



Audit Committee

Friday, June 15, 2018 at 8:00 a.m.

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

AGENDA

BINDER 1 Items in highlighted in gray

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. May 22, 2018 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
 - A. Proposed Underwriter Selection for the for the 2018 Financing Program (Page 6)
 - B. Proposed FY 2016 Shared Services True-up (Page 12)
7. NEW BUSINESS
 - A. FY 2018 Fourth Quarter Budget Update (*Will be included in a subsequent addendum*)
 - B. PFM Investment Contract Extension (Page 22)
 - C. Credit Card Use Policy (Page 24)
8. REPORTS
 - A. Quarterly Investment Report (Page 52)
 - B. Master Bond Ordinance Monthly Cash Transfers: Cash Transfers through May 1, 2018 (Page 56)
 - C. Quarterly Construction Work-in-Progress Report (Page 59)
 - D. Quarterly Financial Reporting & Accounting Group Continuous Improvement Report (*Will be included in a subsequent addendum*)
 - E. Monthly Financial Report for April 2018 (*Will be included in a subsequent addendum*)
 - F. Monthly Revenue & Collections Report for April 2018 (Page 124)
 - G. Trust Receipts & Disbursements Report (*Will be included in a subsequent addendum*)
9. CFO Update
10. LOOK AHEAD

Next Audit Committee Meeting – July 20, 2018 at 8 am (Regular Meeting)
11. INFORMATION
12. OTHER MATTERS
13. ADJOURNMENT



Great Lakes Water Authority

AGENDA ITEM #4A

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

Meeting Minutes - Draft

Audit Committee

Tuesday, May 22, 2018

12:00 PM

Water Board Building 5th Floor

Special Meeting

1. Call To Order

Chairman Baker called the meeting to order at 12:05 p.m.

2. Quorum Call

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

3. Approval of Agenda

Chairman Baker requested a Motion to approve the Agenda.

Motion By: Gary Brown

Support By: Robert Daddow

Action: Approved

The motion carried by a unanimous vote.

4. Approval of Minutes

A. [2018-765](#) Minutes April 20, 2018

Indexes: Finance

Attachments: [Audit Committee Meeting Minutes 4.20.18](#)

Chairman Baker requested a Motion to approve the April 20, 2018 Audit Committee Meeting Minutes.

Motion By: Robert Daddow

Support By: Gary Brown

Action: Approved

The motion carried by a unanimous vote.

5. Public Comment

Raphael Chiolla, Oakland County Water Resources Commissioner's office, came before the Committee to inquire as to when the rates are planning to be approved.

6. Old Business

A. [2018-778](#) Review of the FY 2017 Audited Financial Statements

Indexes: Finance

Attachments: [FY 2017 Audited Financial Statement Review](#)

[GLWA - CAFR 6-30-17 \(Final\)](#)

[GLWA - Single Audit 6-30-17 \(Final\)](#)

[Auditor Review Questions 5.22.2018](#)

[GLWA - SAS Ltr 6-30-17 \(Revised Final\)](#)

Page 2 of the "Independent Auditors' Communication with Those Charged with Governance," 3rd paragraph under "Qualitative Aspects of the Authority's Significant Accounting Practices" was amended to include a matter pertaining to legal settlements assigned to the City of Detroit and the MOU.

Motion By: Gary Brown

Support By: Robert Daddow

Action: Received and Filed as Amended

The motion carried by a unanimous vote.

B. [2018-767](#) Financial Sustainability Model - Forecast Modeling

Indexes: Finance

Attachments: [Financial Sustainability Model 5.22.2018](#)

[GLWA Financial Forecast Model 051718](#)

[Forecast Exhibits 5.17.2018](#)

Motion By: Robert Daddow

Support By: Gary Brown

Action: Received and Filed

The motion carried by a unanimous vote.

C. [2018-768](#) Proposed Public Hearing: State Revolving Fund Project Plan Submittal for the Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project

Indexes: Finance

Attachments: [2019 SRF Project Plan Pump Station No. 1 Ferric Chloride System](#)

[Ferric Chloride System Public Hearing Notice](#)

[Resolution -Ferric Chloride SRF Project Plan](#)

Motion By: Robert Daddow

Support By: Gary Brown

Action: Recommended for Approval to the Board of Directors

Agenda of May 23, 2018

The motion carried by a unanimous vote.

D. [2018-769](#) Review of the FY 2017 Detroit General retirement System Plan Actuarial Report

Indexes: Finance

Attachments: [6D1 Review of FY 2017 Detroit General Retirement Plan Actuarial Report](#)
[Detroit General Retirements System June 30 2017 Comp II Valuation](#)

Motion By: Robert Daddow
Support By: Gary Brown
Action: Received and Filed
The motion carried by a unanimous vote.

E. [2018-770](#) Detroit General Retirement System Plan Reporting Request

Indexes: Finance

Attachments: [Detroit General Retirement System Pension Reporting Request](#)

Motion By: Robert Daddow
Support By: Gary Brown
Action: Approved
The motion carried by a unanimous vote.

F. [2018-771](#) Report: Responses to Questions from Oakland County Drain Commissioner's Office

Indexes: Finance

Attachments: [Correspondence Oakland County Drain Commissioner's Office](#)
[Response to Foster Group Memorandum](#)

Motion By: Robert Daddow
Support By: Gary Brown
Action: Received and Filed
The motion carried by a unanimous vote.

7. New Business

A. [2018-773](#) FY 2018 Third Quarter Budget Update

Indexes: Finance

Attachments: [Cover Memo FY 2018 Budget Amendments through March 31, 2018](#)
[FY 2018 Interim Pre-Close Budget to Actual Thru 3.31.2018](#)
[FY 2018 Shared Services Analysis](#)
[Staffing Budget to Actual FY 2017](#)
[Staffing Budget to Actual FY 2018](#)
[Interim Pre-Close Budget to Actual Report - table](#)
[Capital Improvement Plan Spending Bar Chart](#)

Motion By: Gary Brown
Support By: Brian Baker
Action: Received and Filed
The motion carried by a unanimous vote.

- B. [2018-774](#) Update: Pre-approved Underwriter Pool Proposal Selection for the 2018 Financing Program

Indexes: Finance

Attachments: [Audit Committee Communication - Underwriter Selection Process 2018](#)

No Action Taken

This item will be sent to the full Board of Directors for consideration at the May 23, 2018 Board of Directors Meeting.

8. Reports

- A. [2018-776](#) Monthly Revenue & Collections Report for March 2018

Indexes: Finance

Attachments: [Monthly Revenue and Collections Report 05.18.2018 REVISED\)](#)
[AR Aging W S IWC PS 04.30.18](#)

Motion By: Gary Brown
Support By: Robert Daddow
Action: Received and Filed
The motion carried by a unanimous vote.

- B. [2018-777](#) Master Bond Ordinance Monthly Cash Transfers: Cash Transfers through May 1, 2018

Indexes: Finance

Attachments: [GLWA Audit Committee Memo DWSD & GLWA Cash Transfers May 2018](#)
[Audit Committee - Monthly Transfers to GLWA May 2018](#)
[Audit Committee - Monthly Transfers to DWSD May 2018](#)

Motion By: Robert Daddow
Support By: Gary Brown
Action: Received and Filed
The motion carried by a unanimous vote.

9. CFO Update

Nicolette Bateson, Chief Financial Officer/Treasurer, gave an update regarding the May 17, 2018 Vendor Outreach; the Water Infrastructure Finance and Innovation Act; and the GLWA Procurement Policy.

10. Look Ahead

The next Audit Committee Meeting is scheduled for June 15, 2018 at 8:00 a.m. (Regular Meeting).

11. Information

None

12. Other Matters

None

13. Adjournment

Chairman Baker requested a Motion to Adjourn.

Motion By: Gary Brown

Support By: Brian Baker

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 2:24 p.m.



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Proposed Underwriter Selections for the for the 2018 Financing Program

Background: At its meeting on June 27, 2016, as part of the underwriter selection process related to its inaugural 2016 bond transaction, the Great Lakes Water Authority (GLWA) Board of Directors (Board) approved the following list of ten (10) firms that were deemed qualified to act as senior managing underwriters for subsequent GLWA bond issuances.

- Barclays Capital, Inc.
- Citigroup Global Markets, Inc.
- Goldman Sachs & Co.
- JP Morgan Securities LLC
- Morgan Stanley & Co.
- Piper Jaffray & Co.
- PNC Capital Markets
- Ramirez & Co.
- Siebert Brandford (Cisneros) Shank
- Wells Fargo Securities

Furthermore, the GLWA Board directed that in the event of a subsequent bond issuance, the Chief Procurement Officer shall:

- 1) Convene an evaluation panel to interview and review the qualifications of each of the ten (10) firms listed below to serve as Bookrunning Senior Managing Underwriter or Co-Senior Managing Underwriter for that issuance; or*
- 2) Issue a Request for Proposals (RFP) to select a Senior Managing Underwriter(s) for that transaction.*

Justification: To begin preparations for GLWA's proposed transactions as outlined below, GLWA is required to select the Senior (Book Running) Underwriter as directed by the GLWA Board, for the proposed bond issues. The target date to complete the proposed transactions is October 1, 2018. To meet this time schedule, the financing team needs to be finalized by July 1, 2018 so that there is sufficient time to approve resolutions, draft and circulate disclosure documents, meet with the rating agencies and investors as well as price and deliver the bonds before the October deadline.

Proposed Transactions: The outstanding GLWA bonds for the water and sewer systems that are the focus of the refunding plan total approximately \$178 million for the water system approximately and approximately \$190 million for the sewer system. These include the current refunding of Series 2001C second lien bonds of the Water System, the current refunding of the senior lien 1998A, 1998B, and 2001 C2 Sewer System Bonds, as well as the potential taxable advance refunding of the senior lien Series 2001 C1 Sewer System Bonds. Additionally, GLWA has been notified by DWSD that it will need GLWA to issue approximately \$75 million of new money sewer bonds on its behalf.

Time Schedule: GLWA put together an aggressive time schedule of less than 30 days to advertise and select the Senior Underwriter. This schedule and proposed selection processes were reviewed and approved by the GLWA Audit Committee at its May 22, 2018 meeting and by the GLWA Board of Directors at its May 23, 2018 meeting. Below is the time schedule for the underwriter solicitation process.

Underwriter Solicitation Time Schedule		
Category	Date	
Review Strategy at Audit Committee	May 22, 2018	✓
Review Strategy with Board of Directors	May 23, 2018	✓
Send out Underwriter Solicitation	May 24, 2018	✓
Solicitation Responses Due	June 7, 2018	✓
Scoring of Written Responses	June 11, 2018	✓
Meeting with Underwriters	June 12, 2018	✓
Final Evaluations/Recommendation	June 12, 2018	✓
Audit Committee Review of Recommended Underwriting Team	June 15, 2018	
Board Approval of Underwriting Team	June 27, 2018	

Selection Process: GLWA, through its Procurement Group, issued a Request for Updated Proposals from the pre-approved list of the 10 underwriters above. An evaluation panel was assembled to represent GLWA, DWSD and the member communities in the selection process. The panel evaluated all 10 firms that responded to the request, based on their written proposals and oral interviews.

Evaluation Panel: To accomplish the objective of selecting the Senior Underwriter, an evaluation panel was selected in accordance with the Board's direction of having 3 GLWA representatives, 2 DWSD representatives and one member community representative. The evaluation panel was comprised of the following members.

Nicolette Bateson, CPA, Chief Financial Officer/Treasurer, GLWA

Thomas Naughton, Chief Financial Officer, DWSD

Jeff McKeen, General Manager, Southeast Oakland County Water Authority

Jon Wheatley, Public Finance Manager, GLWA

Robert Rice, Public Finance Manager, DWSD

Kim Garland, Public Finance Management Professional, GLWA

Proposal Scoring: The scoring of the proposals was based on the written responses to the proposals, which included recommended financing plan and structure, rating agency strategy and investor marketing strategy. The scoring for the written responses was completed prior to the oral interviews. The oral interviews with all 10 underwriting firms were held on June 12, 2018. The oral interviews and team members were also scored as part of the evaluations. After the written response and oral interview scoring, the fees were also scored, based on the separate submissions by the firms, as summarized in **Attachment B**, which was prepared by GLWA’s financial advisor, PFM. The total weighting of the evaluation criteria is shown below.

**Underwriter Solicitation
Scoring Criteria**

Category	Points
Refinancing Plan and Structure	25
Credit and Market Strategy	20
Fees	10
Interview Presentation	45
Total	100

Panel Recommendation: Based on the panel’s final scoring of the evaluation criteria referenced above, it was the unanimous recommendation of the evaluation panel to select Citigroup as the Bookrunning Senior Managing Underwriter and Wells Fargo Securities as the Co-Senior Manager for the upcoming refunding and new money bond sales (see, “Roles of the Underwriter” below). The summary of the evaluation panel’s final scoring is shown in **Attachment A**.

In addition to the Bookrunning Senior Manager and Co-Senior Managers selected above, the evaluation panel also recommends the following list of co-managers for the upcoming transactions:

- Goldman Sachs & Co.
- JP Morgan Securities LLC
- Morgan Stanley & Co.
- Ramirez & Co.
- Siebert Cisneros Shank & Co.

Proposed Action: Audit Committee recommends that the GLWA Board approve Citigroup as Bookrunning Senior Managing Underwriter, Wells Fargo Securities as Co-Senior Managing Underwriter at a Takedown fee of no more than \$2.50 per bond (plus expenses) which will be subject to negotiation prior to the final pricing of the bonds. The Audit Committee further recommends the Co-Managers of Goldman Sachs & Co., JP Morgan Securities LLC, Morgan Stanley & Co., Ramirez & Co. and Siebert Cisneros Shank & Co.

Roles of the Underwritersⁱ:

Senior (Book Running) Underwriter-

- Manages the affairs of any underwriting syndicate formed in connection with a new issue;
- In a negotiated offering:
 - works with state or local government and municipal advisor to design the plan of finance, develops the bond structure
 - assists in determining timing to sell bonds based on market conditions – assists in the development of the bond documents
 - assists in preparing any rating agency strategy and presentation
 - “runs numbers” providing quantitative analysis of financing structure – manages the pricing process
 - executes pre-sale marketing – solicits price views from syndicate members, which provides preliminary pricing indications among underwriters and customers about the offering range of a new issue
 - prepares distribution analysis
 - works with the state or local government to determine how orders are filled from the bond pricing order period – executes the bond purchase agreement with the municipal government on behalf of the syndicate
- Provides proceeds at closing and obtains funds from investors

Co-Manager (also known as Underwriting Syndicate)-

- Under the direction of the senior manager, purchases an initial bond issue from state or local government and offers it for resale to investors
- Provides sufficient capital to purchase an issue
- Shares the risks of underwriting the issue with the senior manager
- Distributes the bonds to investors

ⁱFrom the MSRB website- Roles and Responsibilities: The Financing Team in an Initial Municipal Bond Offering
<http://msrb.org/msrb1/pdfs/Financing-Team.pdf>

GLWA-CS-290 Updated Proposals for Potential Refunding and New Money Bond Transactions

ATTACHMENT "A" - SCORES

No.	Evaluation Criteria	Citigroup	Wells Fargo	Goldman Sachs	Ramirez	Morgan Stanley	JP Morgan	Siebert Cisneros Shank	Piper Jaffray	Barclays	PNC Capital
1	Refinancing Plan and Structure	21.53	18.83	19.97	17.89	20.19	18.61	17.58	17.19	17.03	14.78
2	Credit and Market Strategy	19.00	18.90	15.80	13.37	15.57	13.67	16.37	15.07	14.07	12.90
3	Fees	6.99	6.38	6.35	6.53	6.69	9.67	6.32	5.34	10.00	6.83
4	Oral Interview and Proposed Underwriting Team	45.00	36.00	36.00	27.00	18.00	18.00	18.00	18.00	9.00	9.00
	Total	92.52	80.11	78.12	64.79	60.45	59.95	58.27	55.60	50.09	43.51
	Firm Ranking:	1	2	3	4	5	6	7	8	9	10

Tabulation of Proposed Underwriter Fees ATTACHMENT "B"

	Average Takedown (\$/bond) (1)	Est. Takedown (\$) (1)	Management Fee (\$/bond)	Est. Management Fee (\$)	Est. Expenses (\$) (2)	Total Fees including Expenses (\$/bond)	Est. Total Fees (\$)	Points Awarded
Barclays	1.69	625,000	-	-	54,000	1.84	679,000	10.00
JP Morgan	1.75	647,000	-	-	55,000	1.90	702,000	9.67
Citi (3)	2.50	924,000	-	-	47,000	2.63	971,000	6.99
PNC	2.58	954,000	-	-	40,000	2.69	994,000	6.83
Morgan Stanley (4)	2.63	972,000	-	-	43,000	2.75	1,015,000	6.69
Ramirez & Co.	2.69	994,000	-	-	46,000	2.81	1,040,000	6.53
Wells Fargo	2.75	1,017,000	-	-	47,000	2.88	1,064,000	6.38
Goldman Sachs (5)	2.50	924,000	0.25	92,000	54,000	2.89	1,070,000	6.35
Siebert Cisneros Shank & Co.	2.75	1,017,000	-	-	57,000	2.90	1,074,000	6.32
Piper Jaffray	2.96	1,096,000	0.35	129,000	47,000	3.44	1,272,000	5.34
				-				

Notes:

- (1) Estimated takedowns are based on Base Case financing structure as of May 30, 2018. Assumes matched lien current refunding of candidates identified in RFP with level savings structure and new money Sewer issuance generating \$75 million in proceeds with amortization in 2044-2048. Base Case financing structure results in total principal amount of \$369.7 million. Assumed issued without bond insurance.
- (2) Estimated expenses exclude Underwriter's Counsel.
- (3) Citi bid lower takedowns (\$2.00 per bond) for uninsured bonds. All other firms proposed same takedowns for insured or uninsured bonds.
- (4) Morgan Stanley proposes a Sealed Bid process for 2019 maturity; assumed takedown for 2019 at \$1.25 per bond.
- (5) Goldman Sachs bid range of management fees based on GLWA discretion of \$0.25-\$1.00 per bond; assumed at \$0.25 per bond.
- (6) Base Case financing amortization assumed as:

2019	14,245,000
2020	15,005,000
2021	16,745,000
2022	18,825,000
2023	27,345,000
2024	24,235,000
2025	18,205,000
2026	16,010,000
2027	15,955,000
2028	62,840,000
2029	72,520,000
2044	12,270,000
2045	12,880,000
2046	13,525,000
2047	14,200,000
2048	14,910,000



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Alicia Haskin, Public Finance Management Professional –
Intergovernmental Relations

Re: Proposed FY 2016 Shared Services True-up

Background & Analysis: See attached draft Board letter and related schedules. The Shared Services Agreement is online at <http://www.glwater.org/board/organizational-documents/>.

Proposed Action: Audit Committee receives and files the attached report and forwards to the full GLWA Board for consideration at its next meeting.

Title

Approval of FY2016 Shared Services and Transition Costs True-up between the Detroit Water and Sewerage Department and the Great Lakes Water Authority

Body

Agenda of: June 13, 2018

Item No.: **2018-**

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 13, 2018

RE: **Approval of FY2016 Shared Services and Transition Costs True-up between the Detroit Water and Sewerage Department and the Great Lakes Water Authority**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer (CFO) and Randal M. Brown, General Counsel, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA):

1) Authorizes GLWA's Chief Executive Officer (CEO), CFO and General Counsel to finalize, and the CEO execute on behalf of the GLWA, the FY2016 Shared Services and Transition Costs True-Up Agreement between the Detroit Water and Sewerage Department (DWSD) and the GLWA;

2) GLWA and DWSD shall create at a minimum four (4) binders, including the FY2016 Shared Services and Transition Costs True-Up Agreement and supporting documentation. The binders shall be retained by both parties' CFOs and General Counsel and kept in their permanent storage; and

3) Authorizes the CEO and CFO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The concept of formation of a regional water authority arose as a part of the City of Detroit's Chapter 9 Bankruptcy. The formation of GLWA was discussed during mediation proceedings held as a part of the bankruptcy case. On June, 12, 2015, the City of Detroit and GLWA entered into a Regional Water Supply Lease, a Regional Sewage Disposal Lease (collectively the "Leases") and a Water and Sewer Services Agreement ("WSSA"). On January 1, 2016, the Leases and WSSA became effective and govern the relationship between GLWA and DWSD. In the course of operations, GLWA and DWSD determined that it would be in their mutual interest to provide certain services to each other these services are provided pursuant to the Shared Services Agreement. Further, there were transition costs associated with the bifurcation. Both, the shared services and transition costs for FY 2015-2016 have been reviewed and agreed upon by the parties.

JUSTIFICATION

The GLWA and DWSD administrations wish to finalize the FY2016 shared service and transition costs.

BUDGET IMPACT

The budget impact of the FY2016 Shared Services and Transition Costs True-Up Agreement is outlined in the attached memorandum and supporting documentation. The FY2016 Shared Services and Transition Costs True-Up Agreement does not adversely impact GLWA's ability to perform its current and proposed financial plan.

COMMITTEE REVIEW

This item is being presented directly to the full Board of Directors.

SHARED SERVICES IMPACT

This item brings closure to the shared services and transition costs for FY2016 between GLWA and DWSD.

FY2016 SHARED SERVICES AND TRANSITION COSTS TRUE-UP AGREEMENT

THIS Fiscal Year 2016 (FY2016) SHARED SERVICES AND TRANSITION COSTS TRUE-UP AGREEMENT (“Agreement”) entered into on _____, 2018, by and between the DETROIT WATER AND SEWERAGE DEPARTMENT (“DWSD”), a department of the City of Detroit (the “City”), and the GREAT LAKES WATER AUTHORITY (“GLWA”) and, a municipal authority and public body corporate organized and existing under and pursuant to the provisions of Act No. 233, Public Acts of Michigan, 1955, as amended (“Act 233”) (DWSD and GLWA together are the “Parties”).

WITNESSETH:

WHEREAS, the City owns a Water Supply System (the “Water System”) and a Sewage Disposal System (the “Sewer System”); and

WHEREAS, the City and GLWA entered into a Shared Services Agreement (the “SSA”) dated as of December 1, 2015 relating to the provision of services by the City to the GLWA with respect to the Regional Water System and the Regional Sewer System, and the provision of services by the GLWA to the City with respect to the operation and management of the Detroit Local Water Facilities and the Detroit Local Sewer Facilities for a term that runs concurrently with the Regional Water Supply System Lease, dated June 12, 2015 (as Schedules have been amended, the “Water Lease”), and (ii) the Regional Sewage Disposal System Lease, dated June 12, 2015 (as Schedules have been amended, the “Sewer Lease” and together with the Water Lease, the “Leases”). The Leases have an initial term of forty (40) years; and

WHEREAS, pursuant to the SSA and for FY2016, GLWA provided specific Services to the DWSD and DWSD provided specific Services to GLWA (“Shared Services”), which are reflected in Schedule A to this Agreement; and

WHEREAS, for FY2016, there were transition costs incurred by both Parties that were not captured in the Schedules attached to the SSA, which are reflected in Schedule B to this Agreement and

WHEREAS, for FY2016, DWSD’s Chief Financial Officer and GLWA’s Chief Financial Officer negotiated a settlement of these Shared Services and transition costs; and

WHEREAS, for FY2016, the Parties seek to true-up the amounts owed between them for any and all, known and unknown, Shared Services and transition costs, which are reflected in Schedule A and B.

In consideration for the mutual agreements described herein, the Parties agree to the following settlement of FY2016 Shared Services and transition costs as described below:

1. On or before June 30, 2018, DWSD shall pay GLWA \$8,093,032 and GLWA shall pay DWSD \$7,548,000 as the true-up of all FY2016 Shared Services and transition costs performed by the Parties.

2. Said monetary payment represents a reviewed and agreed upon settlement between the Parties and fully resolves any and all of the Parties, known and unknown Shared Services and transition costs for FY2016.
3. The Parties expressly agree that they cannot demand payment for any other FY2016 Shared Services and transition costs.
4. The Parties mutually agree that this Agreement supersedes any and all requirements under Article 5 of the SSA regarding invoices, payment terms and invoice disputes for FY2016.
5. The Parties mutually agree that this Agreement does not impact in any way the Parties' rights and obligations under the SSA for any other Fiscal Year.

IN WITNESS WHEREOF, the DETROIT WATER AND SEWERAGE DEPARTMENT and the GREAT LAKES WATER AUTHORITY have executed this Agreement by their duly authorized officers as of the day and year first above written.

DETROIT WATER AND SEWERAGE DEPARTMENT

By: _____

Its: Director

GREAT LAKES WATER AUTHORITY

By: _____

Its: Chief Executive Officer

Schedule A - Shared Services

GLWA Provider Shared Service Description	GLWA Total Billings to DWSD	DWSD/City of Detroit Provider Shared Service Description	DWSD Total Billings to GLWA
OPS-002 Miss Dig	\$ 109,338	OPS-001 Fleet	\$ 471,000
OPS-004 Water Quality	112,085	OPS-002 Miss Dig	15,000
OPS-005 Security	1,142,217	OPS-003 As Needed Field Services	140,000
OPS-005 Security Training	4,732	OPS-006 Facilities	688,000
OPS-006 Facilities	58,234	DoIT-001 Financial Information Services	75,000
OPS-008 Systems Control Center	620,000	DoIT-002 Radios	75,000
ITS-001 Retail AMR	355,962	DoIT-003 Customer Service Technology Suite	22,000
ITS-002 Customer Service Tech Suite	59,208	OCFO-001 Support for Financial Services	-
ITS-003 See Click Fix	91,988		
ITS-004 WAM	577,009		
ITS-005 Mobile Work Force	140,940		
ITS-006 ESRI-GIS	666,402		
ITS-007 DADS	54,081		
ITS-008 TIBCO	95,372		
ITS-009 IT Infrastructure	2,001,645		
PRO-001 Application Analyst	19,700		
LS-001-A Joint Litigation and Defense, LS-001-B Environment, LS-002 Environment, LS-003 Contract Drafting	73,586		
Subtotals	6,182,500	Subtotals	\$ 1,486,000

Schedule B - Transition Costs

Other items to bill not a defined shared service code		Other items to bill not a defined shared service code	
DWSD-R Staff Training by GLWA	\$ 2,325	Fuel	\$ 35,000
DWSD-R Bills paid by GLWA	186,346	Employee Termination Payouts	5,699,000
Bank Fees	373,831	WAM Invoices	328,000
P-Card	29,742		-
Lakeshore Invoices	1,291,699		-
Public Finance	26,590		
Subtotal	1,910,533	Subtotal	6,062,000
Grand Total	\$ 8,093,032	Grand Total	\$ 7,548,000



Memorandum

To: Sue McCormick, Great Lakes Water Authority, CEO
Gary Brown, Detroit Water and Sewerage Department, Director

From: Alicia Haskin, Public Finance Management Professional
– Intergovernmental Relations

CC: Nicolette Bateson, Great Lakes Water Authority CFO and Treasurer
Tom Naughton, Detroit Water and Sewerage Department, CFO

Date: June 13, 2018

RE: Shared Services and Transition Costs Fiscal Year 2016 True-up

The Fiscal Year 2016 (FY2016) Shared Services and Transition Costs have been finalized. The Great Lakes Water Authority (“GLWA”) and Detroit Water and Sewerage Department (“DWSD”) (collectively the “Parties”) have reviewed all costs for each Shared Service and transition costs and have come to a proposed agreement for the six months of provided Services. The final step for the settlement of FY2016 is to secure GLWA Board and Board of Water Commissioners (BOWC) approval and for DWSD and GLWA to pay the amounts due to each other by June 30, 2018.

Shared Services

Section 5.1 of the Shared Services Agreement (“SSA”) addresses invoices, in pertinent part, it states (emphasis added in bold):

Article 5.1 Invoices. For Fiscal Year 2015-2016, the City shall pay the Authority \$4,707,608 for all Authority Services (including “as-needed” Services) and the Authority shall pay the City \$2,179,506 for all City Services (including “as-needed” Services), each in equal monthly installments. Such installments received by the Authority shall be deposited into the Authority Regional Operation and Maintenance Account of the Operation and Maintenance Fund established in the master bond ordinances for each of the Systems...

The Parties shall engage, and share the costs of, a third-party to analyze the actual Service Costs (“Cost Analysis”) of providing the City Services and the Authority Services for Fiscal Year 2015-2016 and each subsequent Fiscal Year. **If, based on this**

Cost Analysis: (a) the costs paid by a Subscribing Party¹ were greater than the costs of providing the Services, the Providing Party shall pay an amount equal to such cost variance to the Subscribing Party in the next Fiscal Year or as otherwise agreed to by the Parties; and (b) the costs paid by a Subscribing Party were less than the costs of providing the Services, the Subscribing Party shall pay an amount equal to such cost variance to the Providing Party in the next Fiscal Year or as otherwise agreed to by the parties...

Each invoice, whether for Services provided regularly or “as needed”, shall itemize the costs and charges by Services provided under each Service Delivery Schedule, and shall provide sufficient detail to the Subscribing Party to identify the Services performed and the basis for the charges. A Performing Party may only charge the Service Cost for Services provided. Neither Party may set-off any amount it owes to the Party on account of any amounts it may be owed by such party. Contract, material and other applicable Service Costs shall be billed at the contractual rates or third-party charges therefor.

The application of Section 5.1 has resulted in monthly estimated billings in accordance with the calculations from the SSA. The actual calculated Service Costs based upon a Cost Analysis have been agreed to by the Parties.

To date, payments have not yet been exchanged. It has been agreed to by both Parties to expedite the processing of the settlement by having both parties pay the amounts due to each other by June 30, 2018. The payments and acceptance of these payments will be considered as satisfaction of payment by both Parties. This is not deemed a set-off of other costs as noted in the SSA.

Per the SSA, the Parties, individually, prepared a true-up analysis to calculate the Service Costs. For those Services where there were differences, an amount was negotiated to settle on a Service Costs.

Transition Costs

In addition to the Shared Services outlined in the SSA, there have been transition costs associated with the stand-up of the Regional and Local System. The Parties have reviewed the transition costs for FY2016. Of the transition costs, the most significant are the Employee Termination Payouts (\$5,699,000) and the payment of Lakeshore Invoices (\$1,291,699). The Employee Payouts were contemplated in the Regional Water Supply and Sewerage Disposal Leases between the City and GLWA (the “Leases”). See Sections 4.1 and 1.1(k)(i)—the definition of City Residual Costs. Pursuant to the Leases, GLWA was obligated to reimburse the City for these costs. As it relates to the Lakeshore invoices, the City assigned the Lakeshore contracts to GLWA pursuant to Schedule E of Leases. However, Lakeshore had work to complete on the Local System after the stand-up. As such, DWSD needs to reimburse

¹ Subscribing Party means the Party that is receiving a Service from a Performing Party in supporting the transition of a Subscribing Party to transition to a new Service provider.

GLWA for Lakeshore's work on the Local System. A breakdown of these and other transitions costs are attached.

In summary:

GLWA Provider True-Up Billings to DWSD \$8,093,032

DWSD Provider True-Up Billings to GLWA \$7,548,000

The following is the "Schedule of True Up Billings" which provide the details of the Performing Party's Service Costs and the proposed agreement to the actual true-up costs.

Since the proposed agreement deviates from the monthly process outlined in the SSA and the Parties' transition costs are also being resolved, it is recommended that GLWA's Board and DWSD's BOWC approve the proposed agreement.

Schedule of True Up Billings			
Shared Services			
GLWA Provider		DWSD Provider	
Shared Service Description	Billings to DWSD	Shared Service Description	Billings to GLWA
OPS-002 Miss Dig	\$109,338	OPS-001 Fleet	\$471,000
OPS-004 Water Quality	112,085	OPS-002 Miss Dig	15,000
OPS-005 Security	1,142,217	OPS-003 As Needed Field Services	140,000
OPS-005 Security Training	4,732	OPS-006 Facilities	688,000
OPS-006 Facilities	58,234	DoIT-001 Financial Information Services	75,000
OPS-008 Systems Control Center	620,000	DoIT-002 Radios	75,000
ITS-001 Retail AMR	355,962	DoIT-003 Customer Service Technology Suite	22,000
ITS-002 Customer Service Tech Suite	59,208	OCFO-001 Support for Financial Services	-
ITS-003 See Click Fix	91,988		
ITS-004 WAM	577,009		
ITS-005 Mobile Work Force	140,940		

ITS-006 ESRI-GIS	666,402		
ITS-007 DADS	54,081		
ITS-008 TIBCO	95,372		
ITS-009 IT Infrastructure	2,001,645		
PRO-001 Application Analyst	19,700		
LS-001-A Joint Litigation and Defense, LS-001-B Environment, LS-002 Environment, LS-003 Contract Drafting	73,586		
Subtotal	\$6,182,500		\$1,486,000
Transition Costs			
DWSD-R Staff Training by GLWA	\$2,325	Fuel	\$35,000
DWSD-R Bills paid by GLWA	186,346	Employee Termination Payouts	5,699,000
Bank Fees	373,831	WAM Invoices	328,000
P-Card	29,742		
Lakeshore Invoices	1,291,699		
Public Finance	26,590		
Subtotal	\$1,910,533		\$6,062,000
Grand Total	\$8,093,032		\$7,548,000



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Proposed Contract Extension and Increase with PFM Asset Management LLC
GLWA Contract No. GLWA CS-022

Background: In November 2015, Great Lakes Water Authority (GLWA) engaged PFM Asset Management LLC (PFM) as a registered investment advisor to assist with 1) identifying portfolio and cash management optimization opportunities, 2) overcome personnel resource constraints during the stand-up of both GLWA and DWSD-Retail, 3) expand the transparency and capacity of investment portfolio reporting, and 4) provide an added level of controls.

PFM has worked with the treasury staff to 1) negotiate and increase bank earnings credit rates, 2) invest debt service and debt reserve funds, 3) transition balances in bank deposit accounts to higher yielding government money market and local government investment pools, 4) invest funds in construction and trust accounts into longer term investment securities, and 5) develop quarterly investment report package. With PFM's assistance, GLWA earned \$4.3 million in investment income for fiscal year 2017. The projected investment earnings for fiscal year 2018 are \$11.8 million.

The original PFM contract amount in 2015, which did not contemplate PFM actively managing the portfolio, was \$250,000 with an expiration date of December 2017. In November 2017, the PFM contract was extended to July 2018 and was increased by \$350,000 to bring the contract total to \$600,000. This contract increase was to accommodate PFM's active management of the portfolio and continued investment advisory services.

Analysis: The use of a registered investment advisor has proven to be a cost effective and efficient approach to portfolio management. The use of an investment advisor allows GLWA to have direct access to financial market expertise while allowing the treasury team to focus on the development of cash flows, treasury internal controls, and process improvements.

We are requesting to extend the PFM contract period to December 2018 while we complete an RFP to solicit competitive proposals for Investment Advisory Services. This contract extension would require an increase to the contract of \$100,000. The total life-to-date PFM contract amount after this increase would be \$700,000.

<u>Portfolio Income</u>	
FY 2017	\$4,300,000
Projected FY 2018	<u>11,800,000</u>
Total Portfolio Income	<u><u>\$16,100,000</u></u>
<u>PFM Contract</u>	
Original Contract Amount - November 2015	\$250,000
Contract Extension & Increase - November 2017	350,000
Proposed Contract Extension & Increase - June 2018	<u>100,000</u>
Total PFM Contract	<u><u>\$700,000</u></u>
PFM Contract as % of Portfolio Income	<u><u>4.3%</u></u>

Calculation of Contract Increase - Invested Portfolio			
	<u>Estimated Portfolio \$</u>	<u>Rate</u>	<u>Fee \$</u>
1st	\$ 100,000,000	0.08%	\$ 80,000
2nd	100,000,000	0.06%	60,000
above 2nd	550,000,000	0.05%	275,000
Portfolio Balance	<u>\$ 750,000,000</u>		<u>\$ 415,000</u>
		Monthly	<u><u>\$ 34,583</u></u>
Projected billings through December 2018	\$	277,000	
Remaining Balance on Current Contract		<u>(190,000)</u>	
Additional Contract Funds Needed	\$	<u><u>87,000</u></u>	
Requested Increase			<u><u>\$100,000</u></u>

The total contract amount of \$700,000 is 4.3% of the total portfolio income for FY 2017 and FY 2018. The estimated annual fee of \$415,000 is .04% of the March 2018 investment portfolio balance.

This contract extension and increase in fees does not require action by the GLWA Board. Staff did want to report this update that achieves a desired outcome of increased investment earnings while preserving compliance with GLWA's investment policy and Michigan Public Act 20, *Investments of Surplus Funds of Political Subdivisions*.

Proposed Action: Receive and file report.



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Policy Resolution – Procurement Card Policy

Background: The Great Lakes Water Authority Procurement Card Program has been established to provide an efficient and cost-effective method of paying for business related goods and services. A procurement card (PCard) may be used with any merchant that accepts credit cards. This program is designed to serve as an alternative to the use of petty cash or instances where a purchase order, just-in-time procedures, or other formal procurement methods cannot be used. It is not intended to be a mechanism to avoid or by-pass the Great Lakes Water Authority (GLWA) Procurement Policy.

Analysis: GLWA established its own PCard program with Comerica Bank at the time of the stand-up of GLWA on January 1, 2016. The program that was established was carried forward from the predecessor Detroit Water & Sewerage Department (DWSD) PCard program. The program and policy have now been revised and updated to meet GLWA's business requirements. The Chief Financial Officer/Treasurer has delegated authority to the Treasury Manager to be the Program Administrator and oversee compliance with this policy. The Program Administrator is responsible for managing the program including PCard issuance, reporting, and monitoring usage. All PCards issued to employees must be approved by an Area Chief. All transactions are reviewed for supporting documentation and monthly/quarterly reporting is provided to the Chief Financial Officer/Treasurer and Area Chiefs.

Local government units are required to adopt a credit card use policy in accordance with State of Michigan Public Act 266 of 1995, Credit Card Transactions to authorize and regulate use of a company sponsored credit card. The governing body of the local government unit must adopt by resolution this written policy. The GLWA Board is being asked to accept this policy to close an open item from the stand-up of the Authority.

The following documents are attached:

- Resolution for Procurement Card Policy & Procedures
- PCard Policy Comparison to Credit Card Transactions Act 266
- Procurement Card Policy
- Procurement Card Procedure

Proposed Action: Audit Committee recommends that the GLWA Board of Directors adopts the Procurement Card Policy resolution at its regularly scheduled meeting in July 2018.

Great Lakes Water Authority

Resolution for Procurement Card Policy & Procedure

Whereas, in accordance with State of Michigan Credit Card Transactions Act 266 of 1995, GLWA is required to adopt a credit card use policy,

Whereas the Great Lakes Water Authority wishes to use a procurement card which is considered to be a type of credit card for payment of business related goods and services for use by designated personnel as approved by the Area Chief Executive,

Now, Therefore Be It:

Resolved, that the Chief Executive Officer delegates the responsibility for the development of procurement card (PCard) policy and procedures to the Chief Financial Officer/Treasurer,

Resolved, that the Chief Financial Officer/Treasurer delegates the authority to the Treasury Manager to be the Program Administer and oversee the compliance with the PCard policy and procedures,

Resolved, that the PCard will be issued and used only by authorized Great Lakes Water Authority employees,

Resolved, that the Program Administrator is responsible for PCard issuance, accounting, monitoring, retrieval and for overseeing compliance with the procurement card policies and procedures,

Resolved, that the user of the PCard will submit documentation, in a timely organized manner, for every purchase which includes in detail the goods or services purchased, the date of purchase and the official business for which purchased,

Resolved, that the Program Administrator will review supporting documentation for all transactions and provide monthly reporting to the Chief Financial Officer and quarterly reporting to all Area Chiefs.

Resolved, that the employee issued the PCard is responsible for its protection and custody and will immediately notify the Great Lakes Water Authority Treasury Group if the card is lost or stolen and will turn in the card prior to termination of employment,

Resolved, that the misuse of the PCard by an employee will result in reimbursement to Great Lakes Water Authority for unauthorized charges, revocation of the card privileges and/or reprimand, suspension, or immediate termination,

Resolved, that this Board hereby adopts the Great Lakes Water Authority Procurement Card Policy.

STATE OF MICHIGAN
CREDIT CARD TRANSACTIONS
Act 266 of 1995
[\(GLWA's Compliance Notes in Blue\)](#)

**Great Lakes Water Authority Procurement Card (PCard) Policy and Procedure Comparison to
State of Michigan Credit Card Transactions Act 266.**

AN ACT to authorize and regulate credit card transactions involving local units of government, including the use of credit cards by officers and employees of local units of government; and to provide for powers and duties of certain state and local agencies, officers, and employees.

- [Referenced in PCard Policy, Purpose statement, Page 1](#)
- [Referenced in PCard Procedure, Purpose statement, Page 1](#)

History: 1995, Act 266, Eff. July 8, 1996.

The People of the State of Michigan enact:

129.241 Definitions.

Sec. 1. As used in this act:

(a) "Budget" means a plan of financial operation for a given period of time, including an estimate of all proposed expenditures from the funds of a local unit and the proposed means of financing the expenditures. As used in section 4(1), budget does not include any of the following:

- (i)) A fund for which the local unit acts as a trustee or agent.
- (ii)) An intragovernmental service fund.
- (iii)) An enterprise fund.
- (iv)) A public improvement or building and site fund.
- (v)) A special assessment fund.

(b) "Credit card" means a card or device issued under a credit card arrangement by a person licensed under 1984 PA 379, MCL 493.101 to 493.114, by a person licensed under the consumer financial services act, 1988 PA 161, MCL 487.2051 to 487.2072, or by a depository financial institution as defined in section 1a of the mortgage brokers, lenders, and servicers licensing act, 1987 PA 173, MCL 445.1651a.

(c) "Credit card arrangement" means an unsecured extension of credit for purchasing goods or services from the credit card issuer or any other person that is made to the holder of a credit card and that is accessed with a credit card.

(d) "Credit card policy" means a policy adopted by resolution of a local unit under section 3.

(e) "Governing body" means any of the following:

- (i)) The council, commission, or other entity vested with the legislative power of a village.
- (ii)) The council or other entity vested with the legislative power of a city.
- (iii)) The township board of a township.
- (iv)) The county board of commissioners of a county.
- (v)) The board of county road commissioners of a county.
- (vi)) The board of education of a local school district.
- (vii)) The board of education of an intermediate school district.
- (viii)) The board of trustees of a community college district.

(ix) The official body to which is granted general governing powers over an authority or organization of government established by law that may issue obligations under the revised municipal finance act, 2001 PA 34, MCL 141.2101 to 141.2821, and that may expend funds of the authority or organization.

(x) A community mental health authority created under section 205 of the mental health code, 1974 PA 258, MCL 330.1205.

(f) "Local school district" means a school district organized under the revised school code, 1976 PA 451, MCL 380.1 to 380.1852, or a district governed by a special or local act.

(g) "Local unit" means any of the following:

- (i)) A village.
- (ii)) A city.
- (iii)) A township.
- (iv)) A county.
- (v)) A county road commission.

- (vi)) A local school district.
- (vii)) An intermediate school district.
- (viii)) A community college district.
- (ix) An authority or organization of government established by law that may issue obligations under the revised municipal finance act, 2001 PA 34, MCL 141.2101 to 141.2821, and that may expend funds of the authority or organization.
- (x) A community mental health authority created under section 205 of the mental health code, 1974 PA 258, MCL 330.1205.

History: 1995, Act 266, Eff. July 8, 1996;—Am. 2000, Act 169, Imd. Eff. June 20, 2000;—Am. 2002, Act 257, Imd. Eff. May 1, 2002.

129.242 Credit card arrangement; use of credit cards.

Sec. 2. (1) Subject to sections 3 and 5, the governing body of a local unit may enter into a credit card arrangement.

(2) A credit card arrangement or the use of credit cards under this act is not subject to the revised municipal finance act, 2001 PA 34, MCL 141.2101 to 141.2821, or to provisions of law or charter concerning the issuance of debt by a local unit.

History: 1995, Act 266, Eff. July 8, 1996;—Am. 2002, Act 257, Imd. Eff. May 1, 2002.

129.243 Adoption of resolution; written policy; provisions.

Sec. 3. A local unit shall not be a party to a credit card arrangement unless the governing body of the local unit has adopted by resolution a written policy that provides all of the following:

- [Resolution drafted for board approval. Document attached for review.](#)

(a) That an officer or employee designated by the credit card policy is responsible for the local unit's credit card issuance, accounting, monitoring, and retrieval and generally for overseeing compliance with the credit card policy.

- [Referenced in PCard Policy, Responsibilities section, Page 2](#)

(b) That a credit card may be used only by an officer or employee of the local unit for the purchase of goods or services for the official business of the local unit. In addition, the credit card policy may limit the specific official business for which credit cards may be used. This subdivision does not limit the applicability of chapter XXIVA or section 174, 175, 219a, or 490a of the Michigan penal code, Act No. 328 of the Public Acts of 1931, being sections 750.157m to 750.157w, 750.174, 750.175, 750.219a, and 750.490a of the Michigan Compiled Laws; section 1a of the code of criminal procedure, Act No. 175 of the Public Acts of 1927, being section 769.1a of the Michigan Compiled Laws; or any other law, or ordinance, applicable to use of a credit card, issued by a local unit, for other than official business of the local unit.

- [Covered in PCard Policy, Responsibilities section, Page 2, 3A](#)
- [Covered in PCard Policy, Policy section, Page 3, #1](#)
- [Covered in PCard Policy, Noncompliance section, Page 6-7](#)
- [Covered in PCard Procedures, Procedures section, Page 4-5, #I and III](#)

(c) That an officer or employee using credit cards issued by the local unit shall submit to the local unit documentation described in the credit card policy detailing the goods or services purchased, the cost of the goods or services, the date of the purchase, and the official business for which purchased.

- [Covered in PCard Policy, Policy section, Page 5, #7](#)
- [Covered in PCard Procedures, Procedures section, Page 9, #VI B](#)

(d) That an officer or employee issued a credit card is responsible for its protection and custody and shall immediately notify the local unit if the credit card is lost or stolen.

- [Covered in PCard Policy, Policy section, Page 5, #8-9](#)
- [Covered in PCard Procedures, Procedures section, Page 14, #X A](#)

(e) That an officer or employee issued a credit card shall return the credit card upon the termination of his or her employment or service in office with the local unit.

- [Covered in PCard Policy, Policy section, Page 5, #8-9](#)
- [Covered in PCard Procedures, Procedures section, Page 14, #XI and XII](#)

(f) For a system of internal accounting controls to monitor the use of credit cards issued by the local unit.

- [Covered in PCard Policy, Internal accounting controls section, Page 6, #1-4](#)
- [Covered in PCard Procedures, Procedures section, Page 13, # X; Page 15, # XIII-XV](#)

(g) For the approval of credit card invoices before payment.

- [Covered in PCard Policy, Internal accounting controls section, Page 6, #1](#)

(h) That the balance including interest due on an extension of credit under the credit card arrangement shall

be paid for within not more than 60 days of the initial statement date. The local unit shall comply with this provision of the credit card policy.

- Covered in PCard Policy, Internal accounting controls section, Page 6, #2
- Covered in PCard Procedures, Procedures section, Page 15, # XIII

(i) For disciplinary measures consistent with law for the unauthorized use of a credit card by an officer or employee of the local unit.

- Covered in PCard Policy, Noncompliance section, Page 6-7

(j) Any other matters the governing body considers advisable.

History: 1995, Act 266, Eff. July 8, 1996.

129.244 Total combined authorized credit limit; limitation; payment of balance, annual fee, and interest.

Sec. 4. (1) The total combined authorized credit limit of all credit cards issued by a local unit shall not exceed 5% of the total budget of the local unit for the current fiscal year.

(2) The governing body of a local unit may include in its budget and pay the balance due on any credit cards, including the annual fee and interest.

- Covered in PCard Policy, Responsibilities section, Page 3, #5C

History: 1995, Act 266, Eff. July 8, 1996.

129.245 Limiting or suspending authority to issue and use credit cards; issuance of order; hearing.

Sec. 5. After a hearing conducted under the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws, the department of treasury may issue an order limiting or suspending the authority of a local unit to issue and use credit cards under this act for failure to comply with the requirements of this act or with the requirements of the local unit's credit card policy.

- Covered in PCard Policy, Noncompliance section, Page 6-7, #2

History: 1995, Act 266, Eff. July 8, 1996.

129.246 Validity of credit card arrangement before effective date of act.

Sec. 6. A credit card arrangement entered into by a local unit before the effective date of this act is valid but may not be used for credit card transactions on or after the effective date of this act unless the requirements of sections 3 and 4 are complied with.

History: 1995, Act 266, Eff. July 8, 1996.

129.247 Effective date.

Sec. 7. This act shall take effect 6 months after the date of its enactment.

History: 1995, Act 266, Eff. July 8, 1996.



PROCUREMENT CARD (PCARD) POLICY

Version 07.11.18

Purpose

The purpose of this Procurement Card (PCard) Policy for the Great Lakes Water Authority (GLWA) is to establish a clear understanding of the PCard program, the intended uses, and GLWA staff responsibilities. This policy authorizes and regulates credit card transactions pursuant to the State of Michigan law (Credit Card Transactions Act 266 of 1995, Effective July 8, 1996). This policy applies to both the Traditional PCard (TPC) and Limited Travel PCard (LtdPC).

Introduction

The GLWA PCard Program has been established to provide an efficient and cost-effective method of paying for business related goods and services. A PCard may be used with any merchant that accepts credit cards. This program is designed to serve as an alternative to the use of petty cash or instances where a purchase order, just-in-time procedures, or other formal procurement methods cannot be used. The PCard should not be used as a mechanism to avoid or bypass the GLWA Procurement Policy.

Definitions

Area Chief Executive (Area Chief): The executive officer for an area within GLWA.

Cardholder: The Great Lakes Water Authority (GLWA) employee whose name appears embossed on the PCard and is accountable for all charges made with that card.

Limited Travel Procurement Card (LtdPC): A PCard issued to any GLWA employee that can only be used for business related travel expenses associated with training, seminars and/or conference registration.

Procurement Card (PCard): A company sponsored credit card restricted for use to only designated personnel for the purchase of goods and services when conducting official GLWA business.

Procurement Card Program Administrator (Program Administrator): Employee responsible for administering the PCard Program for GLWA and acting as the main contact between the cardholders and the bank.

Supporting Documentation: A merchant produced or non-GLWA document that records the relevant details for each item purchased including quantities, amounts, a description of what was purchased, the total charge amount and the merchant's name, and address (e.g. sales receipt, original invoice, packing slip, credit receipt, etc.). **GLWA purchases are not subject to sales tax.**



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Traditional Procurement Card (TPC): A PCard card issued to an employee of GLWA for making authorized business-related purchases and/or travel arrangements. GLWA will issue payment for charges made with the PCard.

Transaction Limit: A dollar limitation of purchasing authority assigned to the cardholder for each total charge made with the PCard.

Responsibilities

The Chief Financial Officer / Treasurer has delegated authority to the Treasury Manager to oversee compliance with this policy.

1. Group Director / Manager
 - A. Approve all PCard Request Forms for initiating PCards within their group and forwards to the Area Chief for final approval.
 - B. Approve requests for deactivating PCards or changes to card limits (subject to approval by Area Chief).
 - C. Notify Program Administrator immediately if a cardholder transfers or separates from GLWA.
2. Area Chief Executive (Area Chief)
 - A. Approve all PCard Request Forms within their area and forward to the Program Administrator.
 - B. Review quarterly report of cardholder activity and make recommendations or changes as necessary.
3. PCard Program Administrator (Program Administrator)
 - A. Manage the PCard program including process approved PCard enrollment, change, and deactivation requests; issue PCards; review documentation files for completeness; restrict cardholder purchasing profiles by use of Merchant Category Codes (MCC); and provide ongoing training to cardholders.
 - B. Document retention of transactions, sales receipts, and other applicable forms.



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- C. Provide the complete Cardholder Transactions Report to the Financial Reporting and Accounting Team (FRAT) monthly.
- D. Generate a Monthly Procurement Card Report to Chief Financial Officer (CFO) monthly.
- E. Provide Quarterly Procurement Card Report to each Area Chief quarterly.
- F. Monitor cardholder usage to ensure compliance with this policy.

4. Cardholder

Use the PCard in accordance with this policy and any other related policies.

5. Treasury Group

- A. Fund the water/sewer PCard bank accounts accordingly to pay PCard monthly invoices.
- B. Quarterly audit of cardholder eligibility.
- C. Ensures the total combined authorized credit limit for the PCard program does not exceed five (5) percent of the total budget for the current fiscal year.

6. Financial Reporting and Accounting Team

Journalize and post transactions from the Cardholder Transactions Report in the financial reporting software system.

7. Financial Planning and Analysis Team

Review monthly report of PCard transactions to monitor usage, budget, and GL number selections then make recommendations based on spending.

Policy

Cardholders are responsible for adhering to the following:

- 1. Make purchases to pay for all authorized commercially available goods, supplies, services within the GLWA transaction limits determined by the cardholder's authorizing manager.



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2. Cardholder is responsible for all transactions. If the cardholder authorizes another GLWA employee to use their PCard, both the cardholder and authorized user are responsible the transaction(s).
3. **Prohibited** expenditures include the following:
 - Items for personal use
 - Items for non-GLWA purposes
 - Flowers for employees
 - Alcoholic beverages
 - Meals associated with travel
 - Recreation and entertainment
 - Contracting
 - Gasoline (except when used in conjunction with rented vehicles)
 - Capital equipment including vehicles
 - Cash advances
 - Professional services
 - Michigan sales tax
 - Tips greater than 15%
 - Items that GLWA have a just-in-time (JIT) contract, existing contract and/or purchase order.
 - Travel arrangements that may be procured through the Travel Program at a lower cost.
 - Items listed as illegal expenditures as identified by the State of Michigan Attorney General dated January 07, 2002 ([Determining Lawful Expenditures, pp. 7-8](#)).
4. Procure meals or refreshments for GLWA business meetings where:
 - A. The purpose of the meeting is to conduct official GLWA business and/or to provide training for GLWA employees or officials.
 - B. The employee is not free to take the meals elsewhere without being absent from essential formal discussions, lectures, or speeches concerning the purpose of the meeting.
 - C. Lunchtime hours are the only available time for all attendees to meet.



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- A list of attendees and a calculation of per person cost is required for all transactions associated with meals.

D. **Prohibited** meal expenditures include the following:

- For anniversaries of agencies, receptions for new, existing, and/or retiring employees or officials, or other non-public celebrations.
 - Regularly scheduled meetings such as weekly team meetings.
5. Refrain from splitting the cost of a purchase that is over the cardholder's single or monthly transaction limit into two or more charges; or splitting the cost between two or more cardholders for the purpose of circumventing card limit restrictions.
 6. Refrain from syncing the PCard to mobile payment and digital wallet services such as Apple Pay, Samsung Pay, or Google Pay.
 7. Assign correct General Ledger (GL) account number and submit supporting documentation detailing the goods or services purchased, cost, date of the purchase, and the business purpose within five (5) business days of posting date.
 8. Store the PCard in a secure location at all times and ensure exposure to the card number is strictly controlled.
 9. Report a lost, stolen, or damaged PCard to the Program Administrator within 24 hours of incident.
 10. The cardholder must surrender the PCard upon the termination of employment or upon management's request.

Approval levels for obtaining a PCard:

1. Manager

- Submit a request for themselves or another employee within their group/team.



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2. Group Director

- Submit a request for themselves or another employee within their group.
- Approve the PCard Request Form for another employee within their group.

3. Area Chief

- Complete the PCard Request Form for themselves or another employee within their area.
- Approve the PCard Request Form for another employee within their area and if necessary, can approve requests for other areas.
- Chief Executive Officer (CEO) can approve the PCard Request Form for all Area Chiefs.

Internal accounting controls:

1. The Program Administrator monitors the use of all PCard, reviews transactions and support documentation, and report any inconsistencies to reporting manager; performs periodic audits of PCard spending, generate reports of PCard activity, and recommend transaction limit increases/decreases as needed.
2. The Treasury Group reviews the PCard program statement balances prior to bank account funding and payment for charges. The balance, including interest and fees, under the credit card arrangement will be paid within sixty (60) days of the initial statement date.
3. Monthly reports provided to the Chief Financial Officer, Financial Reporting and Accounting Team, and Financial Planning and Analysis Team to review transaction activity and GL account numbers.
4. Quarterly reports provided to each Area Chief for their relative area(s) to review PCard activity.

Noncompliance:

1. Failure to adhere to this policy may result in disciplinary action against the cardholder and/or the employee making the purchase.



PROCUREMENT CARD (PCARD) POLICY

Version 07.11.18

2. The disciplinary action may result in one or more of the following in accordance with the Corrective Action Point System (CAPS) as outlined in The Way We Work Policies, Rules, and Guidelines and/or legal counsel recommendation:
- Reimbursement to GWLA for unauthorized charges
 - Suspension or termination of PCard purchasing privileges
 - Written reprimand, suspension, or immediate discharge.

Policy Revision History

Revision Number	Revision Effective Date	Description of Changes	Requested By

Procurement Card (PCard) Procedure

Version: V1.0	Prepared By: Treasury Group	
Effective Date: 07.11.18	Approved By: Great Lakes Water Authority Board of Directors	Date Approved: 07.11.18

Purpose: The purpose of this Procurement Card (PCard) procedure is to establish a clear understanding of the process for obtaining and using a PCard, reporting requirements, funding, and accounting for PCard transactions pursuant to the State of Michigan law (Credit Card Transactions Act 266 of 1995, Effective July 8, 1996). This procedure applies to both the Traditional PCard (TPC) and Limited Travel PCard (LtdPC).

Scope: This procedure applies to all Great Lakes Water Authority (GLWA) Departments.

Responsibilities: The Program Administrator is responsible for monitoring cardholder use and ensuring compliance with the PCard Policy.

References: See PCard Policy

Other related policies and procedures:

- Travel, Training, and Local Transportation Policy and Procedure
- Procurement Policy and Procedures
- The Way We Work Policies, Rules, and Guidelines

Definitions:

Term	Definition
Area Chief	The Executive Officer for an area within GLWA.
BS&A	General Ledger System
Cardholder	The GLWA employee whose name appears on the PCard and is accountable for all charges made with that card.
Cardholder Delegate	GLWA employee authorized by cardholder to prepare and upload supporting documentation to Smart Data.
Comerica Card Management System (CMS)	Online program management tool that allows the Program Administrator to manage and monitor the PCard program on a day-to-day basis. Program Administrator can view current balances and recent transactions, add new cardholders, change

	purchase profiles, block or cancel cards, export transaction data. This tool may be used in conjunction with Smart Data.
Financial Management Professional (FMP)	Employee with the Financial Reporting and Accounting Team.
Limited Travel PCard (LtdPC)	A charge card issued to an employee of GLWA that can only be used for business related travel expenses associated with training, seminars and/or conference registration.
Lost Receipt Form	This form is used when a receipt is lost, illegible, or damaged. This form may only be used when attempts to obtain a duplicate receipt from the merchant are unsuccessful.
Merchant Category Codes (MCC)	Purchasing profiles created by the bank used to assist with PCard spend controls.
MasterCard Smart Data (Smart Data)	MasterCard Smart Data is an online tool used to manage, organize and integrate card transaction data in GLWA's GL system. This application includes transaction review/approval, standard reports, report and export scheduling, and data customization. A cardholder may use this tool to view transactions and upload supporting documentation. The Program Administrator may use this tool in conjunction with CMS.
PCard Request Form	Form used to request a Traditional or Limited PCard for GLWA employees.
Procurement Card (PCard)	A company sponsored credit card restricted for use to only designated personnel for the purchase of goods and services when conducting official GLWA business.
Supporting Documentation	A merchant produced or non-GLWA document that records the relevant details for each item purchased including quantities, amounts, description, total charge amount, and merchant's name and address (e.g. sales receipt, original invoice, packing slip, credit receipt, etc.). GLWA purchases are not subject to sales tax.
Traditional Procurement Card (TPC)	Charge card issued to an employee of GLWA for making authorized business-related purchases and/or travel arrangements.

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Procedures:

I. Program Overview - Traditional PCard Program (TPC)

Cardholders are authorized to use the Traditional PCard (TPC) to purchase goods or services required as a function of their duties at GLWA. Cardholders may use the card for conference registration and travel arrangements not covered by the Travel, Training, and Local Transportation Policy and Procedures. TPC cardholders do not need a Limited Travel PCard (LtdPC).

- PCards profiles are created to allow purchases from specific Merchant Category Codes (MCC).
- Monthly spend limits range from \$1,000 to \$10,000. Any amount greater than \$10,000 requires a written explanation on the PCard Request Form.
- Area Chief may request credit limit increases for designated emergency response personnel within their Area/Group.

II. Cardholder Enrollment – Traditional PCard Program (TPC)

Department managers and above can request PCards for their department by completing a PCard Request Form. The Area Chief Executive (Area Chief) approves all PCard Request Forms. This form is available on the GLWA intranet

(<https://glwater.sharepoint.com/Areas/FS/Treasury/SitePages/Home.aspx>).

- A. Manager or Group Director forwards the completed PCard Request Form to their Area Chief for approval.
- B. Area Chief approves all PCard requests within their area.
 1. Area Chief Executive can approve the PCard Request Form for another employee within their area and if necessary, can approve requests for other areas.
 2. Approved PCard Request Form is emailed to the Program Administrator at PCard.Administrator@glwater.org.
- C. Program Administrator creates a PCard account and assigns an access code via the Comerica Card Management System (CMS) website after approved PCard Request Form is received.

- D. Once the card is received via US Mail, a Program Administrator meets with the cardholder to review the PCard Policy, Procedures, and Cardholder User Agreement.
- E. Cardholder reviews the documents and signs the Cardholder User Agreement.
- F. Cardholder completes online self-registration process on Comerica's Smart Data website.
 - This website is used to view PCard activity, enter accounting information, and upload supporting documentation.
- G. Program Administrator provides overview of Smart Data website and emails cardholder a link to the Smart Data instructional video and website.
- H. Cardholder receives the card and four (4) digit access code.
- I. Cardholder activates PCard via telephone using the assigned access code and creates a new four (4) digit Personal Identification Number (PIN) to complete card activation.
 - Card cannot be used until activated.
 - Card must be activated within 45 days of issuance or card is automatically disabled by Comerica. If this occurs, Program Administrator must request a new card.
- J. The Program Administrator files the approved PCard Request Form and Cardholder User Agreement on a shared network drive.

III. Program Overview - Limited Travel PCard (LtdPC)

The LtdPC is restricted to the following purchases associated with travel:

- training, seminar, or conference registration
- lodging (reservations and payment)
- rental car (see Section III Authorized PCard Usage of this policy for rental car guidelines)
- gasoline (rental car only)
- transportation services (e.g., taxi, shuttle, Uber)
- parking and tolls
- baggage fees (one (1) checked personal item)

An employee with a TPC does not need a LtdPC.

IV. Cardholder Enrollment – Limited Travel PCard (LtdPC)

Department managers and above can request a Limited Travel PCard (LtdPC) for employees authorized to travel on official GLWA business by completing a PCard Request Form. The LtdPC should only be requested when the employee may be required to present a card at point-of-sale.

The Area Chief approves all PCard Request Forms. The form is available from the Program Administrator or on the GLWA intranet (<https://glwater.sharepoint.com/Areas/FS/Treasury/SitePages/Home.aspx>).

- A. Manager or Group Director forwards the completed PCard Request Form to their Area Chief for approval.
- B. Area Chief approves all PCard requests within their area.
 1. Area Chief Executive can approve the PCard Request Form for another employee within their area and if necessary, can approve requests for other areas.
 2. Approved PCard Request Form is emailed to the Program Administrator at PCard.Administrator@glwater.org.
- C. Approved PCard Request Form and Travel and Training Authorization Form (TTAF) (see Travel, Training, and Local Transportation Policy) are emailed to PCard.Administrator@glwater.org at least ten (10) business days prior to travel.
- D. Program Administrator creates a PCard account.
 1. Card limit is based on estimated travel expenses from TTAF. Any revisions to travel dates or expenses requires email notification to the Program Administrator.
 - Reporting manager should be carbon copied (cc'd) on the email.
 2. Employee's purchase profile will only include MCC associated with travel.
 3. A four (4) digit access code is assigned via the CMS website.
- E. Program Administrator meets with the cardholder to review the PCard Policy, Procedures, and Cardholder User Agreement once the card is received via US Mail.

- An employee with a LtdPC must adhere to the guidelines outlined in the GLWA PCard Policy and Procedures.
- F. Cardholder reviews the PCard Policy and signs Cardholder User Agreement.
- G. Cardholder completes online self-registration process on Comerica's Smart Data website.
- This website is used to view PCard activity, enter accounting information, and upload supporting documentation.
- H. Program Administrator provides overview of Smart Data website and emails cardholder a link to the Smart Data instructional video and website.
- I. Cardholder receives the card and four (4) digit access code.
- J. Cardholder activates PCard via telephone using the assigned access code and creates a new four (4) digit Personal Identification Number (PIN) to complete card activation.
- Card cannot be used until activated.
 - Card must be activated within 45 days of issuance or card is automatically disabled by Comerica. If this occurs, Program Administrator must request a new card.
- K. The Program Administrator files the approved PCard Request Form, Cardholder User Agreement, and TTAF on a shared network drive.
- L. Program Administrator reduces credit limit to \$1.00 five (5) business days after traveler's expected return date.
- Card limit remains at \$1.00 until a new approved TTAF is received.
 - Cardholder keeps Limited Travel PCard (LtdPC) in their possession.

V. Authorized Usage

- A. Cardholders are authorized to purchase goods and/or services based on the type of PCard issued (Traditional or Limited Travel) and in accordance with the GLWA PCard Policy. This includes conference registrations, hotel accommodations, rental car, and parking not covered by the Travel, Training, and Local Transportation Policy.

B. Car rental expenses and fuel charges related to the car rental may be charged to the card only if necessary for GLWA business and approved in advance.

- Cardholder must initiate and pay for the entire rental agreement with the PCard at the time the vehicle is returned.
- Cardholder must decline the optional collision/damage waiver (or similar coverage) offered by the rental company because coverage by MasterCard.
- A cardholder cannot rent a vehicle for another employee. The vehicle must be in the cardholder's name and sign a rental agreement.
- The rental agreement must be for a rental period not to exceed more than thirty-one (31) consecutive days. Rental periods that exceed thirty-one consecutive days are not covered MasterCard insurance.
- The rented vehicle must have a Manufacturer suggested retail price (MSRP) that does not exceed \$50,000 USD.
- See MasterCard Commercial Guide to Benefits for complete rental car coverage information (pp. 3-6):
<http://sp.dwsd.org/group/GLWA/FinancialServices/PCard/MasterCard%20Commercial%20Guide%20to%20Benefits.pdf>

C. **Prohibited** expenditures for all cardholders include the following:

- Items for personal use
- Items for non-GLWA purposes
- Flowers for employees
- Alcoholic beverages
- Meals associated with travel
- Michigan sales tax
- Recreation and entertainment
- Contracting
- Gasoline (except when used in conjunction with rented vehicles)
- Capital equipment including vehicles
- Cash advances
- Professional services

- Tips greater than 15% defined in GLWA Travel, Training, and Local Transportation Policy
 - Items that GLWA have a just-in-time (JIT) contract, existing contract and/or purchase order.
 - Travel arrangements that may be procured through the GLWA travel program at a lower cost.
 - Items listed as illegal expenditures as identified by the State of Michigan Attorney General dated January 07, 2002 (Determining Lawful Expenditures, pp. 7-8 <http://sp.dwsd.org/group/GLWA/FinancialServices/PCard/Determining%20Lawful%20Expenditures%202002.pdf>).
- D. Food and beverage items may only be purchased for public/group meetings as outlined in the GLWA PCard Policy.
- A list of attendees and a calculation of per person cost is required for all transactions associated with meals.
- E. **Prohibited meal expenditures** include the following:
- Anniversaries of agencies, receptions for new, existing, and/or retiring employees or officials, or other **non-public** celebrations.
 - Regularly scheduled meetings such as weekly team meetings.
- F. The cardholder may authorize another employee within their group to make purchases with the PCard. Both the cardholder and authorized user are responsible for ensuring transactions are within the guidelines of the GLWA PCard Policy.

VI. Making a Purchase

- A. Confirm the selected merchant accepts MasterCard. If not, choose another merchant or submit a requisition to Purchasing so the purchase can be made via purchase order.
- B. When making purchases in person, the cardholder must sign the charge receipt and retain the customer copy. The cardholder should verify the charge receipt or sales receipt complies with the requirements for supporting documentation (see definition for supporting documentation). The cardholder must inform the merchant that **GLWA purchases are not subject to Michigan sales tax prior to the transaction.**

- The [Michigan Sales and Use Tax Certificate of Exemption Form](#) is available on SharePoint or from a Program Administrator.
- C. When making purchases **via telephone or online**, cardholders should provide their account number and direct the merchant to include the following on the shipping label and/or packing slip:
- Cardholder name and phone number
 - Area, Group, and/or Team name (e.g., Financial Services Area, Treasury Group)
 - Complete delivery address, including building name and/or number
- D. Cardholders are encouraged to receive their own shipments. If someone will be receiving a shipment on the cardholder's behalf, the cardholder must notify them in advance. Regardless of who receives the shipment, the cardholder is responsible for obtaining all documentation (packing slips, mail order form copies, etc.) related to the purchase and verifying it complies with the requirements for supporting documentation.

VII. Declined Transaction

A transaction may be refused by the Comerica Bank/MasterCard authorization system for any of the following reasons:

- MCC not in cardholder's profile
 - Daily Transaction limit reached
 - Single Transaction limit reached
 - Individual Cardholder limit reached
 - Fraud Criteria met
- A. If a transaction is declined, the cardholder should contact a Program Administrator.
- B. The Program Administrator will review the transaction on CMS to identify reason for decline.
- C. If decline was due to MCC, Program Administrator may do one or more of the following:
- Add the MCC to the cardholder's profile
 - Override as a one-time approval

- Contact an approving Manager, Director, or Area Chief for authorization.
- D. If decline was due to transaction limit being reached, Program Administrator will need authorization from approving Manager, Director, or Area Chief before approving a transaction override or increasing cardholder limits.
- E. Once override is performed, the cardholder should attempt to make the purchase again.
- The Program Administrator will set a time limit, dollar amount, and maximum number of override occurrences allowed for each transaction override in CMS.

VIII. Resolving Errors, Disputes, Returns and Credits

There may be occasions where items on the statement do not correlate with receipts. The transaction may not have been made by the cardholder, the amount may be incorrect, or there is a quality issue. The cardholder is responsible for contacting the merchant when merchandise purchased with the PCard is not acceptable (incorrect, damaged, defective, etc.) and arrange a return for credit or an exchange.

- A. If merchandise is returned for credit, the cardholder is responsible for obtaining a credit receipt from the merchant and retaining that receipt with the documentation for that purchase. Receiving cash or checks to resolve a credit is prohibited.
- B. If merchandise must be exchanged, the cardholder is responsible for returning the merchandise to the merchant and obtaining a replacement as soon as possible. Documentation showing the proper resolution of the exchange is to be retained with the supporting documentation for that purchase.
- C. In the event of a disputed charge, the cardholder must try to resolve the dispute directly with the merchant. If the merchant agrees that an error has been made, they will credit the account. The cardholder can verify the credit has occurred in Smart Data.
- D. If a charge or credit does not appear online, the cardholder should contact the merchant where the purchase was made. If the charge or credit does not appear within 30 days after the original charge was made, and the merchant confirmed the charge or credit, the Program Administrator should contact Comerica Customer Service Department.

- E. If the cardholder is unable to resolve an issue with the merchant, they should call Comerica Customer Service Department at 1-800-759-9610 to dispute the transaction and request the purchase(s) be removed from the account until the dispute is resolved. Comerica will initiate the investigation.
- F. The cardholder is responsible for notifying the Program Administrator of any disputes within three (3) days of the transaction.

IX. Verification of Charges – Cardholder

Cardholders are responsible for all charges made with their PCard. A review is performed weekly using Smart Data.

- A. The cardholder views the transactions for the week in Smart Data.
- B. The cardholder saves electronic copies of the receipt(s) for each transaction to be uploaded to Smart Data.
- C. In the RARE event that a receipt is lost, illegible, or damaged, the cardholder **must** attempt to get a duplicate receipt from the merchant. If unsuccessful, the cardholder must complete a Lost Receipt Form and have it signed by their manager or department head.
 - 1. This form must be attached to any other documentation that can substantiate the purchase and uploaded to Smart Data.
 - 2. Program Administrator forwards a copy of the Lost Receipt Form to the Area Chief.
 - The Lost Receipt Form does not require signature when the receipt is not legible or damaged. The illegible or damaged receipt must accompany the Lost Receipt Form.
 - The Lost Receipt Form should **NOT** be used habitually. Any apparent abuse of this will be reported to the Manager, Group Director, or Area Chief and may result in the loss of PCard privileges.
- D. Cardholder uploads the supporting documentation (and Lost Receipt Form if applicable) for each PCard transaction weekly to Smart Data. It is recommended that cardholders perform this task as transactions occur. The original documentation is retained in their department for 7 years.
 - If all supporting documentation has not been uploaded to Smart Data within five (5) business days of notification of transaction(s), the Program Administrator notifies the approving Manager, Director, or Area Chief.

- Cardholder may lose PCard purchasing privileges if documentation is not submitted within thirty (30) days of the transactions.
- Multiple offenses may result in the loss of PCard purchasing privileges.

X. Verification of Charges – Program Administrator

- A. The Program Administrator is responsible for reviewing all transactions and supporting documentation in Smart Data to verify it meets all the criteria for authorized card use as defined in the PCard policy.
- B. In the event of questionable transactions, the Program Administrator will contact the cardholder who must provide a timely explanation, supporting documentation and/or reimbursement.
- C. All discrepancies must be investigated and resolved. The nature of each discrepancy must be documented and retained with the supporting documentation. Cardholders are accountable for all discrepancies.
 - Discrepancies resulting from unauthorized card usage must also be reported to the Manager, Group Director, and/or Area Chief.
- D. The documentation supporting PCard activity is saved to the network drive and retained for seven (7) years.

XI. Verification of Charges / Fraud Alerts – Comerica

Comerica will contact the Program Administrator in the event of suspected fraudulent activity via email and/or telephone. The cardholder is not responsible for fraudulent charges.

- A. Program Administrator will contact the cardholder to verify charges.
 1. If authorized, Program Administrator contacts Comerica to approve the transaction(s).
 2. If unauthorized, Comerica will deactivate the card and reissue a new PCard.
- B. On some occasions, Comerica will automatically deactivate a PCard when fraud is suspected depending on the type of transaction.
 1. Comerica emails the Program Administrator and advises them to call the Fraud Department.

2. Comerica explains the reason for the fraud alert and reissues a new PCard.

X. Lost, Stolen or Damaged Card

- A. If a PCard is lost, stolen or damaged, the cardholder must notify the Program Administrator immediately. If after business hours, the cardholder can contact Comerica Customer Service Department directly at 1-800-759-9610. Representatives are available 24 hours a day.
- B. Program Administrator will request and issue the cardholder a new PCard.
- C. A PCard that is found after it has been reported lost or stolen must be destroyed by cutting it in half, then forwarded to the Program Administrator. The same procedure applies if a card is damaged.

XI. Cardholder Account Maintenance

- A. A revised cardholder PCard Request Form must be completed and signed by the Director or Area Chief whenever any information contained on a PCard Request Form changes including if the cardholder:
 - moves to another location within their current department
 - moves to another area or group
 - title changes.
- B. The revised PCard Request Form is emailed to the Program Administrator for update in CMS.

XII. Card Cancellation

The Program Administrator must be notified immediately when a PCard is to be canceled for any reason.

- A. Manager, Director, or Area Chief completes the PCard Request Form and emails it to PCard.Administrator@glwater.org.
- B. The PCard is deactivated in CMS.
- C. The PCard should be cut in half and forwarded to the Program Administrator, then destroyed by shredding.

XIII. PCard Bank Account Funding – Treasury

- A. A Treasury Management Professional (TMP) generates a monthly statement containing all PCard activity (separated by water and sewer) for the prior month on/by the ninth (9th) business day of each month.
 - Each statement provides the total dollar amount of transactions for the month.
- B. TMP funds the water and sewer bank accounts based the transaction totals from the monthly statement.
 - Two (2) wires are performed: One to fund the water bank account and one to fund the sewer bank account.
- C. All documentation supporting the PCard account funding(s) is saved on a shared network drive.

XIV. General Ledger (GL) Entry – Financial Reporting and Accounting Team

- A. Program Administrator provides a monthly Cardholder Transactions Report to the Financial Reporting and Accounting Team listing all PCard activity with corresponding GL numbers by the 15th calendar day of the following month.
 - If there is missing information, the Program Administrator will send a final report once all outstanding documentation has been submitted.
- B. A Financial Management Professional (FMP) reviews the report for appropriate coding and create a monthly journal entry.
- C. The FMP records the data in to a monthly journal entry worksheet and is uploaded to BS&A.

XV. Reporting

- A. Program Administrator generates the Monthly Procurement Card Report for the Chief Financial Officer (CFO) listing all PCard activity by the 15th calendar day of the following month.
- B. Program Administrator generates the Quarterly Procurement Card Report for each Area Chief listing all PCard activity for their relative area by the 30th calendar day at the end of the quarter.

Revision History:

Revision	Date	Description of changes	Requested By



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report through March 31, 2018 (Unaudited)

Background: As stated in section 14 of the Great Lakes Water Authority (GLWA) Investment Policy, quarterly reporting shall be presented to provide a clear picture of the status of the current GLWA investment portfolio. The attached report is a synopsis of the investment activity as of March 31, 2018. The detailed report will be presented by PFM Asset Management LLC, at the July 2018 audit committee meeting.

Analysis: GLWA continues to actively invest 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. Key indicators for the quarter are:

- Yield to Market at Cost compared to market index:
 - As of March 31, 2018: 1.72% vs 1.61% (3-Month Treasury Index)
 - As of December 31, 2017: 1.36% vs 1.25% (3-Month Treasury Index)
- Portfolio Allocation in Cash/Money Market Securities
 - As of March 31, 2018: 54%
 - As of December 31, 2017: 60%

Proposed Action: Receive and file report.

Market Returns

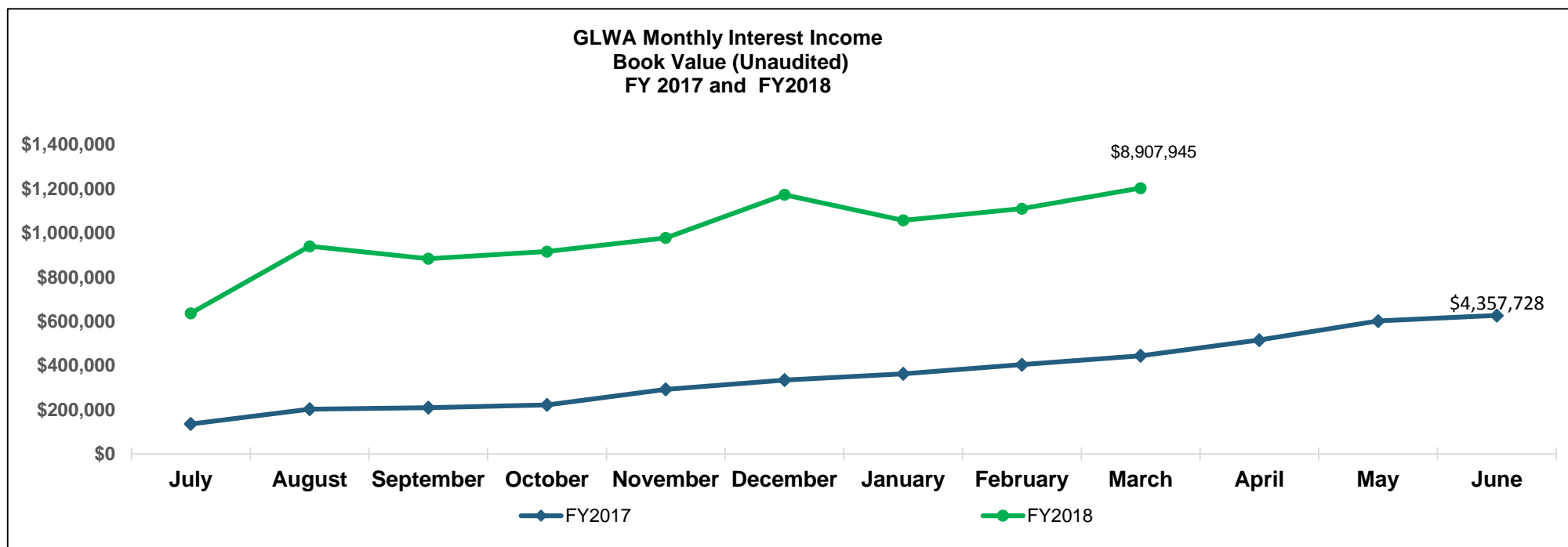
- The overall portfolio yield as of March 31, 2018 is 1.72%.
- This yield is comparable to:
 - December 31, 2017 portfolio yield of 1.36%
 - March 31, 2018 Bank of America/Merrill Lynch 3-month U.S. Treasury Bill index of 1.61%

Type of Account	Financial Institution	Market Value	%
Deposit Account	Comerica	\$14,942	0.0%
Deposit Account	First Independence (Retainage Account)	\$16,291,558	1.4%
Deposit Account	Chase (Flint Deposit Account)	\$3,752,384	0.3%
Deposit Account	Chase	\$25,405,360	2.3%
Trust	U.S. Bank	\$432,792,148	38.4%
Money Market Fund	JP Morgan	\$62,013,156	5.5%
Local Government Investment Pool	GovMic	\$67,584,854	6.0%
Managed Funds	PFM	\$518,660,920	46.0%
TOTAL		\$1,126,515,322	100.0%
Total Portfolio - YTM @ Market as of 3/31/18		1.72%	

All funds and earnings in the Retainage account are held on behalf of the contractors and do not belong to GLWA. All funds and earnings in the Flint Deposit account are held on behalf of the City of Flint and do not belong to GLWA.

Monthly Investment Income

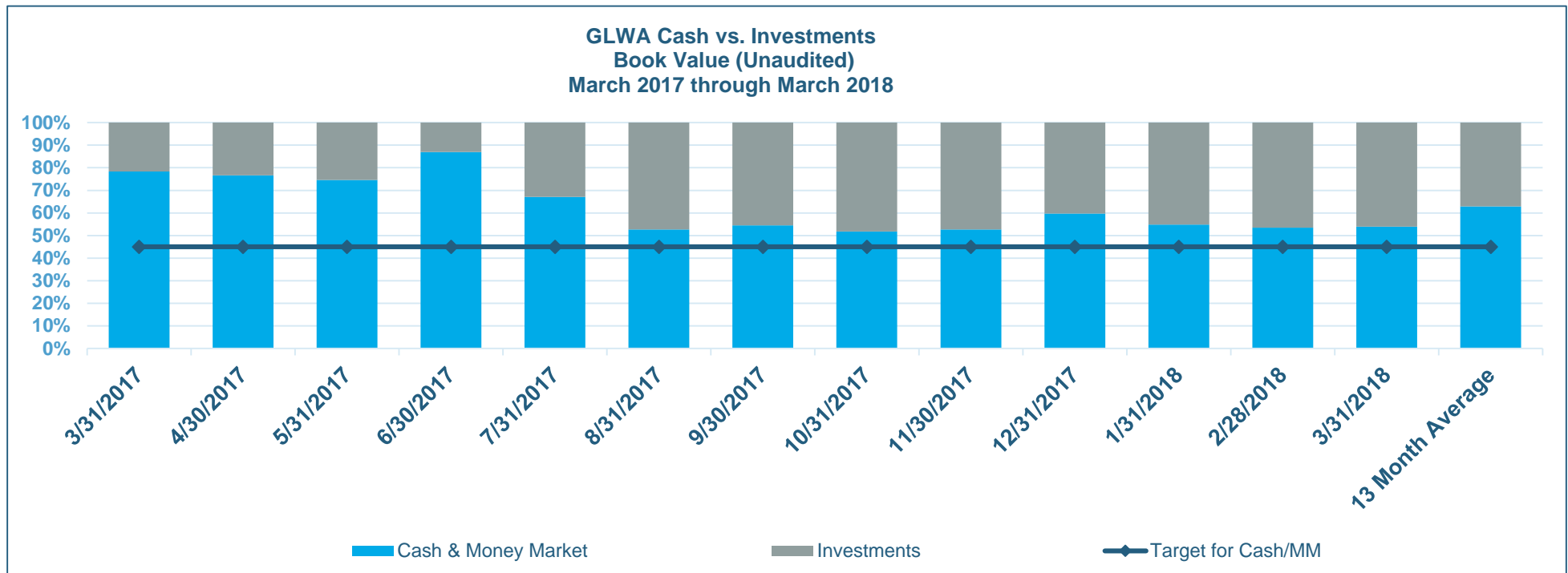
- GLWA has earned \$8,907,945 in investment income for FY 2018 on a book value basis compared to \$4,357,728 for FY 2017.
- Projected investment income for FY 2018 is \$11.3 million.
- The monthly investment earnings are continuing on an upward trend as GLWA continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment income while meeting the objectives of safety and liquidity.



Portfolio Holdings

Cash/Money Market vs. Investments

- GLWA's liquidity requirements fluctuate each month based on operational requirements such as accounts payable and payroll, capital requirements, debt payments, legacy pension payments, and WRAP funding. We have set an average target of 45% cash/money market accounts and 55% investments. We believe this average allocation target will provide adequate liquidity to meet GLWA requirements.
- The chart below compares the monthly allocation of the portfolio holdings to the 13 month average and the target. As cash management strategies have improved, so has the alignment with the 45%/55% target.





Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Master Bond Ordinance Monthly Cash Transfers to Detroit Water & Sewerage Department (DWSD) and Great Lakes Water Authority (GLWA)

Background: The Master Bond Ordinances for the water and sewer systems prescribe monthly distributions of cash receipts.

Analysis: The attached documents summarize the monthly cash transfers to DWSD and GLWA as stipulated by the Master Bond Ordinances for the period January 2016 – June 2018.

Proposed Action: Receive and file report.

Great Lakes Water Authority
Funds Transferred to DWSD per Master Bond Ordinance
Through June 1, 2018

DWSD Water				
	Operations & Maintenance	Pension	Lease Payment (I&E Fund)	Total Water
Total FY 2016	\$ 26,185,600	\$ 4,262,700	\$ 20,173,100	\$ 50,621,400
FY 2017				
July 2016	\$ 2,799,700	\$ 355,200	\$ 1,875,000	\$ 5,029,900
August 2016	2,799,700	355,200	1,875,000	5,029,900
September 2016	2,799,700	355,200	1,875,000	5,029,900
October 2016	2,799,700	355,200	1,875,000	5,029,900
November 2016	2,799,700	355,200	1,875,000	5,029,900
December 2016	2,799,700	355,200	1,875,000	5,029,900
January 2017	2,799,700	355,200	1,875,000	5,029,900
February 2017	2,799,700	355,200	1,875,000	5,029,900
March 2017	2,799,700	355,200	1,875,000	5,029,900
April 2017	2,799,700	355,200	1,875,000	5,029,900
May 2017	2,799,700	355,200	1,875,000	5,029,900
June 2017	2,799,700	355,200	1,875,000	5,029,900
Total FY 2017	\$ 33,596,400	\$ 4,262,400	\$ 22,500,000	\$ 60,358,800
FY 2018				
July 2017	\$ 2,799,700	\$ 356,000	\$ 1,875,000	\$ 5,030,700
August 2017	2,921,642	356,000	1,875,000	5,152,642 ¹⁾
August 2017	121,942	-	-	121,942 ³⁾
September 2017	2,921,642	356,000	1,875,000	5,152,642
October 2017	2,921,642	356,000	1,875,000	5,152,642
November 2017	2,921,642	356,000	1,875,000	5,152,642
December 2017	2,921,642	356,000	1,875,000	5,152,642
January 2018	2,921,642	356,000	1,875,000	5,152,642
February 2018	2,921,642	356,000	1,875,000	5,152,642
March 2018	2,921,642	356,000	1,875,000	5,152,642
April 2018	2,921,642	356,000	1,875,000	5,152,642
May 2018	2,921,642	356,000	1,875,000	5,152,642
June 2018	2,921,642	356,000	-	3,277,642 ⁴⁾
Total FY 2018	\$ 35,059,704	\$ 4,272,000	\$ 20,625,000	\$ 59,956,704
Grand Total Water Transfers	\$ 94,841,704	\$ 12,797,100	\$ 63,298,100	\$ 170,936,904
DWSD Sewer				
	Operations & Maintenance	Pension	Lease Payment (I&E Fund)	Total Sewer
Total FY 2016	\$ 19,774,300	\$ 2,861,800	\$ 7,508,500	\$ 30,144,600
FY 2017				
July 2016	\$ 3,461,300	\$ 238,500	\$ 2,291,700	\$ 5,991,500
August 2016	3,461,300	238,500	2,291,700	5,991,500
September 2016	3,461,300	238,500	2,291,700	5,991,500
October 2016	3,461,300	238,500	2,291,700	5,991,500
November 2016	3,461,300	238,500	2,291,700	5,991,500
December 2016	3,461,300	238,500	2,291,700	5,991,500
January 2017	3,461,300	238,500	2,291,700	5,991,500
February 2017	3,461,300	238,500	2,291,700	5,991,500
March 2017	3,461,300	238,500	2,291,700	5,991,500
April 2017	3,461,300	238,500	2,291,700	5,991,500
May 2017	3,461,300	238,500	2,291,700	5,991,500
June 2017	3,461,300	238,500	2,291,300	5,991,100 ²⁾
Total FY 2017	\$ 41,535,600	\$ 2,862,000	\$ 27,500,000	\$ 71,897,600
FY 2018				
July 2017	\$ 3,461,300	\$ 238,000	\$ 2,291,667	\$ 5,990,967
August 2017	5,043,166	238,000	2,291,667	7,572,833 ¹⁾
August 2017	1,581,866	-	-	1,581,866 ³⁾
September 2017	5,043,166	238,000	2,291,667	7,572,833
October 2017	5,043,166	238,000	2,291,667	7,572,833
November 2017	5,043,166	238,000	2,291,667	7,572,833
December 2017	5,043,166	238,000	2,291,667	7,572,833
January 2018	5,043,166	238,000	2,291,667	7,572,833
February 2018	5,043,166	238,000	2,291,667	7,572,833
March 2018	5,043,166	238,000	-	5,281,166 ⁴⁾
April 2018	5,043,166	238,000	-	5,281,166 ⁴⁾
May 2018	5,043,166	238,000	-	5,281,166 ⁴⁾
June 2018	5,043,166	238,000	-	5,281,166 ⁴⁾
Total FY 2018	\$ 60,517,992	\$ 2,856,000	\$ 18,333,336	\$ 81,707,328
Grand Total Sewer Transfers	\$ 121,827,892	\$ 8,579,800	\$ 53,341,836	\$ 183,749,528
Total FY 2016 Water & Sewer	\$ 45,959,900	\$ 7,124,500	\$ 27,681,600	\$ 80,766,000
Total FY 2017 Water & Sewer	\$ 75,132,000	\$ 7,124,400	\$ 50,000,000	\$ 132,256,400
Total FY 2018 Water & Sewer	\$ 95,577,696	\$ 7,128,000	\$ 38,958,336	\$ 141,664,032

Note 1: 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 paid from the lease payment deposited to the Improvement & Extension (I&E) Fund.

Note 2: For FY 2016, \$22,318,500 million of the lease payment was directed by the City of Detroit to offset a portion of its FY 2016 water and sewer debt service in lieu of a cash transfer.

¹⁾ O&M transfer updated to reflect DWSD FY18 budget

²⁾ Final FY17 Lease transfer adjusted so total annual transfers meet requirements per Lease 3.4(a)

³⁾ Additional O&M transfer to update July 2017 to requested amount

⁴⁾ Adjustment in DWSD FY18 budget resulted in \$0 transfer for I&E.

Great Lakes Water Authority
Funds Transferred to Accounts Held by GLWA per Master Bond Ordinance
Through June 1, 2018

WATER							
	<u>Operations & Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization</u> <small>(For Benefit of DWSD)</small>	<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	\$0	\$130,651,200
FY 2018							
July 2017	\$10,130,217	\$504,000	\$891,308	\$179,950	-	-	\$11,705,475
August 2017	10,130,217	504,000	891,308	179,950	-	-	11,705,475
September 2017	10,130,217	504,000	891,308	179,950	-	-	11,705,475
October 2017	10,130,217	504,000	891,308	179,950	-	-	11,705,475
November 2017	10,130,217	504,000	891,308	179,950	-	-	11,705,475
December 2017	10,130,217	504,000	891,308	179,950	-	-	11,705,475
January 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
February 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
March 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
April 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
May 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
June 2018	10,130,217	504,000	891,308	179,950	-	-	11,705,475
Total FY 2018	\$121,562,604	\$6,048,000	\$10,695,696	\$2,159,400	\$0	\$0	\$140,465,700
Total Water Since Jan 1 2016	\$304,494,204	\$18,122,300	\$31,290,096	\$6,219,900	\$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</u> <small>(For Benefit of DWSD)</small>	<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	\$0	\$206,032,800
FY 2018							
July 2017	\$15,923,283	\$902,000	\$1,223,958	\$230,067	-	-	\$18,279,308
August 2017	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
September 2017	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
October 2017	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
November 2017	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
December 2017	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
January 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
February 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
March 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
April 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
May 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
June 2018	15,923,283	902,000	1,223,958	230,067	-	-	18,279,308
Total FY 2018	\$191,079,396	\$10,824,000	\$14,687,496	\$2,760,804	\$0	\$0	\$219,351,696
Total Sewer Since Jan 1 2016	\$467,803,796	\$32,500,800	\$42,740,096	\$7,938,604	\$8,246,100	\$779,600	\$560,008,996
Total FY 2016 Water & Sewer	\$171,917,600	\$16,875,500	\$24,323,000	\$4,506,700	\$7,918,600	\$1,385,600	\$226,927,000
Total FY 2017 Water & Sewer	\$287,738,400	\$16,875,600	\$24,324,000	\$4,731,600	\$3,014,400	\$0	\$336,684,000
Total FY 2018 Water & Sewer	\$312,642,000	\$16,872,000	\$25,383,192	\$4,920,204	\$0	\$0	\$359,817,396



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

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

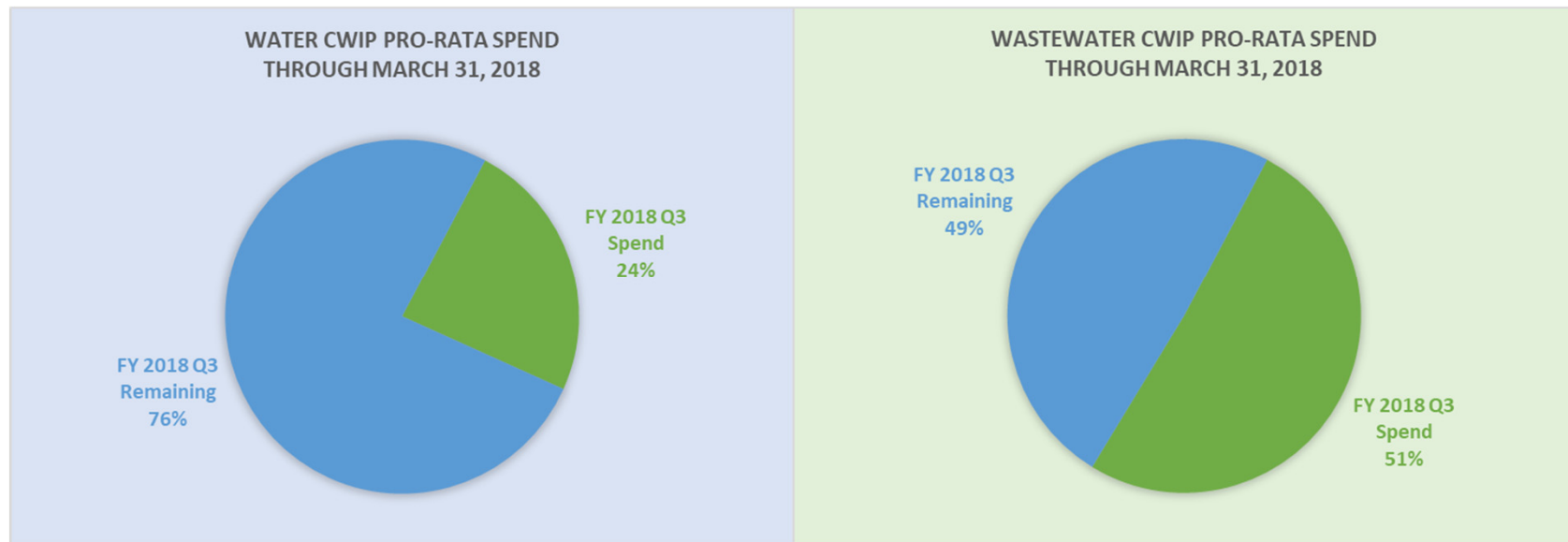
Re: FY 2018 Construction Work-in-Progress Report through March 31, 2018

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

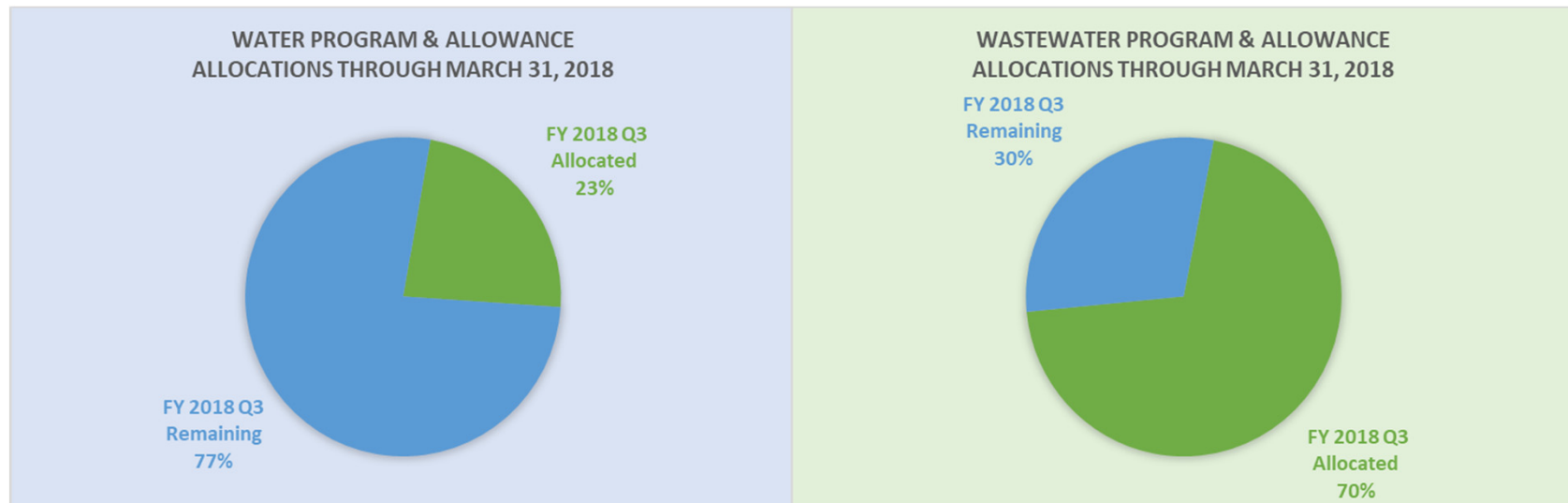
Analysis: In addition to the quarterly report, a CWIP Spend and CIP Allowance Used dashboard is attached.

Proposed Action: Receive and file report.

Construction Work-in-Progress (CWIP) - FY 2018 Q3



Use of Capital Improvement Plan Allowances - FY 2018 Q3





**Construction Work-in-Progress Quarterly Report
(Unaudited, Pre-close)**

As of March 31, 2018

For questions, please contact:

Andrew Sosnoski

Construction Accounting and Financial Reporting Manager

Phone: 313.999.2585

Email: Andrew.Sosnoski@glwater.org

Prepared 5.30.2018

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June 15th, 2018**To Our Stakeholders:**

The contents of this report represent the financial presentation of construction work-in-progress activity for the Great Lakes Water Authority (GLWA) as of March 31, 2018. The information in this report presents a snapshot to inform decision makers and stakeholders. This is important as we manage the capital program for the remainder of FY 2018 and approach the implementation of the FY 2019–2023 Capital Improvement Plan (CIP).

This report remains relatively new and will continue to improve each quarter to inform decision makers and stakeholders.

Report Contents and Organization

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

Percent of Spend Compared to Budget and Capital Improvement Plan (CIP) Requests: Presentation of spend information is necessary to report our progress on CIP projects.

Analysis of Projects with Largest Percent of Spend and Otherwise Noteworthy Projects: A combination of commentary and analysis provides further insight into risk factors and project status. An excerpt from the CIP for each of the selected projects follows the commentary as further background information.

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

Budget Amendments / Allowance & Program Analysis: This information identifies the specific usage and the reallocation of allowance and program budgets to CIP projects

Financial Information

All project amounts are unaudited and are “pre-close”. This means that direct contractor costs are generally included in these totals with most pay estimates entered through March 31, 2018. There may, however, be some pay estimates that lag. The totals do not include indirect overhead or capitalized interest.

Budget vs. Plan

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

- ✓ The adopted **budget** relates to operations and maintenance expense, annual fixed commitments such as debt service, and incremental adjustments to reserves. The budget provides authority to spend within defined amounts. The budget is also referred to as the “revenue requirement” for the utility.
- ✓ The CIP “budget” for the same biennial budget period above is based on the first two years of the CIP. Funding for these projects are established in the financial plan through a combination of bond proceeds and Improvement & Extension fund reserves
- ✓ The five-year capital improvement **plan** is a rolling plan that is updated at an administrative tracking level as projects move from estimated to actual bid numbers. An updated mid-cycle CIP would be presented to the Board for approval if the prioritization strategy was revised and/or the plan was in need of material revisions.

Future Enhancements

This report presents information that is readily available. Currently under development are enhancements that will provide the opportunity for improved CWIP reporting.

Monthly Capital Spend Projections – Improvements are underway related to preliminary monthly spend information, projected out for the duration of the CIP, and communicated with Treasury to allow for investment optimization. This reporting is being developed as a joint effort with our engineering partners. This will also allow for improved accuracy of our Key Performance Indicator on rate of spending.

Future Enhancements Continued...

Direct Labor Capitalization – Technology solutions have been procured to improve direct labor capture accuracy, timeliness and ease in which labor cost are captured with anticipated implantation date of July 1, 2018.

Indirect Labor Capitalization – An effort to identify and capture indirect labor related to the capital process remains underway.

Alignment of Budget & CIP – During the development of the FY 2019–2023 CIP Plan, FY 2018 budgeted CIP was reforecast to align with anticipated spend. The resulting budget amendments will be entered and reflected in future period CWIP reports. This budget realignment will be reflected in the June 30, 2018 CWIP report.

Key Performance Indicators – KPI's under consideration include CIP spend vs book value assets, percentage growth of project in amount and duration, actual vs planned number of projects completed, and actual vs planned monthly capital spend.

WATER SYSTEM

Percent of Spend Compared to Annual Budget and Capital Improvement Plan (CIP) Requests

The rate of spend of is a key performance indicator. The ratios for FY 2017 (twelve months) of 37.9% and for FY 2018 (nine months) of 23.9% are lower than simple benchmark of 80% and 75% respectively. This is attributable to three reasons. First is the competition for staff priorities during stand-up of the GLWA (primarily during FY 2017). Second, is the alignment of projects identified and staff or contractor resources to carry out the projects. Several key hires occurred during the past year which will improve this performance. Third, is the phasing of CIP activity which is being further refined throughout GLWA.

Water System Projects	FY 2017 Original Plan and Budget		FY 2017 Activity as a Percentage of Budget	FY 2018 Amended Budget	FY 2018 Prorated (Nine Months)	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
	(Twelve Months)	FY 2017 Activity					
FY 2017 CIP Project Requests @ 100%	\$ 130,232,000	\$ 39,483,833	30.3%				
FY 2017 CIP Net Budget (approx. 80% of request)	104,185,600	39,483,833	37.9%				
FY 2018 CIP Project Requests @ 100%				\$ 137,655,000	\$ 103,241,250	\$ 19,778,231	19.2%
FY 2018 CIP Net Budget (approx. 80% of request)				110,124,000	82,593,000	19,778,231	23.9%

It should be noted that these interim reports have been prepared on a modified cash basis. This means that expenses may lag in vendor invoice receipt and posting. Known expenses, material in nature, have been accrued.

Analysis of Projects with Largest Percent of Spend and Otherwise Noteworthy Projects

Of the total Water System Construction Bond spend for FY 2018 to date, **four projects account for \$8.5 million or 43.2% of the total spend**. Those projects are summarized in the following table. An analysis of each project and its related CIP summary follow the table. Note that the last page of this report provides a Glossary of Acronyms.

Water System Projects	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget Per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Project 114001- Springwells WTP 1958 Filter Rehabilitation	\$ 77,422,000	\$ 82,884,422	\$ 1,200,000	\$ 4,597,124	23.2%
Project 114003-Water Production Flow Metering Improvements at NE, SW, and SPW WTP Total	12,900,000	184,952	8,800,000	848,784	4.3%
Project 114015-Emergency Grating Replacement at Springwells WTP	2,500,000	253,623	2,000,000	2,170,291	11.0%
Project 116002- PA, SW and NE Raw Water Tunnel Improvements	32,400,000	10,401	2,000,000	921,391	4.7%
Selected Projects as a Percentage of the Total	\$ 125,222,000	\$ 83,333,398	\$ 14,000,000	\$ 8,537,590	43.2%
Total			\$ 137,655,000	\$ 19,778,231	100.0%

The following analysis provides brief highlights related to these projects.

Project 114001 – Springwells Water Treatment Plant 1958 Filter Rehabilitation

Water System Projects	Total Project		FY 2018		FY 2018	FY 2018
	Budget per CIP	Life-to-Date Through	Requested	Pre-Close	Pre-Close	Pre-Close
	(Life of Projects)	June 30, 2017	Budget Per CIP	(Nine Months)	(Nine Months)	as a Percent of
				(Unaudited)	(Unaudited)	Prorated Budget
						(Nine Months)
						(Unaudited)
Project 114001- Springwells WTP 1958 Filter Rehabilitation	\$ 77,422,000	\$ 82,884,422	\$ 1,200,000	\$ 4,597,124		23.2%
Prebifurcation budget not included in CIP 114001	6,500,000					
Total Project Budget	\$ 83,922,000					

Project Engineer/Manager: Grant Gartrell

Manager: Grant Gartrell

Total Construction and Construction Assistance Budget: \$77,422,000

Timeline: To be completed by November 2018

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: SP-563 Walsh Construction; CS-1425 & CS-200 CDM Michigan

Project Description: Installation of new filter media, underdrains, filter valves and rate controllers; replace the existing filter control console and hydraulic controls at Springwells Water Treatment Plant.

Purpose: Rehabilitation of both filter trains to restore filtration capacity and sustain the useful service life of the process treatment infrastructure.

Status: Construction continues with the installation of new stop logs and guides in the 1930 weir chamber, renovation of the laboratory and offices in the administration building, installation of new heating, ventilating and air-conditioning equipment in the administration building, rehabilitation of elevators in the switch house, store house and boiler house buildings, and construction of the 1958 breezeway.

Additional Project Manager Comments: None.

Additional Construction Accounting & Financial Reporting Team Comments: Total project budget per the Board approved CIP schedule does not include the historical, pre-fiscal year 2017 budget for the design contract CS-1425 nor the allocation of the Water Treatment Plant Allowance to fund CS-200 the Owner's Representative (RPR) consultant contract. The design contract has a total budget amount of \$6,500,000.

FY 2018-2022 CIP Page VI-3 for Project 114001 – Springwells Water Treatment Plant 1958 Filter Rehabilitation

CIP Number: **CIP 917**

Title: **SPRINGWELLS WATER TREATMENT PLANT 1958 FILTER REHABILITATION AND AUXILIARY FACILITIES**

Classification: 114: Water > Treatment Plants & Facilities > Springwells

Managing Dept: Water Eng

RC Score: NA

Contract No.: CS-1425, SP-563

Significance: Rehabilitation of Springwells WTP 1958 Filters and 1930s failed filters to provide the WTP with a renovated capacity of 295 MGD

Location: Springwells WTP

Driver: N/A - Active

Explanation: N/A - Active

Preliminary Scope of Work:

This project includes the study, design (CS-1425) and construction assistance of improvements to the Springwells WTP that includes the replacement of Phosphoric Acid Feed System, rehabilitation of the 1958 Filters, rehabilitation of failed 1930s Filters, Update of Operation and Maintenance Manuals, and addition of polymer systems and controls. Provide construction services to furnish and install new filter media, underdrains, filter valves, and rate controllers; replace the existing filter control consoles, hydraulic control valves with electric control valves, enclosures; add appurtenances to enable automatic backwashing of the filters; provide a Filter Aid Polymer System to the 1930 and 1958 filter complexes; Programmable Logic Controller-based controls for automatic control of the polymer system; install a local instrumentation and controls system.

Challenges: N/A - Active

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
S/D/C A	Active	1/18/2008	1/18/2018	\$0	\$353	\$95	\$0	\$0	\$0	\$0	\$0	\$95	\$448
C	Active	7/8/2013	3/14/2018	\$56759	\$20000	\$215	\$0	\$0	\$0	\$0	\$0	\$215	\$76974
Totals				\$56759	\$20353	\$310	\$0	\$0	\$0	\$0	\$0	\$310	\$77422



Springwells filter building

*Budget Amendment 6094 for RPR Services increases planned CIP from \$310,000 to \$1,200,000

Project 114015 – Emergency Grating Replacement at Springwells WTP

Water System Projects	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget Per CIP	FY 2018	FY 2018
				Pre-Close Activity (Nine Months) (Unaudited)	Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Project 114015-Emergency Grating Replacement at Springwells WTP	2,500,000	253,623	2,000,000	2,170,291	11.0%

Project Manager/Manager: Erich Klun

Manager: Grant Gartrell

Total Budget: \$2,500,000

Timeline: The contract time was extended by 210 calendar days due to additional scope in the amount of \$745,186, as per Change Order No. 1, approved by the Board of Directors on April 25, 2018 and now ends on November 27, 2018.

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: SCP-DB-112 Barton Malow Company

Project Description: The base scope of the contract involves replacement of grating and supports in the low lift pumping station at elevation 42.0 feet and replacement of the low lift station sump pumps. Change Order No. 1 added the replacement of select high lift header piping steel supports in the high-lift header vault, replacement of a steel reinforced concrete column in the basement of the administration building, and replacement of hatch covers at an outdoor vault near the drainage pump house at the site.

Purpose: Replace grating, supports, columns, and hatch covers that are significantly deteriorated and are in danger of failure. Replace sump pumps in the low lift station that are not reliable and protect the low lift station from flooding.

Status: The base scope of the contract is complete in the low lift station and contractor is proceeding with the additional scope added via Change Order No. 1 totaling \$745,186 as detailed in project description above.

Additional Project Manager Comments: None.

Additional Construction Accounting & Financial Reporting Team Comments: None.

FY 2018-2022 CIP Page VI-71 for Project 114015 – Emergency Grating Replacement at Springwells

CIP Number: CIP 1412

Title: EMERGENCY GRATING REPLACEMENT AT SPRINGWELLS WTP

Classification: 114: Water > Treatment Plants & Facilities > Springwells

Managing Dept: WSO Engineering

RC Score: NA

Contract No.: NA

Significance: Original grating and supporting structural steel dating back to 1930 has deteriorated to the point where operator, consultant and contractor safety at Springwells is severely compromised. Additionally, structural failure could result in lost water production at Springwells.

Location: Springwells Water Treatment Plant

Driver: 1 – Condition

Explanation: Failure of structural components could injure personnel and/or take Springwells out of commission

Preliminary Scope of Work:

Refer to the RFP and proposals received. The scope is very well defined, and the winning proposal is very well authored. It involves a lot of demolition and replacement of deteriorated grating and structural steel at five (5) locations at Springwells, the bulk of which is in the Low Lift Station.

Challenges: Maintaining operations through execution of the work.

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
D	New	NA	NA	\$0	\$250	\$250	\$0	\$0	\$0	\$0	\$0	\$250	\$500
C	New	NA	NA	\$0	\$250	\$1750	\$0	\$0	\$0	\$0	\$0	\$1750	\$2000
Totals				\$0	\$500	\$2000	\$0	\$0	\$0	\$0	\$0	\$2000	\$2500



Deteriorated support beams holding up Low Lift Station Dewatering and Sump Pumps at Elev. 42'-0" (left). Deteriorated grating and access ship's ladder in Low Lift Station - Looking down at Elev. 50'-0" and 42'-0" from Elev. 62'-0" (right).

Project 114003-Water Production Flow Metering Improvements at NE, SW and SPW WTP

	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget Per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Water System Projects					

Project 114003-Water Production Flow Metering Improvements at NE, SW, and SPW WTP Total	12,900,000	184,952	8,800,000	848,784	4.3%
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Project Engineer/Manager: Jorge Nicholas

Manager: Grant Gartrell

Total Budget: \$12,900,000

Timeline: July 31, 2019

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: CON-133 Lakeshore Global Corporation

Project Description: Rehabilitate the existing water production meters at Northeast, Southwest and Springwells Water Treatment Plants.

Purpose: Rehabilitation of the meters will provide direct measurement of finished water flows that are pumped out of the plants to the transmission system. The rehabilitated flow meters will improve the accuracy and reliability of measuring water production flows from these water treatment plants.

Status: Construction work is currently being performed at the Northeast and Southwest Water Treatment Plants with work at Springwells work to commence in May 2018. Work at Northeast includes demolition of existing mechanical and electrical equipment in the meter vaults and site work. Substantial work has been completed post March 31, 2018. Work at Southwest includes removal of an existing venturi meter and preparation for the installation of the new venturi tube. The new venturi tubes that have been fabricated have been flow tested at Utah State University.

Additional Project Manager Comments: None.

Additional Construction Accounting & Financial Reporting Team Comments: None.

FY 2018-2022 CIP Page VI-17 for Project 114003-Water Production Flow Metering Improvements at NE, SW and SPW WTP

CIP Number: CIP 1264

Title: WATER PRODUCTION FLOW METERING IMPROVEMENTS AT NE, SW, AND SPW WTP

Classification: 114: Water > Treatment Plants & Facilities > Springwells

Managing Dept: Water Eng

RC Score: 41.4

Contract No.: NA

Significance: Existing water production flow meters need to be rehabilitated to place back into reliable and accurate service. Once completed, accurate flow measurement from these plants will answer non-revenue water questions.

Location: Springwells, Northeast and Southwest WTP

Driver: 7 - Financial

Explanation: Not provided.

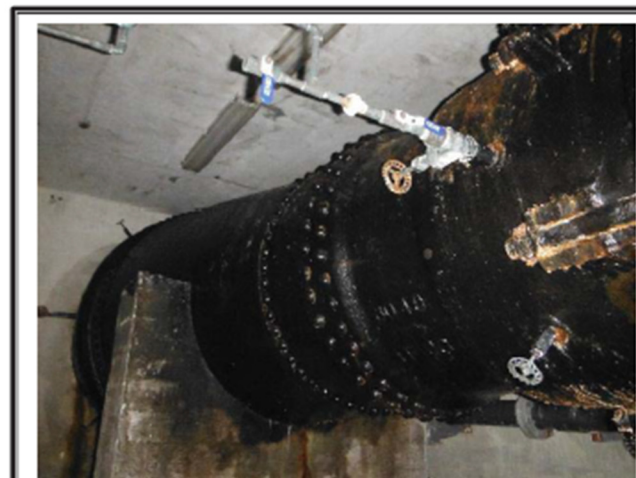
Preliminary Scope of Work:

Water production metering is needed at the Water Treatment Plants to manage non-revenue and provide estimates of usage for non-wholesale customers.

Challenges: Removing and replacing existing meters in original piping requires isolation using existing yard piping and valving. Condition of existing pipe and valves needs to be adequately addressed in the final design documents and coordinated with operations.

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
C	Not Yet Started	NA	NA	\$0	\$1000	\$8800	\$2100	\$1000	\$0	\$0	\$0	\$11900	\$12900
Totals				\$0	\$1000	\$8800	\$2100	\$1000	\$0	\$0	\$0	\$11900	\$12900



Water production flow metering device

Project 116002 – PA, SW and NE Raw Water Tunnel Improvements

	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget Per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Water System Projects					
Project 116002- PA, SW and NE Raw Water Tunnel Improvements	32,400,000	10,401	2,000,000	921,391	4.7%

Project Engineer/Manger: Todd King

Manager: Grant Gartrell

Total Budget: \$32,400,000

Timeline: The detailed investigation and preliminary design work under this contract is scheduled to be completed by March 2019. Once the preliminary design is complete, the vendor will submit a guaranteed maximum price (GMP) for the construction of the raw water tunnel rehabilitation and improvements work which is tentatively scheduled to be completed by 2021.

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: DB-150 / Ballard Marine Construction

Project Description: This is a progressive design build project delivery that involves the detailed inspection, design and construction of the improvements to the Pennsylvania, Northeast and Springwells raw water tunnels.

Purpose: Rehabilitate sections of the Pennsylvania, Northeast and Springwells raw water tunnels where substantial deterioration in the form of cracking and ovality have been observed.

Status: The contract started on January 29, 2018. The project kickoff workshop has been conducted and the vendor is currently preparing its implementation and safety plans for entering the raw water tunnels to conduct a detailed inspection. The results of the detailed inspection will be used to prepare the preliminary design documents for the project.

Project 116002 – PA, SW and NE Raw Water Tunnel Improvements – Continued

Additional Project Manager Comments: If GLWA and the vendor are unable to negotiate a GMP that is acceptable to GLWA, then GLWA will use the scope of the preliminary design to publicly bid the project as a design-build project delivery.

Additional Construction Accounting & Financial Reporting Team Comments: None.

FY 2018-2022 CIP Page VI-55 for Project 116002 - PA, SW and NE Raw Water Tunnel Improvements

CIP Number: CIP 1327

Title: PENNSYLVANIA, SPRINGWELLS AND NORTHEAST RAW WATER SUPPLY TUNNEL IMPROVEMENTS BASED ON CONTRACT CS-1623 INSPECTION RESULTS

Classification: 116: Water > Treatment Plants & Facilities > General Purpose

Managing Dept: Water Eng

RC Score: 64.4

Contract No.: DB-150

Significance: Project critical to production at Springwells WTP during repurposing of Northeast WTP as recommended by the 2015 WMPU. Contract CS-1623 identified problem areas on the raw water supply system that compromised the system's ability to meet demands during the repurposing of Northeast WTP.

Location: Springwells, Northeast, & Pennsylvania raw water tunnels

Driver: 1 - Condition

Explanation: Failure of the affected raw water tunnels could impact as much as 50% of the GLWA customers.

Preliminary Scope of Work:

The scope of work is to conduct supplemental investigations to design the repairs for the sections of tunnel identified in CS-1623 as having structural concerns. Three areas were identified with the highest concern being a portion of the Springwells Tunnel near the Springwells WTP.

Challenges: The tunnels are approximately 80 feet below the surface of the Detroit River. This poses challenges for assessing the extent of damage to the structures, as well as repair. Dewatering the tunnels to repair them will create extensive stresses that must be considered prior to performing the work.

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
DB	Not Yet Started	NA	NA	\$0	\$500	\$2000	\$10000	\$15000	\$4900	\$0	\$0	\$31900	\$32400
Totals				\$0	\$500	\$2000	\$10000	\$15000	\$4900	\$0	\$0	\$31900	\$32400



Crown cracks are especially concerning in the Springwells Raw Water Tunnel

Construction Work-in-Progress Rollforward

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

The CWIP Rollforward provides a project status for each item.

Future Year:	Project that was included in the CIP with no expenditures (F)
Active:	Project in which procurement process has been initiated and expenditures incurred (A)
Pending Close:	Project that has no projected expenditures for the current fiscal year and has reached substantial completion (PC)
Closed:	Project that has been closed and capitalized (C)

Projects in bold font on the CWIP Rollforward were discussed in further detail previously in this report.

As shown in the summary below, the Water System CWIP Rollforward identifies 110 projects with a total budgeted value of \$1.17 billion. Of that total, \$178.9 million (unaudited) is in CWIP as of March 31, 2018 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is from largest spend in FY 2018 dollars first.

Status	Project Count	Total Project Estimated Budget	Percent of Total
Future Years (Post FY 2018)	23	134,605,000	12%
Active	76	987,196,000	84%
Pending Close	8	45,537,000	4%
Closed	3	2,041,000	0%
Grand Total	110	1,169,379,000	100%

Water System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

				FY 2018 Activity (Unaudited)									
			Total Project Estimate from CIP	CWIP Balance July 1, 2017	Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)	FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
CIP #	Brief Description	Status											
004430	Project 004430-DWSD: Contract Replacement Water Main	A	-	75,804								-	75,804
007412	Project 007412- Water Main Repairs shared service with DWSD	A		536,930	2,638,895							2,638,895	3,175,825
111001	Project 111001-Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	F	5,700,000	-								-	-
111002	Project 111002 LHWTP Backflow Replacement	A	7,902,000	309,471	442,443	31,288				1,708	680	476,119	785,589
111003	Project 111003-Evaluation of Flocculation Improvement Alternatives at the LHWTP	F	125,000	-								-	-
111004	Project 111004-Electrical Tunnel Rehabilitation at Lake Huron WTP	A	5,600,000	-		3,265						3,265	3,265
111005	Project 111005-Miscellaneous Concrete Improvements at the Lake Huron WTP	PC	923,000	754,581						2,010	804	2,813	757,395
111006	Project 111006-Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake Huron WTP	A	24,630,000	253,138		351,672				76	30	351,779	604,917
111007	Project 111007-Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	A	7,133,000	9,332		189,840						189,840	199,172
112001	Project 112001-Yard Piping Replacement at Northeast Water Treatment Plant	F	800,000	-								-	-
112002	Project 112002-Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	A	1,775,000	163,085		33,248				5,175	2,066	40,489	203,574
113001	Project 113001-Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilities	A	49,380,000	39,885						4,891	1,956	6,847	46,732
113002	Project 113002-High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	A	2,120,000	115,027		96,216				11,118	4,441	111,775	226,802
113003	Project 113003-Replacement of Butterfly Valves and Sluice Gates for Rapid Mix Chamber at Southwest WTP	F	2,940,000	-		26,608				5,682	2,271	34,560	34,560
113004	Project 113004-Residual Handling Facility's Decant Flow Modifications at Southwest WTP	A	5,509,000	141,675								-	141,675
114001	Project 114001-Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	A	\$ 78,312,000	\$ 82,884,422	\$ 3,892,785	\$ 540,301			\$ 100,380	\$ 45,622	\$ 18,036	4,597,124	87,481,546

Water System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited)							FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
					Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)		
114002	Project 114002-Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	A	86,000,000	22,480		187,109				5,728	641	193,479	215,959
114003	Project 114003-Water Production Flow Metering Improvements at NE, SW, and SPW WTP	A	12,900,000	184,952	726,725	88,187				25,482	8,389	848,784	1,033,736
114004	Project 114004-Miscellaneous Concrete Improvements at Springwells WTP	A	998,000	-								-	-
114005	Project 114005-Administration Building Improvements at Springwells WTP	F	2,000,000	-								-	-
114006	Project 114006-Replacement of Rapid Mix Units at Springwells WTP	A	1,250,000	104,286		20,902				4,831	1,356	27,089	131,374
114007	Project 114007-Powdered Activated Carbon System Improvements at Springwells WTP	F	2,900,000	-								-	-
114008	Project 114008-1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	F	7,500,000	-								-	-
114009	Project 114009-Springwells Water Treatment Plant Service Area Redundancy Study	A	450,000	193,332		120,856				1,878	751	123,484	316,816
114010	Project 114010-Yard Piping Improvements at Springwells WTP	F	25,000,000	-								-	-
114011	Project 114011-Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	A	6,250,000	279,784		22,475				12,478	4,378	39,331	319,114
114012	Project 114012-Springwells Water Treatment Plant 1930 Filter Building-Roof Replacement	A	3,000,000	-						264	106	370	370
114013	Project 114013-Springwells Reservoir Fill Line Improvements	A	7,914,000	119,663		75,505				6,700	979	83,184	202,847
114014	Project 114014-Springwells WTP Underground Fire Protection Loop Improvements	F	3,289,000	-								-	-
114015	Project 114015-Emergency Grating Replacement at Springwells WTP	A	2,500,000	253,623	2,152,690	6,334				11,048	219	2,170,291	2,423,914
115001	Project 115001-Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	A	53,900,000	8,977		452,326				5,776	2,309	460,412	469,389

Water System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited)							FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
					Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)		
115002	Project 115002-Miscellaneous Concrete and Road Improvements at Waterworks Park WTP	PC	3,036,000	1,951,164	16,102	9,676				4,750	1,900	32,428	1,983,592
115003	Project 115003-Comprehensive Condition Assessment at Waterworks Park WTP	A	575,000	-		176,766				5,362	1,941	184,069	184,069
115004	Project 115004-Water Works Park WTP Chlorine System Upgrade	A	9,690,000	370,797	432,800	24,721				6,418	2,157	466,096	836,893
116001	Project 116001-Miscellaneous Improvements to Raw Water Tunnels, Shafts and Related Structures	F	2,500,000	-								-	-
116002	Project 116002-Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on Contract CS-1623 Inspection Results	A	32,400,000	10,401	921,391							921,391	931,792
116003	Project 116003-Genesee and Lapeer County Transmission System Improvements	F	6,800,000	-								-	-
122001	Project 122001-Parallel 42-Inch Main in 24 Mile Road from Rochester Station to Romeo Plank Road	PC	30,008,000	32,570,891		5,400						5,400	32,576,291
122002	Project 122002-Replacement of Five (5) PRV Pits of Treated Water Transmission System	A	2,220,000	1,696,488						76	30	106	1,696,595
122003	Project 122003-New Waterworks Park to Northeast Transmission Main	A	130,000,000	19,372		894,981				10,278	4,035	909,294	928,666
122004	Project 122004-96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	A	139,000,000	459,919		276,048				19,138	6,547	301,733	761,651
122005	Project 122005-Transmission System Water Main Work - Replacement of Schoolcraft Water Main	F	14,550,000	-		3,960						3,960	3,960
122006	Project 122006-Transmission System Water Main Work-Wick Road Parallel Water Main	A	19,350,000	23,300								-	23,300
122007	Project 122007-Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Cherry Hill and Glenwood Avenue	F	4,000,000	-								-	-
122009	Project 122009-Water System Improvements in Joy Road from Southfield Road to Trinity	PC	8,423,000	106,881								-	106,881

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Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited)							FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
					Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)		
122010	Project 122010-Water Main Replacement within the City of Detroit - Joy Rd from Greenfield to Schaefer and Davison Ave from Linwood to Livernois	F	3,128,000	-								-	-
122011	Project 122011-Park-Merriman Water Main-Final Phase	F	4,000,000	-								-	-
122012	Project 122012-36-inch Water Main in Telegraph Road	A	7,061,000	8,125,683	743,386	29,305				5,954	2,381	781,026	8,906,709
122013	Project 122013-Lyon Township Transmission Main Extension Project	F	29,800,000	-								-	-
122014	Project 122014-48-Inch Water Main Installation at Vining and Wick Roads in Romulus	A	4,535,000	3,839,433	110,084	7,512						117,596	3,957,029
122015	Project 122015-30-Inch Water Main	PC	2,327,000	2,345,314	115,459							115,459	2,460,774
132001	Project 132001-Wick Road Station Rehabilitation	A	13,702,000	85						123	49	173	258
132002	Project 132002-Replacement of Switchgear at Joy Road Pumping Station	C	612,000	-								-	-
132003	Project 132003-Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	A	1,521,000	66,236		56,032				750		56,782	123,018
132004	Project 132004-Hydraulic Surge Control for North Service Center Pumping Station	A	2,800,000	75,075		45,422				5,247	2,091	52,760	127,834
132005	Project 132005-Energy Management: Evaluate Alternatives and Recommend Corrective Actions to Improve Power Factors (PF) at Various GLWA Booster Pumping Stations	F	250,000	-								-	-
132006	Project 132006-Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chicago Water Booster Pumping Stations	A	3,000,000	7,524		87,065				3,454	1,382	91,901	99,425
132007	Project 132007-Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	F	1,000,000	-								-	-
132008	Project 132008-Needs Assessment Study for all Water Booster Pumping Stations	A	1,700,000	33,385		620,318				18,263	1,504	640,084	673,470
132009	Project 132009-Study Phase Services for Proposed East Service Center Booster Pumping Station and Reservoir	A	500,000	10,313								-	10,313

Water System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited)							FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
					Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)		
132010	Project 132010-West Service Center/Duval Rd Division Valve Upgrades	A	11,800,000	-		(23,023)						(23,023)	(23,023)
132011	Project 132011-Energy Management: West Service Center (WSC) VFD Installation	F	3,334,000	-								-	-
132012	Project 132012- Ypsilanti Pumping Station Improvements	A	-	-						548	217	765	765
161001	Project 161001-Comprehensive Water Master Plan Update	PC	290,000	-								-	-
170011	Project 170011-Miscellaneous Heating Improvements Southwest WTP	C	563,000	-	3,916					2,659	1,064	7,638	7,638
170100	Project 170100-Allowance: WTP/Pump Station	A	76,877,010	-								-	-
170101	Project 170101-Master Specs	PC	300,000	-								-	-
170102	Project 170102-Water Production Plant Flow Metering Improvements at NE, SP & SW WTP	A	1,989,000	269,071	49,008					183	72	49,263	318,335
170103	Project 17103-Belle Isle Water Supply Intake and Ice Boom Improvements	A	369,150	6,243	148,090	13,943						162,033	168,276
170104	Project 170104-Orion and Newburgh Pumping Stations Improvements	A	2,590,000	164,615		36,369				16,464	4,854	57,687	222,303
170105	Project 170105-Phosphoric Acid and Heating System and NE-WTP	A	1,804,620	1,949,623						233	93	327	1,949,950
170106	Project 17016- Phosphoric Acid Tank Replacement LHWI	F	575,000									-	-
170107	Project 170107- Belle Isle Water Supply Intake Lagoon Main Entrance Bridge Pile Restoration	A	358,500	12,041	259,431	15,346				5,473	2,189	282,439	294,480
170108	Project 170108- Adams Road Water Isolation Gate	A	1,092,500	625								-	625
170109	Project 170109-Inspection of Raw Water Intakes and Tunnels	A	2,076,120	2,920,548		118,214				1,392	557	120,163	3,040,711
170110	Project 170110- WWP WTP Raw Water Smapping Improvements	A	535,600							402	161	562	562
170113	Project 170113-Water Plant Automation	A	1,610,000	12,933		582,004						582,004	594,936
170117	Project 170117-Instrument Air Compressor Systems Replacement at NE-WTP	PC	230,000	226,483								-	226,483
170118	Project 170118-1958 Sedimentation Basin	C	866,000	-								-	-
170119	Project 170119- Belle Isle Water Supply Intake Lagoon	F	115,000									-	-
170120	Project 170120-Phosphoric Acid Feed System Improvements at Southwest WTP	A	207,500	87,031		13,345				5,329	2,129	20,803	107,834

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Construction Work-in-Progress Quarterly Report

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Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
Unaudited, Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited)								FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018
					Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)			
170200	Project 170200-As Needed Construction Materials, Environmental Media and Special Testing Services, Construction Inspection, and Other Technical Services	A	-	-									-	-
170201	Project 17020- Job Order Contract for Construction, Environmental, Special Testing, Inspection and Other Technical Services	A	1,500,000							206	82		288	288
170300	Project 170300-Water Treatment Plant Automation Program	A	5,890,000	-									-	-
170400	Project 170400-Water Transmission Improvement Program	A	45,666,500										-	-
170401	Project 170401-Emergency Bypass Around Ypsilanti Station	A	1,150,000	373,858						329	132		461	374,318
170402	Project 170402-Emergency Manned Visual Inspection 84-Inch Transmission Main	A	163,500	121,400		34,620							34,620	156,020
170403	Project 170403-Lapeer County Chlorine Booster Station	A	3,020,000	579,723									-	579,723
170500	Project 170500-Transmission System Valve Assessment and Rehabilitation/Replacement	A	-	-									-	-
170502	Project 170502-Transmission System Valve Assessment and Rehabilitation/Replacement	A	15,330,000		1,279,399								1,279,399	1,279,399
170600	Project 170600-Water Transmission Main Asset Assessment Program	A	10,626,000	-									-	-
170701	Project 170701-Booster Station & Reservoirs Program Management	A	11,975,000	12,913,885		(206,805)							(206,805)	12,707,080
170800	Project 170800-Reservoir Inspection, Design and Rehabilitation at Imlay Station, Adams Station, Haggerty Stations, LH-WTP, SP-WTP and SW-WTP	A	11,000,000	-									-	-
170900	Project 170900-Suburban Water Meter Pit Rehabilitation and Meter Replacement	A	20,500,000	-									-	-
331001	Project 331002-Roofing Replacement	F	11,500,000	-									-	-
351001	Project 351001-Water Facility Lighting Renovations	F	2,799,000	-									-	-
361001	Project 361001-Consolidated Process Control Systems	A	4,237,000	146,482	166,250								166,250	312,732
361002	Project 361002-Data Control Reliab/Avail Improvements	A	2,851,000	16,080									-	16,080
361003	Project 361003-SCADA Radio Network Upgrade	A	3,484,000	467,427									-	467,427

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Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
 Water System Construction Work-in-Progress (CWIP) FY 2018 Rollforward
 Unaudited, Pre-Close Activity for the Quarter Ended March 31, 2018

				FY 2018 Activity (Unaudited)											
CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	Construction: (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Personnel (601995)	Capital Allocation: Benefits (601997)	FY 2018 Activity (Unaudited), Pre-Close	Unaudited, Pre-Close CWIP Balance, March 31, 2018		
380401	Project 380400-As-Needed CIP Implementation Assistance and Related Services	A	-	105,339		33,587						33,587	138,926		
380500	Project 380500-Department-Wide General Engineering Services on an As-Needed Basis	A	-	-								-	-		
380501	Project 380501-Department-Wide General Engineering Services on an As-Needed Basis	A	5,260,000	132,282		11,911						11,911	144,193		
380600	Project 380600-General Engineering Services	A	-	-								-	-		
380601	Project 380601-General Engineering Services	A	8,014,000	157,971						329	82	411	158,382		
380701	Project 380701-Engineering Services for Concrete Testing, Geotechnical Soil Borings and Services	A	2,556,000	115,418		93,045				288	115	93,448	208,866		
380800	Project 380800-Geotechnical and Related Services on an As-Needed Basis	A	2,573,000	-								-	-		
380801	Project 380801-Geotechnical and Related Services on an As-Needed Basis	A	-	82,476								-	82,476		
380900	Project 390900-General Engineering Services	A	1,513,000	-								-	-		
380901	Project 380901- General Engineering Services	A	-	74,791		18,232				3,986	1,594	23,812	98,604		
381000	Project 381000-Energy Management: Electric Metering Improvement Program	A	3,000,000	-								-	-		
Total # of Projects and Dollars			110		\$ 1,169,379,000	\$ 159,099,050	\$ 14,098,855	\$ 5,224,128	\$ -	\$ -	\$ 100,380	\$ 268,097	\$ 86,771	\$ 19,778,231	\$ 178,877,281
FY 2018 - 2022 Water CIP Total (Page IV-2)					\$ 1,169,378,000	\$ 159,099,050								19,778,231	
Difference due to rounding					(1,000)	-								-	
Items to be reclassified to Capital Outlay FY 2018						287,488									
Total CWIP Reported on FY 2017 Financial Statements						159,386,538									

CIP Allowance and Program Summary

Within the FY 2018 – 2022 CIP, GLWA has developed budgets for allowances and programs that provide GLWA flexibility in capital development and improvements.

Allowances are established to provide funding related to unanticipated pipeline and equipment failures that require immediate repair and rehabilitation to continuously meet level of service requirements. Allowances can also be allocated to projects with anticipated or actual spend in excess of CIP budget.

Programs are established to provide funding related to specific capital improvements that are system specific, reoccurring, and vary from year to year.

Below are the allowances and programs within the Water System.

Allowance

170100: Water Treatment Plant / Pump Station Allowance

Programs

170200: As Needed Construction Materials, Environmental Media and Special Testing, Construction Inspection, and Other Technical Services

170300: Water Treatment Plant Automation Program

170400: Water Transmission Improvement Program

170500: Transmission System Valve Rehabilitation and Replacement Program

170600: Water Transmission Main Asset Assessment Program

170700: Reservoirs Inspection, Repair and Rehabilitation Program

170800: Reservoir Inspection, Design and Rehabilitation at Imlay Station, Adams Station, Haggerty Station, LH-WTP, SPW-WTP and SW-WTP

170900: Suburban Water Meter Pit Rehabilitation and Meter Replacement

Water System Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Allowance: 170100 Water Treatment / Pump Station

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170100		Water Treatment / Pump Station Allowance			19,650,000	20,000,000	20,000,000	10,000,000	10,000,000
111002	CON-212	Lake Huron Treatment Plant Mechanical Improvements	9410	Board	(381,000)	(579,000)			
112002	CON-215	Low Lift Chaisson Rehabilitation at NEWTP	6857	Administrative	(247,000)	(195,000)	0	0	0
114001	CS-200	Resident Project Representative and O&M for SP-564	6904	Administrative	(890,000)	0	0	0	0
114013	SCP-CS-038	Professional Engineering Services Springwell WTP	6905	Administrative	(207,000)	(172,500)	(34,500)	0	0
170011	SCP-SW-011	Miscellaneous Heating Improvements at Southwest WTP			0	0	0	0	0
170101	SCP-CS-1630	Water Transmission Pipeline Improvements			0	0	0	0	0
170102	SCP-CS-1656	Water Production Plant Flow Meter	6859	Administrative	(105,000)	0	0	0	0
170103	SCP-CON-094	Belle Isle Ice Boom Replacement & Reinforcement Upgrade			0	0	0	0	0
170104	CON-225	Orion Pumping Station Improvements	6923	Board	(500,000)	(1,800,000)	0	0	0
170105	SCP-NE-017	Phosphoric Acid and Heating System Improvements			0	0	0	0	0
170106	SCP-LH-398	Phosphoric Acid Tank Replacement LHWT			0	0	0	0	0
170107	SCP-DWS-059	Belle Isle Water Intake Bridge Improvements	6862	Administrative	(358,500)	0	0	0	0
170108	SCP-DWS-063	Adams Rd Water Booster Isolation Gate	6900	Administrative	(192,500)	0	0	0	0
170109	SCP-CS-1623	Inspection of Three Water Intakes	6864	Board	(500,000)	(3,000)	0	0	0
170110	CON-153	WWPWT Raw Water Sampling Improvements			0	0	0	0	0
170117	SCP-NE-007A	Instrument Air Compressor NEWTP			0	0	0	0	0
170118	SCP-SP-009	Sedimentation Basin Sludge Removal			0	0	0	0	0
170119	SCP-CS-1685	Belle Isle Water Supply Intake Lagoon			0	0	0	0	0
170120	SCP-CS-1692	Acid and Chlorine Feed Improvements SWWP			0	0	0	0	0
		Available Balance			16,269,000	17,250,500	19,965,500	10,000,000	10,000,000

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170200 As Needed Construction Materials, Environmental Media and Special Testing Services
Construction Inspection, and other Technical Services

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170200		As Needed Materials and Services			500,000	500,000	500,000	0	0
		Available Balance			500,000	500,000	500,000	0	0

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170300 Water Treatment Plant Automation

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170300		Water Treatment Plant Automation Program			1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
170113	CS-108	Water Plant Automation Needs Assessment	6867	Board	(1,090,000)				
Total		Available Balance			410,000	1,500,000	1,500,000	1,500,000	1,500,000

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170400 Water Transmission Improvement

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170400		Water Transmission Improvements Program			10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
170402	PO# 0004292	84" Transmission Water Main Assessment in Troy							
170403	GLWA-DBW-070	Lapeer County Chlorine Booster Stations	6932	Board	(2,900,000)	(120,000)			
		Available Balance			7,100,000	9,880,000	10,000,000	10,000,000	10,000,000

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170500 Transmission System Valve Rehabilitation and Replacement

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170500		Transmission System Valve Assessment and Rehabilitation / Replacement			2,930,000	3,100,000	3,100,000	3,100,000	3,100,000
170502	CON-181	Transmission System Valve Assessment and Rehabilitation and Replacement	6977	Board	(2,930,000)	(3,100,000)	(3,100,000)	(870,000)	
		Available Balance			0	0	0	2,230,000	3,100,000

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170600 Water Transmission Main Asset Assessment

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170600		Water Transmission Main Asset Assessment Program			2,626,000	2,000,000	2,000,000	2,000,000	2,000,000
		Available Balance			2,626,000	2,000,000	2,000,000	2,000,000	2,000,000

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170700 Reservoirs Inspection, Repair and Rehabilitation

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170700		Booster Stations and Reservoirs Inspection, Rehabilitation and Inspection Repair Program			88,000				
170701	DWS-874	Booster Stations & Reservoirs Inspection	N/A		(88,000)	0	0	0	0
		Available Balance			0	0	0	0	0

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170800 Reservoir Inspection, Design and Rehabilitation at Imlay Station, Adams Station
Haggerty Station, LH-WTP, SPW-WTP and SW-WTP

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170800		Reservoir Inspection, Design and Rehabilitation at Imlay Station, Adams Station, Haggerty Station, LH-WTP, SP-WTP and SW-WTP Program			3,300,000	2,550,000	2,550,000	2,550,000	
		Available Balance			3,300,000	2,550,000	2,550,000	2,550,000	0

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 170900 Suburban Water Meter Pit Rehabilitation and Meter Replacement

CIP#	Contract Number	Description	Current Year Budget Amendment	Board /Administrative Approved	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
170900		Suburban Water Meter Pit Rehabilitation and Meter Replacement Program			4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
		Available Balance			4,000,000	4,000,000	4,000,000	4,000,000	4,000,000

Budget Amendment Reporting

Scope: Budget amendments are being utilized as an internal management tool to properly allocate funds from the allowance and programs within the Capital Improvement Plan (CIP) for the budgeted years by the reallocation of funds from the budgeted allowance or programs level to the actual project level.

Process: Steps are listed below.

- 1) Properly identify projects that utilize funds from the allowance or programs
- 2) Reallocate the funds from the budgeted allowance or programs level through a journal entry
- 3) Attach documents that support the reallocation (CIP funding request, contract transmittal, or change orders)
- 4) Create, review, and approve budget amendment journal entry

Budget Amendments / Descriptions / Reasons / GL Strings		Amount
6857		
CIP 170100 Water Treatment / Pump Station Allowance		
To fund Salaries, Benefits and Construction Services that exceeds FY 2018-2022 CIP		
Allocation of Allowance Budget		
	5519-882111.000-616900-170100	(247,000)
CIP 112002 Low Lift Chaisson Rehabilitation at NE-WTP		
To fund Salaries, Benefits and Construction Services that exceeds FY 2018-2022 CIP		
Executed Contract in excess of CIP Budget		
	5519-882111.000-616900-112002	147,000
Benefits Allocation (Not included in FY 2018 - 2022 CIP)	5519-882111.000-601997-112002	40,000
Salaries Allocation (Not included in FY 2018 - 2022 CIP)	5519-882111.000-601995-112002	60,000
6859		
CIP 170100 Water Treatment / Pump Station Allowance		
To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP		
Allocation of Allowance Budget		
	5519-882111.000-616900-170100	(105,000)
CIP 170102 Water Production Plant Flow Meter		
To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP		
Project was not included in FY 2018-2022 CIP		
	5519-882111.000-617950-170102	20,000
Benefits Allocation (Not included in FY 2018 - 2022 CIP)	5519-882111.000-601997-170102	34,000
Salaries Allocation (Not included in FY 2018 - 2022 CIP)	5519-882111.000-601995-170102	51,000

6862

CIP 170100 Water Treatment / Pump Station Allowance

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Allocation of Allowance Budget

5519-882111.000-616900-170100 (358,500)

CIP 170107 Belle Isle Water Intake Bridge Improvements

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Project was not included in FY 2018-2022 CIP

5519-882111.000-616900-170107 321,000

Benefits Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601997-170107 15,000

Salaries Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601995-170107 22,500

6864

CIP 170100 Water Treatment / Pump Station Allowance

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Allocation of Allowance Budget

5519-882111.000-616900-170100 (500,000)

CIP 170109 Inspection of Three Water Intakes

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Project was not included in FY 2018-2022 CIP

5519-882111.000-617950-170109 447,400

Benefits Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601997-170109 21,040

Salaries Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601995-170109 31,560

6867

CIP 170300 Water Plant Automation Needs Assessment

To Fund Design Services Salaries, and Benefits related to budgeted program assigned

Allocation of Program Budget

5519-882111.000-616900-170300 (1,090,000)

CIP 170113 Water Plant Automation Needs Assessment

To Fund Design Services Salaries, and Benefits related to budgeted program assigned

Benefits Allocation

5519-882111.000-601997-170113 42,000

Program Needs Assigned

5519-882111.000-617950-170113 985,000

Allocation of Program Salaries

5519-882111.000-601995-170113 63,000

6900

CIP 170100 Water Treatment / Pump Station Allowance

To fund Contracted Constructed Services, Materials, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Allocation of Allowance Budget

5519-882111.000-616900-170100 (192,500)

CIP 170108 Adams Road Water Booster Isolation Gate

To fund Contracted Constructed Services, Materials, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Project was not included in FY 2018-2022 CIP

5519-882111.000-616900-170108 97,000

5519-882111.000-617955-170108 70,000

Benefits Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601997-170108 10,200

Salaries Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601995-170108 15,300

6904

CIP 170100 Water Treatment / Pump Station Allowance

To fund Owner's Rep Service that were not part of FY2018-2022 CIP Plan

Allocation of Allowance Budget

5519-882111.000-616900-170100 (890,000)

CIP 114001 Resident Project Representative for SP-563

To fund Owner's Rep Service that were not part of FY2018-2022 CIP Plan

Executed Contract in excess of CIP Budget

5519-882111.000-617950-114001 890,000

6905

CIP 170100 Water Treatment / Pump Station Allowance

To fund Salaries, Benefits and Construction Services that exceed FY 2018-2022 CIP

Allocation of Allowance Budget

5519-882111.000-616900-170100 (207,000)

CIP 114013 Professional Engineering Services Springwells WTP

To fund Salaries, Benefits and Construction Services that exceed FY 2018-2022 CIP

Executed Contract in excess of CIP Budget

5519-882111.000-617950-114013 180,000

Benefits Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601997-114013 10,800

Salaries Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601995-114013 16,200

6923

CIP 170100 Water Treatment / Pump Station Allowance

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Allocation of Allowance Budget

5519-882111.000-616900-170100 (500,000)

CIP 170104 Orion Pumping Station Improvements

To fund Contracted Design Services, Salaries and Benefits not budgeted for in FY 2018-2022 CIP

Project was not included in FY 2018-2022 CIP

5519-882111.000-616900-170104 450,000

Benefits Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601997-170104 20,000

Salaries Allocation (Not included in FY 2018 - 2022 CIP)

5519-882111.000-601995-170104 30,000

6932

CIP 170400 Water Transmission Improvements Program

To Fund Construction, Inspection, Salaries and Benefits related to budgeted program assigned

Allocation of Program Budget

5519-882111.000-616900-170400 (2,529,000)

5519-882111.000-617950-170400 (371,000)

CIP 170403 Lapeer County Chlorine Booster Stations

To Fund Construction, Inspection, Salaries and Benefits related to budgeted program assigned

Benefits Allocation

5519-882111.000-601997-170403 9,900

Program Needs Assigned

5519-882111.000-601998-170403 6,600

Allocation of Program Salaries

5519-882111.000-601995-170403 17,500

Allocation for Design Services Contract

5519-882111.000-617950-170403 371,000

Allocation for Construction Services Contract

5519-882111.000-616900-170403 2,495,000

6977

CIP 170500 Transmission System Valve Assessment and Rehabilitation / Replacement Program

To Fund Construction, Inspection, Salaries and Benefits related to budgeted program assigned

Allocation of Program Budget

5519-882111.000-601995-170500	(24,000)
5519-882111.000-601997-170500	(9,000)
5519-882111.000-601998-170500	(1,000)
5519-882111.000-616900-170500	(2,896,000)

CIP 170502 Transmission System Valve Assessment and Rehabilitation and Replacement

To Fund Construction, Inspection, Salaries and Benefits related to budgeted program assigned

Allocation for Program Inspection Services

5519-882111.000-601998-170502	1,000
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Allocation for Program Benefits

5519-882111.000-601997-170502	10,000
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Allocation for Program Salaries

5519-882111.000-601995-170502	25,000
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Allocation for Program Design Services

5519-882111.000-617950-170502	320,000
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Allocation for Program Construction Services

5519-882111.000-616900-170502	2,574,000
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9410

CIP 111002 Lake Huron Treatment Plant Mechanical Improvements

To Fund Construction, Inspection, Salaries and Benefits related to budgeted program assigned

Allocation for Construction Services Contract

5519-882111.000-616900-170100	(381,000)
5519-882111.000-616900-111002	381,000

Grand Total

0

WASTEWATER SYSTEM

Percent of Spend Compared to Annual Budget and Capital Improvement Plan (CIP) Requests

The rate of spend is a key performance indicator. The ratios for FY 2017 (twelve months) of 55% and for FY 2018 (nine months) of 50.8% are lower than simple benchmark of 80% and 75% respectively. This is attributable to three reasons. First is the competition for staff priorities during stand-up of the GLWA (primarily during FY 2017). Second, is the alignment of projects identified and staff or contractor resources to carry out the projects. Several key hires occurred primarily during fiscal FY 2017 will improve this performance. Third, is the phasing of CIP activity which is being further refined throughout GLWA.

	FY 2017 Original Plan and Budget (Twelve Months)	FY 2017 Activity	FY 2017 Activity as a Percent of Budget	FY 2018 Amended Budget	FY 2018 Prorated Amended Budget (Nine Months)	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Wastewater System Projects							
FY 2017 CIP Project Requests @ 100%	\$ 128,973,000	56,788,123	44.0%				
FY 2017 CIP Net Budget (approx. 80% of request)	103,178,400	56,788,123	55.0%				
FY 2018 CIP Project Requests @ 100%				\$ 160,746,000	120,559,500	49,043,353	40.7%
FY 2018 CIP Net Budget (approx. 80% of request)				128,596,800	96,447,600	49,043,353	50.8%

Analysis of Projects with Largest Percent of Spend and Otherwise Noteworthy Project

Of the total Wastewater System Construction Bond spend for FY 2018 to date, **four projects account for \$34.7 million or 70.8% of the total spend**. Those projects are summarized in the following table. An analysis of each project and its related CIP summary follow the table. Note that the last page of this report provides a Glossary of Acronyms.

Wastewater System Projects	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Project 211001: Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	\$ 51,903,000	\$ 10,243,275	\$ 12,097,000	\$ 10,813,280	22.0%
Project 212003: Aeration System Improvements	\$ 16,203,000	\$ 3,804,993	\$ 11,197,000	\$ 5,310,480	10.8%
Project 212006: PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	\$ 47,599,000	\$ 6,872,993	\$ 15,800,000	\$ 13,613,228	27.7%
Project 260201: CON-149 Emergency Sewer Repair	\$ 14,880,000	\$ -	\$ 4,795,540	\$ 5,049,993	10.3%
Selected Projects as a Percentage of the Total	<u>\$ 130,585,000</u>	<u>\$ 20,921,261</u>	<u>\$ 43,889,540</u>	<u>\$ 34,786,981</u>	<u>70.8%</u>
Total			<u>\$ 160,746,000</u>	<u>\$ 49,122,396</u>	<u>100.0%</u>

The following analysis provides brief highlights related to these projects.

Project 211001–Rehabilitation of Primary Rectangular Clarifiers

	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Wastewater System Projects					
Project 211001: Rehabilitation of Primary Clarifiers					
Rectangular Tanks, Drain Lines, Electrical/Mechanical					
Building and Pipe Gallery	\$ 51,903,000	\$ 10,243,275	\$ 12,097,000	\$ 10,813,280	22.0%

Project Engineer/Manager: Nicolas Nicolas

Manager: Philip Kora

Total Project Budget: \$51,903,000

Timeline: To be completed by May 2020

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: PC-757 Toolles Contracting Group

Project Description: The Rehabilitation of Primary Rectangular Clarifiers Tanks, Drain Lines, Electrical/Mechanical Building, Pipe Gallery, and Replacement of Rake Arm assembly for Circular Primary Clarifiers 15 and 16 at the Water Resource Recovery Facility (WRRF).

Purpose: To improve the operating and maintenance efficiencies that meets the regulatory National Pollution Discharge Elimination (NPDES) Permit and National Electrical code (NEC) requirements.

Status: Rehabilitation of Primary rectangular clarifiers 11 and 12 is complete and returned to operation. Rehabilitation work is ongoing for Primary rectangular clarifiers 9 and 10. Primary circular clarifier 15 rehabilitation is complete, and the 30-day testing is ongoing.

Additional Project Manager Comments: There are no additional comments to provide at this time.

Additional Construction Accounting & Financial Reporting Team Comments: There are no additional comments to provide at this time.

FY 2018-2022 CIP Page VI-73 for Project 211001–Rehabilitation of Primary Rectangular Clarifiers

CIP Number: CIP 291

Title: REHABILITATION OF PRIMARY CLARIFIERS RECTANGULAR TANKS, DRAIN LINES, ELECTRICAL/MECHANICAL BUILDING AND PIPE GALLERY

Classification: 211: Wastewater > WRRF > Primary Treatment

Managing Dept: WW Eng

RC Score: NA

Contract No.: PC-757

Significance: Rehabilitation for meeting NPDES Permit and NEC requirements

Location: WRRF

Driver: N/A - Active

Explanation: N/A - Active

Preliminary Scope of Work:

The work to be completed under this project will include installing ventilation and atmospheric control for the pipe gallery; providing new lights and emergency lights, etc.. This work also includes rehabilitation of 12 drain lines from rectangular clarifiers 3-12, circular clarifiers 16 and 16, installation of large manhole with sump pumps to collect drainage and discharge to clarifier, and concrete crack repairs, and rehabilitation work in Electrical/Mechanical Building.

Challenges: N/A - Active

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
C	Active	TBD	TBD	\$0	\$10848	\$12097	\$20990	\$7968	\$0	\$0	\$0	\$41055	\$51903
Totals				\$0	\$10848	\$12097	\$20990	\$7968	\$0	\$0	\$0	\$41055	\$51903



Pipe gallery

Project 212003-Aeration System Improvements

	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Wastewater System Projects					
Project 212003: Aeration System Improvements	\$ 16,203,000	\$ 3,804,993	\$ 11,197,000	\$ 5,310,480	10.8%

Project Engineer/Manager: Vinod Sharma

Manager: Philip Kora

Total Project Budget: \$15,985,000

Timeline: To be completed by September 2018

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: CS-1498, CS-157-Metco Services, PC-796-Weiss Construction

Project Description: The Aeration System Improvements will improve the aeration system and provide necessary inter-connections.

Purpose: To increase the efficiency of oxygen used in the High Purity Oxygen (HPO) activated sludge process, reduce the risk of mechanical failures with the replacement/rehabilitation of the Influent and Return Activated Sludge(RAS) valves/pipeline would meet regulatory guidelines to comply with NPDES Permit.

Status: The rehabilitation work associated with Aeration Basin No. 3 is ongoing.

Additional Project Manager Comments: There are no additional comments to provide at this time.

Additional Construction Accounting & Financial Reporting Team Comments: There are no additional comments to provide at this time.

FY 2018-2022 CIP Page VI-83 for Project 212003-Aeration System Improvements

CIP Number: **CIP 1194**

Title: **AERATION SYSTEM IMPROVEMENTS**

Classification: 212: Wastewater > WRRF > Secondary Treatment & Disinfection

Managing Dept: WW Eng

RC Score: NA

Contract No.: CS-1498, PC-796

Significance: Improve aeration system and provide necessary inter-connections

Location: WRRF

Driver: N/A - Under Procurement

Explanation: N/A - Under Procurement

Preliminary Scope of Work:

The scope of work includes study, design, and construction assistance for the oxygen baffle on Bay 10 of A1 & A2 decks, replacement of influent, Return Activated Sludge (RAS) piping, isolation gate and valves for decks Nos. 3 & 4, replace RAS and influent magmeters for Intermediate Lift Pumps (ILP) Nos. 3, 4 & 7. The work also includes replacement of influent gates and operators on Aeration Deck No. 1 & 2.

Challenges: N/A - Under Procurement

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
S/D/CA	Active	2/21/2012	2/28/2018	\$0	\$106	\$97	\$16	\$0	\$0	\$0	\$0	\$113	\$219
C	Under Procurement	TBD	TBD	\$0	\$2242	\$11100	\$2642	\$0	\$0	\$0	\$0	\$13742	\$15984
Totals				\$0	\$2348	\$11197	\$2658	\$0	\$0	\$0	\$0	\$13855	\$16203



Equipment for aeration system

Project 212006-Rouge River Outfall Project

	Total Project Budget per CIP (Life of Projects)	Life-to-Date Through June 30, 2017	FY 2018 Requested Budget per CIP	FY 2018 Pre-Close Activity (Nine Months) (Unaudited)	FY 2018 Pre-Close as a Percent of Prorated Budget (Nine Months) (Unaudited)
Wastewater System Projects					
Project 212006: PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	\$ 47,599,000	\$ 6,872,993	\$ 15,800,000	\$ 13,613,228	27.7%

Project Engineer/ Manager: Philip Kora and Darrel Field (PMA)

Manager: Philip Kora

Total Project Budget: \$47,599,000

Timeline: To be substantially complete by April 2019

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contracts/Vendors: CS-1781- PMA Consultants and PC-797-CDM Construction

Project Description/Purpose: The Rouge River Outfall Disinfection Project (Phase 2) is MDEQ approved to provide chlorination and de-chlorination to the Rouge River Outfall (RRO) effluent during wet weather events.

Status: Current work efforts include the construction of the new hypo building and chemical piping, and the installation of the flow meters and diffusers in the primary effluent channel. The west RRO conduit diffuser installation has been completed and is in service.

Additional Project Manager Comments: There are no additional comments to provide at this time.

Additional Construction Accounting & Financial and Reporting Team Comments: There are no additional comments to provide at this time.

FY 2018-2022 CIP Page VI-98 for 212006-Rouge River Outfall Project

CIP Number: CIP 1302

Title: ROUGE RIVER OUTFALL (RRO) DISINFECTION (ALTERNATIVE)

Classification: 212: Wastewater > WRRF > Secondary Treatment & Disinfection

Managing Dept: WW Eng

RC Score: NA

Contract No.: PC-797, CS-1781

Significance: Provide project oversight and design build services for alternative disinfection services to meet NPDES Permit requirements at existing Rouge River Outfall

Location: Rouge River Outfall

Driver: 3 – Regulatory (Environmental/Legal)

Explanation: In order to be in compliance with its NPDES permit, GLWA's WRRF must provide disinfection to all effluent flows from the DRO and RRO by April 2019. Only the DRO currently has disinfection; this project will provide chlorination and de-chlorination for RRO effluent during wet weather events.

Preliminary Scope of Work:

The consultant shall provide comprehensive professional services for project oversight and Owner's representation for the PC-797 RRO Disinfection Progressive Design-Build Contract. The scope of work consists of completing basis of design, design and construction services to develop and implement a solution that will result in 100% disinfection of wet weather flow discharged from WRRF to Detroit River outfall and Rouge River Outfall in order to meet NPDES Permit requirements.

Challenges: N/A - Under Procurement

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY2016 (Unaudited)	Projected Expenditures FY2017	Projected Expenditures FY2018	Projected Expenditures FY2019	Projected Expenditures FY2020	Projected Expenditures FY2021	Projected Expenditures FY2022	Projected Expenditures FY2023 & Beyond	2018-2022 CIP Total	Phase Total
S/D/C	Under Procure.	2/19/2016	12/31/2019	\$729	\$2690	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3419
CM	Under Procure.	TBD	TBD	\$0	\$1000	\$800	\$520	\$100	\$0	\$0	\$0	\$1420	\$2420
C	Not Yet Started	2/19/2016	12/31/2019	\$0	\$2840	\$15000	\$15000	\$8920	\$0	\$0	\$0	\$38920	\$41760
Totals				\$729	\$6530	\$15800	\$15520	\$9020	\$0	\$0	\$0	\$40340	\$47599



Project 260201-Emergency Sewer Repair

	Total Project		FY 2018		FY 2018
	Budget per CIP		Requested		Pre-Close
	(Life of Projects)		Budget per CIP		Activity
Wastewater System Projects	Life-to-Date Through		(Nine Months)		as a Percent of
	June 30, 2017		(Unaudited)		Prorated Budget
					(Nine Months)
					(Unaudited)
Project 260201: CON-149 Emergency Sewer Repair	\$	14,880,000	\$	-	10.3%
			\$	4,795,540	
			\$	5,049,993	

Project Engineer/Manager: Mini Panicker/Todd King

Manager: Biren Saparia

Total Project Budget: \$14,880,000

Timeline: Estimated Completion July 2019

FY 2018 Last Pay Estimate Processed: March 31, 2018

Key Contract/Vendor: Inland Waters CON-149, FK EngineersCS-168

Project Description: Emergency repair/ rehabilitation/replacement of sanitary sewer mains, sewer manholes and sewer structures.

Purpose: To provide sewer inspections to locate defects and perform sewer lining and open cut repair of failed sewers for the in-place rehabilitation of sewers on an as needed basis.

Status: The rehabilitation of the Northwest Interceptor at Joy Rd and Trinity located in Detroit, Lynch Sewer in Detroit, and the Cured in Place Pipe Lining (CIPP) and EcoCasting of portions of the B-54 sewer outfall located at Warren & Pierson in Detroit are complete. Currently, the ongoing rehabilitation of Fox Creek Relief Sewer and Cadieux Sewer in Detroit are progressing.

Additional Project Manager Comments: There are no additional comments to provide at this time.

Additional Construction Accounting & Financial and Reporting Team Comments: There are no additional comments to provide at this time.

FY 2018-2022 CIP Page VI-93 for 260201-Emergency Sewer Repair

CIP Number: CIP 1263

Title: SEWER AND INTERCEPTOR EVALUATION AND REHABILITATION PROGRAM

Classification: 2602: Wastewater > Programs > Programs

Managing Dept: WW Eng

RC Score: NA

Contract No.: CS-068, PO-005030

Significance: Evaluation of the existing condition of the sewers and interceptors, cleaning and rehabilitating are essential to optimize the transportation capacity of the GLWA collection system and to increase its life expectancy.

Location: Sewers and Interceptors

Driver: 1 - Condition

Explanation: Some sewers have sediment deposits that results in transportation capacity limitation. Some have deterioration.

Preliminary Scope of Work:

Provide CCTV and or sonar inspection of the GLWA Collection System Interceptors and Trunk Sewers to reveal the existing conditions as per the National Association of Sewer Service Companies' (NASSCO) Pipeline Assessment Certification Program (PACP) standards, evaluate the existing conditions, and provide the necessary cleaning/rehabilitation/replace to optimize the design capacity of the collection system and to minimize the inflow and infiltration into the collection system.

Challenges: Very large sewers and interceptors may have flow control challenges for both inspection and rehabilitation.

Initial Project Cost Estimates (in \$1000s)

Phase	Status	Start Date	End Date	Lifetime Actual Thru FY 2016 (Unaudited)	Projected Expenditures FY 2017	Projected Expenditures FY 2018	Projected Expenditures FY 2019	Projected Expenditures FY 2020	Projected Expenditures FY 2021	Projected Expenditures FY 2022	Projected Expenditures FY 2023 & Beyond	2018-2022 CIP Total	Phase Total
S,D,C	Not Yet Started	NA	NA	\$0	\$2464	\$2000	\$0	\$0	\$0	\$0	\$0	\$2000	\$4464
S,D,CA	Under Procure.	NA	NA	\$0	\$148	\$22	\$0	\$0	\$0	\$0	\$0	\$22	\$170
S	Not Yet Started	NA	NA	\$0	\$0	\$218	\$240	\$600	\$600	\$600	\$0	\$2258	\$2258
D	Not Yet Started	NA	NA	\$0	\$0	\$400	\$400	\$1000	\$1000	\$1000	\$0	\$3800	\$3800
C	Not Yet Started	NA	NA	\$0	\$0	\$5360	\$7360	\$18400	\$18400	\$18400	\$0	\$67920	\$67920
Totals				\$0	\$2612	\$8000	\$8000	\$20000	\$20000	\$20000	\$0	\$76000	\$78612



An example interceptor.

Construction Work-in-Progress Rollforward

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

The CWIP Rollforward provides a project status for each item.

Future Year:	Project that was included in the CIP with no expenditures (F)
Active:	Project in which procurement process has been initiated and expenditures incurred (A)
Pending Close:	Project that has no projected expenditures for the current fiscal year and has reached substantial completion (PC)
Closed:	Project that has been closed and capitalized (C)

Projects in bold font on the CWIP Rollforward were discussed in further detail previously in this report.

As shown in the summary below, the Wastewater System CWIP Rollforward for FY 2018 thru 2022 identifies 85 projects with a total budgeted value of \$1.1 billion. Of that total, \$201.8 million is in CWIP as of March 31, 2018 as shown in the table beginning on the next page.

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

Status	Project Count	Total Project Cost	Percent of Total
Future	28	371,444,000	33%
Active	40	694,649,000	62%
Pending Close	5	8,098,000	1%
Closed	12	41,029,000	4%
Grand Total	85	\$ 1,115,220,000	100%

Wastewater System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Wastewater Construction Work-in-Progress (CWIP) FY 2018 Rollforward
(Unaudited), Pre-Close Activity For the Quarter Ended March 31, 2018

CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	FY 2018 Activity (Unaudited) Pre-Close							FY 2018 Activity (Unaudited), Pre-Close	(Unaudited), Pre-Close CWIP Balance, as of March 31, 2018
					Construction (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Salary & Wages-Direct (601995)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Employee Benefits (601997)		
4824	DWSD-Reha/Replacement Existing Sewer	PC	-	56,280	-	-	-	-	-	-	-	-	56,280
211001	Project 211001: Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	A	51,903,000	10,243,275	10,578,450	129,197	-	-	75,468	-	30,164	10,813,280	21,056,555
211002	Project 211002: Pump Station No. 2 Pumping Improvments	A	3,533,000	108,416	141,688	36,361	-	-	8,718	-	3,467	190,234	298,651
211003	Project 211003: Rehabilitation of Primary Clarifiers	A	581,000	1,701,631	-	-	-	-	739	-	296	1,035	1,702,666
211004	Project 211004: Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	A	21,494,000	20,944,123	2,363,732	153,899	-	-	115,121	-	46,020	2,678,772	23,622,895
211005	Project 211005: Pump Station No. 2 Improvements	F	10,800,000	-	-	-	-	-	-	-	-	-	-
211006	Project 211006: Pump Station No. 1 Improvements	F	13,129,000	88	-	-	-	-	-	-	-	-	88
211007	Project 211007: Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	F	9,667,000	-	-	-	-	-	-	-	-	-	-
211008	Project 211008: Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	F	9,633,000	-	-	-	-	-	-	-	-	-	-
211009	Project 211009: Rehabilitation of the Circular Primary Clarifier Scum Removal System	F	10,480,000	-	-	-	-	-	-	-	-	-	-
212001	Project 212001: Returned Activated Sludge (RAS) Pumps, Influent Mixed Liquor System and Motor Control Centers (MCC) Improvements for Secondary Clarifiers	C	24,175,000	-	-	-	-	-	-	-	-	-	-
212002	Project 212002: Study, Design, & Construction, Management Services for Modified Detroit River Outfall No. 2 - WRRF	A	8,482,000	10,818,870	-	-	-	-	-	-	-	-	10,818,870
212003	Project 212003: Aeration System Improvements	A	16,203,000	3,804,993	5,137,696	113,141	-	-	42,617	-	17,026	5,310,480	9,115,473
212004	Project 212004: Chlorination/Dechlorination Process Equipment Improvements	A	5,000,000	85,850	-	29,915	-	-	434	-	140	30,489	116,339
212005	Project 212005: Rouge River Outfall No. 2 (RRO-2) Segment 1-WWTP Modifications	C	12,187,000	-	-	-	-	-	-	-	-	-	-
212006	Project 212006: PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	A	47,599,000	6,872,993	13,038,082	509,265	-	-	47,104	-	18,777	13,613,228	20,486,221
212007	Project 212007: Rehabilitation of the Secondary Clarifiers	F	30,999,000	-	-	-	-	-	-	-	-	-	-
213001	Project 213001: Replacement of Belt Filter Presses for Complex I and Upper Level Complex II	C	1,901,000	-	-	(4,328)	-	-	1,094	-	438	(2,796)	(2,796)
213002	Project 213002: Rehabilitation of Central Offload Facility	A	17,750,000	202,142	-	563,437	-	-	16,656	-	6,612	586,705	788,847
213003	Project 213003: Sewage Sludge Incinerator Air Quality Improvements at WRRF	A	36,043,000	36,153,036	436,443	-	-	-	17,761	-	7,098	461,301	36,614,337
213004	Project 213004: Biosolids Dryer Facility at WRRF	A	135,968,000	2,023,774	165,798	-	-	-	2,899	-	1,159	169,856	2,193,630
213005	Project 213005: Complex I Incinerators Decommissioning and Reusability	A	1,100,000	-	-	29,748	-	-	2,269	-	905	32,922	32,922
213006	Project 213006: Improvements to Sludge Feed Pumps at Dewatering Facilities	A	1,185,000	4,856	-	-	-	-	-	-	-	-	4,856

Wastewater System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Wastewater Construction Work-in-Progress (CWIP) FY 2018 Rollforward
(Unaudited), Pre-Close Activity For the Quarter Ended March 31, 2018

					FY 2018 Activity (Unaudited) Pre-Close							FY 2018 Activity (Unaudited), Pre- Close	(Unaudited), Pre-Close CWIP Balance, as of March 31, 2018
CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	Construction (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Salary & Wages- Direct (601995)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Employee Benefits (601997)		
213007	Project 213007: Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	A	18,922,000	-	-	169,052	-	-	4,830	-	1,731	175,612	175,612
213008	Project 213008: Rehabilitation of the Wet and Dry Ash Handling Systems	F	18,316,000	-	-	-	-	-	-	-	-	-	-
213009	Project 213009: Phosphorous Recovery Facility at the WRRF	A	15,000,000	-	-	21,905	-	-	-	-	-	21,905	21,905
214001	Project 214001: Relocation of Industrial Waste Division and Analytical Laboratory Operations	A	7,000,000	181,500	-	-	-	-	350	-	140	490	181,990
215001	Project 215001: Rehabilitation of Combined Sewer Overflow (CSO) Retention Treatment Basins (RTB), Screening and Disinfection Facilities (SDF)	A	31,977,000	763,690	1,039,214	173,954	-	-	13,381	-	5,344	1,231,893	1,995,583
216001	Project 216001: Underground Electrical Duct Bank Repair and EB-1, EB-2, and EB-10 Primary Power Service Improvements - WRRF	A	27,144,000	31,636,300	988,905	(423)	-	-	13,677	-	5,470	1,007,629	32,643,929
216002	Project 216002: Plant-wide Fire Alarm Systems Upgrade/ Integration and Fire Protection Improvements	A	6,014,000	-	-	-	-	-	3,522	-	1,409	4,931	4,931
216003	Project 216003: Repair Potable Water, Screened Final Effluent, natural Gas, and Compressed Air Pipelines at the WWTP	F	5,000,000	-	-	-	-	-	-	-	-	-	-
216004	Project 216004: Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	A	5,000,000	311,736	-	39,827	-	-	1,658	-	479	41,963	353,699
216005	Project 216005: Rehabilitation of the Main Plant Maintenance Building, Replacement of various Plant Maintenance Areas and Work Environment Improvement	F	12,900,000	-	-	-	-	-	-	-	-	-	-
216006	Project 216006: Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	F	50,000,000	-	-	-	-	-	-	-	-	-	-
216007	Project 216007: DTE Primary Electric 3rd Feed Supply Line to the WRRF	A	7,000,000	15,074	292,200	15,000	-	-	-	-	-	307,200	322,274
222001	Project 222001: Intercommunity Relief Sewer Modifications in Detroit Oakwood District	F	11,000,000	-	-	-	-	-	-	-	-	-	-
222002	Project 222002: Detroit River Interceptor Evaluation and Rehabilitation	A	20,321,000	5,380	320,686	-	-	-	3,051	-	1,218	324,955	330,335
222003	Project 222003:North Interceptor East Arm (NIEA) Evaluation and Rehabilitation	F	26,000,000	-	-	-	-	-	-	-	-	-	-
222004	Project 222004:Collection System Valve Remote Operation Structures Improvements	F	2,763,000	-	-	-	-	-	-	-	-	-	-
222005	Project 222005: Collection System Access Hatch Improvements	F	7,197,000	-	-	-	-	-	-	-	-	-	-
222006	Project 222006: GLWA CSO Outfalls Rehabilitation	A	36,000,000	-	-	-	-	-	5,224	-	2,082	7,306	7,306
222007	Project 222007: North Interceptor East Arm (NIEA) Evaluation and Rehabilitation from WRRF to Gratiot Ave. and Sylvester St.	F	21,000,000	-	-	-	-	-	-	-	-	-	-
232001	Project 232001: Fairview Pumping Station - Replace Four Sanitary Pumps	A	32,400,000	778,162	-	518,432	-	-	13,594	-	4,615	536,641	1,314,803
232002	Project 232002: Freud and Connor Creek Pump Station Improvements	A	22,500,000	2,100,803	1,246,581	708,838	-	-	4,691	155,539	1,874	2,117,523	4,218,326
232003	Project 232003: Northeast Pump Station Improvements	F	26,328,000	-	-	-	-	-	-	-	-	-	-
233001	Project 233001: Collection System Backwater Gates and Regulator Gates Rehabilitation	F	9,301,000	-	-	-	-	-	-	-	-	-	-

Wastewater System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Wastewater Construction Work-in-Progress (CWIP) FY 2018 Rollforward
(Unaudited), Pre-Close Activity For the Quarter Ended March 31, 2018

					FY 2018 Activity (Unaudited) Pre-Close							FY 2018 Activity (Unaudited), Pre- Close	(Unaudited), Pre-Close CWIP Balance, as of March 31, 2018
CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	Construction (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Salary & Wages- Direct (601995)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Employee Benefits (601997)		
233002	Project 233002: Collection System In System Storage Devices(ISOs) Improvements	F	3,550,000	-	-	-	-	-	-	-	-	-	-
251002	Project 251002: Wastewater System Wide Instrumentation & Controls Software and Hardware Upgrade	F	5,862,000	-	-	-	-	-	-	-	-	-	-
260100	Project 260100: Water Resource Recovery Facility (WRRF), Lift Station & Wastewater Collection System Allowance	A	52,843,000	-	-	-	-	-	-	-	-	-	-
260101	Project 260101: Plant-Wide Replacement of Emergency Lighting	PC	1,680,000	289,743	870,902	-	-	-	24,482	-	9,790	905,174	1,194,917
260102	Project 260102: Replace Stairs - WWTP	C	500,000	-	-	-	-	-	-	-	-	-	-
260103	Project 260103: Replace 4 DS-706 Centrifuges WWTP	C	600,000	-	-	-	-	-	-	-	-	-	-
260104	Project 260104: Pur Installation of EB-25 Unit WWTP	C	1,195,000	-	-	-	-	-	-	-	-	-	-
260105	Project 260105: Replace Various Air Distribution Equip	C	286,000	-	-	-	-	-	64	-	26	90	90
260107	Project 260107: Pump Station 2 Replacement	F	331,000	-	-	-	-	-	-	-	-	-	-
260108	Project 260108: Sanitary Meter Replacement: Neff Road	C	448,000	-	-	-	-	-	-	-	-	-	-
260110	Project 260110: CS060: Black& Veatch:	A	2,266,000	1,458,339	-	122,208	-	-	8,388	-	3,151	133,747	1,592,086
260111	Project 260111: SCP-PC-015: W-3 Construct: Overhead Door	C	593,000	-	-	-	-	-	-	-	-	-	-
260112	Project 260112: DWS-065: Tooles: Connor Creek	C	345,000	-	-	-	-	-	984	-	394	1,378	1,378
260113	Project 260113: Fire Remediation	A	10,500,000	17,005,859	-	-	-	-	-	-	-	-	17,005,859
260200	Project 260200: Sewer and Interceptor Evaluation and Rehabilitation Program NNB	A	72,320,000	-	-	-	-	-	-	-	-	-	-
260201	Project 260201: Conveyance System Interceptor Rehab	A	1,828,000	90,500	4,465,947	573,179	-	-	7,766	-	3,100	5,049,993	5,140,493
260203	Project 260203: SCP-CON-068: Inland: Sewer Inspection	A	4,464,000	3,306,028	937,665	-	-	-	2,760	-	1,100	941,525	4,247,553
260300	Project 260300: Schedule Replacement Program of Critical Assets NNB	A	23,519,000	-	-	-	-	-	-	-	-	-	-
260301	Project 260301: Roof Replacement of Complex II	A	1,871,000	-	1,672,747	-	-	-	-	-	-	1,672,747	1,672,747
260302	Project 260302: CON 127: Repair HVAC	PC	110,000	56,282	160,329	15,165	-	-	(2,128)	-	(851)	172,515	228,797
260400	Project 260400: Sewage Meter Design, Installation, Replacement and Rehabilitation Program	F	3,000,000	-	-	-	-	-	-	-	-	-	-
331002	Project 331002: Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	F	9,050,000	-	-	-	-	-	-	-	-	-	-
361001	Project 361001: Consolidated Process Control System Upgrades	PC	331,000	173,127	142,500	-	-	-	-	-	-	142,500	315,627

Wastewater System

Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Wastewater Construction Work-in-Progress (CWIP) FY 2018 Rollforward
(Unaudited), Pre-Close Activity For the Quarter Ended March 31, 2018

					FY 2018 Activity (Unaudited) Pre-Close								
CIP #	Brief Description	Status	Total Project Estimate from CIP	CWIP Balance July 1, 2017	Construction (616900)	Contractual Engineering Services (617950)	Capitalized Interest (703115)	Other Expenses (617900)	Capital Allocation: Salary & Wages- Direct (601995)	Capital Allocation: Non-Personnel (601998)	Capital Allocation: Employee Benefits (601997)	FY 2018 Activity (Unaudited), Pre-Close	(Unaudited), Pre-Close CWIP Balance, as of March 31, 2018
361002	Project 361002: Data Center Reliability/Availability Improvements	PC	3,163,000	17,253	-	-	-	-	-	-	-	-	17,253
361003	Project 361003: SCADA Radio Network Upgrade	PC	2,955,000	852,872	-	-	-	-	-	-	-	-	852,872
380400	Project 380400: As-needed CIP Implementation Assistance and Related Services NNB	A	3,135,000	-	-	-	-	-	-	-	-	-	-
380401	Project 380401: CS-1433: PMA: As Needed CIP Services	A	3,135,000	105,279	-	159,990	-	-	-	-	-	159,990	265,269
380500	Project 380500: Department-wide General Engineering Services on an As-needed Basis	A	4,960,000	-	-	-	-	-	-	-	-	-	-
380501	Project 380501: CS-1499:MetcoServices:General Engineer	PC	300,000	148,366	-	-	-	-	-	-	-	-	148,366
380600	Project 380600: General Engineering Services	A	7,016,000	-	-	-	-	-	-	-	-	-	-
380601	Project 380601: CS-1432A:Alfred Benesh:General Engineer	A	250,000	157,929	-	13,816	-	-	-	-	-	13,816	171,745
380700	Project 380700: As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services	C	-	-	-	-	-	-	-	-	-	-	-
380701	Project 380701: Engineering Svc Concrete Testing,Soil Borings	A	-	115,388	-	-	-	-	-	-	-	-	115,388
380800	Project 380800: Geotechnical and Related Services on an As- Needed Basis	F	1,116,000	-	-	-	-	-	-	-	-	-	-
380800	Project 380800: Geotechnical and Related Services on an As- Needed Basis	C	(1,201,000)	-	-	-	-	-	-	-	-	-	-
380801	Project 380801: CS-1490: Nth Consultants: As needed GIS	A	85,000	82,476	-	-	-	-	-	-	-	-	82,476
380900	Project 380900: General Engineering Services	A	649,000	-	-	-	-	-	-	-	-	-	-
380901	Project 380901: CS-1481:Sigma Assoc: General Engineering	A	270,000	63,426	-	265,367	-	-	-	-	-	265,367	328,793
381000	Project 381000: Energy Management: Electric Metering Improvement Program	F	3,000,000	-	-	-	-	-	-	-	-	-	-
Total # of Projects and Dollars		85	1,115,220,000	152,735,840	43,999,567	4,356,943	-	-	437,173	155,539	173,173	49,122,396	201,858,236
FY 2018 - 2022 Wasterwater CIP Total (Page IV-3)			1,115,218,000	152,735,840									
Difference due to Rounding			(2,000)										
Items to be reclassified to Capital Outlay FY 2018				605,618									
Total CWIP Reported on FY 2017 Financial Statements				153,341,458									

CIP Allowance and Program Summary

Within the FY 2018 - 2022 CIP, GLWA has developed budgets for allowances and programs that provide GLWA flexibility in capital development and improvements.

Allowances are established to provide funding related to unanticipated nature of pipeline and equipment failures that require immediate repair and rehabilitation to continuously meet level of service requirement. Allowances can also be allocated to projects with anticipated or actual spend in excess of the CIP budget.

Programs are established to provide funding related to specific capital improvements that are systemic, reoccurring, and vary from year to year.

Below are the allowances and programs within the Wastewater System.

Allowance

260100: WRRF, Lift Station and Wastewater System Structure Allowance

Programs

260200: Sewer and Interceptor Evaluation and Rehabilitation

260300: Scheduled Replacement of Program of Critical Assets

260400: Sewage Meter Design, Installation, Replacement and Rehabilitation Program

Wastewater System Construction Work-in-Progress Quarterly Report As of March 31, 2018

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Allowance: 260100 Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures

CIP#	Contract Number	Description	Board/Administrative Approved	Current Budget Amendment	FY2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
260100		WRRF, Lift Station and Wastewater Collection System Structures Allowance	Board		12,000,000	12,000,000	15,000,000	15,000,000	12,000,000
260300	Fire Remediation Project at WRRF	Fire Remediation	Board	6992	2,000,000				
260110	CS-060	Study and Design for Modification of Sludge Feeds Systems	Board	6920	(174,000)				
260113	Fire Remediation Project at WRRF	Fire Remediation	Board	9383	(2,000,000)				
211004	CON-250	Rack and Grit at Pump Station No. 1	Board	9023	(1,740,000)				
213007	CON-197	Modify Sludge Feeds Systems in Complex II	Board	9024	(1,709,083)				
260602	DB-261	CSO Facilities Fire Alarm	Administrative	9374	(834,788)				
215001	CON-234	Effluent Gates	Board	9025	(500,000)				
260601	CON-254	Oakwood CSO Control Facility Rehabilitation	Administrative	9373	(200,000)				
213007	CS-060	Study and Design for Modification of Sludge Feeds Systems	Board	Pending	(96,404)				
232002	CON-109	Emergency Refurbishment of Storm Pump #5 and #7, Upgrade of Pump #5 and Motor Control Center Upgrade for Eight Storm Pumps for Freud Pumping Station	Board	9372	(886,684)				
214001	CS-262	Engineer Services for IWCD Relocation	Administrative	9370	(154,040)				
211004	CS-1432A	Rack and Grit at Pump Station No. 1 Design	Administrative	9371	(153,899)				
Total	12 Available Balance				5,551,102	12,000,000	15,000,000	15,000,000	12,000,000

Wastewater System Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 260200 Sewer and Interceptor Evaluation and Rehabilitation Program

CIP#	Contract Number	Description	Board/Administrative Approved	Current Year Budget Amendment	FY2018	FY 2019	FY 2020	FY 2021	FY 2022
260200		Sewer and Interceptor Evaluation and Rehabilitation Program			8,000,000	8,000,000	20,000,000	20,000,000	20,000,000
260201	PO 5030	DRI Section Inspection, Evaluation, Design							
260201	CS-168	Conveyance Sstem Interceptor Rehab	Board	7013	(1,000,000)	(1,000,000)	(1,000,000)		
260201	CON-149	CON-149 Inland: DRI, Sec Insl, Evaluation, Design	Board	7013	(4,795,540)	(6,600,000)	(3,404,460)		
260203	CS-068	CON-068 Inland: Sewer Inspection	Board	7011	(2,140,460)				
Total	4	Available Balance			64,000	400,000	15,595,540	20,000,000	20,000,000

Great Lakes Water Authority
Board Approved CIP Allowance /Program Summary
Allowance: 260300 Scheduled Replacement of Program of Critical Assets

CIP#	Contract Number	Description	Board/Administrative Approved	Current Year Budget Amendment	FY2018	FY 2019	FY 2020	FY 2021	FY 2022
260300		Schedule Replacement Program of Critical Assets			5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
260301	CON-143	Complex II Roof Replacement	Board	6990	(1,567,400)				
260113	Fire Remediation Project at WRRF	Fire Remediation	Board	6992	(2,000,000)				
Total	2	Available Balance			1,432,600	5,000,000	5,000,000	5,000,000	5,000,000

Wastewater System Construction Work-in-Progress Quarterly Report

As of March 31, 2018

Great Lakes Water Authority
Board Approved CIP Allowance/Program Summary
Program: 260400 Sewage Meter Design, Installation, Replacement and Rehabilitation

CIP#	Contract Number	Description	Board/Administrative Approved	FY2018	FY 2019	FY 2020	FY 2021	FY 2022
260400		Sewage Meter Design, Installation, Replacement and Rehabilitation Program		500,000	500,000	500,000	500,000	500,000
Total	0	Available Balance		500,000	500,000	500,000	500,000	500,000

Budget Amendment Reporting

Scope: Budget amendments are being used as an internal management tool to properly allocate funds from the allowance and programs within the Capital Improvement Plan (CIP) for the budgeted years by the reallocation of funds from the budgeted allowance or programs level to the actual project level.

Process: Steps are listed below.

- 1) Properly identify projects that utilize funds from the allowance or programs
- 2) Reallocate the funds from the budgeted allowance or programs level through a journal entry
- 3) Attach documents that support the reallocation (CIP funding request, contract transmittal, or change orders)
- 4) Create, review, and approve budget amendment journal entry

Budget Amendment Processed for FY 2018 through March 31, 2018

Budget Amendments/Descriptions/Reasons/GL Strings		Amount
6920		
CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance		
To fund Contracted Construction Services not budgeted for in FY 2018-2022 CIP		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260100	(\$174,000)
CIP 260110: CS-060: Upgraded Sludge Conveyance System Design		
To fund Contracted Construction Services not budgeted for in FY 2018-2022 CIP		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260110	\$174,000
6990		
CIP 260300: Scheduled Replacement of Program of Critical Assets		
To Fund Contracted Construction Services related to budgeted program assigned		
Fire Remediation-Roof Replacement		
	5421-892211.000-616900-260300	(\$1,567,400)
CIP 260301: CON-143: Roof Replacement of Complex II		
To Fund Contracted Construction Services related to budgeted program assigned		
Fire Remediation-Roof Replacement		
	5421-892211.000-616900-260301	\$1,567,400
6992		
CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance		
To Fund Contracted Construction Services related to budgeted program assigned		
Fire Remediation		
	5421-892211.000-616900-260100	\$2,000,000
CIP 260300: Scheduled Replacement of Program of Critical Assets		
To Fund Contracted Construction Services related to budgeted program assigned		
Fire Remediation		
	5421-892211.000-616900-260300	(\$2,000,000)

Budget Amendment Processed for FY 2018 through March 31, 2018

7011

CIP 260203: CON-068: Inland: Sewer Inspection

To Fund Contracted Construction Services related to budgeted program assigned
Allocation of Program

5421-882301.000-616900-260203 \$2,140,460

CIP 260200: Sewer and Interceptor Evaluation and Rehabilitation

To Fund Contracted Construction Services related to budgeted program assigned
Allocation of Program

5421-892211.000-616900-260200 (\$500,460)

To Fund Contracted Engineering Services related to budgeted program assigned
Allocation of Program

5421-892211.000-617950-260200 (\$1,640,000)

7013

CIP 260201: CON-149: Inland: DRI, Evaluation, Design

To Fund Contracted Construction Services related to budgeted program assigned
Allocation of Program

5421-882301.000-616900-260201 \$4,795,540

CIP 260201: Conveyance System Interceptor Rehab

To Fund Contracted Engineering Services related to budgeted program assigned
Allocation of Program

5421-882301.000-617950-260201 \$1,000,000

CIP 260200: Sewer and Interceptor Evaluation and Rehabilitation

To Fund Contracted Construction Services related to budgeted program assigned
Allocation of Program

5421-892211.000-616900-260200 (\$4,795,540)

To Fund Contracted Engineering Services related to budgeted program assigned
Allocation of Program

5421-892211.000-617950-260200 (\$1,000,000)

Budget Amendment Processed for FY 2018 through March 31, 2018

9023

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Construction Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$1,740,000)

CIP 211004: Rack and Grit Pump Station No. 1

To Fund Contracted Construction Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-616900-211004 \$1,740,000

9024

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$1,709,083)

CIP 213007: Modify Sludge Feeds Systems in Complex II

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-213007 \$1,709,083

9025

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$500,000)

CIP 215001: Effluent Gates

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-215001 \$500,000

Budget Amendment Processed for FY 2018 through March 31, 2018

9370

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Engineering Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$154,040)

CIP 214001: Engineer Services for IWCD Relocation

To Fund Contracted Engineering Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-617950-214001 \$154,040

9371

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Construction Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$153,899)

CIP 211004: Rack and Grit Pump Station No. 1

To Fund Contracted Engineering Services related to budgeted program assigned

Cost in Excess of CIP Budget

5421-892211.000-617950-211004 \$153,899

9372

CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-260100 (\$886,684)

CIP 232002: Emergency Storm Pumps 5 and 7 Upgrade

To Fund Contracted Construction Services

Cost in Excess of CIP Budget

5421-892211.000-616900-232002 \$886,684

Budget Amendment Processed for FY 2018 through March 31, 2018

9373		
CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance		
To Fund Contracted Construction Services		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260100	(\$200,000)
CIP 260601: Oakwood CSO Control Facility Rehabilitation		
To Fund Contracted Construction Services		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260601	\$200,000
9374		
CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance		
To Fund Contracted Construction Services		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260100	(\$834,788)
CIP 260602: CSO Facilities Fire Alarm		
To Fund Contracted Construction Services		
Cost in Excess of CIP Budget		
	5421-892211.000-616900-260602	\$834,788
9383		
CIP 260100: Water Resource Recovery Facility, Lift Station, and Wastewater Collection System Structures Allowance		
To Fund Contracted Engineering Services related to budgeted program assigned		
Fire Remediation		
	5421-892211.000-616900-260100	(\$2,000,000)
260113: Fire Remediation		
To Fund Contracted Construction Services related to budgeted program assigned		
Fire Remediation		
	5421-892211.000-616900-260113	\$2,000,000
Grand Total		0

Glossary of Acronyms

ACRONYM	DEFINITION	ACRONYM	DEFINITION
CCD	Construction Change Directive	NPDES	National Pollution Discharge Elimination System
CSO	Combined Sewer Overflow	RAS	Return Activated Sludge
CIPP	Cured in Place Pipe Lining	RRO	River Rouge Outfall
DCB	Detailed Cost Breakdown	RTB	Retention Treatment Basin
ECR	Equipment Shutdown Request	SDF	Screening and Disinfection Facility
HPO	High Purity Oxygen	SFE	Screened Final Effluent
ISDs	In System Storage Devices	SPW	Springwells Water Treatment Plant
IWC	Industrial Waste Control	VFD	Variable Frequency Drive
MCC	Motor Control Centers	WRRF	Water Resource Recovery Facility
MDEQ	Michigan Department of Environmental Quality	WTP	Water Treatment Plant
NAB	New Administration Building	WWTP	Wastewater Treatment Plant
NIEA	North Interceptor East Arm		



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Monthly Revenue & Collections Report for April 2018

The Monthly Revenue & Collections Report includes the following.

1. FY 2018 Retail and Wholesale Sewer Revenue
2. FY 2018 Retail and Wholesale Water Revenue
3. City of Highland Park Billings and Collections
4. City of Flint Billings and Collections
5. Water & Sewer System Wholesale Accounts Receivable Aging Report

Note: Wholesale customer revenues are billed by the Great Lakes Water Authority (GLWA). Pursuant to the terms of the lease agreement between the City of Detroit and the Great Lakes Water Authority, the Detroit Water & Sewerage Department (DWSD) serves as GLWA's agent for billing activities for the City of Detroit retail customer class. All revenues collected by both GLWA and DWSD are deposited in a trust account in accordance with the GLWA Master Bond Ordinance.

1. FY 2018 Retail and Wholesale Sewer Revenue Report

Table 1 summarizes the unaudited FY 2018 billed revenues through April 30, 2018 and do not reflect collections of those revenues. It should also be noted that the revenues are shown in the month that the billed flow was accrued and not the following month when the bills are usually sent out to customers.

Table 1 – Combined DWSD and GLWA Wholesale FY 2018 Sewer Revenue

RETAIL SEWER CUSTOMERS						
Month	FY 2018 - Budget		FY 2018 - Actual		Variance	
	Volume	Revenue	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	260,000	24,615,100	244,512	24,624,820	(15,488)	9,720
August	260,600	24,754,400	239,911	24,348,011	(20,689)	(406,389)
September	222,800	22,752,800	228,122	23,517,204	5,322	764,404
October	205,500	22,717,800	224,159	23,573,505	18,659	855,705
November	189,900	21,987,300	188,312	22,084,385	(1,588)	97,085
December	204,400	22,774,800	190,811	21,937,291	(13,589)	(837,509)
January	195,300	22,296,100	213,373	22,944,848	18,073	648,748
February	198,300	23,060,600	193,452	21,926,685	(4,848)	(1,133,915)
March	203,000	23,026,900	196,148	22,043,574	(6,852)	(983,326)
April	189,300	22,215,900	-	-	-	-
May	219,400	23,798,700	-	-	-	-
June	251,500	24,635,500	-	-	-	-
Total	2,600,000	278,635,900	1,918,800	207,000,322	(21,000)	(985,478)
Subtotals ytd	1,939,800	207,985,800	1,918,800	207,000,322	(21,000)	(985,478)
Achievement of Budget			98.92%	99.53%		
WHOLESALE SEWER CUSTOMERS						
Month	FY 2018 - Budget		FY 2018 - Actual		Variance	
	Volume	Revenue	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,619,300	N/A	22,619,300	N/A	-
August	N/A	22,619,300	N/A	22,619,300	N/A	-
September	N/A	22,619,300	N/A	22,619,300	N/A	-
October	N/A	22,619,300	N/A	22,619,300	N/A	-
November	N/A	22,619,300	N/A	22,619,300	N/A	-
December	N/A	22,619,300	N/A	22,619,300	N/A	-
January	N/A	22,619,300	N/A	22,619,300	N/A	-
February	N/A	22,619,300	N/A	22,619,300	N/A	-
March	N/A	22,619,300	N/A	22,619,300	N/A	-
April	N/A	22,619,300	N/A	22,619,300	N/A	-
May	N/A	22,619,300	N/A	-	N/A	-
June	N/A	22,619,300	N/A	-	N/A	-
Total		271,431,600		226,193,000		0
Subtotals ytd		226,193,000		226,193,000		0
Achievement of Budget			100.00%			
TOTAL - ALL CUSTOMERS						
Month	FY 2018 - Budget		FY 2018 - Actual		Variance	
	Volume	Revenue	Volume	Revenue	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	260,000	47,234,400	244,512	47,244,120	(15,488)	9,720
August	260,600	47,373,700	239,911	46,967,311	(20,689)	(406,389)
September	222,800	45,372,100	228,122	46,136,504	5,322	764,404
October	205,500	45,337,100	224,159	46,192,805	18,659	855,705
November	189,900	44,606,600	188,312	44,703,685	(1,588)	97,085
December	204,400	45,394,100	190,811	44,556,591	(13,589)	(837,509)
January	195,300	44,915,400	213,373	45,564,148	18,073	648,748
February	198,300	45,679,900	193,452	44,545,985	(4,848)	(1,133,915)
March	203,000	45,646,200	196,148	44,662,874	(6,852)	(983,326)
April	189,300	44,835,200	-	22,619,300	-	-
May	219,400	46,418,000	-	-	-	-
June	251,500	47,254,800	-	-	-	-
Total	2,600,000	550,067,500	1,918,800	433,193,322	(21,000)	(985,478)
Subtotals ytd	1,939,800	434,178,800	1,918,800	433,193,322	(21,000)	(985,478)
Achievement of Budget			98.92%	99.77%		

DWSD Retail Billings: **Table 1** shows the FY 2018 sewer usage and billed revenue which are provided by DWSD staff. As of March 31, 2018, the DWSD usage was at 98.92% of the budget and billed revenue was at 99.53% of budget. *Due to DWSD's reporting software transition, the updated DWSD billed usage and billed revenue information for April 2018 were not available. The April 2018 numbers will be included in next report provided at the July 2018 Audit Committee meeting.*

GLWA Wholesale Customer Billings: **Table 1** shows the FY 2018 sewer billed revenue. As a result of the sewer rate simplification which provides a more stable revenue stream, the wholesale sewer customers are billed a fixed monthly fee. The results of this effort can be seen as the billed revenue is at 100.00% of budget through April 30 2018.

Total System Billings: **Table 1** shows the FY 2018 combined DWSD and GLWA Wholesale sewer billed usage and billed revenue. Based on the combined billings available at the time of this report, the GLWA Sewer System had billed revenues of 100.0% of budget without the April 2018 DWSD billings.

2. FY 2018 Retail and Wholesale Water Revenue Report

Table 2 summarizes the unaudited FY 2018 wholesale customer water revenues billed by GLWA and the retail water revenues billed by DWSD. Please note these are billed revenues and do not reflect collections of those revenues. It should also be noted that the revenues are shown in the month that the billed flow was accrued and not the following month when the bills are usually sent out.

Table 2 – Combined DWSD and GLWA Wholesale FY 2018 Water Revenue Report

RETAIL WATER CUSTOMERS								
Month	FY 2018 - Budget			FY 2018 - Actual			Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	295,700	9,332,300	31.56	274,267	8,813,936	32.14	(21,433)	(518,364)
August	303,100	9,517,000	31.40	269,802	8,631,595	31.99	(33,298)	(885,405)
September	248,900	8,393,900	33.72	259,341	8,463,041	32.63	10,441	69,141
October	236,100	7,947,500	33.66	247,700	8,187,943	33.06	11,600	240,443
November	218,400	7,585,100	34.73	208,783	7,276,521	34.85	(9,617)	(308,579)
December	238,500	8,008,200	33.58	213,026	7,333,094	34.42	(25,474)	(675,106)
January	224,700	7,673,100	34.15	235,142	7,873,651	33.48	10,442	200,551
February	224,700	7,813,100	34.77	235,436	7,879,874	33.47	10,736	66,774
March	235,700	7,944,800	33.71	216,866	7,410,681	34.17	(18,834)	(534,119)
April	217,700	7,529,200	34.59	-	-	-	-	-
May	256,700	8,946,300	34.85	-	-	-	-	-
June	284,800	9,089,900	31.92	-	-	-	-	-
Total	2,985,000	99,780,400	33.43	2,160,363	71,870,335	33.27	(65,437)	(2,344,665)
Subtotals ytd	2,225,800	74,215,000	33.34	2,160,363	71,870,335	33.27	(65,437)	(2,344,665)
Achievement of Budget				97.06%	96.84%			
WHOLESALE WATER CUSTOMERS*								
Month	FY 2018 - Budget			FY 2018 - Actual			Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,712,100	31,705,800	18.52	1,721,500	32,819,241	19.06	9,400	1,113,441
August	1,615,000	30,914,600	19.14	1,573,478	31,520,853	20.03	(41,522)	606,253
September	1,420,900	28,619,700	20.14	1,421,715	29,686,522	20.88	815	1,066,822
October	1,064,900	25,002,100	23.48	1,158,883	26,949,856	23.26	93,983	1,947,756
November	892,000	23,038,000	25.83	958,686	25,146,717	26.23	66,686	2,108,717
December	946,600	23,392,700	24.71	1,024,164	24,434,241	23.86	77,564	1,041,541
January	972,400	23,676,000	24.35	1,067,591	24,810,289	23.24	95,191	1,134,289
February	893,000	23,017,200	25.78	894,635	23,326,980	26.07	1,635	309,780
March	988,100	23,781,500	24.07	1,017,632	24,299,625	23.88	29,532	518,125
April	997,900	23,859,300	23.91	958,319	23,588,340	24.61	(39,581)	(270,960)
May	1,155,100	25,576,800	22.14	-	-	-	-	-
June	1,472,900	28,727,800	19.50	-	-	-	-	-
Total	14,130,900	311,311,500	22.03	11,796,604	266,582,664	22.60	293,704	9,575,764
Subtotals ytd	11,502,900	257,006,900	22.34	11,796,604	266,582,664	22.60	293,704	9,575,764
Achievement of Budget				102.55%	103.73%			
* Includes Revenues and Usage from the City of Flint.								
TOTAL - ALL CUSTOMERS								
Month	FY 2018 - Budget			FY 2018 - Actual			Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	2,007,800	41,038,100	20.44	1,995,768	41,633,177	20.86	(12,032)	595,077
August	1,918,100	40,431,600	21.08	1,843,280	40,152,447	21.78	(74,820)	(279,153)
September	1,669,800	37,013,600	22.17	1,681,056	38,149,562	22.69	11,256	1,135,962
October	1,301,000	32,949,600	25.33	1,406,583	35,137,799	24.98	105,583	2,188,199
November	1,110,400	30,623,100	27.58	1,167,469	32,423,237	27.77	57,069	1,800,137
December	1,185,100	31,400,900	26.50	1,237,190	31,767,335	25.68	52,090	366,435
January	1,197,100	31,349,100	26.19	1,302,733	32,683,940	25.09	105,633	1,334,840
February	1,117,700	30,830,300	27.58	1,130,072	31,206,854	27.61	12,372	376,554
March	1,223,800	31,726,300	25.92	1,234,498	31,710,306	25.69	10,698	(15,994)
April	997,900	23,859,300	23.91	958,319	23,588,340	24.61	(39,581)	(270,960)
May	1,411,800	34,523,100	24.45	-	-	-	-	-
June	1,757,700	37,817,700	21.52	-	-	-	-	-
Total	16,898,200	403,562,700	23.88	13,956,968	338,452,998	24.25	228,268	7,231,098
Subtotals ytd	13,728,700	331,221,900	24.13	13,956,968	338,452,998	24.25	228,268	7,231,098
Achievement of Budget				101.66%	102.18%			

DWSD Retail Billings: **Table 2** shows the FY 2018 water billed usage and billed revenue which are provided by the DWSD staff. As of March 31, 2018, the DWSD usage was at 97.06% of the budget and billed revenue was at 96.84% of budget. *Due to DWSD's reporting software transition, the updated DWSD billed usage and billed revenue information for April 2018 were not available. The April 2018 numbers will be included in next report provided at the July 2018 Audit Committee meeting.*

GLWA Wholesale Customer Billings: **Table 2** shows the FY 2018 water billed usage and billed revenues. Starting FY 2016, wholesale water charges were re-structured to create a more stable revenue stream by using a historical rolling average to project customer volumes and allocating 60% of the customer revenue requirement to the monthly fixed charge. As of April 30, 2018, the billed usage was at 102.55% of budget and billed revenue at 103.73% of budget. As noted in **Table 2**, revenues and usage from the City of Flint *are* included as they were assumed in the FY 2018 Budget.

Total System Billings: **Table 2** shows the FY 2018 combined DWSD and GLWA Wholesale water billed usage and billed revenue. Based on the combined Retail and Wholesale Water billings, the GLWA Water System had billed usage of 101.66% of budget and billed revenues of 102.18% of budget without the April 2018 DWSD billings.

3. City of Highland Park Billings and Collections

As of May 31, 2018, Highland Park had a delinquent balance of \$38.2 million, including \$30.6 million for wastewater treatment services, \$1.6 million for industrial waste control services, and \$6.0 million for water supply services. **Table 3** provides a summary of the billing and collection history for Highland Park from June 30, 2012 to May 31, 2018 in the table below. Please note the numbers below reflect the month the invoice was sent and not the month the service was provided.

No payments were received by the City of Highland Park during May 2018.

Table 3 - City of Highland Park Billings and Collections

	Water	Sewer	IWC	Cumulative Total
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	(65,652)	(2,206,211)	-	(2,271,863)
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	-	(1,612,633)	-	(1,612,633)
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	-	(1,444,623)	-	(1,444,623)
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	-	(2,022,335)	-	(2,022,335)
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	-	(2,309,186)	-	(2,309,186)
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings (11 Months)	1,171,230	5,186,901	73,742	6,431,872
FY 2018 Payments (11 Months)	-	(4,108,108)	-	(4,108,108)
Balance as of May 31, 2018	\$ 6,006,300	\$ 30,627,127	\$ 1,617,292	\$ 38,250,718

4. Water & Sewer System Wholesale Accounts Receivable Aging Report

Table 4 is a summary of the total, current and non-current receivables by category as of May 31, 2018. **Table 5** is the same summary *without* the past due balances for the City of Highland Park. The detailed accounts receivable aging is attached to this report. This report reflects the wholesale receivables only and do not include DWSD. (Note: percentages vary from 100% due to rounding.)

Table 4 - Wholesale Accounts Receivable Aging Report

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 34,733,571.87	\$ 28,887,501.18	\$ 145,771.05	\$ 102,147.03	\$ 5,598,152.61
Sewer	\$ 52,324,826.82	\$ 20,114,799.50	\$ 2,523,300.00	\$ 470,200.00	\$ 29,216,527.32
IWC	\$ 2,979,639.78	\$ 910,762.49	\$ (39.76)	\$ 129,185.92	\$ 1,939,731.13
Pollutant Surcharge	\$ 1,034,958.04	\$ 725,712.59	\$ 38,458.58	\$ 47,744.29	\$ 223,042.58
Total	\$ 91,072,996.51	\$ 50,638,775.76	\$ 2,707,489.87	\$ 749,277.24	\$ 36,977,453.64
	<u>100.00%</u>	<u>55.60%</u>	<u>2.97%</u>	<u>0.82%</u>	<u>40.60%</u>

Table 5 - Wholesale Accounts Receivable Aging Report, Net of Highland Park

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 28,727,272.22	\$ 28,682,951.25	\$ 44,320.97	\$ -	\$ -
Sewer	\$ 21,697,699.50	\$ 19,644,599.50	\$ 2,053,100.00	\$ -	\$ -
IWC	\$ 1,362,348.05	\$ 897,613.29	\$ (39.76)	\$ 116,255.40	\$ 348,519.12
Pollutant Surcharge	\$ 1,034,958.04	\$ 725,712.59	\$ 38,458.58	\$ 47,744.29	\$ 223,042.58
Total	\$ 52,822,277.81	\$ 49,950,876.63	\$ 2,135,839.79	\$ 163,999.69	\$ 571,561.70
	<u>100.00%</u>	<u>94.56%</u>	<u>4.04%</u>	<u>0.310%</u>	<u>1.08%</u>

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$174,193.40	\$174,193.40	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$62,433.98	\$62,433.98	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$24,601.38	\$24,601.38	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$54,973.93	\$54,973.93	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$268,707.68	\$268,707.68	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$16,214.69	\$16,214.69	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$62,964.39	\$42,123.40	\$20,840.99	\$0.00	\$0.00
CANTON TOWNSHIP	\$976,078.87	\$976,078.87	\$0.00	\$0.00	\$0.00
CENTER LINE	\$37,828.56	\$37,828.56	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$298,012.24	\$298,012.24	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$611,128.56	\$611,128.56	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$367,422.97	\$367,422.97	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,586,364.86	\$1,586,364.86	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$296,917.40	\$296,917.40	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$130,177.96	\$130,177.96	\$0.00	\$0.00	\$0.00
ECORSE	\$117,438.98	\$117,438.98	\$0.00	\$0.00	\$0.00
FARMINGTON	\$75,480.92	\$75,480.92	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$667,993.96	\$667,993.96	\$0.00	\$0.00	\$0.00
FERNDAL	\$165,732.81	\$165,732.81	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$97,726.10	\$97,726.10	\$0.00	\$0.00	\$0.00
FLINT	\$160,774.78	\$160,774.78	\$0.00	\$0.00	\$0.00
FRASER	\$100,406.84	\$100,406.84	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$132,562.99	\$132,562.99	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GENESEE COUNTY DRAIN COMM	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$36,945.08	\$36,945.08	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$26,776.36	\$26,776.36	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$98,362.86	\$98,362.86	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$107,678.42	\$107,678.42	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$43,771.49	\$43,771.49	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$118,378.94	\$118,378.94	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$55,510.70	\$55,510.70	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$68,890.67	\$68,890.67	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$113,887.65	\$113,887.65	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$56,941.10	\$56,941.10	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$6,006,299.65	\$204,549.93	\$101,450.08	\$102,147.03	\$5,598,152.61
HURON TOWNSHIP	\$113,255.14	\$113,255.14	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$85,866.89	\$85,866.89	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$2,023.32	\$2,023.32	\$0.00	\$0.00	\$0.00
INKSTER	\$3,787.79	\$3,787.79	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$23,567.39	\$23,567.39	\$0.00	\$0.00	\$0.00
LAPEER	\$110,014.95	\$110,014.95	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$70,412.94	\$46,932.96	\$23,479.98	\$0.00	\$0.00
LINCOLN PARK	\$189,492.31	\$189,492.31	\$0.00	\$0.00	\$0.00
LIVONIA	\$1,000,822.48	\$1,000,822.48	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$781,250.02	\$781,250.02	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MADISON HEIGHTS	\$150,725.72	\$150,725.72	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$4,302.57	\$4,302.57	\$0.00	\$0.00	\$0.00
MELVINDALE	\$52,614.04	\$52,614.04	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$43,446.91	\$43,446.91	\$0.00	\$0.00	\$0.00
NOCWA	\$3,624,257.92	\$3,624,257.92	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$112,910.51	\$112,910.51	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$442,353.66	\$442,353.66	\$0.00	\$0.00	\$0.00
NOVI	\$674,080.40	\$674,080.40	\$0.00	\$0.00	\$0.00
OAK PARK	\$109,531.87	\$109,531.87	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$5,986.62	\$5,986.62	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$79,552.17	\$79,552.17	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$314,312.36	\$314,312.36	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$271,208.94	\$271,208.94	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$50,938.91	\$50,938.91	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$75,338.05	\$75,338.05	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$23,272.75	\$23,272.75	\$0.00	\$0.00	\$0.00
ROMEO	\$18,720.34	\$18,720.34	\$0.00	\$0.00	\$0.00
ROMULUS	\$299,530.57	\$299,530.57	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$210,883.72	\$210,883.72	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$18,326.36	\$18,326.36	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$974,729.61	\$974,729.61	\$0.00	\$0.00	\$0.00
SOCWA	\$3,518,938.90	\$3,518,938.90	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$8,106.90	\$8,106.90	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHGATE	\$174,927.15	\$174,927.15	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$238,826.90	\$238,826.90	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,193,348.42	\$1,193,348.42	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$51,858.31	\$51,858.31	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,062.23	\$18,062.23	\$0.00	\$0.00	\$0.00
TAYLOR	\$377,949.81	\$377,949.81	\$0.00	\$0.00	\$0.00
TRENTON	\$167,062.25	\$167,062.25	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,026,105.95	\$1,026,105.95	\$0.00	\$0.00	\$0.00
UTICA	\$47,410.36	\$47,410.36	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$257,187.58	\$257,187.58	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$17,536.62	\$17,536.62	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$74,363.91	\$74,363.91	\$0.00	\$0.00	\$0.00
WARREN	\$764,357.66	\$764,357.66	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$155,807.81	\$155,807.81	\$0.00	\$0.00	\$0.00
WAYNE	\$237,921.87	\$237,921.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,485,944.30	\$1,485,944.30	\$0.00	\$0.00	\$0.00
WESTLAND	\$544,170.51	\$544,170.51	\$0.00	\$0.00	\$0.00
WIXOM	\$187,070.90	\$187,070.90	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$157,736.50	\$157,736.50	\$0.00	\$0.00	\$0.00
YCUA	\$871,778.63	\$871,778.63	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$34,733,571.87	\$28,887,501.18	\$145,771.05	\$102,147.03	\$5,598,152.61

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$64,300.00	\$64,300.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$82,199.50	\$82,199.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,811,100.00	\$2,811,100.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$145,000.00	\$145,000.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$19,300.00	\$19,300.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$30,627,127.32	\$470,200.00	\$470,200.00	\$470,200.00	\$29,216,527.32
MELVINDALE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,812,600.00	\$3,812,600.00	\$0.00	\$0.00	\$0.00
OMID	\$6,068,000.00	\$6,068,000.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,585,200.00	\$4,585,200.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$4,106,200.00	\$2,053,100.00	\$2,053,100.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$3,800.00	\$3,800.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$52,324,826.82	\$20,114,799.50	\$2,523,300.00	\$470,200.00	\$29,216,527.32

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$2,575.88	\$2,575.88	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BERKLEY	\$4,632.04	\$4,632.04	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$1,596.08	\$1,596.08	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$3,797.08	\$3,797.08	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$17,835.20	\$17,798.28	\$0.00	\$36.92	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$11,297.52	\$11,297.52	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$304,482.08	\$60,923.68	\$0.00	\$60,923.68	\$182,634.72
CENTER LINE	\$5,884.48	\$5,884.48	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$19,343.24	\$19,343.24	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$445.88	\$445.88	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$5,949.80	\$5,949.80	\$0.00	\$0.00	\$0.00
CLARKSTON	\$491.32	\$491.32	\$0.00	\$0.00	\$0.00
CLAWSON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$40,424.56	\$40,424.56	\$0.00	\$0.00	\$0.00
DEARBORN	\$58,631.80	\$58,631.80	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$15,253.64	\$15,253.64	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$170.40	\$170.40	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$10,158.68	\$10,158.68	\$0.00	\$0.00	\$0.00
FARMINGTON	\$5,289.93	\$5,289.93	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FERNDAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$7,923.60	\$7,923.60	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$3,337.00	\$3,337.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$3,777.20	\$3,777.20	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$6,668.32	\$6,668.32	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$3,024.60	\$3,024.60	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$5,248.32	\$5,248.32	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,617,291.73	\$13,149.20	\$0.00	\$12,930.52	\$1,591,212.01
HUNTINGTON WOODS	\$457.24	\$457.24	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$7,477.72	\$7,477.72	\$0.00	\$0.00	\$0.00
INKSTER	\$8,883.52	\$8,883.52	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$1,283.68	\$1,283.68	\$0.00	\$0.00	\$0.00
LATHRUP	\$2,246.44	\$2,246.44	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$1,278.00	\$1,278.00	\$0.00	\$0.00	\$0.00
LIVONIA	\$63,806.28	\$63,806.28	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MACOMB TWP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$5,799.28	\$5,799.28	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$976.96	\$976.96	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$2,916.68	\$2,916.68	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$73,073.20	\$14,614.64	\$0.00	\$14,614.64	\$43,843.92
NOVI	\$27,548.00	\$27,548.00	\$0.00	\$0.00	\$0.00
OAK PARK	\$11,104.40	\$11,104.40	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$8,991.44	\$8,991.44	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,510.88	\$1,510.88	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$2,010.72	\$2,010.72	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$ (39.76)	\$0.00	\$ (39.76)	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$203,400.80	\$40,680.16	\$0.00	\$40,680.16	\$122,040.48
REDFORD TOWNSHIP	\$19,403.92	\$19,403.92	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$29,124.20	\$29,124.20	\$0.00	\$0.00	\$0.00
ROMULUS	\$1,479.64	\$1,479.64	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$22,671.72	\$22,671.72	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$22,058.28	\$22,058.28	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$19,096.16	\$19,096.16	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$44,962.88	\$44,962.88	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$6,035.00	\$6,035.00	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$39,010.24	\$39,010.24	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$49,569.36	\$49,569.36	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$613.44	\$613.44	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$58,890.24	\$58,890.24	\$0.00	\$0.00	\$0.00
UTICA	\$4,694.52	\$4,694.52	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$3,317.12	\$3,317.12	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$4,413.36	\$4,413.36	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$19,845.92	\$19,845.92	\$0.00	\$0.00	\$0.00
WAYNE	\$8,017.32	\$8,017.32	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,508.04	\$1,508.04	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$10,062.12	\$10,062.12	\$0.00	\$0.00	\$0.00
WESTLAND	\$36,610.44	\$36,610.44	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$2,979,639.78	\$910,762.49	\$ (39.76)	\$129,185.92	\$1,939,731.13

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
A & R PACKING CO., LLC	\$4,374.82	\$4,374.82	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$253.81	\$253.81	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$44.70	\$44.70	\$0.00	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$665.07	\$665.07	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$27,272.46	\$14,933.33	\$6,645.47	\$5,693.66	\$0.00
ALEXANDER & HORNUNG	\$7,853.40	\$7,853.40	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$26,434.64	\$26,434.64	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$1,574.11	\$1,574.11	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$12,026.88	\$2,536.61	\$1,308.17	\$723.48	\$7,458.62
ALL CHEM CORP, LLC.	\$ (134.45)	\$ (134.45)	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER BREWERY	\$57.81	\$57.81	\$0.00	\$0.00	\$0.00
ATWATER BREWERY	\$2,454.97	\$2,454.97	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$6.86	\$6.86	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$528.31	\$223.08	\$0.00	\$0.00	\$305.23
BARON INDUSTRIES	\$1,034.12	\$1,034.12	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$71.79	\$71.79	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$ (713.70)	\$0.00	\$0.00	\$0.00	\$ (713.70)
BAYS MICHIGAN CORPORATION	\$1,188.58	\$882.26	\$306.32	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$21,556.03	\$21,556.03	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$29.22	\$29.22	\$0.00	\$0.00	\$0.00
BOZEK'S MARKET	\$76.16	\$76.16	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$5,655.67	\$5,655.67	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$ (100.00)	\$0.00	\$0.00	\$0.00	\$ (100.00)
BROOKS BREWING, LLC.	\$22.57	\$22.57	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$138.01	\$77.25	\$0.00	\$0.00	\$60.76
CAPITAL REPRODUCTIONS	\$1.50	\$1.50	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$13,147.11	\$13,147.11	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,951.62	\$44.68	\$38.29	\$116.47	\$1,752.18
CINTAS CORP. - MACOMB TWP.	\$57,316.33	\$57,316.33	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$37,498.28	\$37,498.28	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$12,721.16	\$12,721.16	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$10.83	\$10.83	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$1,695.21	\$1,695.21	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$3,112.68	\$3,112.68	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$742.11	\$742.11	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$1,890.88	\$1,890.88	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$33,257.44	\$33,257.44	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
CROSS CHEMICAL COMPANY, INC.	\$ (344.54)	\$0.00	\$ (344.54)	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$10,944.25	\$10,944.25	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$376.50	\$376.50	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$50.80	\$50.80	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE	\$9,184.54	\$9,184.54	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$11,009.00	\$11,009.00	\$0.00	\$0.00	\$0.00
DETROIT BEER	\$110.95	\$110.95	\$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 SAUSAGES CO INC	\$81.78	\$36.66	\$14.10	\$16.92	\$14.10
DETRONIC INDUSTRIES, INC.	\$72.77	\$72.77	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$18,929.05	\$18,929.05	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$132.47	\$132.47	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$961.38	\$961.38	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,320.58	\$1,320.58	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$2,741.66	\$2,741.66	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$5,408.13	\$5,408.13	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$9,638.13	\$9,638.13	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (1,239.37)	\$ (1,239.37)	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (4,601.71)	\$ (4,601.71)	\$0.00	\$0.00	\$0.00
EQ RESOURCES RECOVERY, INC.	\$3,404.01	\$3,404.01	\$0.00	\$0.00	\$0.00
ETON ST BREWERY- GRIFFIN CLF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EXTRUDE HONE CORPORATION	\$290.74	\$290.74	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$73.03	\$73.03	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$269,376.42	\$60,700.75	\$26,749.33	\$33,286.75	\$148,639.59
FORD NEW MODEL PROGRAM	\$193.94	\$193.94	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$1,983.07	\$1,983.07	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$7,710.22	\$7,710.22	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$63,220.98	\$12,329.40	\$5,821.25	\$6,499.41	\$38,570.92
GLOBAL TITANIUM, INC.	\$6,191.36	\$6,191.36	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$139.72	\$139.72	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$130.46	\$79.27	\$0.00	\$0.00	\$51.19
GRANITE CITY FOOD & BREWERY	\$349.04	\$137.02	\$0.00	\$0.00	\$212.02
GREAT BARABOO BREWING CO.	\$ (2,452.90)	\$0.00	\$0.00	\$0.00	\$ (2,452.90)
HACIENDA MEXICAN FOODS	\$4,394.25	\$1,220.36	\$604.56	\$601.74	\$1,967.59
HENKEL CORPORATION	\$391.25	\$125.35	\$131.43	\$0.00	\$134.47
HOME STYLE FOOD INC.	\$4,826.98	\$4,826.98	\$0.00	\$0.00	\$0.00
HOOD CLEANERS	\$210.36	\$0.00	\$1.96	\$1.96	\$206.44
HOUGHTON INTERNATIONAL INC.	\$631.87	\$631.87	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$150.44	\$150.44	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$4,114.70	\$4,114.70	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$742.07	\$742.07	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
INDUSTRIAL METAL COATING	\$861.60	\$861.60	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$949.22	\$949.22	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$9.57	\$9.57	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$112.82	\$112.82	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$944.80	\$944.80	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$770.58	\$770.58	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$643.93	\$643.93	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$81.54	\$81.54	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$4,473.48	\$4,473.48	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$2,491.29	\$2,491.29	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$112.83	\$112.83	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$473.84	\$473.84	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$418.31	\$418.31	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$75,802.15	\$75,802.15	\$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	\$755.56	\$755.56	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,864.39	\$2,864.39	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MISTER UNIFORM & MAT RENTALS	\$528.51	\$58.71	\$43.17	\$49.05	\$377.58
MOTOR CITY BREWING WORKS	\$663.80	\$0.00	\$0.00	\$0.00	\$663.80
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$90.42	\$90.42	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEAT	\$49.33	\$49.33	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$202.38	\$202.38	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$2,023.17	\$2,023.17	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$45,822.87	\$45,822.87	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, INC.	\$46.60	\$46.60	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$46,232.61	\$46,232.61	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$2,824.07	\$1,277.76	\$1,222.51	\$0.00	\$323.80
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$273.49	\$273.49	\$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	\$24.66	\$24.66	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$1,973.20	\$678.43	\$0.00	\$0.00	\$1,294.77
ROCHESTER MILLS BEER COMPANY	\$241.71	\$241.71	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ROCHESTER MILLS BREWERY	\$1,198.52	\$1,198.52	\$0.00	\$0.00	\$0.00
RTT	\$23,143.92	\$0.00	\$399.25	\$655.91	\$22,088.76
SEAFARE FOODS, INC.	\$67.49	\$67.49	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$4,023.17	\$41.14	\$30.18	\$29.80	\$3,922.05
SWEETHEART BAKERY, INC.	\$407.64	\$171.41	\$84.99	\$69.14	\$82.10
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$ (1,813.37)	\$0.00	\$0.00	\$0.00	\$ (1,813.37)
TOM LAUNDRY CLEANERS	\$11.71	\$11.71	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$ (0.48)	\$0.00	\$0.00	\$0.00	\$ (0.48)
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.	\$1,327.97	\$1,327.97	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$77,180.76	\$77,180.76	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$83.41	\$83.41	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$8.49	\$8.49	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$544.53	\$544.53	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$335.65	\$335.65	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$ (4,637.22)	\$0.00	\$ (4,637.22)	\$0.00	\$0.00
USHER OIL SERVICES	\$3,562.79	\$3,562.79	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$14,589.98	\$14,589.98	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$5,497.80	\$5,497.80	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 5/31/2018

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
VERNOR FOOD PRODUCTS	\$112.48	\$73.12	\$39.36	\$0.00	\$0.00
WIGLEY'S MEAT PROCESS	\$369.51	\$369.51	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$942.09	\$942.09	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$135.39	\$135.39	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$5,688.99	\$5,688.99	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,851.66	\$2,851.66	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$1,034,958.04	\$725,712.59	\$38,458.58	\$47,744.29	\$223,042.58



Audit Committee

Friday, June 15, 2018 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 **BINDER 2 Items in highlighted in aqua**
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. May 22, 2018 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
 - A. Proposed Underwriter Selection for the for the 2018 Financing Program (Page 6)
 - B. Proposed FY 2016 Shared Services True-up (Page 12)
7. NEW BUSINESS
 - A. FY 2018 Fourth Quarter Budget Update (*Will be included in Binder 3*)
 - B. PFM Investment Contract Extension (Page 22)
 - C. Credit Card Use Policy (Page 24)
 - D. Proposed Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds an Amount Not to Exceed \$45,000,000 (Ordinance 2018-01) (*Binder 2 Page 1*)
8. REPORTS
 - A. Quarterly Investment Report (Page 52)
 - B. Master Bond Ordinance Monthly Cash Transfers: Cash Transfers through May 1, 2018 (Page 56)
 - C. Quarterly Construction Work-in-Progress Report (Page 59)
 - D. Quarterly Financial Reporting & Accounting Group Continuous Improvement Report (*Binder 2 Page 23*)
 - E. Monthly Financial Report for April 2018 (*Binder 2 Page 27*)
 - F. Monthly Revenue & Collections Report for April 2018 (Page 124)
 - G. Trust Receipts & Disbursements Report (*Binder 2 Page 37*)
9. CFO Update (*Will be included in Binder 4*)
10. LOOK AHEAD
 - Next Audit Committee Meeting – July 20, 2018 at 8 am (Regular Meeting)
11. INFORMATION
12. OTHER MATTERS
13. ADJOURNMENT



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Proposed Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds an Amount Not to Exceed \$45,000,000 (Ordinance 2018-01)

Background: On March 8, 2017, the Great Lakes Water Authority ("GLWA") Board of Directors approved Resolution 2017-185, *"Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Sewage Disposal System Revenue Bonds in a principal amount not to exceed \$275,000,000"* (the "Notice of Intent"). This is the second series of sewer bonds from that Notice of Intent in the amount not to exceed \$45,000,000. The first series was issued on June 13, 2017 for the Rouge River Outfall disinfection project in the amount of \$38,450,000 through the State Revolving Fund (SRF).

The projects to be funded are two SRF Projects for the GLWA regional system, which will close in September 2018. The projects are the Detroit River Interceptor (DRI) project which is anticipated to be about \$29 million and the Central Offload Facility project at the WRRF which is anticipated to be about \$16 million.

The Series Ordinance presented today is the next formal step required by the GLWA Board of Directors in the bond issuance process which authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the SRF Bonds, designates the Bonds as 2018 SRF Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order within the parameters set forth in the Series Ordinance. A copy of the Series Ordinance and draft resolution are included with this memo.

Budget Impact: The debt service on the proposed projects is anticipated to commence in FY 2019 and have been included in the FY 2019 financial plan.

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution for the Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds an Amount Not to Exceed \$45,000,000 as presented, at its Regular Meeting on July 11, 2018.

Great Lakes Water Authority

Resolution 2018-

**RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal
System Revenue Bonds in an Amount not to Exceed \$45,000,000**

Ordinance 2018-01

By Board Member: _____

Whereas There has been presented to the Board of Directors of the Great Lakes Water Authority (the “Authority”) an ordinance entitled “Series Ordinance Authorizing the Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$45,000,000” (the “2018 SRF Series Ordinance”), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-02 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016 (as amended, the “Master Sewer Bond Ordinance”).

Whereas The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2018 SRF Series Ordinance.

Now, Therefore Be It:

Resolved That the 2018 SRF Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2018 SRF Series Ordinance in the form approved; **And Be it Further**

Resolved That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: _____, 2018

GREAT LAKES WATER AUTHORITY
ORDINANCE NO. 2018-01

**SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF
SEWAGE DISPOSAL SYSTEM REVENUE BONDS IN
AN AMOUNT NOT TO EXCEED \$45,000,000**

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

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

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time one or more Series of SRF Junior Lien Bonds (the “2018 SRF Junior Lien Bonds”) to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Regional Sewer System identified in the Capital Improvement Program (collectively, the “2018 SRF Projects”).

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

Section 1. Authority for this Series Ordinance. This Series Ordinance (the “2018 SRF Series Ordinance”) is adopted pursuant to Section 1102(1) of the Ordinance.

Section 2. Definitions. Except as otherwise provided in this 2018 SRF Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2018 SRF Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:

(a) “2018 SRF Junior Lien Bonds” means the Bonds authorized by Section 5 of this 2018 SRF Series Ordinance.

(b) “2018 SRF Projects” means improvements to the Regional Sewer System, including but not limited to, (i) improvements to the Detroit River Interceptor (DRI) consisting of upgrades to the DRI conveyance system to ensure maximum wastewater flows to the Water Resource Recovery Facility (WRRF) and mitigate combine sewer overflows, interceptor collapses, sink holes and residential basement flooding, and (ii) improvements to the Central Offload Facility at the WRRF consisting of the rehabilitation of existing facilities and upgrades to operational monitoring and control to improve the reliability of the solids handling capability of the WRRF.

(c) “Authorized Denomination” any denomination as determined by an Authorized Officer in the Sale Order.

(d) “Authorized Officer” means either the Chief Executive Officer or the Chief Financial Officer.

(e) “Construction Fund, SRF Series 2018” means a subaccount or subaccounts of the Construction Fund established in accordance with Section 11 of this 2018 SRF Series Ordinance relating to the construction of the 2018 SRF Projects to be paid with the proceeds of each Series of the 2018 SRF Junior Lien Bonds.

(f) “Interest Payment Date” means except as otherwise set forth in the Sale Order each April 1 and October 1.

(g) “Maturity Date” means such dates of maturity of the 2018 SRF Junior Lien Bonds as determined in a Sale Order.

(h) “MFA” means the Michigan Finance Authority.

(i) “Person” means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.

(j) “Project Costs” means the costs of acquiring, constructing, equipping, installing and financing the 2018 SRF Projects, including Issuance Costs relating to the 2018 SRF Junior Lien Bonds.

(k) “Purchase Contract” means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of 2018 SRF Junior Lien Bonds.

(l) “Regular Record Date” means except as otherwise set forth in the Sale Order the fifteenth day of the calendar month immediately preceding an Interest Payment Date.

(m) “Sale Order” means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2018 SRF Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2018 SRF Junior Lien Bonds and to complete the other transactions contemplated herein.

(n) “Supplemental Agreement” means the Supplemental Agreement among the Authority, the MFA and the State of Michigan acting through the Department of Environmental Quality, with respect to a Series of the 2018 SRF Junior Lien Bonds.

(o) “Taxable 2018 SRF Junior Lien Bonds” means any 2018 SRF Junior Lien Bonds other than Tax-Exempt 2018 SRF Junior Lien Bonds.

(p) “Tax-Exempt 2018 SRF Junior Lien Bonds” means any 2018 SRF Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. Approval of 2018 SRF Projects. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Sewer System to acquire, construct and undertake the 2018 SRF Projects, and the 2018 SRF Projects are hereby approved and accepted.

Section 4. Estimated Cost and Period of Usefulness of 2018 SRF Projects. The Project Costs are estimated by the Authority Board not to exceed \$45,000,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2018 SRF Projects is estimated to be not less than 40 years.

Section 5. Authorization of 2018 SRF Junior Lien Bonds.

(a) Authorization of Borrowing.

(1) The Authority may borrow an aggregate amount not in excess of \$45,000,000, as is finally determined in the Sale Order, and issue 2018 SRF Junior Lien Bonds at one or more times and in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2018 SRF Junior Lien Bonds, all as finally determined in the Sale Order.

(2) The amount of the 2018 SRF Junior Lien Bonds authorized in (1) above shall include the amount of the net original issue premium, if any.

(b) Purpose of 2018 SRF Junior Lien Bonds. The 2018 SRF Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing the Project Costs.

(c) Priority of Lien. The 2018 SRF Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.

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

(e) Separate Series. The 2018 SRF Junior Lien Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order.

(f) Taxable and Tax-Exempt 2018 SRF Junior Lien Bonds. The 2018 SRF Junior Lien Bonds may be issued as Taxable 2018 SRF Junior Lien Bonds or Tax-Exempt 2018 SRF Junior Lien Bonds, or as separate Series of both, as set forth in the Sale Order.

(g) Source of Payment and Security. The 2018 SRF Junior Lien Bonds shall be payable and secured as provided in Section 8.

(h) Applicability of Ordinance. Except as otherwise provided in this 2018 SRF Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2018 SRF Junior Lien Bonds as if set forth in full in this 2018 SRF Series Ordinance, the purpose of this

2018 SRF Series Ordinance being to supplement the Ordinance to authorize the issuance of 2018 SRF Junior Lien Bonds for the purposes set forth herein.

Section 6. 2018 SRF Junior Lien Bond Details.

(a) Designation.

- (1) The 2018 SRF Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2018-SRF-[1/2] and shall include the Series designation and such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2018 SRF Series Ordinance.
- (2) If the 2018 SRF Junior Lien Bonds are not issued in 2018, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of the 2018 SRF Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of the 2018 SRF Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

(b) Numbering. The 2018 SRF Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.

(c) Principal. The 2018 SRF Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:

- (1) No 2018 SRF Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
- (2) The 2018 SRF Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.

(d) Interest. 2018 SRF Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of the maximum rate permitted by law. Interest on 2018 SRF Junior Lien Bonds shall be payable on each Interest Payment Date.

(e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2018 SRF Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2018 SRF Junior Lien Bonds are owned by the MFA, the 2018 SRF Junior Lien Bonds are payable as to principal, redemption premium, if

any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Authority by the MFA (the MFA's Depository"), and the Authority agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on the 2018 SRF Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is due, whether by maturity, redemption or otherwise. If the 2018 SRF Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2018 SRF Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

(f) Dating. The 2018 SRF Junior Lien Bonds shall be dated such date or dates as determined in the Sale Order.

(g) Reserve Requirement. There shall be no Reserve Requirement with respect to the 2018 SRF Junior Lien Bonds.

(h) Exchange. The registered owner of any 2018 SRF Junior Lien Bond may exchange such 2018 SRF Junior Lien Bond for a new 2018 SRF Junior Lien Bond or Bonds of the same Series, interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2018 SRF Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2018 SRF Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2018 SRF Junior Lien Bonds.

(i) Execution and Delivery of 2018 SRF Junior Lien Bonds. The 2018 SRF Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2018 SRF Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.

(j) Form of 2018 SRF Junior Lien Bonds. The 2018 SRF Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2018 SRF Series Ordinance:

R-__

**UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF MACOMB, OAKLAND AND WAYNE
GREAT LAKES WATER AUTHORITY
SEWAGE DISPOSAL SYSTEM REVENUE BOND,
SERIES 2018-SRF-__**

REGISTERED OWNER: Michigan Finance Authority

PRINCIPAL AMOUNT: \$_____

INTEREST RATE: _____%

ORIGINAL ISSUE DATE:

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

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

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on _____, 201_ and semiannually on each April 1 and October 1 thereafter (each an “Interest Payment Date”).

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the “Trustee”).

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

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

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

This Bond is one of a series of bonds designated "Sewage Disposal System Revenue Bonds, Series 2018-SRF-__" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-02 adopted by the Board on October 7,

2015, as amended (the “Bond Ordinance”), (iii) the Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$45,000,000, adopted by the Board on _____, 2018 (the “Series Ordinance”), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _____, 2018 (the “Sale Order,” and, collectively with the Bond Ordinance and the Series Ordinance, the “Ordinance”). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

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

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

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

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

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

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

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

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

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

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board, and a facsimile of its corporate seal to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

GREAT LAKES WATER AUTHORITY

By: _____
Chief Executive Officer

Countersigned:

By: _____
Secretary, Board of Directors

[Seal]

CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as “Sewage Disposal System Revenue Bond, Series 2018-SRF-___”.

U.S. Bank National Association,
Trustee

By:_____

Date of Authentication: _____, 2018

ASSIGNMENT

For value received, the undersigned sells, assigns and transfers unto _____ this Bond and all rights hereunder and hereby irrevocably appoints _____ attorney to transfer this Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: _____

Signature

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

Schedule A

The principal amounts and maturity dates applicable to the Bond to which this Schedule A is attached are as follows:

Date

Amount

Based on the schedule provided above unless revised as provided in this paragraph, repayment of the Principal Amount shall be made according to such schedule until the full Principal Amount disbursed to the Issuer is repaid; provided, however, that the Issuer shall have no obligation to repay any serial principal installment for which the Issuer did not receive a disbursement of Principal Amount by the date such serial principal installment is due. In the event the Order of Approval issued by the Department of Environmental Quality (the "Order") approves a principal amount of assistance less than the amount of this Bond, the MFA shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule described above provides for payment of a total principal amount greater than the amount of assistance approved by the Order, (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the MFA or (3) of prepayment [or principal forgiveness] of the Bond, the MFA shall prepare a new payment schedule that shall be effective upon receipt by the Issuer.

END OF BOND FORM

Section 7. Concerning the Securities Depository.

(a) As used herein:

“Beneficial Owner” means any Person who indirectly owns 2018 SRF Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the “Securities Depository”) and its Participants, commonly known as the “Book-Entry Only System.”

“Participant” means any Person whose ownership of 2018 SRF Junior Lien Bonds is shown on books of the Securities Depository.

(b) The 2018 SRF Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event the 2018 SRF Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:

- (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2018 SRF Junior Lien Bonds,
- (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2018 SRF Junior Lien Bonds, including any notice of redemption, or
- (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2018 SRF Junior Lien Bonds.

(c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2018 SRF Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority’s obligations with respect to the principal (and premium, if any) of, and interest on such 2018 SRF Junior Lien Bonds to the extent of the sum or sums so paid.

(d) If the 2018 SRF Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2018 SRF Junior Lien Bonds that they be able to obtain 2018 SRF Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause (2), the Securities Depository.

(e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2018 SRF Junior Lien Bonds in certificated form to

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

(f) Notwithstanding any other provision of this 2018 SRF Series Ordinance to the contrary, so long as any 2018 SRF Junior Lien Bond is registered in the name of the Securities Depository or its nominee:

- (1) all payments with respect to the principal, premium, if any, and interest on such 2018 SRF Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2018 SRF Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2018 SRF Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
- (2) if less than all of the 2018 SRF Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2018 SRF Junior Lien Bonds or portions of 2018 SRF Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
- (3) all payments with respect to principal of the 2018 SRF Junior Lien Bonds and premium, if any and interest on the 2018 SRF Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
- (4) if a 2018 SRF Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2018 SRF Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2018 SRF Junior Lien Bonds; Confirmation of Statutory Lien.

(a) The 2018 SRF Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.

(b) To secure payment of the 2018 SRF Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2018 SRF Junior Lien Bonds as follows: Such lien in favor of the 2018 SRF Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.

Section 9. Funds and Accounts; Flow of Funds. Except as otherwise provided in this 2018 SRF Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. Disposition of Proceeds.

(a) Disposition of Accrued Interest and Capitalized Interest. From the proceeds of the sale of the 2018 SRF Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2018 SRF Junior Lien Bonds and any capitalized interest on the 2018 SRF Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2018 SRF Junior Lien Bonds.

(b) Construction Fund. The balance of the proceeds of each Series of the 2018 SRF Junior Lien Bonds shall be deposited in the Construction Fund, SRF Series 2018 and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for each Series of the 2018 SRF Junior Lien Bonds and designated the "Construction Fund, SRF Series 2018," and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.

(b) Moneys in the Construction Fund, SRF Series 2018 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority from other funds prior to the issuance of the 2018 SRF Junior Lien Bonds).

- (1) Payments or reimbursement for Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with an Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done pursuant to and in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
- (2) Payment or reimbursement for Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to an Authorized Officer.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2018 SRF Junior Lien Bonds, that so long as any of the Tax-Exempt 2018 SRF Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain and will refrain from taking any action which would impair the exclusion of the interest on the Tax-Exempt 2018 SRF Junior Lien Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2018 SRF Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2018 SRF Junior Lien Bonds, and to prevent the Tax-Exempt 2018 SRF Junior Lien Bonds from being or becoming “private activity bonds” as that term is used in the Code.

Section 13. Sale of 2018 SRF Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2018 SRF Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract or Contracts in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2018 SRF Series Ordinance. Such determination shall be conclusively established by the Authorized Officer’s execution of the Purchase Contract or Contracts to the MFA.

(b) The Authority Board hereby determines that the sale of the 2018 SRF Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2018 SRF Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA’s State Revolving Fund Program.

(c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2018 SRF Junior Lien Bonds subject to the following limitations:

- (1) The interest rate with respect to the 2018 SRF Junior Lien Bonds shall not exceed 2.50%.
- (2) The aggregate purchaser’s discount at which the 2018 SRF Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.

(d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2018 SRF Junior Lien Bonds as required by Section 33 of Act 94.

Section 14. Delegation of Authority to and Authorization of Actions of Authorized Officers.

(a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2018 SRF Series Ordinance.

(b) In addition to determinations authorized elsewhere in this 2018 SRF Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2018 SRF Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2018 SRF Series Ordinance, on the basis of her evaluation of the maximum amount of 2018 SRF Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue

coverage requirements with respect to the 2018 SRF Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2018 SRF Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2018 SRF Series Ordinance, the maturities of the 2018 SRF Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.

(c) An Authorized Officer is authorized to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2018 SRF Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2018 SRF Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

(d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2018 SRF Junior Lien Bonds as Additional Bonds have been satisfied.

(e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2018 SRF Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2018 SRF Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.

Section 15. Advancement of Project Costs. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2018 SRF Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2018 SRF Junior Lien Bonds.

Section 16. Ratification. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2018 SRF Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.

Section 17. Additional Authorization. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2018 SRF Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2018 SRF Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. 2018 SRF Series Ordinance a Contract. The provisions of this 2018 SRF Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2018 SRF Junior Lien Bond.

Section 19. Professional Services.

(a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2018 SRF Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2018 SRF Junior Lien Bonds.

(b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2018 SRF Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2018 SRF Junior Lien Bonds.

(c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2018 SRF Junior Lien Bonds or other available funds.

(d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2018 SRF Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2018 SRF Junior Lien Bonds or other available funds.

Section 20. Severability; Headings; and Conflict. If any section, paragraph, clause or provision of this 2018 SRF Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2018 SRF Series Ordinance. The section and paragraph headings in this 2018 SRF Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2018 SRF Series Ordinance.

Section 21. Publication and Recordation. This 2018 SRF Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.

Section 22. Repeal. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2018 SRF Series Ordinance are, to the extent of such conflict, repealed.

Section 23. Effective Date. This 2018 SRF Series Ordinance shall be effective upon adoption.

Adopted and signed on the ____ day of July, 2018.

GREAT LAKES WATER AUTHORITY

Signed _____
Chairperson

Signed _____
Secretary

Troy 63818-14 2096114v1



Financial Services Audit Committee Communication

Date: June 13, 2018

To: Great Lakes Water Authority Audit Committee

From: Jill Kusters, Manager, Financial Reporting & Accounting (FR&A)

RE: FR&A FY2018 Continuous Improvement Report: Q4

Background: The Continuous Improvement Report provides information related to process improvement and software solution programs currently under development by the Financial Reporting and Accounting Group as of June 13th, 2018

The report is intended to provide the Audit Committee a snapshot of process improvements including percentage of work completed and current project status.

Proposed Action: Receive and file report

FY 2018 Continuous Improvement Summary Report: Q4

Legend

Proceeding as planned	●	Complete	●
PMO/Program Advisors mitigating	▲	On-Hold	●
Executive Sponsors to address	◆		
To be Completed %		Completed %	

Record Retention

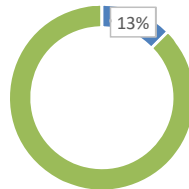
Status

Current Progress

Project Focus:

*Create FSA Retention Policy in conformity with State of Michigan, Records Management Service requirements
* Research and Create Matrix of FSA document retention requirements, research and select disposal schedule maintenance options.

*GLWA Partner Team: Information Technology (IT)



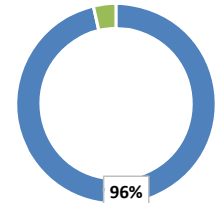
Capitalization Policy:

Status

Current Progress

Project Focus:

*Create a Capitalization Policy in conformity with GAAP.
*Document the Policy in accordance with the GLWA Policy on Policies



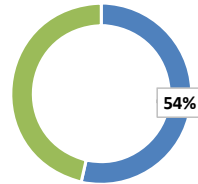
Month End Close

Status

Current Progress

Project Focus:

*Create procedures in line with established Policies.
*Document Month End Process Workflow .
*Creating desktop procedures for future training and new hires.
* Create Presentation Documentation and Training Materials.



Finance Automation Solution

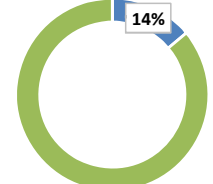
Status

Current Progress

Project Focus:

*Develop RFP to provide an Automated Finance Software Solution to improve the efficiency and effectiveness of the FSA operations and increase the timeliness and quality of reports, analysis& KPI
*Selection, Implementation, Configuration and Delivery of SaaS Project
*GLWA

Partner Team: IT and Procurement



Utility Billing

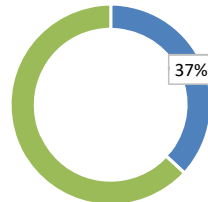
Status

Current Progress

Project Focus:

* Evaluate for and Partner with a utility information management service to process utility payments in order to obtain and provide Energy Management with timely , energy consumption and rate information.

GLWA Partner Teams: Energy Management and IT



e-Payables Implementation

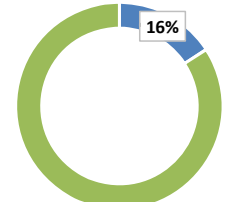
Status

Current Progress

Project Focus:

*Evaluate and Partner with a financial institution to provide the vendor community electronic payment options (credit card, wire and ACH)
* Create procedures, processes, documentation and training material in line with our internal control structure.

Partner Team: Treasury



Future Projects

Payroll Process Mapping
Ceridian Payroll System Reimplimentation
BS&A Employee Reimbursement Process Development(4 of 4)
Capital String expansion into WAM

Completed Projects (within 12 months)

Tracker GL JE for Investment Activity
Excel Based Project Accounting Timesheets
Procure to Pay : Investigative process review
HR-PR Assessment Survey

FY 2018 Continuous Improvement Summary Report: Q4

Legend

Proceeding as planned	●	Complete	●
PMO/Program Advisors mitigating	▲	On-Hold	●
Executive Sponsors to address	◆		
To be Completed %		Completed %	

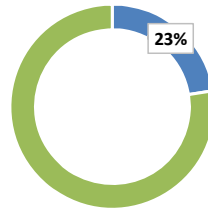
SRF Loan Process

Status

Current Progress

Project Focus:

- * Create procedures and documentation in conformity with Single Audit requirements
- * Create desktop procedures for future training and new hires.
- * Create and execute processes surrounding SRF loan distributions to our Sub -Recipient: DWSD



BS&A AP Module Reconfiguration (1 of 4)

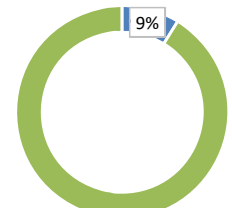
Status

Current Progress

Project Focus:

- *To accommodate Utility Billing and e-Payables, business process must be recalibrated and BS&A software settings reconfigured. There are three new processes that need to be coordinated
- *Document changes to workflows and procedures.

Partner Team : IT



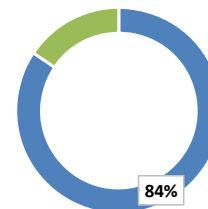
CWIP Rollout (Process Mapping)

Status

Current Progress

Project Focus:

- *Document Workflows for the CWIP Process, inclusive of touchpoints with other processes and departments.
- * Review and Document procedures in line with established Policies.
- *Create desktop procedure documents for future training and new employees onboarding



BS&A Configuration - Utility Billing (2 of 4)

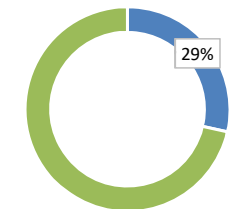
Status

Current Progress

Project Focus:

- *Re-Configure BS&A to meet the needs of the Utility Billing Process.
- *Document changes to workflows and procedures.

Team Partner: IT



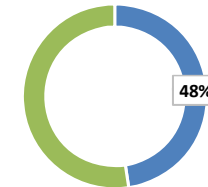
Fixed Assets (Process Mapping)

Status

Current Progress

Project Focus:

- * Create Procedures in line with established Policies.
- *Document Workflows for Fixed Assets
- *Document Procedures for Fixed Assets Process.
- *Create desktop procedure documents for future training and new employee onboarding



BSA Configuration - e-Payable (3 of 4)

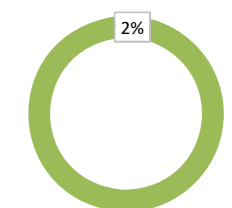
Status

Current Progress

Project Focus:

- *Re-Configure BS&A to meet the needs of the E-Payable process.
- *Document changes to workflows and procedures.

Team Partner: IT



Future Projects

Payroll Process Mapping
 Ceridian Payroll System Reimplimentation
 BS&A Employee Reimbursement Process Development(4 of 4)
 Capital String expansion into WAM

Completed Projects (within 12 months)

Tracker GL JE for Investment Activity
 Excel Based Project Accounting Timesheets
 Procure to Pay : Investigative process review
 HR-PR Assessment Survey

FY 2018 Continuous Improvement Summary Report: Q4

Legend

Proceeding as planned	●	Complete	●
PMO/Program Advisors mitigating	▲	On-Hold	●
Executive Sponsors to address	◆		
To be Completed %		Completed %	

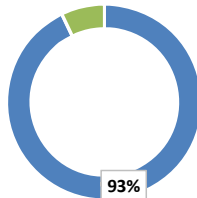
FP&A O&M (Process Mapping)

Status

Current Progress

Project Focus:

- *Document O&M Process Workflows.
- * Creating procedures in line with established Policies.
- * Creating desktop procedures for future training and new employee onboarding.



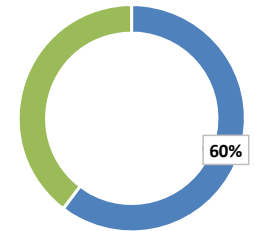
FP&A WRRF ScoreCard

Status

Current Progress

Project Focus:

- *Review and update of the WRRF ScoreCard used for reporting to MDEQ.
- *Review and update charts for internal reporting needs



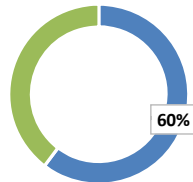
Capital Delivery and Shared Service Timekeeping

Status

Current Progress

Project Focus:

- * Evaluate and select Cloud based timekeeping software to facilitate accurate and timely shared service billing and capital delivery employee overhead allocation.
- *Create and Document Workflows
- *Create Presentation n and Training Materials.



Projects Managed by other departments where FSA is the Partner Team

Capital Work Processes (Sponser: AMLT) Coordination of Business, Asset Management and FSA capital discovery for process improvement

BS&A to WAM GL Account Interface Improvements (Sponser: AMLT) Cleanup of the WAM GL string environment limited to active GL strings, filter upgrade for GL string changes from BS&A into WAM

WAM approval route and title reconfiguration (Sponser: AMLT) Review and correct WAM approval route and security roles for compliance with internal control policies

Future Projects

- Payroll Process Mapping
- Ceridian Payroll System Reimplimentation
- BS&A Employee Reimbursement Process Development(4 of 4)
- Capital String expansion into WAM

Completed Projects (within 12 months)

- Tracker GL JE for Investment Activity
- Excel Based Project Accounting Timesheets
- Procure to Pay : Investigative process review
- HR-PR Assessment Survey



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee
Nicolette Bateson, CPA, Chief Financial Officer/Treasurer

From: Steve Hoover, Financial Reporting Manager

Re: April 30, 2018 Interim Monthly Financial Report (Unaudited)

Background: The Interim Monthly Financial Report (unaudited) provides information and analysis related to the financial performance of the Great Lakes Water Authority (GLWA). The monthly report is accounted for on a full accrual basis with the exception of certain items below which are adjusted at year-end only.

1. Balance sheet only reclassification
 - a. Restricted versus unrestricted cash
 - b. Construction work in progress (CWIP) versus closed projects
 - c. Deferred Pension versus net pension liability
 - d. No delineation between current versus noncurrent assets
2. Non-cash reclassification between expenses versus assets or liabilities
 - a. Interest expense versus capitalized interest on CWIP
 - b. Wages expense versus adjustments to accrued compensated absences
 - c. Fringe benefits versus adjustments to accrued worker's compensation
 - d. CWIP is shown as an expense for budgetary monitoring

It should be noted that this is the first monthly interim GLWA financial report that moves toward a full accrual basis. Several of the above classification matters will be addressed in future months as our month-end close process continues to mature.

Analysis: See attached report.

Proposed Action: Receive and file report.

Statement of Net Position (Unaudited)
As of April 30, 2018

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2017
Assets				
Cash	\$ 352,583,517	\$ 279,040,920	\$ 631,624,438	
Investments	249,180,913	292,876,643	542,057,556	
Accounts Receivable	113,490,051	68,142,263	181,632,314	
Due from Other Funds	24,419,658	34,624,548	59,044,206	
Other Assets	527,839,598	387,888,098	915,727,696	
Fixed Assets	1,920,177,913	2,715,697,183	4,635,875,095	
Deferred Inflow	116,733,775	226,975,079	343,708,854	
Total Assets	\$3,187,691,650	\$3,778,269,655	\$6,965,961,305	\$7,397,336,050
Liabilities				
Liabilities – Short-Term	\$ 218,581,911	\$ 186,798,777	\$ 405,380,688	
Due to Other Funds	20,673,914	38,370,292	59,044,206	
Other Liabilities	2,573,982	5,985,734	8,559,715	
Liabilities – Long-Term	3,060,888,538	3,842,779,627	6,903,668,165	
Deferred Outflow	66,494,373	59,033,220	125,527,593	
Total Liabilities	\$3,302,718,345	\$4,073,934,429	\$7,376,652,774	\$7,500,171,043
Net Assets (Deficit)	(\$ 64,787,292)	(\$127,722,915)	(\$192,510,208)	(\$102,834,993)

Net position is defined by the 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. For GLWA, deferred inflows and deferred outflows generally relate to financing activity and GLWA's share of the GRS pension obligation.

Statement of Revenues, Expenses and Changes in Net Position (Unaudited)
For the Ten Months ended April 30, 2018

	Water	Sewage Disposal	Total Business-type Activities	Year Ended June 30, 2017
Revenue				
Wholesale customer charges	\$268,107,558	\$226,193,000	\$494,300,558	
Industrial waste charges	-	11,949,734	11,949,734	
Local system charges (DWSD)	12,608,830	149,141,000	161,749,830	
Other nonoperating revenue/(expense)	(1,506,554)	(2,248,980)	(3,755,534)	
Other revenue	50,343	3,748,889	3,799,232	
Pollutant surcharges	-	5,038,642	5,038,642	
Total Revenue	\$279,260,177	\$393,822,284	\$673,082,461	\$857,557,026
Operating Expenses				
Chemicals	3,948,552	6,686,037	10,634,589	
Contractual services	31,852,382	51,015,737	82,868,119	
Employee Benefits Group	(2,267,802)	-	(2,267,802)	
Personnel - Benefits	11,668,470	7,427,860	19,096,330	
Personnel - Overtime	2,672,538	2,606,207	5,278,745	
Personnel - Salaries & Wages	21,268,902	33,256,501	54,525,403	
Supplies and other	8,136,755	14,494,212	22,630,967	
Utilities - Electric	20,969,547	12,863,306	33,832,853	
Utilities - Gas	892,261	4,563,301	5,455,562	
Utilities - Sewage	331,427	823,901	1,155,328	
Utilities - Water	1,558	3,230,550	3,232,108	
Capital program allocation	(427,158)	(643,236)	(1,070,394)	
Shared services allocation	(6,167,744)	(40,564)	(6,208,308)	
Operating Expenses	92,879,688	136,283,812	229,163,500	283,049,215
Depreciation	120,096,813	156,105,914	276,202,727	329,766,377
Total Operating Expenses	212,976,501	292,389,726	505,366,227	582,815,592
Operating Income	(66,283,676)	(101,432,559)	(167,716,235)	274,741,434
Nonoperating (Revenues)/ Expenses				
(Gain) loss on disposal of assets	6,225	853	7,078	
Interest income local*	(19,464,206)	(12,921,083)	(32,385,290)	
Investment earnings	(5,323,994)	(4,899,852)	(10,223,846)	
Other nonoperating revenue	(47,648)	2,022	(45,626)	
Interest expense*	112,462,552	126,541,304	239,003,856	
CWIP expense*	18,550,774	49,769,470	68,320,245	
Other	11,586,884	(4,301,920)	7,284,964	
Net Nonoperating Expense	94,596,819	162,794,634	257,391,453	174,600,651
Change in Net Position (Increase) Decrease	\$ (28,313,143)	\$(61,362,075)	\$(89,675,219)	\$(102,834,993)

An “*” denotes categories where year-end reclassifications from a portion of expenses to Net Assets will occur.

Financial Highlights

Water Fund

Wholesale water customer charges of \$268.1 million account for 96.0% of Water System revenues.

Operating expenses of \$212.9 million represent 76.3% of total operating revenue. Depreciation is the largest operating expense at \$120.1 million or 56.4% of operating expense. The remaining 43.6% of operating expenses is allocated among seven categories as shown below.

Water Operating Expenses, excluding depreciation	Amount	Percent of Operating Expenses
Personnel	\$ 33,342,108	15.7%
Contractual services	31,852,382	15.0%
Utilities	22,194,793	10.4%
Chemicals	3,948,552	1.9%
Supplies and other expenses	8,136,755	3.8%
Capital program allocation	(427,158)	-0.2%
Shared services allocation	(6,167,744)	-2.9%
Total Nonoperating expenses, excluding depreciation	\$92,879,688	43.6%

The largest category of nonoperating activities is interest expense of \$112.4 million. This expense is currently reported in gross but will be reviewed for partial capitalization at the end of the fiscal year related to CWIP. Interest expense before capitalization is largely attributable to debt service with the remainder related to the Water Lease and obligation payable.

Operating income after operating expenses (including depreciation) equals \$66.2 million or 23.7% of operating revenue.

Sewage Disposal Fund

Wholesale customer charges of \$226.1 million account for 57.4% of Sewer System revenues. Wholesale customer charges are based on a “share” percentage of the annual budget billed one-twelfth each month. The shares are established based upon historical flows and are formally revisited every five years. The result is no revenue shortfall or overestimation.

Local system (DWSD) revenues of \$149.1 million account for 37.8% of total operating revenues.

The remaining 4.7% of revenue is due to other charges such as industrial waste charges, pollutant surcharges which are charged to non-residential users.

Operating expenses of \$292.3 million represent 74.2% of total operating revenue. Depreciation is the largest operating expense at \$156.1 million or 53.4% of total operating expense. The remaining 46.6% of operating expenses is allocated among seven categories as shown below.

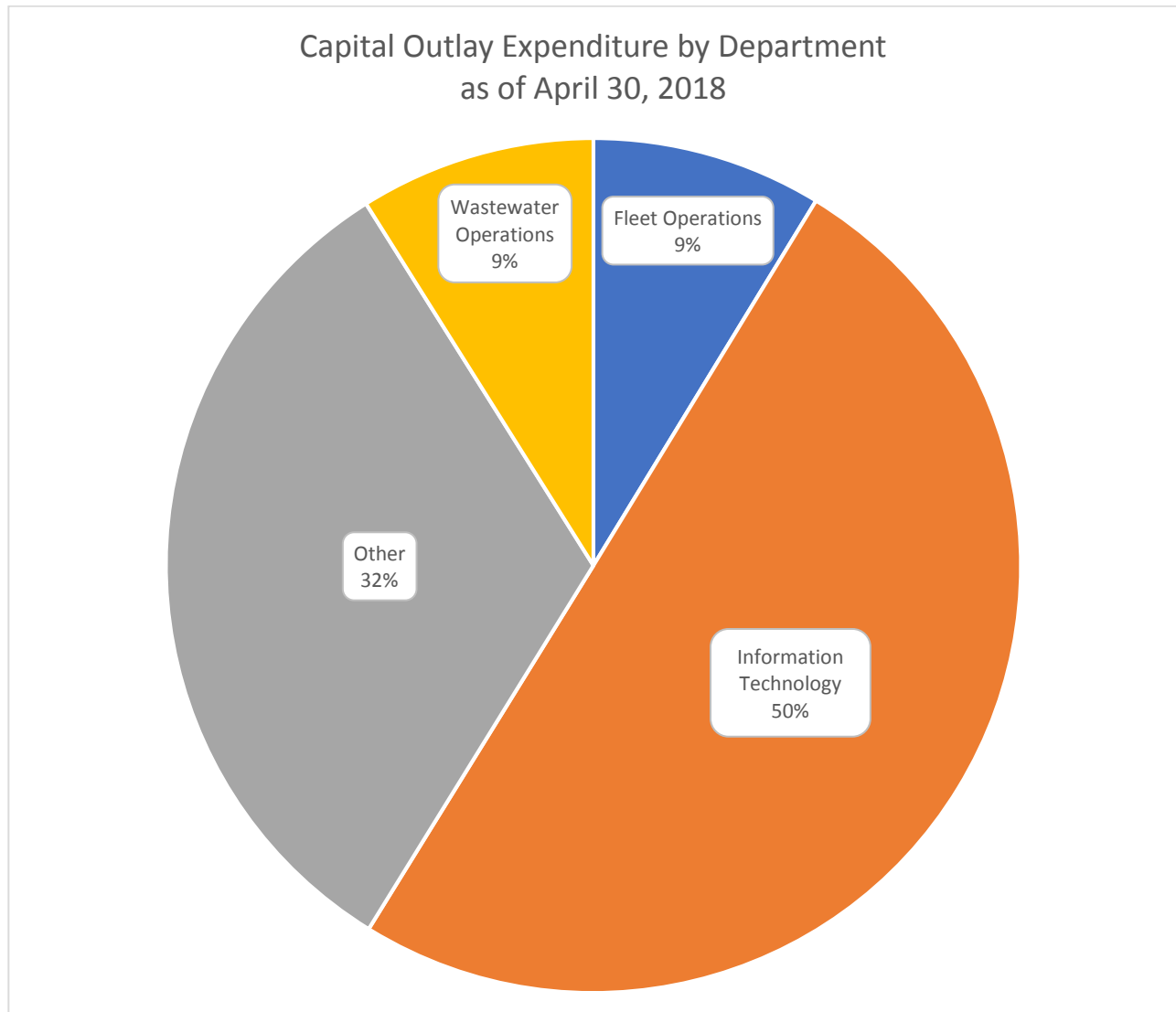
Balance of Sewer Operating Expenses	Amount	Percent of Operating Expenses
Personnel	\$ 43,290,568	14.8%
Contractual services	51,015,737	17.4%
Utilities	21,481,058	7.3%
Chemicals	6,686,037	2.3%
Supplies and other expenses	14,494,212	5.0%
Capital program allocation	(643,236)	-0.2%
Shared services allocation	(40,564)	0.0%
	\$136,283,812	46.6%

The largest category of nonoperating activities is interest expense of \$126.5 million which is currently reported in gross and is reviewed for possible capitalization at the end of the fiscal year. Interest expense before capitalization is largely attributable to debt service with the remainder related to the Sewer Lease and obligation payable.

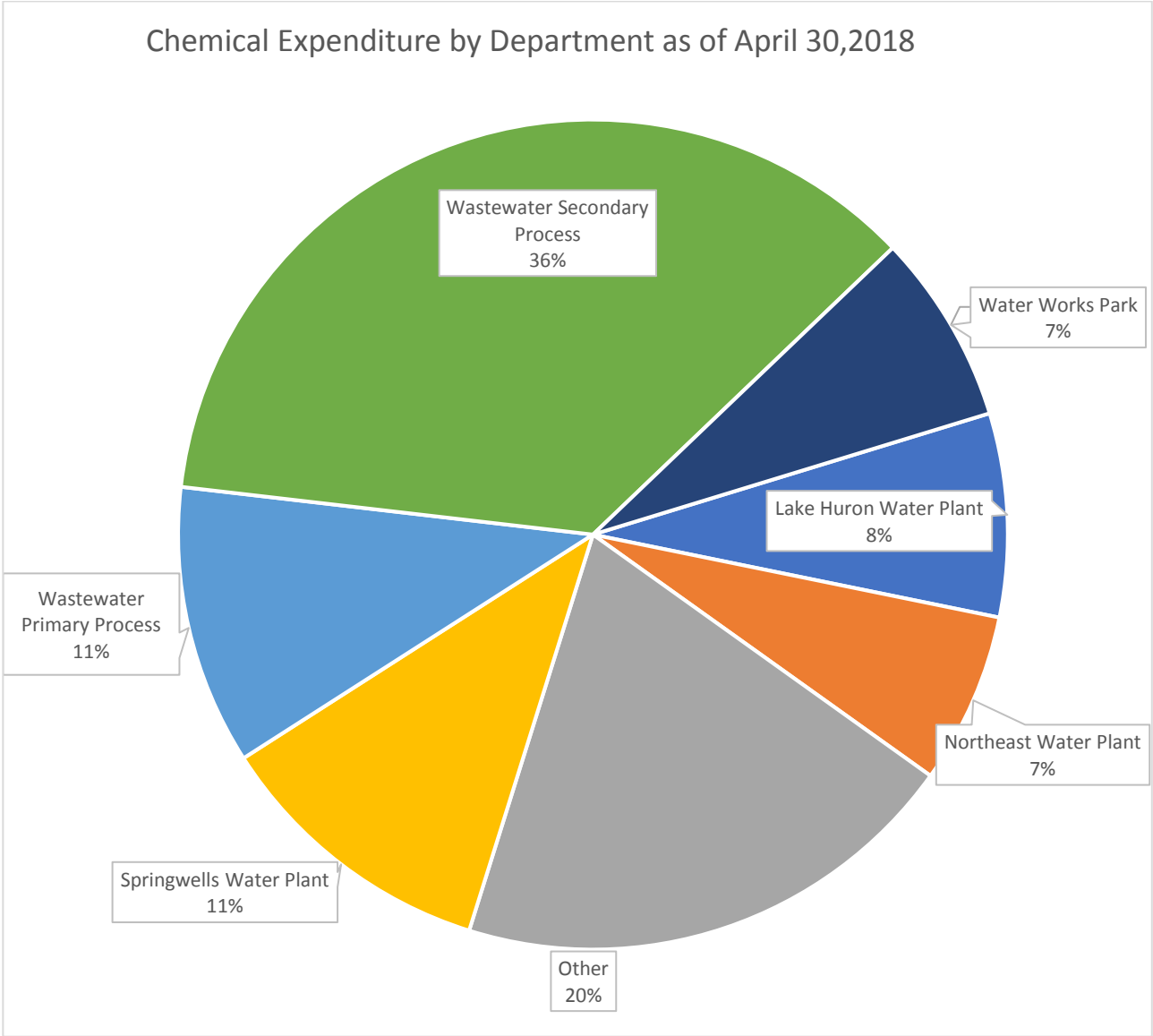
Operating income after operating expenses (including depreciation) equals \$101.4 million or 25.7% of operating revenue.

Other Analysis

Capital Outlay spend is \$6,118,537 through April 30, 2018. The allocation is shown in the table below.

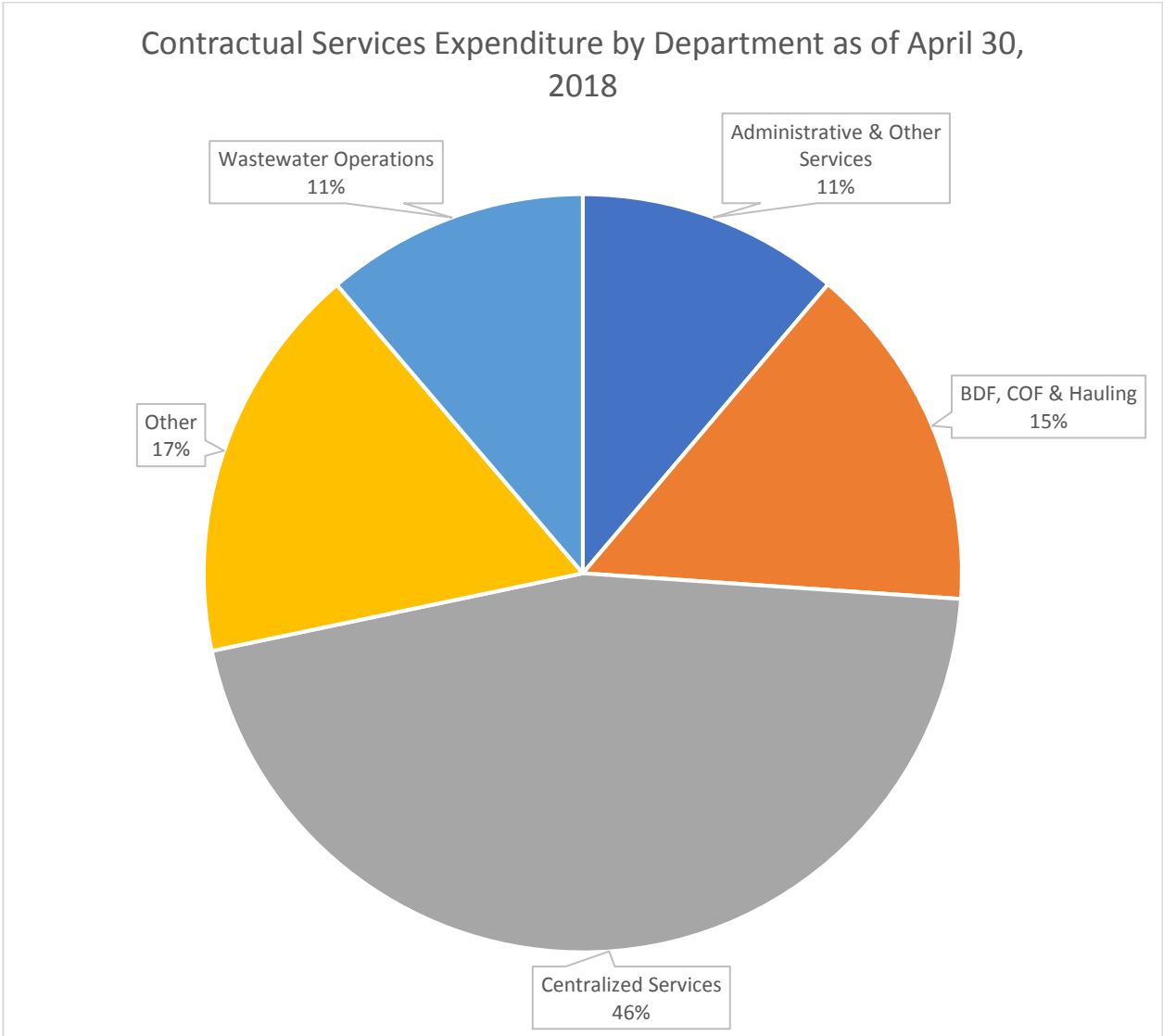


Chemical spend is \$10,634,589 through April 30, 2018. The allocation is shown in the table below.

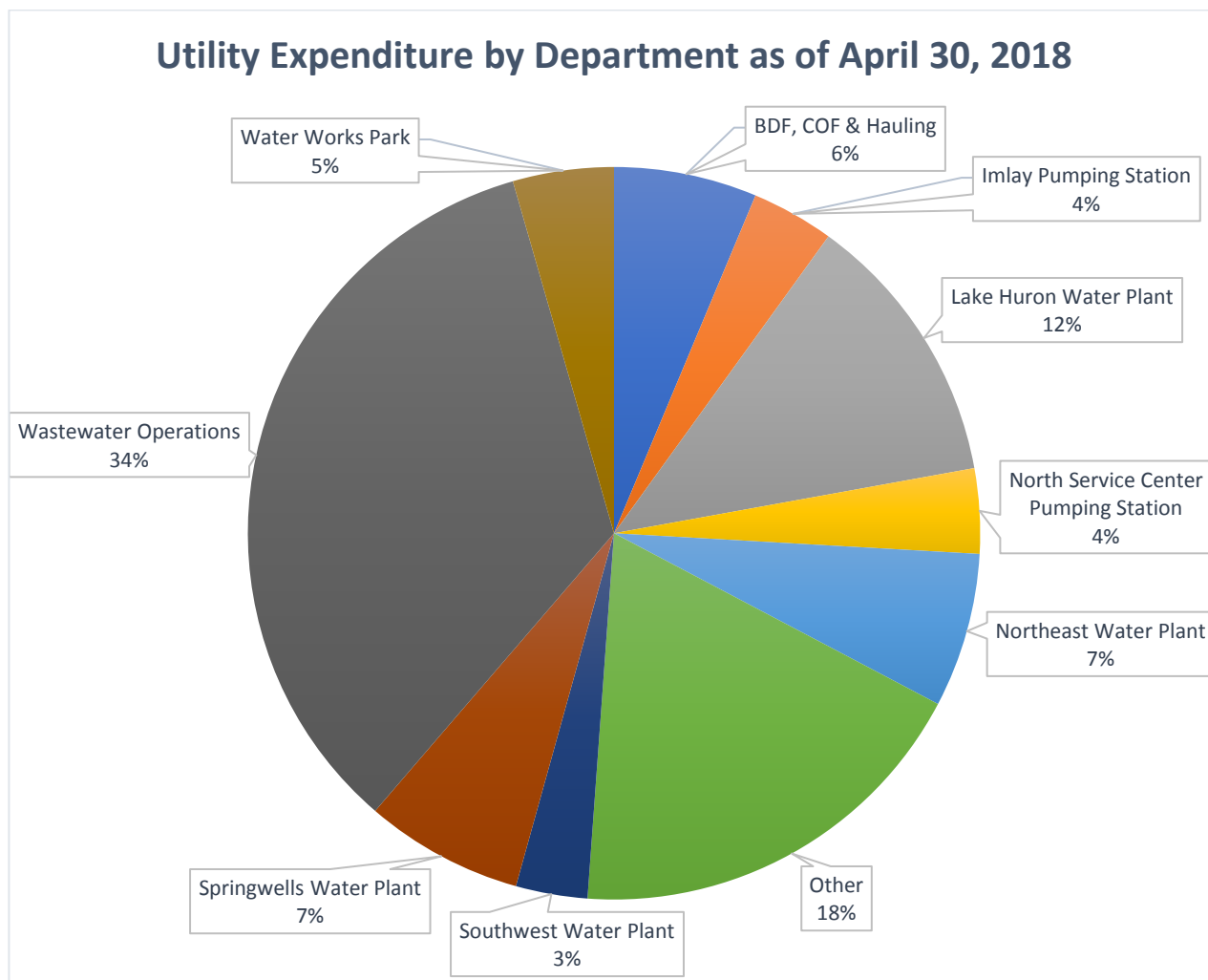


“Other” includes CSO, portions of the Wastewater process and two cost centers from Water.

Contractual services spend is \$82,868,119 through April 30, 2018. The allocation is shown in the table below.

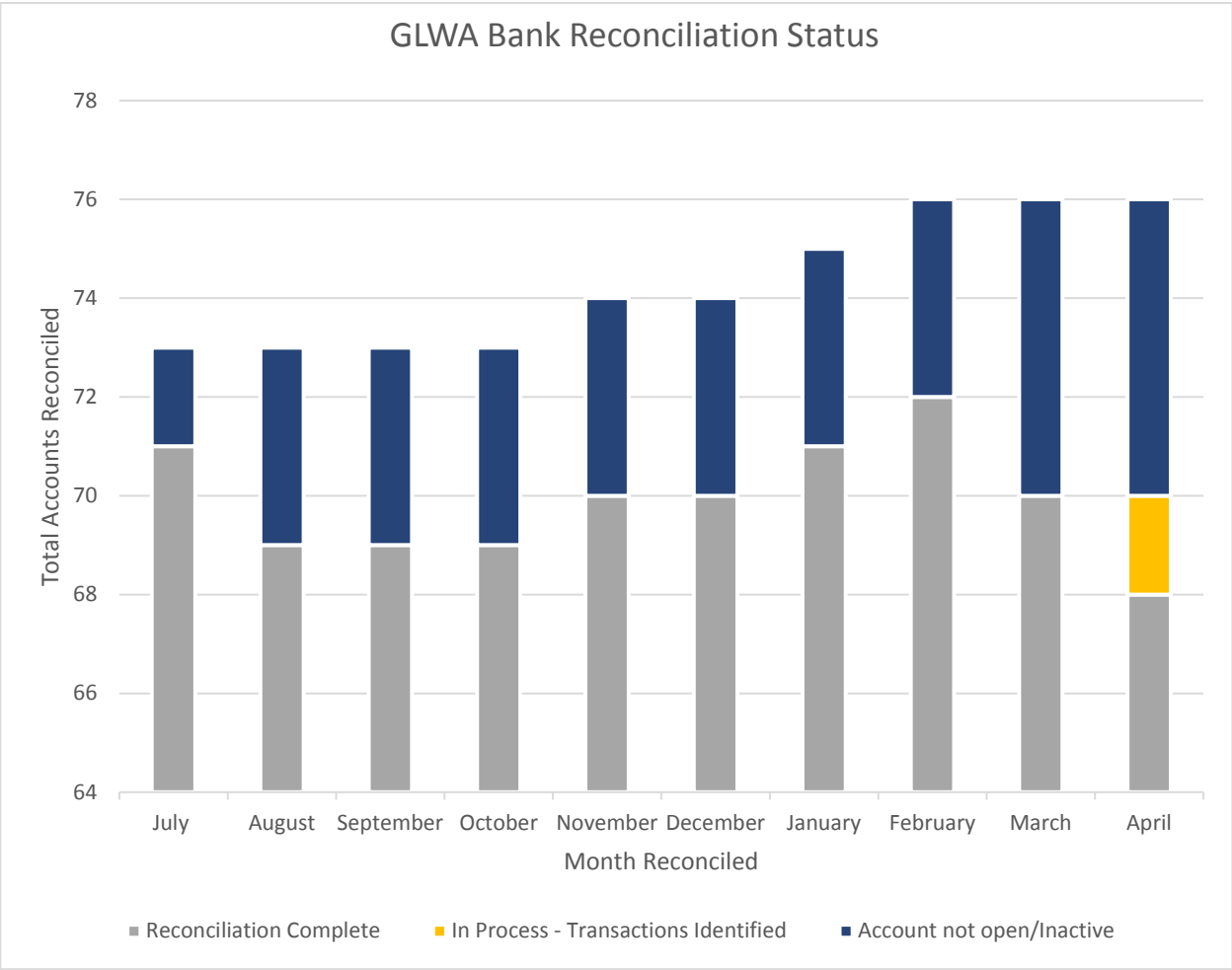


Utility spend is \$43,675,851 through April 30, 2018. The allocation is shown in the table below.



BDF: Biosolids Dryer Facility
COF: Central Offloading Facility

A measure of progress made in the month-end close process is that bank reconciliations are prepared soon after month end. The in-process items for April 2018 in the chart below represent adjusting entries and other reconciling items which have either been subsequently cleared or are under review.





Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, Public Finance Management Professional

Re: Trust Receipt & Disbursement Report for Activity through April 30, 2018

Background: Beginning January 2016, water and sewer system services are provided to the City of Detroit through the DWSD. Accordingly, DWSD is allocated a revenue requirement for those services in accordance with a services agreement. Consistent with the terms of the GLWA Master Bond Ordinance, which is applicable to assumed pre- and new post-bifurcation debt of the DWSD which was transferred to GLWA on the effective date, the cash receipts of both DWSD and GLWA are deposited in a Trust and distributed in accordance with the terms of the Master Bond Ordinance.

The purpose of this report is to provide an ongoing status as to the ability of both organizations to cover their Master Bond Ordinance requirements with their cash receipts.

Analysis: The following tables summarize this activity along three lines: Local System Activity, Regional System Activity, and Combined Activity accompanied by a series of charts that further breakdown this activity by fund, inflows and outflows. *This information does reflect activity and transfers associated with the April 2018 Memorandum of Understanding Term Sheet as part of fiscal year ending June 30, 2017 activity.*

This is a new report and process, made possible mainly due to continuous process improvement and the steady implementation of financial reporting best practices. It will take time to refine but is being put in use at a high-level for Board and Audit Committee use and at a more detailed level for use by DWSD and GLWA finance team members.

This initial report highlights the continued health of the regional system water and sewer funds and local system water fund. While the local system sewer fund does reflect a deficit, this report helps provide a basis to discuss changes and monitor progress. DWSD management has already taken steps to address the local system sewer deficit as evidenced by the use lease payment proceeds beginning in March to support current debt requirements.

Proposed Action: Receive and file report.

Great Lakes Water Authority
Local System Trust Receipts & Disbursements - Budget to Actual
January 1, 2016 thru April 30, 2018

Month	Retail System Cash Receipts			Revenue Requirements due to GLWA			Local System O&M and MBO Disbursements		
	Water	Sewer	Total	Water	Sewer	Total	Water	Sewer	Total
YE 6/30/2016	27,365,381	75,252,534	102,617,915	6,833,500	96,981,750	103,815,250	42,139,552	35,311,350	77,450,902
YE 6/30/2017	114,210,305	285,398,467	330,174,472	15,490,300	188,809,372	204,299,672	76,888,944	69,074,600	145,963,544
Jul-17	8,358,980	18,584,448	26,943,428	1,260,883	15,150,489	16,411,372	6,807,834	7,850,191	14,658,025
Aug-17	9,512,385	24,266,091	33,778,476	1,260,883	15,148,550	16,409,433	6,807,834	7,850,191	14,658,025
Sep-17	8,952,012	21,323,940	30,275,952	1,260,883	15,148,770	16,409,653	6,807,834	7,850,191	14,658,025
Oct-17	9,531,471	23,791,664	33,323,135	1,260,883	15,151,126	16,412,009	6,807,834	7,850,191	14,658,025
Nov-17	8,053,735	19,491,771	27,545,506	1,260,883	15,137,426	16,398,309	6,983,027	7,975,498	14,958,525
Dec-17	8,271,571	19,531,290	27,802,861	1,260,883	15,135,108	16,395,991	6,807,834	7,850,191	14,658,025
Jan-18	8,075,038	18,317,964	26,393,002	1,260,883	15,136,391	16,397,274	6,807,834	7,850,191	14,658,025
Feb-18	6,443,649	17,507,247	23,950,896	1,260,883	15,135,893	16,396,776	6,807,834	7,850,191	14,658,025
Mar-18	8,292,929	25,318,954	33,611,883	1,260,883	15,136,739	16,397,622	6,807,834	7,850,191	14,658,025
Apr-18	9,243,981	18,465,537	27,709,519	1,260,883	15,136,070	16,396,953	6,113,232	7,641,892	13,755,124
YTD 4/30/2018	84,735,751	206,598,906	291,334,657	12,608,830	151,416,562	164,025,392	67,558,931	78,418,918	145,977,849
	\$ 226,311,437	\$ 567,249,907	\$ 724,127,045	\$ 34,932,630	\$ 437,207,684	\$ 472,140,314	\$ 186,587,428	\$ 182,804,868	\$ 369,392,295

Month	Difference (shortfall)/surplus			Budgeted Requirements (Reference)		
	Water	Sewer	Total	Water	Sewer	Total
YE 6/30/2016	(21,607,671)	(57,040,566)	(78,648,237)	42,139,900	35,311,100	77,451,000
YE 6/30/2017	21,831,061	27,514,495	49,345,556	74,132,300	72,903,200	147,035,500
Jul-17	290,263	(4,416,232)	(4,125,969)	6,550,883	6,866,492	13,417,375
Aug-17	1,443,668	1,267,350	2,711,018	6,550,883	6,866,492	13,417,375
Sep-17	883,295	(1,675,021)	(791,726)	6,550,883	6,866,492	13,417,375
Oct-17	1,462,754	790,347	2,253,101	6,550,883	6,866,492	13,417,375
Nov-17	(190,175)	(3,621,153)	(3,811,328)	6,550,883	6,866,492	13,417,375
Dec-17	202,854	(3,454,009)	(3,251,155)	6,550,883	6,866,492	13,417,375
Jan-18	6,321	(4,668,618)	(4,662,297)	6,550,883	6,866,492	13,417,375
Feb-18	(1,625,068)	(5,478,837)	(7,103,905)	6,550,883	6,866,492	13,417,375
Mar-18	224,212	2,332,024	2,556,236	6,550,883	6,866,492	13,417,375
Apr-18	1,869,866	(4,312,425)	(2,442,558)	6,550,883	6,866,492	13,417,375
YTD 4/30/2018	4,567,990	(23,236,573)	(18,668,584)	65,508,833	68,664,917	134,173,750
	\$ 4,791,380	\$ (52,762,644)	\$ (47,971,265)	\$ 181,781,033	\$ 176,879,217	\$ 358,660,250

Report Notes: This report reflects actual cash receipts received. These values will not tie to revenues reported on the CAFR due to that difference.

Actual O&M/MBO Disbursements differ from budget in FY 17 & FY18 to date as a result of the use of lease payments to cover budgeted expenses and adjustments made for actual pension expense.

Great Lakes Water Authority
Regional System Trust Receipts & Disbursements - Budget to Actual
January 1, 2016 thru April 30, 2018

Month	Regional System Cash Receipts			Regional System O&M Disbursements			Regional System MBO Disbursements		
	Water	Sewer	Total	Water	Sewer	Total	Water	Sewer	Total
YE 6/30/2016	148,460,783	222,315,173	370,775,955	58,846,800	92,551,800	151,398,600	86,181,457	116,923,983	203,105,440
YE 6/30/2017	352,432,097	469,205,155	821,637,251	117,927,700	186,682,800	304,610,500	170,340,472	254,176,813	424,517,285
Jul-17	29,487,166	39,464,719	68,951,885	10,634,217	16,825,283	27,459,500	13,693,206	20,319,222	34,012,428
Aug-17	26,681,875	38,984,345	65,666,220	10,634,217	16,825,283	27,459,500	12,834,449	19,000,583	31,835,032
Sep-17	28,167,949	37,793,282	65,961,231	10,634,217	16,825,283	27,459,500	13,597,892	20,429,213	34,027,105
Oct-17	39,786,742	38,672,972	78,459,714	10,634,217	16,825,283	27,459,500	13,792,757	20,290,667	34,083,424
Nov-17	28,702,426	39,207,527	67,909,953	10,645,017	16,810,883	27,455,900	13,952,799	21,016,173	34,968,972
Dec-17	23,591,223	40,540,948	64,132,171	10,634,217	16,825,283	27,459,500	13,729,347	20,387,673	34,117,020
Jan-18	33,481,060	38,878,363	72,359,423	10,634,217	16,825,283	27,459,500	13,723,698	20,446,937	34,170,635
Feb-18	22,859,171	46,831,437	69,690,608	10,634,217	16,825,283	27,459,500	13,662,466	20,396,598	34,059,064
Mar-18	29,230,393	30,141,091	59,371,484	10,634,217	16,825,283	27,459,500	13,687,023	18,127,661	31,814,684
Apr-18	20,052,031	42,244,880	62,296,911	10,634,217	16,825,283	27,459,500	14,398,826	18,421,619	32,820,445
YTD 4/30/2018	282,040,036	392,759,564	674,799,600	106,352,970	168,238,430	274,591,400	137,072,463	198,836,346	335,908,809
	\$ 782,932,916	\$ 1,084,279,891	\$ 1,867,212,807	\$ 283,127,470	\$ 447,473,030	\$ 730,600,500	\$ 393,594,392	\$ 569,937,142	\$ 963,531,534

Month	Difference (shortfall)/surplus			Budgeted Requirements (Reference)		
	Water	Sewer	Total	Water	Sewer	Total
YE 6/30/2016	3,432,526	12,839,390	16,271,915	159,276,000	220,731,000	380,007,000
YE 6/30/2017	64,163,925	28,345,542	92,509,466	331,213,200	471,710,200	802,923,400
Jul-17	5,159,743	2,320,214	7,479,957	27,343,275	39,025,892	66,369,167
Aug-17	3,213,209	3,158,479	6,371,688	27,343,275	39,025,892	66,369,167
Sep-17	3,935,840	538,786	4,474,626	27,343,275	39,025,892	66,369,167
Oct-17	15,359,768	1,557,022	16,916,790	27,343,275	39,025,892	66,369,167
Nov-17	4,104,610	1,380,471	5,485,081	27,343,275	39,025,892	66,369,167
Dec-17	(772,341)	3,327,992	2,555,651	27,343,275	39,025,892	66,369,167
Jan-18	9,123,145	1,606,143	10,729,288	27,343,275	39,025,892	66,369,167
Feb-18	(1,437,512)	9,609,556	8,172,044	27,343,275	39,025,892	66,369,167
Mar-18	4,909,153	(4,811,853)	97,300	27,343,275	39,025,892	66,369,167
Apr-18	(4,981,012)	6,997,978	2,016,966	27,343,275	39,025,892	66,369,167
YTD 4/30/2018	38,614,603	25,684,788	64,299,391	273,432,750	390,258,917	663,691,667
	\$ 106,211,054	\$ 66,869,719	\$ 173,080,773	\$ 763,921,950	\$ 1,082,700,117	\$ 1,846,622,067

Report Notes: This report reflects actual cash receipts received. These values will not tie to revenues reported on the CAFR due to that difference.

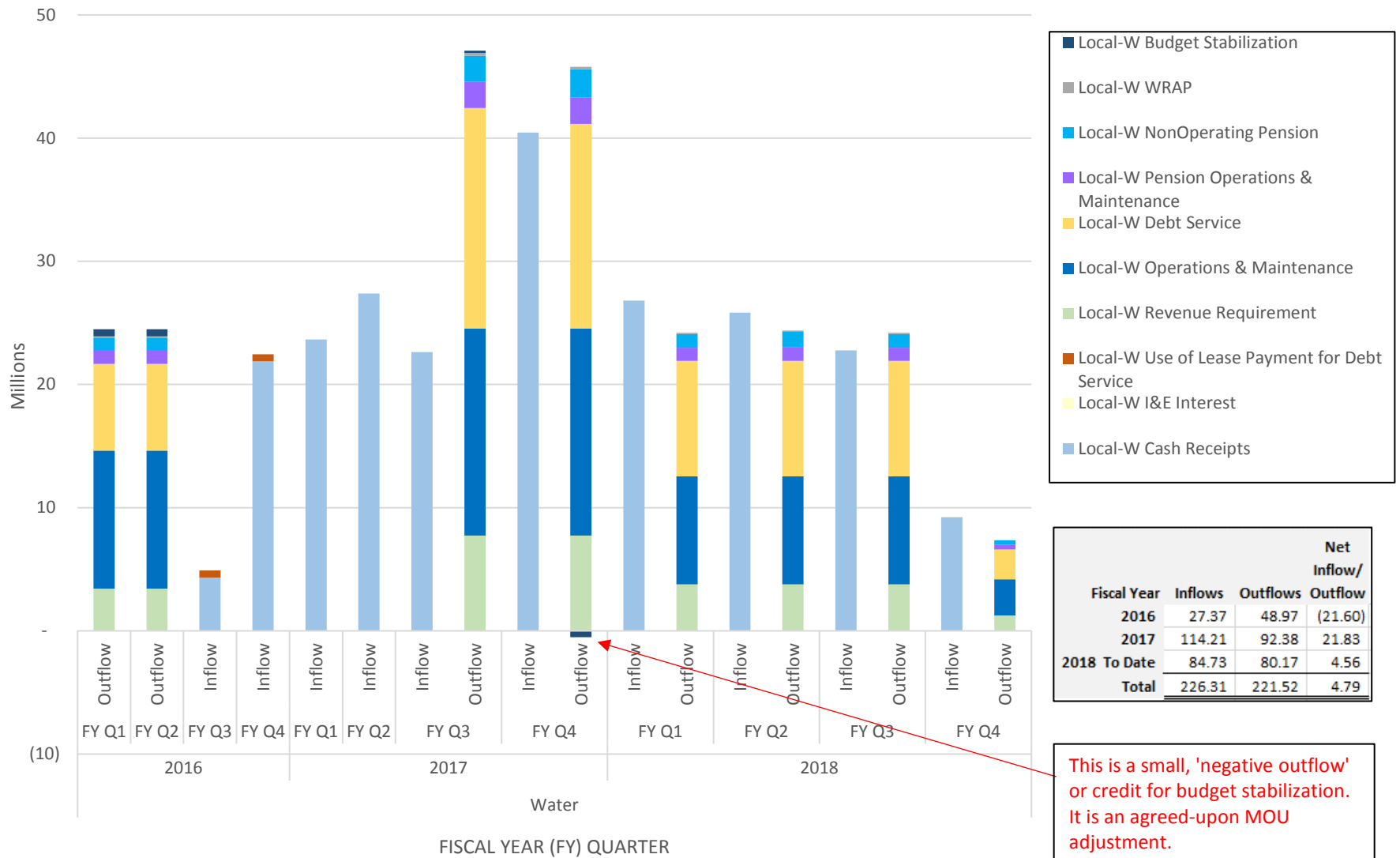
Actual O&M/MBO Disbursements differ from budget in FY 17 & FY18 to date as a result of the use of lease payments to cover budgeted expenses, adjustments made for actual pension expense and because debt payments are net of interest earned.

Great Lakes Water Authority
Combined System Trust Receipts & Disbursements - Budget to Actual
January 1, 2016 thru April 30, 2018

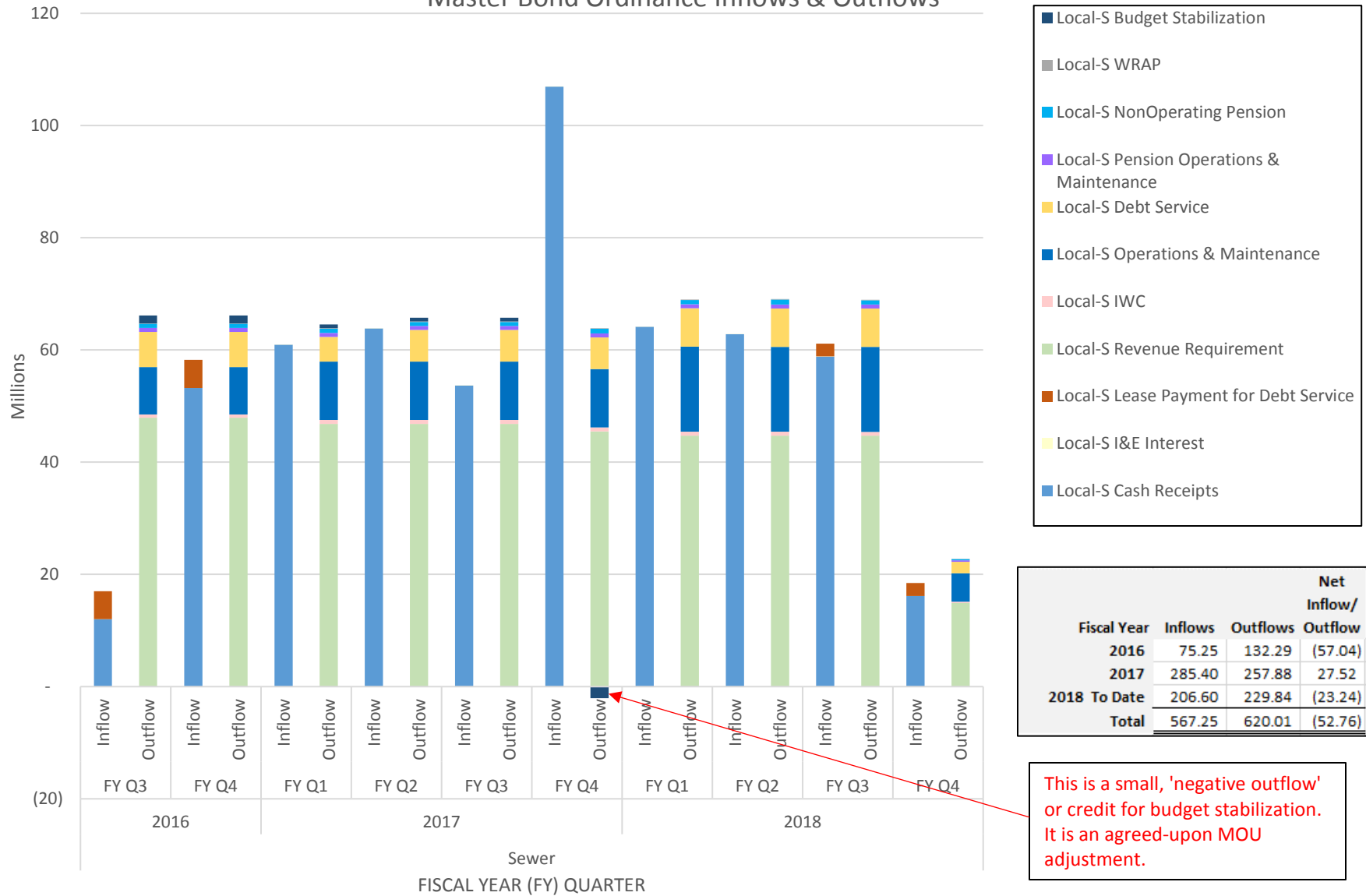
Month	Combined Systems Cash Receipts			Combined Systems O&M and MBO Disbursements		
	Water	Sewer	Total	Water	Sewer	Total
YE 6/30/2016	175,826,164	297,567,707	473,393,871	194,001,309	341,768,883	535,770,192
YE 6/30/2017	466,642,402	754,603,622	1,221,246,023	380,647,416	698,743,585	1,079,391,001
Jul-17	37,846,146	58,049,167	95,895,313	32,396,140	60,145,185	92,541,325
Aug-17	36,194,261	63,250,436	99,444,697	31,537,383	58,824,607	90,361,990
Sep-17	37,119,961	59,117,222	96,237,183	32,300,826	60,253,457	92,554,283
Oct-17	49,318,213	62,464,636	111,782,849	32,495,691	60,117,267	92,612,958
Nov-17	36,756,162	58,699,298	95,455,459	32,841,726	60,939,980	93,781,706
Dec-17	31,862,794	60,072,238	91,935,032	32,432,281	60,198,255	92,630,536
Jan-18	41,556,098	57,196,327	98,752,425	32,426,632	60,258,802	92,685,434
Feb-18	29,302,820	64,338,684	93,641,504	32,365,400	60,207,965	92,573,365
Mar-18	37,523,322	55,460,045	92,983,367	32,389,957	57,939,874	90,329,831
Apr-18	29,296,012	60,710,417	90,006,429	32,407,158	58,024,864	90,432,022
YTD 4/30/2018	366,775,788	599,358,470	689,502,958	323,593,194	596,910,256	920,503,450
	\$ 1,009,244,353	\$ 1,651,529,799	\$ 2,384,142,851	\$ 898,241,920	\$ 1,637,422,724	\$ 2,535,664,643

Difference (shortfall)/surplus			Budgeted Requirements (Reference)		
			Combined Systems O&M and MBO Requirements		
Water	Sewer	Total	Water	Sewer	Total
(18,175,146)	(44,201,176)	(62,376,322)	182,453,300	242,630,800	425,084,100
85,994,986	55,860,037	141,855,022	405,345,500	536,981,700	942,327,200
5,450,006	(2,096,018)	3,353,988	33,894,158	45,658,167	79,552,325
4,656,878	4,425,829	9,082,707	33,894,158	45,658,167	79,552,325
4,819,135	(1,136,235)	3,682,900	33,894,158	45,658,167	79,552,325
16,822,522	2,347,369	19,169,891	33,894,158	45,658,167	79,552,325
3,914,435	(2,240,682)	1,673,753	33,894,158	45,658,167	79,552,325
(569,487)	(126,017)	(695,504)	33,894,158	45,658,167	79,552,325
9,129,466	(3,062,475)	6,066,991	33,894,158	45,658,167	79,552,325
(3,062,580)	4,130,719	1,068,139	33,894,158	45,658,167	79,552,325
5,133,365	(2,479,829)	2,653,536	33,894,158	45,658,167	79,552,325
(3,111,146)	2,685,553	(425,593)	33,894,158	45,658,167	79,552,325
43,182,593	2,448,215	45,630,808	338,941,583	456,581,667	795,523,250
\$ 111,002,433	\$ 14,107,075	\$ 125,109,508	\$ 926,740,383	\$ 1,236,194,167	\$ 2,162,934,550

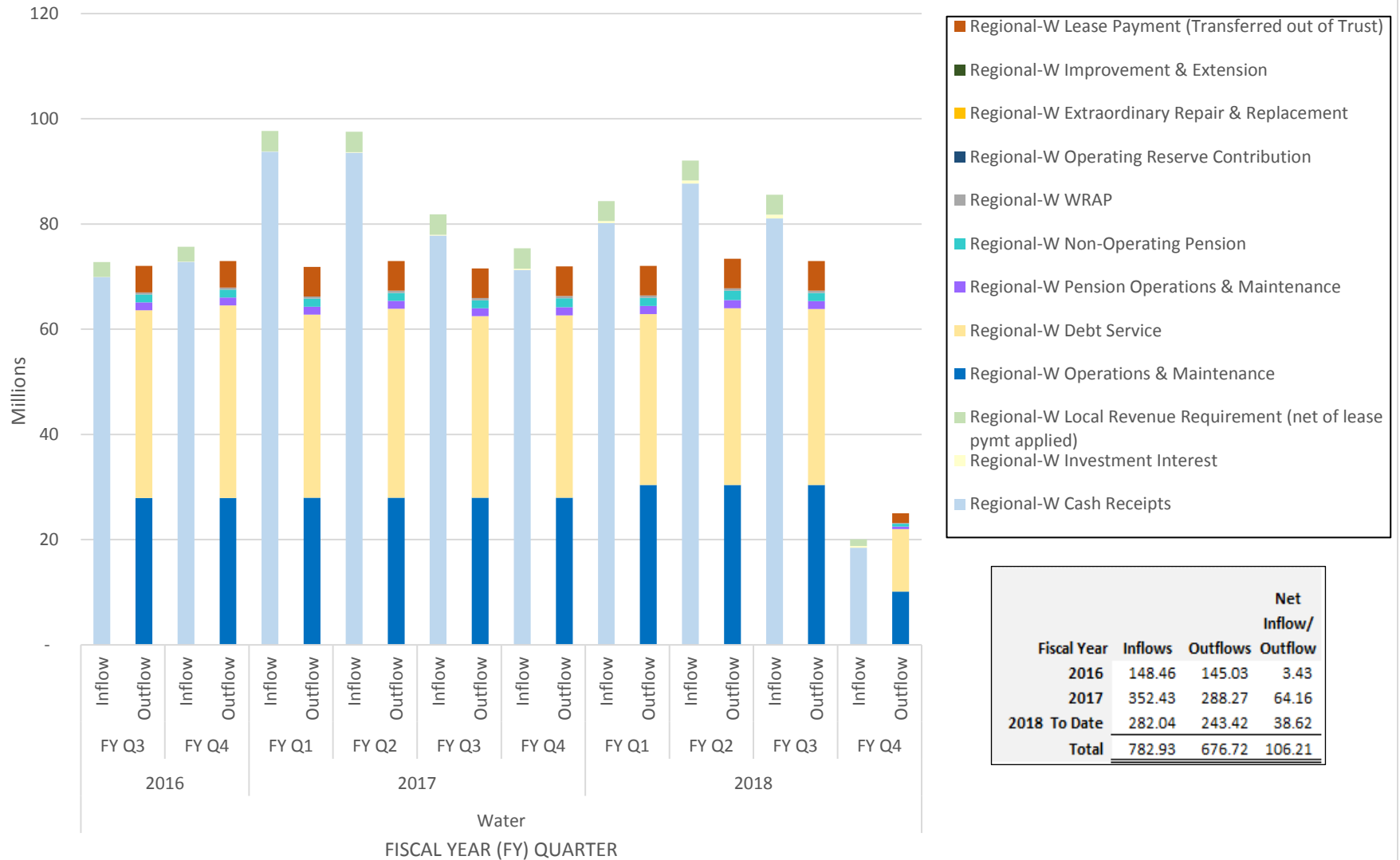
Local Water System Master Bond Ordinance Inflows and Outflows



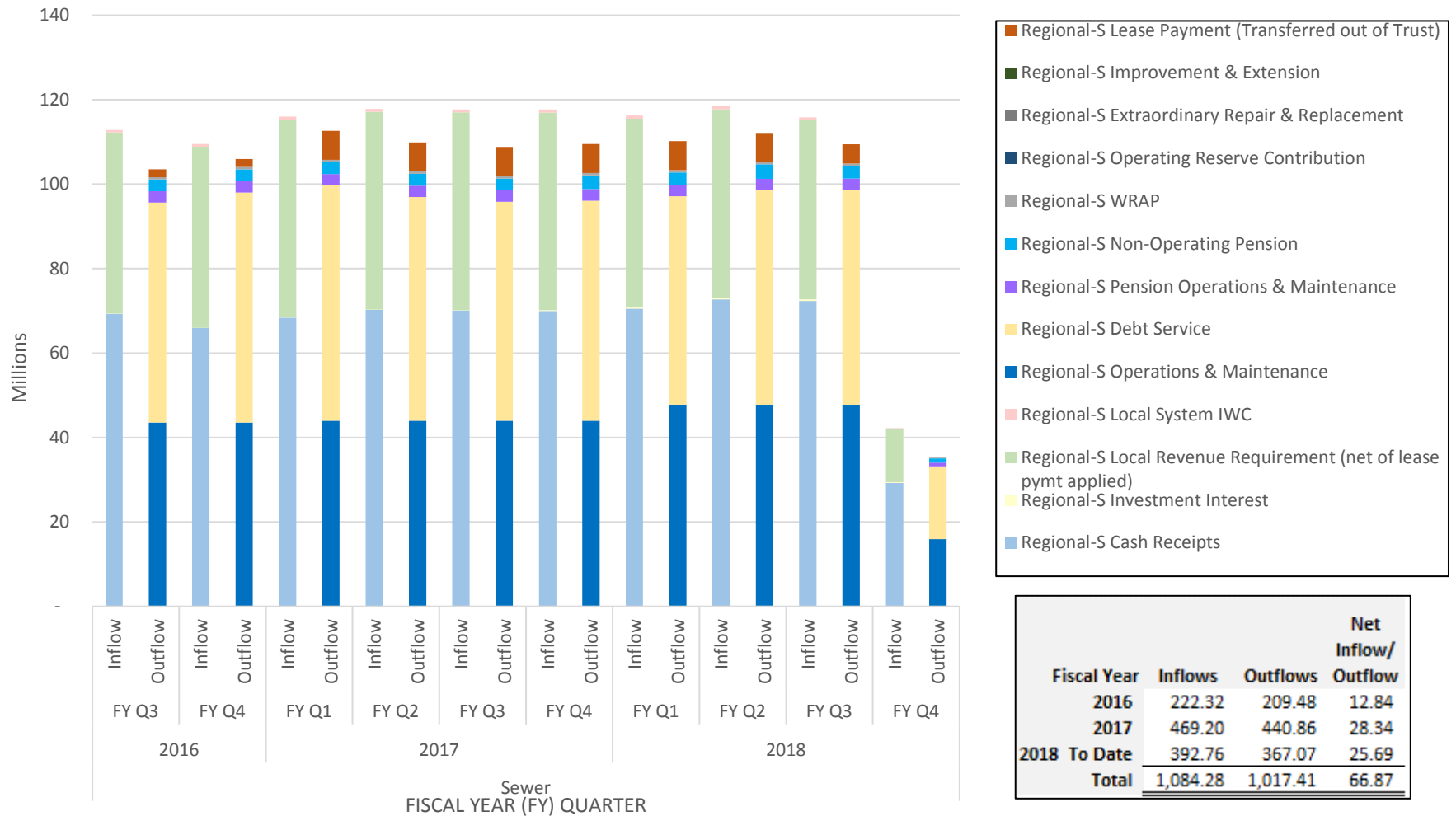
Local Sewer System Master Bond Ordinance Inflows & Outflows



Regional Water System Master Bond Ordinance Inflows and Outflows



Regional Sewer System Master Bond Ordinance Inflows & Outflows





Audit Committee
Friday, June 15, 2018 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 **BINDER 3 Items in highlighted in gree**
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
 - A. May 22, 2018 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
 - A. Proposed Underwriter Selection for the for the 2018 Financing Program (Page 6)
 - B. Proposed FY 2016 Shared Services True-up (Page 12)
7. NEW BUSINESS
 - A. FY 2018 Fourth Quarter Budget Update (Binder 3 Page 1)
 - B. PFM Investment Contract Extension (Page 22)
 - C. Credit Card Use Policy (Page 24)
 - D. Proposed Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds an Amount Not to Exceed \$45,000,000 (Ordinance 2018-01) (Binder 2 Page 1)
 - E. Proposed Procurement Policy Amendment for Compliance with the Code of Federal Regulations (Binder 3 Page 13)
8. REPORTS
 - A. Quarterly Investment Report (Page 52)
 - B. Master Bond Ordinance Monthly Cash Transfers: Cash Transfers through May 1, 2018 (Page 56)
 - C. Quarterly Construction Work-in-Progress Report (Page 59)
 - D. Quarterly Financial Reporting & Accounting Group Continuous Improvement Report (Binder 2 Page 23)
 - E. Monthly Financial Report for April 2018 (Binder 2 Page 27)
 - F. Monthly Revenue & Collections Report for April 2018 (Page 124)
 - G. Trust Receipts & Disbursements Report (Binder 2 Page 37)
 - H. Status Update - 2018 Contract Alignment Process and Wholesale Water Contract Reopeners Status (Binder 3 Page 25)
9. CFO Update (Binder 3 Page 28)
10. LOOK AHEAD
 - Next Audit Committee Meeting – July 20, 2018 at 8 am (Regular Meeting)
11. INFORMATION
12. OTHER MATTERS
13. ADJOURNMENT



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Lisa Mancini, Interim Financial Planning & Analysis Manager

Re: FY 2018 Operations & Maintenance Budget Update through May 31, 2018 and
Fiscal Year-End Amendments through June 30, 2018

Background: The Great Lakes Water Authority (GLWA) is in the process of closing May 31, 2018. A pre-close report has been prepared to present the current budget status as we approach the final day of our fiscal year on June 30, 2018.

Analysis: This report contains the following for review and discussion.

- ✓ Operations & Maintenance (O&M) Category Analysis
- ✓ Staffing – Budget vs. Actual
- ✓ Overtime by Major Budget Category
- ✓ Budget Amendment Report/Use of Unallocated Reserve

It should be noted that these interim reports are being prepared on an accrual basis which is currently under final review as the Financial Reporting & Accounting team is rolling out new monthly closing procedures.

Proposed Action: Receive and file report.

Great Lakes Water Authority
Fiscal Year 2018 Pre-Close Operations & Maintenance Budget to Actual Report
Through May 31, 2018

The purpose of this report is to summarize the status of the Operations & Maintenance (O&M) budget as of May 31, 2018. Twelve months of budget is in the columns with the blue heading contrasted with an 11-month equal pro-ration in the columns with a green header. It is important to note that the month of May 2018 is currently under review and has not been closed.

Great Lakes Water Authority Interim Pre-Close Budget to Actual Report - Revenue Requirement Budget Basis FY 2018 through May 31, 2018									
O&M Category	FY 2018 Original Budget	FY 2018 Amended Budget thru 5/31/2018	Percent of Total Amended Budget	Prorated FY 2018 Amended Budget (Eleven Months)	Actual (*) thru 05/31/2018 (Eleven Months)	Dollar Variance Positive/ (Negative)	Percent of Actual thru 5/31/2018	Percent Variance Positive/ (Negative)	
Personnel	\$ 101,113,100	\$ 101,041,000	30.7%	\$ 92,620,917	\$ 88,065,800	\$ 4,555,117	33.4%	95.1%	
Capital Outlay	7,353,400	7,114,700	2.2%	6,521,808	4,054,200	2,467,608	1.5%	62.2%	
Utilities	59,036,600	57,800,400	17.5%	52,983,700	44,733,300	8,250,400	17.0%	84.4%	
Chemicals	17,806,600	14,068,600	4.3%	12,896,217	11,417,600	1,478,617	4.3%	88.5%	
Supplies & Other	34,800,600	31,436,300	9.5%	28,816,608	21,387,200	7,429,408	8.1%	74.2%	
Contractual Services	127,816,900	112,743,400	34.2%	103,348,117	85,951,700	17,396,417	32.6%	83.2%	
Capital Program Allocation	(25,358,600)	(4,000,000)	-1.2%	(3,666,667)	(1,070,500)	(2,596,167)	-0.4%	29.2%	
Shared Services	(16,281,700)	(9,783,100)	-3.0%	(8,967,842)	(6,531,400)	(2,436,442)	-2.5%	72.8%	
Unallocated Reserves	6,353,900	2,220,600	0.7%	2,035,550	-	2,035,550	0.0%	0.0%	
O&M Legacy Pension Allocation	16,872,000	16,872,000	5.1%	15,466,000	15,466,000	-	5.9%	100.0%	
Total	\$ 329,512,800	\$ 329,513,900	100.0%	\$ 302,054,408	\$ 263,473,900	\$ 38,580,508	100.0%	87.2%	

(*) The close for May 2018 is under review. There are no known material adjustments; most common delays occur in contractual services and utilities.

As the table above shows, GLWA's spend is currently being estimated at 87.2% of the forecasted budget. The two largest categories of underbudget status, **Contractual Services** and **Utilities**, experience the most common delays in receiving invoices timely. These accounts are being reviewed to ensure that the accruals for unposted vendor invoices are adequate. The third largest area with a positive variance, **Supplies & Other**, may experience some lag, but to a much lesser extent. The 'Percent of Total Amended Budget' column and the 'Percent of Actual thru May 31, 2018, demonstrate that the budgeted amounts closely align with actual costs at 87.2%.

Great Lakes Water Authority
Staffing - Budget vs. Actual
As of May 31, 2018

Legend

Estimated Amount

Fiscal Year 2018

Line #	Annual Positions	Year to Date												
	Budgeted Positions (Staffing Plan)	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	
1	Employees	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	
2	Transition Services Contractors	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	
3	Total Positions	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	1,177.00	
	Budgeted FTEs (Based on Quarterly Hiring Assumptions) (Requested FTEs)													
4	Employees	1,053.00	1,053.00	1,053.00	1,053.00	1,053.00	1,053.00	1,059.50	1,059.50	1,059.50	1,065.50	1,065.50	1,065.50	
5	Transition Services Contractors	102.00	102.00	102.00	102.25	102.25	102.25	102.25	102.25	102.25	102.25	102.25	102.25	
6	Total Positions	1,155.00	1,155.00	1,155.00	1,155.25	1,155.25	1,155.25	1,161.75	1,161.75	1,161.75	1,167.75	1,167.75	1,167.75	
	Actual Employee Positions	FY2018 Year to Date												
7	Beginning Balances	873.00	870.00	896.00	899.00	909.00	920.00	924.00	924.00	947.00	961.00	957.00	968.00	873.00
8	New Hires	25.00	29.00	10.00	15.00	17.00	9.00	2.00	31.00	23.00	7.00	23.00		191.00
9	Rehires	-	1.00	-	1.00	-	-		2.00	-	1.00			5.00
10	Terminations	28.00	4.00	7.00	6.00	6.00	5.00	2.00	10.00	9.00	12.00	12.00		101.00
11	Ending Balance (1)	870.00	896.00	899.00	909.00	920.00	924.00	924.00	947.00	961.00	957.00	968.00	968.00	968.00
12	Ending Balance - Transition Service Contractors	80.00	80.00	80.00	80.00	89.00	83.00	83.00	83.00	87.00	75.00	75.00		
	Budget to Actual Variance - Vacant Positions													
13	(Row 1 minus Row 11)	205.00	179.00	176.00	166.00	155.00	151.00	151.00	128.00	114.00	118.00	107.00	107.00	
	Budget to Actual Variance - Transition Service Contractors													
14	(Row 2 minus Row 12)	22.00	22.00	22.00	22.00	13.00	19.00	19.00	19.00	15.00	27.00	27.00	102.00	
Note:	(1) Includes Active; Active-FMLA, and STD													
	Check Figure (New Hires - Terminations)	-3	25	3	9	11	4	0	21	14	-5	11		
	Difference, if any	-	-	-	-	-	-	-	-	-	-	-	-	

Great Lakes Water Authority
Staffing - Budget vs. Actual

Note; prior fiscal year (FY 2017)

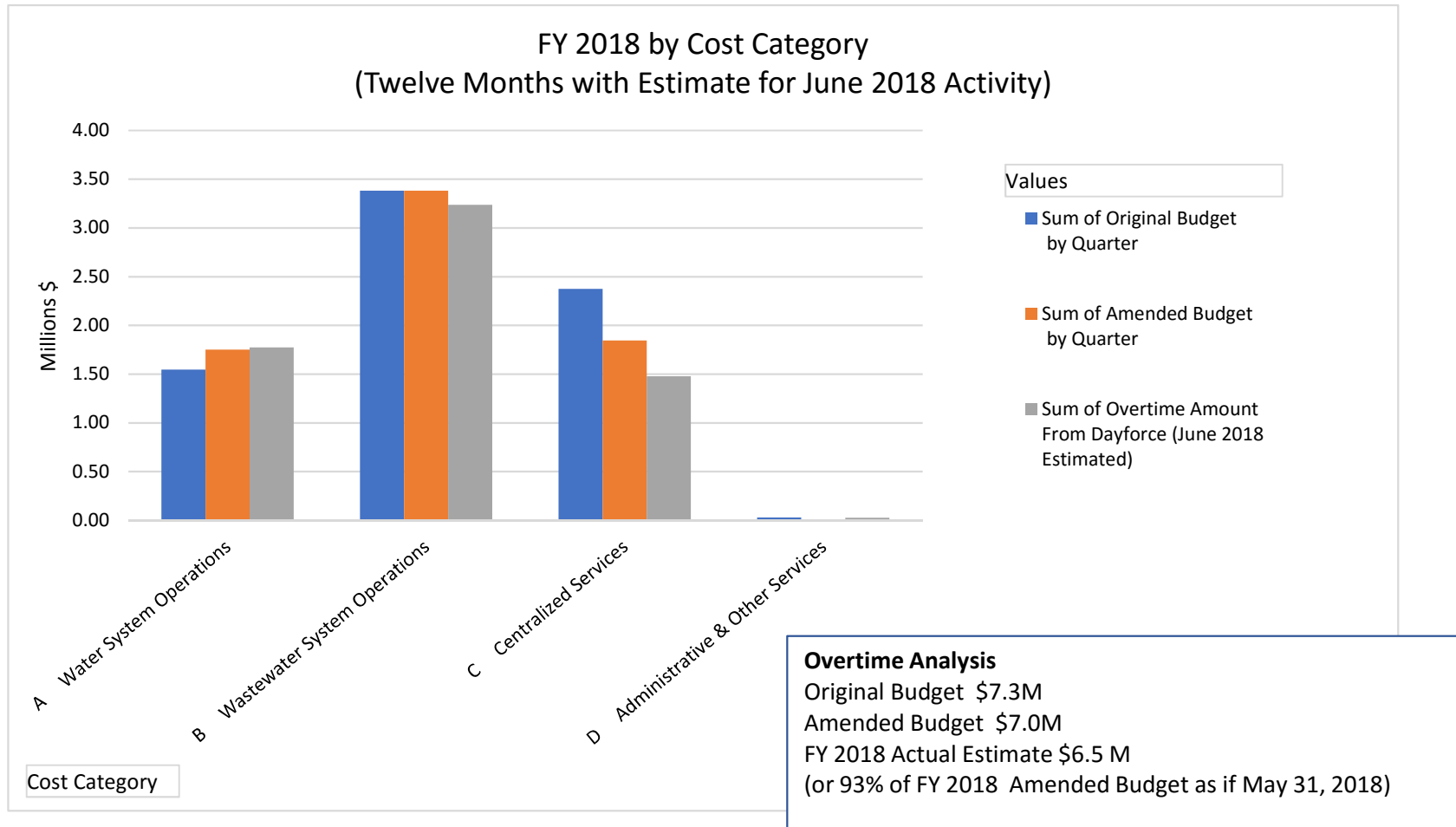
Legend

Estimated Amount

Fiscal Year 2017

Line #	Annual Positions	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	
	Budgeted "Positions" (Staffing Plan)													
1	Employees	995.00	995.00	995.00	995.00	995.00	995.00	995.00	995.00	995.00	995.00	995.00	995.00	
2	Transition Services Contractors	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00	
3	Total Positions	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	1,105.00	
	Budgeted "FTEs" (Based on Quarterly Hiring Assumptions) (Requested FTEs)													
4	Employees	840.00	840.00	840.00	875.75	875.75	875.75	891.75	891.75	891.75	994.00	994.00	994.00	
5	Transition Services	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	
6	Total Positions	942.00	942.00	942.00	977.75	977.75	977.75	993.75	993.75	993.75	1,096.00	1,096.00	1,096.00	
	Actual Employee Positions													FY2017 Year to Date
7	Beginning Balances	770.00	781.00	791.00	783.00	791.00	793.00	798.00	799.00	801.00	814.00	836.00	848.00	770.00
8	New Hires	13.00	15.00	4.00	14.00	6.00	8.00	10.00	14.00	19.00	25.00	17.00	35.00	180.00
9	Rehires	-	-	-	1.00	-	2.00	-	-	-	-	2.00	2.00	7.00
10	Terminations	2.00	5.00	12.00	7.00	4.00	5.00	9.00	12.00	6.00	3.00	7.00	12.00	84.00
11	Ending Balance (1)	781.00	791.00	783.00	791.00	793.00	798.00	799.00	801.00	814.00	836.00	848.00	873.00	873.00
12	Ending Balance - Transition Service Contractors	100.00	100.00	100.00	95.00	95.00	95.00	90.00	90.00	90.00	85.00	85.00	85.00	
	Budget to Actual Variance - Vacant Positions													
13	(Row 1 minus Row 11)	214.00	204.00	212.00	204.00	202.00	197.00	196.00	194.00	181.00	159.00	147.00	122.00	
	Budget to Actual Variance - Transition Service Contractors													
14	(Row 2 minus Row 12)	10.00	10.00	10.00	15.00	15.00	15.00	20.00	20.00	20.00	25.00	25.00	25.00	
Note:	(1) Includes Active; Active-FMLA, and STD													
	Check Figure (New Hires - Terminations)	11	10	-8	7	2	3	1	2	13	22	10	23	
	Difference, if any	-	-	-	-	-	-	-	-	-	-	-	-	

Great Lakes Water Authority
Interim Budget to Actual Report - Revenue Requirement Budget Basis
FY 2018 through May 31, 2018



Great Lakes Water Authority
Interim Budget to Actual Report - Revenue Requirement Budget Basis
FY2018 through May 31 2018

Overtime by Major Budget Category	Overtime Hours from Dayforce (1.5x and 2.0x)	Original Budget by Quarter	Amended Budget by Quarter	Overtime Amount From Dayforce (1)	Dollar Variance Positive/ (Negative)	Percent Variance Positive/ (Negative)
FY 2018 Q1	44,560	1,832,125	1,746,275	1,641,983	104,292	6%
A Water System Operations	10,941	386,250	437,500	441,519	(4,019)	-1%
B Wastewater System Operations	21,402	845,000	845,000	776,412	68,588	8%
C Centralized Services	12,047	593,700	461,350	418,377	42,973	9%
D Administrative & Other Services	171	7,175	2,425	5,676	(3,251)	-134%
FY 2018 Q2	38,159	1,832,125	1,746,275	1,422,788	323,487	19%
A Water System Operations	10,406	386,250	437,500	411,667	25,833	6%
B Wastewater System Operations	19,224	845,000	845,000	701,733	143,267	17%
C Centralized Services	8,330	593,700	461,350	302,519	158,831	34%
D Administrative & Other Services	199	7,175	2,425	6,869	(4,444)	-183%
FY 2018 Q3	42,809	1,832,125	1,746,275	1,586,374	159,901	9%
A Water System Operations	11,300	386,250	437,500	449,594	(12,094)	-3%
B Wastewater System Operations	22,503	845,000	845,000	808,917	36,083	4%
C Centralized Services	8,828	593,700	461,350	321,408	139,942	30%
D Administrative & Other Services	178	7,175	2,425	6,456	(4,031)	-166%
FY 2018 Q4	34,509	1,832,125	1,746,275	1,268,907	477,368	27%
A Water System Operations	8,465	386,250	437,500	341,029	96,471	22%
B Wastewater System Operations	18,005	845,000	845,000	631,904	213,096	25%
C Centralized Services	7,883	593,700	461,350	290,532	170,818	37%
D Administrative & Other Services	157	7,175	2,425	5,442	(3,017)	-124%
Grand Total	160,037	7,328,500	6,985,100	5,920,052	1,065,048	15%

(1) Total amount per BS&A General Ledger for the eleven months ended May 31 2018 is \$5,660,670. Difference is due to coding change during 2017.

**Great Lakes Water Authority
Budget Amendment Report
Through June 30, 2018**

The purpose of this report is to present the Operations & Maintenance (O&M) budget amendments that have been processed for FY 2018 from January 1, 2018, through June 30, 2018. This report contains two parts: **Part 1** - Budget Amendments Processed for FY 2018 from January 1, 2018, through June 30, 2018 and **Part 2** - Analysis of Unallocated Reserves from January 1, 2018, through June 30, 2018.

Part 1 - Budget Amendments Processed for FY 2018 from January 1, 2018, through June 30, 2018

The following is an overview of the O&M budget amendments that have been processed for the 3rd and 4th Quarters of FY 2018.

- ✓ Many of the budget amendments recorded during the 3rd and 4th quarters have been reclassifications within a cost center or operating area to improve assignment of costs.
- ✓ A budget amendment (No. 8580) for \$360,000 was recorded to move budget to cover GLWA-CS-154 titled Investment Grade Energy Audit. This study, covered in the Energy, Research & Innovation group's budget, was created in FY 2018 to analyze GLWA's energy usage. The outcome of this study may lead to the development of capital projects for long term energy savings.
- ✓ A budget Amendment (No. 9229) for \$5,391,640 was recorded to move budget to cover PC-798A Change Order No. 1. This is the facilities maintenance requirement contract for Lakeshore Global Corporation which was approved at the Board of Directors Workshop on September 13, 2017. PC-798A is a skilled trades contract that is to augment GLWA staff and has assisted in successfully maintaining compliance with state and federal regulations, as well as GLWA's Administrative Consent Order (ACO) with the State of Michigan. The services also provide the necessary support for urgent and emergency projects requiring immediate attention or resources beyond the staff's ability.
- ✓ A budget amendment (No. 8582) for \$1,084,400 was recorded to move budget to cover GLWA-CON-219. This contract, approved by the GLWA Board on 1/24/2018, is for the removal and disposal of debris, cleaning and flowmeter services in the influent conduit at the Baby Creek Combined Sewer Overflow (CSO) facility.
- ✓ A budget amendment (No. 9104) for \$1,050,000 for DTE Electric Company was recorded to move budget for the rental of the generators that were needed while the second electrical feed was being repaired at the Water Resource Recovery Facility.
- ✓ A budget amendment (No. 9838) for \$373,000 was entered to move budget to cover Sigma CS-1481, Task 27. This document retention project is for the scanning of the as-built drawings for GLWA.

Part 2 - Analysis of Unallocated Reserves from January 1, 2018, through June 30, 2018

The table below identifies four categories of unallocated reserves by the four primary budget areas. This table includes the FY 2018 approved budget amounts as well as the net effect of the budget amendments as described below.

GL String	Description	FY 2018 Adopted Budget	Amendments Through 12.31.2017	QTR 3 Amendments Through 3.31.2018	QTR 4 Amendments Through 6.30.2018	Total Budget Increase/(Decrease) Through 6.30.2018	FY 2018 Amended Budget
5910-887601.000-832000-WS7310	Unallocated Reserve - Water System Operations	2,036,500	-	360,000	(2,055,800)	(1,695,800)	340,700
5910-887602.000-832000-WS7900	Unallocated Reserve - Centralized Services	1,897,400	(674,600)	(737,400)	232,700	(1,179,300)	718,100
5910-887603.000-832000-WS7900	Unallocated Reserve - Administrative Services	2,000,000	-	(1,310,000)	(689,700)	(1,999,700)	300
5960-897600.000-832000-SD8050	Unallocated Reserve - Wastewater System Operations	420,000	2,411,000	(360,000)	(1,309,500)	741,500	1,161,500
	Total Unallocated Reserve	\$ 6,353,900	\$ 1,736,400	\$ (2,047,400)	\$ (3,822,300)	\$ (4,133,300)	\$ 2,220,600

Third Quarter Budget Amendments

Unallocated Reserve – Water System Operations & Wastewater System Operations

There is one budget amendment (No. 8563) that equals **the \$360,000** shown in the table above for both the Water System and Wastewater System Operations.

- Budget was moved from Systems Control (a cost center within Water System Operations) to the **repairs & maintenance accounts of several Pumping Stations** (cost centers within Sewer System Operations). This reclass was **made to align the budget to the cost centers where the costs are being incurred**. Since two different funds (Water & Sewage Disposal) were being impacted by this reclass, the Unallocated Reserve accounts were used to balance the two funds. This resulted in an increase of \$360,000 to the Unallocated Reserve – Water System Operations and a decrease of (\$360,000) to the Unallocated Reserve – Wastewater System Operations.

Unallocated Reserve – Centralized Services

There are two items that equal the **(\$737,400)** shown in the table above.

- (\$620,400) – Budget amendment (No. 8716) was recorded to transfer costs to the newly formed Hazmat group. Prior to the formation of this new group, Hazmat services had been provided through a contract with the Detroit Fire Department. **Beginning on March 1, 2018, the GLWA Hazmat group was launched.** The budget required to make this new group operational was credited from the Unallocated Reserve.
- (\$117,000) – Budget amendment (No. 9182) was recorded to cover the budget needed for **the purchase of Bonfire** (a software as a service, or SaaS, solution) for the Procurement group. Bonfire spans the “end-to-end” procurement cycle from soliciting suppliers, receiving bids and proposals, evaluation & scoring, documenting awardee

decision, and managing the contract. This product was not included in the FY 2018 budget and resulted in an entry to reduce (credit) the Unallocated Reserve.

Unallocated Reserve – Administrative Services

There are three items that equal the **(\$1,310,000)** shown in the table above.

- (\$1,000,000) – A review of the current and projected activity posted in the **Enterprise Risk Management Insurance Fund** cost center (883411) was conducted in February 2018. The results of this review showed that an additional budget of \$1,700,000 would be required to cover the actual cost through the end of FY 2018. Examples of the types of coverage included in this cost center are **property & casualty insurance, brokerage services, and public officials & employment practices liability insurance**. Budget amendment (No. 9212) was recorded in the 3rd quarter to transfer \$1,000,000 from Unallocated Reserve. An additional analysis is currently being conducted to review activity through May 2018
- (\$215,000) – Budget amendment (No. 9575) was recorded to add budget to both the **Financial Planning & Analysis (884113) and Public Finance (884141) cost centers** for The Foster Group, contract GLWA-CS-195. **The contract amount was not known at the time the FY 2018 budget was adopted.** The difference between the amount budgeted and the actual contract amount was transferred from the Unallocated Reserve.
- (\$95,000) – An increase to the Contractual Professional Services budget for the Financial Reporting & Accounting group (884111) was needed to cover the **additional services required to manage the multiple projects** that are being initiated by this group. As multiple new processes are being developed in this group additional staff is needed, on a temporary basis, to assist with the management and documentation of these processes. This additional assistance provides the GLWA staff with the ability to assist with the development of the processes while being able to manage their day-to-day workload. The additional budget needed was transferred from the Unallocated Reserve (Budget Amendment No. 9595).

Fourth Quarter Budget Amendments

A review of several key areas of the O&M budget was undertaken during the third and fourth quarters of FY 2018. This resulted in amendments being processed in the fourth quarter. The three key areas were Personnel, Capital Program Allocation, and Shared Services.

Personnel – A comparison of the actual Salaries & Wages, as well as the Employee Benefits, to the amounts budgeted showed that an increase to the budget of these areas would be needed. The increase is due to the following.

- Increases in the **Salaries & Wages** and Benefits of existing GLWA staff during FY 2018 for various reasons (**market adjustments, merit raises, promotions, etc.**)

- Increase in **Employee Benefits due to the increase in premiums** charged for Calendar Year 2018. The amount of this increase was not known at the time the FY 2018 budget was prepared.

Based on the results of the review of the Salaries & Wages and Employee Benefits, several budget amendments were prepared to move budget from the Unallocated Reserves to the appropriate cost centers.

GL String	Description	Total Budget Increase/(Decrease) Personnel Review
5910-887601.000-832000-WS7310	Unallocated Reserve - Water System Operations	(410,500)
5910-887602.000-832000-WS7900	Unallocated Reserve - Centralized Services	(481,400)
5910-887603.000-832000-WS7900	Unallocated Reserve - Administrative Services	(273,600)
5960-897600.000-832000-SD8050	Unallocated Reserve - Wastewater System Operations	(750,300)
	Total Change to Unallocated Reserves	\$ (1,915,800)

Capital Program Allocation (contra accounts) – The FY 2018 budget was prepared based on a prior methodology for recording time allocated to capital projects. A more conservative approach is now being taken to focus on those individuals who are working directly on the capital projects rather than those who are working indirectly. In addition, there are processes being implemented to improve the tracking and reporting of the GLWA staff members' direct hours. Both scenarios have resulted in a decrease to the budget for the Capital Program Allocation contra accounts.

The following table shows the impact of the adjustment to the Capital Program Allocation budget on the Unallocated Reserve accounts.

GL String	Description	Total Budget Increase/(Decrease) Capital Program Allocation
5910-887601.000-832000-WS7310	Unallocated Reserve - Water System Operations	(3,164,000)
5910-887602.000-832000-WS7900	Unallocated Reserve - Centralized Services	(12,531,100)
5910-887603.000-832000-WS7900	Unallocated Reserve - Administrative Services	(105,600)
5960-897600.000-832000-SD8050	Unallocated Reserve - Wastewater System Operations	(143,200)
	Total Change to Unallocated Reserves	\$ (15,943,900)

Shared Services – The shared services budget was prepared based on the agreements as they were interpreted, before actual invoices were issued and the true-ups (actual costs incurred as compared to the estimates billed) analyzed. The billing trends for FY 2016 and FY 2017 were reviewed to improve the projection for FY 2018. This review has resulted in an overall decrease to the budget for Shared Services which are primarily contra accounts.

The following table shows the impact of the adjustment to the Shared Services budget on the Unallocated Reserve accounts.

GL String	Description	Total Budget Increase/(Decrease) Shared Services
5910-887601.000-832000-WS7310	Unallocated Reserve - Water System Operations	(235,600)
5910-887602.000-832000-WS7900	Unallocated Reserve - Centralized Services	(2,928,700)
5910-887603.000-832000-WS7900	Unallocated Reserve - Administrative Services	(1,732,600)
5960-897600.000-832000-SD8050	Unallocated Reserve - Wastewater System Operations	-
	Total Change to Unallocated Reserves	\$ (4,896,900)

In addition to the key areas mentioned above, a variety of other categories of expenses were reviewed. Some of the larger categories reviewed included **chemicals, utilities, and contractual services**. Budgets were moved either from or to the Unallocated Reserve accounts as deemed necessary. The impact of these budget amendments on the Unallocated Reserve accounts are as follows – **noting that it was an overall increase in reserve.**

GL String	Description	Total Budget Increase/(Decrease)
5910-887601.000-832000-WS7310	Unallocated Reserve - Water System Operations	3,554,300
5910-887602.000-832000-WS7900	Unallocated Reserve - Centralized Services	16,173,800
5910-887603.000-832000-WS7900	Unallocated Reserve - Administrative Services	1,422,200
5960-897600.000-832000-SD8050	Unallocated Reserve - Wastewater System Operations	6,785,000
	Total Change to Unallocated Reserves	\$ 27,935,300

Two additional budget amendments were processed during the fourth quarter; one impacting the Water System Operations Unallocated Reserves and one the Wastewater System Operations Unallocated Reserves.

Unallocated Reserve – Water System Operations

Budget amendment No. 9968 for **\$1,800,000** was processed to cover the O&M expenses incurred for sludge removal services to **preserve water quality and meet MDEQ requirements for the NPDES permit for wastewater operations**. This is a temporary scenario until further equipment enhancements are in place which is currently under consideration. This service is for the **Southwest Water Treatment Plant**.

Unallocated Reserve – Wastewater System Operations

A budget amendment (No. 9982) was processed to correct a previously posted budget amendment – **no financial impact, but it does create presentation challenges**. This amendment reclassified \$7,201,000 from the O&M Unallocated Reserves to the Improvement & Extension fund. This reclass will bring the O&M budget back in line with the Original Board Adopted Budget of \$329,512,800. **This scenario was caused by a clerical error at the time of budget load which could not be corrected by the system or their support center.**



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Kathy Smith-Roy, Susan Kopinski, Special Projects Manager

Re: Proposed Procurement Policy Amendment for Compliance with the Code of Federal Regulations (CFR)

Background: GLWA receives federal funds passed through State Revolving Fund Loans, which requires compliance with the related Federal Regulations 2 CFR Part 200 and new citations in the new “*Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Grants*”. In addition to the information below, attached is the AICPA April 2018 summary compliance requirements.

Implementation is required by fiscal year end June 30, 2018.

Synopsis of Changes for Operating Federal programs as subrecipients of the State:

The major revision to the procurement requirements are the following five (5) methods of procurement with dollar thresholds associated to each method of procurement. Section 200.320 found below describes the five methods of procurements:

- 1) Micro-purchase (less than to \$3,500),
- 2) Small purchase (less than \$150,000),
- 3) Sealed bids purchases (more than \$150,000),
- 4) Competitive proposal purchases (more than \$150,000), and
- 5) Noncompetitive purchases (special circumstances which are applicable for all purchase levels).

All five procurement types must comply with the Procurement Standards in section 200.318, also found below, which can be summarized generally as follows:

- the purchase complies with the organization’s documented procedures in place,
- purchases are necessary,
- open competition (to the extent required by each method),
- a conflict of interest policy, and
- proper documentation for the purchases.

In section 200.88 simplified acquisitions threshold is used to describe small purchases and micro-purchases (200.67). Simplified acquisition threshold means the dollar amount below which an organization may purchase property or services using small purchase methods (less than \$150,000). Since micro-purchases are less than to \$3,000, micro-purchases can also use the simplified acquisition threshold. All purchases under the simplified acquisition threshold (including micro-purchases) require:

- fewer terms and conditions,
- have a lesser competition standard than purchases over the simplified acquisition threshold,
- can be solicited informally,
- and do not require a cost or price analysis.

For example, purchases of supplies or services under \$3,000 are treated as micro-purchases. If the organization entity considers the costs to be reasonable, the purchase orders may be awarded without soliciting any competitive quotations. No rate competitive quotations are necessary for the purchase. A cost or price analysis is also not required. The organization must, to the extent practicable, distribute these purchases equitable among qualified suppliers.

All purchases between \$3,000 and \$150,000 the small purchase procedures can used and is stated in section 200.320 (b) which describes the procedures as relatively simple and informal.

- It states that “price or rate quotations must be obtained from an adequate number of qualified sources.”
- It leaves the discretion of the organization’s written policy to determine the “adequate” number of qualified sources (i.e., any number greater than one) and the methods of methods of obtaining the price or rate quotations (e.g., it can be in writing, orally, vendor price list on website, or generated via online search engine).
- Section 200.323 also excludes the small purchases from any requirements for cost or price analysis.
 - For example, a purchase order for supplies in the amount \$10,000 can treated a small purchase order.
 - This purchase order requires a rate quote from at least two sources, which can be obtained in writing from two suppliers or research done on a public website. A cost or price analysis is not required.
 - In addition, if the supplies are of special quality that is offered by only one company or only one company can deliver in the time frame required for the project, the purchase order can be made under the sole source purchase provision in section 200.320 (f).

For purchases greater than the simplified acquisition threshold of \$150,000, either sealed bids or competitive proposals purchases apply. The sealed bid method is the preferred

method for procuring construction and is not a typical procurement method for local centers. Sealed bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, and is the lowest in price. For detail information please review the information below in section 200.320 Methods of procurement to be followed.

Competitive proposals are used to solicit multiple offers and can be awarded either a fixed price or cost-reimbursement type contract. Competitive proposals are for bids over \$500,000 and is generally used when conditions are not appropriate for the use of sealed bids. Requests for proposals (RFPs) are typical used for competitive proposals. For competitive proposals where qualification of the vendor is more important than the price of the service a request for qualification (RFQ) maybe more appropriate. For detail information please review the information below in section 200.320 Methods of procurement to be followed.

The final method of procurement is the sole source method. This procurement method is noncompetitive and should only be used for the following types of procurement:

- Unique type of service or product that can only be provided by a specific vendor,
- Public emergency where the service and product must be performed or produced without delayed.
- Upon the written request by the organization, the federal awarding agency or pass-through entity expressly authorized sole sourcing, or
- After solicitation of a number of sources, competition is determined to be inadequate.

Finally, to promote cost-effective and efficient procurement, organizations are encouraged to use shared services by entering into state/local intergovernmental agreements, or inter-entity agreements. This method is appropriate for common procurement or shared goods and services.

Analysis: The changes to the procurement policy and related procedures relating to Federal programs are significant and implementation is required by June 30, 2018 is required for compliance. A markup copy of the proposed implementation of this requirement are shown on the attached pages.

Proposed Action: Audit Committee recommends that the proposed revision to the GLWA Procurement Policy be forwarded to the GLWA Board of Directors for consideration and potential action at its next meeting in June 2018.



EXCERPT FROM PROCUREMENT POLICY

Section 9 – Contract/Purchase Order Compliance

9.1 Contract Performance

A contractor shall supply goods and services conforming to the specifications of the solicitation and award. Failure to perform within the specification and stated time of the contract or purchase order may result in contract or purchase order termination.

9.2 Federal Uniform Guidance Procurement Standards

All projects funded in full, or in part, by federal funds, are subject to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Federal Procurement Standards CFR 200.318 – 200.326 or as may be amended). The Chief Procurement Officer shall establish procedures to incorporate the required federal provisions for federally funded projects, regardless of the amount of funding.

9.29.3 Vendor Suspension and Debarment

It is the policy of GLWA to solicit offers from, award contracts and purchase orders to and consent to subcontracts with responsible vendors only. Suspensions or debarments may be imposed at the discretion of the GLWA for purposes related to the good of the public interest, including maintaining the integrity of the bidding, contracting and procurement processes and protecting public trust and confidence in GLWA's operations. Suspensions and debarments will not be imposed as punitive measures. GLWA may suspend or debar a vendor based on a finding that the vendor is not a responsible vendor and shall report said finding to the Legal Committee. Causes which may result in a finding that a vendor is not a responsible vendor include, but are not limited to, any of the following:

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Election to Delay Implementation of Procurement Standards

On May 17, 2017, the [Management and Budget Office](#) issued a [Rule](#) updating the final guidance that appeared in the Federal Register on December 26, 2013. Guidance on the effective/applicability date was revised to allow for a grace period of one additional fiscal year for non-Federal entities to implement changes to their procurement policies and procedures in accordance with guidance on procurement standards (2 CFR 200.317 through 200.326). This means the grace period for non-Federal entities extends through December 25, 2017, and the implementation date for the procurement standards will start for fiscal years beginning on or after December 26, 2017.

Entity Name: _____

Procurement Standards Election:

☐ Management has elected to delay implementation of the procurement standards (2 CFR 200.317 through 200.326) for an additional fiscal period.

Effective Date: _____

For example: if the grantee's fiscal year end is June 30, 2017, the election should be made as of July 1, 2016

I attest that I am authorized to make this election on behalf of the entity:

Signature: _____

Job Title: _____

Please retain a copy of this election for the entity's records and provide to the entity's auditors no later than the first day of the next audit. This election should also be provided to federal/pass-through grantor monitors to support the delayed implementation of the procurement standards.

PART 3.2 - I – COMPLIANCE REQUIREMENTS

Note: For all other types of compliance requirements, the auditor must use Part 3 of the 2017 Compliance Supplement.

I. PROCUREMENT AND SUSPENSION AND DEBARMENT

Compliance Requirements - Procurement

Procurement—Grants and Cooperative Agreements

States

When procuring property and services, States must use the same policies and procedures they use for procurements from their non-Federal funds (2 CFR section 200.317).

Non-Federal Entities Other than States

Non-Federal entities other than States, including those operating Federal programs as subrecipients of States, must follow the procurement standards set out at 2 CFR sections 200.318 through 200.326. They must use their own documented procurement procedures, which reflect applicable State and local laws and regulations, provided that the procurements conform to applicable Federal statutes and the procurement requirements identified in 2 CFR part 200. A non-Federal entity must:

1. Meet the general procurement standards in 2 CFR section 200.318, which include oversight of contractors' performance, maintaining written standards of conduct for employees involved in contracting, awarding contracts only to responsible contractors, and maintaining records to document history of procurements.
2. Conduct all procurement transactions in a manner providing full and open competition, in accordance with 2 CFR section 200.319.
3. Use the micro-purchase and small purchase methods only for procurements that meet the applicable criteria under 2 CFR sections 200.320(a) and (b). Under the micro-purchase method, the aggregate dollar amount does not exceed \$3,500 (\$2,000 in the case of acquisition for construction subject to the Wage Rate Requirements (Davis-Bacon Act)). Small purchase procedures are used for purchases that exceed the micro-purchase amount but do not exceed the simplified acquisition threshold. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable (2 CFR section 200.320(a)). If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources (2 CFR section 200.320(b)). Note exceptions described in subsequent sections for the provisions under the 2017 and 2018 National Defense Authorization Act.
4. For acquisitions exceeding the simplified acquisition threshold, the non-Federal entity must use one of the following procurement methods: the sealed bid method if the acquisition meets the criteria in 2 CFR section 200.320(c); the competitive proposals

method under the conditions specified in 2 CFR section 200.320(d); or the noncompetitive proposals method (i.e., solicit a proposal from only one source) but only when one or more of four circumstances are met, in accordance with 2 CFR section 200.320(f).

5. Perform a cost or price analysis in connection with every procurement action in excess of the simplified acquisition threshold, including contract modifications (2 CFR section 200.323(a)). The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used (2 CFR section 200.323(d)).
6. Ensure that every purchase order or other contract includes applicable provisions required by 2 CFR section 200.326. These provisions are described in Appendix II to 2 CFR part 200, “Contract Provisions for Non-Federal Entity Contracts Under Federal Awards.”

Procurement—Cost-Reimbursement Contracts under the Federal Acquisition Regulation

When awarding subcontracts, non-Federal entities receiving cost-reimbursement contracts under the FAR must comply with the clauses at 48 CFR section 52.244-2 (consent to subcontract), 52.244-5 (competition), 52.203-13 (code of business ethics), 52.203-16 (conflicts of interest), and 52.215.12 (cost or pricing data); and the terms and conditions of the contract. The FAR defines “subcontracts” as a contract, i.e., a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

Source of Governing Requirements – Procurement

The requirements that apply to procurement under grants and cooperative agreements are contained in 2 CFR sections 200.317 through 200.326, program legislation, Federal awarding agency regulations, and the terms and conditions of the award. The requirements that apply to procurement under cost-reimbursement contracts under the FAR are contained in 48 CFR parts 03, 15, 44 and the clauses at 48 CFR sections 52.244-2, 52.244-5, 52.203-13, 52.203-16, and 52.215-12; agency FAR Supplements; and the terms and conditions of the contract.

Compliance Requirements – Suspension and Debarment

Non-Federal entities are prohibited from contracting with or making subawards under covered transactions to parties that are suspended or debarred. “Covered transactions” include contracts for goods and services awarded under a non-procurement transaction (e.g., grant or cooperative agreement) that are expected to equal or exceed \$25,000 or meet certain other criteria as specified in 2 CFR section 180.220. All non-procurement transactions entered into by a pass-through entity (i.e., subawards to subrecipients), irrespective of award amount, are considered covered transactions, unless they are exempt as provided in 2 CFR section 180.215.

When a non-Federal entity enters into a covered transaction with an entity at a lower tier, the non-Federal entity must verify that the entity, as defined in 2 CFR section 180.995 and agency adopting regulations, is not suspended or debarred or otherwise excluded from participating in

the transaction. This verification may be accomplished by (1) checking the *Excluded Parties List System (EPLS)* maintained by the General Services Administration (GSA) and available at <https://www.sam.gov/portal/public/SAM/>, (2) collecting a certification from the entity, or (3) adding a clause or condition to the covered transaction with that entity (2 CFR section 180.300).

Non-Federal entities receiving contracts from the Federal Government are required to comply with the contract clause at FAR 52.209-6 before entering into a subcontract that will exceed \$30,000, other than a subcontract for a commercially available off-the-shelf item.

Source of Governing Requirements – Suspension and Debarment

The requirements for nonprocurement suspension and debarment are contained in OMB guidance in 2 CFR part 180, which implements Executive Orders 12549 and 12689, “Debarment and Suspension;” Federal awarding agency regulations in Title 2 of the CFR adopting/implementing the OMB guidance in 2 CFR part 180; program legislation; and the terms and conditions of the award.

Most of the Federal agencies have adopted or implemented 2 CFR part 180, generally by relocating their associated agency rules in Title 2 of the CFR. Appendix II to the Supplement includes the current CFR citations for all agencies adoption or implementation of the nonprocurement suspension and debarment guidance.

Government-wide requirements related to suspension and debarment and doing business with suspended or debarred subcontractors under cost reimbursement contracts under the FAR are contained in 48 CFR section 9.405-2(b) and the clause at 48 CFR section 52.209-6.

National Defense Authorization Act (NDAA) of 2017 and 2018

The following information is provided regarding timing and impact of the NDAA of 2017 and 2018. Additional guidance to the auditor is provided in Appendix VII -A – “Other Audit Advisories – Hurricane and NDAA Addendum” of the 2018 Supplement.

NDAA of 2017

The NDAA of 2017, Section 217 (Pub. L. No. 114-328, 130 Stat. 6 (2017)) and 41 USC 1902(a)(2) contained the following provisions.

- Raise the micro-purchase threshold to \$10,000 for procurements under grants and cooperative agreements to institutions of higher education, or related or affiliated nonprofit entities, nonprofit research organizations or independent research institutes..
- Allow a threshold higher than \$10,000 as determined appropriate by the head of the relevant executive agency.

The provisions of this Act are specific to, institutions of higher education, or related or affiliated nonprofit entities, nonprofit research organizations or independent research institutes. As of the

date of this 2018 Supplement, OMB has not issued guidance to clarify the applicability date which would allow the specified entities to raise their micro-purchase threshold up to \$10,000. Once the applicability date is determined, the non-Federal entity must document this decision in its internal procurement policies. Institutions of higher education, or related or affiliated nonprofit entities, nonprofit research organizations or independent research institutes, which had established micro-purchase thresholds up to the \$10,000 prior to the enactment of the NDAA 2017, are allowed to continue the use of the same threshold as documented in their internal procurement policies.

Note that the exception for the \$10,000 micro-purchase threshold is not available to ALL auditees; however when implemented by an eligible auditee, the exception would apply to procurements purchased under ALL federal grants.

Institutions of higher education, or related or affiliated nonprofit entities, nonprofit research organizations or independent research institutes may request micro-purchase threshold higher than \$10,000, but it requires a formal approval from an appropriate executive agency. Once approved, the non-Federal entity must document this decision in its internal procurement policies.

NDAA of 2018

The NDAA of 2018, Sections 805 (41 USC 134) and 806 (41 USC. 1902 (a) (1)), increased the simplified acquisition threshold to \$250,000 and the micro-purchase threshold to \$10,000, respectively for ALL auditees for ALL Federal grants. These changes effectively redefine the level for the simplified acquisition threshold (section 200.88 of the Uniform Guidance) and the micro-purchase threshold (section 200.67 of the Uniform Guidance). These changes will become effective when they are formally codified in the Federal Acquisition Regulations at 48 CFR Subpart 2.1 (Definitions). Early implementation is not permissible.

Note exception for institutions of higher education, or related or affiliated nonprofit entities, nonprofit research organizations or independent research institutes provided under 2017 NDAA (and described in previous section).

Once codified, the higher thresholds will be available to all non-Federal entities except States. The non-Federal entity must document this decision in its internal procurement policies.

Availability of Other Information

2 CFR section 200.110(a), Effective/Applicability Date was amended on May 17, 2017 to allow non-Federal entities to continue to comply with the procurement standards in OMB Circular A-110 or the A-102 common rule, as applicable, through December 25, 2017, extending the grace period from 2 years to 3 years. Implementation of the procurement standards in 2 CFR sections 200.317 through 200.326 is now required for auditee fiscal years beginning on or after December 26, 2017. For example, for a non-Federal entity with a June 30th year end, implementation is required for its fiscal year beginning July 1, 2018.

If a non-Federal entity chooses to use the previous procurement standards for the additional three fiscal years before adopting the procurement standards in 2 CFR part 200, the non-Federal entity must document this decision in its internal procurement policies.

Auditors will review procurement policies and procedures based on the documented standard. Once the grace period ends, all non-Federal entities will be required to comply fully with the procurement standards in the uniform guidance.

Audit Objectives

1. Obtain an understanding of internal control, assess risk, and test internal control as required by 2 CFR section 200.514(c).
2. Determine whether procurements under Federal awards were made in compliance with applicable Federal regulations and other procurement requirements specific to an award or subaward.
3. For covered transactions determine whether the non-Federal entity verified that entities are not suspended, debarred, or otherwise excluded.

Suggested Audit Procedures – Internal Control

1. Perform procedures to obtain an understanding of internal control sufficient to plan the audit to support a low assessed level of control risk for the program.
2. Plan the testing of internal control to support a low assessed level of control risk for procurement and suspension and debarment requirements and perform the testing of internal control as planned. If internal control over some or all of the compliance requirements is likely to be ineffective, see the alternative procedures in 2 CFR section 200.514(c)(4), including assessing the control risk at the maximum and considering whether additional compliance tests are required because of ineffective internal control.
3. Consider the results of the testing of internal control in assessing the remaining risk of noncompliance. Use this as the basis for determining the nature, timing, and extent (e.g., number of transactions to be selected) of substantive tests of compliance.

Suggested Audit Procedures – Compliance

(Procedure 1 applies only to States under grants and cooperative agreements.)

1. Test a sample of procurements to ascertain if the State's laws and procedures were followed and that the policies and procedures used were the same as for non-Federal funds (2 CFR section 200.317).

(Procedures 2 – 5 apply to non-Federal entities other than States.)

2. Obtain the entity's procurement policies and verify that the policies comply with the compliance requirements highlighted above.
3. Verify that the entity has written standards of conduct that cover conflicts of interest and govern the performance of its employees engaged in the selection, award, and administration of contracts (2 CFR section 200.318(c) and 48 CFR sections 52.203-13 and 52.303-16).
4. Ascertain if the entity has a policy to use statutorily or administratively imposed in-State or local geographical preferences in the evaluation of bids or proposals. If yes, verify that these limitations were not applied to federally funded procurements except where applicable Federal statutes expressly mandate or encourage geographic preference (2 CFR section 200.319(b)).
5. Select a sample of procurements and perform the following procedures:
 - a. Examine contract files and verify that they document the history of the procurement, including the rationale for the method of procurement, selection of contract type, basis for contractor selection, and the basis for the contract price (2 CFR section 200.318(i) and 48 CFR part 44 and section 52.244-2).
 - b. For grants and cooperative agreements, verify that the procurement method used was appropriate based on the dollar amount and conditions specified in 2 CFR section 200.320. Current micro-purchase and simplified acquisition thresholds can be found in the FAR (48 CFR subpart 2.1, "Definitions") (<https://www.acquisition.gov/sites/default/files/current/far/html/Subpart%202.1.html>).
 - c. Verify that procurements provide full and open competition (2 CFR section 200.319 and 48 CFR section 52.244-5).
 - d. Examine documentation in support of the rationale to limit competition in those cases where competition was limited and ascertain if the limitation was justified (2 CFR sections 200.319 and 200.320(f) and 48 CFR section 52.244-5).
 - e. Ascertain if cost or price analysis was performed in connection with all procurement actions exceeding the simplified acquisition threshold, including contract modifications, and that this analysis supported the procurement action (2 CFR section 200.323 and 48 CFR section 15.404-3).

Note: A cost or price analysis is required for each procurement action, including each contract modification, when the total amount of the contract and related modifications is greater than the simplified acquisition threshold.)

- f. Verify consent to subcontract was obtained when required by the terms and conditions of a cost reimbursement contract under the FAR (48 CFR section 52.244-2).

Note: If the non-Federal entity has an approved purchasing system, consent to subcontract may not be required unless specifically identified by contract terms or conditions. The auditor should verify that the approval of the purchasing system is effective for the audit period being reviewed.

- g. Refer to Appendix VII-A for guidance on reporting audit test results for the National Defense Authorization Acts of 2017 and 2018.

(Procedures 6 and 7 apply to all non-Federal entities)

- 6. Review the non-Federal entity's procedures for verifying that an entity with which it plans to enter into a covered transaction is not debarred, suspended, or otherwise excluded (2 CFR sections 200.212 and 200.318(h); 2 CFR section 180.300; 48 CFR section 52.209-6).
- 7. Select a sample of procurements and subawards and test whether the non-Federal entity followed its procedures before entering into a covered transaction.



Financial Services Audit Committee Communication

Date: June 15, 2018

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Status Update - 2018 Contract Alignment Process and Wholesale Water Contract Reopeners Status

Background: The Great Lakes Water Authority (GLWA) model water contract currently provides for designated reopener dates in year 2, year 5 and every 5 years afterwards, until the end of the 30-year term of the contract. In the fall of 2017 the GLWA contract negotiation team met with 33 member communities which are served under the model contract for regularly scheduled reopeners, including one out-of-sequence reopener (Commerce Township) to renegotiate contract values. The next regularly scheduled reopener for most of these member communities is scheduled for 2022. The GLWA contract negotiation team will be meeting with 55 member communities throughout 2018 to reopen their model contracts as part of the Contract Alignment Process (CAP) for those that did not reopen their contracts in 2017. In addition to the CAP reopeners, GLWA will also be meeting with 4 additional communities on old forms of contract (Dearborn, Gibraltar, Grosse Ile and Trenton) to discuss getting them on model contracts.

What is the CAP?

As part of the 2017 customer outreach meetings, member communities asked GLWA to implement strategies to achieve goals of water charge stability and equity. As part of this strategy, members asked for alignment of the model contract reopener to a common schedule to minimize the annual charge volatility created by changing contract demands which come as a result of the contract amendments.

The CAP involves all model contract customers that did not have a scheduled reopener in 2017 and requests that those member communities reopen their model contracts in 2018 ("2018 reopeners") regardless of their current reopener schedule. As part of the 2018 reopener meetings, the contract reopener schedule within each customer contract is amended to change the next regularly scheduled reopener date to 2022 and every 4 years thereafter.

The CAP concept was presented by GLWA at the October 10th and October 26th Water Charges Workgroup meetings and was approved by the member communities at the December 20, 2017 One Water Partnership meeting.

CAP Process

To maximize the efficiency of meeting with 59 communities, the GLWA contract negotiation team grouped the member communities largely by county with a focus on establishing a convenient regional location at which to host the meetings. The month for their meetings were randomly chosen at the December 20, 2017 One Water Partnership meeting. On average, 7 meetings per month have been (or will be) scheduled and will be conducted on 3 pre-announced days within each month.

With the goal of having effective and efficient meetings with all member communities this year, the GLWA negotiation team sends the following packet of information to each member community 30 days prior to scheduled meeting:

- ✓ Latest Exhibit A Drawings
- ✓ Proposed contract amendment
- ✓ Data sheets containing Volume, Max Day and Peak Hour information

Using 2015-2017 data (same data set used for 2017 reopeners)

Request that outlier points be investigated for cause prior to the meeting

By the close of each member community meeting, a time schedule is agreed to by the parties to have the contract amended within the designated time period, based on the governing body's meeting schedule. The time schedule includes:

- ✓ Member must provide GLWA with its proposed Volume for planning purposes, Max Day and Peak Hour values within 30 days after the meeting
- ✓ When the parties have reached mutual agreement on the contract values, GLWA will provide within seven days the contract amendment
- ✓ After receipt of the amendment, Member will have 45 calendar days for its governing body to approve.

CAP Meeting Schedule

Below is the current meeting schedule for the 2018 CAP. Those with check marks indicate that meetings with these member communities have already been held. To date, the GLWA contract negotiation team has met with 25 member communities as part of the CAP. Based on the proposed schedule, the final meetings will be held on October 22, 2017 and all contract amendments must be approved by the member community's governing body by January 11, 2018 to meet the FY 2020 water charges rollout schedule.

March Meetings - 7	April Meetings - 7	May Meetings - 7
✓Ecorse	✓Garden City	✓Burtchville
✓Lincoln Park	✓Inkster	✓Chesterfield Twp.
✓Melvindale	✓Plymouth Twp.	✓Clinton Twp.
✓River Rouge	✓Romulus	✓Harrison Twp.
✓Romeo	✓Westland	✓Lenox Twp.
✓Shelby Twp.	✓Huron Twp.	✓Macomb Twp.
✓Southgate	✓Livonia	✓New Haven

JUNE 5, 7, & 26	JULY 10, 16 & 26	AUGUST 7, 21 & 23
E. Wayne & S. Oakland	NW/Central Oakland	Southern Wayne
✓Grosse Pte Shores	•Commerce Twp.	•Ash Twp.
✓Grosse Pte Woods	•Farmington	•Berlin Twp.
✓Hamtramck	•Farmington Hills	•Brownstown Twp.
•Harper Woods	•Novi	•Flat Rock
•Hazel Park	•SOCWA	•Rockwood
•Oak Park	•Walled Lake	•S. Rockwood
✓Warren		•Sumpter Twp.

SEPT. 17, 19 & 24	OCT. 11, 18 & 22
East/Central Oakland	Unique Meetings
•GW Kuhn	•Village of Almont
•Keego Harbor	•Bruce Twp.
•Madison Heights	•Ferndale
•NOCWA	•Flint
•Royal Oak Twp.	•Imlay City
•Sylvan Lake	•Walled Lake
	•Mayfield Twp.
	•Riverview



Financial Services Audit Committee Communication

Date: June 15, 2018
To: Great Lakes Water Authority Audit Committee
From: Nicolette Bateson, CPA, Chief Financial Officer/Treasurer
Re: CFO Update

This month's report is organized into three categories – past, present, and future.

Past - Close-out of Open Items

1. FY 2017 Audit

- a. GLWA's external auditors presented the auditor's report along with GLWA's FY 2017 audited financial statements at the Audit Committee meeting on May 22, 2018. Based upon feedback from the Audit Committee, updates were made to the Independent Auditors' Communication to those Charged with Governance (commonly referred to as the SAS 114 letter for the Statement on Auditing Standards which sets for the guidance for those communications). The revised report was subsequently received and distributed to the Board of Directors and is available online at <http://www.glwater.org/wp-content/uploads/2018/06/GLWA-SAS-Ltr-6-30-17-Revised-Final.pdf>.
- b. The final FY 2017 reports were issued and filed with state and federal agencies by the deadline of May 31, 2018.
- c. It should be noted that GLWA's Comprehensive Annual Financial Report (CAFR) provides the water and sewer funds combined. As an added disclosure, individual fund statements (i.e. water fund and sewer fund) were also prepared for ease of continuing debt disclosure and are also available online at <http://www.glwater.org/finances/financial-statements/>. These statements mirror the basic financial statements in the CAFR.

Present – Items Within the Next 45 Days

1. FY 2019 and FY 2020 Biennial Budget; FY 2019 Charges; and FY 2019 – 2023 Capital Improvement Plan Update
2. Charges Stability Initiatives Continues
 - a. Wastewater Charges Symposium Session 1 on Tuesday, June 19th

- b. Wastewater Charges Symposium Session 2 on Tuesday, June 28th
- 3. Procurement Policy Review
 - a. General Counsel's review began this week
 - b. Significant update to align with best business process transformation efforts and stakeholder input
 - c. Distribution and review with Board Members in early July
 - d. Target date for Board as a whole to review on July 25th
- 4. Launch 2018 GLWA Bond Refunding and DWSD New Money Financial – Target date is closing by October 1, 2018
- 5. Bonfire Rollout – Significant procurement business process enhancement – see <https://glwater.bonfirehub.com/portal/>
- 6. One Water Partnership Meeting on Thursday, June 21st
- 7. Financial Services Day at the Outreach Asset Management/Capital Improvement Planning Work Group meeting on Tuesday, July 24th
- 8. Next round of financial sustainability scenario modeling
- 9. Year-end close begins; year-end inventories are underway

Future – Post August 1, 2018

- 1. FY 2018 Audit starts fieldwork on October 15, 2018; preliminary and single audit work begins prior to that date
- 2. Dedicated effort on rating agency and investor outreach for a successful 2018 financing program
- 3. Kick-off of FY 2020+ Financial Planning cycle

Proposed Action: Receive and file report.