



Audit Committee

Friday, May 17, 2019 at 8:00 a.m.

5th Floor Board Room, Water Board Building
735 Randolph Street, Detroit, Michigan 48226
GLWater.org

AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. April 24, 2019 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
7. NEW BUSINESS
 - A. WRAP Reallocation Recommendation (Page 4)
 - B. The Foster Group Contract (Page 12)
8. REPORTS
 - A. Monthly Financial Report for February 2019 (Page 23)
 - B. Quarterly Investment Report (Page 24)
 - C. May 6, 2019 Reconciliation Committee Meeting Update (Page 55)
 - D. CFO Updates (Page 77)
9. LOOK AHEAD
 - Next Audit Committee Meetings
 - A. Regular Meeting June 21, 2019 at 8 am
10. INFORMATION
11. OTHER MATTERS
12. ADJOURNMENT

*Please note:
pages 73-76 are 11x17*



Great Lakes Water Authority

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

Meeting Minutes - Draft

Audit Committee

Wednesday, April 24, 2019

11:30 AM

Water Board Building 5th Floor

Special Meeting

1. Call To Order

Chairman Daddow called the meeting to order at 11:30 a.m.

2. Quorum Call

Present: 3 - Chairman Robert Daddow, Director Brian Baker, and Director Gary Brown

3. Approval of Agenda

Chairman Daddow requested a Motion to approve the Agenda.

Motion By: Brian Baker

Support: Gary Brown

Action: Approved

The motion carried unanimously.

4. Approval of Minutes

A. [2019-172](#) Approval of Minutes of March 15, 2019

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [March 15 2019 Audit Committee Meeting Minutes.pdf](#)

Chairman Daddow requested a Motion to approve the March 15, 2019 Audit Committee Meeting Minutes.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

None

6. Old Business

None

7. New Business

- A. [2019-175](#) Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds an Amount Not to Exceed \$12,000,000 (Ordinance 2019-01)

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of.pdf](#)

Motion By: Brian Baker

Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of April 24, 2019

The motion carried by a unanimous vote.

- B. [2019-176](#) Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds.pdf](#)

Motion By: Gary Brown

Support By: Brian Baker

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

Agenda of May 8, 2019

The motion carried by a unanimous vote.

- C. [2019-177](#) Drinking Water Revolving Fund Project Plan Submittal for the Detroit Water and Sewerage Department Water Main Replacement - FY 2020 Drinking Water Revolving Fund Project Plan

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [Drinking Water Revolving Fund Project Plan Submittal for the Detroit Water and Sewerage Department Water Main Replacement – FY 2020 Drinking Water.pdf](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Recommended for Approval to the Board of Directors

Agenda of April 24, 2019

The motion carried by a unanimous vote.

8. Reports

A. [2019-173](#) Monthly Financial Report for January 2019

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [GLWA Monthly Financial Report January 2019.pdf](#)

Motion By: Gary Brown

Support By: Brian Baker

Action: Received and Filed

The motion carried by a unanimous vote.

B. [2019-174](#) CFO Updates - Sewer Charges Methodology

Sponsors: Nicolette Bateson

Indexes: Finance

Attachments: [CFO Update Sewer Charges Methodology.pdf](#)

Nicolette Bateson, Chief Financial Officer/Treasurer, provided updates on the following topics:

- External Auditor Selection
- Financial Automation System Implementation
- Charges Methodology

9. Look Ahead

The next Audit Committee Meeting is scheduled for Friday, May 17, 2019 at 8:00 a.m.

10. Information

None

11. Other Matters

None

12. Adjournment

Chairman Daddow requested a Motion to Adjourn.

Motion By: Brian Baker

Support By: Gary Brown

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 1:07 p.m.



Financial Services Audit Committee Communication

Date: May 17, 2019

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Water Residential Assistance Program - Uncommitted FY 2018 Funds Reallocation Request

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 funded by GLWA at an amount equal to 0.5 percent of budgeted revenues with the budgeted FY 2019 funding level of \$4.9 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 up to \$1,000. Maximum annual assistance per household is \$2,000. To participate in WRAP, an applicant must have household gross incomes at or below 150% 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 to date has committed almost \$16 million in assistance and conservation funds to qualified WRAP participants. WRAP has the potential to serve over 100 communities within the GLWA service area, but to assist qualified households, each community must opt into the program and sign a Memorandum of Agreement (MOA) with Wayne Metro. To date, 76 communities have opted into WRAP. A list of current participating communities is presented in **Table 1**.

Analysis: WRAP Cashflow through June 30, 2018: **Table 2** shows the WRAP cashflow of budgeted and committed funds in total and for each of the participating counties and the City of Detroit for the period of March 1, 2016 to June 30, 2018. Through June 30, 2018 \$675,000 in assistance funds remain uncommitted and \$547,155 of conservation and repair dollars were unspent.

Table 1- WRAP Participating Communities

Wayne County	Oakland County	Macomb County
Allen Park	Berkley	Centerline
Brownstown Township	Beverly Hills	Chesterfield Township
Canton Township	Bingham Farms	Clinton Township
Dearborn	Birmingham	Eastpointe
Dearborn Heights	Bloomfield Hills	Fraser
Detroit	Clawson	Macomb Township
Ecorse	Commerce Township	New Haven
Flat Rock	Farmington	Shelby Township
Garden City	Farmington Hills	St. Clair Shores
Gibraltar	Ferndale	Sterling Heights
Grosse Pointe Shores	Hazel Park	Utica
Hamtramck	Huntington Woods	Warren
Harper Woods	Keego Harbor	Washington Township
Inkster	Lathrup Village	
Lincoln Park	Madison Heights	Washtenaw County
Livonia	Oak Park	Augusta Township
Melvindale	Orchard Lake	Pittsfield Township
Northville	Orion Township	Superior Township
Plymouth	Oxford	Ypsilanti
Redford Township	Pleasant Ridge	Ypsilanti Township
River Rouge	Pontiac	
Romulus	Royal Oak	Lapeer County
Southgate	Royal Oak Township	Almont
Taylor	Southfield	Lapeer
Trenton	West Bloomfield Township	
Van Buren Township		Genesee County
Wayne	Monroe County	Flint
Westland	Ash Township	
Woodhaven		

Wayne Metro Funding Recommendations

Based on the demonstrated usage of the WRAP funds since March 1, 2016 and the usage during FY 2018, Wayne Metro is recommending reallocation of currently uncommitted FY 2018 counties' WRAP funds. Attached is Wayne Metro's letter (including referenced documents) dated May 10, 2019 which outlines their recommendations. Below is a summary of the recommendations:

1. Reallocation of Uncommitted FY 2018 Assistance Funds: WRAP utilization in FY 2018 for suburban counties had uncommitted assistance dollars of \$929,732 (rounded). This is down from the uncommitted funds from FY 2017 of \$1,063,519. as of June 30, 2018 (see **Exhibit A**). Wayne Metro is recommending the repurposing of \$254,732 in uncommitted assistance funds be used for conservation and repairs as noted in #2 below. The net amount resulting from this repurposing of funds is \$675,000 for reallocation consideration of direct assistance programming. From the \$675,000 in uncommitted FY 2018 Counties' funds, Wayne Metro is recommending a transfer to the City of Detroit allocation in the amount of \$337,500 and to the City of Flint allocation in the amount of \$337,500. **Table 3** shows the effect of the proposed reallocation of these funds.

2. Reallocation of Uncommitted FY 2018 Conservation Funds: In addition to the uncommitted assistance funds, \$292,424 remain from the suburban counties' allocation of the conservation funds from FY 2018. Wayne Metro is recommending combining the \$254,732 of repurposed FY 2018 assistance funds (noted above) and the \$292,424 of unspent FY 2018 counties' conservation funds for a total of \$547,155. From the \$547,155, Wayne Metro is recommending the transfer of \$273,578 to the City of Detroit allocation and \$273,577 to the City of Flint allocation as shown in **Exhibit A**. **Table 3** also shows the effect of the proposed reallocation of these funds.

Budget Impact: None

Proposed Action: The GLWA Audit Committee recommends that the Great Lakes Water Authority Board approve the Wayne Metro recommendation outlined on Exhibit A of their letter dated May 10, 2019 to reallocate the uncommitted FY 2018 funds of \$1,222,156 as follows:

- A. Reallocation of \$337,500 to the Detroit allocation for Direct Assistance Funds
- B. Reallocation of \$337,500 to the Flint allocation for Direct Assistance Funds
- C. Reallocation of \$254,732 of Direct Assistance Funds to the Conservation Fund; which when added to the existing FY 2018 remaining conservation funds of \$292,424 results in available Conservation Funds of \$547,155
- D. Reallocation of the resulting Conservation Funds total of \$547,155 to the City of Detroit conservation allocation for \$273,578 and City of Flint conservation allocation of \$273,577
- E. The result of the above is the reallocation of total unspent FY 2018 funds of \$1,222,156 to the City of Detroit allocation in the amount of \$611,078 (\$337,500 for Direct Assistance and \$273,578 for Conservation) and the City of Flint allocation in the amount of \$611,077 (\$337,500 for Direct Assistance and \$273,577 for Conservation)

Table 2

WRAP Fund Sources and Uses
(Unaudited)

TOTAL Activity March 1, 2016 to June 30, 2018

INCLUDES FY 2016, 2017 & 2018 FUNDING

INCLUDES REALLOCATION OF FY 2016 AND 2017 UNCOMMITTED FUNDS

Row		Detroit	Out-Wayne County	Oakland County	Macomb County	Washtenaw County	St. Clair County	Lapeer County	Monroe County	Genesee County	City of Flint	Total
	Sources (Net Revenues)											
	FY 2016 Assistance Budget Allocation											
1	Bill and Arrearage Assistance	\$ 1,238,736	\$ 748,629	\$ 740,155	\$ 379,764	\$ 35,419	\$ 3,051	\$ 10,080	\$ 5,093	\$ 63,842	\$ -	\$ 3,224,769
2	Home Audit and Repairs	288,022	174,066	172,096	88,300	8,235	709	2,344	1,184	14,500	-	749,457
3	Total FY 2016 Assistance Budget Allocation	\$ 1,526,759	\$ 922,695	\$ 912,250	\$ 468,064	\$ 43,654	\$ 3,760	\$ 12,424	\$ 6,277	\$ 78,342	\$ -	\$ 3,974,226
	FY 2017 Assistance Budget Allocation											
4	Bill and Arrearage Assistance	\$ 1,278,103	\$ 806,833	\$ 774,825	\$ 400,804	\$ 37,998	\$ 2,431	\$ 10,059	\$ 5,561	\$ -	\$ -	\$ 3,316,615
6	Home Audit and Repairs	297,856	188,029	180,570	93,406	8,855	578	2,344	1,296	-	-	772,934
7	Total FY 2017 Assistance Budget Allocation	\$ 1,575,960	\$ 994,862	\$ 955,395	\$ 494,209	\$ 46,853	\$ 3,009	\$ 12,403	\$ 6,858	\$ -	\$ -	\$ 4,089,549
	Re-Allocation of Uncommitted Funds from FY 2016 (1)											
8	Bill and Arrearage Assistance Reallocated to Detroit	\$ 1,664,833	\$ (718,353)	\$ (591,163)	\$ (355,316)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Uncommitted FY 2016 Conservation Funds	\$ 446,090	\$ (173,591)	\$ (162,836)	\$ (82,690)	\$ (8,235)	\$ (709)	\$ (2,344)	\$ (1,184)	\$ (14,500)	-	0
11	Bill and Arrearage Assistance Reallocated to Flint	-	-	-	-	(35,419)	(3,051)	(10,080)	(5,093)	(63,842)	117,485	-
12	Total Re-Allocation of Uncommitted Funds from FY 2016	\$ 2,110,922	\$ (891,945)	\$ (753,999)	\$ (438,006)	\$ (43,654)	\$ (3,760)	\$ (12,424)	\$ (6,277)	\$ (78,342)	\$ 117,484	\$ 0
	Proposed Re-Allocation of Uncommitted Funds from FY 2017 (2)											
13	FY 2017 Reallocation of Assistance Funds	\$ 679,984	\$ (486,355)	\$ (268,078)	\$ (262,634)	\$ (28,401)	\$ (2,431)	\$ (10,059)	\$ (5,561)	\$ -	\$ 383,535	\$ -
15	FY 2017 Reallocation of Conservation Funds	106,997	(71,911)	(62,120)	(6,248)	(5,866)	(405)	(1,641)	(907)	-	42,100	0
16	Proposed Total Re-Allocation of Uncommitted Funds from FY 2017	\$ 786,981	\$ (558,266)	\$ (330,198)	\$ (268,882)	\$ (34,267)	\$ (2,836)	\$ (11,700)	\$ (6,468)	\$ -	\$ 425,635	\$ 0
17	Total Re-Allocation of Uncommitted FY 2016 and FY 2017 Funds	\$ 2,897,904	\$ (1,450,210)	\$ (1,084,196)	\$ (706,888)	\$ (77,921)	\$ (6,596)	\$ (24,124)	\$ (12,745)	\$ (78,342)	\$ 543,119	\$ -
	FY 2018 Assistance Budget Allocation											
18	Bill and Arrearage Assistance	\$ 1,303,229	\$ 848,677	\$ 827,662	\$ 429,388	\$ 40,961	\$ 2,604	\$ 9,970	\$ 5,908	\$ 28,679	\$ -	\$ 3,497,078
20	Home Audit and Repairs	303,712	197,780	192,883	100,067	9,546	607	2,323	1,377	6,684	-	814,979
21	Total FY 2018 Assistance Budget Allocation	\$ 1,606,941	\$ 1,046,457	\$ 1,020,545	\$ 529,455	\$ 50,507	\$ 3,211	\$ 12,294	\$ 7,285	\$ 35,363	\$ -	\$ 4,312,057
22	NET FY 2016, FY 2017 & FY 2018 Assistance Available	\$ 7,607,563	\$ 1,513,804	\$ 1,803,994	\$ 784,840	\$ 63,093	\$ 3,384	\$ 12,997	\$ 7,675	\$ 35,362	\$ 543,119	\$ 12,375,831
	Uses 3/01/2016 to 6/30/2018											
23	Investment Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Home Repairs	518,445	50,334	101,319	62,952	433	-	-	-	-	-	733,482
25	Home Audits	664,050	97,375	103,075	70,775	475	-	-	-	-	-	935,750
26	Bill Assistance	505,234	113,985	190,841	150,713	912	-	-	-	-	-	961,685
27	Arrearage Assistance	1,299,172	293,104	490,735	56,251	2,346	-	-	-	-	-	2,141,608
28	Total Uses 3/01/2016 to 6/30/2018	\$ 2,986,900	\$ 554,798	\$ 885,970	\$ 340,691	\$ 4,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,772,525
29	Net Funds Available for Future Assistance	\$ 4,620,663	\$ 959,006	\$ 918,024	\$ 444,149	\$ 58,927	\$ 3,384	\$ 12,997	\$ 7,675	\$ 35,362	\$ 543,119	\$ 7,603,306
	Less: Committed Funds 3/01/2016 to 6/30/2018											
30	Bill Assistance	\$ 789,680	\$ 394,790	\$ 221,783	\$ 79,915	\$ 14,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,215
31	Arrearage Assistance	1,225,984	67,178	147,352	46,024	6,769	0	0	0	0	0	1,493,307
32	Accrued Assistance for FY 2018	0	101,282	119,625	17,339	0	0	0	0	0	0	238,245
33	Total Committed Funds 3/01/2016 to 6/30/2018	\$ 2,015,664	\$ 563,249	\$ 488,760	\$ 143,278	\$ 20,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,231,767
34	Total Expenditures/Committed Funds	\$ 5,002,564	\$ 1,118,047	\$ 1,374,730	\$ 483,969	\$ 24,982	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,004,292
35	Uncommitted Funds as of 6/30/2018	\$ 2,604,999	\$ 395,757	\$ 429,264	\$ 300,871	\$ 38,111	\$ 3,384	\$ 12,997	\$ 7,675	\$ 35,362	\$ 543,119	\$ 4,371,539

(1) Based on April 26, 2017 Board of Directors action

(2) Based on August 22, 2018 Board of Directors action

Table 3

WRAP Fund Sources and Uses
(Unaudited)

TOTAL Activity March 1, 2016 to June 30, 2018

INCLUDES FY 2016, 2017 & 2018 FUNDING

INCLUDES REALLOCATION OF FY 2016, 2017 AND 2018 UNCOMMITTED FUNDS

Row		Detroit	Out-Wayne County	Oakland County	Macomb County	Washtenaw County	St. Clair County	Lapeer County	Monroe County	Genesee County	City of Flint	Total
	Sources (Net Revenues)											
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2	Home Audit and Repairs	288,022	174,066	172,096	88,300	8,235	709	2,344	1,184	14,500	-	749,457
3	Total FY 2016 Assistance Budget Allocation	\$ 1,526,759	\$ 922,695	\$ 912,250	\$ 468,064	\$ 43,654	\$ 3,760	\$ 12,424	\$ 6,277	\$ 78,342	\$ -	\$ 3,974,226
	FY 2017 Assistance Budget Allocation											
5	Bill and Arrearage Assistance	\$ 1,278,103	\$ 806,833	\$ 774,825	\$ 400,804	\$ 37,998	\$ 2,431	\$ 10,059	\$ 5,561	\$ -	\$ -	\$ 3,316,615
6	Home Audit and Repairs	297,856	188,029	180,570	93,406	8,855	578	2,344	1,296	-	-	772,934
7	Total FY 2017 Assistance Budget Allocation	\$ 1,575,960	\$ 994,862	\$ 955,395	\$ 494,209	\$ 46,853	\$ 3,009	\$ 12,403	\$ 6,858	\$ -	\$ -	\$ 4,089,549
	Re-Allocation of Uncommitted Funds from FY 2016 (1)											
9	Bill and Arrearage Assistance Reallocated to Detroit	\$ 1,664,833	\$ (718,353)	\$ (591,163)	\$ (355,316)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Uncommitted FY 2016 Conservation Funds	\$ 446,090	\$ (173,591)	\$ (162,836)	\$ (82,690)	\$ (8,235)	\$ (709)	\$ (2,344)	\$ (1,184)	\$ (14,500)	-	0
11	Bill and Arrearage Assistance Reallocated to Flint	-	-	-	-	(35,419)	(3,051)	(10,080)	(5,093)	(63,842)	117,485	-
12	Total Re-Allocation of Uncommitted Funds from FY 2016	\$ 2,110,922	\$ (891,945)	\$ (753,999)	\$ (438,006)	\$ (43,654)	\$ (3,760)	\$ (12,424)	\$ (6,277)	\$ (78,342)	\$ 117,485	\$ 0
	Re-Allocation of Uncommitted Funds from FY 2017 (2)											
14	FY 2017 Reallocation of Assistance Funds	\$ 679,984	\$ (486,355)	\$ (268,078)	\$ (262,634)	\$ (28,401)	\$ (2,431)	\$ (10,059)	\$ (5,561)	\$ -	\$ 383,535	\$ -
15	FY 2017 Reallocation of Conservation Funds	106,997	(71,911)	(62,120)	(6,248)	(5,866)	(405)	(1,641)	(907)	-	42,100	0
16	Total Re-Allocation of Uncommitted Funds from FY 2017	\$ 786,981	\$ (558,266)	\$ (330,198)	\$ (268,882)	\$ (34,267)	\$ (2,836)	\$ (11,700)	\$ (6,468)	\$ -	\$ 425,635	\$ 0
	Proposed Re-Allocation of Uncommitted Funds from FY 2018 (3)											
18	FY 2018 Reallocation of Assistance Funds	\$ 337,500	\$ (298,775)	\$ (313,067)	\$ (241,763)	\$ (28,966)	\$ (2,604)	\$ (9,970)	\$ (5,908)	\$ (28,679)	\$ 337,500	\$ (254,732)
19	FY 2018 Reallocation of Conservation Funds	273,578	(96,982)	(116,197)	(59,108)	(9,145)	(607)	(2,323)	(1,377)	(6,684)	273,577	254,732
20	Proposed Total Re-Allocation of Uncommitted Funds from FY 2018 (3)	\$ 611,078	\$ (395,757)	\$ (429,264)	\$ (300,871)	\$ (38,111)	\$ (3,211)	\$ (12,293)	\$ (7,285)	\$ (35,363)	\$ 611,077	\$ (0)
21	Total Re-Allocation of Uncommitted Funds	\$ 3,508,982	\$ (1,845,967)	\$ (1,513,460)	\$ (1,007,759)	\$ (116,032)	\$ (9,807)	\$ (36,417)	\$ (20,030)	\$ (113,705)	\$ 1,154,197	\$ -
	FY 2018 Assistance Budget Allocation											
23	Bill and Arrearage Assistance	\$ 1,303,229	\$ 848,677	\$ 827,662	\$ 429,388	\$ 40,961	\$ 2,604	\$ 9,970	\$ 5,908	\$ 28,679	\$ -	\$ 3,497,078
24	Home Audit and Repairs	303,712	197,780	192,883	100,067	9,546	607	2,323	1,377	6,684	-	814,979
25	Total FY 2018 Assistance Budget Allocation	\$ 1,606,941	\$ 1,046,457	\$ 1,020,545	\$ 529,455	\$ 50,507	\$ 3,211	\$ 12,294	\$ 7,285	\$ 35,363	\$ -	\$ 4,312,057
26	NET FY 2016, FY 2017 & FY 2018 Assistance Available	\$ 8,218,641	\$ 1,118,047	\$ 1,374,730	\$ 483,969	\$ 24,982	\$ 173	\$ 704	\$ 390	\$ (0)	\$ 1,154,197	\$ 12,375,832
	Uses 3/01/2016 to 6/30/2018											
27		0	0	0	0	0	0	0	0	0	0	0
28	Investment Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	Home Repairs	518,445	50,334	101,319	62,952	433	-	-	-	-	-	733,482
30	Home Audits	664,050	97,375	103,075	70,775	475	-	-	-	-	-	935,750
31	Bill Assistance	505,234	113,985	190,841	150,713	912	-	-	-	-	-	961,685
32	Arrearage Assistance	1,299,172	293,104	490,735	56,251	2,346	-	-	-	-	-	2,141,608
33	Total Uses 3/01/2016 to 6/30/2018	\$ 2,986,900	\$ 554,798	\$ 885,970	\$ 340,691	\$ 4,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,772,525
34	Net Funds Available for Future Assistance	\$ 5,231,741	\$ 563,249	\$ 488,760	\$ 143,278	\$ 20,816	\$ 173	\$ 704	\$ 390	\$ (0)	\$ 1,154,197	\$ 7,603,307
	Less: Committed Funds 3/01/2016 to 6/30/2018											
36	Bill Assistance	\$ 789,680	\$ 394,790	\$ 221,783	\$ 79,915	\$ 14,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,215
37	Arrearage Assistance	1,225,984	67,178	147,352	46,024	6,769	0	0	0	0	0	1,493,307
38	Accrued Assistance for FY 2018	0	101,282	119,625	17,339	0	0	0	0	0	0	238,245
39	Total Committed Funds 3/01/2016 to 6/30/2018	\$ 2,015,664	\$ 563,249	\$ 488,760	\$ 143,278	\$ 20,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,231,767
40	Total Expenditures/Committed Funds	\$ 5,002,564	\$ 1,118,047	\$ 1,374,730	\$ 483,969	\$ 24,982	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,004,292
41	Uncommitted Funds as of 6/30/2018	\$ 3,216,077	\$ 0	\$ 0	\$ 0	\$ (0)	\$ 173	\$ 704	\$ 390	\$ (0)	\$ 1,154,197	\$ 4,371,540

(1) Based on April 26, 2017 Board of Directors action

(2) Based on August 22, 2018 Board of Directors action

(3) Based on 5.10.19 Wayne Metro Recommendation



Wayne Metropolitan
Community Action Agency
Established 1971



LHSA
A Community Action Agency



May 10, 2019

Great Lakes Water Authority & Chief Executive Officer
500 Randolph, 19th Floor
Detroit, MI 48202

RE: Water Residential Assistance Program Reallocation of Uncommitted FY18-19 Funds

Dear GLWA Board of Directors and Sue McCormick,

Community Action Agencies, America's anti-poverty network, carry out a shared promise to empower people and communities to be strong, healthy, and thriving. The Community Action Alliance for Southeast Michigan, through our role in WRAP, has made water assistance, conservation, and consumer education a leading priority in our community-based poverty fighting efforts.

Together we have enrolled more than 15,000 GLWA resident customers into WRAP assisting in the prevention of thousands of water service shut offs. With 76 of the eligible GLWA communities now offering WRAP services to residents and one additional MOA in process the reach and impact of WRAP continues to grow. **Even with an increase in community participation, an unspent balance of \$675,000 in uncommitted funds remain in Direct Assistance and \$547,155 in Conservation.**

The greatest need for WRAP services is from Detroit and Flint customers. 71 percent of all WRAP enrollments are Detroit and Flint residents. All available GLWA Detroit WRAP funding has been committed to service first year enrollments, second year re enrollments, home repairs, and conservation measures.

We respectfully request that GLWA Board of Directors:

- 1. Approve a WRAP conservation and direct assistance funding reallocation as follows:**
 - a. Conservation:**
 - i. Reallocate unspent funds as follows:**
 - 1. City of Detroit: Conservation: \$273,578**
 - 2. Genesee county (Flint): Conservation: \$273,577**
 - b. Direct Assistance:**
 - i. Reallocate unspent funds as follows:**
 - 1. Genesee County: New Enrollments: \$ 337,500**
 - 2. City of Detroit New Enrollments: \$ 337,500**

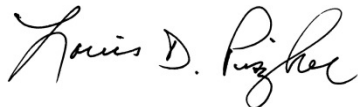
In advocating for this reallocation, it is worth noting:

- All allocated GLWA funding and additional funding raised for Detroit has been committed.
- All allocated GLWA funding for Flint has been committed and \$17,000 are allocated for FY 19-20.
- This request is consistent with the reallocation request made by the CAA Alliance in 2018.
- An additional \$4,138,000 has been raised and committed for WRAP Detroit - Wayne Metro contributing \$1M in Federal dollars and DWSD an additional \$3M for Departmental sources.
- \$3.2M has been leveraged to expand and advance WRAP services through technology, facilities, and increased staffing.
- \$400,000 of discretionary funding has been raised through events, grants, and donations to provide one-time assistance to individuals and communities ineligible for WRAP.

Please find attached:

1. A funding allocation request table (Exhibit A)

Sincerely,

A handwritten signature in black ink, reading "Louis D. Piszker". The signature is fluid and cursive, with the first name "Louis" and last name "Piszker" clearly legible.

Louis D. Piszker, CEO
Wayne Metro CAA

EXHIBIT A

Wayne Metropolitan Community Action Agency GLWA WRAP Reallocation Recommendation Uncommitted FY 2018 Funds

FY 2018 Direct Assistance Funds

	Direct Assistance Budget	Direct Assistance Committed	Remaining Assistance Balance	Recommended Reallocation	Balance after Reallocation
City of Detroit	\$1,303,229	\$1,303,229	\$0	\$337,500	\$337,500
Out-Wayne	848,677	549,902	298,775	(298,775)	-
Oakland	827,662	514,595	313,067	(313,067)	-
Macomb	429,388	187,625	241,763	(241,763)	-
Washtenaw	40,961	11,995	28,966	(28,966)	-
St. Clair	2,604	-	2,604	(2,604)	-
Lapeer	9,970	-	9,970	(9,970)	-
Monroe	5,908	-	5,908	(5,908)	-
Genesee	28,679	-	28,679	(28,679)	-
City of Flint	-	-	-	337,500	337,500
	<u>\$3,497,078</u>	<u>\$2,567,345</u>	<u>\$929,733</u>	<u>(\$254,732)</u>	<u>\$675,000</u>

FY 2018 Conservation Funds

	Conservation Assistance Budget	Conservation Assistance Spent	Remaining Assistance Balance	Recommended Reallocation	Balance after Reallocation
City of Detroit	\$303,712	\$303,712	\$0	\$273,578	\$273,578
Out-Wayne	197,780	100,798	96,982	(96,982)	-
Oakland	192,883	76,686	116,197	(116,197)	-
Macomb	100,067	40,959	59,108	(59,108)	-
Washtenaw	9,546	401	9,145	(9,145)	-
St. Clair	607	-	607	(607)	-
Lapeer	2,323	-	2,323	(2,323)	-
Monroe	1,377	-	1,377	(1,377)	-
Genesee	6,684	-	6,684	(6,684)	-
City of Flint	-	-	-	273,577	273,577
	<u>\$814,979</u>	<u>\$522,555</u>	<u>\$292,424</u>	<u>\$254,732</u>	<u>\$547,155</u>
FY 2018 Total	<u>\$4,312,057</u>	<u>\$3,089,901</u>	<u>\$1,222,156</u>	<u>\$0</u>	<u>\$1,222,155</u>



Financial Services Audit Committee Communication

Date: May 15, 2019

To: Great Lakes Water Authority Audit Committee

From: Nicolette Bateson, Chief Financial Officer & Treasurer

Re: Proposed Contract with The Foster Group

Background: See attached draft Great Lakes Water Authority (GLWA) Board action item letter.

Analysis: See attached draft GLWA Board action item letter.

Proposed Action: Recommend that the Great Lakes Water Authority Board approve an Amendment to GLWA Contract CS-195 effective July 1, 2019 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$1,000,000 for a two-year contract and, in addition, System Consultant Services – Related to Specific Bond Transactions Services on a per transaction fee basis at a not-to-exceed amount of \$610,000 for the same two-year time period.

..Title

Proposed Amendment to GLWA Contract CS-195 effective July 1, 2019 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$1,000,000 for a two-year contract and, in addition, System Consultant Services – Related to Specific Bond Transactions Services on a per transaction fee basis at a not-to-exceed amount of \$610,000 for the same two-year time period

..Body

Agenda of: June 12, 2019

Item No.: **2019-TBD**

Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: June 12, 2019

RE: **Proposed Amendment to GLWA Contract CS-195 effective July 1, 2019 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$1,000,000 for a two-year contract and, in addition, System Consultant Services – Related to Specific Bond Transactions Services on a per transaction fee basis at a not-to-exceed amount of \$610,000 for the same two-year time period.**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Great Lakes Water Authority Board authorizes the Chief Executive Officer (CEO) to **enter into Contract No. CS-195 effective July 1, 2019 with The Foster Group for Annual Financial Management Consulting at a not-to-exceed amount of \$1,000,000 for a two-year contract and, in addition, System Consultant Services – Related to**

Specific Bond Transactions Services on a per transaction fee basis at a not-to-exceed amount of \$610,000 for the same two-year time period, and also authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The current fixed fee, fixed cost contract with The Foster Group expires June 30, 2019. The Foster Group provides critical customer outreach, highly technical financial analysis, charge methodology services, management assistance, and long-term strategic support to the Great Lakes Water Authority (GLWA). In addition to core tasks, there are several open GLWA initiatives that depend on The Foster Group's services which includes the following.

- ✓ Current review of sewer charges methodology in process
- ✓ Current review of shares through the member partner outreach in process
- ✓ Financial analysis of the sewer master plan in the latter half of CY 2019
- ✓ Complex coordination on behalf of the Chief Financial Officers for Detroit Water and Sewerage Department (DWSD) and GLWA on a regular basis related to coordination of budget, capital, and financing needs.
- ✓ Ongoing expertise to support the GLWA and the DWSD in analyzing and implementing the leases and services agreement
- ✓ Knowledge transfer in the customer outreach program facilitation,
- ✓ Knowledge transfer and participation in the finance transformation including the launch of Tagetik in the latter half of CY 2019 for financial modeling and strategic planning,
- ✓ Supporting the Chief Financial Officer is the development of GLWA team member expertise to build in-house capacity.

In addition, the GLWA is preparing to launch (and hopefully complete) a comprehensive review of the water charges methodology during this proposed contract period. Early member partner leadership feedback has indicated that there would be a preference for The Foster Group to be engaged in that effort.

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

JUSTIFICATION

The GLWA Board is being asked to consider a renewal of The Foster Group contract at this time to carry forward these critical tasks without disruption. For that reason, The Foster Group has been asked to provide a detailed proposal (attached) for the next two years. The proposal expands further on many of the key initiatives noted above.

The proposed fee is a fixed annual fee paid on a pro-rata monthly lump sum basis which includes all expenses. In GLWA's form of contract, either party can initiate the discussion to modify to the scope of services and related fees.

As a benchmark of the fee proposed, the following analysis was prepared using the hourly rates obtained during the Request for Information for a third-party consultant to support individual and collective member partner questions for the sewer charges methodology review. The resulting contract was not to exceed \$120,000 based on negotiated hourly rates plus \$20,000 expenses with most of the work being completed between May and August. The evaluation panel (which included representatives from DWSD, Oakland, and Macomb service areas) selected Firm D. GLWA team members conducted negotiations.

Firm	A	B	C	D	D Negotiated	Average
Director Level	\$ 350.00	\$ 300.00	\$ 290.00	\$ 425.00	\$ 350.00	\$ 343.00
Manager Level	\$ 275.00	\$ 280.00	\$ 290.00	\$ 291.00	\$ 250.00	\$ 277.20

Based on the table above, if the lowest, average, and highest hourly fee was applied using an estimated annual number of hours (recognizing that there the number of hours is especially intensive during certain times of the year), a benchmarked annual fee *before expenses* would range from \$452,400 to \$663,000.

Firm	3/4 FTE (hours)	Fee based on 3/4 FTE @ lowest rate	Fee based on 3/4 FTE @ average rate	Fee based on 3/4 FTE @ highest rate
Director Level	1,560	\$ 452,400	\$ 535,080	\$ 663,000
Manager Level	1,560	\$ 452,400	\$ 432,432	\$ 453,960

Given the current market rate, staff has determined that the fee proposed for financial management consulting services is reasonable.

The proposed contract with The Foster Group also provides for revenue bond (including State Revolving Fund) transaction services if needed. The fees are at the same level as prior years.

BUDGET IMPACT

The Foster Group Contract is divided equally between the Financial Planning & Analysis Group and the Public Finance Group in the Financial Services Area. There will be an allocation required from the Administrative Budget Reserve to allow for the discrepancy between early budget estimates and the proposed fee.

Line Item Budget	Current FY 2019 Services	Approved FY 2020 Services	Proposed FY 2021 Services
FP&A Contractual Professional Services			
5910-884113.000-617903-WS7900	\$ 250,000	\$ 200,000	\$ 200,000
Public Finance Consulting Services			
5910-884141.000-617903-WS7900	250,000	210,000	210,000
Budget Amendment Required		90,000	90,000
Budget Total	<u>\$ 500,000</u>	<u>\$ 500,000</u>	<u>\$ 500,000</u>

Fees for bond transactions are charged to the bond issuance costs consistent with industry practice for all advisor fees that are transaction based.

COMMITTEE REVIEW

The Audit Committee is reviewing this matter at its meeting on May 17, 2019.

SHARED SERVICES IMPACT

The extent to which DWSD will utilize The Foster Group's services is undetermined. If required by the SRF program for a transaction, the fees would be a pass-through cost based on the attached proposal and at the same rate as prior years. DWSD also pays a pro rata share of fees for revenue bonds on their behalf. This is also a pass-through cost.

T F G
THE FOSTER GROUP

P.O. BOX 26282
LEAWOOD, KS 66225
TEL: (913) 345-1410
FAX: (913) 345-1640

THE FOSTER GROUP, LLC
BART FOSTER, PRESIDENT
CELL: (913) 530-6240
BFOSTER@FOSTERGROUPLLC.COM

May 13, 2019

Ms. Nicolette Bateson
Chief Financial Officer
Great Lakes Water Authority
735 Randolph Street
Detroit, Michigan 48226

Dear Ms. Bateson:

In accordance with your direction, we have prepared this brief summary report regarding the status of the business consulting services being provided to GLWA by THE FOSTER GROUP via GLWA Contract CS-195, and to outline a possible work plan for such services in the coming years. Our current engagement is funded by Amendment No. 1 to CS-195, and covers consulting services during GLWA FY 2019. Services under this contract are separated into two major categories: Annual Financial Management Consulting, designed to support annual budget development, cost of service analysis, charge setting, support of GLWA's customer outreach program, and related activities; and System Consultant Services, designed to support the Authority's issuance of revenue bonds and related financing instruments. The discussion that follows addresses consulting services for both of these categories.

Annual Financial Management Consulting

Fees for FY 2019 services in this category (under Amendment No. 1 to CS-195) are fixed at \$500,000. We note that annual fees for these services have been gradually reduced over the past several years, and totaled \$750,000 as recently as FY 2016. The fees for FY 2019 represent a 20% reduction from FY 2018. The reduction in consulting fees has coincided with the Authority's development of internal resources to perform many of the services previously provided under predecessor consulting contracts. This transition has been strategic, and is ongoing.

Through the first 10 months of FY 2019, the reduction in our level of effort on this category compared to FY 2018 has not matched the comparable level of fee reduction. We continue to streamline activities related to budget development and accounting review tasks, and more of the analyses and tasks that we traditionally conducted in prior years are now being executed by GLWA financial staff. In this respect the anticipated level of transition is being successfully executed. However, the GLWA "transition mode" continues to evolve and other areas of requested assistance under this engagement have grown and are requiring unprecedented and unanticipated levels of consulting effort. A small sample of these assignments include extraordinary levels of consultation designed to:

- Develop and execute a supplemental MOU to implement the Lease(s) between GLWA and the City of Detroit;
- Negotiate water service agreements with Flint and Genesee County, an occurrence that seemed virtually impossible when our consulting agreement was negotiated;
- Negotiate a proposed amendment to the wastewater service agreements with OMID reflecting a potential new service arrangement regarding the Northeast Sewer Pump Station;
- Explore and establish potential modifications to the wastewater and water charge methodologies;
- Provide continued leadership and support of the GLWA customer outreach program, which continues to evolve during the transition.

While progress is being made on several of these initiatives, we respectfully suggest that much work remains to establish a steady state GLWA organization. Further, we humbly submit that that our consulting assistance is essential to achieving this goal. While much has been accomplished, much work remains. We envision that our continuing consulting assistance in the upcoming GLWA FY 2020 will focus on:

- Finalization of several of the “in flight” initiatives above;
- Continued assistance in standing up the GLWA finance organization as it incorporates new programs and systems;
- Continued leadership and support of the GLWA customer outreach program, specifically related to the efforts to review cost of service allocation and charge methodologies;
- Preparation of revenue requirements, cost of service allocations, and charge development studies for FY 2021.
 - ***This is the core element of our engagement, but as noted above, does not begin to constitute the full nature of our services.***

In short, we are not engaged as a “rate consultant” to GLWA. Rather, the services we have provided in recent years have focused on serving as a valued business advisor on multiple fronts. We believe that the Authority would be well served by continuing this relationship, while continuing to focus the structure of our arrangement towards more strategic services, and away from the detailed tasks conducted in prior years. The hallmark of our practice has always been that we provide more value delivering our consulting services than the cost of the associated fees. We pride ourselves on always accomplishing this objective, and we are not interested in pursuing engagements that don’t fit that premise.

System Consultant Services

Fees for services in this category are funded from the transactions they are designed to support, and are not formally included in the change order funding level in the contract. The contract currently contains a “not to exceed” fee per transaction of \$100,000 per revenue bond

transaction and \$15,000 per transaction for financings issued through the State of Michigan Municipal Financing Authority, such as SRF transactions. Amendment No. 1 to CS-195 limits annual funding in this category to \$305,000.

We submit that our consulting assistance in this category has been an essential contribution to GLWA's remarkably successful inaugural bond sales over the past two years. We believe we are well situated to continue provide these services in a manner that adds remarkable value to future transactions.

Proposal for FY 2020 and FY 2021

The intent of this proposal is to establish a mechanism to provide funding for continued consulting services through FY 2021. As noted above, as GLWA matures and continues to develop additional internal financial planning and management resources, the organization's need for our services will naturally wane. The proposed scope of services set forth herein continues to recognize that strategic transition. The work plan outlined in this proposal is designed to provide consulting services in support of:

- Financial planning, monitoring, cost of service studies, and charge development activities in support of the FY 2021 and FY 2022 Budgets, Financial Plans, cost of service allocations, and development of supporting wholesale service charges;
- Related implementation assistance, including consultation on GLWA/DWSD coordination matters;
- Support of GLWA's customer outreach program, including provision of leadership positions on several work groups of the GLWA One Water Partnership Agreement;
- System Consultant services in support of GLWA's issuance of revenue bonds and related financing vehicles.

The basic scope of services summarized herein has been crafted with the understanding that they be similar in nature to those set forth in CS-195 and prior agreements.

Based on our experience with studies of a similar nature for GLWA and other major municipal clients, and several conversations with key representatives of the GLWA leadership team, we have developed a detailed work plan for the proposed consulting services. This work plan is designed to result in comprehensive, high quality consulting services and deliverables. We are uniquely qualified to provide the services desired by GLWA, having been directly involved with the organization's annual financial planning process for the last 33 years.

Executive Summary Work Plan

Six general categories of analyses are necessary to carry out the objectives of the annual financial management and charge design consulting services, as summarized by the task descriptions below. In addition, we have included two customer outreach tasks – one for Water and one for Sewer. Finally, we have provided a task to support System Consultant services on an as needed basis. We are prepared to provide a more detailed work plan for these services as necessary.

1. **Operating and Capital Budget Development** - THE FOSTER GROUP will assist GLWA in the development of operating budgets and capital improvement programs, including analyses to incorporate DWSD retail budget and capital improvement programs, and to present budgetary information in a manner suitable for discussions with stakeholders.
2. **Review of Accounting Records** - THE FOSTER GROUP will perform detailed analytical reviews of GLWA's accounting records, to facilitate development of financial plans, cost of service allocations and charge designs, and to provide interpretive commentary on the overall adequacy and accuracy of the statements.
3. **Design of Financing Plans** - THE FOSTER GROUP will develop alternative 10-year operating and capital financing plans for the water and sewer utilities, strategize with Authority management on the most appropriate depiction, and formalize such analyses as the "plan of record" for the Authority.
4. **Cost of Service Allocations** - THE FOSTER GROUP will allocate the annual cost of providing utility service to individual customers and customer classes. This element will include detailed reviews of new technical data gathered to indicate relative use of the water and sewer systems, application of industry standards and agreed upon methodologies, and incorporation of new initiatives being discussed at various stakeholder work groups. This element will include updates of demands placed on the water system by individual customer communities and classes, and updates of relative customer wastewater contributions and other technical data to compute "SHARES".
5. **Charge Design** - THE FOSTER GROUP will design schedules of water and sewer service charges that recover the total annual revenue requirements from utility customers in an equitable, defensible manner and in accordance with applicable policies, statutes, regulations, and agreements.
6. **Implementation Assistance** - THE FOSTER GROUP will assist GLWA in its preparation of all material necessary to implement the proposed water and sewer charges, and to carry out and monitor GLWA's financial plans. This assistance will include development of notification material, drafting of ordinances and other documents, and presentations to interested stakeholders at the Authority's direction. This task will also include ongoing monitoring throughout the year to address charge related issues that arise, including briefing sessions with GLWA management and attendance of Board meetings, workshops, and subcommittee meetings, and support of interagency meetings with DWSD representatives and related stakeholders.
7. **Sewer Customer Outreach Program Support** - THE FOSTER GROUP will assist the Authority in the Sewer Customer Outreach activities by attending and presenting materials on behalf of the Authority at several committees and work groups, including the One Water Partnership, the Wastewater Charges Work Group, etc. THE FOSTER GROUP has been a vital resource to the success of this initiative and the individual work groups, and it is anticipated that the committees and work groups will continue to function in their current forms. Key elements of this task are anticipated to include strategic consultation regarding the Wastewater Master Plan update, assistance with development and implementation of the next version of the Long Term CSO Control Plan (including development of NPDES Permit modifications), and continued leadership role in discussions on wastewater charge methodologies, including efforts to further implement "rate simplification".

8. **Water Customer Outreach Program Support** - THE FOSTER GROUP will assist the Authority in the Water Customer Outreach activities by continuing to play a key membership role in the One Water Partnership and all of its work groups, including the Analytical Work Group, the Water Charges Work Group, etc. THE FOSTER GROUP was critical to the vision, development, and implementation of the model contract and the associated water charge platform. It is envisioned that subsequent efforts will focus on the planned comprehensive review of the water charge methodology, strategic planning with respect to consultation on studies being conducted to evaluate units of service, and ongoing development and presentation of material illustrating the Authority's financial planning, cost allocation and service charge practices.
9. **System Consultant Services** - THE FOSTER GROUP will serve as the Authority's System Consultant to support its issuance of revenue bonds and related financing instruments. These services have traditionally consisted of two separate levels of consulting based on the type of transaction. For "regular" revenue bonds issued to finance capital improvements and/or refinance outstanding revenue bonds, we have been engaged to provide a financial feasibility report, complete with updated five-year financial projections, certification of compliance with the Additional Bonds Test, and related implementation assistance. On other occasions, including support of issuance of Junior Lien Bonds through the State Revolving Fund, our services have been limited to certification of compliance with the Additional Bonds Test and related, less comprehensive analytical assistance. We suggest maintaining the same arrangement, as noted in the Proposed Fee section below.

Schedule

At your direction, the work plan outlined in this proposal is designed to provide for consulting services for GLWA Fiscal Years 2020 and 2021, to support development of the FY 2021 and FY 2022 water and sewer charges. As such, we suggest a contract start date of July 1, 2019 and a contract termination date of June 30, 2021.

Resources

In addition to members, employees, and contract employees, THE FOSTER GROUP maintains cooperative arrangements with several other professional service firms, large and small, to facilitate effective delivery of a wide variety of specialized consultative services. These entities are available to provide additional technical assistance on a subcontract basis, as needed.

Proposed Fees

Our proposed fees for the consulting services set forth herein are summarized in the table below.

Annual Financial Management Consulting

Under CS-195, fees for Annual Financial Management Consulting services during the two years covered by the contract totaled \$1,125,000. Annual fees were \$625,000 for FY 2018 and \$500,000 for FY 2019, reflecting the anticipated strategic transition away from consulting services provided by THE FOSTER GROUP. While the transition, and the accompanying gradual reduction in requested consulting services, has occurred – it has not materialized at the same pace anticipated when the original agreement for CS-195 was established. We are

inclined to suggest that returning to the FY 2018 fee level would be appropriate. However, we remain committed to the desired transition, and have established an estimated level of consulting services that maintains the FY 2019 fee for proposed services provided during FY 2020 and FY 2021. We propose to continue to invoice for these services in fixed monthly amounts.

<u>Item</u>	<u>Fee Estimate</u>
Annual Financial Management Consulting – FY 2020	\$500,000
Annual Financial Management Consulting – FY 2021	<u>\$500,000</u>
Total – Financial Management Consulting	\$1,000,000

System Consultant Services – Related to Specific Bond Transactions

We suggest that fees for services in this category be consistent with our current agreement. The contract currently contains a “not to exceed” fee per transaction of \$100,000 per revenue bond transaction and \$15,000 per transaction for financings issued through the State of Michigan Municipal Financing Authority, such as SRF transactions. Any such services will only be initiated and invoices will only be produced at the direction of GLWA via separate task order for each transaction, as transactions are identified and specific services are requested, along with agreed upon fees for each task. We note that fees for these consulting services are funded via issuance expenses of the specific transactions, and not through normal operating expense budgets.

<u>Item</u>	<u>Fee Estimate</u>
System Consultant Services – FY 2020	\$305,000
System Consultant Services – FY 2021	<u>\$305,000</u>
Total – System Consultant Services	\$610,000

We sincerely appreciate this opportunity to be of continued service to the Authority. If you have any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

THE FOSTER GROUP



Bart Foster
President



Monthly Financial Report Binder

February 2019

**Presented to the
Great Lakes Water Authority
Audit Committee on May 17, 2019**

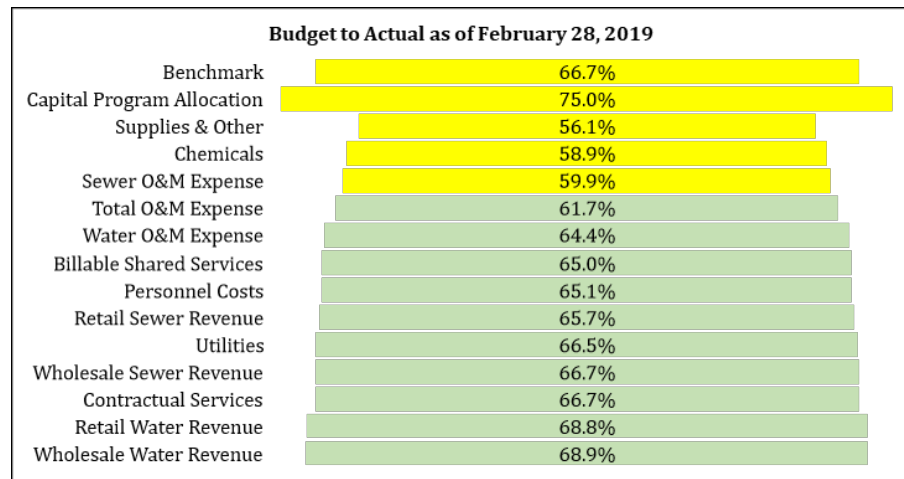
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Revenue and Expense Budget to Actual¹ – Pro-rata Benchmark of 66.7%

Most categories are within 5% of the pro-rata benchmark.

Capital Program Allocation: The launch of a new software program in early FY 2019 has significantly improved capital project time reporting. The outcome is direct labor charged to construction projects rather than operations and maintenance expense (O&M).



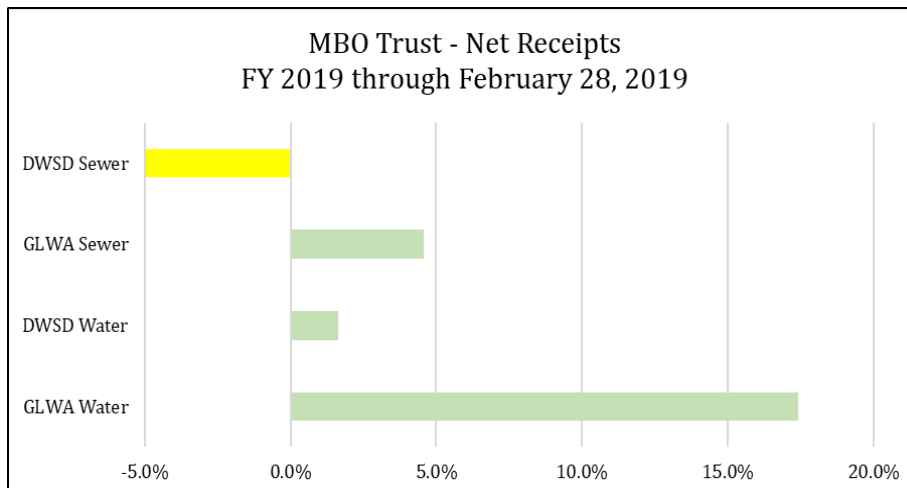
Supplies & Other: Due to timing of one-time or annual purchases in this category, expenses will not occur evenly throughout the fiscal year.

Chemicals: Expected variance as usage does not follow a consistent monthly budget pattern.

Sewer Operations & Maintenance (O&M) Expense: The positive variances in Supplies & Other and Chemicals, noted above, also positively impact the overall Sewer O&M Expense.

Note: The recent continuous wet weather activity will most likely increase supply, chemical utility and payroll (overtime) expense; future reductions in positive variances are anticipated.

Master Bond Ordinance (MBO) Trust Net Receipts



Overall net cash flow (receipts) is positive. This means that all legal commitments of the MBO Trust and the lease payment are fully funded to date. The net positive variance contributes to an improving financial position. The FY 2019 DWSD net sewer receipts budgetary shortfall is

under discussion with DWSD with expected resolution by year-end.

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

¹ All amounts are GLWA entity-wide unless noted as water, sewer, and/or retail.

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

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

Revenue Requirement Budget Basis Analysis

GLWA's annual revenue requirement represents the basis for calculating Member Partner charges. The analysis is presented in a manner that largely aligns with the Master Bond Ordinance flow of funds. 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 February 2019, the pro-rata benchmark is 66.7% (8 of 12 months of the fiscal year).

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

1. **Revenues:** For *both* systems, FY 2019 revenues are above target and are consistent with the prior year (FY 2018) at the same time. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.
2. **Investment Earnings:** For *both* systems, investment earnings are at or above target for FY 2019. 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. For example, in FY 2018 the variance reported for the *sewer* system was due, in large part, to fire remediation insurance proceeds received.

4. **Operations & Maintenance Expense:** Actual expenses¹ for *both* systems are less than the pro-rata benchmark; the *water* system is slightly under the pro-rata benchmark for FY 2019 at 64.4%, while the *sewer* system O&M expense is at 59.9%.
5. **Debt Service:** *Both* systems are on target with the pro-rata benchmark; the *water* system is at 66.4%, while the *sewer* system is at 66.0%. The activity is based on the payment schedules that have been adjusted for the State Revolving Fund loans that are still being drawn down. In October 2018, the GLWA had a successful bond sale which will provide a positive budget variance for *both* systems. The budget amendment for this transaction was recorded in January 2019.
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 2018 DWSD *sewer* shortfall through February 28, 2018, was \$21.3 million (the ending shortfall for FY 2018 was \$18.2 million). A plan for payment of this shortfall is under discussion with the outer boundary of payment terms being payment over three years plus interest at the three-year treasury rate plus 1.5%. For FY 2019, while the DWSD *water* system has positive budgetary cash flow, through February 28, 2019, the DWSD *sewer* system budgetary shortfall is approximately \$8.6 million. It is anticipated that this shortfall will be cured by June 30, 2019 based upon discussion at the May 2019 Reconciliation Committee and related discussions at the administration level. As of May 14, 2019, GLWA is anticipating written direction from DWSD to amend the FY 2019 O&M MBO transfers to reverse the shortfall based on DWSD's financial projections through June 30, 2019. This is feasible as DWSD has positive O&M variances outside of the MBO trust for the current and prior years.
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 typically occur later in the year or after year end close when final net revenues is validated.
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 are at 1/12 of the budget to a DWSD O&M bank account outside the trust. Actual budget may be, and often is, less than that amount providing an actual positive variance for DWSD.

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

	FY 2018 BOARD ADOPTED BUDGET	FY 2018 THRU 2/28/2018	Percent Year-to- Date	FY 2019 BOARD ADOPTED BUDGET	FY 2019 AMENDED BUDGET	FY 2019 THRU 2/28/2019	Percent Year-to- Date
Water System							
Revenues							
Wholesale Customer Charges	\$ 310,020	\$ 221,987	71.6%	\$ 307,383	\$ 307,383	\$ 211,184	68.7%
Retail Services Agreement	15,131	10,087	66.7%	20,181	20,181	13,551	67.1%
Investment Earnings	2,969	2,502	84.3%	3,802	9,425	6,326	67.1%
Other Revenues	-	15	0.0%	34	-	25	0.0%
Total Revenues	\$ 328,119	\$ 234,590	71.5%	\$ 331,401	\$ 336,989	\$ 231,086	68.6%
Revenue Requirements							
Operations & Maintenance Expense	\$ 121,563	\$ 69,183	56.9%	\$ 121,563	\$ 121,563	\$ 78,250	64.4%
O&M Legacy Pension	6,048	4,032	66.7%	6,048	6,048	4,032	66.7%
Debt Service	135,464	88,900	65.6%	134,215	131,242	87,106	66.4%
Accelerated Legacy Pension	6,268	4,179	66.7%	6,268	6,268	4,179	66.7%
Extraordinary Repair & Replacement							
Deposit	646	430	66.7%	-	-	-	0.0%
Lease Payment	22,500	15,000	66.7%	22,500	22,500	15,000	66.7%
Operating Reserve Deposit	1,098	732	66.7%	-	-	-	0.0%
Water Residential Assistance Program	1,711	1,141	66.7%	1,673	1,673	1,116	66.7%
Improvement & Extension Fund							
Transfer Pending	32,821	21,881	66.7%	39,134	47,695	31,797	66.7%
Total Revenue Requirements	\$ 328,119	\$ 205,478	62.6%	\$ 331,401	\$ 336,989	\$ 221,480	65.7%
Net Difference		\$ 29,112				\$ 9,606	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 15,844				\$ 6,426	
Revenue Requirement Variance		13,268				3,180	
Overall Variance		\$ 29,112				\$ 9,606	

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

	FY 2018 BOARD ADOPTED BUDGET	FY 2018 THRU 2/28/2018	Percent Year-to- Date	FY 2019 BOARD ADOPTED BUDGET	FY 2019 AMENDED BUDGET	FY 2019 THRU 2/28/2019	Percent Year-to- Date
Sewer System							
Revenues							
Wholesale Customer Charges	\$ 267,034	\$ 180,954	67.8%	\$ 271,296	\$ 271,296	\$ 183,302	67.6%
Retail Services Agreement	178,969	119,313	66.7%	181,159	181,159	122,005	67.3%
Industrial Waste Control Charges	14,458	9,562	66.1%	15,006	15,001	6,106	40.7%
Pollutant Surcharges	5,099	4,043	79.3%	-	-	3,756	0.0%
Investment Earnings	2,751	2,582	93.8%	4,086	6,879	6,555	95.3%
Other Revenues	-	3,694	0.0%	480	-	334	0.0%
Total Revenues	\$ 468,311	\$ 320,149	68.4%	\$ 472,027	\$ 474,335	\$ 322,059	67.9%
Revenue Requirements							
Operations & Maintenance Expense	\$ 191,079	\$ 98,219	51.4%	\$ 191,079	\$ 191,079	\$ 114,497	59.9%
O&M Legacy Pension	10,824	7,216	66.7%	10,824	10,824	7,216	66.7%
Debt Service	207,616	134,654	64.9%	214,601	208,389	137,595	66.0%
Accelerated Legacy Pension	11,621	7,747	66.7%	11,621	11,621	7,747	66.7%
Extraordinary Repair & Replacement							
Deposit	814	542	66.7%	-	-	-	0.0%
Lease Payment	27,500	18,333	66.7%	27,500	27,500	18,333	66.7%
Operating Reserve Deposit	1,733	1,155	66.7%	-	-	-	0.0%
Water Residential Assistance Program	2,392	1,595	66.7%	2,374	2,374	1,583	66.7%
DWSD Budget Shortfall Pending	-	21,256	0.0%	-	-	8,595	0.0%
Improvement & Extension Fund							
Transfer Pending	14,733	9,822	66.7%	14,028	22,548	15,032	66.7%
Total Revenue Requirements	\$ 468,311	\$ 300,540	64.2%	\$ 472,027	\$ 474,335	\$ 310,598	65.5%
Net Difference		\$ 19,608				\$ 11,461	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 7,941				\$ 5,835	
Revenue Requirement Variance		11,667				5,626	
Overall Variance		\$ 19,608				\$ 11,461	

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of February 28, 2019, is 66.7% (eight months). When comparing FY 2019 to FY 2018 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, it appears spending has increased. This is true in some instances; however, the greater impact is that the Financial Reporting & Accounting Team has implemented a full accrual basis for interim financial statements during the latter half of FY 2018. This variance anomaly will decrease as we proceed through FY 2019.

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 2018 AMENDED BUDGET	FY 2018 ACTIVITY THRU 2/28/2018	Percent Year-to- Date	FY 2019 BOARD ADOPTED BUDGET	FY 2019 AMENDED BUDGET	FY 2019 ACTIVITY THRU 2/28/2019	Percent Year-to- Date
Water	\$ 73,511	\$ 37,364	50.8%	\$ 66,596	\$ 66,596	\$ 48,777	73.2%
Sewer	124,106	65,025	52.4%	118,319	118,319	73,812	62.4%
Centralized	82,629	50,707	61.4%	99,045	99,045	55,706	56.2%
Administrative	32,305	16,576	51.3%	28,682	28,682	16,678	58.1%
Employee Benefits	-	(2,269)	0.0%	-	-	(2,226)	0.0%
Total O&M Budget	\$ 312,551	\$ 167,403	53.6%	\$ 312,642	\$ 312,642	\$ 192,747	61.7%

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 61.7% which is reasonably within the pro-rata benchmark of 66.7%. This positive variance equates to a dollar amount of \$15.7 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is slightly lower than the benchmark; coming in at 65.1% through February 2019.

Utilities: The overall category is on target at 66.5% through February 2019. In comparing FY 2019 to FY 2018 the expenses appear more in line with the budget in FY 2019. This is due in large part to the month-end closing process improvements implemented during the latter half of FY 2018.

Chemicals: This category is lower than the benchmark; coming in at 58.9% through February 2019. This variance is not unexpected as usage varies throughout the year. Staff is working on enhancements to future monthly financial and operational reports to correlate spending with operational metrics.

Supplies & Other: This category is lower than the benchmark; coming in at 56.1% through February 2019. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time.

Contractual Services: The overall category is on target at 66.7% through February 2019.

Capital Program Allocation: This category is higher than the benchmark; coming in at 75.0% through February 2019. In July 2018, GLWA launched a time keeping software (including an app), BigTime, to make it easier for team members to report their time spent on direct capital delivery.

Shared Services: This category is slightly lower than the benchmark; coming in at 65.0% through February 2019. The shared services reimbursement is comprised of both labor (tracked via BigTime) and expenses, such as annual fees for software licensing. Staff from both GLWA and DWSD have been working together to evaluate and refine the budget for the shared services agreements. In December 2018, adjustments were made to both the billings and accounting accruals to bring them in line with the amended shared services budget.

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

Expense Categories	FY 2018 AMENDED	FY 2018 ACTIVITY THRU	Percent Year-to- Date at	FY 2018 ACTIVITY THRU	Percent Year-to- Date at	FY 2019 AMENDED	FY 2019 PRORATED BUDGET	FY 2019 ACTIVITY THRU	Percent Year-to- Date	FY 2019 PRORATED BUDGET LESS FY 2019 ACTIVITY
Entity-wide	BUDGET	2/28/2018	2/28/2018	6/30/2018	6/30/2018	BUDGET	(8 MONTHS)	2/28/2019		
Salaries & Wages	\$ 57,114	\$ 35,286	61.8%	\$ 55,174	64.0%	\$ 63,101	\$ 42,067	\$ 39,582	62.7%	\$ 2,485
Workforce Development	662	378	57.1%	605	62.4%	723	482	494	68.4%	(12)
Overtime	6,517	4,334	66.5%	6,162	70.3%	7,197	4,798	5,055	70.2%	(258)
Employee Benefits	20,999	15,125	72.0%	20,432	74.0%	22,282	14,854	16,507	74.1%	(1,653)
Transition Services	13,865	5,590	40.3%	13,153	42.5%	6,442	4,295	5,509	85.5%	(1,215)
Personnel Transition										
Adjustment	(1,557)	-	0.0%	-	0.0%	-	-	-	0.0%	-
Employee Benefits Fund	-	(2,269)	0.0%	-	0.0%	-	-	(2,226)	0.0%	2,226
Personnel Costs	97,599	58,443	59.9%	95,526	61.2%	99,745	66,496	64,922	65.1%	1,574
Electric	42,324	21,401	50.6%	40,874	52.4%	39,801	26,534	27,618	69.4%	(1,084)
Gas	7,030	2,622	37.3%	6,612	39.7%	6,620	4,413	4,734	71.5%	(321)
Sewage Service	2,031	1,018	50.1%	1,716	59.3%	2,588	1,725	1,463	56.5%	263
Water Service	4,588	2,878	62.7%	4,493	64.0%	5,717	3,811	2,597	45.4%	1,214
Utilities	55,972	27,918	49.9%	53,694	52.0%	54,725	36,483	36,411	66.5%	72
Chemicals	13,341	8,682	65.1%	12,878	67.4%	14,695	9,796	8,657	58.9%	1,139
Supplies & Other	46,971	18,033	38.4%	34,950	51.6%	34,287	22,858	19,225	56.1%	3,633
Contractual Services	108,480	60,190	55.5%	99,877	60.3%	107,491	71,661	71,662	66.7%	(2)
Capital Program Allocation	(2,013)	(872)	43.3%	(1,683)	51.8%	(2,806)	(1,871)	(2,105)	75.0%	235
Shared Services	(10,110)	(4,991)	49.4%	(9,908)	50.4%	(9,272)	(6,181)	(6,025)	65.0%	(156)
Unallocated Reserve	2,311	-	0.0%	-	0.0%	13,777	9,185	-	0.0%	9,185
Total Expenses	\$ 312,551	\$ 167,403	53.6%	\$ 285,333	58.7%	\$ 312,642	\$ 208,428	\$ 192,747	61.7%	\$ 15,680

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*.

Statement of Net Position – All Funds Combined

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

Table 1 – Statement of Net Position - All Funds Combined
As of February 28, 2019
(\$000)

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2018
Assets				
Cash (a)	\$ 178,641	\$ 190,222	\$ 368,862	\$ 671,753
Investments (a)	385,028	310,895	695,924	343,235
Accounts Receivable	114,998	92,872	207,870	191,359
Due from Other Funds (b)	2,471	-	2,471	32,255
Other Assets (c)	607,883	465,421	1,073,304	985,888
Cash Held FBO DWSD Advance (d)	-	27,062	27,062	18,468
Capital Assets, net of depreciation	1,699,542	2,497,755	4,197,297	4,402,212
Construction Work in Process	183,390	198,936	382,326	288,052
Total Assets	3,171,954	3,783,162	6,955,116	6,933,222
Deferred Inflow (e)	88,884	171,639	260,522	332,992
Liabilities				
Liabilities – Short-Term (f)	143,684	154,737	298,421	270,446
Due to Other Funds (b)	-	2,471	2,471	32,255
Other Liabilities (g)	2,794	6,237	9,030	8,638
Cash Held FBO DWSD (d)	9,985	-	9,985	8,902
Liabilities – Long-Term (h)	3,101,322	3,847,616	6,948,938	6,998,296
Total Liabilities	3,257,785	4,011,061	7,268,845	7,318,537
Deferred Outflow (e)	66,170	57,112	123,282	126,432
Net Position (Deficit) (i)	\$ (63,117)	\$ (113,372)	\$ (176,489)	\$ (178,755)

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 February 28, 2019 are lower when compared to June 30, 2018 (highlighted in gold on Table 1). This is because of the high liquidity needs at June 30, 2018 to meet annual debt and interest payments, legacy pension obligation payments, and annual operational requirements whereas more funds are being invested as of February 28, 2019.

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

Footnotes to Statement of Net Position

- a. *Cash and Investments* include restricted amounts and are reported at book value. Investments at June 30, 2018 are reported at market value.
- 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. *Deferred Inflow* and *Deferred Outflow* relate to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- f. *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.
- g. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- h. *Liabilities - Long-term* include bonds payable, lease payable, and legacy General Retirement System pension liabilities.
- i. *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 February 2019 Financial Report Binder. Prior year ending balances are provided in the June 30, 2018 column as a reference for comparative purposes. Explanatory notes follow this statement.

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Eight Months ended February 28, 2019
(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- type	Comparative June 30, 2018
Revenue						
Wholesale customer charges	\$ 216,056	94.1%	\$ 183,302	58.1%	\$ 399,359	\$ 592,096
Local system charges	13,551	5.9%	122,005	38.7%	135,556	194,100
Industrial waste charges	-	0.0%	6,106	1.9%	6,106	14,335
Other revenue	25	0.0%	334	0.1%	359	4,455
Pollutant surcharges	-	0.0%	3,756	1.2%	3,756	6,908
Bad Debt Recovery	-	0.0%	-	0.0%	-	-
Total Revenues	\$ 229,632	100.0%	\$ 315,504	100.0%	\$ 545,136	\$ 811,895
Operating Expenses						
Operations and Maintenance Expenses	78,250	34.1%	114,497	36.3%	192,747	284,910
Depreciation	95,618	41.6%	115,984	36.8%	211,602	331,242
Total Operating Expenses	173,868	75.7%	230,481	73.1%	404,349	616,152
Operating Income	55,764	24.3%	85,022	26.9%	140,787	195,743
Total Nonoperating (Revenue)/Expense						
	58,446	25.5%	80,075	25.4%	138,521	271,662
Increase/(decrease) in Net Position	(2,682)	-1.2%	4,947	1.6%	2,266	(75,920)
Net Position Deficit, beginning of year	(60,435)		(118,319)		(178,755)	(102,835)
Net Position Deficit, end of year	\$ (63,117)		\$ (113,372)		\$ (176,489)	\$ (178,755)
<i>Totals may be off due to rounding</i>						

Water Fund

- ✓ The decrease in Water Fund Net Position is \$2.6 million.
- ✓ Wholesale water customer charges of \$216.0 million account for 94.1% of Water System revenues.
- ✓ Operating expenses of \$173.8 million represent 75.7% of total operating revenue. Depreciation is the largest operating expense at \$95.6 million or 55.0% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$55.7 million or 24.3% of operating revenue. This represents an increase of \$7.9 million over January year-to-date.
- ✓ The largest category within nonoperating activities is interest expense of \$75.8 million (this equates to the bonded debt interest less the offset from DWSD contractual obligation income).

Sewage Disposal Fund

- ✓ The increase in Sewer Net Position was \$4.9 million.
- ✓ Wholesale customer charges of \$183.3 million account for 58.1% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$122.0 million account for 38.7% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$230.4 million represent 73.1% of total operating revenue. Depreciation is the largest operating expense at \$115.9 million or 50.3% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$85.0 million or 26.9% of operating revenue. This represents an increase of \$11.9 million over January year-to-date.
- ✓ The largest category within nonoperating activities is interest expense of \$95.3 million (this equates to the bonded debt interest less the offset from DWSD contractual obligation income).

Supplemental Schedule of Operations & Maintenance Expenses – All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown below in Table 3. This accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the February 2019 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
– All Funds Combined
For the Eight Months ended February 28, 2019
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- type Activities	Percent of Total
Expenditure						
Personnel						
Salaries & Wages	16,098	20.6%	29,487	25.8%	45,585	23.7%
Overtime	2,789	3.6%	2,267	2.0%	5,056	2.6%
Benefits	7,959	10.2%	6,322	5.5%	14,281	7.4%
Total Personnel	\$ 26,846	34.3%	\$ 38,076	33.3%	\$ 64,922	33.7%
Utilities						
Electric	18,012	23.0%	9,606	8.4%	27,618	14.3%
Gas	784	1.0%	3,950	3.4%	4,734	2.5%
Sewage	516	0.7%	947	0.8%	1,463	0.8%
Water	1	0.0%	2,596	2.3%	2,597	1.3%
Total Utilities	\$ 19,314	24.7%	\$ 17,098	14.9%	\$ 36,411	18.9%
Chemicals	3,308	4.2%	5,350	4.7%	8,657	4.5%
Supplies and other	6,342	8.1%	12,882	11.3%	19,225	10.0%
Contractual services	29,466	37.7%	42,197	36.9%	71,662	37.2%
Capital program allocation	(1,287)	-1.6%	(818)	-0.7%	(2,105)	-1.1%
Shared services allocation	(5,738)	-7.3%	(287)	-0.3%	(6,025)	-3.1%
Operations and Maintenance Expenses	\$ 78,250	100.0%	\$ 114,497	100.0%	\$ 192,747	100.0%

Totals may be off due to rounding

- ✓ Core expenses for water and sewage disposal systems are utilities (18.9% of total O&M expenses) and chemicals (4.5%).
- ✓ Personnel costs (33.7% of total O&M expenses) include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (37.2%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$9.3 million);
 - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$10.7 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 Eight Months ended February 28, 2019
(\$000)

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2018
Nonoperating (Revenue)/Expense				
Interest income contractual obligation	\$ (15,246)	\$ (10,923)	\$ (26,169)	\$ (38,857)
Interest income DWSD shortfall		(811)	(811)	-
Investment earnings	(8,491)	(7,271)	(15,762)	(11,396)
Other nonoperating revenue (expense)	(342)	5,986	5,645	(430)
Interest expense				
Bonded debt	76,262	91,349	167,611	255,868
Lease obligation	11,802	14,424	26,226	39,702
Other obligations	3,049	492	3,541	4,825
Total interest expense	91,112	106,265	197,377	300,395
Other capital / non-capital expense	420	922	1,342	1,684
Amortization, issuance costs, debt	(6,036)	(3,858)	(9,894)	(8,684)
Amortization, raw water rights	2,378	-	2,378	2,081
(Gain) loss on disposal of capital assets	280	5	284	(2,463)
Loss on impairment of capital assets	-	-	-	654
Water Residential Assistance Program	385	524	909	3,756
Legacy pension expense (income)	(6,014)	(10,764)	(16,778)	24,922
Total Nonoperating (Revenue)/Expense	\$ 58,446	\$ 80,075	\$ 138,521	\$ 271,662

Totals may be off due to rounding

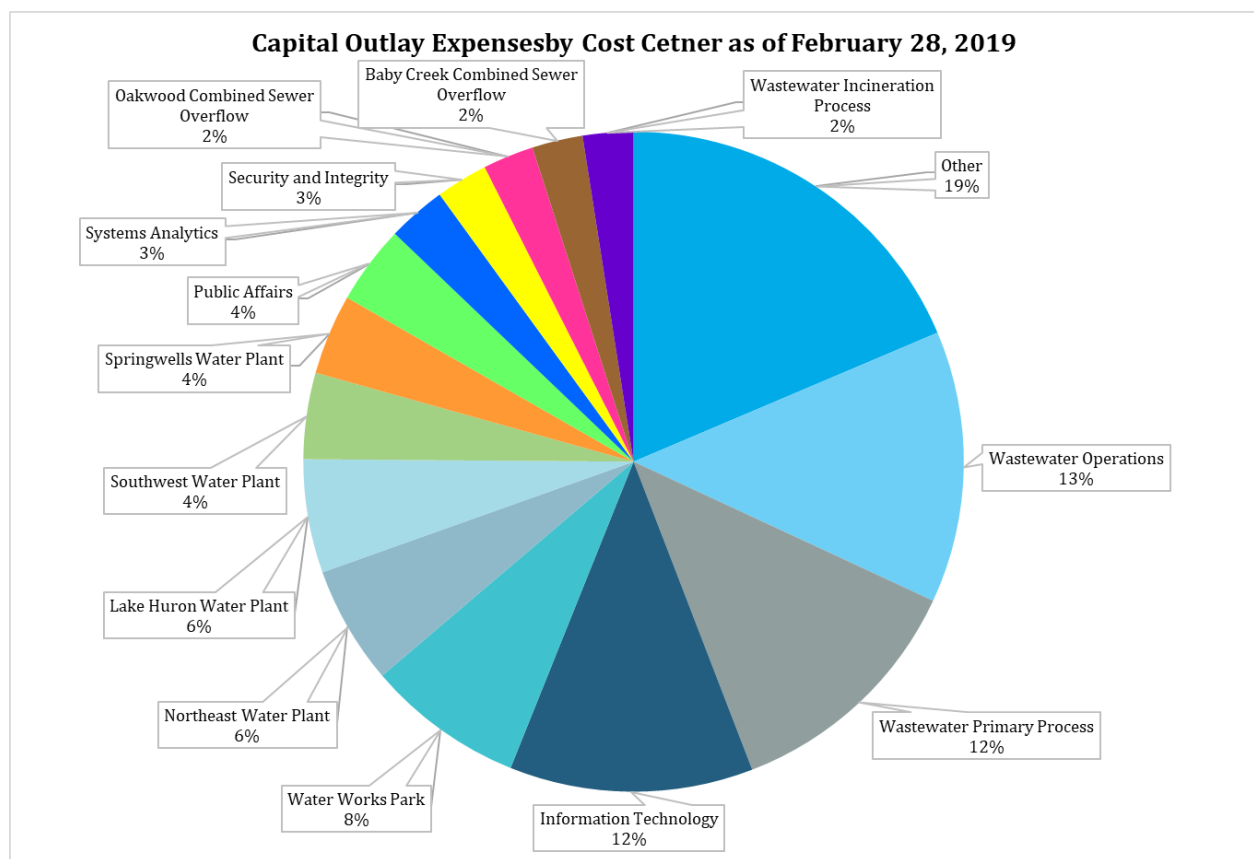
- ✓ Interest income on contractual obligation relates to the portion of the total GLWA debt obligation attributable to DWSD. This interest income offsets the total debt interest expense paid by GLWA on behalf of both entities monthly.
- ✓ Interest income DWSD shortfall represents interest from a budgetary shortfall loan from fiscal years 2016 and 2017 and is in accordance to the April 2018 MOU. The repayment of the shortfall will last for three years.

- ✓ Investment earnings in this report are reflected on a cost basis and may therefore not agree with the Cash and Investment Income section of this Financial Report Binder and the Quarterly Debt Report which present balances at market value.
- ✓ 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 for FY 2019 is currently reflected as income due to changes in actuarial assumptions and rates from the June 30, 2018 City of Detroit General Retirement System Component II audited financial statement.
- ✓ Sewer Other Non-operating expense includes the 2018 Memorandum of Understanding (MOU) Item 8 a 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 February 28, 2019, the capital outlay spend is \$10.4 million which includes the following:

Water Operations: NXGII control upgrade (\$167k) and filter upgrade at Water Works Park (\$124k)

Wastewater Operations: chiller replacement at Water Resource Recovery Facility (WRRF) (\$756k); grit crane (\$563k); WRRF engineering offices design (\$239k); pump pull-out assembly (\$197k); booster pump and expansion tank for Scum building (\$196k) and screw conveyor (\$114k)

Information Technology: software (\$727k) and low voltage wiring (\$305k)

Security: security infrastructure (\$264k)

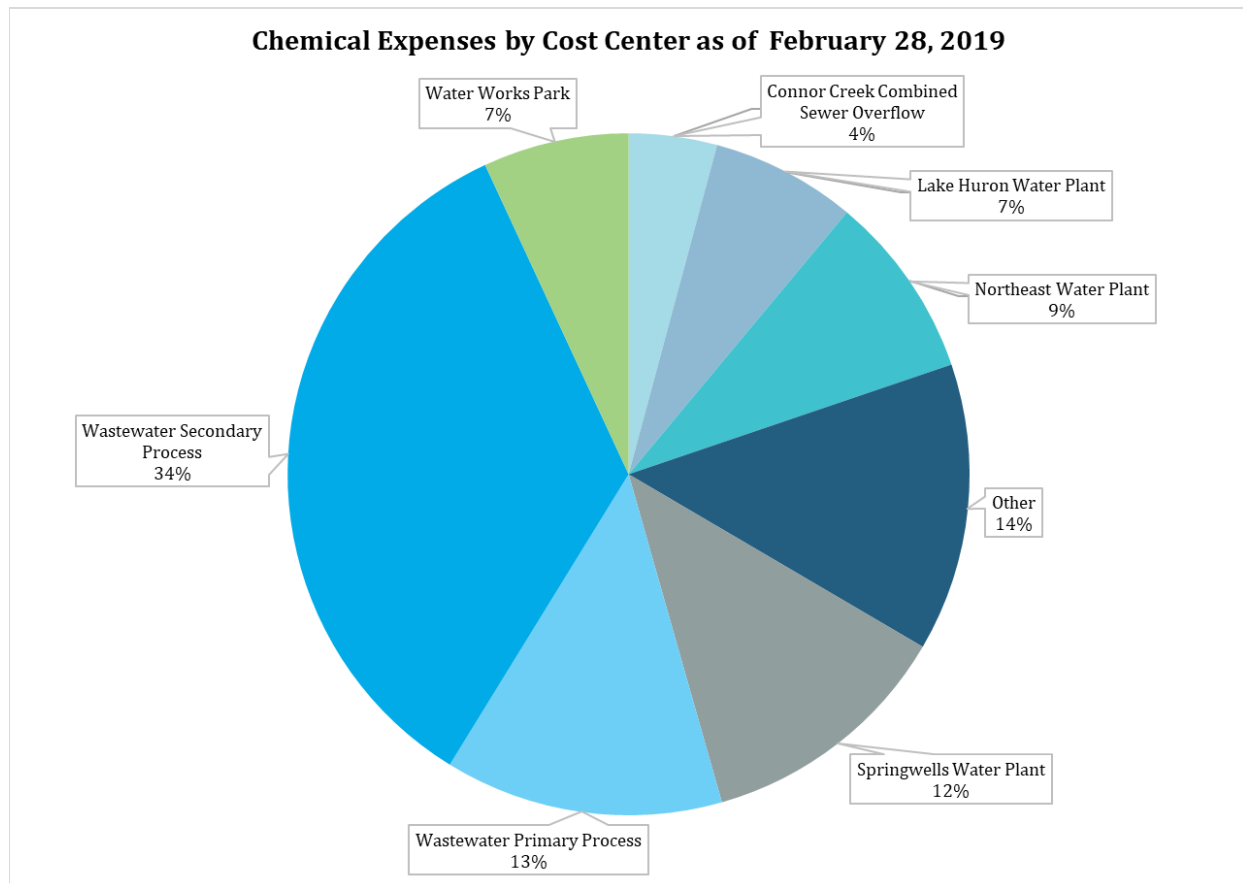
System Analytics: flow meters (\$442k)

CSO Facilities: chemical feed pump (\$178k); submersible sewage pump (\$144k) and chemical induction unit (\$124k)

Centralized & Administrative Facilities: underground storage tanks, dispenser and management system (\$2.7M); Public Affairs & 13th floor renovation, furniture, and equipment (\$402k); variable feed drives (\$113k) and gas scrubber (\$95k)

Chart 2 – Chemical Spend – Water and Sewer System Combined

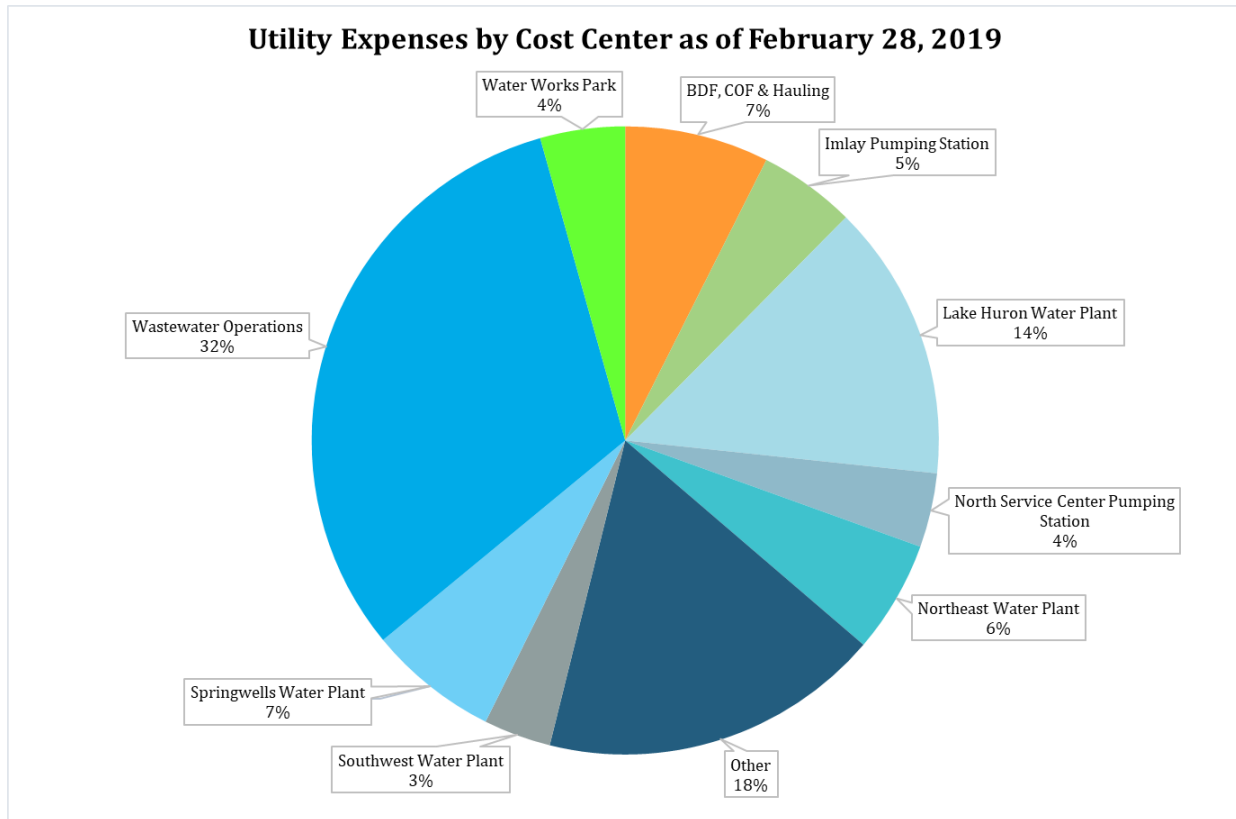
Chemical spend is \$8.6 million through February 28, 2019. The allocation is shown in the chart below.



Note: "Other" includes Combined Sewer Overflow (CSO), portions of the Wastewater process and two departments from Water.

Chart 3 – Utility Spend – Water and Sewer System Combined

Utility spend is \$36.4 million through February 28, 2019. The allocation is shown in the chart below.

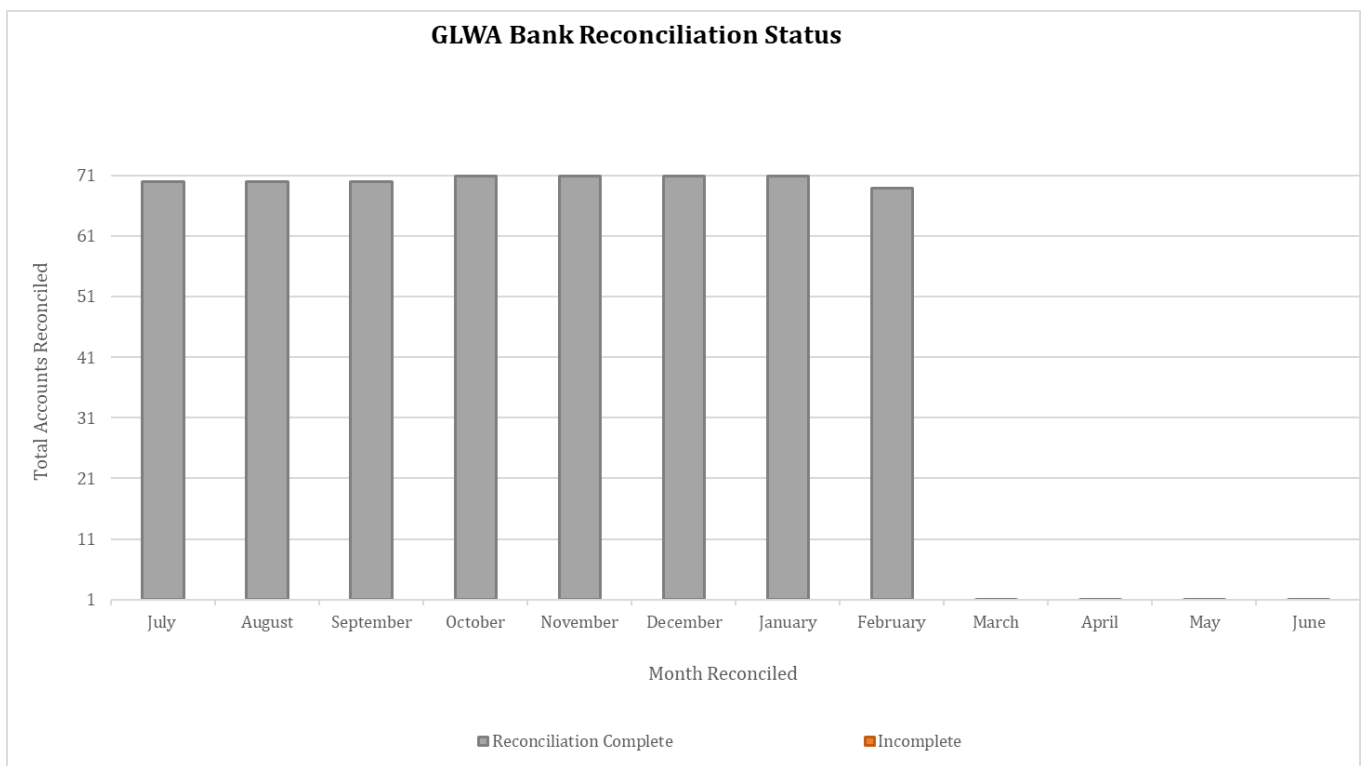


Financial Operations KPI

This key performance indicator shown in Chart 1 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.

It should be noted that two cost of issuance accounts closed during the month of January 2019 which resulted in a decrease in the number of accounts reconciled in the month of February 2019.

Chart 1 – Bank Reconciliation Completion Status



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 budget. 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)
 Crosswalk Revenue Requirement Budget Basis to Financial Reporting Basis
 For the Eight Months Ended February 28, 2019
 (\$000)

	Water	Sewer	Total
Net Revenue Requirement Budget Variance (a)	\$ 9,606	\$ 17,191	\$ 26,797
Budgetary categories adjustments to financial reporting basis			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	7,627	13,650	21,277
Prior year pension contribution accounted for in current year (d)	6,014	10,764	16,778
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	26,090	57,169	83,259
Accelerated pension B&C notes obligation portion (g)	365	821	1,186
Lease payment (h)	3,198	3,909	7,107
WRAP (i)	731	1,059	1,790
DWSD short term allocation (j)	-	8,595	8,595
Improvement & Extension Fund (j)	31,797	9,302	41,099
Nonbudgeted financial reporting categories adjustments			
Depreciation (k)	(95,618)	(115,984)	(211,602)
Amortization (k)	3,658	3,858	7,516
Other nonoperating income (k)	343	(5,987)	(5,644)
Other nonoperating expense (k)	(420)	(922)	(1,342)
Gain(loss) on disposal of capital assets (k)	(280)	(5)	(285)
Raw water rights (l)	2,042	-	2,042
Investment earnings construction fund (m)	2,165	1,527	3,692
Net Position Increase/(Decrease) per Financial Statements (b)	<u>\$ (2,682)</u>	<u>\$ 4,947</u>	<u>\$ 2,265</u>

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 (d) above. This adjustment relates to the B&C note obligation payments. The principal and interest cash basis payments are treated as an expense for budget purposes. The principal portion is not an expense for financial reporting purposes. For financial reporting purposes interest is expensed on an accrual basis which is different from the cash basis.
- (h) The lease payment is included as an expense for budget and includes both principal and interest payments. Most of the adjustment relates to the principal payments which are not an expense for financial reporting purposes. A portion of the adjustment relates to interest expense which is recorded on an accrual basis for financial reporting which is different from the cash basis.
- (i) WRAP is shown as an expense for budget purposes. For financial reporting purposes the expense is not recognized until the funds have been transferred to the WRAP administrator. The adjustment shown is the amount of current year transfers that have not been transferred to the WRAP administrator. Note that there are funds from the prior year that have not been transferred to the WRAP administrator.
- (j) The DWSD short term allocation and Improvement & Extension Fund transfers are shown as an expense for budget purposes but not for financial reporting purposes.
- (k) Certain nonoperating income and expenses are reported in financial statements only.
- (l) The water service contract with Flint includes a license for raw water rights which has been recorded as an asset and liability by the Authority. The contract provides 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.

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 biennial budget that establishes allowable amounts for construction spending during that period to support a five-year capital improvement plan (CIP). The CIP is a five-year, rolling plan which is updated annually, reviewed, and formally adopted by the GLWA Board of Directors.

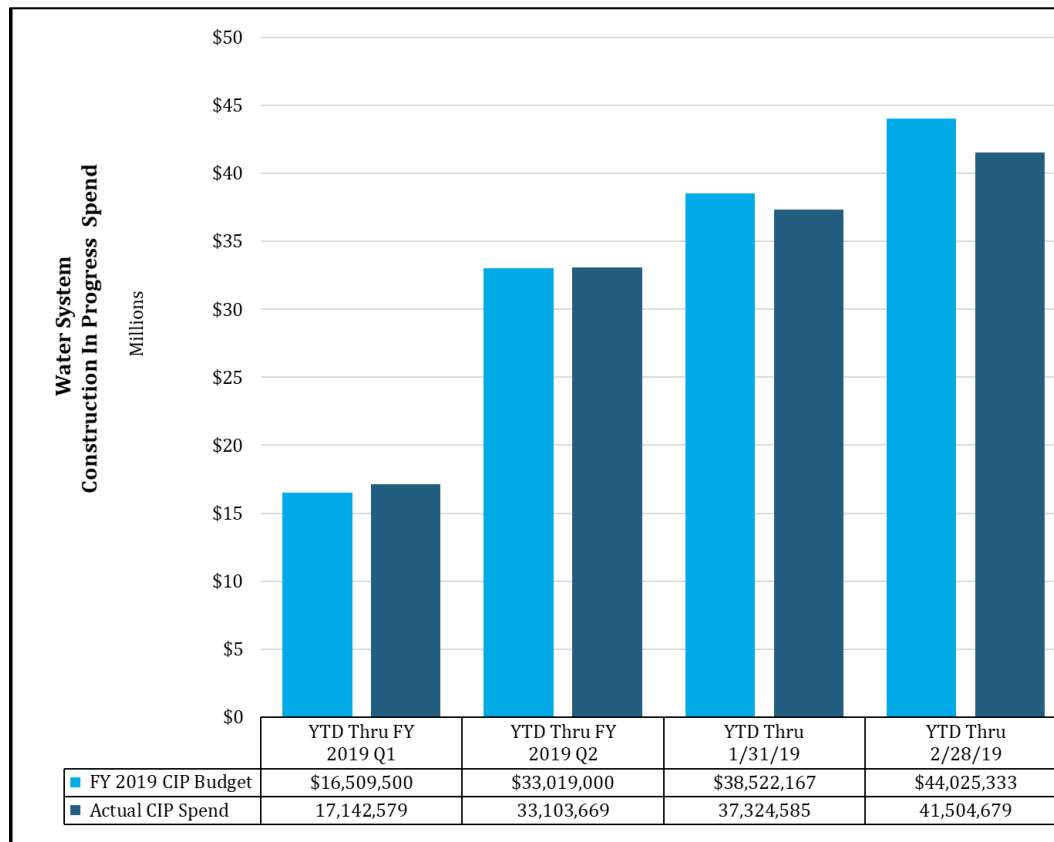
This report presents quarterly and monthly CWIP spending trends against a prorated budget amount. The prorated budget amount is calculated by dividing the total fiscal year 2019 board-approved CIP plan by twelve equal months. It should be noted that these interim reports are prepared on a modified cash basis. Known expenses, where material in nature, have been accrued.

Chart 1 – Water System Construction in Work in Progress Spend

As of February 2019, the Water system incurred nearly \$42 million of construction costs to date. This is 94% of the total fiscal year 2019 prorated, budgeted spend and continues a trend of on-target spend.

Chart 2 – Sewer System Construction in Work in Progress Spend

As of February 2019, the Sewer system incurred nearly \$53 million of construction costs to date. This is 75% of the total fiscal year 2019 prorated, budgeted spend and a slight decrease over the prior period.

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 April 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 2019 Water MBO Transfers reflects the required transfers for FY 2019 completed through February 1, 2019. The December O&M transfer amount is less than the other months due to correction to bring fiscal year to date transfers to the approved FY 2019 year to date budget. For FY 2019, through February 1, 2019, MBO transfers for Water totaling \$93.6 million have been transferred to accounts held by GLWA.

Table 2 – GLWA FY 2019 Sewer MBO Transfers reflects the required transfers for FY 2019 completed through February 1, 2019. The December O&M transfer amount is less than the other months due to correction to bring fiscal year to date transfers to the approved FY 2019 year to date budget. For FY 2019, through February 1, 2019, MBO transfers for Water totaling \$146.3 million have been transferred to accounts held by GLWA.

Table 3 – GLWA MBO Transfer History reflects historical transfers for FY 2016, FY 2017, FY 2018 and FY 2019 to date.

Table 1 – GLWA FY 2019 Water MBO Transfers

	WATER						
	<u>Operations & Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair & Replacement (ER&R)</u>	<u>Total Water</u>
FY 2019							
July 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
August 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
September 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
October 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
November 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
December 2018	8,813,927	504,000	891,308	171,683	-	-	10,380,918
January 2019	10,130,217	504,000	891,308	171,683	-	-	11,697,208
February 2019	10,130,217	504,000	891,308	171,683	-	-	11,697,208
Total FY 2019	81,041,736	4,032,000	7,130,464	1,373,464	\$0	\$0	93,577,664

Table 2 – GLWA FY 2019 Sewer MBO Transfers

	SEWER						
	<u>Operations & Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair & Replacement (ER&R)</u>	<u>Total Water</u>
FY 2019							
July 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
August 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
September 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
October 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
November 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
December 2018	15,072,198	902,000	1,223,958	238,483	-	-	17,436,639
January 2019	15,923,283	902,000	1,223,958	238,483	-	-	18,287,724
February 2019	15,923,283	902,000	1,223,958	238,483	-	-	18,287,724
Total FY 2019	127,386,264	\$7,216,000	9,791,664	1,907,864	\$0	\$0	146,301,792

Table 3 – GLWA MBO Transfer History

	WATER						
	<u>Operations & Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair & Replacement (ER&R)</u>	<u>Total Water</u>
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 (8 months)	81,041,736	4,032,000	7,130,464	1,373,464	-	-	
Life to Date	\$385,535,940	\$22,154,300	\$38,420,560	\$7,593,364	\$2,686,900	\$606,000	\$363,419,400

	SEWER						
	<u>Operations & Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair & Replacement (ER&R)</u>	<u>Total Water</u>
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 (8 months)	127,386,264	7,216,000	9,791,664	1,907,864	-	-	402,144,776
Life to Date	\$595,190,060	\$39,716,800	\$52,531,760	\$9,846,468	\$8,246,100	\$779,600	\$962,153,772

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 2019 Water MBO Transfers reflects the required transfers for FY 2019 completed through February 1, 2019. For FY 2019, DWSD has requested \$3,972,200 of the lease payment be utilized to offset a portion of debt service. (Note: the original FY 2019 request was for \$3,949,200; the \$23,000 mid-year increase will be reflected in the May and June 2019 transfers.) For FY 2019, through February 1, 2019, MBO transfers for Water totaling \$38.9 million have been transferred to accounts held by DWSD.

Table 5 – DWSD FY 2019 Sewer MBO Transfers reflects the required transfers for FY 2019 completed through February 1, 2019. For FY 2019, DWSD has requested \$4,415,000 of the lease payment be utilized to offset a portion of debt service. (Note: the original FY 2019 request was for \$4,864,000; the \$449,000 mid-year decrease will be reflected in the May and June 2019 transfers.) For FY 2019, through February 1, 2019, MBO transfers for Water totaling \$62.4 million have been transferred to accounts held by DWSD.

Table 6 – DWSD MBO and Lease Payment Transfer History reflects historical transfers for FY 2016, FY 2017, FY 2018 and FY 2019 to date.

Table 4 – DWSD FY 2019 Water MBO Transfers

WATER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Water</u>
FY 2019				
July 2018	\$ 2,957,025	\$ 356,000	\$ 1,545,900	\$ 4,858,925
August 2018	2,957,025	356,000	1,545,900	4,858,925
September 2018	2,957,025	356,000	1,545,900	4,858,925
October 2018	2,957,025	356,000	1,545,900	4,858,925
November 2018	2,957,025	356,000	1,545,900	4,858,925
December 2018	2,957,025	356,000	1,545,900	4,858,925
January 2019	2,957,025	356,000	1,545,900	4,858,925
February 2019	2,957,025	356,000	1,545,900	4,858,925
Total FY 2019	\$ 23,656,200	\$ 2,848,000	\$ 12,367,200	\$ 38,871,400

Table 5 – DWSD FY 2019 Sewer MBO Transfers

SEWER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Sewer</u>
FY 2019				
July 2018	\$ 5,676,792	\$ 238,000	\$ 1,886,333	\$ 7,801,125
August 2018	5,676,792	238,000	1,886,333	7,801,125
September 2018	5,676,792	238,000	1,886,333	7,801,125
October 2018	5,676,792	238,000	1,886,333	7,801,125
November 2018	5,676,792	238,000	1,886,333	7,801,125
December 2018	5,676,792	238,000	1,886,333	7,801,125
January 2019	5,676,792	238,000	1,886,333	7,801,125
February 2019	5,676,792	238,000	1,886,333	7,801,125
Total FY 2019	\$ 45,414,336	\$ 1,904,000	\$ 15,090,664	\$ 62,409,000

Table 6 – DWSD MBO and Lease Payment Transfer History

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	\$ 73,121,400
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	70,794,500
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 (8 months)				
MBO/Lease Requirement	23,656,200	2,848,000	15,000,000	41,504,200
Offset to Debt Service	-	-	(2,632,800)	(2,632,800)
Net MBO Transfer	23,656,200	2,848,000	12,367,200	38,871,400
Life-to-Date				
MBO/Lease Requirement	118,497,904	15,645,100	82,500,000	236,816,104
Offset to Debt Service	-	-	(6,834,700)	(6,834,700)
Total Water	\$ 118,497,904	\$ 15,645,100	\$ 75,665,300	\$ 229,981,404
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 (8 months)				
MBO/Lease Requirement	45,414,336	1,904,000	18,333,333	65,651,669
Offset to Debt Service	-	-	(3,242,669)	(3,242,669)
Total MBO Transfer	45,414,336	1,904,000	15,090,664	62,409,000
Life-to-Date				
MBO/Lease Requirement	167,242,228	10,483,800	100,833,333	278,559,361
Offset to Debt Service	-	-	(32,400,833)	(32,400,833)
Total Sewer	\$ 167,242,228	\$ 10,483,800	\$ 68,432,500	\$ 246,158,528

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

This report includes the following:

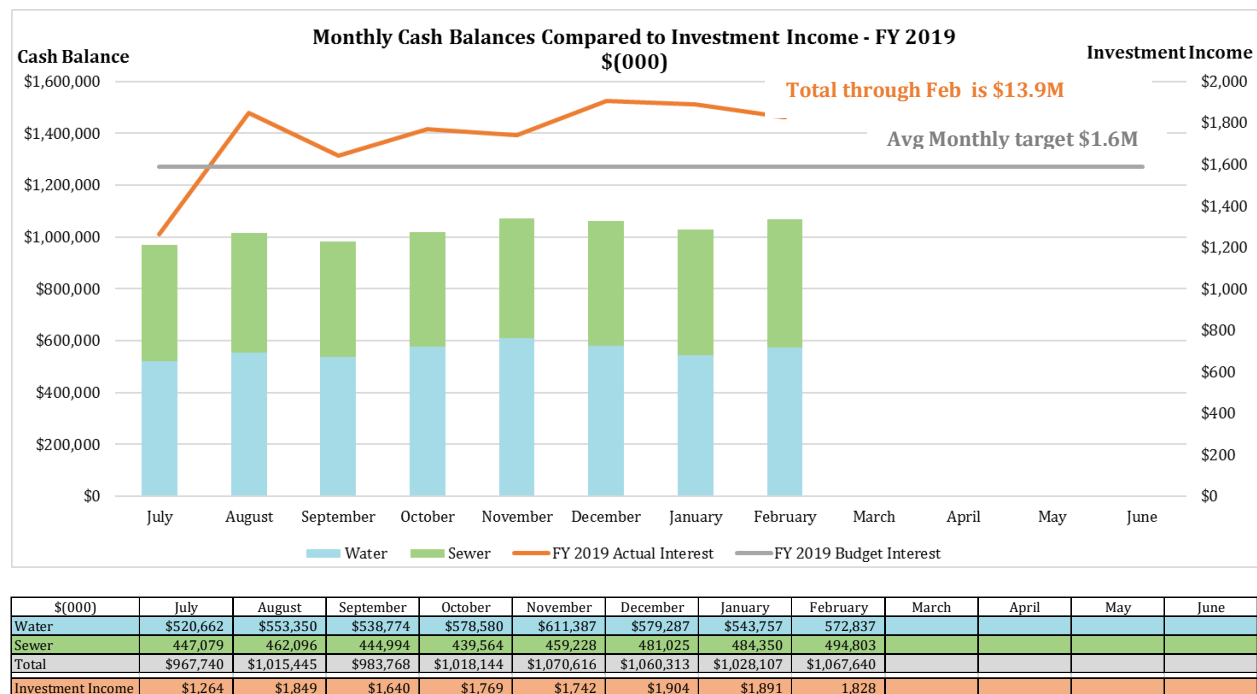
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

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

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The cumulative investment earnings through February 2019 of \$13.9 million is 73% of the FY 2019 budget. Based on these earnings to date, GLWA is on target to meet the projection of \$19.0 million for the fiscal year (Chart 1).¹

Chart 1 – Monthly Cash Balances Compared to Investment Income – Through February 2019.



¹ Note: At the May 17, 2019 Audit Committee meeting, GLWA's investment manager will report an updated investment earnings forecast of \$21.2 million. This updated information will be reflected in the March 2019 financial report.

All amounts are unaudited unless otherwise noted.

GLWA Audit Committee May 17, 2019

Cash Balance Detail

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

Funds Held Within Trust:

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

Funds Held Outside Trust:

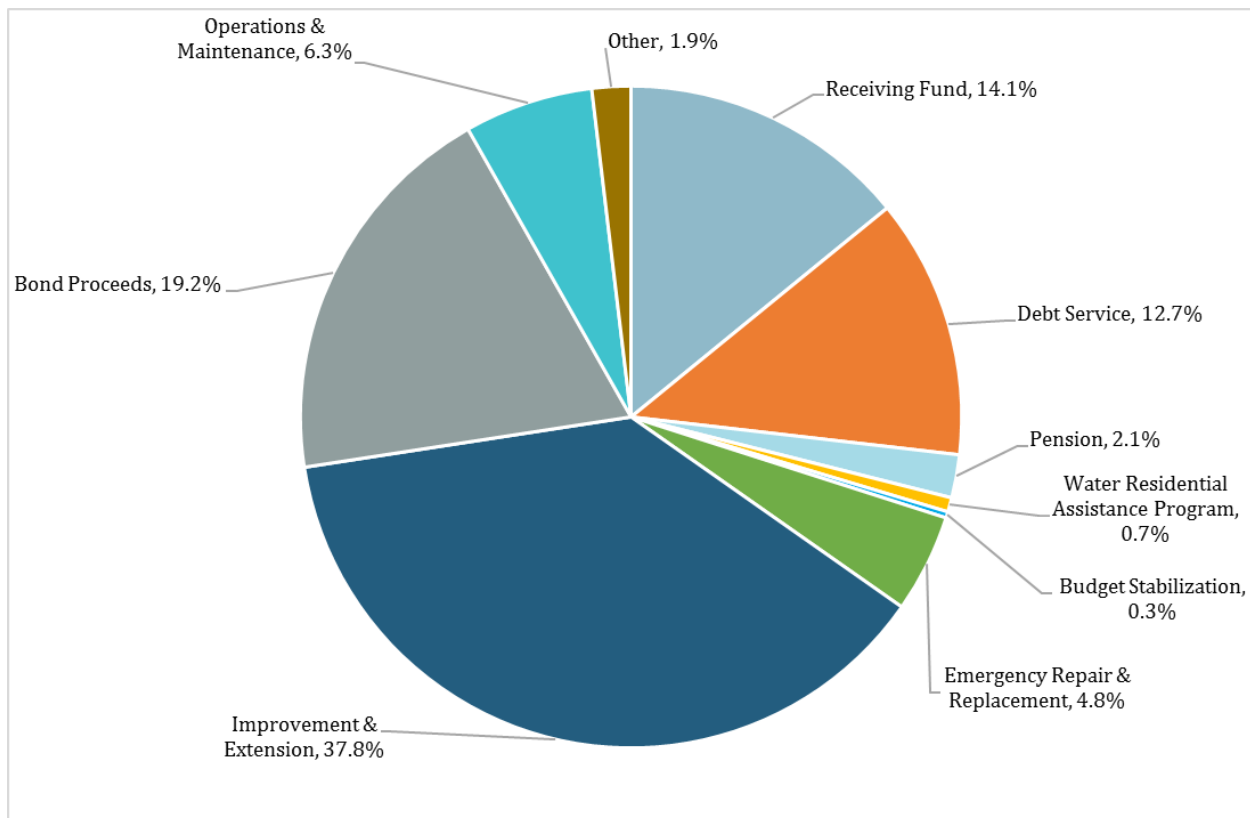
- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors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

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

Chart 2 – Cash Balances - Water Funds as of February 28, 2019

The chart below shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of February 28, 2019 is \$572.8 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 February 28, 2019

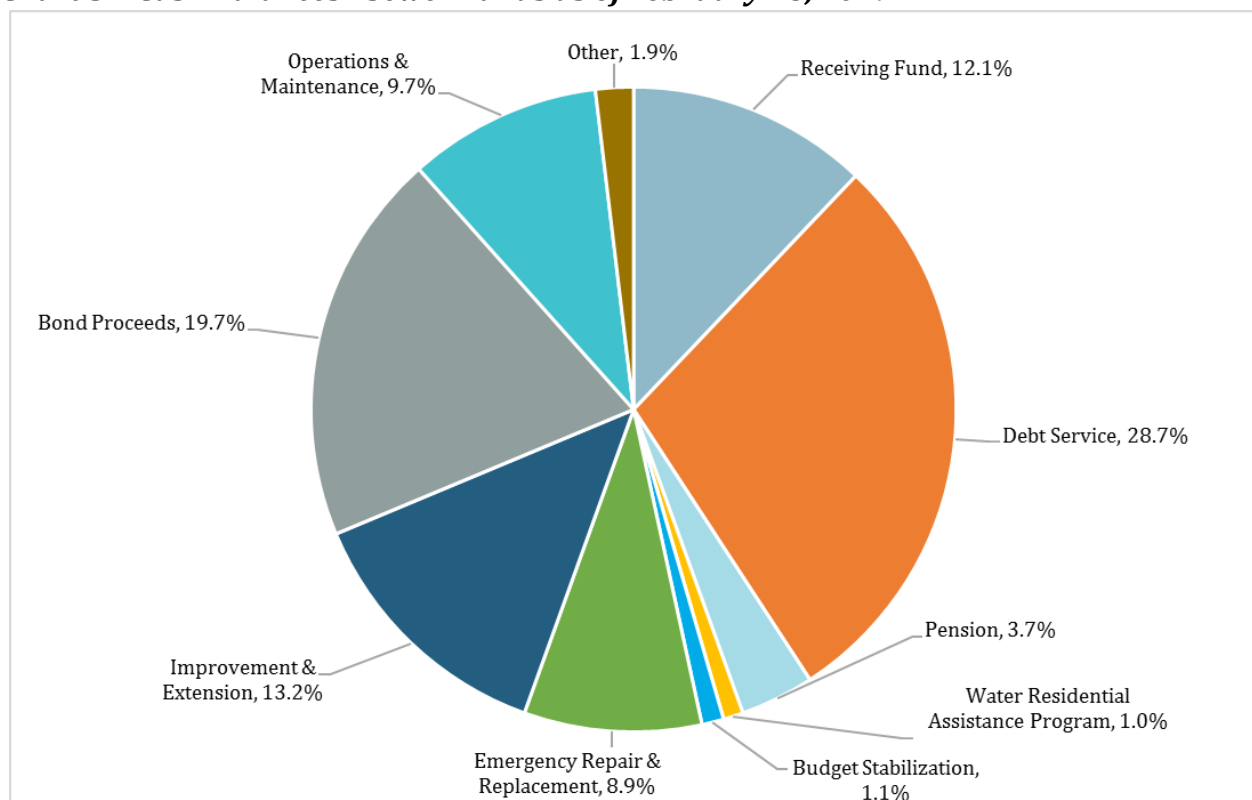


Note: Due to rounding totals may not equal 100%.

Chart 3 – Cash Balances - Sewer Funds as of February 28, 2019

The chart below shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of February 28, 2019 is \$494.8 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 February 28, 2019



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

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

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

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

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

DWSD Retail Water Billings and Collections

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

Table 1 - DWSD Retail Billings shows the FY 2019 water usage and billed revenue which are provided by DWSD staff. As of February 28, 2019, the DWSD usage was at 100.76% of the budget and billed revenue was at 103.75% 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.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.

Table 1 – DWSD Retail Water Billings

RETAIL WATER CUSTOMERS								
Month (1)	FY 2019 - Budget/Goal			FY 2019 - Actual			FY 2019 - Variance	
	Volume	Revenue	Unit	Volume	Revenue (2)	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	269,000	9,424,500	35.04	300,613	10,203,409	33.94	31,613	778,909
August	273,100	9,377,700	34.34	302,476	9,833,149	32.09	29,376	455,449
September	270,500	8,494,300	31.40	221,531	8,996,692	40.61	(48,969)	502,392
October	233,800	8,165,900	34.93	215,104	8,010,524	37.24	(18,696)	(155,376)
November	224,500	7,750,100	34.52	232,770	8,325,013	35.76	8,270	574,913
December	206,500	8,224,900	39.83	202,686	7,659,930	37.79	(3,814)	(564,970)
January	226,600	7,978,800	35.21	227,697	8,250,078	36.23	1,097	271,278
February	216,400	7,980,200	36.88	232,094	8,645,832	37.25	15,694	665,632
March	213,300	8,163,900	38.27					
April	223,100	7,856,900	35.22					
May	211,000	9,109,200	43.17					
June	240,200	9,063,600	37.73					
Total	2,808,000	101,590,000	36.18	1,934,971	69,924,627	36.14	14,571	2,528,227
Subtotals ytd	1,920,400	67,396,400	35.09	1,934,971	69,924,627	36.14	14,571	2,528,227
Achievement of Budget				100.76%	103.75%			

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 2 – DWSD Retail Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
March	8,280,635	8,218,506	62,129	0.76%
April	9,226,675	6,977,199	2,249,477	32.24%
May	8,969,019	8,568,632	400,387	4.67%
June	7,940,939	7,141,568	799,371	11.19%
July	7,375,402	8,357,505	(982,103)	-11.75%
August	8,692,784	9,509,488	(816,704)	-8.59%
September	9,766,449	8,949,906	816,543	9.12%
October	9,015,400	9,528,528	(513,128)	-5.39%
November	7,938,517	8,049,328	(110,811)	-1.38%
December	7,297,698	8,265,636	(967,938)	-11.71%
January	8,158,817	8,066,448	92,369	1.15%
February	7,927,299	6,432,245	1,495,054	23.24%
Rolling, 12-Month Total	100,589,634	98,064,988		
Rolling, 12-Month Average	8,382,470	8,172,082		

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 2019 sewer billed revenue which are provided by DWSD staff. As of February 28, 2019, the DWSD usage was at 104.51% of the budget and billed revenue was at 98.85% 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.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.

Table 3 - DWSD Retail Sewer Billings

RETAIL SEWER CUSTOMERS						
Month (1)	FY 2019 - Budget/Goal		FY 2019 - Actual		FY 2019 - Variance	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	242,100	27,423,400	273,862	27,711,606	31,762	288,206
August	244,200	27,232,200	262,525	27,263,163	18,325	30,963
September	239,600	25,367,500	221,660	25,413,790	(17,940)	46,290
October	211,000	25,177,200	205,267	24,092,209	(5,733)	(1,084,991)
November	197,600	23,861,000	205,806	24,176,849	8,206	315,849
December	182,400	25,293,500	193,791	23,787,394	11,391	(1,506,106)
January	198,600	24,852,800	201,171	24,269,509	2,571	(583,291)
February	191,600	25,329,400	220,021	25,460,582	28,421	131,182
March	191,000	25,474,500				
April	197,300	24,789,700				
May	187,300	26,205,200				
June	210,300	26,730,700				
Total	2,493,000	307,737,100	1,784,103	202,175,102	77,003	(2,361,898)
Subtotals ytd	1,707,100	204,537,000	1,784,103	202,175,102	77,003	(2,361,898)
Achievement of Budget/Goal			104.51%	98.85%		

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 4 – DWSD Retail Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
March	23,015,525	18,711,974	4,303,552	23.00%
April	16,159,844	17,219,106	(1,059,262)	-6.15%
May	18,341,298	20,046,357	(1,705,059)	-8.51%
June	27,591,834	18,005,548	9,586,286	53.24%
July	21,461,926	18,582,964	2,878,962	15.49%
August	21,746,714	24,263,141	(2,516,427)	-10.37%
September	23,727,505	21,320,358	2,407,147	11.29%
October	23,938,933	23,786,903	152,030	0.64%
November	20,624,039	19,485,270	1,138,769	5.84%
December	19,612,154	19,522,952	89,203	0.46%
January	21,140,835	18,308,458	2,832,377	15.47%
February	20,758,852	17,495,563	3,263,289	18.65%
Rolling 12-Month Total	258,119,460	236,748,593		
Rolling, 12-Month Average	21,509,955	19,729,049		

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 February 28, 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	Accounts Receivable Balance
Residential	286,672	\$ 330.85	\$ 13,308,964 14.0%	\$ 6,617,410 7.0%	\$ 19,051,794 20.1%	\$ 55,867,836 58.9%	\$ 94,846,004 100.0%
Commercial	28,289	1,210.29	7,549,808 22.1%	2,841,303 8.3%	7,152,263 20.9%	16,694,497 48.8%	34,237,871 100.0%
Industrial	4,781	3,118.41	4,146,004 27.8%	1,329,130 8.9%	2,951,958 19.8%	6,482,007 43.5%	14,909,100 100.0%
Tax Exempt Entities	6,850	1,296.25	1,449,767 16.3%	862,118 9.7%	1,879,725 21.2%	4,687,727 52.8%	8,879,337 100.0%
Government Entities	3,394	2,300.25	1,418,195 18.2%	454,163 5.8%	2,127,851 27.3%	3,806,830 48.8%	7,807,039 100.0%
Subtotal - Active Accounts	329,986	\$ 486.93	\$27,872,738 17.3%	\$12,104,125 7.5%	\$33,163,590 20.6%	\$ 87,538,897 54.5%	\$160,679,351 100.0%
Inactive Accounts	256,792	67.27	72,844 0.4%	115,500 0.7%	955,642 5.5%	16,130,781 93.4%	17,274,767 100.0%
Total	586,778	\$ 303.27	\$27,945,582 15.7%	\$12,219,625 6.9%	\$34,119,233 19.2%	\$103,669,679 58.3%	\$177,954,118 100.0%
% of Total A/R							
Water Fund	210,116	181.09	\$ 6,755,903	\$ 2,258,657	\$ 6,524,353	\$ 22,510,704	\$ 38,049,617
Sewer Fund	268,251	521.54	\$ 21,189,679	\$ 9,960,968	\$ 27,594,880	\$ 81,158,974	\$ 139,904,501
Total	586,778	303.27	\$27,945,582	\$12,219,625	\$34,119,233	\$103,669,679	\$177,954,118

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

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

Wholesale Water Billings and Collections

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

Service Arrangement Type

Model Contract	82
Emergency	1
Older Contracts	4
Total	<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 2019 water billed usage and revenues. As of February 28, 2019, the billed usage was at 101.59% of budget and billed revenue at 103.10% of budget. Billings and usage from the City of Flint are included as they were assumed in the FY 2019 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. There is little to no difference in the year-over-year comparison. However, variability in collections month-to-month are associated with timing of the billing cycle. While at times unavoidable, the GLWA billing team is identifying steps to prevent delays wherever possible.

Table 1 – FY 2019 Wholesale Water Billings Report

WHOLESALE WATER CUSTOMERS (2)								
Month (1)	FY 2019 - Budget/Goal			FY 2019 - Actual			FY 2019 - Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,632,120	30,347,500	18.59	1,800,256	32,754,760	18.19	168,136	2,407,260
August	1,518,130	29,405,800	19.37	1,490,896	29,776,242	19.97	(27,234)	370,442
September	1,354,440	27,424,800	20.25	1,380,514	28,039,719	20.31	26,074	614,919
October	1,091,580	24,826,000	22.74	1,027,086	24,866,975	24.21	(64,494)	40,975
November	912,260	23,273,500	25.51	938,511	24,145,548	25.73	26,251	872,048
December	1,002,110	23,912,600	23.86	997,281	24,545,455	24.61	(4,829)	632,855
January	1,019,240	24,133,400	23.68	1,001,885	24,622,107	24.58	(17,355)	488,707
February	885,170	23,021,600	26.01	927,982	23,986,734	25.85	42,812	965,134
March	1,000,060	23,933,100	23.93					
April	952,450	23,568,200	24.74					
May	1,116,620	25,296,500	22.65					
June	1,557,060	29,624,900	19.03					
Total	14,041,240	308,767,900	21.99	9,564,411	212,737,541	22.24	149,361	6,392,341
<i>Subtotals ytd</i>	<i>9,415,050</i>	<i>206,345,200</i>	<i>21.92</i>	<i>9,564,411</i>	<i>212,737,541</i>	<i>22.24</i>	<i>149,361</i>	<i>6,392,341</i>
Achievement of Budget				101.59%	103.10%			

(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
March	27,715,696	28,339,011	(623,315)	-2.20%
April	18,489,754	24,583,235	(6,093,480)	-24.79%
May	30,447,581	22,312,189	8,135,392	36.46%
June	21,815,013	24,337,730	(2,522,716)	-10.37%
July	21,923,590	28,138,726	(6,215,136)	-22.09%
August	31,920,586	25,280,453	6,640,133	26.27%
September	26,037,313	26,757,992	(728,038)	-2.72%
October	27,827,722	38,336,777	(10,509,055)	-27.41%
November	29,238,260	27,261,391	1,976,869	7.25%
December	27,720,646	22,125,972	5,594,674	25.29%
January	23,430,974	32,002,334	(8,533,044)	-26.66%
February	26,147,082	21,352,903	4,794,179	22.45%
Rolling 12-Month Total	312,714,218	320,828,713		
Rolling, 12-Month Average	26,059,518	26,735,726		

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 2019 sewer billed revenue. Consistent with expectations as a result of sewer rate simplification, billed revenue is at 100.00% of budget through February 28, 2019.

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

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The year-over-year rolling average is down slightly through February due to the temporary downturn in overall collections and is not expected to continue.

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 6 confirms that these payments are not delinquent as Sewer past due balances relate in full to Highland Park. This pattern is a change from the prior twelve months when payments timing was more consistent.

Table 3 – FY 2019 Wholesale Sewer Billings Report

WHOLESALE SEWER CUSTOMERS						
Month (1)	FY 2019 - Budget/Goal		FY 2019 - Actual		FY 2019 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,912,800	N/A	22,912,800	N/A	-
August	N/A	22,912,800	N/A	22,912,800	N/A	-
September	N/A	22,912,800	N/A	22,912,800	N/A	-
October	N/A	22,912,800	N/A	22,912,800	N/A	-
November	N/A	22,912,800	N/A	22,912,800	N/A	-
December	N/A	22,912,800	N/A	22,912,800	N/A	-
January	N/A	22,912,800	N/A	22,912,800	N/A	-
February	N/A	22,912,800	N/A	22,912,800	N/A	-
March	N/A	22,912,800	N/A		N/A	
April	N/A	22,912,800	N/A		N/A	
May	N/A	22,912,800	N/A		N/A	
June	N/A	22,912,800	N/A		N/A	
Total		274,953,600		183,302,400		-
<i>Subtotals ytd</i>		183,302,400		183,302,400		0
<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
March	15,552,000	21,878,700	(6,326,700)	-28.92%
April	27,812,417	22,502,725	5,309,692	23.60%
May	15,342,700	21,620,300	(6,277,600)	-29.04%
June	28,810,500	21,645,500	7,165,000	33.10%
July	16,179,117	22,732,006	(6,552,889)	-28.83%
August	28,384,600	21,949,300	6,435,300	29.32%
September	22,672,400	21,040,913	1,631,487	7.75%
October	16,105,200	21,902,800	(5,797,600)	-26.47%
November	28,633,300	22,662,700	5,970,600	26.35%
December	24,440,000	23,643,400	796,600	3.37%
January	26,874,927	22,057,972	(8,162,872)	-37.01%
February	13,895,100	30,280,800	(16,385,700)	-54.11%
Rolling 12-Month Total	264,702,261	273,917,115		
Rolling, 12-Month Average	22,058,522	22,826,426		

City of Highland Park Billings and Collections

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

As of February 28, 2019, Highland Park had a delinquent balance of \$40.7 million, including \$32.1 million for wastewater treatment services, \$1.6 million for industrial waste control services, and \$7.0 million for water supply services.

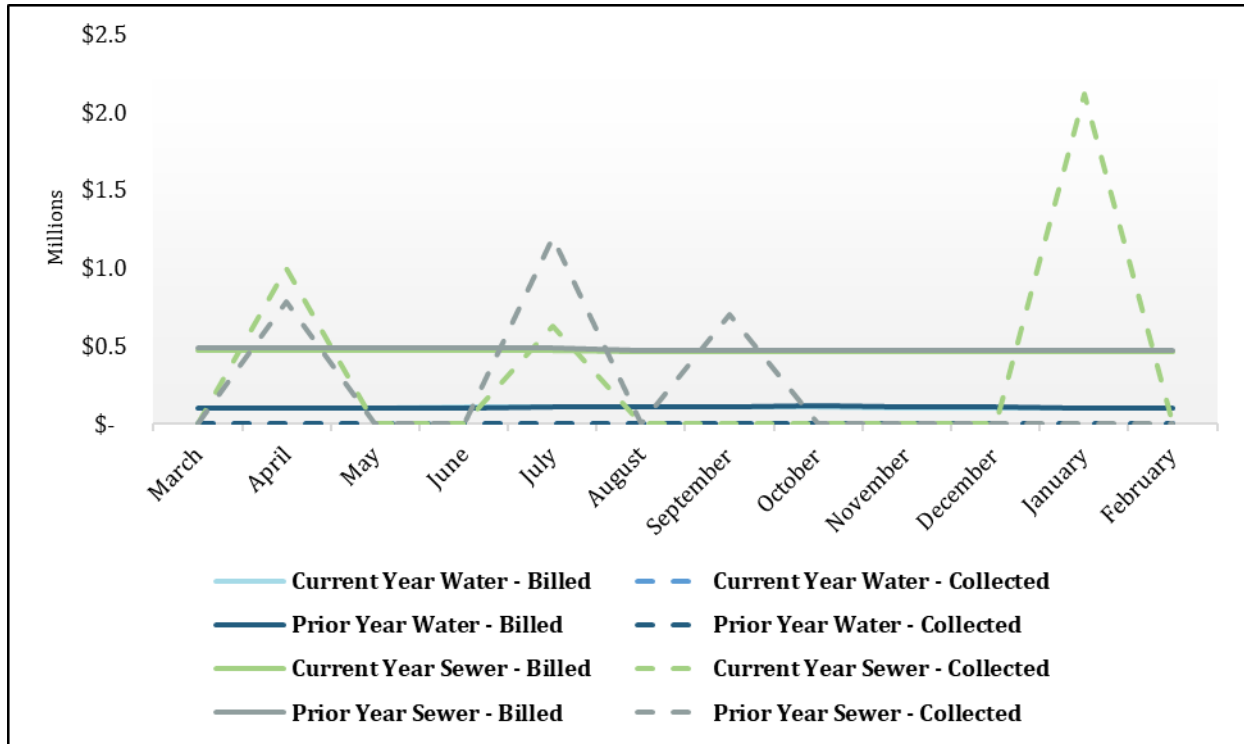
Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2019 through February 28, 2019. Please note the numbers below reflect the month the billing was sent and not the month the service was provided. A life-to-date summary is provided as an appendix to this monthly financial report.

Chart 1 - City of Highland Park Billings and Collections - Past Twelve Months is provided to depict Highland Park's most current performance specific to Water and Sewer. Payments received-to-date are applied to Sewer at this time.

Table 5 - City of Highland Park Billings and Collections

	Water	Sewer	IWC	Total
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,023	\$ 38,833,598
July 2018 Billing	\$ 109,568	\$ 470,200	\$ 6,754	586,521
July 2018 Payments	-	(629,017)	-	(629,017)
July 31, 2018 Balance	6,221,815	30,938,511	1,630,776	38,791,102
August 2018 Billing	108,651	467,900	4,233	580,784
August 2018 Payments	-	-	-	-
August 31, 2018 Balance	6,330,467	31,406,411	1,635,009	39,371,887
September 2018 Billing	109,780	467,900	4,261	581,941
September 2018 Payments	-	-	-	-
September 30, 2018 Balance	6,440,247	31,874,311	1,639,270	39,953,828
October 2018 Billing	109,298	467,900	4,281	581,479
October 2018 Payments	-	-	-	-
October 31, 2018 Balance	6,549,545	32,342,211	1,643,551	40,535,307
November 2018 Billing	104,007	467,900	3,963	575,869
November 2018 Payments	-	-	-	-
November 30, 2018 Balance	6,653,552	32,810,111	1,647,514	41,111,176
December 2018 Billing	101,944	467,900	3,961	573,805
December 2018 Payments	-	-	-	-
December 31, 2018 Balance	\$ 6,755,496	\$ 33,278,011	\$ 1,651,474	41,684,981
January 2019 Billing	98,430	467,900	3,961	570,290
January 2019 Payments	-	(2,116,727)	-	(2,116,727)
January 31, 2019 Balance	\$ 6,853,926	\$ 31,629,183	\$ 1,655,435	40,138,544
February 2019 Billing	98,898	467,900	3,932	570,731
February 2019 Payments	-	-	-	-
February 28, 2019 Balance	\$ 6,952,824	\$ 32,097,083	\$ 1,659,368	40,709,275

Chart 1 - City of Highland Park Water & Sewer Billings and Collections – Past Twelve Months



Note: Current and prior year water billing amounts are very close so the two lines are nearly overlapping when reviewed at this high-level.

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. (Note: percentages vary from 100% due to rounding.)

Table 6 - Wholesale Accounts Receivable Aging Report Summary is a summary of the total, current and non-current receivables by category as of December 31, 2018.

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). Credits for billed services are pending receipt of a final agreement from Wayne County to effectuate a transfer retroactive to July 1, 2018.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 37,277,422.14	\$ 30,521,926.12	\$ 101,944.01	\$ 104,006.77	\$ 6,549,545.24
Sewer	\$ 51,957,882.87	\$ 20,328,699.50	\$ 467,900.00	\$ 467,900.00	\$ 30,693,383.37
IWC	\$ 3,279,601.81	\$ 675,321.83	\$ 77,302.53	\$ 77,304.30	\$ 2,449,673.15
Pollutant Surcharge	\$ 1,097,116.18	\$ 483,562.00	\$ 77,274.56	\$ 57,414.50	\$ 478,865.12
Total	\$ 93,612,023.00	\$ 52,009,509.45	\$ 724,421.10	\$ 706,625.57	\$ 40,171,466.88
	100.00%	55.56%	0.77%	0.75%	42.91%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 30,324,598.20	\$ 30,324,598.20	\$ -	\$ -	\$ -
Sewer	\$ 19,860,799.50	\$ 19,860,799.50	\$ -	\$ -	\$ -
IWC	\$ 1,620,234.24	\$ 667,428.66	\$ 73,341.72	\$ 73,341.72	\$ 806,122.14
Pollutant Surcharge	\$ 1,097,116.18	\$ 483,562.00	\$ 77,274.56	\$ 57,414.50	\$ 478,865.12
Total	\$ 52,902,748.12	\$ 51,336,388.36	\$ 150,616.28	\$ 130,756.22	\$ 1,284,987.26
	100.00%	97.04%	0.28%	0.25%	2.43%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 30,324,598.20	\$ 30,324,598.20	\$ -	\$ -	\$ -
Sewer	\$ 19,860,799.50	\$ 19,860,799.50	\$ -	\$ -	\$ -
IWC	\$ 668,457.36	\$ 594,685.14	\$ 36,969.96	\$ 36,969.96	\$ (167.70)
Pollutant Surcharge	\$ 1,097,116.18	\$ 483,562.00	\$ 77,274.56	\$ 57,414.50	\$ 478,865.12
Total	\$ 51,950,971.24	\$ 51,263,644.84	\$ 114,244.52	\$ 94,384.46	\$ 478,697.42
	100.00%	98.68%	0.22%	0.18%	0.92%

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 for the current year to-date and prior fiscal year. Fiscal year 2019 reflects eight months of activity to date.

Water fund cash receipts exceeded MBO disbursements by 21% through February 28, 2019. This compares favorably to FY 2018 where Water fund cash receipts exceeded MBO disbursements by 5% for the year. Sewer fund cash receipts exceeded MBO disbursements by 5% through February 28, 2019. This also compares favorably to FY 2018 where Sewer fund cash receipts fell slightly short of MBO disbursements by 1%.

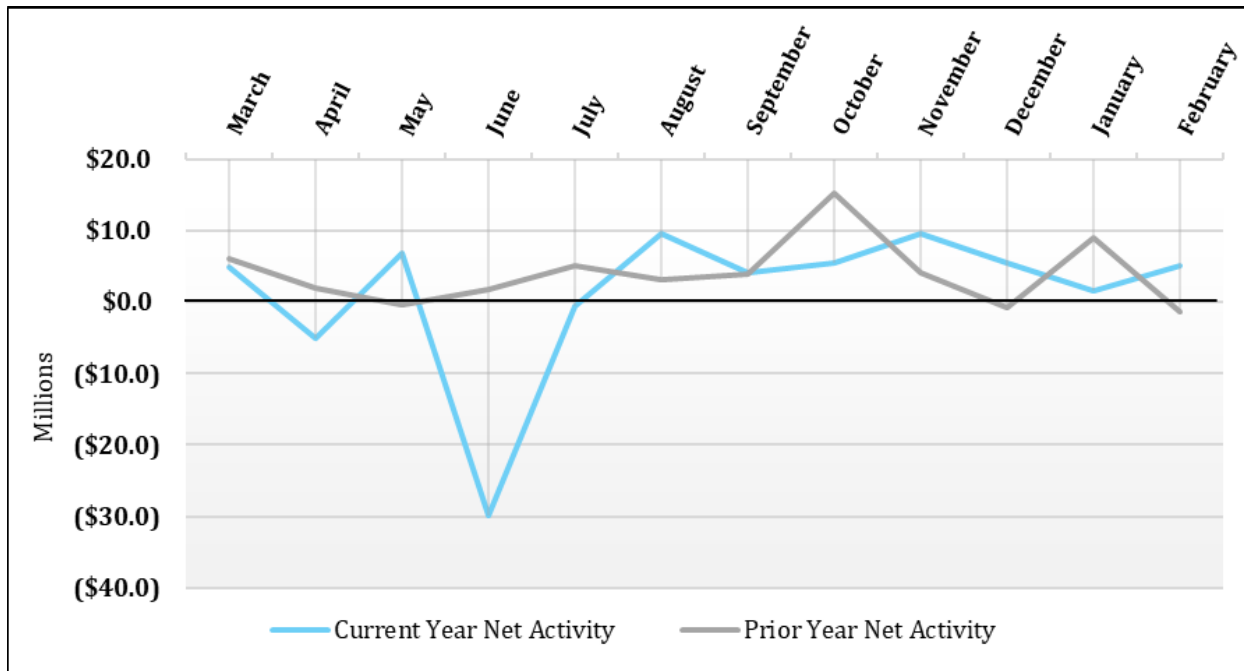
Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

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.

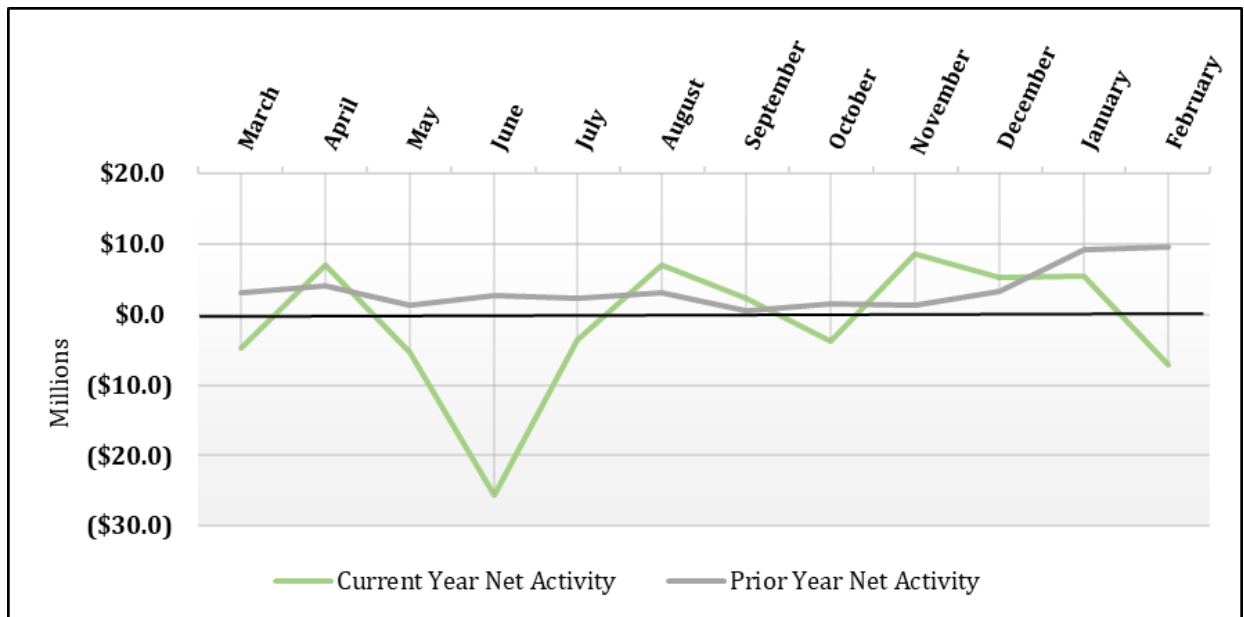
Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements

	FY 2018	FY 2019-to-Date
Water		
1 Receipts	338,452,001	233,044,044
2 MOU Adjustments	-	
3 Adjusted Receipts	338,452,001	233,044,044
4 Disbursements	322,804,510	192,474,251
5 Net Receipts	15,647,491	40,569,793
6 <i>Ratio of Receipts to Disbursements</i>	105%	121%
Sewer		
7 Receipts	476,269,761	314,227,966
8 MOU Adjustments	-	
9 Adjusted Receipts	476,269,761	314,227,966
10 Disbursements	481,601,435	299,860,113
11 Net Receipts	(5,331,674)	14,367,853
12 <i>Ratio of Receipts to Disbursements</i>	99%	105%
Combined		
13 Receipts	814,721,762	547,272,010
14 MOU Adjustments	-	-
15 Adjusted Receipts	814,721,762	547,272,010
16 Disbursements	804,405,945	492,334,364
17 Net Receipts	10,315,817	54,937,646
18 <i>Ratio of Receipts to Disbursements</i>	101%	111%

Note: The method of reporting interest income on debt service reserve funds was modified in February 2019 for purposes of this report. Previously, trust disbursements for debt service contributions were reported net of interest income. Now, the disbursement for debt service contributions are reported at the gross amount and all interest income is reported as a receipt. This schedule was modified so that FY 2018 and FY 2019 are comparable. Net receipts remain unchanged.

Chart 1 – GLWA 12-Month Net Receipts - Water


Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.

Chart 2 – GLWA 12-Month Net Receipts – Sewer


Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.

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 for the current year to-date and prior fiscal year. Fiscal year 2019 reflects eight months of activity to date.

Water fund cash receipts exceeded MBO disbursements by 2% through February 28, 2019. This is a reduction from FY 2018 where Water fund cash receipts exceeded MBO disbursements by 9% for the year. Sewer fund cash receipts fell short of MBO disbursements by 5% through February 28, 2019. This is improved from FY 2018 where Sewer fund cash receipts fell short of MBO disbursements by 7%.

FY 2019 activity to date reflects a \$6.5 million sewer lookback adjustment completed in December 2018. This was due from GLWA to DWSD as part of the April 2018 MOU.

The Reconciliation Committee also monitors this balance as part of its quarterly meetings as well as the repayment progress.

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

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

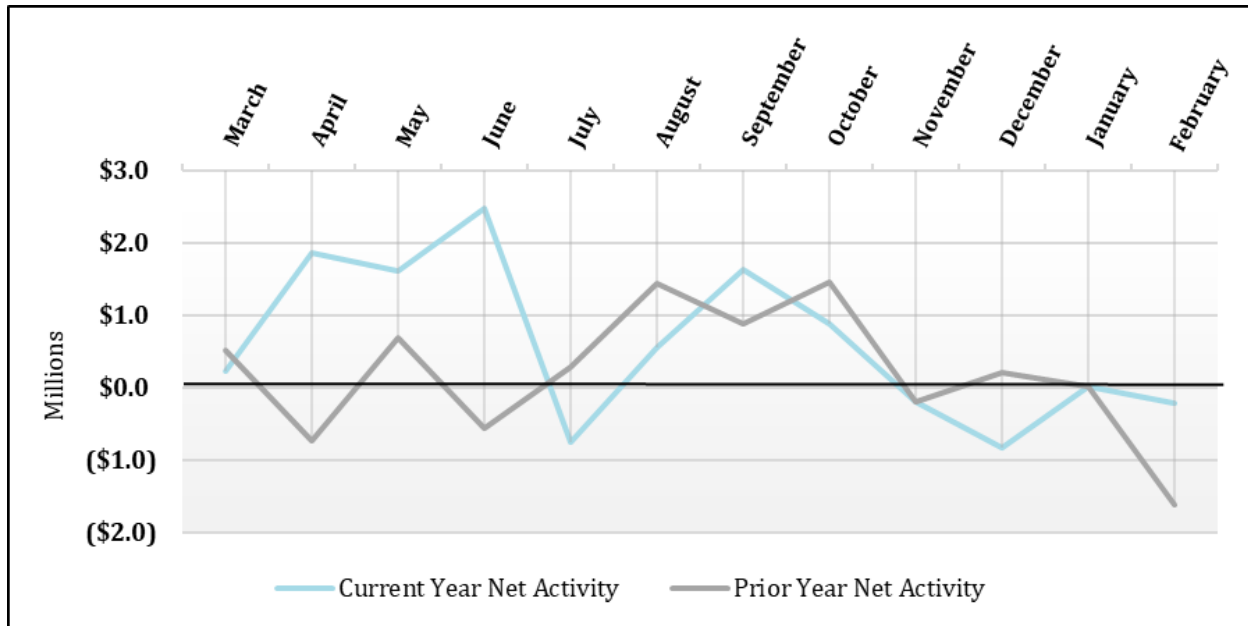
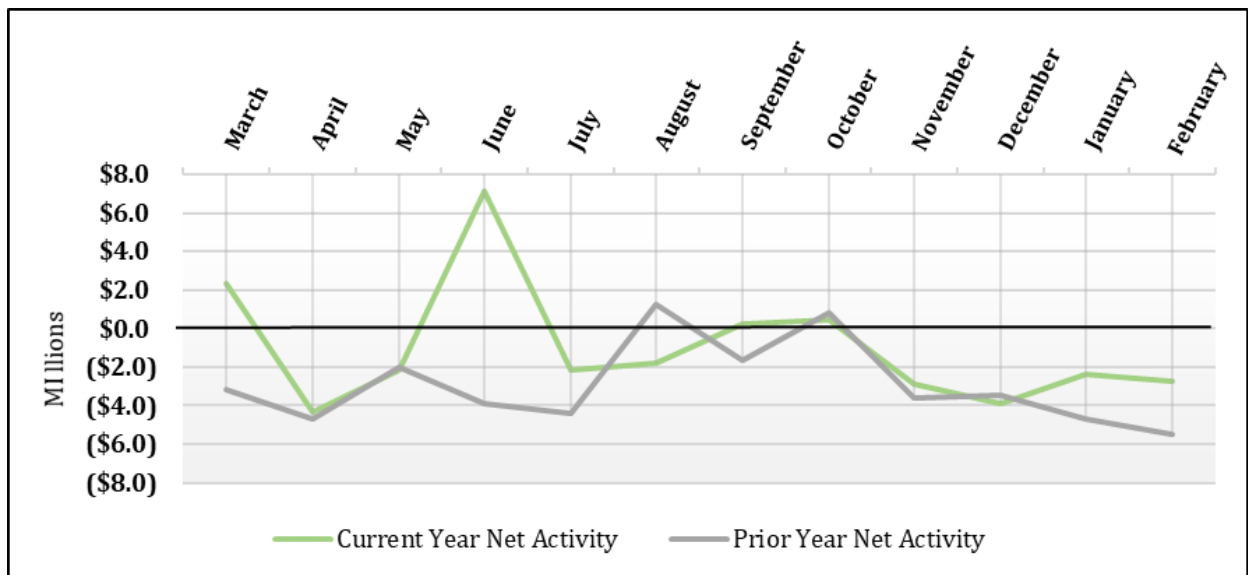
	FY 2018	FY 2019-to-Date
Water		
1 Receipts	101,716,017	66,213,015
2 MOU Adjustments	-	-
3 Adjusted Receipts	101,716,017	66,213,015
4 Disbursements	93,049,457	65,129,800
5 Net Receipts	8,666,560	1,083,215
6 <i>Ratio of Receipts to Disbursements</i>	109%	102%
Sewer		
7 Receipts	247,975,470	173,182,525
8 MOU Adjustments	-	6,527,200
9 Adjusted Receipts	247,975,470	179,709,725
10 Disbursements	266,217,825	188,305,091
11 Net Receipts	(18,242,355)	(8,595,366)
12 <i>Ratio of Receipts to Disbursements</i>	93%	95%
Combined		
13 Receipts	349,691,487	239,395,540
14 MOU Adjustments	-	6,527,200
15 Adjusted Receipts	349,691,487	245,922,740
16 Disbursements	359,267,282	253,434,891
17 Net Receipts	(9,575,795)	(7,512,151)
18 <i>Ratio of Receipts to Disbursements</i>	97%	97%

Table 3 – DWSD Loan Receivable - Sewer

Date	Transaction	Principal	Balance
6/30/2019	Record FY 16 and FY 17 Loan Receivable	29,300,000	29,300,000
2/8/2019	Loan Receivable Payment <i>(for the months of Jul - Dec)</i>	4,635,462	24,664,538
2/22/2019	Loan Receivable Payment <i>(for the months of Jan - Mar)</i>	2,353,768	22,310,770
	Remaining Balance at February 28, 2019		22,310,770

Note 1: The \$29,300,000 for the DWSD loan receivable is calculated below (rounded).

(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

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 4 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers for the current year to-date and prior fiscal year. Fiscal year 2019 reflects eight months of activity to date.

Water fund cash receipts exceeded MBO disbursements by 16% through February 28, 2019. This compares favorably to FY 2018 where Water fund cash receipts exceeded MBO disbursements by 6% for the year. Sewer fund cash receipts exceeded MBO disbursements by 1% through February 28, 2019. This also compares favorably to FY 2018 where Sewer fund cash receipts fell slightly short of MBO disbursements by 3%.

Table 4 – Combined Net Cash Flows from Trust Receipts & Disbursements

	FY 2018	FY 2019-to-Date
Water		
1 Receipts	\$ 440,168,018	\$ 299,257,059
2 MOU Adjustments	\$ -	\$ -
3 Adjusted Receipts	440,168,018	299,257,059
4 Disbursements	415,853,967	257,604,051
5 Net Receipts	24,314,051	41,653,008
6 Ratio of Receipts to Disbursements	106%	116%
Sewer		
7 Receipts	\$ 724,245,231	\$ 487,410,491
8 MOU Adjustments	\$ -	\$ 6,527,200
9 Adjusted Receipts	724,245,231	493,937,691
10 Disbursements	747,819,260	488,165,204
11 Net Receipts	\$ (23,574,029)	\$ 5,772,487
12 Ratio of Receipts to Disbursements	97%	101%
Combined		
13 Receipts	\$ 1,164,413,249	\$ 786,667,550
14 MOU Adjustments	\$ -	\$ 6,527,200
15 Adjusted Receipts	1,164,413,249	793,194,750
16 Disbursements	1,163,673,227	745,769,255
17 Net Receipts	\$ 740,022	\$ 47,425,495
18 Ratio of Receipts to Disbursements	100%	106%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$179,646.18	\$179,646.18	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$68,322.21	\$68,322.21	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$26,523.11	\$26,523.11	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$59,767.30	\$59,767.30	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$282,464.60	\$282,464.60	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$ (1,885.51)	\$ (1,885.51)	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$22,662.97	\$22,662.97	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$767,139.27	\$767,139.27	\$0.00	\$0.00	\$0.00
CENTER LINE	\$36,977.47	\$36,977.47	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$315,250.39	\$315,250.39	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$645,506.55	\$645,506.55	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$280,121.20	\$280,121.20	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,779,853.53	\$1,779,853.53	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$287,958.10	\$287,958.10	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$128,862.29	\$128,862.29	\$0.00	\$0.00	\$0.00
ECORSE	\$129,912.17	\$129,912.17	\$0.00	\$0.00	\$0.00
FARMINGTON	\$79,037.66	\$79,037.66	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$700,599.34	\$700,599.34	\$0.00	\$0.00	\$0.00
FERNDALE	\$85,093.18	\$85,093.18	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$97,905.83	\$97,905.83	\$0.00	\$0.00	\$0.00
FLINT	\$356,700.56	\$356,700.56	\$0.00	\$0.00	\$0.00
FRASER	\$94,663.74	\$94,663.74	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$133,817.75	\$133,817.75	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$27,010.21	\$27,010.21	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$15,705.77	\$15,705.77	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$109,078.07	\$109,078.07	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$101,325.94	\$101,325.94	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$41,168.10	\$41,168.10	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$126,167.29	\$126,167.29	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$57,081.11	\$57,081.11	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$66,420.01	\$66,420.01	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$118,532.24	\$118,532.24	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$59,170.63	\$59,170.63	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$6,952,823.94	\$197,327.92	\$101,944.01	\$104,006.77	\$6,549,545.24
HURON TOWNSHIP	\$118,490.73	\$118,490.73	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$74,058.87	\$74,058.87	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,051.59	\$1,051.59	\$0.00	\$0.00	\$0.00
INKSTER	\$212,272.58	\$212,272.58	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$24,590.06	\$24,590.06	\$0.00	\$0.00	\$0.00
LAPEER	\$117,965.15	\$117,965.15	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$54,088.09	\$54,088.09	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$210,679.28	\$210,679.28	\$0.00	\$0.00	\$0.00
LIVONIA	\$1,081,943.13	\$1,081,943.13	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$823,307.90	\$823,307.90	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$158,014.95	\$158,014.95	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MAYFIELD TOWNSHIP	\$10,684.67	\$10,684.67	\$0.00	\$0.00	\$0.00
MELVINDALE	\$56,860.99	\$56,860.99	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$31,078.76	\$31,078.76	\$0.00	\$0.00	\$0.00
NOCWA	\$3,637,647.56	\$3,637,647.56	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$62,251.82	\$62,251.82	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$417,583.09	\$417,583.09	\$0.00	\$0.00	\$0.00
NOVI	\$692,568.61	\$692,568.61	\$0.00	\$0.00	\$0.00
OAK PARK	\$111,640.03	\$111,640.03	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$6,140.33	\$6,140.33	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$85,079.37	\$85,079.37	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$332,413.40	\$332,413.40	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$251,677.55	\$251,677.55	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$50,289.31	\$50,289.31	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$73,196.86	\$73,196.86	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$24,959.94	\$24,959.94	\$0.00	\$0.00	\$0.00
ROMEO	\$41,596.45	\$41,596.45	\$0.00	\$0.00	\$0.00
ROMULUS	\$331,063.96	\$331,063.96	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$217,269.02	\$217,269.02	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$19,305.08	\$19,305.08	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,025,113.77	\$1,025,113.77	\$0.00	\$0.00	\$0.00
SOCWA	\$3,607,866.10	\$3,607,866.10	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$8,788.85	\$8,788.85	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$181,041.82	\$181,041.82	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$244,272.75	\$244,272.75	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,138,681.79	\$1,138,681.79	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$56,329.34	\$56,329.34	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$20,373.50	\$20,373.50	\$0.00	\$0.00	\$0.00
TAYLOR	\$709,830.03	\$709,830.03	\$0.00	\$0.00	\$0.00
TRENTON	\$177,905.31	\$177,905.31	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,079,964.67	\$1,079,964.67	\$0.00	\$0.00	\$0.00
UTICA	\$56,524.62	\$56,524.62	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$294,115.59	\$294,115.59	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$23,397.68	\$23,397.68	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$78,557.01	\$78,557.01	\$0.00	\$0.00	\$0.00
WARREN	\$832,892.72	\$832,892.72	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$160,199.51	\$160,199.51	\$0.00	\$0.00	\$0.00
WAYNE	\$244,831.27	\$244,831.27	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,638,864.73	\$1,638,864.73	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,032,014.74	\$1,032,014.74	\$0.00	\$0.00	\$0.00
WIXOM	\$186,603.89	\$186,603.89	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$86,950.06	\$86,950.06	\$0.00	\$0.00	\$0.00
YCUA	\$831,150.06	\$831,150.06	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$37,277,422.14	\$30,521,926.12	\$101,944.01	\$104,006.77	\$6,549,545.24

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$70,600.00	\$70,600.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$85,599.50	\$85,599.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,881,500.00	\$2,881,500.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$74,100.00	\$74,100.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$32,097,083.37	\$467,900.00	\$467,900.00	\$467,900.00	\$30,693,383.37
MELVINDALE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,747,700.00	\$3,747,700.00	\$0.00	\$0.00	\$0.00
OMID	\$6,461,100.00	\$6,461,100.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,480,100.00	\$4,480,100.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,056,000.00	\$2,056,000.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,100.00	\$4,100.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$51,957,882.87	\$20,328,699.50	\$467,900.00	\$467,900.00	\$30,693,383.37

GLWA Aged Accounts Receivable- IWC ACCOUNTS

59^{1/4}

Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,612.35	\$1,612.35	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$20,240.88	\$20,240.88	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$375.19	\$375.19	\$0.00	\$0.00	\$0.00
BERKLEY	\$2,901.33	\$2,901.33	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$1,066.57	\$1,066.57	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$5,588.74	\$5,588.74	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$1,539.41	\$1,539.41	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,164.69	\$7,164.69	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$498,870.98	\$38,132.92	\$19,066.46	\$19,066.46	\$422,605.14
CENTER LINE	\$3,683.10	\$3,683.10	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,118.72	\$12,118.72	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$8,904.91	\$8,904.91	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,725.23	\$3,725.23	\$0.00	\$0.00	\$0.00
CLARKSTON	\$ (167.70)	\$0.00	\$0.00	\$0.00	\$ (167.70)
CLAWSON	\$2,763.45	\$2,763.45	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$25,342.76	\$25,342.76	\$0.00	\$0.00	\$0.00
DEARBORN	\$147,879.84	\$73,939.92	\$36,969.96	\$36,969.96	\$0.00
DEARBORN HEIGHTS	\$9,480.49	\$9,480.49	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$106.64	\$106.64	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$6,404.90	\$6,404.90	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
FARMINGTON	\$4,046.54	\$4,046.54	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$24,055.17	\$24,055.17	\$0.00	\$0.00	\$0.00
FRASER	\$4,960.88	\$4,960.88	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$6,117.48	\$6,117.48	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,580.76	\$1,580.76	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,088.99	\$2,088.99	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,182.65	\$1,182.65	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$318.17	\$318.17	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,625.78	\$2,625.78	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,175.13	\$4,175.13	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,892.64	\$1,892.64	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,166.76	\$3,166.76	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,150.78	\$3,150.78	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,659,367.57	\$7,893.17	\$3,960.81	\$3,962.58	\$1,643,551.01
HUNTINGTON WOODS	\$286.18	\$286.18	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$4,781.00	\$4,781.00	\$0.00	\$0.00	\$0.00
INKSTER	\$5,559.87	\$5,559.87	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$686.05	\$686.05	\$0.00	\$0.00	\$0.00
LAKE ORION	\$803.30	\$803.30	\$0.00	\$0.00	\$0.00
LATHRUP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$325.36	\$325.36	\$0.00	\$0.00	\$0.00
LIVONIA	\$40,177.51	\$40,177.51	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MACOMB TWP	\$206.29	\$206.29	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$18,662.65	\$18,662.65	\$0.00	\$0.00	\$0.00
MELVINDALE	\$3,629.99	\$3,629.99	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$567.00	\$567.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$2,095.20	\$2,095.20	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$119,706.05	\$9,148.06	\$4,574.03	\$4,574.03	\$101,409.93
NOVI	\$17,375.72	\$17,375.72	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,810.63	\$6,810.63	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$440.84	\$440.84	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$382.19	\$382.19	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$5,419.63	\$5,419.63	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,043.46	\$1,043.46	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$273.77	\$273.77	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$333,199.85	\$25,462.54	\$12,731.27	\$12,731.27	\$282,274.77
REDFORD TOWNSHIP	\$12,428.68	\$12,428.68	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$36,503.22	\$36,503.22	\$0.00	\$0.00	\$0.00
ROMULUS	\$926.07	\$926.07	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,751.93	\$14,751.93	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,536.72	\$13,536.72	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$880.00	\$880.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,377.41	\$12,377.41	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,770.45	\$3,770.45	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$12,097.15	\$12,097.15	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,414.96	\$31,414.96	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$37,240.99	\$37,240.99	\$0.00	\$0.00	\$0.00
UTICA	\$3,010.88	\$3,010.88	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,072.63	\$2,072.63	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$65.69	\$65.69	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$2,762.20	\$2,762.20	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$12,446.26	\$12,446.26	\$0.00	\$0.00	\$0.00
WAYNE	\$5,017.87	\$5,017.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,888.02	\$1,888.02	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$12,623.08	\$12,623.08	\$0.00	\$0.00	\$0.00
WESTLAND	\$23,023.28	\$23,023.28	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$3,279,601.81	\$675,321.83	\$77,302.53	\$77,304.30	\$2,449,673.15

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$4,513.80	\$4,513.80	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$2,583.59	\$2,583.59	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$84.85	\$84.85	\$0.00	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$870.37	\$870.37	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$25,454.37	\$15,097.57	\$10,356.80	\$0.00	\$0.00
ALEXANDER & HORNING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$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.	\$ (89.96)	\$0.00	\$0.00	\$0.00	\$ (89.96)
ALPHA STAMPING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$37.20	\$37.20	\$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	\$108.95	\$108.95	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$56.56	\$56.56	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$ (121.94)	\$0.00	\$0.00	\$0.00	\$ (121.94)

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$778.49	\$778.49	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$14,992.65	\$14,992.65	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$228.69	\$54.24	\$0.00	\$0.00	\$174.45
BOZEK'S MARKET	\$61.54	\$61.54	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$4,429.29	\$4,429.29	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$2.05	\$2.05	\$0.00	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$41.69	\$41.69	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$199.03	\$56.40	\$0.00	\$0.00	\$142.63
CAPITAL REPRODUCTIONS	\$2.97	\$1.35	\$0.00	\$1.62	\$0.00
CF BURGER CREAMERY	\$12,588.97	\$12,588.97	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,265.30	\$52.22	\$22.15	\$112.34	\$2,078.59
CINTAS CORP. - MACOMB TWP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$7.54	\$7.54	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$2,909.07	\$2,909.07	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$2,308.45	\$2,308.45	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$696.94	\$696.94	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$2,058.37	\$2,058.37	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$271.37	\$271.37	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$3,091.39	\$1,033.49	\$0.00	\$1,029.10	\$1,028.80
DARLING INGREDIENTS, INC.	\$5,067.31	\$5,067.31	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$46.94	\$46.94	\$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	\$122.18	\$122.18	\$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	\$1,010.38	\$1,010.38	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$44.75	\$27.97	\$16.78	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$106.95	\$106.95	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$22,308.57	\$22,308.57	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$141.29	\$141.29	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,127.43	\$1,127.43	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,234.07	\$2,979.54	\$254.53	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$31.00	\$31.00	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$4,073.23	\$4,073.23	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$129.71	\$129.71	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$38,354.83	\$0.00	\$21,914.51	\$0.00	\$16,440.32
EQ DETROIT, INC.	\$337.22	\$337.22	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$2,254.14	\$2,254.14	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (1,238.68)	\$0.00	\$0.00	\$0.00	\$ (1,238.68)
EQ DETROIT, INC.	\$ (4,588.68)	\$0.00	\$0.00	\$0.00	\$ (4,588.68)
ETON ST BREWERY- GRIFFIN CLF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$182.88	\$182.88	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$143.01	\$143.01	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$553,212.89	\$89,136.41	\$33,547.38	\$47,496.42	\$383,032.68
FORD NEW MODEL PROGRAM	\$719.30	\$719.30	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$682.75	\$682.75	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$5,849.38	\$3,619.34	\$738.11	\$1,491.93	\$0.00
GENERAL LINEN SUPPLY CO.	\$63,027.64	\$12,136.06	\$5,748.09	\$6,672.12	\$38,471.37
GLOBAL TITANIUM, INC.	\$4,855.89	\$4,855.89	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$331.98	\$86.66	\$0.00	\$0.00	\$245.32
GREAT BARABOO BREWING CO.	\$ (2,054.91)	\$0.00	\$0.00	\$0.00	\$ (2,054.91)
HACIENDA MEXICAN FOODS	\$6,366.57	\$1,243.82	\$2,487.62	\$0.00	\$2,635.13
HENKEL CORPORATION	\$636.69	\$162.75	\$0.00	\$473.94	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

67^{5/8}

Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOME STYLE FOOD INC.	\$4,027.17	\$4,027.17	\$0.00	\$0.00	\$0.00
HOMEGROWN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HOOD CLEANERS	\$211.33	\$0.97	\$0.00	\$0.00	\$210.36
HOUGHTON INTERNATIONAL INC.	\$371.78	\$371.78	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$461.65	\$461.65	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$6,316.11	\$6,316.11	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$323.75	\$323.75	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$2,617.82	\$2,617.82	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$9.49	\$9.49	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$61.54	\$61.54	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$38.31	\$38.31	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$530.71	\$530.71	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$118.88	\$118.88	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$443.42	\$443.42	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$52.99	\$52.99	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$5,871.86	\$5,871.86	\$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.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$83.92	\$83.92	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

68^{6/8}

Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
METROPOLITAN BAKERY	\$479.44	\$479.44	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$89.48	\$89.48	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$61,541.34	\$61,541.34	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$ (2.94)	\$0.00	\$0.00	\$0.00	\$ (2.94)
MILANO BAKERY	\$628.93	\$628.93	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,889.45	\$2,889.45	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$103.77	\$0.00	\$0.00	\$23.63	\$80.14
MOTOR CITY BREWING WORKS	\$606.55	\$606.55	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$57.69	\$57.69	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEAT	\$40.78	\$40.78	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$160.58	\$160.58	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$1,226.70	\$1,226.70	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$30,376.36	\$30,376.36	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$37.23	\$37.23	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$51,185.55	\$51,185.55	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$1,235.78	\$1,235.78	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$1,161.12	\$1,161.12	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$324.46	\$324.46	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$3,083.05	\$1,077.32	\$0.00	\$0.00	\$2,005.73
RTT	\$23,842.21	\$0.00	\$0.00	\$0.00	\$23,842.21
SEAFARE FOODS, INC.	\$72.50	\$72.50	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$908.84	\$89.76	\$0.00	\$0.00	\$819.08
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$30.67	\$30.67	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$1,093.23	\$152.86	\$75.72	\$77.14	\$787.51
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$ (1,400.20)	\$0.00	\$0.00	\$0.00	\$ (1,400.20)
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$31.21	\$31.21	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$1,259.51	\$1,259.51	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

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Balances as of 02/28/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
UNCLE RAYS SNACKS, LLC	\$51,588.25	\$51,588.25	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$236.29	\$191.28	\$45.01	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$9.14	\$9.14	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$312.15	\$312.15	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$755.33	\$755.33	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$ (420.75)	\$0.00	\$0.00	\$0.00	\$ (420.75)
US ECOLOGY ROMULUS, INC.	\$1,876.84	\$1,876.84	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$6,183.58	\$4,143.61	\$2,039.97	\$0.00	\$0.00
VERNDALE PRODUCTS	\$11,281.09	\$11,281.09	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$3,154.78	\$3,154.78	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$153.41	\$53.00	\$27.89	\$36.26	\$36.26
WIGLEY'S MEAT PROCESS	\$693.79	\$693.79	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$934.38	\$934.38	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$117.50	\$117.50	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$8,765.60	\$8,765.60	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$5,169.88	\$5,169.88	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$219.55	\$0.00	\$0.00	\$0.00	\$219.55
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$1,097,116.18	\$483,562.00	\$77,274.56	\$57,414.50	\$478,865.12

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 (8 Months)	840,576	3,745,500	35,345	4,621,421
FY 2019 Payments (8 Months)	<u>-</u>	<u>(2,745,744)</u>	<u>-</u>	<u>(2,745,744)</u>
				-
Balance as of February 28, 2019	<u>\$ 6,952,824</u>	<u>\$ 32,097,083</u>	<u>\$ 1,659,367</u>	<u>\$ 40,709,274</u>



Financial Services Audit Committee Communication

Date: May 17, 2019

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report through March 31, 2019 (Unaudited)

Background: Section 14 of the Great Lakes Water Authority (GLWA) Investment Policy requires that a quarterly report 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, and reviewed by GLWA treasury, summarizes portfolio information through March 31, 2019 (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 are in compliance 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 March 31, 2019: 2.37% vs 2.35% (3-Month Treasury Index)
 - As of December 31, 2018: 2.40% vs 2.26% (3-Month Treasury Index)
- Portfolio Allocation in Cash/Money Market Securities
 - As of March 31, 2019: 36%
 - As of December 31, 2018: 39%

As GLWA continues to implement process improvements and more clearly define cash flows, the GLWA treasury group will work with PFM Asset Management LLC to identify strategies to maximize investment returns while meeting GLWA standards for safety and liquidity.

Proposed Action: Receive and file report.

Great Lakes Water Authority

Investment Performance Report – March 2019



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Economic Update

Great Lakes Water Authority
Executive Summary

PORTFOLIO RECAP

- Safety – The aggregate portfolio is diversified amongst cash, bank deposits, U.S. Treasuries, Federal Agencies, commercial paper, SEC-registered money market funds, and a local government investment pool. The total credit profile of the pool is strong with over 98% of the assets invested in bank deposits or securities that are rated within the two highest short and long-term rating classifications as established by Standard & Poor's.
- Liquidity – The Authority has continued to reduce its weighting to overnight funds, with only 36% of the total assets maturing overnight.
- Return – The overall market yield slightly decreased to 2.37% as of March 31, 2019 versus 2.40% at December 31, 2018. The Authority earned \$15,928,947 in investment income for fiscal year-to-date on a book value basis. Based on the current interest rate environment, the investment income earned for the previous quarter, and assuming that the Authority maintains the same investable balances for the remainder of the fiscal year, we are projecting that the Authority will earn approximately \$21.2 million in investment income for fiscal year 2019.
- Compliance – The aggregate portfolio is in compliance with the Authority's investment policy and Michigan Public Act 20.

AVAILABLE FUNDS (Unaudited)

Type	Financial Institution	Book Value	Market Value	YTM @ Market (as of 3/31/19)
Deposit Account	Comerica	\$12,398	\$12,398	0.25%
Deposit Account - Retainage	First Independence	\$16,622,964	\$16,622,964	0.05%
Deposit Account – Flint Security Deposit	Chase	\$3,780,756	\$3,780,756	1.32%
Deposit Account	Chase	\$12,916,266	\$12,916,266	1.32%
Trust Money Market Fund	U.S. Bank	\$194,998,031	\$194,998,031	2.31%
Money Market Fund	JP Morgan	\$75,563,368	\$75,563,368	2.19%
Local Government Investment Pool	GovMIC	\$81,882,189	\$81,882,189	2.49%
Managed Funds	PFM	\$698,201,746	\$698,928,787	2.48%
<u>TOTAL</u>		<u>\$1,083,977,717</u>	<u>\$1,084,704,758</u>	<u>2.37%</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. Note that market values move inversely to interest rates, and the recent rise in yields has led to the overall market value being less than the book value. In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of 3/31/2019.

**Great Lakes Water Authority
Investment Strategy**

GLWA INVESTMENT STRATEGY

- The portfolio is in compliance with the Authority's investment policy.
- To date, the Authority has continued to invest its funds in a mixture of short and intermediate-term investments to ensure sufficient liquidity.
- The aggregate portfolio was yielding 2.37% at the end of December.*
 - This compares to the 2.35% yield of the Bank of America / Merrill Lynch 3-Month U.S. Treasury Bill Index as of 3/31/2019, which is a comparable market indicator.
- The Authority continues to implement a disciplined investment plan to provide improved safety and diversification and putting every dollar to work.
- For the fourth quarter of FY 2019, the Authority's investment advisor will continue to align balances with expected liabilities, subject to the Authority's investment policy.
- The Authority will continue to work with its investment manager to identify strategies in this somewhat volatile market to maximize future investment income while meeting the objectives of safety and liquidity.
- Assuming that the Authority maintains the same investable balances for FY 2019 and the interest rate environment remains in a similar trading range, we conservatively expect to earn approximately \$21.2 million in interest income in FY 2019.

* Current market yield as of March 31, 2019.

**Great Lakes Water Authority
Market Overview and Outlook****ECONOMIC HIGHLIGHTS UPDATE**

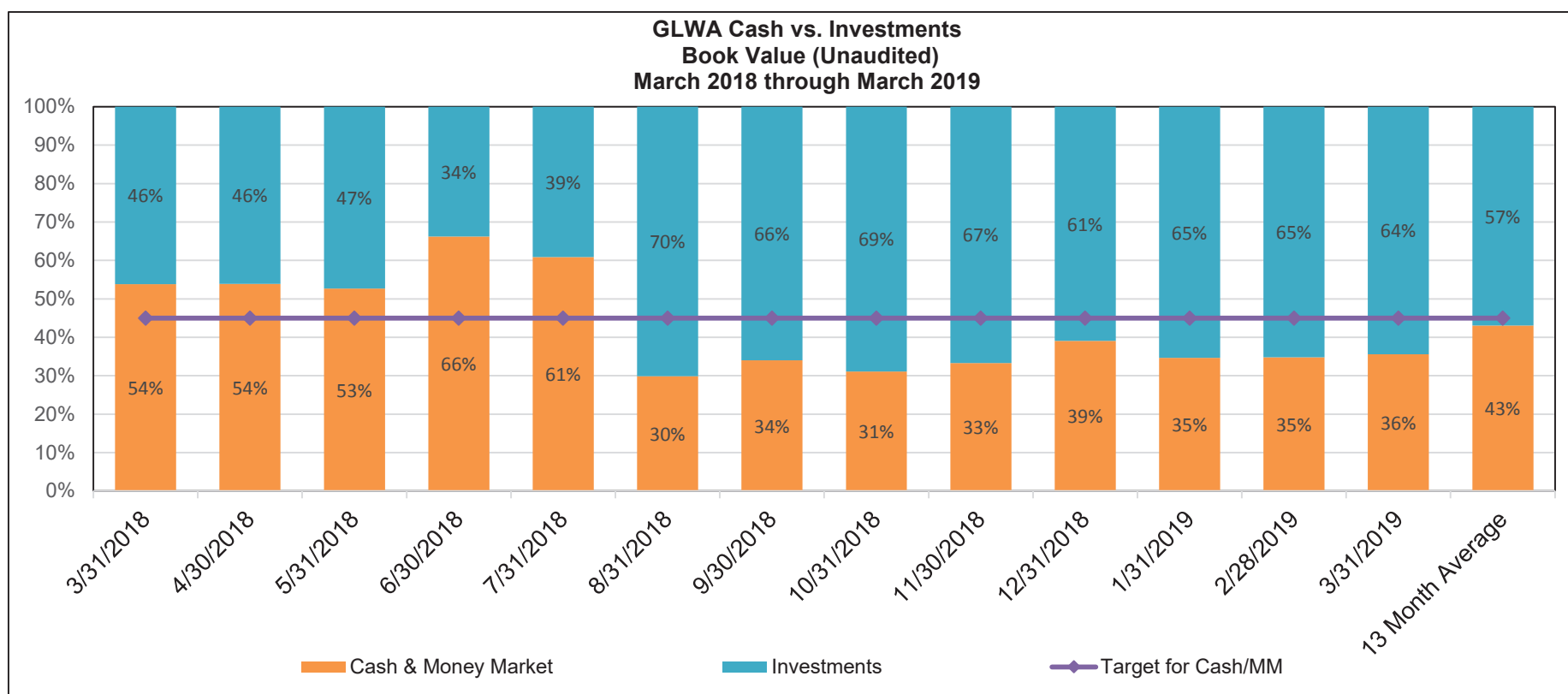
- At the end of March, all eyes turned to the seven-day stint when the yield on a 3-month U.S. Treasury Bill exceeded that of a 10-year U.S. Treasury Note. This yield curve inversion often precedes a recession. Despite this warning sign, other measures of market and economic conditions – such as credit spreads and jobless claims – do not portend a recession in the near term.
- As expected, the Federal Reserve left the Federal Funds rate unchanged in March at its current target range of 2.25% to 2.50%. Fed Chairman Jerome Powell confirmed the Fed's intent to be patient and “on hold” while assessing global economic and financial developments and inflation to determine what future adjustments to short-term rates – up or down – might be warranted.

ECONOMIC IMPACT ON PORTFOLIO

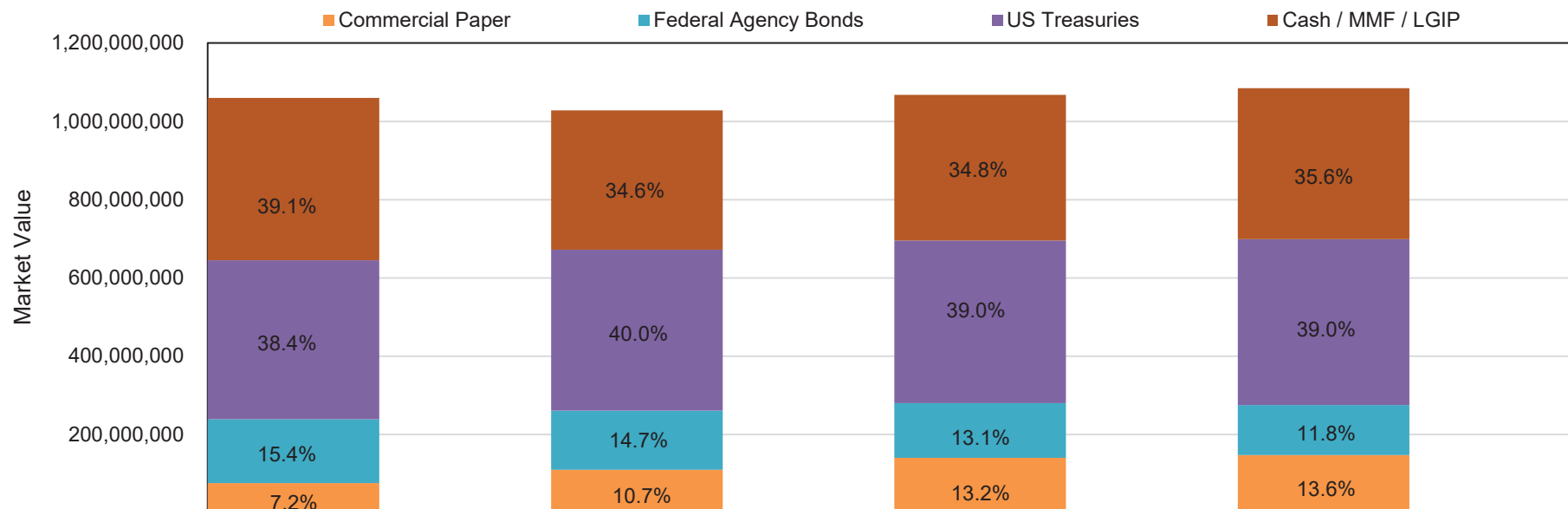
- The inversion of the yield curve, albeit brief, did not change positive investor sentiment. Historically, this inverted relationship has foreshadowed recessions, with only one false positive in the past 45 years. But this event was brief, and other confirming signals such as stock market prices and credit market conditions suggest that a downturn is not imminent.
- U.S. Treasury yields rallied across the curve over the previous quarter, resulting in an even flatter yield curve. The Fed is currently on hold and many investors are expecting a rate cut rather than a rate hike as the next move.
- Commercial paper was a standout performer in the past quarter as spreads narrowed back to September of 2018 levels. Because of this, current value has diminished somewhat, but the positively-sloped credit curve continues to support allocations to the sector. With lower yields and a flat Treasury yield, we expect incremental income from CP to buoy performance in coming quarters for the Authority's portfolio.
- The Authority continues to reap the benefits of short-maturity yields at a decade high. Although yields on commercial paper have moderated with the outlook for a patient Fed, they remain attractive relative to those in short, or even intermediate-term, government securities.

**Great Lakes Water Authority
Portfolio Mix
Cash / Money Market vs. Investments**

- The Authority'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, the Authority has set an average target of 45% cash/money market accounts and 55% investments for the portfolio holdings. The 13-month average as of the end of March of 2019 is very close to 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.



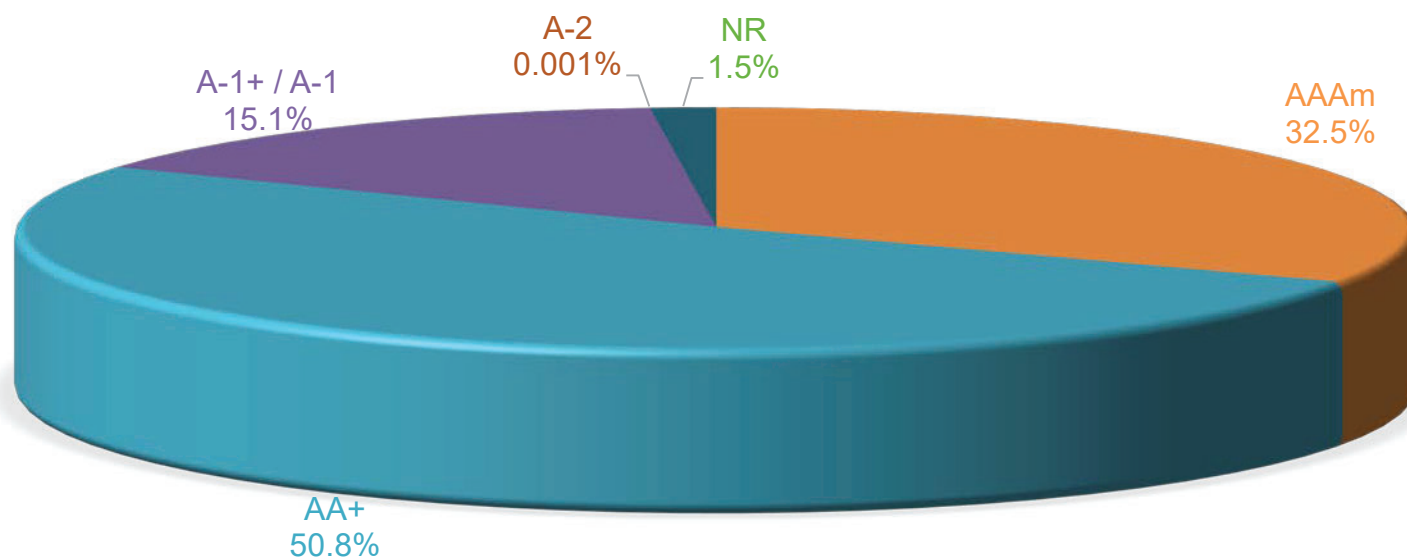
**Great Lakes Water Authority
Investments – By Security Type**



Security Type	December		January		February		March	
	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation
Commercial Paper	76,085,397	7.2%	109,833,905	10.7%	140,668,127	13.2%	147,599,028	13.6%
Federal Agencies	162,894,722	15.4%	151,224,508	14.7%	139,333,833	13.1%	127,908,615	11.8%
U.S. Treasuries	406,532,663	38.4%	410,908,633	40.0%	415,835,845	39.0%	423,421,144	39.0%
Cash / MMF / LGIP	414,381,117	39.1%	356,146,824	34.6%	371,730,951	34.8%	385,775,971	35.6%
Total	1,059,893,899	100.0%	1,028,113,870	100.0%	1,067,568,756	100.0%	1,084,704,758	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.

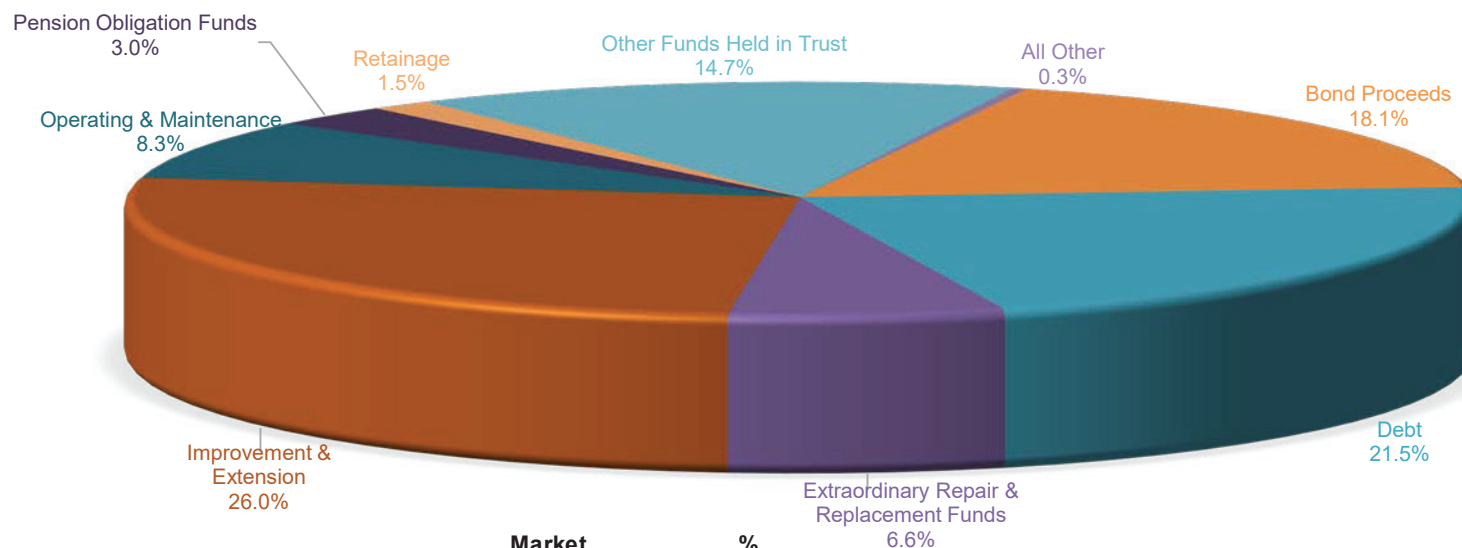
**Great Lakes Water Authority
Investments – By Credit Quality
As of March 31, 2019**



Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	352,443,587	32.5%
AA+	551,329,759	50.8%
A-1 + / A-1	164,296,050	15.1%
A-2	12,398	0.001%
NR	16,622,964	1.5%
Totals	1,084,704,758	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.

**Great Lakes Water Authority
Investment Analysis – By Account Purpose
As of March 31, 2019**



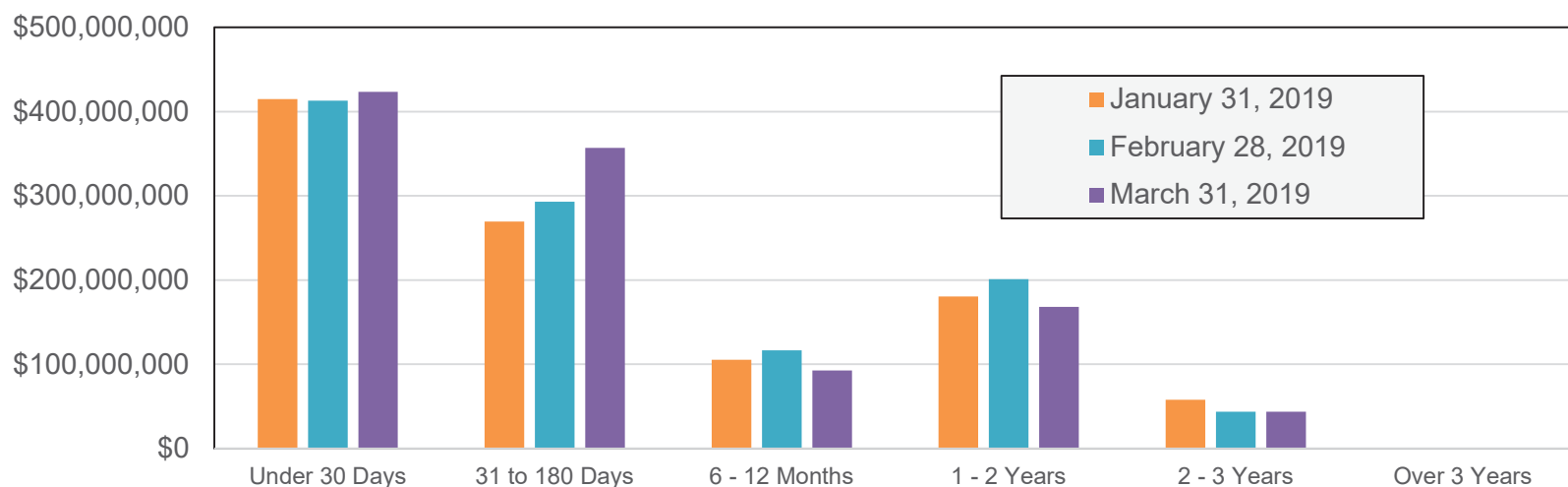
Account Purpose	Market Value	% Allocation
Bond Proceeds	\$ 195,937,071	18.1%
Debt	\$ 233,042,444	21.5%
Extraordinary Repair & Replacement Funds	\$ 71,626,803	6.6%
Improvement & Extension	\$ 281,802,040	26.0%
Operating & Maintenance	\$ 90,210,404	8.3%
Pension Obligation Funds	\$ 32,180,097	3.0%
Retainage	\$ 16,622,964	1.5%
Other Funds Held in Trust	\$ 159,502,180	14.7%
All Other	\$ 3,780,756	0.3%
Total	\$ 1,084,704,758	100.0%

Other Funds Held in Trust		Market Value	% Allocation
Budget Stabilization Funds	\$	7,492,349	4.7%
Receiving Funds	\$	142,356,902	89.3%
WRAP Funds	\$	9,652,929	6.1%
Total	\$	159,502,180	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019. "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.

**Great Lakes Water Authority
Investment Analysis – By Maturity**

Maturity Distribution	January 31, 2019		February 28, 2019		March 31, 2019	
		%		%		%
Under 30 Days	\$ 414,767,823	40.3%	\$ 413,115,612	38.7%	\$ 423,258,250	39.0%
31 to 180 Days	269,602,466	26.2%	293,169,277	27.5%	356,803,934	32.9%
6 - 12 Months	105,340,260	10.2%	116,639,822	10.9%	92,781,503	8.6%
1 - 2 Years	180,417,415	17.5%	200,980,614	18.8%	167,996,058	15.5%
2 - 3 Years	57,985,907	5.6%	43,663,432	4.1%	43,865,014	4.0%
Over 3 Years	-	0.0%	-	0.0%	-	0.0%
Totals	\$ 1,028,113,870	100.0%	\$ 1,067,568,756	100.0%	\$ 1,084,704,758	100.0%



In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



**Great Lakes Water Authority
Investment Accounts – Yield at Cost & Market
As of March 31, 2019**

	As of March 31, 2019		As of December 31, 2018	
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Comerica	0.25%	0.25%	0.25%	0.25%
First Indenpedence	0.05%	0.05%	0.05%	0.05%
Flint Deposit Account	1.32%	1.32%	1.30%	1.30%
JP Morgan Chase	1.32%	1.32%	1.30%	1.30%
Sub-Total Bank Deposits	0.69%	0.69%	0.67%	0.67%
Money Market Funds / LGIPs				
GovMIC	2.49%	2.49%	2.38%	2.38%
U.S. Bank - First American MMF	2.31%	2.31%	2.27%	2.27%
JP Morgan Securities - Blackrock MMF	2.19%	2.19%	2.19%	2.19%
Sub-Total MMF / LGIPs	2.33%	2.33%	2.28%	2.28%
Investment Portfolios				
Sewage SR Debt Serv 5403	2.73%	2.59%	1.75%	2.55%
Sewage SR Res 5400	1.51%	2.45%	1.59%	2.53%
Sew 2nd Debt Serv 5403	2.70%	2.60%	2.47%	2.49%
Sewage 2nd Res 5481	1.88%	2.44%	2.47%	2.49%
Sew SRF Debt Serv 5410	2.70%	2.68%	2.85%	2.92%
Sewage ER & R	2.64%	2.38%	1.51%	2.53%
Sewer Improvement & Extension	2.56%	2.43%	2.90%	2.96%
Sewer Pension Obligation	2.48%	2.45%	1.96%	2.54%
Sewer Wrap Fund	2.54%	3.83%	2.60%	2.75%
Sewer Budget Stabilization Fund	2.66%	2.37%	2.60%	2.51%
Sewer Bond Fund	1.66%	2.44%	2.54%	2.52%
Sewer O&M Pension Sub Account	2.47%	2.45%	2.47%	2.48%
Water SR Debt Ser 5503	2.73%	2.62%	2.59%	2.55%
Water SR Reserve 5500	2.49%	2.45%	2.62%	2.52%
Water 2nd Debt Serv 5503	2.68%	2.58%	2.86%	2.94%
Water 2nd Res 5581	2.15%	2.49%	2.49%	2.55%
Water SRF Debt Serv 5575	2.74%	2.67%	2.81%	2.88%
Water ER & R	2.63%	2.39%	2.15%	2.52%
Water Improvement & Extension	2.63%	2.40%	2.66%	2.80%
Water Pension Obligation	2.48%	2.45%	2.60%	2.51%
Water Wrap Fund	2.54%	4.45%	2.60%	2.52%
Water Budget Stabilization Fund	2.66%	2.37%	2.47%	2.48%
Water Bond Fund	1.86%	2.44%	2.59%	2.55%
Water O&M Pension Sub Account	2.47%	2.45%	2.62%	2.52%
Sub-Total Investment Portfolios	2.42%	2.48%	2.32%	2.57%
Grand Total	2.34%	2.37%	2.26%	2.40%

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.



**Great Lakes Water Authority
Demonstration of Yield to Maturity vs. Duration
As of March 31, 2019**

- 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 the Authority's aggregate portfolio compares favorably to those of other short-term market indices (i.e., the S&P LGIP index and the 3-month U.S. Treasury index).
- The Authority 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 March 31, 2019				
	Market Value	YTM @ Market	Effective Duration	Weighted Average Maturity
GLWA				
Great Lakes Water Authority	\$1,084,704,758	2.37%	0.45 Years	169 Days
Short/Intermediate-Term Indices				
S&P Rated Government Investment Pool Index		2.30%	0.08 Years	30 Days
BoA / ML 3-Month Treasury Index		2.35%	0.16 Years	90 Days
BoA / ML 6-Month Treasury Index		2.43%	0.41 Years	180 Days
BoA / ML 1-Year Treasury Index		2.41%	0.90 Years	365 Days
BoA / ML 1-3 Year Treasury Index		2.32%	1.81 Years	661 Days
BoA / ML 1-5 Year Treasury Index		2.29%	2.56 Years	934 Days
Peer Analysis (Water Entities / Utilities)				
Alameda County Water District, CA	\$134,321,979	2.38%	2.59 Years	997 Days
Coachella Valley Water District, CA	\$455,122,923	2.45%	1.84 Years	812 Days
District of Columbia Water & Sewer Authority, DC	\$259,982,278	2.37%	0.96 Years	366 Days
DuPage Water Commission, IL	\$141,571,749	2.41%	2.17 Years	1,106 Days
Fairfax County Water Authority, VA	\$191,364,191	2.38%	2.07 Years	816 Days
San Bernardino Valley Municipal Water District, CA	\$346,203,480	2.44%	1.82 Years	690 Days
Truckee Meadows Water Authority, NV	\$115,037,298	2.37%	1.87 Years	715 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.

Great Lakes Water Authority
 Investment Income (by Book Value)
 As of March 31, 2019

INVESTMENT INCOME BY MONTH (Unaudited)

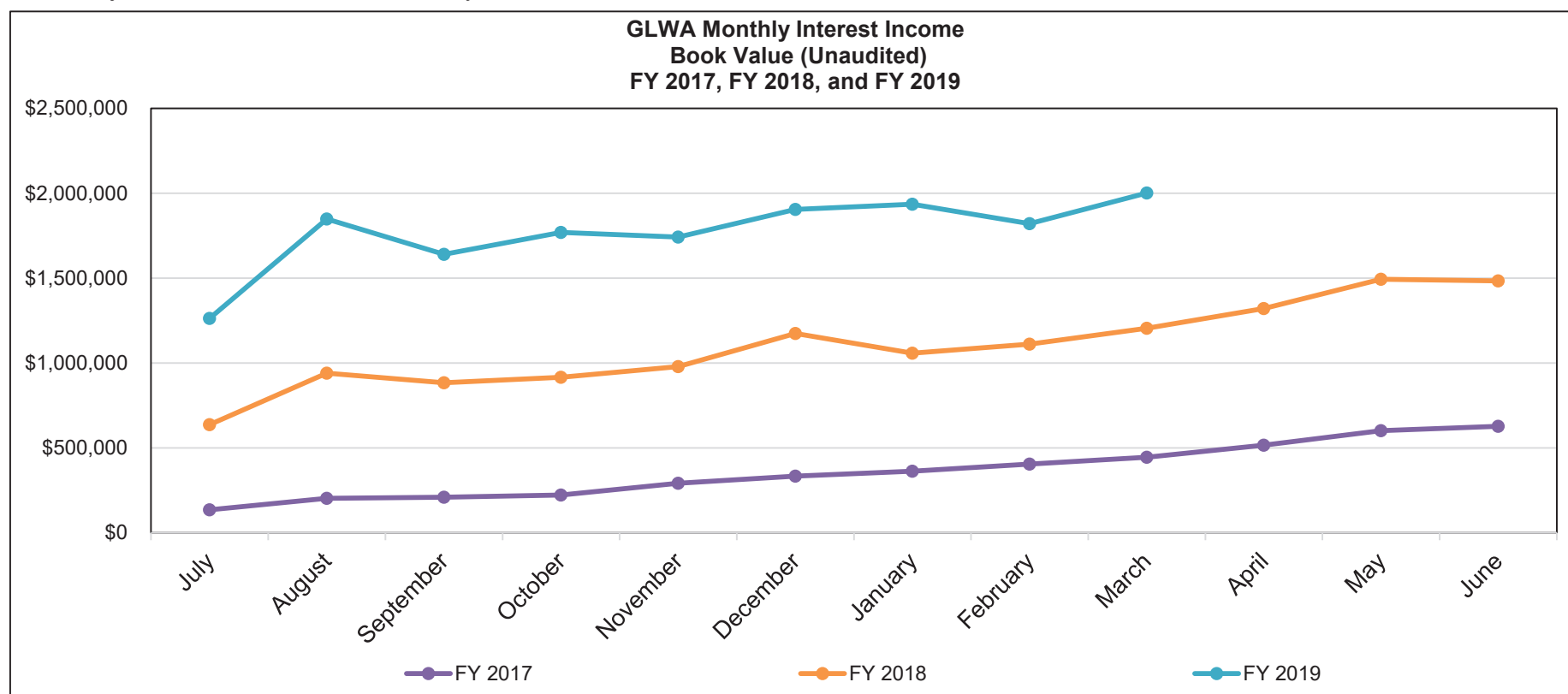
Month	Interest Earned During Period	Realized Gain / Loss	Investment Income
July 2018	\$1,264,010.74	\$0.00	\$1,264,010.74
August 2018	\$1,849,353.45	\$0.00	\$1,849,353.45
September 2018	\$1,638,462.50	\$1,631.65	\$1,640,094.15
October 2018	\$1,769,202.57	\$0.00	\$1,769,202.57
November 2018	\$1,742,251.26	\$0.00	\$1,742,251.26
December 2018	\$1,904,361.36	\$0.00	\$1,904,361.36
January 2019	\$1,890,671.19	\$45,694.26	\$1,936,365.45
February 2019	\$1,828,469.60	(\$6,953.05)*	\$1,821,516.55
March 2019	\$2,001,791.03	\$0.00	\$2,001,791.03
<u>FY 2019 Y-T-D</u>	<u>\$15,888,573.70</u>	<u>\$40,372.86</u>	<u>\$15,928,946.56</u>

* The Authority generally does not realize losses on its investments, however, in February, an adjustment to the cash flow forecast resulted in the sale of investments to meet liquidity requirements. As GLWA continues to refine cash flows, they will work closely with their investment advisor to align investment maturities with cash flow requirements.

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.

**Great Lakes Water Authority
Monthly Investment Income**

- The Authority has earned \$15,928,947 in investment income through March for fiscal year 2019 on a book value basis compared to \$8,907,945 for the first nine months of fiscal year 2018.
- The monthly investment earnings are continuing on an upward trend as the Authority continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment income while meeting the objectives of safety and liquidity.
- Projected investment income for fiscal year 2019 is \$21.2 million.



Appendix I: Portfolio Holdings



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

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		\$ 12,398	4/1/2019	3/31/2019	0.25%	\$ 12,398	1	\$ -	\$ 12,398
FIRST INDEPENDENCE BANK		16,622,964	4/1/2019	3/31/2019	0.05%	16,622,964	1	-	16,622,964
FLINT DEPOSIT ACCOUNT		3,780,756	4/1/2019	3/31/2019	1.32%	3,780,756	1	-	3,780,756
JP MORGAN CHASE		12,916,266	4/1/2019	3/31/2019	1.32%	12,916,266	1	-	12,916,266
GovMIC		81,882,189	4/1/2019	3/31/2019	2.49%	81,882,189	1	-	81,882,189
U.S. BANK - FIRST AMERICAN MMF		194,998,031	4/1/2019	3/31/2019	2.31%	194,998,031	1	-	194,998,031
JP MORGAN SECURITIES - BLACKROCK MMF		75,563,368	4/1/2019	3/31/2019	2.19%	75,563,368	1	-	75,563,368

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Commercial Paper									
MUFG Bank NY 0 4/1/2019	62479MR13	\$ 1,004,000	4/1/2019	2/6/2019	2.54%	\$ 1,000,190	1	\$ -	\$ 1,004,000
MUFG Bank NY 0 4/1/2019	62479MR13	1,004,000	4/1/2019	2/6/2019	2.54%	1,000,190	1	-	1,004,000
ING Funding 0 4/9/2019	4497W1R99	3,049,000	4/9/2019	7/16/2018	2.62%	2,990,884	9	-	3,047,293
ING Funding 0 4/9/2019	4497W1R99	251,000	4/9/2019	7/16/2018	2.62%	246,216	9	-	250,859
ING Funding 0 4/9/2019	4497W1R99	1,352,000	4/9/2019	7/16/2018	2.62%	1,326,230	9	-	1,351,243
ING Funding 0 4/9/2019	4497W1R99	478,000	4/9/2019	7/16/2018	2.62%	468,889	9	-	477,732
MUFG Bank NY 0 5/1/2019	62479MS12	1,525,000	5/1/2019	2/28/2019	2.56%	1,518,355	31	-	1,521,782
MUFG Bank NY 0 5/1/2019	62479MS12	2,796,000	5/1/2019	2/28/2019	2.56%	2,783,817	31	-	2,790,100
BNP Paribas 0 6/20/2019	09659CTL2	1,284,000	6/20/2019	1/4/2019	2.81%	1,267,501	81	-	1,276,643
BNP Paribas 0 6/20/2019	09659CTL2	9,898,000	6/20/2019	1/4/2019	2.81%	9,770,813	81	-	9,841,284
ING US Funding 0 6/20/2019	4497W1TL0	5,845,000	6/20/2019	11/7/2018	2.88%	5,741,617	81	-	5,811,508
JPMorgan Securities 0 6/20/2019	46640QTL5	3,609,000	6/20/2019	12/7/2018	2.93%	3,552,700	81	-	3,588,320
Lloyds Bank 0 6/20/2019	53943STL1	1,500,000	6/20/2019	12/7/2018	2.92%	1,476,681	81	-	1,491,405
Lloyds Bank 0 6/20/2019	53943STL1	6,390,000	6/20/2019	12/7/2018	2.92%	6,290,662	81	-	6,353,385
Natixis NY 0 6/20/2019	63873KTL1	3,354,000	6/20/2019	2/6/2019	2.69%	3,321,166	81	-	3,334,782
Natixis NY 0 6/20/2019	63873KTL1	2,100,000	6/20/2019	2/6/2019	2.69%	2,079,442	81	-	2,087,967
SwedBank 0 6/20/2019	87019STL8	6,549,000	6/20/2019	2/6/2019	2.60%	6,486,352	81	-	6,511,474
Toyota Motor Credit 0 6/20/2019	89233HTL8	500,000	6/20/2019	3/13/2019	2.51%	496,576	81	-	497,135
Toyota Motor Credit 0 6/20/2019	89233HTL8	9,907,000	6/20/2019	3/13/2019	2.51%	9,839,162	81	-	9,850,233
BNP Paribas 0 6/20/2019	09659CTL2	3,658,000	6/20/2019	1/4/2019	2.81%	3,610,996	81	-	3,637,040
ING US Funding 0 6/20/2019	4497W1TL0	6,293,000	6/20/2019	11/7/2018	2.88%	6,181,693	81	-	6,256,941
Lloyds Bank 0 6/20/2019	53943STL1	2,610,000	6/20/2019	12/7/2018	2.92%	2,569,425	81	-	2,595,045
Lloyds Bank 0 6/20/2019	53943STL1	7,500,000	6/20/2019	12/7/2018	2.92%	7,383,406	81	-	7,457,025
Natixis NY 0 6/20/2019	63873KTL1	3,240,000	6/20/2019	12/21/2018	2.99%	3,192,596	81	-	3,221,435
Natixis NY 0 6/20/2019	63873KTL1	2,398,000	6/20/2019	2/6/2019	2.69%	2,374,525	81	-	2,384,259
Natixis NY 0 6/20/2019	63873KTL1	3,648,000	6/20/2019	2/6/2019	2.69%	3,612,288	81	-	3,627,097
SwedBank 0 6/20/2019	87019STL8	7,931,000	6/20/2019	2/6/2019	2.60%	7,855,131	81	-	7,885,555
Toyota Motor Credit 0 6/20/2019	89233HTL8	5,251,000	6/20/2019	3/13/2019	2.51%	5,215,044	81	-	5,220,912
Toyota Motor Credit 0 6/20/2019	89233HTL8	2,750,000	6/20/2019	3/13/2019	2.51%	2,731,169	81	-	2,734,243
Credit Agricole 0 6/28/2019	22533UTU7	2,558,000	6/28/2019	1/4/2019	2.82%	2,523,431	89	-	2,541,859
JPMorgan Securities 0 6/28/2019	46640QTU5	2,846,000	6/28/2019	12/7/2018	2.93%	2,799,781	89	-	2,828,042
Credit Agricole 0 6/28/2019	22533UTU7	11,682,000	6/28/2019	1/4/2019	2.82%	11,524,131	89	-	11,608,287
JPMorgan Securities 0 6/28/2019	46640QTU5	1,348,000	6/28/2019	1/2/2019	2.87%	1,329,244	89	-	1,339,494
JPMorgan Securities 0 6/28/2019	46640QTU5	2,883,000	6/28/2019	12/7/2018	2.93%	2,836,180	89	-	2,864,808
JPMorgan Securities 0 9/23/2019	46640QWP2	216,000	9/23/2019	1/4/2019	2.97%	211,425	176	-	213,281
MUFG Bank NY 0 9/23/2019	62479MWP4	213,000	9/23/2019	2/6/2019	2.73%	209,369	176	-	210,318
MUFG Bank NY 0 9/23/2019	62479MWP4	396,000	9/23/2019	3/27/2019	2.61%	390,892	176	-	391,014
JPMorgan Securities 0 9/23/2019	46640QWP2	4,872,000	9/23/2019	1/4/2019	2.97%	4,768,819	176	-	4,810,662
MUFG Bank NY 0 9/23/2019	62479MWP4	8,855,000	9/23/2019	3/27/2019	2.61%	8,740,771	176	-	8,743,516
Natixis NY 0 9/23/2019	63873KWP8	5,000,000	9/23/2019	3/27/2019	2.61%	4,935,500	176	-	4,937,050

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Federal Agencies									
FHLB 1.375 5/28/2019	3130ABF92	\$ 5,260,000	5/28/2019	7/26/2017	1.40%	\$ 5,257,423	58	\$ 24,711	\$ 5,251,137
FHLB 1.375 5/28/2019	3130ABF92	5,245,000	5/28/2019	8/31/2017	1.34%	5,248,409	58	24,641	5,236,162
FHLB 1.625 6/14/2019	313379EE5	7,050,000	6/14/2019	9/1/2017	1.38%	7,080,033	75	34,051	7,038,861
FHLMC 0.875 7/19/2019	3137EAE81	5,230,000	7/19/2019	7/26/2017	1.41%	5,176,079	110	9,153	5,205,074
FHLMC 0.875 7/19/2019	3137EAE81	6,720,000	7/19/2019	8/31/2017	1.36%	6,659,386	110	11,760	6,687,972
FHLMC 1.375 8/15/2019	3137EAEH8	5,215,000	8/15/2019	7/26/2017	1.45%	5,206,917	137	9,162	5,194,797
FNMA 1 8/28/2019	3135G0P49	6,715,000	8/28/2019	8/31/2017	1.39%	6,664,100	150	6,155	6,674,891
FNMA 1.75 9/12/2019	3135G0ZG1	4,705,000	9/12/2019	7/26/2017	1.45%	4,734,171	165	4,346	4,689,897
FHLB 1 9/26/2019	3130A9EP2	7,550,000	9/26/2019	8/31/2017	1.39%	7,490,053	179	1,049	7,497,528
FHLMC 1.25 10/2/2019	3137EADM8	5,045,000	10/2/2019	12/28/2017	1.93%	4,985,469	185	31,356	5,014,377
FHLB 2.125 2/11/2020	3130ADN32	3,750,000	2/11/2020	6/28/2018	2.52%	3,726,750	317	11,068	3,739,523
FHLMC 2.5 4/23/2020	3137EAEH7	3,750,000	4/23/2020	6/28/2018	2.56%	3,746,288	389	41,146	3,752,013
FHLB 2.625 5/28/2020	3130AECJ7	3,750,000	5/28/2020	6/28/2018	2.57%	3,753,825	424	33,633	3,758,081
FHLMC 2.375 2/16/2021	3137EAEH9	3,500,000	2/16/2021	8/8/2018	2.79%	3,465,210	688	10,391	3,503,395
FHLMC 2.375 2/16/2021	3137EAEH9	20,000,000	2/16/2021	8/8/2018	2.79%	19,801,200	688	59,375	20,019,400
FHLMC 2.375 2/16/2021	3137EAEH9	250,000	2/16/2021	8/9/2018	2.78%	247,563	688	742	250,243
FHLMC 2.375 2/16/2021	3137EAEH9	685,000	2/16/2021	8/9/2018	2.78%	678,321	688	2,034	685,664
FNMA 2.5 4/13/2021	3135G0U27	3,500,000	4/13/2021	8/8/2018	2.82%	3,471,685	744	40,833	3,512,985
FNMA 2.5 4/13/2021	3135G0U27	20,000,000	4/13/2021	8/8/2018	2.82%	19,838,200	744	233,333	20,074,200
FNMA 2.5 4/13/2021	3135G0U27	250,000	4/13/2021	8/9/2018	2.81%	247,985	744	2,917	250,928
FNMA 2.5 4/13/2021	3135G0U27	3,400,000	4/13/2021	8/8/2018	2.81%	3,372,698	744	39,667	3,412,614
FNMA 2.5 4/13/2021	3135G0U27	685,000	4/13/2021	8/9/2018	2.81%	679,479	744	7,992	687,541
FNMA 2.5 4/13/2021	3135G0U27	5,750,000	4/13/2021	8/8/2018	2.81%	5,703,828	744	67,083	5,771,333

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

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 1.625 4/30/2019	912828D23	\$ 2,000,000	4/30/2019	8/8/2018	2.35%	\$ 1,989,609	30	\$ 13,557	\$ 1,998,680
T-Note 1.625 4/30/2019	912828D23	1,250,000	4/30/2019	2/7/2019	2.40%	1,247,803	30	8,473	1,249,175
T-Note 1.25 4/30/2019	912828S18	5,225,000	4/30/2019	7/26/2017	1.37%	5,214,183	30	27,244	5,219,514
T-Note 1.625 4/30/2019	912828D23	11,200,000	4/30/2019	2/7/2019	2.36%	11,181,188	30	75,917	11,192,608
T-Note 1.625 4/30/2019	912828D23	4,000,000	4/30/2019	8/8/2018	2.35%	3,979,219	30	27,113	3,997,360
T-Note 1.25 4/30/2019	912828S18	6,680,000	4/30/2019	8/31/2017	1.31%	6,673,216	30	34,830	6,672,986
T-Note 1.25 5/31/2019	912828XS4-1	5,180,000	5/31/2019	7/26/2017	1.37%	5,168,669	61	21,524	5,169,624
T-Note 1.25 5/31/2019	912828XS4-2	3,690,000	5/31/2019	10/1/2018	2.49%	3,660,019	61	15,333	3,682,620
T-Note 1.25 5/31/2019	912828XS4-2	3,875,000	5/31/2019	10/1/2018	2.49%	3,843,516	61	16,101	3,867,250
T-Note 0.875 6/15/2019	912828R85-1	510,000	6/15/2019	9/5/2018	2.40%	504,063	76	1,300	508,326
T-Note 0.875 6/15/2019	912828R85-1	508,000	6/15/2019	10/2/2018	2.51%	502,265	76	1,294	506,332
T-Note 0.875 6/15/2019	912828R85-1	1,077,000	6/15/2019	8/8/2018	2.41%	1,063,117	76	2,744	1,073,464
T-Note 0.875 6/15/2019	912828R85-1	506,000	6/15/2019	12/4/2018	2.57%	501,513	76	1,289	504,339
T-Note 0.875 6/15/2019	912828R85-1	507,000	6/15/2019	2/1/2019	2.41%	504,148	76	1,292	505,336
T-Note 0.875 6/15/2019	912828R85-1	521,000	6/15/2019	1/3/2019	2.49%	517,276	76	1,328	519,290
T-Note 0.875 6/15/2019	912828R85-1	508,000	6/15/2019	11/2/2018	2.56%	502,781	76	1,294	506,332
T-Note 0.875 6/15/2019	912828R85-1	912,000	6/15/2019	9/5/2018	2.40%	901,384	76	2,324	909,006
T-Note 0.875 6/15/2019	912828R85-1	910,000	6/15/2019	10/2/2018	2.51%	899,727	76	2,319	907,012
T-Note 0.875 6/15/2019	912828R85-1	908,000	6/15/2019	11/2/2018	2.56%	898,672	76	2,314	905,019
T-Note 0.875 6/15/2019	912828R85-1	933,000	6/15/2019	1/3/2019	2.49%	926,331	76	2,377	929,937
T-Note 0.875 6/15/2019	912828R85-1	906,000	6/15/2019	2/1/2019	2.41%	900,904	76	2,309	903,026
T-Note 0.875 6/15/2019	912828R85-1	906,000	6/15/2019	12/4/2018	2.57%	897,966	76	2,309	903,026
T-Note 0.875 6/15/2019	912828R85-1	1,929,000	6/15/2019	8/8/2018	2.41%	1,904,134	76	4,915	1,922,667
T-Note 0.875 6/16/2019	912828R85-2	729,000	6/16/2019	8/8/2018	2.41%	719,603	77	1,858	726,609
T-Note 0.875 6/16/2019	912828R85-2	1,503,000	6/16/2019	11/2/2018	2.55%	1,487,618	77	3,830	1,498,070
T-Note 0.875 6/16/2019	912828R85-2	900,000	6/16/2019	9/5/2018	2.39%	889,523	77	2,293	897,048
T-Note 0.875 6/16/2019	912828R85-2	1,428,000	6/16/2019	2/1/2019	2.42%	1,419,912	77	3,639	1,423,316
T-Note 0.875 6/16/2019	912828R85-2	896,000	6/16/2019	12/4/2018	2.56%	888,055	77	2,283	893,061
T-Note 0.875 6/16/2019	912828R85-2	919,000	6/16/2019	1/2/2019	2.48%	912,395	77	2,342	915,986
T-Note 0.875 6/16/2019	912828R85-2	905,000	6/16/2019	10/2/2018	2.49%	894,819	77	2,306	902,032
T-Note 0.875 6/16/2019	912828R85-2	1,236,000	6/16/2019	9/5/2018	2.39%	1,221,612	77	3,149	1,231,946
T-Note 0.875 6/16/2019	912828R85-2	2,143,000	6/16/2019	11/2/2018	2.55%	2,121,068	77	5,461	2,135,971
T-Note 0.875 6/16/2019	912828R85-2	1,240,000	6/16/2019	10/2/2018	2.49%	1,226,050	77	3,160	1,235,933
T-Note 0.875 6/16/2019	912828R85-2	860,000	6/16/2019	8/8/2018	2.41%	848,914	77	2,191	857,179
T-Note 0.875 6/16/2019	912828R85-2	1,262,000	6/16/2019	1/2/2019	2.48%	1,252,929	77	3,216	1,257,861
T-Note 0.875 6/16/2019	912828R85-2	1,230,000	6/16/2019	12/4/2018	2.56%	1,219,093	77	3,134	1,225,966
T-Note 0.875 6/16/2019	912828R85-2	2,117,000	6/16/2019	2/1/2019	2.42%	2,105,009	77	5,394	2,110,056

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

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 1.25 6/30/2019	912828XV7-1	20,185,000	6/30/2019	8/8/2018	2.43%	19,975,265	91	62,730	20,122,023
T-Note 1.25 6/30/2019	912828XV7-1	15,140,000	6/30/2019	8/8/2018	2.43%	14,982,686	91	47,051	15,092,763
T-Note 1.25 6/30/2019	912828XV7-2	1,700,000	6/30/2019	9/20/2018	2.16%	1,688,115	91	5,283	1,694,696
T-Note 1.25 6/30/2019	912828XV7-1	4,763,000	6/30/2019	2/28/2018	2.17%	4,705,695	91	14,802	4,748,139
T-Note 1.625 6/30/2019	912828WS5	146,000	6/30/2019	7/21/2017	1.35%	146,776	91	590	145,674
T-Note 1.625 6/30/2019	912828WS5	135,000	6/30/2019	10/3/2018	2.53%	134,104	91	545	134,699
T-Note 1 6/30/2019	912828TC4	1,021,000	6/30/2019	7/13/2018	2.36%	1,007,799	91	2,538	1,017,171
T-Note 1 6/30/2019	912828TC4	127,000	6/30/2019	7/13/2018	2.36%	125,358	91	316	126,524
T-Note 1.25 6/30/2019	912828XV7-2	1,743,000	6/30/2019	2/6/2019	2.46%	1,734,694	91	5,417	1,737,562
T-Note 1.625 6/30/2019	912828WS5	3,342,000	6/30/2019	3/13/2019	2.45%	3,333,645	91	13,502	3,334,547
T-Note 1.625 6/30/2019	912828WS5	5,500,000	6/30/2019	10/30/2018	2.56%	5,466,055	91	22,220	5,487,735
T-Note 1.625 6/30/2019	912828WS5	1,625,000	6/30/2019	2/27/2017	1.27%	1,638,267	91	6,565	1,621,376
T-Note 1.25 6/30/2019	912828XV7-1	5,800,000	6/30/2019	10/11/2017	1.49%	5,776,664	91	18,025	5,781,904
T-Note 1.25 6/30/2019	912828XV7-1	159,000	6/30/2019	2/28/2018	2.17%	157,087	91	494	158,504
T-Note 1.625 6/30/2019	912828WS5	4,475,000	6/30/2019	2/10/2017	1.32%	4,506,989	91	18,079	4,465,021
T-Note 1 6/30/2019	912828TC4	2,059,000	6/30/2019	7/13/2018	2.36%	2,032,378	91	5,119	2,051,279
T-Note 1.625 6/30/2019	912828WS5	6,537,000	6/30/2019	3/13/2019	2.45%	6,520,658	91	26,410	6,522,422
T-Note 1.625 6/30/2019	912828WS5	892,000	6/30/2019	3/13/2019	2.45%	889,770	91	3,604	890,011
T-Note 1.25 6/30/2019	912828XV7-1	10,050,000	6/30/2019	10/11/2017	1.49%	10,009,564	91	31,233	10,018,644
T-Note 1.25 6/30/2019	912828XV7-1	195,000	6/30/2019	2/28/2018	2.17%	192,654	91	606	194,392
T-Note 1.625 6/30/2019	912828WS5	2,450,000	6/30/2019	2/27/2017	1.27%	2,470,002	91	9,898	2,444,537
T-Note 1.25 6/30/2019	912828XV7-1	100,000	6/30/2019	9/20/2018	1.49%	99,818	91	311	99,688
T-Note 1.625 8/31/2019	912828D80	3,500,000	8/31/2019	8/8/2018	2.51%	3,467,734	153	4,791	3,486,735
T-Note 1.625 8/31/2019	912828D80	20,000,000	8/31/2019	8/8/2018	2.51%	19,815,625	153	27,378	19,924,200
T-Note 1.625 8/31/2019	912828D80	250,000	8/31/2019	8/9/2018	2.50%	247,715	153	342	249,053
T-Note 1.625 8/31/2019	912828D80	3,400,000	8/31/2019	8/8/2018	2.51%	3,368,656	153	4,654	3,387,114
T-Note 1.625 8/31/2019	912828D80	685,000	8/31/2019	8/9/2018	2.50%	678,739	153	938	682,404
T-Note 1.625 8/31/2019	912828D80	5,750,000	8/31/2019	8/8/2018	2.51%	5,696,992	153	7,871	5,728,208
T-Note 1.25 10/31/2019	912828TV2	1,275,000	10/31/2019	2/7/2019	2.54%	1,263,196	214	6,648	1,266,088
T-Note 1.5 10/31/2019	912828F62-2	2,000,000	10/31/2019	8/8/2018	2.56%	1,974,453	214	12,514	1,988,820
T-Note 1.5 10/31/2019	912828F62-1	3,405,000	10/31/2019	6/28/2018	2.43%	3,363,635	214	21,305	3,385,980
T-Note 1.25 10/31/2019	912828TV2	11,275,000	10/31/2019	2/7/2019	2.53%	11,171,499	214	58,789	11,196,188
T-Note 1.5 10/31/2019	912828F62-2	4,000,000	10/31/2019	8/8/2018	2.56%	3,948,906	214	25,028	3,977,640
T-Note 1.75 11/30/2019	9128283H1	3,350,000	11/30/2019	6/28/2018	2.44%	3,317,809	244	19,488	3,334,821
T-Note 1.75 11/30/2019	9128283H1	3,780,000	11/30/2019	6/28/2018	2.44%	3,743,677	244	21,989	3,762,873
T-Note 1.875 12/31/2019	9128283N8	3,300,000	12/31/2019	6/28/2018	2.46%	3,271,770	275	15,383	3,286,084
T-Note 1.875 12/31/2019	9128283N8	3,750,000	12/31/2019	6/28/2018	2.46%	3,717,920	275	17,481	3,734,186

In addition to the totals listed above, there also exists surety bonds in the amount of \$322,809,258 as of March 31, 2019.



Great Lakes Water Authority
Portfolio Holdings
As of March 31, 2019

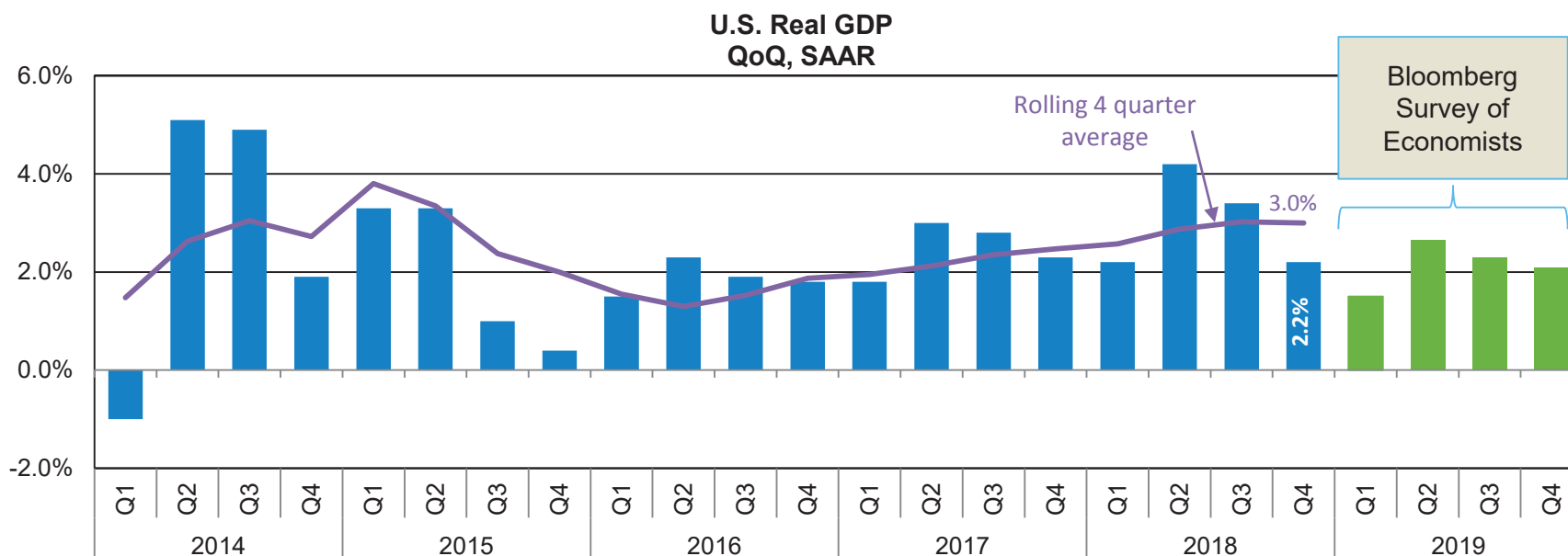
DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
U.S. Treasuries									
T-Note 1.125 12/31/2019	912828UF5	10,925,000	12/31/2019	1/4/2019	2.57%	10,771,794	275	30,557	10,819,574
T-Note 2 1/31/2020	9128283S7	3,750,000	1/31/2020	6/28/2018	2.46%	3,723,047	306	12,224	3,737,550
T-Note 2.25 2/29/2020	9128283Y4	3,500,000	2/29/2020	8/8/2018	2.63%	3,479,902	335	6,634	3,495,065
T-Note 2.25 2/29/2020	9128283Y4	20,000,000	2/29/2020	8/8/2018	2.63%	19,885,156	335	37,908	19,971,800
T-Note 2.25 2/29/2020	9128283Y4	250,000	2/29/2020	8/9/2018	2.62%	248,594	335	474	249,648
T-Note 2.25 2/29/2020	9128283Y4	3,400,000	2/29/2020	8/8/2018	2.63%	3,380,477	335	6,444	3,395,206
T-Note 2.25 2/29/2020	9128283Y4	685,000	2/29/2020	8/9/2018	2.62%	681,147	335	1,298	684,034
T-Note 2.25 2/29/2020	9128283Y4	5,750,000	2/29/2020	8/8/2018	2.63%	5,716,982	335	10,898	5,741,893
T-Note 2.25 3/31/2020	9128284C1	3,725,000	3/31/2020	6/28/2018	2.49%	3,709,431	366	-	3,718,742
T-Note 2.5 5/31/2020	9128284Q0	3,500,000	5/31/2020	8/8/2018	2.66%	3,489,883	427	29,087	3,504,375
T-Note 2.5 5/31/2020	9128284Q0	20,000,000	5/31/2020	8/8/2018	2.66%	19,942,188	427	166,209	20,025,000
T-Note 2.5 5/31/2020	9128284Q0	250,000	5/31/2020	8/9/2018	2.66%	249,297	427	2,078	250,313
T-Note 2.5 5/31/2020	9128284Q0	3,400,000	5/31/2020	8/8/2018	2.66%	3,390,172	427	28,255	3,404,250
T-Note 2.5 5/31/2020	9128284Q0	685,000	5/31/2020	8/9/2018	2.66%	683,073	427	5,693	685,856
T-Note 2.5 5/31/2020	9128284Q0	5,750,000	5/31/2020	8/8/2018	2.66%	5,733,379	427	47,785	5,757,188
T-Note 1.875 6/30/2020	912828VJ6-1	3,750,000	6/30/2020	6/28/2018	2.52%	3,703,271	457	17,481	3,725,978
T-Note 1.875 6/30/2020	912828VJ6-2	4,600,000	6/30/2020	10/30/2018	2.81%	4,530,102	457	21,443	4,570,514
T-Note 1.875 6/30/2020	912828VJ6-2	2,900,000	6/30/2020	7/3/2018	2.54%	2,862,730	457	13,519	2,881,411
T-Note 1.625 6/30/2020	912828XH8	9,705,000	6/30/2020	10/11/2017	1.61%	9,709,928	457	39,209	9,612,511
T-Note 1.625 6/30/2020	912828XH8	4,565,000	6/30/2020	2/27/2017	1.54%	4,578,374	457	18,443	4,521,496
T-Note 1.625 6/30/2020	912828XH8	6,560,000	6/30/2020	10/11/2017	1.61%	6,563,331	457	26,503	6,497,483
T-Note 2.125 8/31/2020	912828VV9	3,500,000	8/31/2020	8/8/2018	2.69%	3,460,762	519	6,265	3,488,520
T-Note 2.125 8/31/2020	912828VV9	20,000,000	8/31/2020	8/8/2018	2.69%	19,775,781	519	35,802	19,934,400
T-Note 2.125 8/31/2020	912828VV9	250,000	8/31/2020	8/9/2018	2.69%	247,188	519	448	249,180
T-Note 2.125 8/31/2020	912828VV9	3,400,000	8/31/2020	8/8/2018	2.69%	3,361,883	519	6,086	3,388,848
T-Note 2.125 8/31/2020	912828VV9	685,000	8/31/2020	8/9/2018	2.69%	677,294	519	1,226	682,753
T-Note 2.125 8/31/2020	912828VV9	5,750,000	8/31/2020	8/8/2018	2.69%	5,685,537	519	10,293	5,731,140
T-Note 2 11/30/2020	912828A42	3,500,000	11/30/2020	8/8/2018	2.72%	3,444,082	610	23,269	3,480,435
T-Note 2 11/30/2020	912828A42	20,000,000	11/30/2020	8/8/2018	2.72%	19,680,469	610	132,967	19,888,200
T-Note 2 11/30/2020	912828A42	250,000	11/30/2020	8/9/2018	2.72%	246,006	610	1,662	248,603
T-Note 2 11/30/2020	912828A42	3,400,000	11/30/2020	9/17/2018	2.81%	3,341,828	610	22,604	3,380,994
T-Note 2 11/30/2020	912828A42	685,000	11/30/2020	8/9/2018	2.72%	674,056	610	4,554	681,171
T-Note 2 11/30/2020	912828A42	5,750,000	11/30/2020	9/17/2018	2.81%	5,651,621	610	38,228	5,717,858
T-Note 2.625 5/15/2021	9128284P2	245,000	5/15/2021	2/7/2019	2.49%	245,708	776	2,416	246,713
T-Note 2.625 5/15/2021	9128284P2	3,455,000	5/15/2021	2/7/2019	2.49%	3,464,852	776	34,073	3,479,150
T-Note 2.625 5/15/2021	9128284P2	700,000	5/15/2021	2/7/2019	2.49%	702,023	776	6,903	704,893
T-Note 2.625 5/15/2021	9128284P2	5,685,000	5/15/2021	2/7/2019	2.49%	5,701,211	776	56,065	5,724,738

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Appendix II: Economic Update

Economic Growth Slows in the Fourth Quarter

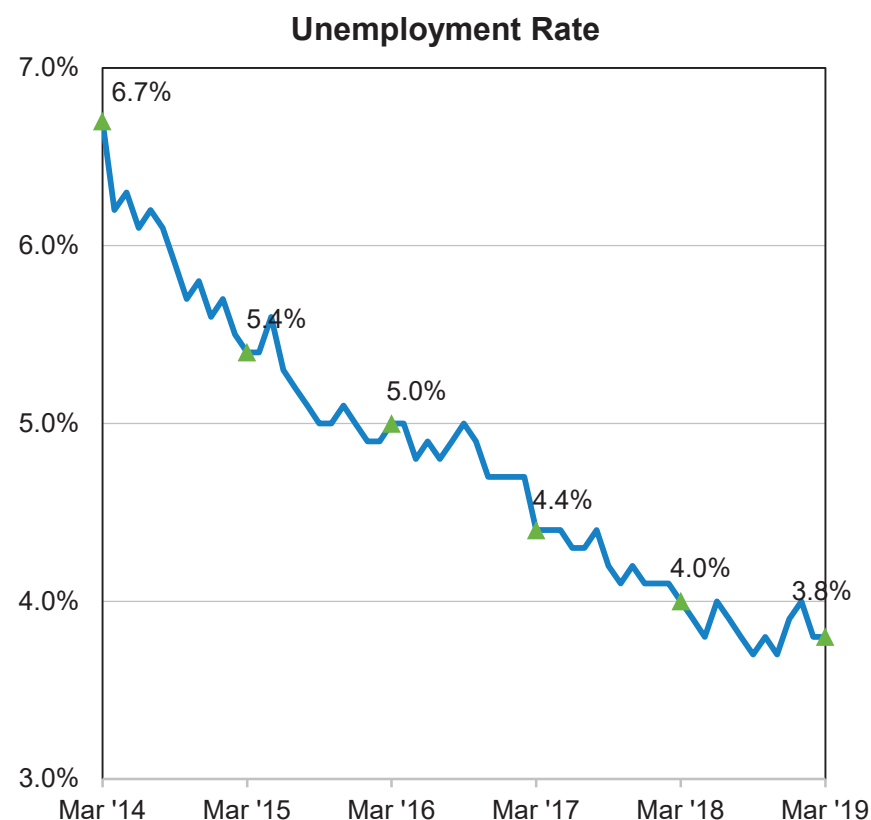
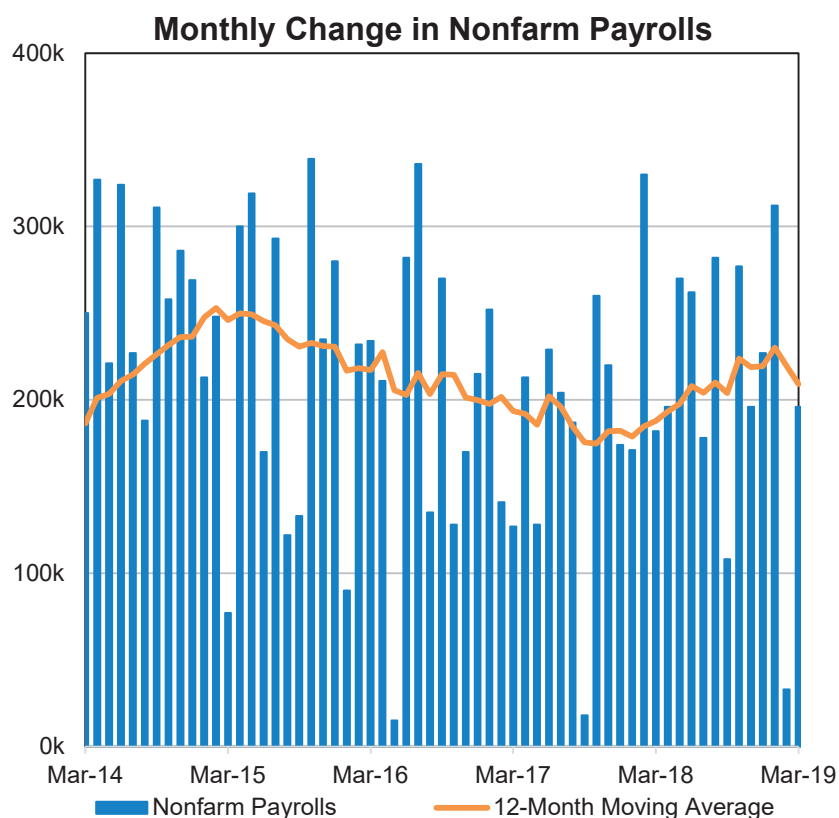
- U.S. economic activity experienced moderate growth during the fourth quarter
 - GDP grew at a 2.2% annual rate, marking a slowdown from the 2nd and 3rd quarters, which were the best back-to-back quarters since 2014
 - This slowing GDP growth occurred as the impact of the 2018 federal tax cuts and increased federal government spending waned
- Growth is projected to further decline in 2019
 - Potential imbalances, including a growing budget deficit, and challenges over trade and border security funding lead to uncertainty surrounding future growth



Source: Bloomberg, as of March 31, 2019. SAAR is seasonally adjusted annualized rate. Purple denotes rolling four-quarter averages

Labor Market Bounces Back in March

- The U.S. economy added 196,000 jobs in March, recovering from a very weak February jobs report
- The unemployment rate remains at a historically low level at 3.8%

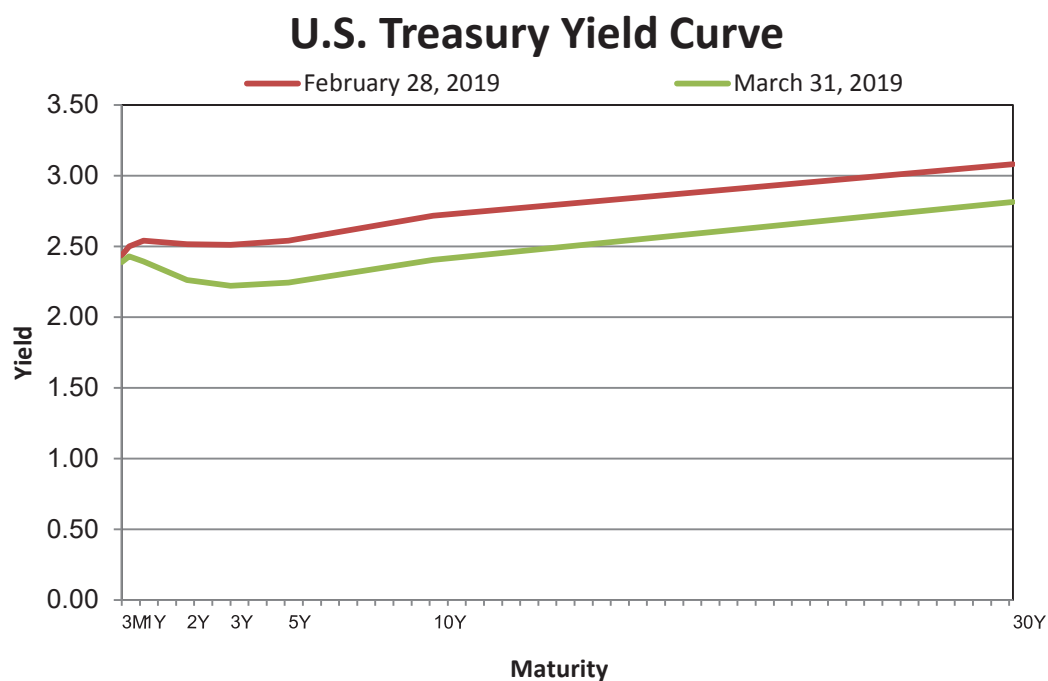


Source: Bloomberg, as of March 2019.

U.S. Treasury Yield Curve

- The U.S. Treasury yield curve continues to exhibit a very slight inversion
- Interest rates decreased across the curve during the month of March, with the strongest decline in maturities two years and beyond

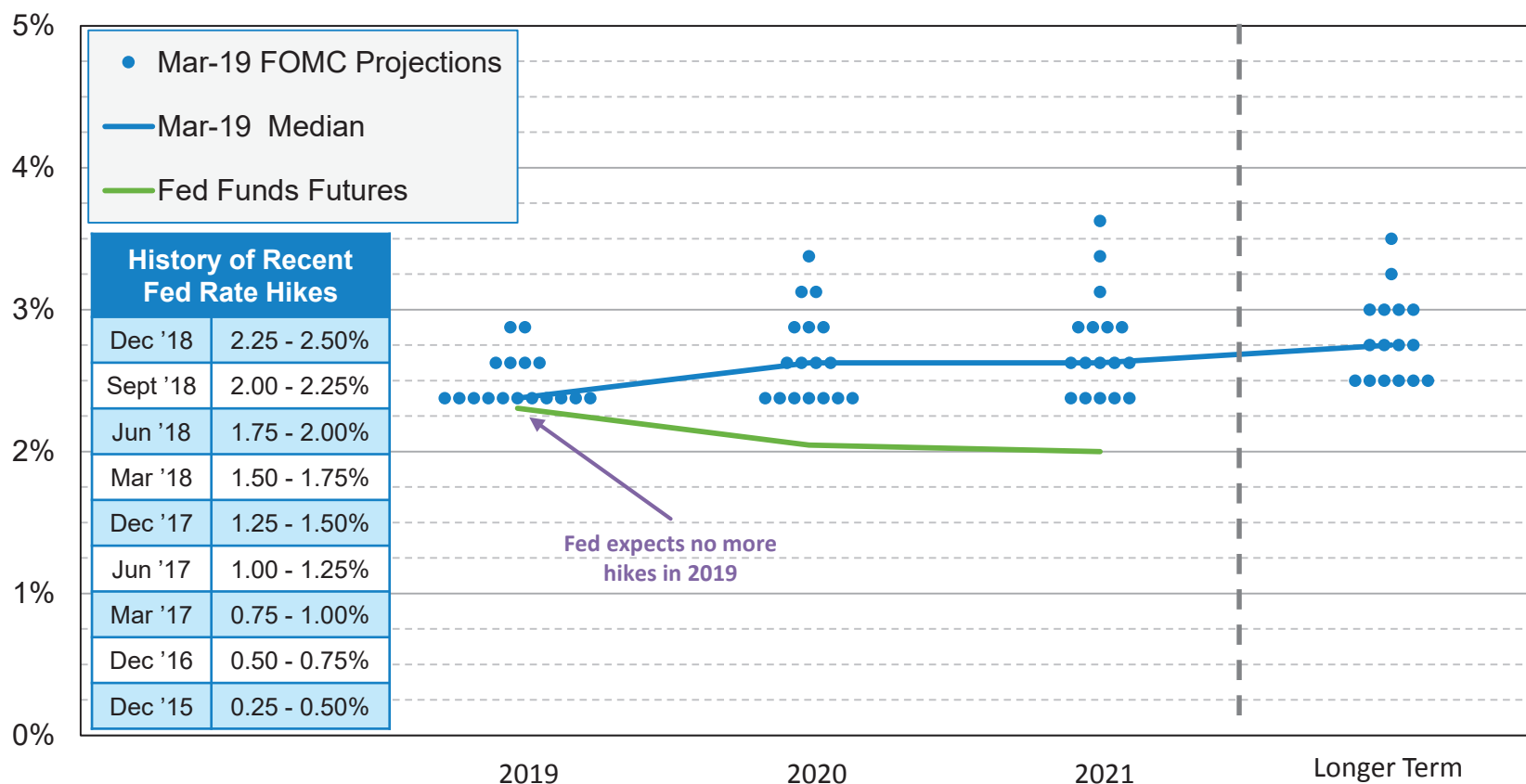
	<u>2/28/19</u>	<u>3/31/19</u>	<u>Change</u>
3 month	2.44%	2.39%	-0.05%
6 month	2.50%	2.43%	-0.07%
1 year	2.54%	2.39%	-0.15%
2 year	2.52%	2.26%	-0.25%
3 year	2.51%	2.22%	-0.29%
5 year	2.54%	2.24%	-0.30%
10 year	2.72%	2.41%	-0.31%
30 year	3.08%	2.82%	-0.27%



Source: Bloomberg

FOMC's March "Dot Plot" Shifts to No Hike in 2019

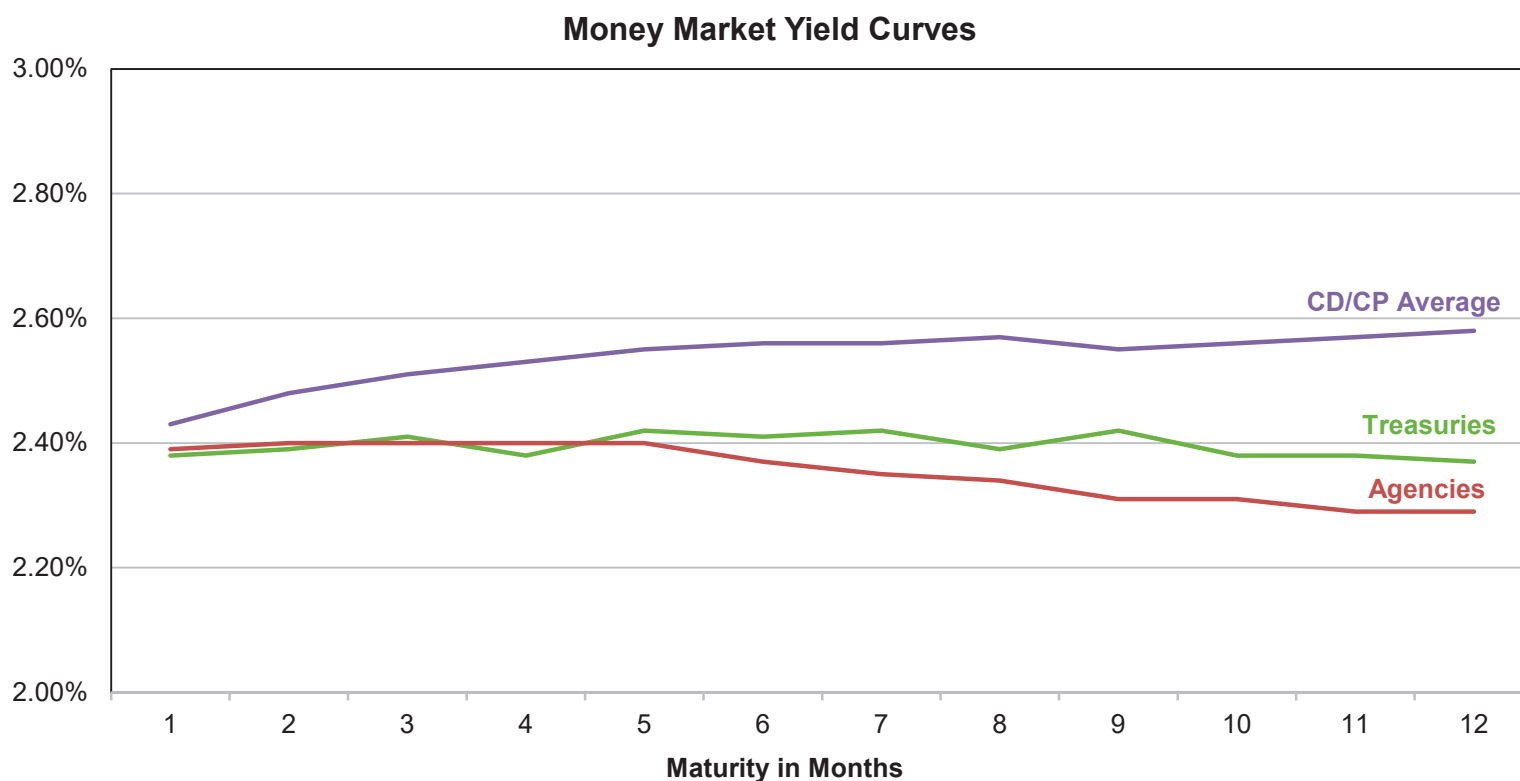
Fed Participants' Assessments of 'Appropriate' Monetary Policy



Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the Federal Funds rate at each year-end. Fed Funds futures as of 3/20/19.

Current Short-Term Credit Environment

- Commercial paper and bank certificates of deposit (CP / CD) yield spreads widened slightly during March
- U.S. Treasuries continue to be relatively attractive versus Agency discount notes, especially in 7 to 12 month maturity range



Source: Bloomberg, PFMAM Trading Desk, as of 3/31/19. Not a specific recommendation.

**Great Lakes Water Authority
Market Overview and Outlook****FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS**

- In a strong reversal, equity markets, credit spreads, and volatility all reversed their sharp sell-off from the fourth quarter, ending the first quarter nearly back to where they were six months ago
 - But, interest rates continued to move lower and the yield curve inverted
- Economic conditions were characterized by the following:
 - U.S. GDP growth slowed to a pace of 2.2% in the fourth quarter, following second quarter and third quarter figures of 4.2% and 3.4%, respectively
 - Inflation metrics hovered near the Fed’s target of 2.0%, but wage growth continued to improve, reaching 3.4% year-over-year, the largest gain in nearly a decade
 - The unemployment rate improved to 3.8% in February, but job gains were volatile, perhaps impacted by the government shutdown
 - Consumer sentiment metrics firmed in the first quarter on the heels of equity market strength and a resolution to the government’s longest shut down in history
 - The Fed held short-term rates unchanged at the current target range of 2.25% to 2.50%, but shifted to a “patient” stance on future rate actions, which drove market expectations that the Fed’s next move will be a rate cut rather than a hike
 - The S&P 500 returned 13.6% in the first quarter, the best quarterly return since the third quarter of 2009
- U.S. Treasury yields with maturities beyond one year fell 20 – 30%)
 - In the last week of the quarter, the 3-month to 10-year part of the yield curve inverted, renewing concerns about a possible recession in coming months

Great Lakes Water Authority
Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- The Fed is on hold and the market's current outlook is for slower economic growth and lower future interest rates\ul style="list-style-type: none;"> - Because of the maturity of the current business cycle, growth prospects are decelerating
- Short-term credit investors benefitted from high yields and wide spreads at the beginning of the year, resulting in favorable income generation for the previous quarter; the rally in bond yields during the first quarter generated strong absolute returns for the majority of fixed-income indices
 - Our sector allocation strategy continued to favor broad diversification, generally including the widest range of permitted investments; while the fourth quarter's market de-risking strongly favored Treasuries, the first quarter's rebound generated strong excess returns for portfolios that included other spread product as most fixed income sectors outperformed similar-duration Treasuries
 - With Agency spreads near historic lows, we continued to favor other sectors, though the exceptions were a few new issues that offered wider than average yield spreads; Federal Agency spreads remained very narrow during the first quarter – generally less than five basis points (0.05%) for maturities under five years, but, even that small incremental yield led to modest excess returns for the quarter
- The outlook for some of the major investment-grade fixed-income sectors are as follows:
 - As Federal Agency spreads remain very tight, we will continue to moderate use of the sector, seeking better value in either Treasuries or other sectors; given the flat yield curve, we will also evaluate callable Agencies for their incremental yield
 - Money market investors continue to reap the rewards of short-term rates above 2.25%; short-term, high quality credit in the form of commercial paper continues to offer good income potential, especially in light of the partially inverted Treasury yield curve

Disclosure

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Financial Services Audit Committee Communication

Date: May 15, 2019

To: Great Lakes Water Authority Audit Committee

From: Alicia Haskin, Management Professional – Intergovernmental Relations

Re: May 6, 2019 Reconciliation Committee Meeting Update

Background: The 2018 Memorandum of Understanding between the Detroit Water and Sewerage Department (DWSD) and Great Lakes Water Authority (GLWA) states that the Reconciliation Committee defined by the Water and Sewer Services Agreement shall meet at a minimum quarterly. The last meeting was on May 6, 2019.

The purpose of the quarterly meetings is to ensure there is communication between the two entities related to financial, operational, legal, capital planning, and other matters.

Analysis: The attached documents from the May 6th Reconciliation Committee Meeting include the following:

- Reconciliation Committee Meeting Summary
 - Summarizes the items discussed and the action items from the meeting.
- DWSD Loan Receivable Amortization Schedule
 - Defines the required repayment of the DWSD FY 2016 and FY 2017 Sewer shortfall and payments made to date.
- Draft DWSD Monthly Financial Report
 - Assists both parties in understanding the financial position of DWSD for FY 2019 to date.
- Draft DWSD Other Reports
 - Assists both entities in understanding the FY 2019 DWSD revenue trends and forecast.

Proposed Action: Receive and file report.



**DWSD & GLWA
Reconciliation Committee
May 6, 2019 at 10:00 a.m.
Water Board Building
735 Randolph, Ste. 1606, Detroit, MI 48226**



Summary

1) Review of Prior Meeting Notes from February 11, 2019

A. FY 2017 DWSD Budget Shortfall

- i. The Parties' CFOs agree that no formal note is deemed to be necessary since the MOU clearly defines the terms of the repayment by DWSD.
- ii. DWSD has made payments during FY 2019.
- iii. GLWA distributed an amortization schedule. It is attached as well.
- iv. GLWA will also include report on these payments at the next GLWA Audit Committee.

2) Status Report: Cash Held for the Benefit of DWSD

A. Tom Naughton, DWSD CFO, provided the following draft reports, dated 5/6/2019:

- i. Accounts Receivable Rollforward – Water and Sewer Funds
 1. Sales for the first five months of FY 2019 included Shared Services through November 30, 2018. Beginning in December 2018, Shared Services has been removed from Enquesta. See the highlighted sections to show this adjustment.
 2. IWC has been removed from Sewer revenues.
- ii. Retail Sales and Collections Forecasts – Water and Sewer Funds
 1. DWSD assumed a 94% collection rate of was assumed.
 - a. DWSD is comfortable with water forecasts for next year's budget.
 2. This draft report is based on billing months. There is a 60-day deferral for payments. 30 days for billing and another 30 days for payments.
 3. The sewer budget is projected to be \$19M below budget. DWSD expects \$5M in highway receipts.
 4. Impervious acreage adjustments had a \$5.5M negative impact on the budget.
- iii. Cash @ GLWA – Cash Flow Forecasts – Water and Sewer Funds
 1. Projected receipts are used in this draft report.
 - a. Water is at \$10.878M

b. Sewer is at negative \$47.458M.

2. DWSD expects the collections to improve to help mitigate the sewer shortfall.

iv. DWSD Monthly Financial Report – For the Nine Months Ended March 31, 2019

1. DWSD is working to clear interfunds and some of the current available cash will go to clearing these accounts.

2. DWSD does not expect a FY 2019 shortfall.

3. DWSD will continue to pay the 2017 note and then will begin payment on the 2018 note. It is expected that the 2017 note will be paid off in two years and the 2018 note the following year.

B. DWSD and GLWA will have a “check-in” call at the end of June 2019 to discuss the FY 2019 shortfall status, if any

3) Status Report: Watermain Arbitration/Transmission Main

A. Chlorination/Dechlorination arbitration is moving forward. All arbitrators have been identified. A 60-day timeframe is expected to see movement on this issue.

B. DWSD will provide a proposal for the allocation of water mains by June 6, 2019. DWSD will specify the following information:

i. Mains that DWSD agrees to be transferred/decommissioned

ii. Mains that DWSD does not agree with to be transferred/decommissioned

iii. Mains that DWSD believes need more research to make a determination on which entity is responsible for operation, maintenance and improvement costs

C. DWSD believes this is an important issue to resolve but want to make sure that it is right. It believes that the Parties need to discuss right sizing of the system. The Parties believe that the arbitration and the review of the mains can continue on parallel paths.

D. As the water main allocation issue continues, GLWA indicated that there needs to be a discussion regarding the allocation of the continued maintenance costs (i.e. water main breaks) that GLWA is paying.

4) Status Report: DWSD Retail Account Billings for GLWA Facilities

A. GLWA has submitted an initial group of requests for review of impervious acreage. DWSD has responded and has made these reviews a priority.

B. GLWA will submit additional requests for review. GLWA wanted to ensure that the proper information was being provided to DWSD to complete these reviews.

C. GLWA will have a better understanding of where the drainage accounts stand by the end of this fiscal year.

5) Status Report: Information Technology Shared Services Update

A. An internal draft for a Data Sharing Agreement is in process. This agreement will ensure all parties protect the information received from the other party.

B. DWSD has provided the following termination notices. The following Shared Services

termination notices have been received:

- i. ITS-001 Retail AMR. Extension #2 received ending June 30, 2019.
 - ii. ITS-006 ESRI-GIS. Termination received ending July1, 2019.
- C. OPS-004 Water Quality need to be redrafted as the laboratory costs will be included in costs of service after July 1, 2019.

6) Status Report: Shared Services FY 2017 True-Up

- A. It appears that an FY 2017 True-Up will be agreed to by May 20th (two weeks).
- B. Parties need to draft and agree to Standard Operating Procedure to simplify the process.

7) Scheduled Meetings:

May 6, 2019 10 am – 12 pm

~~July 19, 2019 10:30 am – 12 pm~~ – Rescheduled to July 31, 2019 10 am – 12 pm

October 18, 2019 10:30 am – 12 pm

Reconciliation Committee

Linda D. Forte, Board of Water Commissioners

Robert J. Daddow, Great Lakes Water Authority Board of Directors

Reconciliation Committee Participants

Gary Brown, Director, Detroit Water & Sewerage Department

Sue McCormick, Chief Executive Officer, Great Lakes Water Authority

Tom Naughton, Chief Financial Officer, Detroit Water & Sewerage Department

Nickie Bateson, Chief Financial Officer & Treasurer, Great Lakes Water Authority

Debra Pospiech, Chief Administrative Officer and General Counsel

Randal Brown, General Counsel, Great Lakes Water Authority

DWSD Note Payable to GLWA
Amortization Schedule

Note amount	\$ 29,300,000
Annual interest rate	4.125%
Loan period in years	3
Number of payments per year	12
Start date of payments	7/31/2018

*30 days per mo/360 days per year

PAYMENT DATE	BEGINNING BALANCE	MINIMUM MONTHLY PAYMENT	PRINCIPAL	INTEREST*	ENDING BALANCE	DATE PAID	Additional Interest Due	Cumulative Additional Interest Due
7/31/2018	\$ 29,300,000.00	\$ 866,682.95	\$ 765,964.20	\$ 100,718.75	\$ 29,300,000.00	2/8/2019	19,067.02	19,067.02
8/31/2018	\$ 28,534,035.80	\$ 866,682.95	\$ 768,597.20	\$ 98,085.75	\$ 27,765,438.60	2/8/2019	15,988.49	35,055.51
9/30/2018	\$ 27,765,438.60	\$ 866,682.95	\$ 771,239.25	\$ 95,443.70	\$ 26,994,199.35	2/8/2019	13,009.27	48,064.78
10/31/2018	\$ 26,994,199.35	\$ 866,682.95	\$ 773,890.39	\$ 92,792.56	\$ 26,220,308.96	2/8/2019	9,930.74	57,995.52
11/30/2018	\$ 26,220,308.96	\$ 866,682.95	\$ 776,550.64	\$ 90,132.31	\$ 25,443,758.32	2/8/2019	6,951.52	64,947.04
12/31/2018	\$ 25,443,758.32	\$ 866,682.95	\$ 779,220.03	\$ 87,462.92	\$ 24,664,538.29	2/8/2019	3,872.99	68,820.03
1/31/2019	\$ 24,664,538.29	\$ 866,682.95	\$ 781,898.60	\$ 84,784.35	\$ 23,882,639.69	2/22/2019	2,184.76	
2/28/2019	\$ 23,882,639.69	\$ 866,682.95	\$ 784,586.38	\$ 82,096.57	\$ 23,098,053.31	2/22/2019		
3/31/2019	\$ 23,098,053.31	\$ 866,682.95	\$ 787,283.39	\$ 79,399.56	\$ 22,310,769.92	2/22/2019		
4/30/2019	\$ 22,310,769.92	\$ 866,682.95	\$ 789,989.68	\$ 76,693.27	\$ 21,520,780.24	4/15/2019		
5/31/2019	\$ 21,520,780.24	\$ 866,682.95	\$ 792,705.27	\$ 73,977.68	\$ 20,728,074.97			
6/30/2019	\$ 20,728,074.97	\$ 866,682.95	\$ 795,430.19	\$ 71,252.76	\$ 19,932,644.78			
7/31/2019	\$ 19,932,644.78	\$ 866,682.95	\$ 798,164.48	\$ 68,518.47	\$ 19,134,480.30			
8/31/2019	\$ 19,134,480.30	\$ 866,682.95	\$ 800,908.17	\$ 65,774.78	\$ 18,333,572.13			
9/30/2019	\$ 18,333,572.13	\$ 866,682.95	\$ 803,661.30	\$ 63,021.65	\$ 17,529,910.83			
10/31/2019	\$ 17,529,910.83	\$ 866,682.95	\$ 806,423.88	\$ 60,259.07	\$ 16,723,486.95			
11/30/2019	\$ 16,723,486.95	\$ 866,682.95	\$ 809,195.96	\$ 57,486.99	\$ 15,914,290.99			
12/31/2019	\$ 15,914,290.99	\$ 866,682.95	\$ 811,977.57	\$ 54,705.38	\$ 15,102,313.42			
1/31/2020	\$ 15,102,313.42	\$ 866,682.95	\$ 814,768.75	\$ 51,914.20	\$ 14,287,544.67			
2/29/2020	\$ 14,287,544.67	\$ 866,682.95	\$ 817,569.52	\$ 49,113.43	\$ 13,469,975.15			
3/31/2020	\$ 13,469,975.15	\$ 866,682.95	\$ 820,379.91	\$ 46,303.04	\$ 12,649,595.24			
4/30/2020	\$ 12,649,595.24	\$ 866,682.95	\$ 823,199.97	\$ 43,482.98	\$ 11,826,395.27			
5/31/2020	\$ 11,826,395.27	\$ 866,682.95	\$ 826,029.72	\$ 40,653.23	\$ 11,000,365.55			
6/30/2020	\$ 11,000,365.55	\$ 866,682.95	\$ 828,869.19	\$ 37,813.76	\$ 10,171,496.36			
7/31/2020	\$ 10,171,496.36	\$ 866,682.95	\$ 831,718.43	\$ 34,964.52	\$ 9,339,777.93			
8/31/2020	\$ 9,339,777.93	\$ 866,682.95	\$ 834,577.46	\$ 32,105.49	\$ 8,505,200.47			
9/30/2020	\$ 8,505,200.47	\$ 866,682.95	\$ 837,446.32	\$ 29,236.63	\$ 7,667,754.15			
10/31/2020	\$ 7,667,754.15	\$ 866,682.95	\$ 840,325.05	\$ 26,357.90	\$ 6,827,429.10			
11/30/2020	\$ 6,827,429.10	\$ 866,682.95	\$ 843,213.66	\$ 23,469.29	\$ 5,984,215.44			

12/31/2020	\$	5,984,215.44	\$	866,682.95	\$	846,112.21	\$	20,570.74	\$	5,138,103.23
1/31/2021	\$	5,138,103.23	\$	866,682.95	\$	849,020.72	\$	17,662.23	\$	4,289,082.51
2/28/2021	\$	4,289,082.51	\$	866,682.95	\$	851,939.23	\$	14,743.72	\$	3,437,143.28
3/31/2021	\$	3,437,143.28	\$	866,682.95	\$	854,867.77	\$	11,815.18	\$	2,582,275.51
4/30/2021	\$	2,582,275.51	\$	866,682.95	\$	857,806.38	\$	8,876.57	\$	1,724,469.13
5/31/2021	\$	1,724,469.13	\$	866,682.95	\$	860,755.09	\$	5,927.86	\$	863,714.04
6/30/2021	\$	863,714.04	\$	866,683.06	\$	863,714.04	\$	2,969.02	\$	-
		<u>\$</u>	<u>31,200,586.31</u>	<u>\$</u>	<u>29,300,000.00</u>	<u>\$</u>	<u>1,900,586.31</u>			

Detroit Water and Sewerage Department

Monthly Financial Report

For the Nine Months Ended March 31, 2019

Draft 5/6/2019



Combining Water Funds

March 31, 2019

	Water Operating	Water I&E	Construction Series 2013	Construction Series 2016	Capital Assets	Combined Water Funds
Assets						
Cash	\$ 23,298,435	\$ 44,588,328	\$ -	\$ -	\$ -	\$ 67,886,763
Restricted Cash and Investments	3,297,321	-	6,792,208	19,504,804	-	29,594,333
Cash on deposit with GLWA	6,889,944	-	-	-	-	6,889,944
Receivables:						
Customer receivables	14,460,488	-	-	-	-	14,460,488
Unbilled accounts receivable	9,724,035	-	-	-	-	9,724,035
Other receivables	829,143	127,564	(757,661)	-	-	199,046
Receivable from Great Lakes Water Authority	7,739,367	12,498	-	-	-	7,751,865
Due from other funds	20,378,276	20,276,913	2,944,762	5,038,032	-	48,637,983
Inventory	3,380,693	-	-	-	-	3,380,693
Prepaid expenses	446,022	-	-	-	-	446,022
Assets not subject to depreciation	-	-	-	-	57,142,765	57,142,765
Assets subject to depreciation - net	-	-	-	-	482,245,412	482,245,412
Receivable from Great Lakes Water Authority (LT)	17,096,738	448,460,673	-	-	-	465,557,411
Total assets	107,540,462	513,465,976	8,979,309	24,542,836	539,388,177	1,193,916,760
Deferred Outflows of Resources	14,365,753	-	-	-	-	14,365,753
Liabilities						
Accounts payable	2,646,496	1,335,535	1,345,489	2,656,216	-	7,983,736
Due to other funds	27,174,132	9,181,839	15,002,363	3,629,150	-	54,987,484
Deposits	5,431,473	-	-	-	-	5,431,473
Accrued salaries and wages payable	6,737,024	-	-	-	-	6,737,024
Accrued liabilities and other	9,052,361	11,250,000	-	-	-	20,302,361
Accrued interest	1,941,491	-	-	-	-	1,941,491
Accrued compensated absences	1,675,525	-	-	-	-	1,675,525
Accrued workers' compensation claims	7,258,895	-	-	-	-	7,258,895
Net pension liability	46,942,909	-	-	-	-	46,942,909
Net OPEB obligation	237,462	-	-	-	-	237,462
Bonds payable and contractual obligation	444,805,439	-	-	66,865,846	-	511,671,285
Total liabilities	553,903,207	21,767,374	16,347,852	73,151,212	-	665,169,645
Deferred Inflows of Resources	7,120,444	-	-	-	-	7,120,444
Net Position						
Net investment in capital assets					539,388,178	539,388,178
Restricted:						
Improvements and extensions		491,698,602	(7,368,542)	(48,608,376)		435,721,684
Budget stabilization						-
Unrestricted	(439,117,455)					(439,117,455)
Total net position	\$ (439,117,455)	\$ 491,698,602	\$ (7,368,542)	\$ (48,608,376)	\$ 539,388,178	\$ 535,992,407

Combining Water Funds

For the Nine Months Ended March 31, 2019

	Water Operating	Water I&E	Construction Series 2013	Construction Series 2016	Capital Assets	Combined Water Funds
Operating Revenue						
Water sales	\$ 78,213,422	\$ -	\$ -	\$ -	\$ -	\$ 78,213,422
Shared service revenue	644,247	-	-	-	-	644,247
Penalties and fees	4,589,851	-	-	-	-	4,589,851
Miscellaneous	1,190,373	217,344	10,228	509,019	-	1,926,964
Total operating revenue	84,637,893	217,344	10,228	509,019	-	85,374,484
Operating Expenses						
Salaries, wages and benefits	21,088,216	-	-	280,695	(280,695)	21,088,216
Contractual services	3,563,206	13,414,807	-	19,611,176	(25,898,048)	10,691,141
Wholesale charges	15,244,578	-	-	-	-	15,244,578
Operating	2,667,177	-	-	-	-	2,667,177
Operating supplies	1,782,692	3,124	-	-	-	1,785,816
Repairs and maintenance	745,144	-	-	-	-	745,144
Utilities	909,042	-	-	-	-	909,042
Shared services	1,312,526	-	-	-	-	1,312,526
Miscellaneous	4,139	-	-	-	-	4,139
Claims and judgements	64,366	-	-	-	-	64,366
Bad debt	5,120,536	-	-	-	-	5,120,536
Depreciation	-	-	-	-	12,699,686	12,699,686
Total operating expenses	52,501,622	13,417,931	-	19,891,871	(13,479,057)	72,332,367
Operating Income (Loss)	32,136,271	(13,200,587)	10,228	(19,382,852)	13,479,057	13,042,117
Nonoperating Revenue (Expense)						
Investment income	-	-	-	322,435	-	322,435
Loss on disposal of capital assets	-	-	-	-	-	-
Interest revenue on lease with GLWA	-	12,527,350	-	-	-	12,527,350
Principal forgiveness on state revolving fund loans	-	-	-	-	-	-
Miscellaneous (Non-operating)	5,917	-	-	-	-	5,917
Interest expense, net of capitalized interest	(17,469,675)	-	-	-	-	(17,469,675)
Total nonoperating expense	(17,463,758)	12,527,350	-	322,435	-	(4,613,973)
Change in Net Position	14,672,513	(673,237)	10,228	(19,060,417)	13,479,057	8,428,144
Net Position - Beginning of Year	(453,789,968)	492,371,839	(7,378,770)	(29,547,959)	525,909,121	527,564,263
Net Position - End of Year	\$ (439,117,455)	\$ 491,698,602	\$ (7,368,542)	\$ (48,608,376)	\$ 539,388,178	\$ 535,992,407

Sewage Disposal Funds

Combining Sewage Disposal Funds

March 31, 2019

	Sewer Operating	Sewer I&E	Construction Series 2012	Construction Series 2018	Capital Assets	Combined Sewer Funds
Assets						
Cash	\$ 53,799,247	\$ 14,724,474	\$ -	\$ -	\$ -	\$ 68,523,721
Restricted Cash and Investments	5,500,000	-	2,788,917	91,760,425	-	100,049,342
Receivables:						
Customer receivables	63,085,163	-	-	-	-	63,085,163
Unbilled accounts receivable	24,200,000	-	-	-	-	24,200,000
Other receivables	1,429,984	523,477	-	-	-	1,953,461
Receivable from Great Lakes Water Authority	13,952,535	-	845,470	-	-	14,798,005
Due from other funds	20,393,318	61,498,939	3,715,863	-	-	85,608,120
Inventory	848,085	-	-	-	-	848,085
Prepaid expenses	423,960	-	-	-	-	423,960
Assets not subject to depreciation	-	-	-	-	50,047,804	50,047,804
Assets subject to depreciation - net	-	-	-	-	453,723,944	453,723,944
Receivable from Great Lakes Water Authority	38,456,230	548,118,599	-	-	-	586,574,829
Total assets	222,088,522	624,865,489	7,350,250	91,760,425	503,771,748	1,449,836,434
Deferred Outflows of Resources	10,402,369	-	-	531,771	-	10,934,140
Liabilities						
Accounts payable	3,423,659	921,071	2,320,939	-	-	6,665,669
Due to Great Lakes Water Authority	29,770,294	22,310,770	-	-	-	52,081,064
Due to other funds	73,628,519	5,252,171	8,338,390	-	-	87,219,080
Deposits	-	-	-	-	-	-
Accrued salaries and wages payable	9,488,123	-	-	-	-	9,488,123
Accrued liabilities and other	26,969,686	13,750,000	-	-	-	40,719,686
Accrued interest	3,169,374	-	-	-	-	3,169,374
Accrued compensated absences	2,513,288	-	-	-	-	2,513,288
Accrued workers' compensation claims	3,222,992	-	-	-	-	3,222,992
Net pension liability	32,609,564	-	-	-	-	32,609,564
Net OPEB obligation	216,828	-	-	-	-	216,828
Bonds payable and contractual obligation	387,392,301	-	-	91,531,771	-	478,924,072
Total liabilities	572,404,628	42,234,012	10,659,329	91,531,771	-	716,829,740
Deferred Inflows of Resources	6,259,808	-	-	-	-	6,259,808
Net Position						
Net investment in capital assets					503,771,745	503,771,745
Restricted:						
Improvements and extensions		582,631,478				582,631,478
Budget stabilization						-
Unrestricted	(346,173,555)		(3,309,079)	760,425		(348,722,209)
Total net position	\$ (346,173,555)	\$ 582,631,478	\$ (3,309,079)	\$ 760,425	\$ 503,771,745	\$ 737,681,014

Sewage Disposal Funds

Combining Sewage Disposal Funds

For the Nine Months Ended March 31, 2019

	Sewer Operating	Sewer I&E	Construction Series 2012	Construction Series 2018	Capital Assets	Combined Sewer Funds
Operating Revenue						
Sewage disposal charges	\$ 224,820,587	\$ -	\$ -	\$ -	\$ -	\$ 224,820,587
Shared service revenue	2,051,731	-	-	-	-	2,051,731
Penalties and fees	2,641,228	-	-	-	-	2,641,228
Miscellaneous	7,806,555	539,342	198,099	760,425	-	9,304,421
Total operating revenue	237,320,101	539,342	198,099	760,425	-	238,817,967
Operating Expenses						
Salaries, wages and benefits	26,650,750	-	-	-	-	26,650,750
Contractual services	6,762,139	22,918,312	-	-	(20,741,377)	8,939,074
Wholesale charges	137,255,697	-	-	-	-	137,255,697
Operating	2,751,848	-	-	-	-	2,751,848
Operating supplies	167,455	-	-	-	-	167,455
Repairs and maintenance	634,940	-	-	-	-	634,940
Utilities	2,143,556	-	-	-	-	2,143,556
Shared services	2,868,960	-	-	-	-	2,868,960
Miscellaneous	1,195,382	-	-	-	-	1,195,382
Claims and judgements	352,846	-	-	-	-	352,846
Bad debt	18,193,650	-	-	-	-	18,193,650
Depreciation	-	-	-	-	8,951,346	8,951,346
Total operating expenses	198,977,223	22,918,312	-	-	(11,790,031)	210,105,504
Operating Income (Loss)	38,342,878	(22,378,970)	198,099	760,425	11,790,031	28,712,463
Nonoperating Revenue (Expense)						
Investment income	-	-	-	-	-	-
Loss on disposal of capital assets	-	-	-	-	-	-
Interest revenue on lease with GLWA	-	15,311,202	-	-	-	15,311,202
Principal forgiveness on state revolving fund loans	-	-	-	-	-	-
Miscellaneous (Non-operating)	-	-	-	-	-	-
Interest expense, net of capitalized interest	(13,121,148)	(810,916)	-	-	-	(13,932,064)
Total nonoperating expense	(13,121,148)	14,500,286	-	-	-	1,379,138
Change in Net Position	25,221,730	(7,878,684)	198,099	760,425	11,790,031	30,091,601
Net Position - Beginning of Year	(371,395,285)	590,510,162	(3,507,178)	-	491,981,714	707,589,413
Net Position - End of Year	\$ (346,173,555)	\$ 582,631,478	\$ (3,309,079)	\$ 760,425	\$ 503,771,745	\$ 737,681,014

Statement of Revenue and Expenses - Budget and Actual

Water and Sewer Operating Funds

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Operating Revenue						
Retail sales	\$ 72,892,275	\$ 78,213,422	\$ 5,321,147	\$ 227,079,450	\$ 224,820,587	\$ (2,258,863)
Shared service revenue	1,258,050	644,247	(613,803)	1,887,150	2,051,731	164,581
Penalties and fees	3,300,225	4,589,851	1,289,626	3,723,450	2,641,228	(1,082,222)
Miscellaneous	2,199,375	1,190,373	(1,009,002)	375,000	7,806,555	7,431,555
Total operating revenue	79,649,925	84,637,893	4,987,968	233,065,050	237,320,101	4,255,051
Operating Expenses						
Salaries, wages and benefits	19,289,850	21,088,216	1,798,366	26,116,500	26,650,750	534,250
Contractual services	6,479,325	3,563,206	(2,916,119)	14,319,975	6,762,139	(7,557,836)
Operating	2,610,375	2,667,177	56,802	5,717,025	2,751,848	(2,965,177)
Operating supplies	185,100	1,782,692	1,597,592	366,225	167,455	(198,770)
Repairs and maintenance	1,581,225	745,144	(836,081)	2,929,500	634,940	(2,294,560)
Utilities	681,975	909,042	227,067	1,891,200	2,143,556	252,356
Miscellaneous	11,625	4,139	(7,486)	1,971,000	1,195,382	(775,618)
Claims and judgements	750,000	64,366	(685,634)	2,625,000	352,846	(2,272,154)
Wholesale charges	15,243,600	15,244,578	978	137,256,825	137,255,697	(1,128)
Shared services	2,702,550	1,312,526	(1,390,024)	3,901,200	2,868,960	(1,032,240)
Bad debt	4,571,550	5,120,536	548,986	20,772,225	18,193,650	(2,578,575)
Depreciation	-	-	-	-	-	-
Total operating expenses	54,107,175	52,501,622	(1,605,553)	217,866,675	198,977,223	(18,889,452)
Operating Income (Loss)	25,542,750	32,136,271	6,593,521	15,198,375	38,342,878	23,144,503
Nonoperating Revenue (Expense)						
Miscellaneous (Non-operating)	-	5,917	5,917	4,895,400	-	(4,895,400)
Interest expense, net	(25,542,750)	(17,469,675)	8,073,075	(20,093,775)	(13,121,148)	6,972,627
Investment income	-	-	-	-	-	-
Interest revenue on lease with GLWA	-	-	-	-	-	-
Total nonoperating expense	(25,542,750)	(17,463,758)	8,078,992	(15,198,375)	(13,121,148)	2,077,227
Change in Net Position	\$ -	\$ 14,672,513	\$ 14,672,513	\$ -	\$ 25,221,730	\$ 25,221,730

Schedule of Expenses by Cost Center - Budget and Actual
Water and Sewer Operating Funds

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Board of Water Commissioners						
Salaries, wages and benefits	\$ 51,525	\$ 18,065	\$ (33,460)	\$ 119,850	\$ 41,347	\$ (78,503)
Contractual services	262,200	233,472	(28,728)	611,700	544,823	(66,877)
Operating	59,850	20,893	(38,957)	139,500	48,750	(90,750)
Operating supplies	675	-	(675)	1,575	-	(1,575)
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	374,250	272,430	(101,820)	872,625	634,920	(237,705)
Chief Executive Officer						
Salaries, wages and benefits	3,475,350	3,798,575	323,225	2,774,850	3,491,877	717,027
Contractual services	115,875	85,011	(30,864)	270,375	33,626	(236,749)
Operating	572,325	742,326	170,001	1,335,300	971,806	(363,494)
Operating supplies	8,325	2,344	(5,981)	13,050	6,269	(6,781)
Repairs and maintenance	-	3,175	3,175	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	675	298	(377)	1,575	1,001,617	1,000,042
Shared services	112,500	54,072	(58,428)	-	-	-
Total operating expenses	4,285,050	4,685,801	400,751	4,395,150	5,505,195	1,110,045
Public Affairs						
Salaries, wages and benefits	102,825	102,932	107	240,300	231,842	(8,458)
Contractual services	337,500	223,953	(113,547)	787,500	534,689	(252,811)
Operating	51,600	2,712	(48,888)	120,300	9,429	(110,871)
Operating supplies	19,500	2,732	(16,768)	39,075	6,374	(32,701)
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	511,425	332,329	(179,096)	1,187,175	782,334	(404,841)
Security						
Salaries, wages and benefits	545,625	653,702	108,077	1,269,600	1,376,277	106,677
Contractual services	27,000	1,274	(25,726)	63,000	2,972	(60,028)
Operating	42,000	5,371	(36,629)	97,950	(61,900)	(159,850)
Operating supplies	14,400	-	(14,400)	27,225	-	(27,225)
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	1,125	-	(1,125)	2,625	-	(2,625)
Shared services	76,050	42,675	(33,375)	130,200	99,575	(30,625)
Total operating expenses	706,200	703,022	(3,178)	1,590,600	1,416,924	(173,676)

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Field Services Director						
Salaries, wages and benefits	199,125	176,433	(22,692)	298,500	258,823	(39,677)
Contractual services	600,000	359,925	(240,075)	600,000	609,213	9,213
Operating	34,500	34,126	(374)	49,875	16,068	(33,807)
Operating supplies	6,000	-	(6,000)	7,875	-	(7,875)
Repairs and maintenance	-	(151)	(151)	-	(40,110)	(40,110)
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Shared services	300,000	115,160	(184,840)	450,000	268,707	(181,293)
Total operating expenses	1,139,625	685,493	(454,132)	1,406,250	1,112,701	(293,549)
Field Services Operations						
Salaries, wages and benefits	5,278,575	6,056,109	777,534	5,278,575	5,603,811	325,236
Contractual services	151,875	474,017	322,142	335,625	51,984	(283,641)
Operating	466,050	61,708	(404,342)	699,075	123,146	(575,929)
Operating supplies	12,525	1,607,948	1,595,423	17,325	47,691	30,366
Repairs and maintenance	900,000	217,410	(682,590)	1,350,000	74,422	(1,275,578)
Utilities	-	-	-	-	-	-
Miscellaneous	300	487	187	450	500	50
Total operating expenses	6,809,325	8,417,679	1,608,354	7,681,050	5,901,554	(1,779,496)
Field Engineering						
Salaries, wages and benefits	1,036,350	1,160,821	124,471	1,554,525	1,592,377	37,852
Contractual services	75,000	45,186	(29,814)	37,500	70,575	33,075
Operating	29,100	8,897	(20,203)	43,650	13,575	(30,075)
Operating supplies	7,125	68	(7,057)	9,225	159	(9,066)
Repairs and maintenance	-	833	833	-	136	136
Utilities	-	-	-	-	-	-
Miscellaneous	1,500	139	(1,361)	2,250	232	(2,018)
Total operating expenses	1,149,075	1,215,944	66,869	1,647,150	1,677,054	29,904
Meter Operations						
Salaries, wages and benefits	869,700	980,165	110,465	1,304,625	1,376,579	71,954
Contractual services	438,000	4,170	(433,830)	657,000	10,192	(646,808)
Operating	7,275	5,511	(1,764)	16,575	11,302	(5,273)
Operating supplies	10,725	58,078	47,353	18,375	130	(18,245)
Repairs and maintenance	93,300	15,215	(78,085)	207,675	18,143	(189,532)
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	1,419,000	1,063,139	(355,861)	2,204,250	1,416,346	(787,904)

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Facility Operations						
Salaries, wages and benefits	509,100	435,529	(73,571)	764,025	607,319	(156,706)
Contractual services	792,375	642,366	(150,009)	1,200,225	1,148,693	(51,532)
Operating	4,500	1,667	(2,833)	10,500	3,661	(6,839)
Operating supplies	81,375	-	(81,375)	183,225	-	(183,225)
Repairs and maintenance	184,050	57,606	(126,444)	429,450	123,613	(305,837)
Utilities	681,975	909,042	227,067	1,591,200	2,143,556	552,356
Miscellaneous	-	-	-	-	-	-
Total operating expenses	2,253,375	2,046,210	(207,165)	4,178,625	4,026,842	(151,783)
Fleet Operations						
Salaries, wages and benefits	600,900	767,267	166,367	901,200	1,066,942	165,742
Contractual services	616,650	17,640	(599,010)	945,600	26,460	(919,140)
Operating	8,775	1,978	(6,797)	20,325	4,617	(15,708)
Operating supplies	7,350	(815)	(8,165)	10,500	-	(10,500)
Repairs and maintenance	366,750	333,848	(32,902)	855,750	397,437	(458,313)
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	1,600,425	1,119,918	(480,507)	2,733,375	1,495,456	(1,237,919)
Stormwater Management						
Salaries, wages and benefits	-	-	-	905,550	595,691	(309,859)
Contractual services	-	-	-	1,297,500	757,230	(540,270)
Operating	-	-	-	46,500	9,278	(37,222)
Operating supplies	-	-	-	11,250	-	(11,250)
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	300,000	-	(300,000)
Miscellaneous	-	-	-	3,750	-	(3,750)
Total operating expenses	-	-	-	2,564,550	1,362,199	(1,202,351)
General Counsel						
Salaries, wages and benefits	112,275	99,853	(12,422)	261,900	239,772	(22,128)
Contractual services	475,875	162,500	(313,375)	1,477,875	154,927	(1,322,948)
Operating	11,700	24,495	12,795	27,300	10,980	(16,320)
Operating supplies	-	-	-	-	-	-
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	1,125	338	(787)	2,625	49,788	47,163
Claims and judgments	750,000	64,366	(685,634)	2,625,000	352,846	(2,272,154)
Total operating expenses	1,350,975	351,552	(999,423)	4,394,700	808,313	(3,586,387)

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Organizational Development						
Salaries, wages and benefits	232,500	265,151	32,651	542,550	592,946	50,396
Contractual services	1,800	5,462	3,662	4,200	12,745	8,545
Operating	79,875	15,921	(63,954)	121,650	26,490	(95,160)
Operating supplies	675	5,695	5,020	1,575	12,625	11,050
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	314,850	292,229	(22,621)	669,975	644,806	(25,169)
Information Technology						
Salaries, wages and benefits	492,675	483,058	(9,617)	1,149,900	1,086,350	(63,550)
Contractual services	306,675	336,445	29,770	715,575	733,773	18,198
Operating	661,575	672,165	10,590	1,606,950	980,968	(625,982)
Operating supplies	-	-	-	-	-	-
Repairs and maintenance	23,625	1,063	(22,562)	55,125	-	(55,125)
Utilities	-	-	-	-	-	-
Miscellaneous	-	2,000	2,000	-	3,000	3,000
Shared services	2,214,000	951,815	(1,262,185)	3,321,000	2,220,903	(1,100,097)
Total operating expenses	3,698,550	2,446,546	(1,252,004)	6,848,550	5,024,994	(1,823,556)
Customer Service						
Salaries, wages and benefits	1,528,275	1,535,196	6,921	3,572,925	3,417,518	(155,407)
Contractual services	241,875	(37,681)	(279,556)	564,375	119,702	(444,673)
Operating	44,025	8,301	(35,724)	102,525	15,344	(87,181)
Operating supplies	9,975	-	(9,975)	15,900	-	(15,900)
Repairs and maintenance	-	2,199	2,199	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	5,625	409	(5,216)	13,125	955	(12,170)
Total operating expenses	1,829,775	1,508,424	(321,351)	4,268,850	3,553,519	(715,331)
Chief Financial Officer						
Salaries, wages and benefits	171,525	164,092	(7,433)	404,400	367,561	(36,839)
Contractual services	78,750	14,818	(63,932)	183,600	22,227	(161,373)
Operating	375	-	(375)	975	-	(975)
Operating supplies	-	376	376	-	524	524
Repairs and maintenance	-	-	-	-	329	329
Utilities	-	-	-	-	-	-
Miscellaneous	450	-	(450)	1,050	-	(1,050)
Shared services	-	148,804	148,804	-	279,775	279,775
Total operating expenses	251,100	328,090	76,990	590,025	670,416	80,391

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Controller						
Salaries, wages and benefits	354,375	354,978	603	827,400	784,713	(42,687)
Contractual services	894,375	111,548	(782,827)	2,086,875	174,424	(1,912,451)
Operating	8,850	94,433	85,583	20,700	120,636	99,936
Operating supplies	450	105,821	105,371	1,050	93,346	92,296
Repairs and maintenance	-	38,930	38,930	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	450	167	(283)	1,050	307	(743)
Total operating expenses	1,258,500	705,877	(552,623)	2,937,075	1,173,426	(1,763,649)
Procurement						
Salaries, wages and benefits	384,750	327,479	(57,271)	898,125	731,195	(166,930)
Contractual services	19,350	24,449	5,099	45,150	50,115	4,965
Operating	6,075	1,023	(5,052)	14,175	2,343	(11,832)
Operating supplies	3,000	5	(2,995)	4,500	-	(4,500)
Repairs and maintenance	13,500	75,016	61,516	31,500	60,970	29,470
Utilities	-	-	-	-	-	-
Miscellaneous	375	301	(74)	825	703	(122)
Total operating expenses	427,050	428,273	1,223	994,275	845,326	(148,949)
Treasury						
Salaries, wages and benefits	106,500	87,772	(18,728)	248,850	199,492	(49,358)
Contractual services	56,250	-	(56,250)	131,250	-	(131,250)
Operating	159,825	675,553	515,728	372,975	79,577	(293,398)
Operating supplies	-	440	440	-	337	337
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	322,575	763,765	441,190	753,075	279,406	(473,669)
Public Finance						
Salaries, wages and benefits	57,600	55,665	(1,935)	134,025	125,360	(8,665)
Contractual services	-	-	-	-	-	-
Operating	-	-	-	-	-	-
Operating supplies	-	-	-	-	-	-
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	57,600	55,665	(1,935)	134,025	125,360	(8,665)

For the Nine Months Ended March 31, 2019

	Water Operating Fund			Sewer Operating Fund		
	Budget	Actual	Over (Under) Budget	Budget	Actual	Over (Under) Budget
Finance - Budget						
Salaries, wages and benefits	57,300	51,688	(5,612)	133,575	118,779	(14,796)
Contractual services	20,400	-	(20,400)	47,550	-	(47,550)
Operating	1,875	-	(1,875)	4,500	-	(4,500)
Operating supplies	3,000	-	(3,000)	4,500	-	(4,500)
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	82,575	51,688	(30,887)	190,125	118,779	(71,346)
Billing and Collections						
Salaries, wages and benefits	266,100	193,136	(72,964)	621,300	444,076	(177,224)
Contractual services	967,500	858,651	(108,849)	2,257,500	1,703,769	(553,731)
Operating	-	-	-	-	-	-
Operating supplies	-	-	-	-	-	-
Repairs and maintenance	-	-	-	-	-	-
Utilities	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
Total operating expenses	1,233,600	1,051,787	(181,813)	2,878,800	2,147,845	(730,955)
Non-Departmental						
Operating Pension	2,856,900	3,320,550	463,650	1,909,950	2,300,103	390,153
Water Retail Assistance Program	360,225	290,097	(70,128)	865,725	365,778	(499,947)
Miscellaneous	-	-	-	1,941,675	138,280	(1,803,395)
Wholesale charges	15,243,600	15,244,578	978	137,256,825	137,255,697	(1,128)
Bad debt expense	4,571,550	5,120,536	548,986	20,772,225	18,193,650	(2,578,575)
Total operating expenses	23,032,275	23,975,761	943,486	162,746,400	158,253,508	(4,492,892)
Total Cost Centers	\$ 54,107,175	\$ 52,501,622	\$ (1,605,553)	\$ 217,866,675	\$ 198,977,223	\$ (18,889,452)

City of Detroit Water and Sewerage Department

Draft 5/6/2019

Accounts Receivable Rollforward
Water and Sewer Funds

Usage Month	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Billed Month	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19

WATER													
Net Sales	\$ 8,937,673	\$ 10,484,827	\$ 10,888,060	\$ 8,044,031	\$ 8,028,509	\$ 8,642,598	\$ 7,488,819	\$ 8,397,071	\$ 8,406,844	\$ -	\$ -	\$ -	-
Collections	(7,042,907)	(7,865,544)	(9,421,153)	(8,541,011)	(7,474,097)	(6,919,447)	(12,515,391)	(7,574,879)	(8,014,714)	-	-	-	-
Write-offs and Adjustments	(105,895)	(128,034)	(143,411)	(761,092)	(110,143)	(74,728)	(178,770)	(151,840)	67,409	-	-	-	-
Net Change in Water Receivables	1,788,871	2,491,248	1,323,497	(1,258,072)	444,269	1,648,423	(5,205,343)	670,353	459,540	-	-	-	-
Accounts Receivable - BOM	37,553,462	39,342,333	41,833,581	43,157,078	41,899,007	42,343,276	43,991,699	38,786,357	39,456,709	-	-	-	-
Accounts Receivable - End of Month	\$ 39,342,333	\$ 41,833,581	\$ 43,157,078	\$ 41,899,007	\$ 42,343,276	\$ 43,991,699	\$ 38,786,357	\$ 39,456,709	\$ 39,916,249	\$ -	\$ -	\$ -	-
EnQuesta Control Total	\$ 39,342,322	\$ 41,833,644	\$ 43,163,262	\$ 41,905,608	\$ 42,348,729	\$ 43,997,392	\$ 38,792,050	\$ 39,462,334	\$ 39,929,397	\$ -	\$ -	\$ -	-

Collection Rates*:													
Current Month		88.0%	89.9%	78.4%	92.9%	86.2%	144.8%	101.1%	95.4%				
Three Month Rolling Average				85.2%	86.5%	85.1%	108.9%	111.8%	114.6%				
* Collections lag 1 month following billing													

SEWER													
Net Sales	24,276,812	26,332,508	29,399,507	22,210,550	23,135,286	24,264,673	23,498,694	24,092,245	25,042,249	-	-	-	-
Collections	(21,558,665)	(21,507,638)	(23,563,603)	(24,807,812)	(20,819,072)	(19,642,137)	(28,838,768)	(20,811,015)	(22,180,705)	-	-	-	-
Write-offs and Adjustments	(26,969)	(17,791)	10,602	1,408,505	(56,412)	113,531	158,811	(125,516)	711,795	-	-	-	-
Net Change in Sewer Receivables	2,691,178	4,807,079	5,846,507	(1,188,756)	2,259,801	4,736,067	(5,181,264)	3,155,714	3,573,339	-	-	-	-
Accounts Receivable - BOM	123,108,731	125,799,909	130,606,987	136,453,494	135,264,737	137,524,539	142,260,605	137,079,341	140,235,055	-	-	-	-
Accounts Receivable - End of Month	\$ 125,799,909	\$ 130,606,987	\$ 136,453,494	\$ 135,264,737	\$ 137,524,539	\$ 142,260,605	\$ 137,079,341	\$ 140,235,055	\$ 143,808,394	\$ -	\$ -	\$ -	-
EnQuesta Control Total	\$ 125,799,909	\$ 130,606,987	\$ 136,453,494	\$ 135,264,952	\$ 137,515,271	\$ 142,291,806	\$ 137,136,854	\$ 140,292,634	\$ 143,865,973	\$ -	\$ -	\$ -	-

Collection Rates*:													
Current Month		88.6%	89.5%	84.4%	93.7%	84.9%	118.9%	88.6%	92.1%				
Three Month Rolling Average				87.3%	88.8%	87.3%	99.6%	97.7%	100.0%				
* Collections lag 1 month following billing													

ACCOUNTS RECEIVABLE SUMMARY

	Balances as of 07/31/18	Balances as of 08/31/18	Balances as of 09/30/18	Balances as of 10/31/18	Balances as of 11/30/18	Balances as of 12/31/18	Balances as of 01/31/19	Balances as of 02/28/19	Balances as of 03/31/19	Balances as of 04/30/19	Balances as of 05/31/19	Balances as of 06/30/19	Balances as of 07/31/19
Retail Accounts Receivable by Sales Class													
Residential	\$ 92,950,405	\$ 96,548,003	\$ 100,538,258	\$ 100,459,619	\$ 103,570,436	\$ 107,602,375	\$ 109,159,804	\$ 112,158,448	\$ 114,023,735	\$ -	\$ -	\$ -	-
Commercial	26,314,512	28,372,836	33,208,434	29,903,070	30,512,189	32,483,361	33,303,137	34,559,232	34,743,102	-	-	-	-
Industrial	13,231,223	12,359,217	12,817,163	12,045,891	13,432,202	14,689,803	14,637,882	14,773,034	15,290,178	-	-	-	-
Tax Exempt	6,370,816	7,466,649	6,849,974	7,426,634	5,866,816	5,894,403	6,063,255	7,706,373	11,477,339	-	-	-	-
Faith-Based	2,050,118	1,972,795	2,118,803	2,145,959	2,230,422	2,307,279	2,266,713	2,292,730	2,384,836	-	-	-	-
MDOT	2,066,773	1,963,178	2,058,893	2,226,199	2,260,092	2,427,398	2,570,714	2,676,198	2,672,258	-	-	-	-
Wayne State	36,663	(8,762)	(10,895)	(8,129)	(7,899)	(7,630)	(7,424)	(6,774)	(6,448)	-	-	-	-
City of Detroit	10,183,818	10,211,701	8,266,664	8,309,604	9,055,181	9,481,979	6,504,822	5,160,123	2,825,331	-	-	-	-
Shared Services (GLWA)	13,275,958	13,516,691	13,757,423	13,878,241	14,118,974	14,118,974	-	-	-	-	-	-	-
Total Retail Accounts Receivable	\$ 166,480,286	\$ 172,402,308	\$ 179,604,717	\$ 176,387,089	\$ 181,038,412	\$ 188,997,940	\$ 174,498,903	\$ 179,319,363	\$ 183,410,331	\$ -	\$ -	\$ -	-
EnQuesta Control Total Difference	\$ (1,338,055.52)	\$ 38,323.67	\$ 12,038.17	\$ 783,470.77	\$ (1,174,411.59)	\$ (2,708,741.55)	\$ 1,430,000.91	\$ 435,604.79	\$ 385,039.62				

City of Detroit Water and Sewerage Department

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Retail Sales and Collections Forecasts Water and Sewer Funds

Month Ended	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Fiscal Quarter	FY2019.Q1	FY2019.Q1	FY2019.Q1	FY2019.Q2	FY2019.Q2	FY2019.Q2	FY2019.Q3	FY2019.Q3	FY2019.Q3	FY2019.Q4	FY2019.Q4	FY2019.Q4
WATER BUDGETS												
Monthly Water Mcf Distribution %	9.5%	9.8%	9.9%	8.5%	8.1%	7.3%	7.8%	7.7%	7.7%	7.8%	7.3%	8.5%
Budgeted Water Usage	266,428	274,436	277,713	240,026	228,182	204,655	218,764	217,022	217,093	218,211	206,386	239,369
Budgeted Water Mcf Rate	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71	\$ 24.71
Water Commodity Sales	6,583,400	6,781,300	6,862,300	5,931,000	5,638,400	5,057,000	5,405,700	5,362,600	5,364,400	5,392,000	5,099,800	5,914,800
Service Charges	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800	2,063,800
Firelines	252,600	252,600	252,600	252,600	252,600	252,600	252,600	252,600	252,600	252,600	252,600	252,600
Other Utility Fees	240,825	240,825	240,825	240,825	240,825	240,825	240,825	240,825	240,825	240,825	240,825	240,825
Penalties	125,867	125,867	125,867	125,867	125,867	125,867	125,867	125,867	125,867	125,867	125,867	125,867
Budgeted Retail Water Sales	9,266,492	9,464,392	9,545,392	8,614,092	8,321,492	7,740,092	8,088,792	8,045,692	8,047,492	8,075,092	7,782,892	8,597,892
Budgeted Water Collection Rate	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%
Budgeted Water Cash Collection	8,710,500	8,896,500	8,972,700	8,097,200	7,822,200	7,275,700	7,603,500	7,563,000	7,564,600	7,590,600	7,315,900	8,082,000
WATER ACTUALS/FORECAST										FORECAST	FORECAST	FORECAST
Commodity Sales												
Actual/Forecast Sales	6,144,742	7,458,462	8,024,926	4,766,028	5,304,650	5,706,149	4,878,059	5,639,505	5,541,332	5,499,800	5,201,800	6,033,100
Amount Over(Under) Budget	(438,658)	677,162	1,162,626	(1,164,972)	(333,750)	649,149	(527,641)	276,905	176,932	107,800	102,000	118,300
Variance %	-6.7%	10.0%	16.9%	-19.6%	-5.9%	12.8%	-9.8%	5.2%	3.3%	2.0%	2.0%	2.0%
Service Charges and Firelines												
Actual/Forecast Sales	2,263,071	2,344,313	2,338,033	2,341,876	2,339,434	2,467,446	2,352,461	2,370,092	2,537,354	2,362,700	2,362,700	2,362,700
Amount Over(Under) Budget	(53,329)	27,913	21,633	25,476	23,034	151,046	36,061	53,692	220,954	46,300	46,300	46,300
Variance %	-0.6%	0.3%	0.2%	1.1%	1.0%	6.5%	1.6%	2.3%	9.5%	2.0%	2.0%	2.0%
Other Utility Fees												
Actual/Forecast Sales	318,911	529,242	321,753	696,379	303,695	329,642	191,160	289,297	213,981	245,600	245,600	245,600
Amount Over(Under) Budget	78,086	288,417	80,928	455,554	62,870	88,817	(49,665)	48,472	(26,844)	4,775	4,775	4,775
Variance %	32.4%	119.8%	33.6%	189.2%	26.1%	36.9%	-20.6%	20.1%	-11.1%	2.0%	2.0%	2.0%
Penalties												
Actual/Forecast Sales	114,906	56,517	107,346	143,331	(14,483)	139,612	67,889	98,177	114,216	128,400	128,400	128,400
Amount Over(Under) Budget	(10,961)	(69,350)	(18,521)	17,464	(140,350)	13,746	(57,978)	(27,690)	(11,651)	2,533	2,533	2,533
Variance %	-8.7%	-55.1%	-14.7%	13.9%	-111.5%	10.9%	-46.1%	-22.0%	-9.3%	2.0%	2.0%	2.0%
Totals												
Total Sales	8,841,630	10,388,534	10,792,057	7,947,613	7,933,296	8,642,848	7,489,569	8,397,071	8,406,884	8,236,500	7,938,500	8,769,800
Water Cash Receipts	7,042,907	7,865,544	9,421,153	8,541,011	7,474,097	6,919,447	12,515,391	7,574,879	8,014,714	7,986,500	7,824,700	7,541,600
Collection % of Current Month Sales	79.7%	75.7%	87.3%	107.5%	94.2%	80.1%	167.1%	90.2%	95.3%	97.0%	98.6%	86.0%
Collection % of Prior Month Sales		89.0%	90.7%	79.1%	94.0%	87.2%	144.8%	101.1%	95.4%	95.0%	95.0%	95.0%

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Retail Sales and Collections Forecasts
Water and Sewer Funds

Month Ended	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Fiscal Quarter	FY2019.Q1	FY2019.Q1	FY2019.Q1	FY2019.Q2	FY2019.Q2	FY2019.Q2	FY2019.Q3	FY2019.Q3	FY2019.Q3	FY2019.Q4	FY2019.Q4	FY2019.Q4
SEWER BUDGETS												
Monthly Sewer Mcf Distribution %	9.5%	9.8%	9.9%	8.5%	8.1%	7.3%	7.8%	7.7%	7.7%	7.8%	7.3%	8.5%
Budgeted Sewer Usage	236,512	243,621	246,530	213,075	202,561	181,676	194,200	192,654	192,717	193,709	183,212	212,491
Budgeted Sewer Mcf Rate	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84	\$ 54.84
Sewer Commodity Sales	12,970,300	13,360,200	13,519,700	11,685,000	11,108,400	9,963,100	10,649,900	10,565,100	10,568,600	10,623,000	10,047,300	11,653,000
Service Charges	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700	1,098,700
Drainage	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600	12,739,600
Other Utility Fees	-	-	-	-	-	-	-	-	-	-	-	-
Penalties	413,717	413,717	413,717	413,717	413,717	413,717	413,717	413,717	413,717	413,717	413,717	413,717
Budgeted Retail Sewer Sales	27,222,317	27,612,217	27,771,717	25,937,017	25,360,417	24,215,117	24,901,917	24,817,117	24,820,617	24,875,017	24,299,317	25,905,017
Est. Sewer Collection Rate	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%
Budgeted Sewer Cash Collection	24,772,300	25,127,100	25,272,300	23,602,700	23,078,000	22,035,800	22,660,700	22,583,600	22,586,800	22,636,300	22,112,400	23,573,600
										FORECAST	FORECAST	FORECAST
SEWER ACTUALS/FORECAST												
Commodity Sales												
Actual/Forecast Sales	12,292,851	14,962,240	15,922,816	9,987,574	11,148,531	10,757,040	10,435,681	11,006,669	11,815,899	11,047,900	10,449,200	12,119,100
Amount Over(Under) Budget	(677,449)	1,602,040	2,403,116	(1,697,426)	40,131	793,940	(214,219)	441,569	1,247,299	424,900	401,900	466,100
Variance %	-5.2%	12.0%	17.8%	-14.5%	0.4%	8.0%	-2.0%	4.2%	11.8%	4.0%	4.0%	4.0%
Service Charges												
Actual/Forecast Sales	1,068,102	1,109,709	1,108,399	1,108,168	1,107,815	1,218,561	1,114,909	1,115,222	1,261,673	1,126,200	1,126,200	1,126,200
Amount Over(Under) Budget	(30,598)	11,009	9,699	9,468	9,115	119,861	16,209	16,522	162,973	27,500	27,500	27,500
Variance %	-2.8%	1.0%	0.9%	0.9%	0.8%	10.9%	1.5%	1.5%	14.8%	2.5%	2.5%	2.5%
Drainage												
Actual/Forecast Sales	10,150,443	9,830,161	11,700,576	10,500,939	10,684,390	11,652,257	11,494,466	11,425,146	11,418,723	11,465,600	11,465,600	11,465,600
Amount Over(Under) Budget	(2,589,157)	(2,909,439)	(1,039,024)	(2,238,661)	(2,055,210)	(1,087,343)	(1,245,134)	(1,314,454)	(1,320,877)	(1,274,000)	(1,274,000)	(1,274,000)
Variance %	-20.3%	-22.8%	-8.2%	-17.6%	-16.1%	-8.5%	-9.8%	-10.3%	-10.4%	-10.0%	-10.0%	-10.0%
Penalties												
Actual/Forecast Sales	398,474	146,424	384,641	331,024	(87,953)	501,061	315,665	407,435	408,202	407,500	407,500	407,500
Amount Over(Under) Budget	(15,243)	(267,293)	(29,076)	(82,693)	(501,670)	87,345	(98,052)	(6,281)	(5,515)	(6,217)	(6,217)	(6,217)
Variance %	-3.7%	-64.6%	-7.0%	-20.0%	-121.3%	21.1%	-23.7%	-1.5%	-1.3%	-1.5%	-1.5%	-1.5%
Totals												
Total Sales	23,909,869	26,048,534	29,116,431	21,927,706	22,852,783	24,128,919	23,360,720	23,954,472	24,904,497	24,047,200	23,448,500	25,118,400
Sewer Cash Receipts	21,558,665	21,507,638	23,563,603	24,807,812	20,819,072	19,642,137	28,838,768	20,811,015	22,180,705	22,414,000	21,642,500	21,103,700
Collection % of Current Month Sales	90.2%	82.6%	80.9%	113.1%	91.1%	81.4%	123.4%	86.9%	89.1%	93.2%	92.3%	84.0%
Collection % of Prior Month Sales		90.0%	90.5%	85.2%	94.9%	86.0%	119.5%	89.1%	92.6%	90.0%	90.0%	90.0%

City of Detroit
Water and Sewerage Department

Draft 5/6/2019

Cash @ GLWA - Cash Flow Forecasts
Water and Sewer Funds

	Forecast Override	Actual 07/31/18	Actual 08/31/18	Actual 09/30/18	Actual 10/31/18	Actual 11/30/18	Actual 12/31/18	Actual 01/31/19	Actual 02/28/19	Preliminary 03/31/19	Forecast 04/30/19	Forecast 05/31/19	Forecast 06/30/19
WATER													
Inflows													
Retail A/R receipts		\$ 7,042,907	\$ 7,865,544	\$ 9,421,153	\$ 8,541,011	\$ 7,474,097	\$ 6,919,447	\$ 12,515,391	\$ 7,574,879	\$ 8,014,714	\$ 7,986,500	\$ 7,824,700	\$ 7,541,600
Retail Non-A/R receipts, net		332,495	827,240	345,296	474,389	464,420	378,251	(4,356,574)	352,420	692,865	-	-	-
Net retail cash receipts		7,375,402	8,692,784	9,766,449	9,015,400	7,938,517	7,297,698	8,158,817	7,927,299	8,707,578	7,986,500	7,824,700	7,541,600
Investment income	4,000	9,655	2,740	4,289	5,439	7,792	3,057	2,910	4,766	6,351	4,000	4,000	4,000
Budget Stabilization	N/A	-	-	-	-	-	-	-	-	482,870	482,900	482,900	482,900
Applied lease payments	N/A	329,100	329,100	329,100	329,100	329,100	329,100	329,100	329,100	280,800	280,800	280,800	280,800
		7,714,157	9,024,624	10,099,838	9,349,939	8,275,409	7,629,855	8,490,828	8,261,164	9,477,599	8,754,200	8,592,400	8,309,300
Outflows													
Wholesale charge	N/A	1,693,842	1,693,842	1,693,842	1,693,842	1,693,842	1,693,842	1,693,842	1,693,842	1,693,842	1,693,800	1,693,800	1,693,800
DWSD O&M	N/A	2,957,025	2,957,025	2,957,025	2,957,025	2,957,025	2,957,025	2,957,025	2,957,025	2,957,025	2,957,000	2,957,000	2,957,000
Bifurcation obligation	N/A	2,786,567	2,786,567	2,786,567	2,786,567	2,786,567	2,786,567	2,786,567	2,786,567	3,014,000	3,014,000	3,014,000	3,014,000
Post bifurcation debt service	N/A	275,708	275,708	275,708	211,417	211,417	211,417	211,417	211,417	-	-	-	-
DWRF Debt Service	N/A	-	-	-	64,291	64,291	64,291	64,291	64,291	-	-	-	-
Operating Pension	N/A	356,000	356,000	356,000	356,000	356,000	356,000	356,000	356,000	356,000	356,000	356,000	356,000
Nonoperating pension	N/A	368,950	368,950	368,950	368,950	368,950	368,950	368,950	368,950	368,950	369,000	369,000	369,000
WRAP contribution	N/A	32,233	32,233	32,233	32,233	32,233	32,233	32,233	32,233	32,233	32,200	32,200	32,200
Other MBO Requirements	N/A	-	-	-	-	-	-	-	-	-	-	-	-
		8,470,325	8,470,325	8,470,325	8,470,325	8,470,325	8,470,325	8,470,325	8,470,325	8,422,050	8,422,000	8,422,000	8,422,000
Net Inflows (Outflows)		(756,168)	554,299	1,629,513	879,614	(194,916)	(840,470)	20,503	(209,161)	1,055,549	332,200	170,400	(112,700)
Cash @ GLWA - Beginning of Period		8,407,079	7,650,912	8,205,210	9,834,724	10,714,337	10,519,421	9,678,952	9,699,454	9,490,294	10,545,843	10,878,043	11,048,443
Cash @ GLWA - End of Period		\$ 7,650,912	\$ 8,205,210	\$ 9,834,724	\$ 10,714,337	\$ 10,519,421	\$ 9,678,952	\$ 9,699,454	\$ 9,490,294	\$ 10,545,843	\$ 10,878,043	\$ 11,048,443	\$ 10,935,743
SEWER													
Inflows													
Retail A/R receipts		\$ 21,558,665	\$ 21,507,638	\$ 23,563,603	\$ 24,807,812	\$ 20,819,072	\$ 19,642,137	\$ 28,838,768	\$ 20,811,015	\$ 22,180,705	\$ 22,414,000	\$ 21,642,500	\$ 21,103,700
Retail Non-A/R receipts, net		(96,739)	239,076	163,902	(868,879)	(195,033)	(29,983)	(7,697,934)	(52,163)	(69,014)	-	-	-
Net retail cash receipts		21,461,926	21,746,714	23,727,505	23,938,933	20,624,039	19,612,154	21,140,835	20,758,852	22,111,691	22,414,000	21,642,500	21,103,700
Investment income	N/A	11,587	37,202	37,402	34,493	36,470	3,625	4,379	6,408	2,291	2,300	2,300	2,300
Applied lease payments	N/A	405,333	405,333	405,333	405,333	405,333	405,333	405,333	405,333	752,933	752,900	752,900	752,900
Budget stabilization	0	12,397,879	-	-	-	-	-	-	-	-	-	-	-
		34,276,726	22,189,249	24,170,240	24,378,759	21,065,842	20,021,113	21,550,547	21,170,593	22,866,915	23,169,200	22,397,700	21,858,900
Outflows													
Wholesale charge	N/A	15,250,633	15,250,633	15,250,633	15,250,633	15,250,633	15,250,633	15,250,633	15,250,633	15,250,633	15,250,600	15,250,600	15,250,600
DWSD IWC	0	223,075	222,866	139,694	138,826	138,632	138,226	138,280	138,221	137,876	-	-	-
DWSD O&M	N/A	5,676,792	5,676,792	5,676,792	5,676,792	5,676,792	5,676,792	5,676,792	5,676,792	5,676,792	5,676,800	5,676,800	5,676,800
Bifurcation obligation	N/A	2,322,108	2,322,108	2,322,108	2,322,108	2,322,108	2,322,108	2,322,108	2,322,108	2,669,700	2,669,700	2,669,700	2,669,700
Post bifurcation debt service	N/A	-	-	-	-	-	-	-	-	-	-	-	-
SRF Debt Service	N/A	-	-	-	-	-	-	-	-	-	-	-	-
Operating Pension	N/A	238,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000
Nonoperating pension	N/A	255,567	255,567	255,567	255,567	255,567	255,567	255,567	255,567	255,567	255,600	255,600	255,600
WRAP contribution	N/A	40,642	40,642	40,642	40,642	40,642	40,642	40,642	40,642	40,642	40,600	40,600	40,600
Other MBO Requirements	N/A	-	-	-	-	-	-	-	-	-	-	-	-
		24,006,817	24,006,608	23,923,436	23,922,568	23,922,374	23,921,968	23,922,022	23,921,963	24,269,210	24,131,300	24,131,300	24,131,300
Net Inflows (Outflows)		10,269,909	(1,817,359)	246,803	456,191	(2,856,532)	(3,900,855)	(2,371,475)	(2,751,370)	(1,402,295)	(962,100)	(1,733,600)	(2,272,400)
Cash @ GLWA - Beginning of Period		(53,639,106)	(43,369,197)	(45,186,556)	(44,939,752)	(44,483,561)	(47,340,093)	(51,240,948)	(53,612,423)	(49,374,563)	(50,776,858)	(47,458,958)	(44,912,558)
Note amortization and other													
Note amortization - FY 2017 Shortfall	780,000	-	-	-	-	-	-	-	6,989,230	-	780,000	780,000	780,000
Other DWSD payments	3,500,000	-	-	-	-	-	-	-	-	-	3,500,000	3,500,000	3,500,000
Cash @ GLWA - End of Period		\$ (43,369,197)	\$ (45,186,556)	\$ (44,939,752)	\$ (44,483,561)	\$ (47,340,093)	\$ (51,240,948)	\$ (53,612,423)	\$ (49,374,563)	\$ (50,776,858)	\$ (47,458,958)	\$ (44,912,558)	\$ (42,904,958)



Financial Services Audit Committee Communication

Date: May 15, 2019

To: Great Lakes Water Authority Audit Committee

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

Re: Monthly CFO Update

Background: The Financial Services Area has several initiatives underway. The monthly update is an opportunity to provide a status report on progress and priorities.

Analysis: Topics this month include the following.

- 1) Update on Sewer Charges Methodology
- 2) External Auditor Selection (proposals due May 16, 2019)
- 3) Reconciliation Committee Follow-up - Cross Entity Balance Report
- 4) May 16, 2019 Vendor Outreach Event Recap
- 5) Review of Initiatives, Timelines, and Resource Allocation – Two attachments:
 - a. Financial Services Area - Strategic Initiatives, Timelines, & Resources
 - b. GLWA One Water Charge Methodology Initiatives
(as of February 15, 2019; should be updated in next 30-45 days)

Proposed Action: No Action.

Financial Services Area (FSA)	FSA Strategic Resource Allocation as a Whole (not necessarily reflective of hours; focus is on managing span of strategic inputs to reduce bottlenecks)																					
Strategic Initiatives, Timelines, & Resources	High = Strategic Elements - Regular commitment of multiple team members including CFO\Treasurer, FR&A Director or Procurement Director, and/or Manager																					
Focus on CY 2019	Medium = Directional Elements - Regular commitment of multiple team members including FR&A Director or Procurement Director, and/or Manager																					
As of May 15, 2019	Low = Regular commitment of team members with cross-functional touchpoints who are actively engaged in implementation																					
Note: All timelines are estimates and are not intended to represent the "official schedule" for projects outside of FSA.	FSA Strategic Resource Allocation	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Until	
Financial Services Driven																						
Tagetik Reporting & Modeling	High																					
Integrated Payables	High		Go Live																			
Adobe Captivate Knowledge Base	High																					
Procurement Procedures, Forms, Work Instructions, & Training	High																					
Capturis	Low																					
Financial Reporting & Accounting Procedures, Forms, Work Instructions, & Training	Medium																					
DWSD/GLWA Standard Operating Procedures	Medium																					
Internal Audit - Time & Material Contracts	High																					
Investment Manager RFP & Selection	Medium																					
Small Business Initiative Phase 2	High																					
Procurement Cooperative	High																					
Procurement Data - Smartsheet 2.0	Medium																					
Vendor Performance Program	Medium																					
Inaugural Submittal to GFOA Budget Program	High																					
Launch of Bondlink	High																					
Rewrite of Standard Vendor Contracts	Medium																					
Recruitment & Retention	High																					Ongoing
Facilitate Selection of External Auditor and On-Ramp	Medium																					
Financing Team RFP & Selections (3)	Medium																					
Member Partner Driven																						
See attached GLWA One Water Charge Methodology Initiatives	High																					
Cross-functional Driven																						
Ceridian Reimplementation	Medium																					
Enterprise Asset Management RFP	Medium																					
Enterprise Asset Management Implementation	Medium																					Jun-22
Capital Program Management Startup	High																					
Project Management Information System	Medium																					Jun-21
Records Retention (Financial Portion)	Medium																					
GLWA Branding Rollout (Financial aspect)	High																					
Strategic Asset Management Plan	High		Finance Chapter																			
Master Plan Financial Analysis	High																					

GLWA One Water Charge Methodology Initiatives *

February 15, 2019 Update

		Calendar 2018				Calendar 2019				Calendar 2020				Calendar 2021			
		Q1	Q3	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	<u>Cost Allocation Project</u>	<i>Continual process improvement and phased implementation</i>															
1.0	Functional GL Cost Reporting Implementation			x				x				x				x	
1.1	Administrative and General Cost Allocation Approaches			x				x				x				x	
1.2	Refined Functional Cost Structure			x				x				x				x	
1.3	Fixed Asset Project- Completed			x													
2	<u>Wastewater Charges / Methodology Update</u>																
2.1	2nd year of phase in for FY 2018 SHARES- Completed			X													
2.2	SHARE Update - 3rd Fixed SHARE Period											X	or...			X	
2.3	Evaluation of Peak Wastewater Flows and Costs																
2.4	Wastewater Strength of Flow Sampling Plan- Completed																
2.5	Wastewater Strength of Flow Sampling																
2.6	Wastewater Master Plan																
2.7	Modeling & Monitoring																
2.8	Wet Weather Optimization Refinements																
2.9	Leverage National Expertise and Benchmarks																
	Charge Update - Current Methodology			x				x									
3	<u>Water Charges / Methodology Update</u>																
3.1	Units of Service Study PHASE 1- Non-Master Metered- Completed																
	Updated Water Charges - Current Methodology, Aligned Contracts							X									
3.2	Units of Service Study PHASE 2- Non-Master Metered							X									
3.3	System Water Audit																
3.4	Contract Alignment Project (CAP) Completed																
3.5	Alternative Allocators for Pumping and Transmission																
3.6	Reflection of NE WTP Repurposing																
3.7	Leverage National Expertise and Benchmarks																
3.8	Updated Water Charges - potential new methods															X	
* Designed to achieve hallmark objectives of charge stability and equity.																	