the best ways to accomplish this is by reducing the debt service payments on existing bonds as well as reducing the amounts of future bond issues by using revenue financed capital.

Table 7 - Long-Term Debt Summary provides a detail of GLWA's fiscal year 2020 beginning balances by debt type and loan issues, year-to-date activity, and ending balances as of June 30, 2020. GLWA debt includes financing for both the regional and local share.

Debt Type	(In Thousands)			
	June 30, 2019 Beg Balance	Increase	Decrease	June 30, 2020 End Balance
Water Fund				
Revenue Bonds	\$ 2,220,320	\$ 463,095	\$ (421,480)	\$ 2,261,935
State Revolving Loans	29,861	16,084	(6,627)	39,318
Total Installment Debt	2,250,181	479,179	(428,107)	2,301,253
Unamortized Premiums / Discounts	246,241	14,406	(69,111)	191,536
Subtotal: Water	2,496,422	493,585	(497,218)	2,492,789
Sewer Fund				
Revenue Bonds	2,604,390	687,455	(713,625)	2,578,220
Capital Appreciation bonds	14,780	-	(3,445)	11,335
State Revolving Loans	474,177	25,164	(49,675)	449,667
Total Installment Debt	3,093,347	712,619	(766,745)	3,039,222
Capital Appreciation Bond Discount	(1,402)	-	735	(667)
Unamortized Premiums / Discounts	159,807	-	(94,239)	65,568
Subtotal: Sewer	3,251,752	712,619	(860,249)	3,104,122
Total Combined, Long Term Debt	\$ 5,748,174	\$ 1,206,205	\$ (1,357,467)	\$ 5,596,912

Debt Service Coverage

GLWA is committed to ensuring the long-term sustainability of the water and sewer systems and has pledged specific revenue streams to secure the repayment of the revenue bonds and SRF loans associated with them. The MBO establishes minimum debt coverage levels at 1.20 for senior lien bonds, 1.10 for second lien bonds and 1.00 for any junior lien bonds, other than second lien bonds. Debt service coverage ratios are inclusive of all debt held on behalf of both GLWA and DWSD.

GLWA computes the debt service coverage ratio using two different methodologies. The Rate Covenant Basis uses a pledged revenue on a cash basis methodology and the GAAP Basis uses a pledged revenue on an accrual basis methodology. Pledged revenue is divided by the debt service requirements of each lien on a rate covenant basis to compute the debt service coverage ratio. The rate covenant basis is defined as the cash available to make the debt service payments on the due dates. The table below details the components of the pledged revenue for each methodology.

Components of Pledged Revenue	Pledged Revenue Calculation	Rate Covenant Basis	GAAP Basis
Revenues	Addition	Cash basis	Accrual basis
GLWA O&M expenses	Subtraction	Cash basis	Accrual basis
GLWA O&M pension	Subtraction	Cash basis	Cash basis
DWSD O&M expenses & O&M pension	Subtraction	Cash transfers to DWSD	Cash transfers to DWSD

Table 8: Debt Service Coverage Ratios - Water provides a summary of the MBO required minimum, historical, and budgeted debt service coverage ratios for the Water fund.

Debt Service Coverage Water Fund							
	MBO Required Minimum	Actual 2017	Actual 2018	Actual 2019	Adopted Budget 2020	Adopted Budget 2021	Adopted Budget 2022
Rate Covenant Basis							
Senior Lien Bonds	1.20	2.12	2.07	2.13	1.94	1.81	1.84
Senior and second lien bonds	1.10	1.64	1.55	1.54	1.40	1.32	1.38
All bonds, including SRF junior lien	1.00	1.62	1.53	1.51	1.38	1.28	1.32
GAAP Basis							
Senior Lien Bonds		2.10	2.12	2.04			
Senior and second lien bonds		1.63	1.59	1.47			
All bonds, including SRF junior lien		1.61	1.57	1.45			

Table 9: Debt Service Coverage Ratios - Sewer provides a summary of the MBO required minimum, historical and budgeted debt service coverage ratios for the Sewer fund.

Debt Service Coverage Sewage Disposal Fund							
	MBO Required Minimum	Actual 2017	Actual 2018	Actual 2019	Adopted Budget 2020	Adopted Budget 2021	Adopted Budget 2022
Rate Covenant Basis							
Senior Lien Bonds	1.20	2.03	2.05	2.14	2.11	2.44	2.38
Senior and second lien bonds	1.10	1.51	1.57	1.65	1.61	1.73	1.78
All bonds, including SRF junior lien	1.00	1.22	1.25	1.31	1.26	1.34	1.39
GAAP Basis							
Senior Lien Bonds		2.49	2.20	2.10			
Senior and second lien bonds		1.86	1.68	1.61			
All bonds, including SRF junior lien		1.50	1.34	1.28			

Refunding Opportunities

In an effort to reduce the annual water and sewer debt service payments, GLWA monitors its outstanding water and sewer debt portfolios to determine if it has the ability to refund existing bond issues with new, lower interest rate bonds. At least once per year, GLWA's registered municipal advisor, PFM Financial Advisors, LLC (PFM) prepares an analysis of GLWA's bond refunding opportunities based on the current municipal interest rate environment and the existing debt service on GLWA's callable bonds.

The Authority successfully issued both water supply system and sewage disposal system refunding bonds this quarter. In May 2020, GLWA completed a \$463.1 million Water Supply System Revenue and Revenue Refunding bond transaction. This included a \$377.5 million taxable bond refinancing transaction with an additional \$85.6 million in tax-exempt new money to support the DWSD local system capital improvements. The refunding transaction resulted in \$66.5 million of present value savings for the water system. In June 2020, GLWA completed a \$687 million Sewage Disposal System Revenue Refunding taxable bond transaction resulting in present value savings of \$123 million for the sewage disposal system.

The next available call date for both water and sewer will be on July 1, 2024. Approximately \$390.4 million in water bonds and \$392.5 million in sewer bonds will be callable at that time. GLWA will continue to work with its registered municipal advisor to monitor the potential for refunding these bonds.



Financial Services Audit Committee Communication

Date: August 21, 2020

To: Great Lakes Water Authority Audit Committee

From: Alicia Haskin, Management Professional – Intergovernmental Relations

Re: Summary of Shared Services Billings and Payments

Background: The Great Lakes Water Authority (GLWA) and the Detroit Water and Sewerage Department (DWSD) are parties to a Shared Services Agreement (the Agreement) dated December 1, 2015. This agreement provides the framework for shared services for the efficient operation of both entities.

On a monthly basis, an invoice is prepared. While the intent is for the monthly invoice to represent actual costs, the reality is that the timing of certain vendor invoices and accumulation of internal charges requires a “True-up” process. That being said, the intent is also for the parties to transmit payment on a monthly basis utilizing estimates for services provided. Section 5.1 of the Agreement states, “Payments for services shall be payable monthly.”

Analysis: GLWA and DWSD have billed each other for services since January 1, 2016, the start of the Agreement. A history of this activity and applicable payments is summarized in two tables.

Table 1 – GLWA as a Service Provider reflects activity in which GLWA is the provider and is billing DWSD for services - FY 2020 Billings through June 2020

Summary of Shared Services Billings and Payments				
Year	Total Billings	True Up Amount Actual/Potential	Total Payments	Unpaid Amount
FY2016	\$ 4,781,194	\$ 3,311,838	\$ 8,093,032	\$ -
FY2017	\$ 9,378,922	\$ 3,076,854	\$ 12,455,776	\$ -
FY2018*	\$ 7,477,571	\$ 391,650	\$ -	\$ 7,869,221
FY2019**	\$ 8,933,462	\$ (2,363,150)	\$ -	\$ 6,570,312
FY2020***	\$ 5,012,664	\$ -	\$ -	\$ 5,012,664
Subtotals	\$ 35,583,814	\$ 4,417,192	\$ 20,548,809	\$ 19,452,198

* All True Up calculations have been provided to DWSD and the True Up Amount is indicated.

** There is one True Up calculation that is not complete representing less than 1% of the total True Up amount.

*** True Up not complete at this time.

Table 2 – DWSD as Service Provider Table 2 – DWSD as a Service Provider reflects activity in which DWSD is the provider and is billing GLWA for services. **(FY 2020 Billings through June 2020)**

Summary of Shared Services Billings and Payments				
Year	Total Billings	True Up Amount Actual/Potential	Total Payments	Unpaid Amount
FY2016	\$ 2,543,735	\$ 5,003,644	\$ 7,547,379	\$ -
FY2017	\$ 4,722,364	\$ (1,077,584)	\$ 3,644,780	\$ -
FY2018	\$ 5,308,539	\$ -	\$ -	\$ 5,308,539
FY2019	\$ 4,175,695	\$ -	\$ -	\$ 4,175,695
FY2020	\$ 4,677,356	\$ -	\$ -	\$ 4,677,356
Subtotals	\$ 21,427,689	\$ 3,926,060	\$ 11,192,159	\$ 14,161,590

Proposed Action: Receive and file this report.

Procurement Pipeline


 Great Lakes Water Authority (313) 964-9157 www.glwater.org

July 2020 - Volume 17

Welcome to the July edition of *The Procurement Pipeline*, a monthly newsletter designed to provide informative updates on doing business with the Great Lakes Water Authority (GLWA). This edition of *The Pipeline* focuses on the Michigan Sales and Use Tax as it relates to the vendor community and provides a link to GLWA's most recently issued Coronavirus Memorandum. Thanks to the efforts of GLWA team members and the vendor community, we continue to take the utmost precautions in maintaining workplace safety while we operate in these unusual times.

Michigan Sales and Use Tax for the GLWA Vendor Construction Community

Recently, there have been some questions within the GLWA vendor community regarding the extension of GLWA's tax-exempt status to our construction contracts. We would like to provide some clarification on this matter.

As a governmental entity, GLWA is tax-exempt. This means that all tangible property that *GLWA procures directly for its own use* is also considered tax-exempt. As such, GLWA Vendors may request our [Michigan Sales and Use Tax Certificate of Exemption](#).

However, GLWA's tax exempt status **does not** extend to our vendors in the scenario outlined below. In summary, we have been advised that the State of Michigan Tax Law provides for the following guidelines:

- A contractor or subcontractor who constructs, alters, repairs, or improves real estate for others ***is recognized as the user or consumer of all goods and materials that they purchase for use in providing their services.***
- As the user or consumer of these purchased goods and materials affixed to and becoming part of GLWA realty, the contractor or subcontractor cannot claim tax exempt status.
- The contractor or subcontractor is therefore responsible for paying the sales tax.

We strongly encourage all GLWA vendors to consult with their own tax advisors when determining whether they will be responsible for payment of sales or use taxes and, therefore,

whether such costs should be included in their bid prices. If a GLWA vendor does not include sales or use tax in their bid prices, and later finds out that they need to pay them, GLWA cannot amend the contract to reimburse for these costs. If you have additional questions regarding the payment of sales or use taxes, then please contact your tax advisor or accounting team.

Coronavirus Update #54: Vendor COVID-19 Requirements and Related Forms

On Tuesday July 7, GLWA issued a new coronavirus memorandum providing updates and several points of clarification on GLWA's protocols and procedures for Vendor COVID-19 Requirements. The following topics are addressed in Coronavirus Update #54.

1. Second option for compliance with the one-time mandatory Vendor COVID-19 Testing Requirement
2. Information security protocol
3. Testing requirements for delivery drivers
4. Process and approval routes for Visitor Questionnaire and Vendor COVID-19 Testing Documentation
5. Critical Infrastructure Provider Letters are no longer necessary

The full memorandum and related forms (the Visitor Questionnaire Form and Vendor COVID-19 Testing Submittal Form) may be found on the [GLWA website](#). We thank the vendor community for their continuing cooperation with these safety measures. If you have any additional questions regarding these matters, then please contact Michael Lasley (michael.lasley@glwater.org) and Megan Torti (megan.torti@glwater.org).

What's Coming Down the Pipe?

Current Solicitations: Be sure to register in [Bonfire](#) to monitor new solicitations and contract awards.

Upcoming Procurements: Next Three to Nine Months - See page 2

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

Upcoming Solicitations July 2020

Category	Description	Budget Estimate
Water System (next three months)		
Construction	2001456 SPWTP 1958 Settled Water Conduit and Loading Dock Concrete – Springwells Water Treatment Plant (CIP #114016)	\$1,652,000
Maintenance Services	5-Year Sludge Removal and Disposal Services at Northeast, Springwell's & Southwest Water Plants	\$55,000,000
Design Build	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	\$5,000,000
Construction	1904231 – Flocculator Improvements – Northeast Water Treatment Plant (CIP #112006)	\$2,700,000
Engineering	North Service Center Pumping Station Improvements (CIP # 132016)	\$10,000,000
Wastewater System (next three months)		
Design	Oakwood HVAC Improvements	\$500,000
Design	Study and Design of NWI Relief Sewer to Oakwood RTB	\$5,000,000
Design	Rehabilitation of Remaining CSO Outfalls and Some Trunk Sewers	\$7,000,000
Construction	Baby Creek Gate Repair	\$155,000
Construction	Baby Creek Chemical Feed Tank Repair	\$250,000
Construction	WRRF Rehabilitation of Ferric Chloride Feed System in PS-1 and Complex B Sludge Lines (CIP #211008)	\$7,500,000
Water System (next four to nine months)		
Design Build	WTP Ovation Workstation Upgrade Project (CIP 170303)	TBD
Construction	Springwells Water Treatment Plant Medium Voltage Electrical System Replacement (CIP #114002 Project B)	\$30,000,000
Design Build	Southwest Water Treatment Plant Chlorine Scrubber and Raw Water Screen Replacement (CIP #113006)	\$6,000,000
Wastewater System (next four to nine months)		
Progressive Design Build	Baby Creek Outfall Improvements Projects (CIP #277001)	TBD
Design	St. Aubin Chemical Disinfection & Screening Improvements	TBD
Design	Control System Upgrade – St. Aubin, Lieb, and 7 Mile CSO Facilities	TBD
Design	WRRF Rehabilitation of the Circular Primary Clarifier Scum Removal System (CIP #211009)	\$1,000,000
Design	WRRF Improvements to Sludge Feed Pumps at Dewatering Facilities (CIP #213006)	TBD
Design	WRRF Rehabilitation of the Secondary Clarifiers (CIP #212007)	\$700,000
Maintenance	Crane Services	TBD
Services	Actuator Maintenance	TBD
Maintenance	UPS Maintenance and Repair Services (CSO/WRRF)	TBD
Construction	Rehabilitation of Outfalls – Phase III (B-39)	\$7,000,000
Construction	Rehabilitation of Woodward Sewer	\$26,000,000
Construction	Rehabilitation of CSO Outfall Backwater Gates	\$5,000,000
Enterprise (next four to nine months)		
Information Technology	Project Management Information System	TBD
Facilities	HVAC Repairs and Maintenance	TBD

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

Acronyms	
WRRF: Water Resource Recovery Facility	CSO: Combined Sewer Overflow

Procurement Pipeline


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August 2020 - Volume 18

Welcome to the August edition of *The Procurement Pipeline*, a monthly newsletter designed to provide informative updates on doing business with the Great Lakes Water Authority (GLWA). Though we continue to operate with the utmost caution during these unusual times, this month's edition of *The Pipeline* returns to familiar territory and provides some helpful tips for the vendor community regarding the GLWA payment process as well as a reminder about Advanced Shipment Notifications.

Procurement Tip of the Month: Submitting Invoices and GLWA Direct to You!

Timely and efficient payment of invoices is a top priority for GLWA. To ensure that your business receives its payments as promptly as possible, please submit invoices must meet these seven criteria:

1. Submitted **after** goods are shipped or services are completed
2. Includes the GLWA purchase order (PO) number provided by the GLWA Buyer (GLWA PO numbers are seven digits; currently five numbers preceded by two zeroes)
3. Include a valid remittance address
4. Have an invoice number
5. Be addressed to Great Lakes Water Authority
6. Invoice items and unit prices match purchase order items and unit prices
7. Exclude a charge for sales tax (The Exemption form is located [here](#). Please note that there are exceptions to GLWA tax-exempt status for construction contracts; see the [July 2020 Pipeline](#) for more information.)

We also strongly encourage vendors to register for *GLWA Direct to You!* to receive payment via ACH-Direct Deposit. In addition to improved cashflow, *Direct to You!* offers a secure online vendor portal, identifies all invoices paid, and eliminates the delays associated with lost or stolen checks.

For more information about invoices, the payment process, or registering for *GLWA Direct to You!*, contact us at accountspayable@glwater.org.

Reminder: Advanced Shipment Notifications

On March 17, 2020, GLWA instituted an Advanced Shipment Notifications (ASNs) protocol. This requires that vendors send ASN's prior to all deliveries to GLWA warehouse facilities. ASNs must be sent to LM-Shipment-Notifications@glwater.org and include the following information.

1. Vendor name
2. Vendor address
3. GLWA Warehouse address
4. Delivery date
5. Shipment detail (including SKU and quantity)

Providing ASNs ensures that our GLWA warehouses can make the proper preparations to accept the delivery quickly and efficiently. We thank the vendor community for their cooperation. If you have any additional questions related to this matter, please contact your GLWA Buyer directly.

GLWA's First Virtual Vendor Outreach Event

While the COVID-19 pandemic has forced us to cancel many of our regularly scheduled in-person vendor outreach events, we are pleased to announce that on July 15, 2020, GLWA conducted our first virtual training session on "Doing Business with the Great Lakes Water Authority." Over 70 individuals pre-registered for the virtual presentation, which was hosted by the Michigan Department of Transportation (MDOT). The presentation reviewed registering and navigating Bonfire as well as the ABC's of submitting a competitive bid or proposal to a GLWA solicitation. A copy of the presentation is located on the [GLWA vendor page](#). Thank you to all who participated, and we look forward to more events like these in the future!

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