



## Audit Committee

**Friday, January 19, 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
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
  - A. January 19, 2018
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
  - A. Status Report: FY 2017 Year End Financial Statements
  - B. Update: FY 2017 Audit Schedule by GLWA Auditor Rehmann Robson
  - C. Update: FY 2019 – FY 2020 Biennial Budget and FY 2019 – 2023 Financial Plan
  - D. Final Update: 2017 Wholesale Water Contract Reopeners
  - E. Update on Cost of Service Studies for FY 2019 Charges - The Foster Group
7. NEW BUSINESS
  - A. Annual Update & Financing Strategy with PFM (Part 1 of 2)
  - B. Review of the FY 2017 Audit and Internal Control Reports for the City of Detroit General Retirement System
  - C. Analysis of Retail and DWSD Receivable as of June 30, 2017
  - D. Capital Overhead Cost Allocation Project
8. REPORTS
  - A. Monthly Revenue & Collections Report for November 2017
  - B. Treasury Report: Cash Transfers through December 1, 2017
  - C. GLWA and DWSD Shared Services True-Up Status
  - D. CFO Update (verbal)
9. LOOK AHEAD

Next Audit Committee Meeting – February 16, 2018 at 8 am (Regular Meeting)
10. INFORMATION
11. OTHER MATTERS
12. ADJOURNMENT

**Items highlighted in gray are  
included in Audit Committee  
Binder #1**



# Great Lakes Water Authority

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

## Meeting Minutes - Draft

### Audit Committee

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Friday, January 5, 2018

8:00 AM

Water Board Building 5th Floor

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#### 1. Call To Order

Chairman Baker called the meeting to order at 8:05 a.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:** Robert Daddow

**Support By:** Gary Brown

**Action:** Approved

The motion carried by a unanimous vote.

#### 4. Approval of Minutes

##### A. [2018-527](#) Approval of Minutes of December 15, 2017

**Indexes:** Finance

**Attachments:** [December 15, 2017 Audit Committee Meeting Minutes.Draft](#)

Chairman Baker requested a Motion to approve the December 15, 2017 Audit Committee Meeting Minutes.

**Motion By:** Robert Daddow

**Support By:** Gary Brown

**Action:** Approved without objection

Director Brown abstained from the vote.

#### 5. Public Comment

There were no public comments.

#### 6. Old Business

##### A [2018-528](#) Update: Charges Rollout - Preliminary FY 2019 & FY 2020 Budget & Five Year Financial Plan

**Indexes:** Finance

**Attachments:** [CFO Discussion Draft Budget and Five year Plan Memo](#)  
[Audit Committee Binder 1.5.2018 Supporting 11 x 17 Worksheets](#)  
[Addendum: Staffing Plan and Personnel Budget Summary Updated 1.4.2018](#)

**No Action Taken**

**B**      [2018-543](#)      Status Update- 2017 Wholesale Water Contract Reopeners

**Indexes:**      Finance

**Attachments:**      [Update Charges Rollout Customer Contract Status 1.5.2018](#)

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

**C**      [2018-529](#)      Update: Charges Rollout - The Foster Group Charges Development Update

**Indexes:**      Finance

**Attachments:**      [Charges Update 010418](#)

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

Director Daddow Motioned to Receive and File The Foster Group Charges Development Update with the understanding of the need to address capital issues.

**New Business**

None

**8. Reports**

Nicolette Bateson, Chief Financial Officer/Treasurer, stated that the State Treasurer has granted GLWA's audit extension request to February 28, 2018.

**9. Look Ahead**

The next Audit Committee Meeting is scheduled for Friday, January 19, 2018 at 8:00 a.m.

**10. Information**

None

**11. Other Matters**

None

## 12. Adjournment

Chairman Baker requested a Motion to Adjourn.

Motion By: Gary Brown

Support By: Robert Daddow

Action: Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 10:23 a.m.





## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

**From:** Jon Wheatley, Public Finance Manager

**Re:** Final Update: 2017 Wholesale Water Contract Reopeners

**Background:** The Great Lakes Water Authority (GLWA) model water contract 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. As part of the reopener process, each customer can discuss its maximum day and peak hour demands, which are included in Exhibit B of the contract, and negotiate those values based on historical performance and projected changes in its usage. The maximum day and peak hour demands in the model contract are used in the determination of customer charges and represent about ninety percent (90%) of the annual revenue requirement for each customer.

**Analysis:** Between October 9, 2017 and December 13, 2017, the negotiations team met with 29 of the 30 scheduled reopeners plus one out-of-sequence reopener (Commerce Township). As of January 12, 2018, 30 contract amendments have been drafted and sent to the customer and all 30 amendments have been approved by the customer's legislative body by the January 12, 2018 deadline. The next step in the process is for the GLWA Board of Directors to approve the contract amendments at its January 24, 2018 meeting. Below is a summary of the changes to the contracts, based on the amended contract values.

Reopener results as compared to FY 2018 demand values:

- 22 customers decreased contract demands
- 5 customers increased contract demands
- 4 customers had no change in contract demands

Net Change in reopeners for FY 2019 contract demands vs FY 2018 contract demands:

Demand Type	Net Change (mgd)	Average Change	Impact on Total Water Demands
Max Day	(17.65)	(7.10%)	(2.20%)
Peak Hour	(32.61)	(9.56%)	(3.24%)

The list of wholesale water customers scheduled for contract reopeners is set forth in the table below.

<b>2017 MODEL CONTRACT REOPENER STATUS</b> <b>AS OF JANUARY 12, 2018</b>					
	Meeting Scheduled	Meeting with Customer	Contract Amendment Sent to Customer	Contract Amendment Approved by Customer	Contract Amendment Approved by GLWA Board
Allen Park	X	X	X	X	
Belleville	X	X	X	X	
Bruce Twp.	X	X	X	X	
Canton Twp.	X	X	X	X	
Center Line	X	X	X	X	
Dearborn Heights	X	X	X	X	
Eastpointe	X	X	X	X	
Ferndale	X	X	X	X	
Fraser	X	X	X	X	
Imlay City	X	X	X	X	
Lapeer	X	X	X	X	
Mayfield Twp.	X	X	X	X	
Northville	X	X	X	X	
Northville Twp.	X	X	X	X	
Plymouth	X	X	X	X	
Redford Twp.	X	X	X	X	
Riverview	X	X	X	X	
Roseville	X	X	X	X	
St Clair Shores	X	X	X	X	
Sterling Heights	X	X	X	X	
Taylor	X	X	X	X	
Troy	X	X	X	X	
Utica	X	X	X	X	
Van Buren Twp.	X	X	X	X	
Washington Twp.	X	X	X	X	
Wayne					
West Bloomfield Twp.	X	X	X	X	
Wixom	X	X	X	X	
Woodhaven	X	X	X	X	
YCUA	X	X	X	X	
Commerce Twp.	X	X	X	X	

**Budget Impact:** None.

**Proposed Action:** Receive and File Report.



## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Update on Cost of Service Studies for FY 2019 Charges - The Foster Group

**Background:** Each January, the Great Lakes Water Authority (GLWA) members receive a calculation of the Cost of Service Studies and the resulting proposed charges. This timing is defined by service contracts as further cited in the attached budget calendar.

**Analysis:** GLWA's advisor, The Foster Group, prepares the Cost of Service Studies and charges based upon several inputs and analysis. Bart Foster, The Foster Group, will be in attendance at the Audit Committee meeting to address the status of the Cost of Service study and charge development as well as unique considerations in the development of the FY 2019 charges. Presentation materials are attached.

**Proposed Action:** Receive and file report.

## **Financial Plan Calendar**

### **FY 2019 and 2020 Biennial Budget & Five-Year Financial Planning Cycle**

The Great Lakes Water Authority (GLWA) Financial Planning Cycle includes:

1. FY 2019 and 2020 Biennial Budget
2. FY 2019 through FY 2023 Five-Year Financial Plan
3. FY 2019 through FY 2023 Five-Year Capital Improvement Plan
4. FY 2019 Schedule of Revenues and Charges

The schedule below reflects planning for the comprehensive GLWA Financial Plan.

<b>Date</b>	<b>Activity</b>
Friday, September 29, 2017	Internal – Deadline for Cost Center Budget Request
Wednesday, October 11, 2017	GLWA Board Workshop – FY 2019 and 2020 Goals & Objectives and Financial Planning Cycle Update
Friday, December 1, 2017	GLWA and DWSD (City) - Exchange shared services to be provided and related costs (Shared Services Agreement 5.4)
Tuesday, December 12, 2017	Customer Rollout Meeting #1 – Units of Service Update
Friday, December 15, 2017	GLWA Audit Committee Meeting – Revenue Requirement Status Report
Tuesday, December 19, 2017	Customer Rollout Meeting #2 – Water & Sewer Capital Improvement Plan Update
Monday, January 1, 2018	DWSD – Preliminary two-year budget forecast Including key assumptions and impact statement due to GLWA (Water and Sewer Services Agreement 5.3)
Friday, January 5, 2018	Special GLWA Audit Committee Meeting – Review of Proposed FY 2019 & FY 2020 Biennial Budget, Five-Year Financial Plan, and Revenue Requirement
Wednesday, January 10, 2018	GLWA Board Workshop – Review of Proposed FY 2019 and 2020 Biennial Budget, Five-Year Financial Plan, and Revenue Requirement

Thursday, January 11, 2018	Customer Rollout Meeting #3 – Proposed FY 2019 Revenue Requirement
Friday, January 19, 2018	GLWA Audit Committee Meeting – Regular Meeting
<b>Wednesday, January 24, 2018</b>	<b>GLWA Board Meeting – Status Report FY 2019 Service Charges, FY 2019 and 2020 Biennial Budget, Five-Year Financial Plan, and Revenue Requirement</b>
<b>Thursday, January 25, 2018</b>	<b>Customer Rollout Meeting #4 – Proposed FY 2019 Service Charges</b>
<b>Friday, January 26, 2018</b>	<b>Publish notice of the hearing by publication in a newspaper of general circulation (B)</b>
<b>Friday, January 26, 2018</b>	<b>Mail Notice to Customers of Public Hearing to be held on February 28, 2018 (minimum 30 days prior to Act 279 Public Hearing) (D)</b>
Thursday, February 1, 2018	DWSD – Current capital improvement plan due to GLWA (Water and Sewer Services Agreement 5.3d(i))
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019 & FY 2020 Biennial Budget <b>(A)</b>
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019–2023 Capital Improvement Plan
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date) <b>(C)</b>
Thursday, March 1, 2018	Mail Notice to Customers of Approved Charges
Friday, March 23, 2018	DWSD – Local system adopted biennial budget due to GLWA (Water and Sewer Services Agreement 5.3B)
Tuesday, May 1, 2018	DWSD – Local system provides direction to GLWA on how to apply lease payment (Water and Sewer Services Agreement 4.3)
Sunday, July 1, 2018	GLWA – Effective date of FY 2019 and 2020 Biennial Budget, FY 2019 Schedule of Charges, and FY 2019-2023 Capital Improvement Plan

**(A) thru (D)** - The above schedule is designed to meet applicable statutory and contractual requirements with excerpts shown below.

- A. **Uniform Budgeting and Accounting Act, Act 2 of 1968, Section 141.434**, “Before final passage of a general appropriations act by the legislative body, a public hearing shall be held as required by 1963 (2nd Ex Sess) PA 43, MCL 141.411 to 141.415, and

the open meetings act, 1976 PA 267, MCL 15.261 to 15.275.” (For purposes of Public Act 2, the GLWA Board is the legislative body.)

- B. **Budget Hearings of Local Governments, Act 43 of 1963 (2nd Ex. Sess.), Section 141.412**, “The local unit shall give notice of the hearing by publication in a newspaper of general circulation within the local unit at least 6 days before the hearing.” (For purposes of Public Act 2, the GLWA Board is a local unit.)
- C. **Home Rule City Act, Act 279 of 1909, Section 117.5e**, “Municipal water or sewage system; annual audit; public hearing before proposed rate increase. A municipal water or sewage system established by a city incorporated under this act which serves more than 40% of the population of the state shall: ....(b) Hold at least 1 public hearing at least 120 days before a proposed rate increase is scheduled to take effect. Each hearing shall be conducted in compliance with Act No. 267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws. Notice of the time, date, and place of each hearing shall be given in the manner required by Act No. 267 of the Public Acts of 1976, shall be prominently printed in a daily newspaper of general circulation within the area, and shall be mailed to each city, village, or township served by the system not less than 30 days before each hearing. A final vote by the governing body of the city to implement a proposed rate increase shall not be taken until the hearings provided for in this subdivision are concluded and the results of those hearings are considered by the city's governing body.” (Emphasis added)

It should be noted that the Home Rule City Act does not apply to GLWA. It is relevant to GLWA’s planning cycle, however, as it is referenced in the *Wholesale Customer Model Water Contract* as noted below.

- D. **GLWA Wholesale Customer Model Water Contract Section 7.02** provides: “Notification of Rates. As soon as possible in the ratemaking process, the Board shall provide information on proposed rates and the draft data and information used in the calculation of proposed rates in a format that will enable Customer to assist in the ratemaking process. Not less than thirty calendar days prior to the hearing required by Act 279, the Board shall provide Customer with written notice of a proposed rate and the underlying data used to calculate the rate. The Board shall meet with Customer to review the rate and the data.” (Emphasis added; Act 279 is the Home Rule City Act noted above.)

# Update on Cost of Service Studies for FY 2019 Charges

*GLWA Audit Committee  
January 19, 2018*





## Presentation Premise

- The material in this presentation has been prepared to provide updates to specific focus areas for the FY 2019 Charges, as set forth in our January 4 memorandum.
- Many of the elements are in near final state, others remain under review, including:
  - ✓ *Capital Improvement Programs for both GLWA and DWSD*
  - ✓ *The portion of the Sewer O&M Budget allocable to:*
    - CSO programs – under review by GLWA and DWSD representatives
    - OMID specific facilities - also under GLWA review
    - The IWC program - also under GLWA review

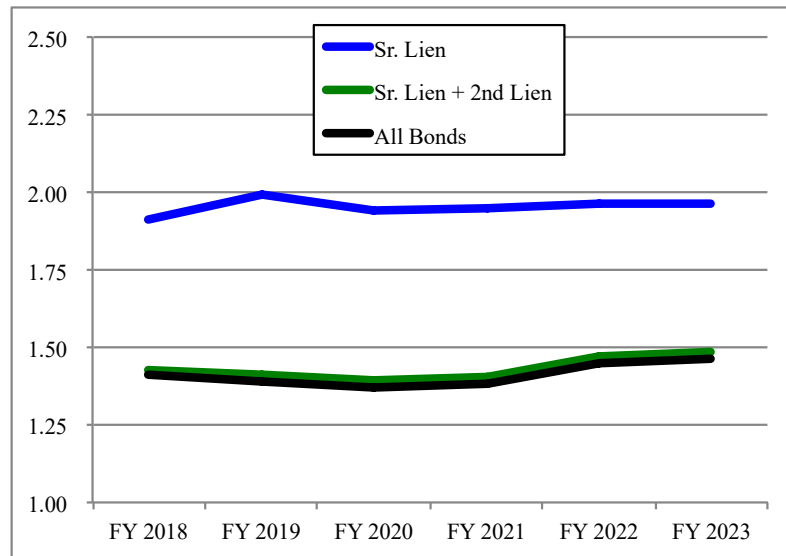


## Five-Year Financial Plan & Debt Service Coverage

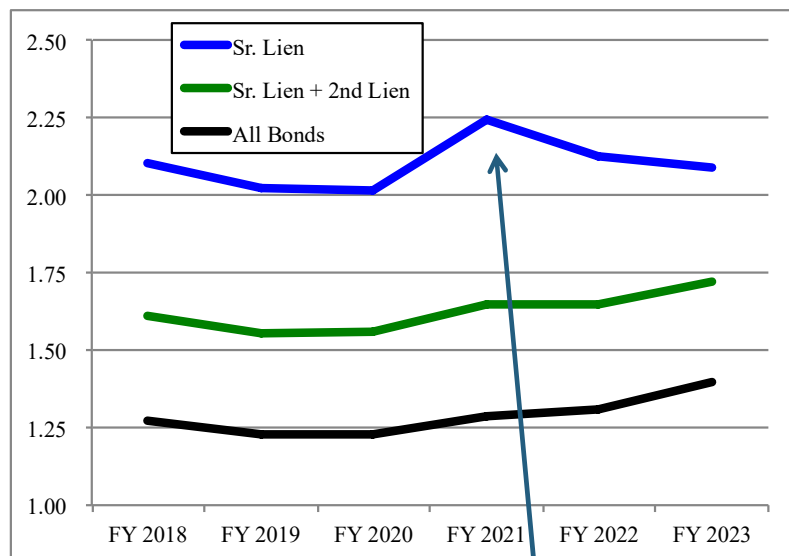
- The preliminary five year financial plans produce stable and rising debt service coverage ratios
  - ✓ *These preliminary projections are impacted by the level of capital investment required by both the Regional GLWA and Local DWSD System. Final CIP plans for both entities remain under development.*

# Five-Year Financial Plan & Debt Service Coverage (continued)

## Water



## Sewer



### Requirements

Sr. Lien  
Sr. Lien + 2nd Lien  
All Bonds

### MBO Minimum

1.20  
1.10  
1.00

### Prior Policy Minimum

1.35  
1.25  
1.15

FY 2021 Sewer Debt Service reflects "Drop off" of Sr. Lien SRF Bonds

## Operating Expense Budget: *Administrative and Centralized Services*

- The FY 2018 Charges were based on an assumption that 45% of the operating expenses for Administrative and Centralized Services (in total) were allocable to Water and 55% to Sewer.
  - ✓ *The existing Charges were developed based on the preliminary FY 2018 Budget Request*
  - ✓ *Subsequent developments have modified the relative split for actual costs to ~ 43% / 57% (in total)*
- The PRELIMINARY cost allocation plan indicates that approximately 54% should be Water and 46% Sewer.
  - ✓ *Different ratios for Centralized and Administrative Services*

## **Operating Expense Budget:** ***Administrative and Centralized Services***

- The PRELIMINARY cost allocation plan is based on a review of a limited data set
- The intent is to continue evaluation as additional data becomes available
- The FY 2019 allocation plan represents a first step, towards this allocation strategy, recognizing that the “end state” may change as a result of ongoing evaluations

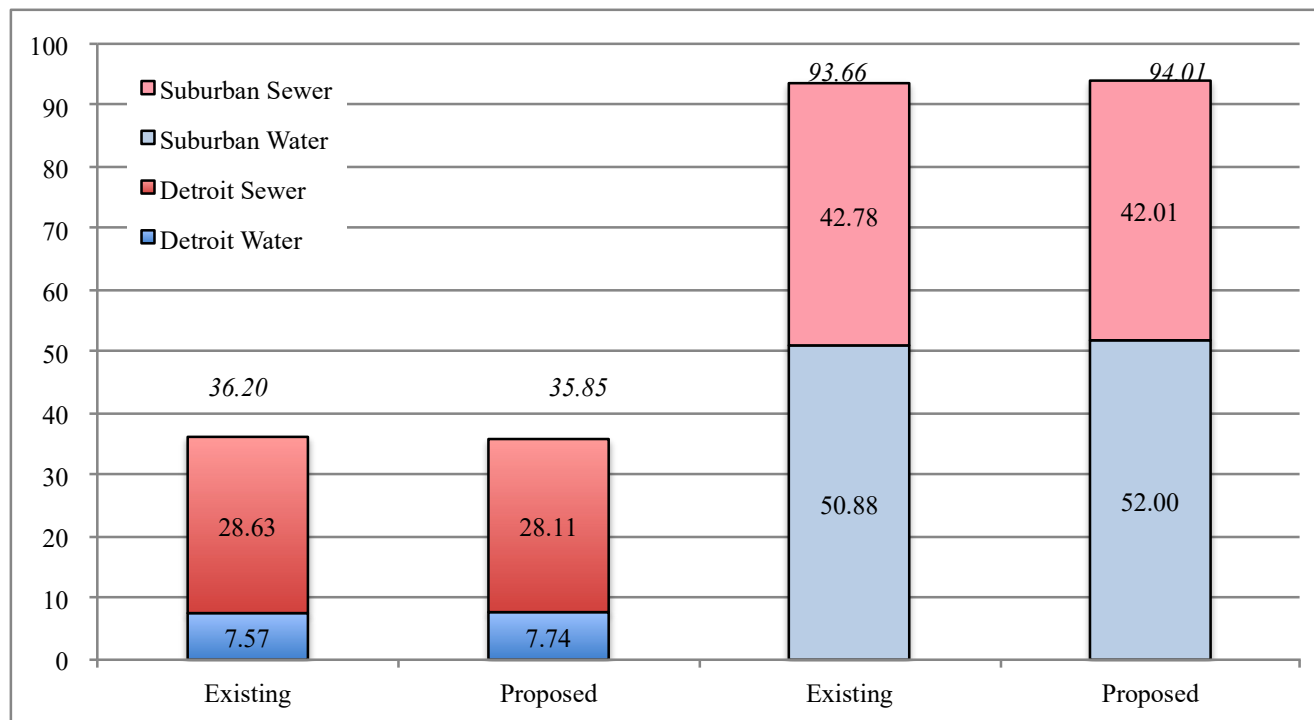
## Operating Expense Budget: *Administrative and Centralized Services*

- The FY 2019 Implementation Plan uses a universal allocation factor of 46% Water / 54% Sewer for both Administrative and Centralized Services
- With respect to Charges, this will shift approximately \$1.3 million of operating expenses from Sewer to Water
- Important to recognize that this impact is not directly meaningful without evaluating the entirety of the budget impacts
  - ✓ *Both BUDGETs include a 2.0% increase, irrespective of any specific allocation of the elements that make up the budgets*



# Operating Expense Budget: *Administrative and Centralized Services*

**FY 2019 Implementation Impact on Customer Classes - \$ millions**



Detroit

Suburban Wholesale

TFG

THE FOSTER GROUP

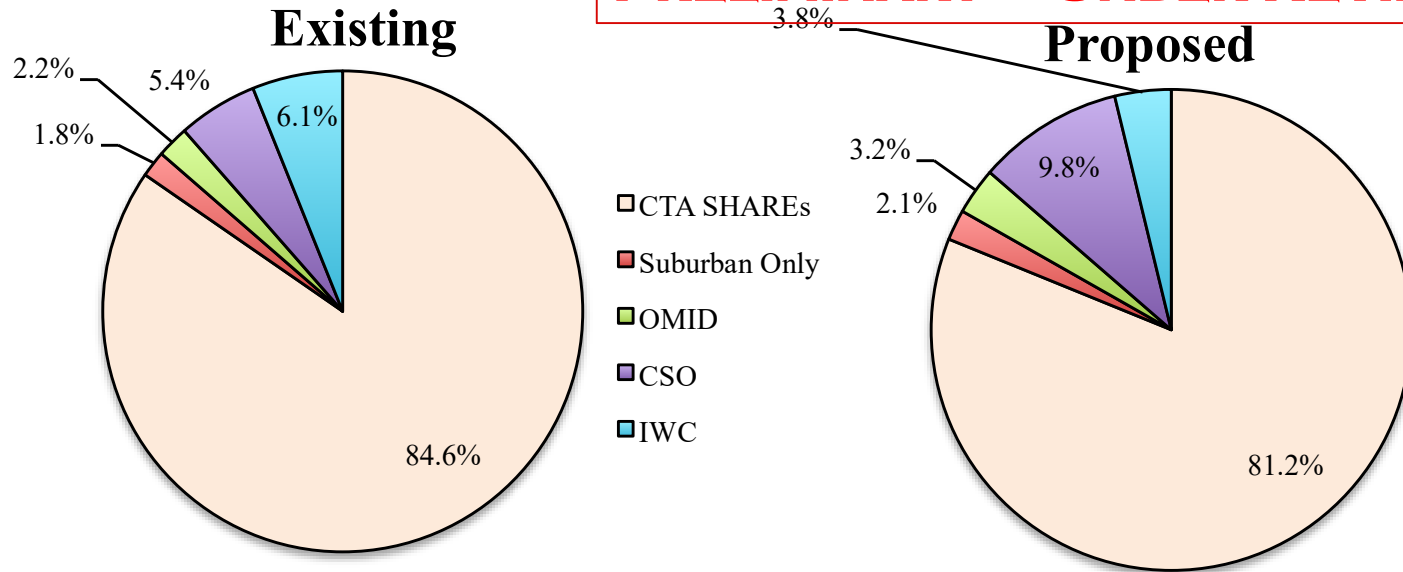
## Sewer Operating Expense Budget: CSO and OMID Cost Pools

**PRELIMINARY – UNDER REVIEW**

- A detailed review of the FY 2019 Sewer Operating Expense Budget indicates a shift of expenses away from Common-to-All (“CTA”) costs allocated based on SHAREs
  - ✓ *CTA SHARE costs – **Decrease** of ~ \$7.1 million*
  - ✓ *CSO program costs – **Increase** of ~ \$9.2 million*
  - ✓ *OMID specific costs – **Increase** of ~ \$2.1 million*
  - ✓ *IWC program costs – **Decrease** of ~ \$4.7 million*

# Sewer Operating Expense Budget: Cost Pool Allocations

**PRELIMINARY – UNDER REVIEW**



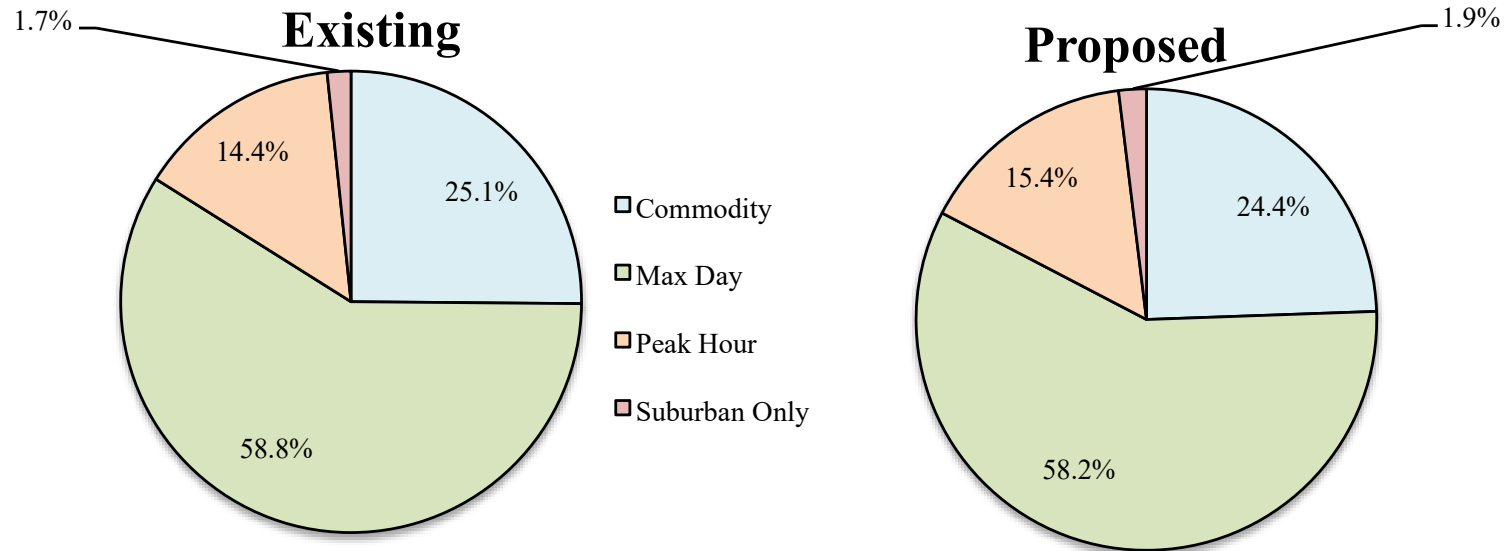
	Existing	Proposed
CTA SHAREs	84.6%	81.2%
Suburban Only	1.8%	2.1%
OMID	2.2%	3.2%
CSO	5.4%	9.8%
IWC	6.1%	3.8%



## Water Operating Expense Budget: *Cost Pool Allocation*

- A detailed review of the FY 2019 Water Operating Expense Budget indicates less of a shift between Cost Pools
  - ✓ *Variances do not materially impact cost of service allocations*

# Water Operating Expense Budget: Cost Pool Allocations

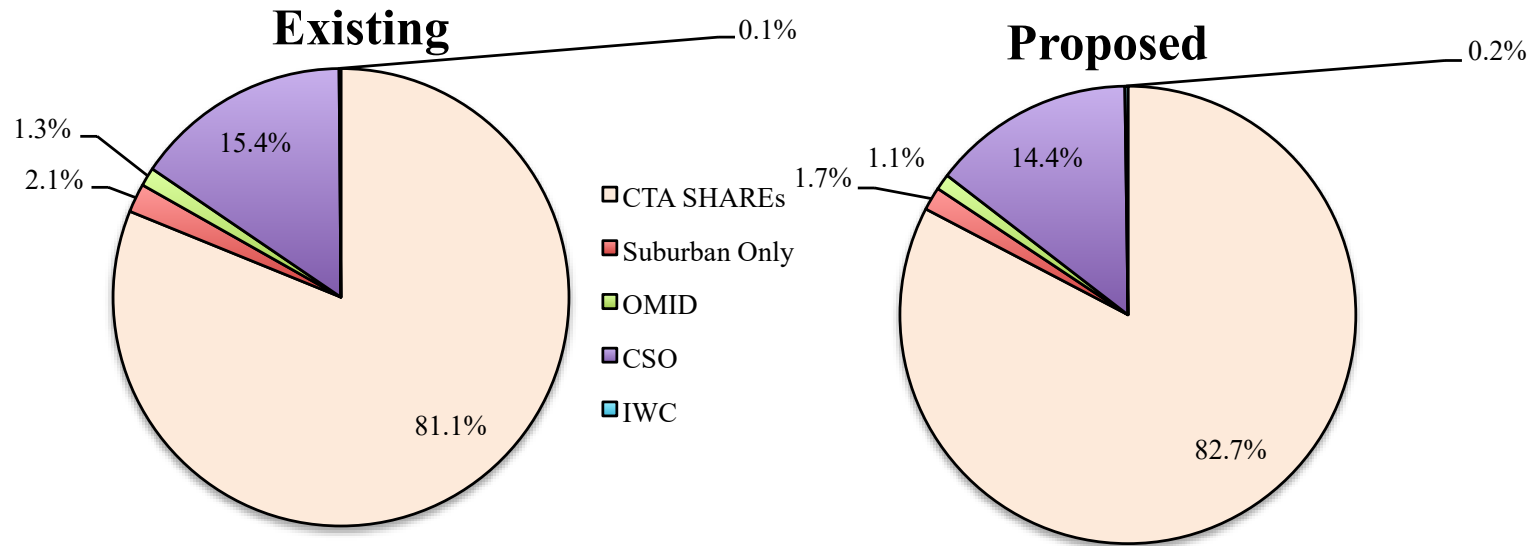


	<u>Existing</u>	<u>Proposed</u>
Commodity	25.1%	24.4%
Max Day	58.8%	58.2%
Peak Hour	14.4%	15.4%
Suburban Only	1.7%	1.9%

## Fixed Asset Inventory and Valuation: *Impact on Cost Pools*

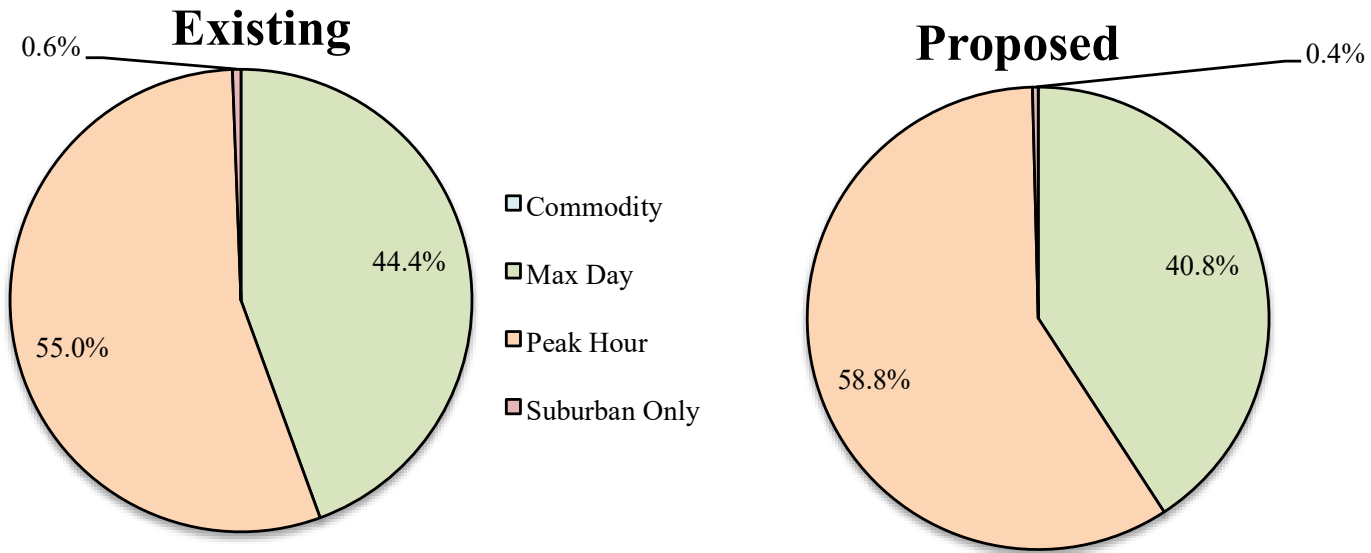
- The new fixed asset inventory and valuation analysis shifts capital revenue requirement cost of service allocations
- The Sewer capital revenue requirement shift is similar to, but less material than, the operating expense shift
- The Water capital revenue requirement shifts moderately from Max Day to Peak Hour Cost Pools

# Sewer Capital Revenue Requirements: Cost Pool Allocations



	Existing	Proposed
CTA SHAREs	81.1%	82.7%
Suburban Only	2.1%	1.7%
OMID	1.3%	1.1%
CSO	15.4%	14.4%
IWC	0.1%	0.2%

# Water Capital Revenue Requirements: Cost Pool Allocations



	<u>Existing</u>	<u>Proposed</u>
Commodity	0.0%	0.0%
Max Day	44.4%	40.8%
Peak Hour	55.0%	58.8%
Suburban Only	0.6%	0.4%

## **Water Cost of Service Allocations:** ***Impact of GCDC's Customer status change***

- GCDC's status change from full service to reciprocal backup service will create a \$3.7 million negative revenue variance in the FY 2019 Budget
- Anticipated revenue from Flint is somewhat lower than FY 2018, which accentuates this challenge
- However, projected sales revenue for other Customers reflects a minor increase, as does projected non-operating revenue
- Net impact is a negative revenue variance of \$2.2 million must be met from increased service charges to Customers, even without a BUDGET increase

## Water Cost of Service Allocations: *Impact of GCDC's Customer status change*

- The net \$2.2 million negative revenue variance equates to a 0.7% Charge increase

### Revenue Profile @ FY 2018 Charges

	<u>FY 2018 Budget</u> \$ millions	<u>FY 2018 Estimate</u> \$ millions	<u>Variance</u> \$ millions	<u>FY 2019 Proforma</u> \$ millions	<u>Variance</u> \$ millions	<u>Adj Needed</u>
GLWA Contract Customers	317.5	317.5	0.0	318.3	0.8	
Flint	3.9	6.9	3.0	3.7	(0.2)	
Subtotal - Revenue from Contract Customers	321.4	324.4	3.0	322.0	0.6	-0.20%
GCDC	3.7	4.8	1.1	0.0	(3.7)	1.15%
Total Revenue from Charges	325.1	329.2	4.1	322.0	(3.1)	
Non-Operating Revenue	3.0	3.0	0.0	3.8	0.9	-0.27%
Total Revenue Variance	328.0	332.2	4.1	325.8	(2.2)	
Revenue from GLWA Contract Customers					2.2	0.7%



## Water Units of Service: *Impact of UoS Study for non master metered Customers*

- The Preliminary FY 2019 Cost of Service Allocations incorporate the results of the Black & Veatch Study, and the GLWA Administrative Implementation recommendation, which:
  - ✓ *Increases max day and peak hour demands for Detroit and Highland Park by 10% - similar to the approach applied to **model** contract Customers who re-opened during 2017*
  - ✓ *Increases Dearborn's max day and peak hour demands by 20% - consistent with the manner that demands for other Customers under "old" contract formats are treated*



## Water Units of Service: *Impact of UoS Study for non master metered Customers* (\$ millions)

		Unadjusted	Technical Recommendations			GLWA Implementation Plan		
		Revenue Req	Adjusted	Variance	% Variance	Adjusted	Variance	% Variance
	<u>Non Master Metered Customers</u>							
1	Detroit	36.3	39.7	3.4	9.3%	41.9	5.5	15.3%
2	Dearborn	8.8	9.3	0.5	5.9%	10.8	2.0	22.2%
3	Highland Park	1.1	1.3	0.1	13.0%	1.4	0.2	20.1%
4	Total NMM Customers	46.3	50.3	4.1	8.8%	54.0	7.7	16.7%
5	Master Metered Customers	284.6	280.5	(4.1)	-1.4%	276.8	(7.7)	-2.7%
6	Total System	330.8	330.8	(0.0)	0.0%	330.8	(0.0)	0.0%

## **Water Units of Service: *Impact of Customer “Re-Opener” Demand Changes***

- Recognition of updated customer demands from the contract re-openers will result in a cost allocation shift
- All else being equal, adjustments to contract demands would re-allocate approximately \$5.9 million in annual revenue requirements from Re-opener Customers to all other Customers

## Water Units of Service: *Impact of Customer “Re-Opener” Demand Changes* (\$ millions)

	<u>Customers</u>	Allocated Rev Req't <i>@ Existing</i> <u>Demands</u>	Allocated Rev Req't <i>@ Updated</i> <u>Demands</u>	<u>Variance</u>	<u>% Variance</u>
Re-opener Customers	31	109.5	103.6	(5.9)	-5.4%
All Other Customers	57	221.3	227.2	5.9	2.7%
Total System	<u>88</u>	<u>330.8</u>	<u>330.8</u>	<u>0.0</u>	<u>0.0%</u>

## Water Cost of Service Allocations: *Treatment of Flint & Highland Park*

- Flint and Highland Park will initially be allocated cost of service in the same manner as all other Customers
- Subsequently, two adjustments will be required to reflect:
  - ✓ *The credit to Flint associated with KWA Debt Service;*
  - ✓ *The expected collection rate for Highland Park*
    - We are currently continuing to assume no collections of bills issued to Highland Park for Water service
- These adjustments are similar to that made for Detroit's "Ownership Benefit"

## Water Cost of Service Allocations: Treatment of Flint & Highland Park (\$ millions)

	Initially Allocated Rev Req't	Adjustments			Adjusted Allocated Rev Req't	Revenue Requirement for Charges	"Gross" Revenue Requirement
		DWSD Own Benefit	KWA Debt Svc Credit	Highland Park Bad Debt			
Flint	10.45	0.75	(6.87)	0.05	4.38	4.38	11.25
Highland Park	1.40	0.10	0.03	(1.53)	0.00	<b>1.53</b>	
Detroit	42.86	(20.70)	0.93	0.20	23.29	23.29	43.99
All Other Customers	276.14	19.85	5.92	1.28	303.18	303.18	
Total System	330.84	(0.00)	(0.00)	0.00	330.84	332.38	

Highland Park Charges will be  
computed to bill full Revenue  
Requirement

## **Sewer Cost of Service Allocations: *Phase II of FY 2018 SHARES***

- The preliminary FY 2019 Sewer Cost of Service Study implements Phase 2 of the implementation plan for the FY 2018 Sewer SHARES – without any further adjustment
- However, as noted earlier the allocation of costs to various cost pools does impact

## **Sewer Cost of Service Allocations:**

### ***Impact of Highland Park Collection Assumptions***

- The preliminary FY 2019 Sewer Cost of Service and Charges Study assumes a 50% collection rate for Highland Park, compared with 20% in FY 2018
- The FY 2017 Bad Debt Expense for Highland Park is lower than that included in prospective FY 2017 charges
- These developments lower the amount in Suburban Wholesale Sewer Charges associated with Highland Park Bad Debt

## Sewer Cost of Service Allocations: Impact of Highland Park Collection Assumptions (\$ millions)

	<u>Existing Charges</u>	<u>Proposed Charges</u>	<u>Variance</u>	<u>% Variance</u>
Projected Bad Debt Expense	4.39	2.78	(1.61)	-36.7%
Bad Debt True-Up	2.82	1.87	(0.94)	-33.5%
Total	<u>7.20</u>	<u>4.65</u>	<u>(2.55)</u>	-35.4%
Relative % of Suburban Revenue	2.7%	1.7%	-1.0%	



## DWSD Local System Budget

- Review and incorporation of DWSD Local System revenue requirements, including capital improvement program
  - ✓ *Details still under development*



## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

**From:** Jon Wheatley, Public Finance Manager

**Re:** Annual Update & Financing Strategy with PFM (Part 1 of 2)

**Background:** Every January the Great Lakes Water Authority (GLWA) receives an annual market and financing opportunity update from its financial advisor, PFM Financial Advisors (PFM).

This year, this update will span two meetings. The first meeting on January 19, 2018 will address recent changes in laws that affect municipal finance and current market conditions and possible refunding opportunities. At the February Audit Committee meeting on February 16, 2018, PFM will present Part 2 of the Annual Update & Financing Strategy with a benchmarking analysis and a review of GLWA's financial metrics.

**Analysis:** PFM Financial Advisors (PFM) has provided an analysis of potential water and sewer bond refunding opportunities as well as updates to the current municipal bond market conditions and the effects of the federal tax bill that was signed on December 22, 2017. (See attached presentation.)

Based on current market conditions, PFM has identified possible refunding candidates of \$161.4 million of senior lien sewer bonds and \$178.7 million of second lien water bonds which are callable on July 1, 2018. The estimated net present value (NPV) savings are currently \$31.9 million (17.1%) for sewer and \$30.3 million (14.5%) for water, over the remaining life of the respective bond issues.

**Budget Impact:** Based on the draft FY 2019 and FY 2020 biennial budget and five-year financial plan which was presented to the Board at its meeting on January 10, 2018, no potential refunding savings were included in the projected debt service. If GLWA is successful in pricing the refunding bonds at the rates and assumptions presented in the PFM analysis, the sewer system could see an average annual savings of about \$2.8 million and the water system could see an average annual savings of about \$2.7 million over the remaining term of the original bonds.

**Proposed Action:** Receive and file report.



# Great Lakes Water Authority

## Municipal Market Update and 2018 Outlook

**Presented by:**  
**Dan Hartman, Managing Director**

January 19, 2018

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PFM Financial Advisors LLC

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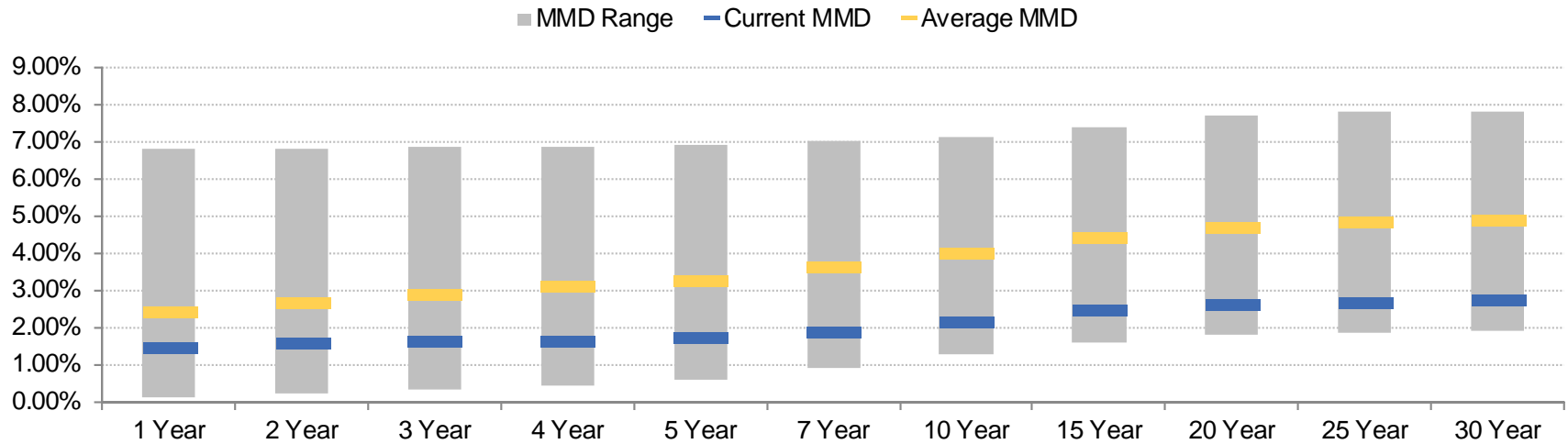


# Municipal Market Update



# Benchmark Tax-Exempt Interest Rate Position

AAA MMD Rate Position  
(January 12, 1988 to January 11, 2018)



Summary of January 11, 2018 vs. Historical MMD Rates (30 Year History)

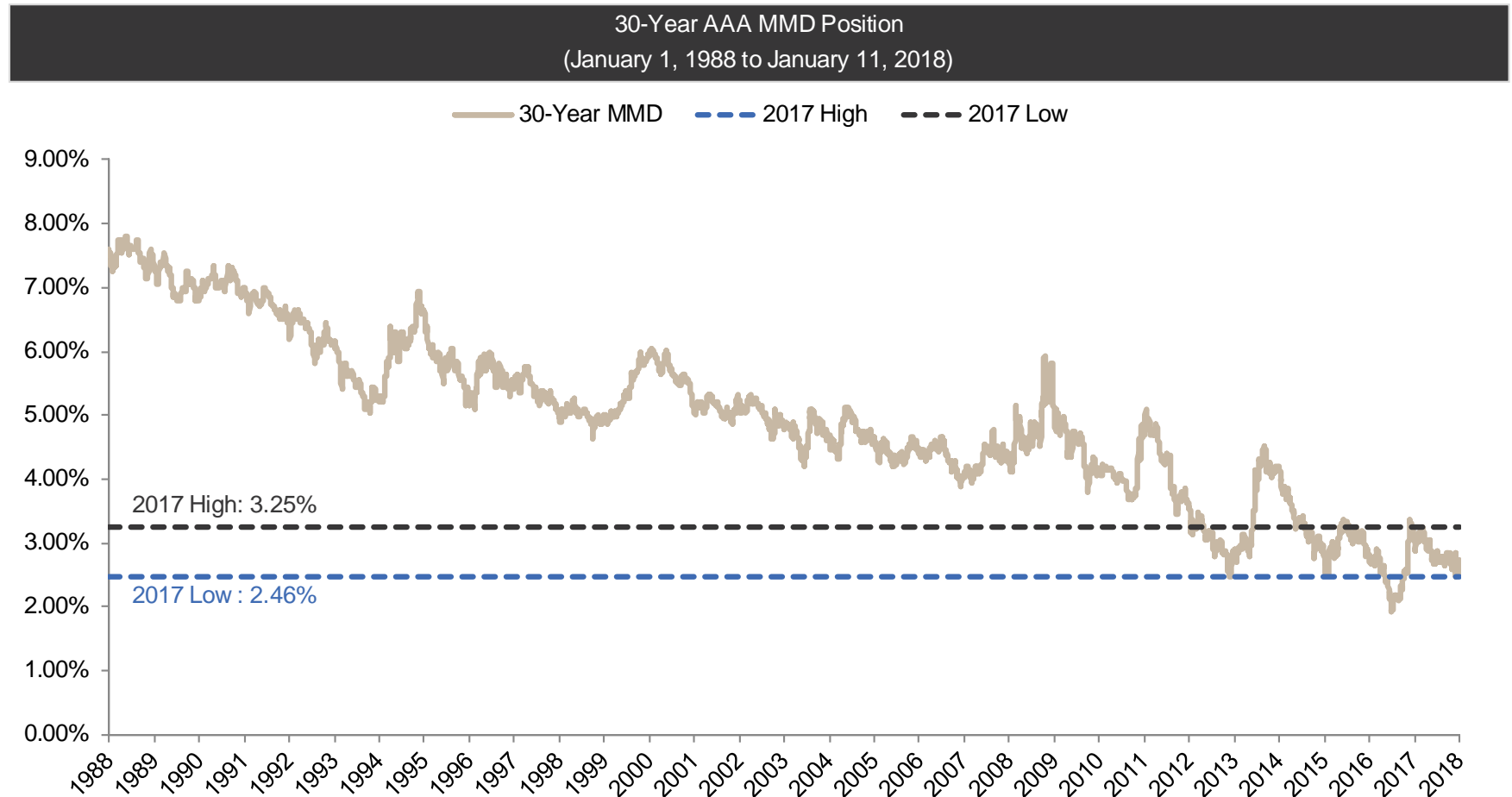
Statistic	1 Year	2 Year	3 Year	4 Year	5 Year	7 Year	10 Year	15 Year	20 Year	25 Year	30 Year
1/11/2018	1.42%	1.54%	1.58%	1.62%	1.70%	1.87%	2.12%	2.45%	2.60%	2.66%	2.71%
Average	2.38%	2.67%	2.88%	3.07%	3.24%	3.57%	3.95%	4.41%	4.67%	4.81%	4.85%
Spread to Avg.	-0.96%	-1.13%	-1.30%	-1.45%	-1.54%	-1.70%	-1.83%	-1.96%	-2.07%	-2.15%	-2.14%
Minimum	0.11%	0.25%	0.36%	0.44%	0.62%	0.89%	1.29%	1.57%	1.80%	1.88%	1.93%
Spread to Min.	1.31%	1.29%	1.22%	1.18%	1.08%	0.98%	0.83%	0.88%	0.80%	0.78%	0.78%
Maximum	6.80%	6.80%	6.85%	6.85%	6.90%	7.00%	7.10%	7.40%	7.70%	7.80%	7.80%
Spread to Max.	-5.38%	-5.26%	-5.27%	-5.23%	-5.20%	-5.13%	-4.98%	-4.95%	-5.10%	-5.14%	-5.09%
Percent of Market Days Lower	38.63%	36.83%	33.63%	31.29%	28.26%	21.21%	15.47%	11.81%	8.71%	4.18%	3.92%

Source: Thomson Reuters



## Interest Rates in 2017

Long-term interest rates in 2017 remained within a historically low range, with the 30-year MMD remaining between a maximum of 3.25% and a minimum of 2.46%

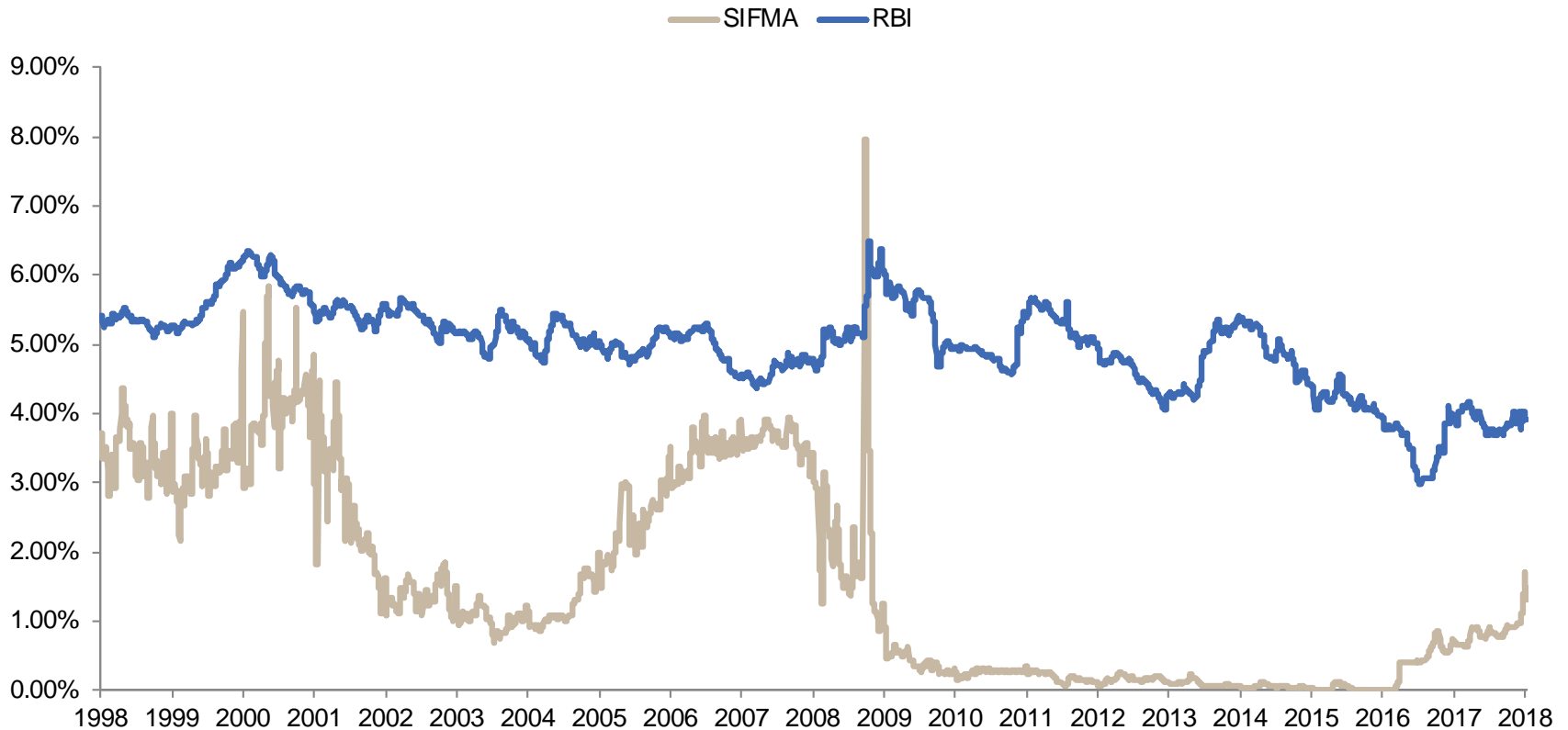




## Short-Term and Long-Term Tax-Exempt Interest Rate History

SIFMA has remained at levels significantly below the Bond Buyer Revenue Bond Index since 2009, although short-term rates have ticked up during 2017

SIFMA vs. RBI (January 1, 1998 – January 11, 2018)





## Taxable Interest Rate Forecasts

Wall Street consensus forecast is for slow and steady rate increases over the next 12-18 months

The Street's Interest Rate Forecast (As of January 11, 2018)							
Average Forecasts	Current	Q1 18	Q2 18	Q3 18	Q4 18	Q1 19	Q2 19
30-Year UST	2.91%	2.99%	3.15%	3.27%	3.40%	3.48%	3.58%
10-Year UST	2.57%	2.57%	2.70%	2.81%	2.91%	3.01%	3.14%
2-Year UST	1.98%	1.99%	2.17%	2.31%	2.44%	2.57%	2.73%
3M LIBOR	1.71%	1.76%	1.97%	2.13%	2.32%	2.44%	2.59%
Fed Funds Target Rate (Upper)	1.50%	1.65%	1.90%	2.05%	2.25%	2.35%	2.55%
Fed Funds Target Rate (Lower)	1.25%	1.42%	1.65%	1.81%	2.00%	2.09%	2.31%





# Federal Tax Bill



## Tax Cuts and Jobs Act

- President Trump signed the Tax Cuts and Jobs Act into law on December 22, 2017
- Major impact of bill for GLWA is the prohibition on tax-exempt advance refunding bonds after December 31, 2017
  - Under prior law, each issue of tax-exempt bonds could be advance refunded one time on a tax-exempt basis
  - Tax-exempt status of current refunding bonds (closing within 90 days of call date on refunded bonds) is not impacted
- The Bill also repeals the authority to issue tax credit bonds under various programs provided in the tax code (Qualified Zone Academy Bonds, Clean Renewable Energy Bonds and others) as of December 31, 2017
- While the bill will limit financing flexibility going forward, minimal impact on 2018 refunding strategy



## Final Version of Tax Reform – Summary of Major Provisions

Issue	House Bill	Senate Bill	Final Bill
State and Local Tax Deduction	Partial repeal with property tax cap	Total repeal	Caps SALT Deduction at \$10k
Corporate Tax Rate Cut	Cut to 20% in 2018	Cut to 20% in 2019	Immediate and permanent cut to 21%
Standard Deduction	\$12,000 individual / \$24,000 married	\$12,000 individual / \$24,000 married	\$12,000 individual / \$24,000 married
Mortgage Interest Tax Deduction	Cap at \$500k and one home	Maintain \$1M cap	Capped at \$750k
Tax Credit Bond Authorization	Repealed	Repealed	Repealed
Private Activity Bonds	No longer tax exempt	Maintain tax exemption	Maintain tax exemption
Advanced Refunding	No longer tax exempt	No longer tax exempt	No longer tax exempt
Higher Education	1.4% excise tax on endowments at certain institutions, repeal student loan interest deduction	1.4% excise tax on endowments at certain institutions	1.4% excise tax on endowments at certain institutions; maintain student loan interest deduction
Historic Rehabilitation Tax Credit / New Market Tax Credit	Eliminated	Maintained	Maintained
Affordable Care Act	Not included	Amended to repeal individual mandate	Individual mandate repealed

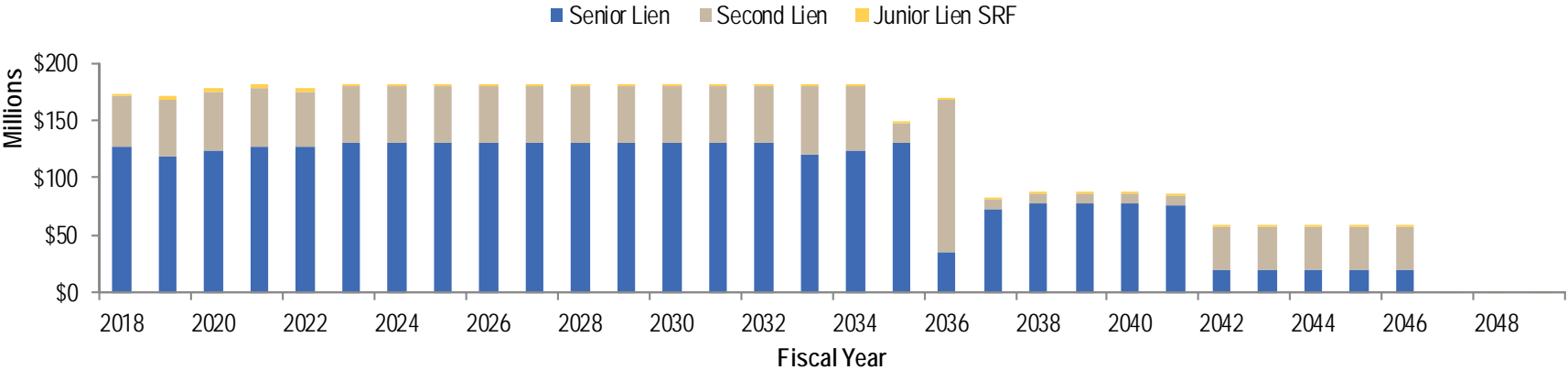


# Status of GLWA Debt Profile

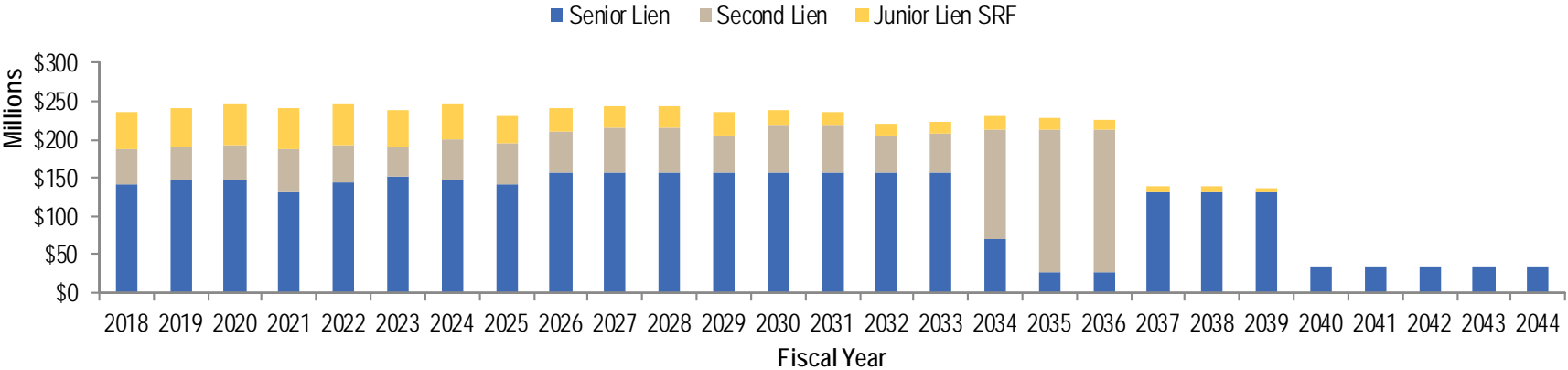


# GLWA Current Debt Structure

## Water



## Sewer



Note: Assumes Series 2006D Variable Rate Bonds calculated at 1.85% interest rate (GLWA planning rate). Funds for Estimated SRF Schedules have not been fully drawn. Debt service schedule reflects amortization of full authorized amount.



## GLWA Fixed Rate Callable Debt (Call Dates Through 2022)

Water						
Series Name	Indenture	Lien	Tax Status	Outstanding	Next Call Date	Callable Par
Series 2011A Senior	Water	Senior	Tax-Exempt	293,970,000	7/1/2021	289,605,000
Series 2011B Senior	Water	Senior	Taxable	4,450,000	7/1/2021	2,295,000
Series 2011C Senior	Water	Senior	Tax-Exempt	75,145,000	7/1/2021	74,125,000
Series 2001C Second	Water	Second	Tax-Exempt	179,150,000	7/1/2018	178,735,000

Sewer						
Series Name	Indenture	Lien	Tax Status	Outstanding	Next Call Date	Callable Par
Series 1998A Senior	Sewer	Senior	Tax-Exempt	18,485,000	Current	18,485,000
Series 1998B Senior	Sewer	Senior	Tax-Exempt	18,260,000	Current	18,260,000
Series 2001C1 Senior	Sewer	Senior	Tax-Exempt	41,515,000	7/1/2019	40,705,000
Series 2001C2 Senior	Sewer	Senior	Tax-Exempt	107,425,000	7/1/2018	107,045,000
Series 2012A Senior	Sewer	Senior	Tax-Exempt	524,925,000	Current / 7/1/2022 <sup>1</sup>	462,810,000
Series 2014C-1 Senior	Sewer	Senior	Tax-Exempt	123,220,000	7/1/2022	123,200,000
Series 2014C-2 Senior	Sewer	Senior	AMT	27,470,000	7/1/2022	27,450,000
Series 2005A Sec.(Call Mod) <sup>2</sup>	Sewer	Second	Tax-Exempt	31,785,000	7/1/2021	31,785,000
Series 2006B Sec.(Call Mod) <sup>3</sup>	Sewer	Second	Tax-Exempt	55,000,000	7/1/2021	55,000,000

Note: excludes series of debt with callable amounts of \$100,000 or less outstanding.

1. \$25.0 million of the Series 2012A Sewer Bonds are callable on 7/1/2017.

2. The call date on \$31.8 million of the series 2005A Sewer Bonds was modified to July 1, 2021.

3. The call date on \$55.0 million of the Series 2006B Sewer Bonds was modified to July 1, 2021.



## Bond Sale Strategy Not Altered in the Wake of Tax Reform

- While the Tax Cuts and Jobs Act is adverse to GLWA via eliminating advance refundings, this development should not drive a different financing strategy than what has been contemplated by GLWA
- The bulk of the refinancing candidates on both the water and sewer credits are tax-exempt current refundings
  - Significant debt service savings will remain available on both credits, with ability to accelerate a portion of the savings
  - Additional series will become current refunding candidates in 2019 and 2021
- New money transactions are not impacted for GLWA
- Majority of savings in the universe of refinancing candidates are generated by bonds that will be currently callable by April 2018
  - Could also structure the refinancing today to accelerate savings and build in expectation of future current refunding savings after 2020
- Current refundings will be more efficient than advance refundings (no additional escrow cost) and ultimately could afford more savings than tax-exempt advance refundings that are no longer permissible due to tax reform
  - Does involve more interest rate risk for GLWA between now and current refunding date
  - GLWA would get the benefit of “moving down the curve” for financing rates, and could always look at taxable advance refunding options



## Refunding Candidate Summary

	Sewer System Currently Callable Debt Generating Savings			Water System Currently Callable Debt Generating Savings		
Refunded Series	Series	Call Date	Par (\$000s)	Series	Call Date	Par (\$000s)
Senior	1998A	Current	18,485	-	-	-
	1998B	Current	18,260			
	2001C-2	7/1/2018	107,045			
	2012A	Current	17,635			
<b>Total Senior</b>			<b>161,425</b>			<b>-</b>
Second	-	-	-	2001C	7/1/2018	178,735
<b>Total Second</b>			<b>-</b>			<b>178,735</b>
<b>Total Refunded</b>			<b>161,425</b>			<b>178,735</b>

Note: Series 2012A Sewer Bonds partially funded Extraordinary Working Capital projects. The ability to refinance the portion of the Series 2012A Bonds related to the Extraordinary Working Capital on a tax-exempt basis is subject to opinion of Tax Counsel. Portion represented above was previously allocated to other projects.





## Base Case Refunding – Water System

### Savings Summary

- Over \$30 million in gross cashflow savings can be achieved (>\$25 million present value)
- Potential to accelerate savings as desired

### Refunding Candidates

- Includes all currently callable bonds
- A larger refunding reflecting a broader universe of refunding candidates not an option on a tax-exempt basis with tax law changes

### Assumptions

- Uninsured, matched lien refunding
- Interest rates as of January 11, 2018
- Contribution of accrued interest from DS fund
- Conservatively assumes no DSRF release
- SLGS escrow as of January 11, 2018
- Savings structured for level aggregate savings by lien
- 5% coupon structure

### Refunding Results

Delivery Date:	5/30/2018
Call Date:	7/1/2028
Current Refunded Par (\$):	178,735,000
NPV Savings (\$):	25,939,261
NPV Savings as % :	14.5%
Negative Arbitrage (\$):	(211,035)
Escrow Efficiency:	99.2%
TIC:	2.79%
Arbitrage Yield:	2.68%
WAM:	6.67 yrs
Refunded Bonds WAM:	6.20 yrs

Date	Prior Net Cashflow (\$)	Refunding DS (\$)	Savings (\$)
7/1/2018	847,917	687,124	160,793
7/1/2019	22,356,775	19,619,500	2,737,275
7/1/2020	22,362,450	19,622,500	2,739,950
7/1/2021	22,351,438	19,611,250	2,740,188
7/1/2022	22,352,300	19,615,000	2,737,300
7/1/2023	21,221,875	18,481,500	2,740,375
7/1/2024	21,537,550	18,801,000	2,736,550
7/1/2025	20,947,100	18,207,000	2,740,100
7/1/2026	21,968,825	19,227,750	2,741,075
7/1/2027	21,114,000	18,372,250	2,741,750
7/1/2028	22,804,113	20,065,000	2,739,113
7/1/2029	22,243,263	19,503,750	2,739,513
7/1/2030	-	-	-
7/1/2031	-	-	-
7/1/2032	-	-	-
7/1/2033	-	-	-
7/1/2034	-	-	-
7/1/2035	-	-	-
7/1/2036	-	-	-
	242,107,604	211,813,624	30,293,980



## Base Case Refunding – Sewer System

### Savings Summary

- Over \$30 million in gross cashflow savings can be achieved (>\$25 million present value)
- Potential to accelerate savings as desired

### Refunding Candidates

- Includes all currently callable bonds
- A larger refunding reflecting a broader universe of refunding candidates not an option on a tax-exempt basis with tax law changes
- Taxable refunding of Series 2001C-1 (callable 7/1/19) would generate additional savings

### Assumptions

- Uninsured, matched lien refunding
- Interest rates as of January 11, 2018
- Contribution of accrued interest from DS fund
- Conservatively assumes no DSRF release
- SLGS escrow as of January 11, 2018
- Savings structured for level aggregate savings by lien
- 5% coupon structure

### Refunding Results

Delivery Date:	5/30/2018
Call Date:	7/1/2028
Current Refunded Par (\$):	161,424,000
NPV Savings (\$):	27,579,206
NPV Savings as % :	17.1%
Negative Arbitrage (\$):	(191,863)
Escrow Efficiency:	99.3%
TIC:	2.85%
Arbitrage Yield:	2.72%
WAM:	8.84 yrs
Refunded Bonds WAM:	8.22 yrs

Date	Prior Net Cashflow (\$)	Refunding DS (\$)	Savings (\$)
7/1/2018	2,551,059	2,266,400	284,659
7/1/2019	11,924,163	8,640,750	3,283,413
7/1/2020	12,563,275	9,278,750	3,284,525
7/1/2021	13,562,450	10,275,500	3,286,950
7/1/2022	14,807,425	11,521,250	3,286,175
7/1/2023	23,517,000	20,230,750	3,286,250
7/1/2024	18,720,025	15,437,250	3,282,775
7/1/2025	12,071,025	8,783,500	3,287,525
7/1/2026	5,941,175	4,882,750	1,058,425
7/1/2027	5,940,025	4,882,750	1,057,275
7/1/2028	52,342,975	49,057,750	3,285,225
7/1/2029	59,439,938	56,154,000	3,285,938
7/1/2030	-	-	-
7/1/2031	-	-	-
7/1/2032	-	-	-
7/1/2033	-	-	-
7/1/2034	-	-	-
7/1/2035	-	-	-
7/1/2036	-	-	-
	233,380,534	201,411,400	31,969,134

Note: Assumes tax-exempt refunding of \$17.7 million of Series 2012A Bonds, which Series partially funded Extraordinary Working Capital projects. The ability to refinance the portion of the Series 2012A Bonds related to the Extraordinary Working Capital on a tax-exempt basis is subject to opinion of Tax Counsel. Portion assumed refunded above was previously allocated to other projects.



## New Money Needs

- Current GLWA projections reflected in draft FY 2019 & FY 2020 Biennial Budget and Five Year Plan contemplate the next new money water and sewer revenue bonds issues to fund CIP needed in FY 2020

New GLWA Debt for CIP (\$ in Millions)	FY18	FY19	FY20	FY21	FY22
Water Revenue Bonds	-	-	\$145	-	\$140
Sewer Revenue Bonds	-	-	\$150	-	\$130

- Information about timing of DWSD new money needs expected next month



# **Rating Agency Water & Sewer Sector Views and Peer Comparisons**



## Current Water and Sewer Ratings

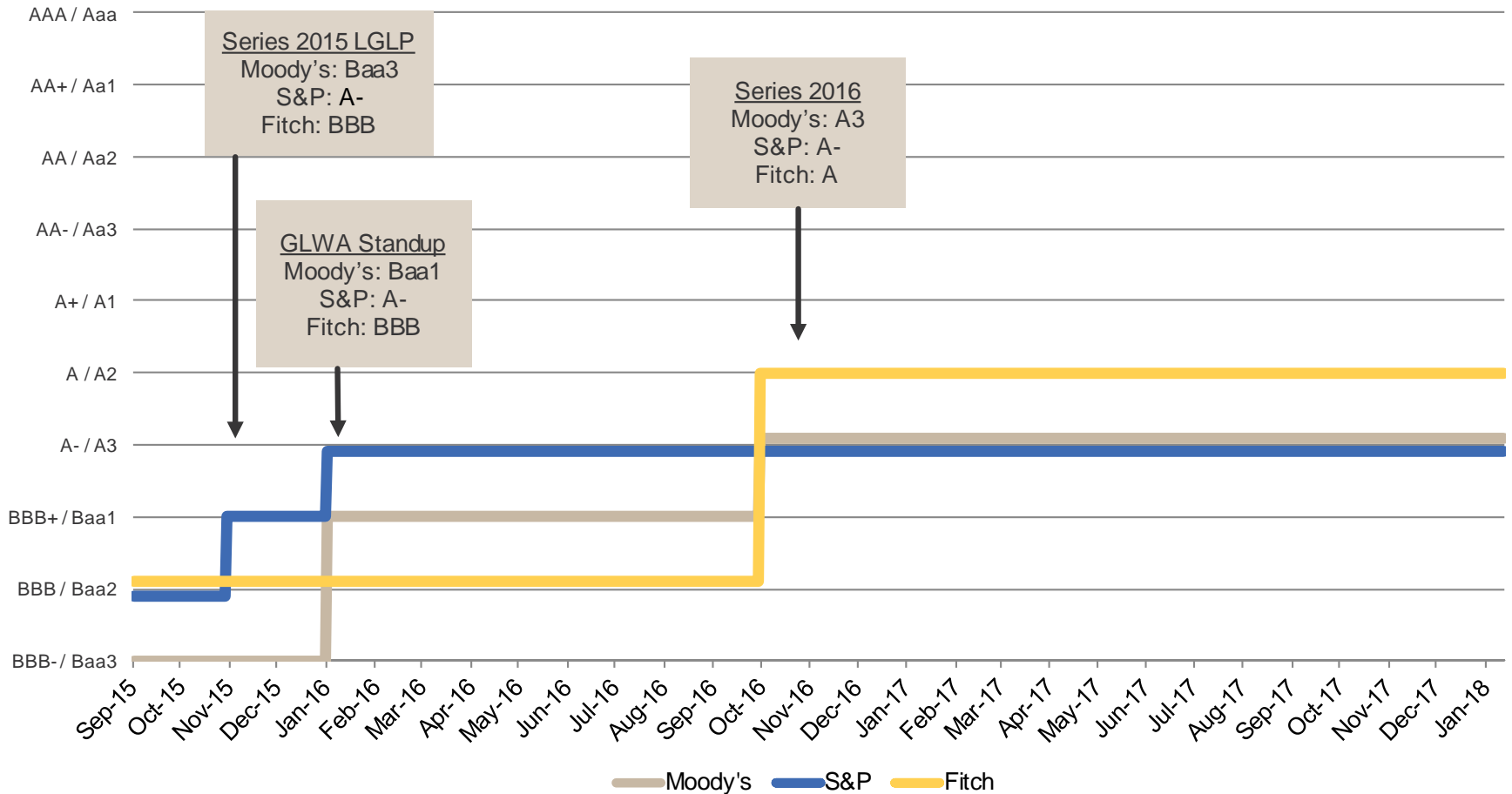
Water			
	Moody's	S&P	Fitch
Senior Lien	A3	A-	A
Second Lien	Baa1	BBB+	A-
Outlook	Stable	Positive	Stable

Sewer			
	Moody's	S&P	Fitch
Senior Lien	A3	A-	A
Second Lien	Baa1	BBB+	A-
Outlook	Stable	Positive	Stable



# History of Senior Lien Water and Sewer Ratings

Senior Lien Ratings History (GLWA Standup to Present)





## Moody's Water & Sewer Sector Outlook

- Anticipate **overall stability** in the sector, driven by strong rate management and liquidity
- Annual debt service coverage remains strong and in line with 2016 medians, as utilities have made proactive adjustments to rates
- Liquidity remains pivotal to the sector's stability, indicating necessary flexibility to absorb unanticipated revenue declines or spending increases
  - Moody's expects the current upward trend of cash reserves to continue in the sector and Moody's expects the current upward trend of cash reserves to continue in the sector
- Moody's expects continued reliance on debt issuance for non-routine capital spending, as liquidity levels are insufficient to fund major capital requirements
- In 2018 and beyond, finding the right balance between capital investment, financial stability, and rate affordability will be key to sector credit quality
- While Moody's does not expect asset condition to worsen dramatically during the next 12-18 months, sufficiency of system investment is becoming an increasingly important sector trend as median asset useful life continues to decline



## Fitch's Water & Sewer Sector Outlook

- ◆ **Stable outlook**, with the key factors in the sector's performance stability being essentiality of the services, monopolistic nature, and generally autonomous rate-setting authority
- ◆ Planned ongoing moderate rate adjustments should maintain consistent results through 2018, although headwinds from stagnant sales and rising costs are evident
- ◆ Fitch anticipates flat capital spending in 2018 which is favorable for debt metrics, but offset by concern over the increasing age of facilities (which are at their oldest in 15 years of Fitch tracking median data)
- ◆ Rates remain affordable but increases have outpaced inflation for many years, leaving diminished capacity
- ◆ Utilities face challenges in fully recovering capital replacement costs stemming from rate structures that traditionally generate the bulk of revenues from customer usage despite the vast majority of costs being fixed
- ◆ Sector cash reserves should continue to increase through 2018 and continue providing utilities flexibility in meeting operating and capital pressures
- ◆ Risk associated with uncertainty with environmental regulations, particularly related to the Lead and Copper Rule





## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Review of the FY 2017 Audit and Internal Control Reports for the City of Detroit General Retirement System

**Background:** The Great Lakes Water Authority (GLWA) assumed a portion of the legacy pension commitment assigned to the City of Detroit Water & Sewerage Department (DWSD) pursuant to the terms of the regional water and sewer leases. For this reason, GLWA monitors activity related to the City of Detroit General Retirement System (GRS).

Attached are the following reports presented to the GRS Board at its meeting on January 3, 2018.

- ✓ Report letter to those charged with governance for The General Retirement System of the City of Detroit for the year ended of June 30, 2017 (dated December 4, 2017)
- ✓ Audited Financial Report for The General Retirement System of the City of Detroit (dated December 4, 2017)

GLWA staff has reached out the GRS to determine when additional reports will be issued In accordance with an agreement between GLWA, City of Detroit, and GRS. This includes an audit of the Statement of Changes in Fiduciary Net Position by Division with an opinion on each divisional column as well as an annual report accounting of Administrative expenses.

**Analysis:** At the Audit Committee meeting on January 19, 2018, Ms. Alicia Haskin, Public Finance Management Professional (Intergovernmental Relations) will review highlights noted by the GRS Auditors from the GRS meeting on January 3, 2018.

**Proposed Action:** Receive and file report.



## Financial Services Audit Committee Communication

**Date:** January 19, 2018  
**To:** Great Lakes Water Authority Audit Committee  
**From:** Jon Wheatley, Public Finance Manager  
**Re:** Monthly Revenue & Collections Report for December 2017

*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 December 31, 2017 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**

<b>RETAIL SEWER CUSTOMERS</b>						
<u>Month</u>	<b>FY 2018 - Budget</b>		<b>FY 2018 - Actual</b>		<b>Variance</b>	
	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>
	<i>Mcf</i>	\$	<i>Mcf</i>	\$	<i>Mcf</i>	\$
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	-	-	-	-
January	195,300	22,296,100	-	-	-	-
February	198,300	23,060,600	-	-	-	-
March	203,000	23,026,900	-	-	-	-
April	189,300	22,215,900	-	-	-	-
May	219,400	23,798,700	-	-	-	-
June	251,500	24,635,500	-	-	-	-
<b>Total</b>	2,600,000	278,635,900	1,125,016	118,147,925	(13,784)	1,320,525
<i>Subtotals ytd</i>	1,138,800	116,827,400	1,125,016	118,147,925	(13,784)	1,320,525
<i>Achievement of Budget</i>			98.79%	101.13%		

<b>WHOLESALE SEWER CUSTOMERS</b>						
<u>Month</u>	<b>FY 2018 - Budget</b>		<b>FY 2018 - Actual</b>		<b>Variance</b>	
	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>
	<i>Mcf</i>	\$	<i>Mcf</i>	\$	<i>Mcf</i>	\$
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	-	N/A	-
January	N/A	22,619,300	N/A	-	N/A	-
February	N/A	22,619,300	N/A	-	N/A	-
March	N/A	22,619,300	N/A	-	N/A	-
April	N/A	22,619,300	N/A	-	N/A	-
May	N/A	22,619,300	N/A	-	N/A	-
June	N/A	22,619,300	N/A	-	N/A	-
<b>Total</b>		271,431,600		113,096,500		0
<i>Subtotals ytd</i>		113,096,500		113,096,500		0
<i>Achievement of Budget</i>				100.00%		

<b>TOTAL - ALL CUSTOMERS</b>						
<u>Month</u>	<b>FY 2018 - Budget</b>		<b>FY 2018 - Actual</b>		<b>Variance</b>	
	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>
	<i>Mcf</i>	\$	<i>Mcf</i>	\$	<i>Mcf</i>	\$
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	-	-	-	-
January	195,300	44,915,400	-	-	-	-
February	198,300	45,679,900	-	-	-	-
March	203,000	45,646,200	-	-	-	-
April	189,300	44,835,200	-	-	-	-
May	219,400	46,418,000	-	-	-	-
June	251,500	47,254,800	-	-	-	-
<b>Total</b>	2,600,000	550,067,500	1,125,016	231,244,425	(13,784)	1,320,525
<i>Subtotals ytd</i>	1,138,800	229,923,900	1,125,016	231,244,425	(13,784)	1,320,525
<i>Achievement of Budget</i>			98.79%	100.57%		

**DWSD Retail Billings:** **Table 1** shows the FY 2018 sewer billed usage and billed revenue which are provided by DWSD staff. As of December 31, 2017, the DWSD usage was at 98.79% of budget and billed revenue was at 101.13% of budget.

**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 100.0% of budget through December 31, 2017.

**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, the GLWA Sewer System had billed revenues of 100.57% of budget based upon the most current information available as of this report.

## **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	Volume	Revenue	Unit	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	-	-	-	-	-
January	224,700	7,673,100	34.15	-	-	-	-	-
February	224,700	7,813,100	34.77	-	-	-	-	-
March	235,700	7,944,800	33.71	-	-	-	-	-
April	217,700	7,529,200	34.59	-	-	-	-	-
May	256,700	8,946,300	34.85	-	-	-	-	-
June	284,800	9,089,900	31.92	-	-	-	-	-
<b>Total</b>	2,985,000	99,780,400	33.43	1,259,893	41,373,035	32.84	(42,307)	(1,402,765)
Subtotals ytd	1,302,200	42,775,800	32.85	1,259,893	41,373,035	32.84	(42,307)	(1,402,765)
Achievement of Budget				96.75%	96.72%			

WHOLESALE WATER CUSTOMERS*								
Month	FY 2018 - Budget			FY 2018 - Actual			Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	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	-	-	-	-	-
January	972,400	23,676,000	24.35	-	-	-	-	-
February	893,000	23,017,200	25.78	-	-	-	-	-
March	988,100	23,781,500	24.07	-	-	-	-	-
April	997,900	23,859,300	23.91	-	-	-	-	-
May	1,155,100	25,576,800	22.14	-	-	-	-	-
June	1,472,900	28,727,800	19.50	-	-	-	-	-
<b>Total</b>	14,130,900	311,311,500	22.03	6,834,262	146,123,188	21.38	129,362	6,842,988
Subtotals ytd	6,704,900	139,280,200	20.77	6,834,262	146,123,188	21.38	129,362	6,842,988
Achievement of Budget				101.93%	104.91%			

\* Includes Revenues and Usage from the City of Flint.

TOTAL - ALL CUSTOMERS								
Month	FY 2018 - Budget			FY 2018 - Actual			Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	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	-	-	-	-	-
January	1,197,100	31,349,100	26.19	-	-	-	-	-
February	1,117,700	30,830,300	27.58	-	-	-	-	-
March	1,223,800	31,726,300	25.92	-	-	-	-	-
April	1,215,600	31,388,500	25.82	-	-	-	-	-
May	1,411,800	34,523,100	24.45	-	-	-	-	-
June	1,757,700	37,817,700	21.52	-	-	-	-	-
<b>Total</b>	17,115,900	411,091,900	24.02	8,094,156	187,496,223	23.16	87,056	5,440,223
Subtotals ytd	8,007,100	182,056,000	22.74	8,094,156	187,496,223	23.16	87,056	5,440,223
Achievement of Budget				101.09%	102.99%			

**DWSD Retail Billings:** **Table 2** shows the FY 2018 water billed usage and billed revenue which are provided by DWSD staff. As of December 31, 2017, the DWSD usage was at 96.75% of budget and billed revenue was at 96.72% of budget.

**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 December 31, 2017, the billed usage was at 101.93% of budget and billed revenue at 104.91% 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 101.09% of budget and billed revenues of 102.99% of budget based upon the most current information available as of this report.

### 3. City of Highland Park Billings and Collections

As of December 31, 2017, Highland Park had a delinquent balance of \$37.6 million, including \$30.5 million for wastewater treatment services, almost \$1.6 million for industrial waste control services, and almost \$5.5 million for water supply services. **Table 3** provides a summary of the billing and collection history for Highland Park from June 30, 2012 to December 31, 2017 in the table below. Please note the numbers below reflect the month the invoice was sent and not the month the service was provided.

**There were no payments received from Highland Park in the month of December 2017.**

**Table 3 - City of Highland Park Billings and Collections**

	<b>Water</b>	<b>Sewer</b>	<b>IWC</b>	<b>Cumulative Total</b>
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 (6 Months)	661,535	2,835,900	41,002	3,538,437
FY 2018 Payments (6 Months)	-	(1,894,519)	-	(1,894,519)
<b>Balance as of December 31, 2017</b>	<b>\$ 5,496,604</b>	<b>\$ 30,489,716</b>	<b>\$ 1,584,552</b>	<b>\$ 37,570,872</b>

#### **4. City of Flint Billings and Collections**

On October 16, 2015, the City of Flint ("City") re-joined the regional water system pursuant to a short-term agreement which was extended several times through November 30, 2017. That agreement provided for a prepayment fund. In total, GLWA has received over \$28.4 million to the prepayment fund, and as of December 31, 2017, \$126,130.35 remains in the prepayment fund as shown in **Table 4**.

Beginning December 1, 2017, GLWA is now providing water service to Flint in accordance with a new 30-year water service agreement. The terms of this agreement provide for the funding of a \$3,750,000 Security Deposit account by the City of Flint, which was received by GLWA on January 11, 2018. The Security Deposit Account may only be drawn down if Flint fails to make full and timely payments. The agreement also provides for a monthly credit to Flint for its previous month's debt service payment to KWA and a pass-through charge to Flint for monthly service provided by GCDC. All monthly payments by Flint will be deposited with the Trustee, US Bank GLWA, KWA and GCDC per the provisions of the Baseline Trust.



**Table 4 - City of Flint Billings and Collections**

Invoice Month	Commodity			Total Invoice	Prepayment	Prepayment
	Usage	Charge	Fixed Charge		Fund Deposits	Fund Balance
<b>October 2015 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 10,000,000.00	\$ 10,000,000.00
November 2015	26,875.0	\$ 8.93	\$ 341,729.00	\$ 581,722.75	\$ -	\$ 9,418,277.25
December 2015	47,576.9	\$ 8.93	\$ 662,100.00	\$ 1,086,961.72	\$ -	\$ 8,331,315.53
January 2016	48,067.4	\$ 8.93	\$ 662,100.00	\$ 1,091,341.88	\$ -	\$ 7,239,973.65
February 2016	52,606.4	\$ 8.93	\$ 662,100.00	\$ 1,131,875.15	\$ -	\$ 6,108,098.50
March 2016	51,787.4	\$ 8.93	\$ 662,100.00	\$ 1,124,561.84	\$ -	\$ 4,983,536.66
April 2016	51,490.5	\$ 8.93	\$ 662,100.00	\$ 1,121,910.52	\$ -	\$ 3,861,626.14
May 2016	48,496.8	\$ 8.93	\$ 662,100.00	\$ 1,095,176.07	\$ -	\$ 2,766,450.07
June 2016	51,410.7	\$ 8.93	\$ 662,100.00	\$ 1,121,197.82	\$ -	\$ 1,645,252.25
<b>July 2016 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 5,900,000.00	\$ 7,545,252.25
July 2016	53,884.4	\$ 8.93	\$ 662,100.00	\$ 1,143,287.33	\$ -	\$ 6,401,964.92
August 2016	56,368.7	\$ 8.93	\$ 662,100.00	\$ 1,165,472.22	\$ -	\$ 5,236,492.69
September 2016	57,283.3	\$ 8.93	\$ 662,100.00	\$ 1,173,640.05	\$ -	\$ 4,062,852.65
<b>October 2016 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 3,900,000.00	\$ 7,962,852.65
October 2016	49,587.3	\$ 8.93	\$ 662,100.00	\$ 1,104,914.86	\$ -	\$ 6,857,937.79
November 2016	52,665.3	\$ 8.93	\$ 662,100.00	\$ 1,132,401.31	\$ -	\$ 5,725,536.48
December 2016	43,857.1	\$ 8.93	\$ 662,100.00	\$ 1,053,743.99	\$ -	\$ 4,671,792.49
January 2017	47,101.3	\$ 8.93	\$ 662,100.00	\$ 1,082,714.34	\$ -	\$ 3,589,078.15
<b>February 2017 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 2,465,700.00	\$ 6,054,778.15
February 2017	52,183.1	\$ 8.93	\$ 662,100.00	\$ 1,128,095.44	\$ -	\$ 4,926,682.71
March 2017	45,690.3	\$ 8.93	\$ 662,100.00	\$ 1,070,114.11	\$ -	\$ 3,856,568.60
April 2017	48,707.3	\$ 8.93	\$ 662,100.00	\$ 1,097,056.28	\$ -	\$ 2,759,512.32
May 2017	45,658.1	\$ 8.93	\$ 662,100.00	\$ 1,069,826.48	\$ -	\$ 1,689,685.84
June 2017	47,915.0	\$ 8.93	\$ 662,100.00	\$ 1,089,980.86	\$ -	\$ 599,704.98
<b>June 2017 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 1,802,750.00	\$ 2,402,454.98
<b>July 2017 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 1,203,045.02	\$ 3,605,500.00
<b>July 2017 Prepayment Deposit</b>	-	\$ -	\$ -	\$ -	\$ 599,704.98	\$ 4,205,204.98
July 2017	47,734.7	\$ 8.93	\$ 662,100.00	\$ 1,088,370.42	\$ -	\$ 3,116,834.56
August 2017	49,522.0	\$ 9.35	\$ 693,200.00	\$ 1,156,230.33	\$ -	\$ 1,960,604.23
September 2017	46,114.6	\$ 9.35	\$ 693,200.00	\$ 1,124,371.23		\$ 836,233.00
<b>October 2017 Prepayment</b>	-	\$ -	\$ -	\$ -	\$ 1,453,500.00	\$ 2,289,733.00
October 2017	43,357.0	\$ 9.35	\$ 693,200.00	\$ 1,098,588.04	\$ -	\$ 1,191,144.96
<b>October 2017 Prepayment</b>	-	\$ -	\$ -	\$ -	\$ 1,100,000.00	\$ 2,291,144.96
November 2017	42,691.8	\$ 9.35	\$ 693,200.00	\$ 1,092,368.52	\$ -	\$ 1,198,776.44
December 2017	40,582.5	\$ 9.35	\$ 693,200.00	\$ 1,072,646.09		\$ 126,130.35
Total				<u>\$ 28,298,569.65</u>	<u>\$ 28,424,700.00</u>	

## 5. Water & Sewer System Wholesale Accounts Receivable Aging Report

**Table 5** is a summary of the total, current and non-current receivables by category as of December 31, 2017. **Table 6** 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 5 - Wholesale Accounts Receivable Aging Report**

	<b>Total</b>	<b>Current</b>	<b>46-74 Days</b>	<b>75-104 Days</b>	<b>&gt;105 Days</b>
<b>Water</b>	\$ 44,233,579.21	\$ 38,615,865.11	\$ 451,275.11	\$ 113,034.28	\$ 5,053,404.71
<b>Sewer</b>	50,274,215.90	20,235,399.50	489,500.00	470,200.00	29,079,116.40
<b>IWC</b>	2,751,326.81	1,023,408.56	67,739.68	-	1,660,178.57
<b>Pollutant Surcharge</b>	938,792.24	669,485.44	151,853.96	43,828.28	73,624.56
<b>Total</b>	<u>\$ 98,197,914.16</u>	<u>\$ 60,544,158.61</u>	<u>\$ 1,160,368.75</u>	<u>\$ 627,062.56</u>	<u>\$ 35,866,324.24</u>
	<u>100.00%</u>	<u>61.66%</u>	<u>1.18%</u>	<u>0.64%</u>	<u>36.52%</u>

**Table 6 - Wholesale Accounts Receivable Aging Report, Net of Highland Park**

	<b>Total</b>	<b>Current</b>	<b>46-74 Days</b>	<b>75-104 Days</b>	<b>&gt;105 Days</b>
<b>Water</b>	\$ 38,736,974.28	\$ 38,401,144.43	\$ 335,829.85	\$ -	\$ -
<b>Sewer</b>	19,784,499.50	19,765,199.50	19,300.00	-	-
<b>IWC</b>	1,166,774.60	1,010,032.16	61,000.36	-	95,742.08
<b>Pollutant Surcharge</b>	938,792.24	669,485.44	151,853.96	43,828.28	73,624.56
<b>Total</b>	<u>\$ 60,627,040.62</u>	<u>\$ 59,845,861.53</u>	<u>\$ 567,984.17</u>	<u>\$ 43,828.28</u>	<u>\$ 169,366.64</u>
	<u>100.00%</u>	<u>98.71%</u>	<u>0.94%</u>	<u>0.07%</u>	<u>0.28%</u>

# GLWA Aged Accounts Receivable- Water Accounts

1/4

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$169,720.34	\$169,720.34	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$120,986.60	\$120,986.60	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$23,999.17	\$23,999.17	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$113,270.11	\$113,270.11	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$266,546.67	\$266,546.67	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$31,625.61	\$31,625.61	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$21,818.73	\$21,818.73	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$2,103,446.73	\$2,103,446.73	\$0.00	\$0.00	\$0.00
CENTER LINE	\$39,037.10	\$39,037.10	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$297,139.00	\$297,139.00	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$604,473.60	\$604,473.60	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$366,530.22	\$366,530.22	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,522,220.86	\$1,522,220.86	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$920,393.69	\$604,903.92	\$315,489.77	\$0.00	\$0.00
EASTPOINTE	\$255,517.68	\$255,517.68	\$0.00	\$0.00	\$0.00
ECORSE	\$225,396.84	\$225,396.84	\$0.00	\$0.00	\$0.00
FARMINGTON	\$75,135.71	\$75,135.71	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$674,596.46	\$674,596.46	\$0.00	\$0.00	\$0.00
FERNDAL	\$161,053.63	\$161,053.63	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$195,201.97	\$195,201.97	\$0.00	\$0.00	\$0.00
FLINT	\$ (126,130.35)	\$ (126,130.35)	\$0.00	\$0.00	\$0.00
FRASER	\$101,356.64	\$101,356.64	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$130,551.21	\$130,551.21	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Water Accounts

2/4

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GENESEE COUNTY DRAIN COMM	\$1,022,076.85	\$1,022,076.85	\$0.00	\$0.00	\$0.00
GIBRALTAR	\$36,756.64	\$36,756.64	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$65,991.69	\$65,991.69	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$97,294.04	\$97,294.04	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$223,547.10	\$223,547.10	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$33,262.58	\$33,262.58	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$117,265.70	\$117,265.70	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$114,372.75	\$114,372.75	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$139,224.44	\$139,224.44	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$113,841.66	\$113,841.66	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$57,101.27	\$57,101.27	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$5,496,604.93	\$214,720.68	\$115,445.26	\$113,034.28	\$5,053,404.71
HURON TOWNSHIP	\$230,595.16	\$230,595.16	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$76,266.59	\$76,266.59	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,984.54	\$1,984.54	\$0.00	\$0.00	\$0.00
INKSTER	\$148,146.72	\$148,146.72	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$23,658.42	\$23,658.42	\$0.00	\$0.00	\$0.00
LAPEER	\$111,200.78	\$111,200.78	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$23,376.66	\$23,376.66	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$186,368.59	\$186,368.59	\$0.00	\$0.00	\$0.00
LIVONIA	\$2,138,758.15	\$2,138,758.15	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$820,111.58	\$820,111.58	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Water Accounts

3/4

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MADISON HEIGHTS	\$156,208.57	\$156,208.57	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$8,473.86	\$8,473.86	\$0.00	\$0.00	\$0.00
MELVINDALE	\$60,730.48	\$60,730.48	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$43,802.08	\$43,802.08	\$0.00	\$0.00	\$0.00
NOCWA	\$3,623,236.77	\$3,623,236.77	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$56,030.77	\$56,030.77	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$462,648.47	\$462,648.47	\$0.00	\$0.00	\$0.00
NOVI	\$1,206,955.02	\$1,206,955.02	\$0.00	\$0.00	\$0.00
OAK PARK	\$214,612.78	\$214,612.78	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$12,233.22	\$12,233.22	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$79,237.24	\$79,237.24	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$680,936.36	\$660,596.28	\$20,340.08	\$0.00	\$0.00
REDFORD TOWNSHIP	\$275,841.87	\$275,841.87	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$43,591.23	\$43,591.23	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$74,059.83	\$74,059.83	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$23,255.93	\$23,255.93	\$0.00	\$0.00	\$0.00
ROMEO	\$18,460.91	\$18,460.91	\$0.00	\$0.00	\$0.00
ROMULUS	\$608,611.06	\$608,611.06	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$434,533.68	\$434,533.68	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$17,731.15	\$17,731.15	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$979,049.72	\$979,049.72	\$0.00	\$0.00	\$0.00
SOCWA	\$3,612,860.20	\$3,612,860.20	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$17,550.16	\$17,550.16	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Water Accounts

4/4

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHGATE	\$169,760.34	\$169,760.34	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$494,741.53	\$494,741.53	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$2,437,977.29	\$2,437,977.29	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$50,882.44	\$50,882.44	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$18,040.38	\$18,040.38	\$0.00	\$0.00	\$0.00
TAYLOR	\$766,828.58	\$766,828.58	\$0.00	\$0.00	\$0.00
TRENTON	\$170,730.13	\$170,730.13	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,022,699.71	\$1,022,699.71	\$0.00	\$0.00	\$0.00
UTICA	\$47,055.02	\$47,055.02	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$468,949.73	\$468,949.73	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$17,349.55	\$17,349.55	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$150,311.61	\$150,311.61	\$0.00	\$0.00	\$0.00
WARREN	\$778,232.05	\$778,232.05	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$149,790.03	\$149,790.03	\$0.00	\$0.00	\$0.00
WAYNE	\$452,331.28	\$452,331.28	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,508,333.85	\$1,508,333.85	\$0.00	\$0.00	\$0.00
WESTLAND	\$997,232.88	\$997,232.88	\$0.00	\$0.00	\$0.00
WIXOM	\$201,862.72	\$201,862.72	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$317,622.67	\$317,622.67	\$0.00	\$0.00	\$0.00
YCUA	\$1,730,501.00	\$1,730,501.00	\$0.00	\$0.00	\$0.00
<b>TOTAL Water Accounts</b>	<b>\$44,233,579.21</b>	<b>\$38,615,865.11</b>	<b>\$451,275.11</b>	<b>\$113,034.28</b>	<b>\$5,053,404.71</b>

# GLWA Aged Accounts Receivable- Sewer Accounts

1/1

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$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	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$329,900.00	\$329,900.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$38,600.00	\$19,300.00	\$19,300.00	\$0.00	\$0.00
HIGHLAND PARK	\$30,489,716.40	\$470,200.00	\$470,200.00	\$470,200.00	\$29,079,116.40
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.	\$2,053,100.00	\$2,053,100.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$3,800.00	\$3,800.00	\$0.00	\$0.00	\$0.00
<b>TOTAL Sewer Accounts</b>	<b>\$50,274,215.90</b>	<b>\$20,235,399.50</b>	<b>\$489,500.00</b>	<b>\$470,200.00</b>	<b>\$29,079,116.40</b>

# GLWA Aged Accounts Receivable- IWC Accounts

1/4

Balances as of 12/31/2017

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)	\$29,510.44	\$29,510.44	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$570.84	\$570.84	\$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)	\$17,707.40	\$17,670.48	\$36.92	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$11,479.28	\$11,479.28	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$152,172.88	\$60,923.68	\$30,461.84	\$0.00	\$60,787.36
CENTER LINE	\$5,884.48	\$5,884.48	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$38,612.64	\$38,612.64	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$445.88	\$445.88	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLARKSTON	\$491.32	\$491.32	\$0.00	\$0.00	\$0.00
CLAWSON	\$4,413.36	\$4,413.36	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$40,205.88	\$40,205.88	\$0.00	\$0.00	\$0.00
DEARBORN	\$116,536.56	\$116,536.56	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$14,875.92	\$14,875.92	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$170.40	\$170.40	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$10,189.92	\$10,189.92	\$0.00	\$0.00	\$0.00
FARMINGTON	\$ (1,159.71)	\$ (1,159.71)	\$0.00	\$0.00	\$0.00



# GLWA Aged Accounts Receivable- IWC Accounts

2/4

Balances as of 12/31/2017

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	\$ (73.53)	\$ (73.53)	\$0.00	\$0.00	\$0.00
FRASER	\$7,923.60	\$7,923.60	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$9,940.00	\$9,940.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$3,266.00	\$3,266.00	\$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	\$7,105.68	\$7,105.68	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$8,573.96	\$5,719.76	\$2,854.20	\$0.00	\$0.00
HARRISON TWP	\$5,012.60	\$5,012.60	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$5,393.16	\$5,393.16	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,584,552.21	\$13,376.40	\$6,739.32	\$0.00	\$1,564,436.49
HUNTINGTON WOODS	\$914.48	\$914.48	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$7,412.40	\$7,412.40	\$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	\$1,198.48	\$1,198.48	\$0.00	\$0.00	\$0.00
LATHRUP	\$2,246.44	\$2,246.44	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$284.00	\$284.00	\$0.00	\$0.00	\$0.00
LIVONIA	\$63,431.40	\$63,431.40	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- IWC Accounts

3/4

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MACOMB TWP	\$329.44	\$329.44	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$639.00	\$639.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$36,536.60	\$14,614.64	\$7,307.32	\$0.00	\$14,614.64
NOVI	\$27,573.56	\$27,573.56	\$0.00	\$0.00	\$0.00
OAK PARK	\$20,175.36	\$20,175.36	\$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)	\$8,568.28	\$8,568.28	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,562.00	\$1,562.00	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$2,010.72	\$2,010.72	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$863.36	\$863.36	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$81,360.32	\$40,680.16	\$20,340.08	\$0.00	\$20,340.08
REDFORD TOWNSHIP	\$20,139.48	\$20,139.48	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$29,058.88	\$29,058.88	\$0.00	\$0.00	\$0.00
ROMULUS	\$2,959.28	\$2,959.28	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$22,563.80	\$22,563.80	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$21,589.68	\$21,589.68	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$18,976.88	\$18,976.88	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- IWC Accounts

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Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$44,965.72	\$44,965.72	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$5,949.80	\$5,949.80	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$38,766.00	\$38,766.00	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$49,558.00	\$49,558.00	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$613.44	\$613.44	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$58,736.88	\$58,736.88	\$0.00	\$0.00	\$0.00
UTICA	\$4,694.52	\$4,694.52	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$550.96	\$550.96	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$2,237.92	\$2,237.92	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$19,723.80	\$19,723.80	\$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)	\$10,047.92	\$10,047.92	\$0.00	\$0.00	\$0.00
WESTLAND	\$36,499.68	\$36,499.68	\$0.00	\$0.00	\$0.00
<b>TOTAL IWC Accounts</b>	<b>\$2,751,326.81</b>	<b>\$1,023,408.56</b>	<b>\$67,739.68</b>	<b>\$0.00</b>	<b>\$1,660,178.57</b>

# GLWA Aged Accounts Receivable- Pollutant Surcharge

1/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
A & R PACKING CO., LLC	\$4,838.45	\$4,838.45	\$0.00	\$0.00	\$0.00
AACTRON	\$ (709.72)	\$0.00	\$0.00	\$0.00	\$ (709.72)
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$87.18	\$87.08	\$0.10	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$1,798.45	\$1,798.45	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$14,151.22	\$14,151.22	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$6,096.79	\$0.00	\$6,096.79	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$24,649.52	\$0.00	\$24,649.52	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$901.12	\$0.00	\$901.12	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$6,371.73	\$1,809.71	\$1,970.58	\$1,309.06	\$1,282.38
ALL CHEM CORP, LLC.	\$ (64.67)	\$ (64.67)	\$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	\$716.38	\$716.38	\$0.00	\$0.00	\$0.00
ATWATER BREWERY	\$3,079.19	\$3,079.19	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$305.23	\$0.00	\$305.23	\$0.00	\$0.00
BARABOO BREWING COMPANY	\$ (2,683.78)	\$0.00	\$0.00	\$0.00	\$ (2,683.78)
BARON INDUSTRIES	\$1,228.89	\$1,228.89	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$ (8.23)	\$0.00	\$0.00	\$0.00	\$ (8.23)
BATCH BREWING COMPANY	\$ (939.32)	\$0.00	\$0.00	\$0.00	\$ (939.32)

# GLWA Aged Accounts Receivable- Pollutant Surcharge

2/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$567.97	\$567.97	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$65.41	\$65.41	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$18,083.34	\$18,083.34	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$ (92.30)	\$0.00	\$0.00	\$0.00	\$ (92.30)
BOZEK'S MARKET	\$324.37	\$324.37	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$4,101.40	\$4,101.40	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CAPITAL REPRODUCTIONS	\$5.32	\$3.68	\$0.00	\$1.64	\$0.00
CF BURGER CREAMERY	\$15,659.42	\$15,659.42	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$1,661.24	\$161.14	\$614.23	\$0.00	\$885.87
CINTAS CORP. - MACOMB TWP.	\$49,302.45	\$0.00	\$49,302.45	\$0.00	\$0.00
CINTAS CORPORATION	\$35,863.64	\$35,863.64	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$11,090.50	\$11,090.50	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$5.56	\$5.56	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$7,148.87	\$4,327.24	\$2,821.63	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$2,695.71	\$2,695.71	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$576.45	\$576.45	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$1,774.52	\$1,774.52	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$564.77	\$564.77	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Pollutant Surcharge

3/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COUNTRY FRESH DAIRY CO.	\$29,107.86	\$29,107.86	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$962.29	\$962.29	\$0.00	\$0.00	\$0.00
DARLING INGREDIENTS, INC.	\$14,849.32	\$14,849.32	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$90.49	\$0.00	\$48.43	\$0.00	\$42.06
DEARBORN SAUSAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT BEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$296.31	\$31.02	\$81.80	\$118.47	\$65.02
DETRONIC INDUSTRIES, INC.	\$92.15	\$92.15	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$27,395.32	\$27,395.32	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$175.53	\$175.53	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,972.58	\$1,972.58	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,071.30	\$3,071.30	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$3,982.74	\$3,982.74	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$5,645.95	\$5,645.95	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$8,609.03	\$8,609.03	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (2,656.50)	\$ (2,656.50)	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$1,399.94	\$1,399.94	\$0.00	\$0.00	\$0.00
EQ RESOURCES RECOVERY, INC.	\$1,972.12	\$1,972.12	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Pollutant Surcharge

4/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ETON ST BREWERY- GRIFFIN CLP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$60.85	\$60.85	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$171,462.04	\$59,087.82	\$32,521.63	\$30,766.90	\$49,085.69
FORD NEW MODEL PROGRAM	\$904.25	\$904.25	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$1,243.36	\$1,243.36	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$4,173.42	\$4,173.42	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$51,013.82	\$22,813.11	\$10,915.76	\$10,742.31	\$6,542.64
GLOBAL TITANIUM, INC.	\$283.80	\$283.80	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$51.19	\$0.00	\$51.19	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$101.76	\$0.00	\$101.76	\$0.00	\$0.00
HACIENDA MEXICAN FOODS	\$2,570.81	\$1,231.61	\$736.72	\$602.48	\$0.00
HENKEL CORPORATION	\$369.98	\$139.03	\$0.00	\$230.95	\$0.00
HOME STYLE FOOD INC.	\$28,758.91	\$28,758.91	\$0.00	\$0.00	\$0.00
HOOD CLEANERS	\$199.60	\$14.65	\$6.84	\$8.78	\$169.33
HOUGHTON INTERNATIONAL INC.	\$1,933.22	\$1,933.22	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$1,647.38	\$1,647.38	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$2,662.89	\$2,662.89	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Pollutant Surcharge

5/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
INDUSTRIAL METAL COATING	\$867.33	\$867.33	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$705.57	\$705.57	\$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.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$2,438.11	\$2,438.11	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$1,254.10	\$1,254.10	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$132.16	\$132.16	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$7,269.16	\$7,269.16	\$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.	\$2,723.80	\$2,723.80	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$32.35	\$32.35	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$84.62	\$84.62	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$456.29	\$456.29	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$178.10	\$178.10	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$102,252.27	\$102,252.27	\$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	\$742.07	\$742.07	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$2,897.12	\$2,897.12	\$0.00	\$0.00	\$0.00



# GLWA Aged Accounts Receivable- Pollutant Surcharge

6/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MISTER UNIFORM & MAT RENTALS	\$338.20	\$64.59	\$39.38	\$27.97	\$206.26
MOTOR CITY BREWING WORKS	\$ (213.00)	\$0.00	\$0.00	\$0.00	\$ (213.00)
NATIONAL CHILI COMPANY	\$345.36	\$345.36	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$89.54	\$89.54	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEAT	\$109.89	\$109.89	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$ (228.50)	\$ (228.50)	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$1,191.51	\$1,191.51	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$30,455.11	\$14,846.05	\$15,609.06	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, INC.	\$212.96	\$212.96	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$28,355.40	\$28,355.40	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$179.15	\$179.15	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$185.01	\$0.00	\$185.01	\$0.00	\$0.00
QUALA SERVICES, LLC	\$279.30	\$279.30	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Pollutant Surcharge

7/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ROCHESTER MILLS BREWERY	\$3,621.30	\$0.00	\$1,913.59	\$0.00	\$1,707.71
RTT	\$20,919.52	\$1,416.39	\$2,851.80	\$0.00	\$16,651.33
SEAFARE FOODS, INC.	\$87.17	\$87.17	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$3,892.17	\$70.00	\$23.78	\$19.72	\$3,778.67
SWEETHEART BAKERY, INC.	\$188.70	\$125.32	\$63.38	\$0.00	\$0.00
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$ (2,081.87)	\$0.00	\$0.00	\$0.00	\$ (2,081.87)
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$ (61.24)	\$0.00	\$0.00	\$0.00	\$ (61.24)
TURRI'S ITALIAN FOODS	\$40,291.60	\$40,291.60	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$1,542.75	\$1,542.75	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$61,530.19	\$61,530.19	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$100.55	\$100.55	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$7.61	\$7.61	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$284.25	\$284.25	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$330.01	\$330.01	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$4,523.39	\$4,523.39	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$3,248.49	\$3,248.49	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$23,847.70	\$23,847.70	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$7,284.96	\$7,284.96	\$0.00	\$0.00	\$0.00

# GLWA Aged Accounts Receivable- Pollutant Surcharge

8/8

Balances as of 12/31/2017

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
VERNOR FOOD PRODUCTS	\$120.91	\$78.73	\$42.18	\$0.00	\$0.00
WIGLEY'S MEAT PROCESS	\$341.30	\$341.30	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$809.52	\$809.52	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$93.08	\$93.08	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$7,826.83	\$7,826.83	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$3,082.96	\$3,082.96	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>TOTAL Pollutant Surcharge</b>	<b>\$938,792.24</b>	<b>\$669,485.44</b>	<b>\$151,853.96</b>	<b>\$43,828.28</b>	<b>\$73,624.56</b>



## Financial Services Audit Committee Communication

**Date:** January 19, 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 – January 2018.

**Proposed Action:** Receive and file report.

**Great Lakes Water Authority**  
**Funds Transferred to DWSD per Master Bond Ordinance**  
**Through January 2, 2018**

<b>DWSD WATER</b>				
	<b>Operations &amp; Maintenance</b>	<b>Pension</b>	<b>Lease Payment (I&amp;E Fund)</b>	<b>Total Water</b>
<b>Total FY 2016</b>	\$ 26,185,600	\$ 4,262,700	\$ 20,173,100	\$ 50,621,400
<b>Total FY 2017</b>	\$ 33,596,400	\$ 4,262,400	\$ 22,500,000	\$ 60,358,800
<b>FY 2018</b>				
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
August 2017	121,942	-	-	121,942 <sup>1)</sup>
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				-
March 2018				-
April 2018				-
May 2018				-
June 2018				-
<b>Total FY 2018</b>	\$ 20,451,494	\$ 2,492,000	\$ 13,125,000	\$ 36,068,494
<b>Total Water Since Jan 1 2016</b>	\$ 80,233,494	\$ 11,017,100	\$ 55,798,100	\$ 147,048,694
<b>DWSD SEWER</b>				
	<b>Operations &amp; Maintenance</b>	<b>Pension</b>	<b>Lease Payment (I&amp;E Fund)</b>	<b>Total Sewer</b>
<b>Total FY 2016</b>	\$ 19,774,300	\$ 2,861,800	\$ 7,508,500	\$ 30,144,600
<b>Total FY 2017</b>	\$ 41,535,600	\$ 2,862,000	\$ 27,500,000	\$ 71,897,600
<b>FY 2018</b>				
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
August 2017	1,581,866	-	-	1,581,866 <sup>1)</sup>
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				-
March 2018				-
April 2018				-
May 2018				-
June 2018				-
<b>Total FY 2018</b>	\$ 35,302,162	\$ 1,666,000	\$ 16,041,669	\$ 53,009,831
<b>Total Sewer Since Jan 1 2016</b>	\$ 96,612,062	\$ 7,389,800	\$ 51,050,169	\$ 155,052,031
<b>Total FY 2016 Water &amp; Sewer</b>	\$ 45,959,900	\$ 7,124,500	\$ 27,681,600	\$ 80,766,000
<b>Total FY 2017 Water &amp; Sewer</b>	\$ 75,132,000	\$ 7,124,400	\$ 50,000,000	\$ 132,256,400
<b>Total FY 2018 Water &amp; Sewer</b>	\$ 55,753,656	\$ 4,158,000	\$ 29,166,669	\$ 89,078,325

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.

<sup>1)</sup> Additional Transfer in August to adjust July O&M to DWSD FY18 requested budget amount.

**Great Lakes Water Authority**  
**Funds Transferred to Accounts Held by GLWA per Master Bond Ordinance**  
**Through January 2, 2018**

<b>WATER</b>							
	<u>Operations &amp; Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair &amp; Replacement (ER&amp;R)</u>	<u>Total Water</u>
<b>Total FY 2016</b>	<b>\$71,052,000</b>	<b>\$6,037,100</b>	<b>\$10,297,200</b>	<b>\$1,983,300</b>	<b>\$2,326,900</b>	<b>\$606,000</b>	<b>\$92,302,500</b>
<b>Total FY 2017</b>	<b>\$111,879,600</b>	<b>\$6,037,200</b>	<b>\$10,297,200</b>	<b>\$2,077,200</b>	<b>\$360,000</b>	<b>\$0</b>	<b>\$130,651,200</b>
<b>FY 2018</b>							
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							-
March 2018							-
April 2018							-
May 2018							-
June 2018							-
<b>Total FY 2018</b>	<b>\$70,911,519</b>	<b>\$3,528,000</b>	<b>\$6,239,156</b>	<b>\$1,259,650</b>	<b>\$0</b>	<b>\$0</b>	<b>\$81,938,325</b>
<b>Total Water Since Jan 1 2016</b>	<b>\$253,843,119</b>	<b>\$12,074,300</b>	<b>\$20,594,400</b>	<b>\$4,060,500</b>	<b>\$2,686,900</b>	<b>\$606,000</b>	<b>\$222,953,700</b>
<b>SEWER</b>							
	<u>Operations &amp; Maintenance</u>	<u>Pension Sub Account</u>	<u>Pension Obligation</u>	<u>WRAP</u>	<u>Budget Stabilization (For Benefit of DWSD)</u>	<u>Extraordinary Repair &amp; Replacement (ER&amp;R)</u>	<u>Total Water</u>
<b>Total FY 2016</b>	<b>\$100,865,600</b>	<b>\$10,838,400</b>	<b>\$14,025,800</b>	<b>\$2,523,400</b>	<b>\$5,591,700</b>	<b>\$779,600</b>	<b>\$134,624,500</b>
<b>Total FY 2017</b>	<b>\$175,858,800</b>	<b>\$10,838,400</b>	<b>\$14,026,800</b>	<b>\$2,654,400</b>	<b>\$2,654,400</b>	<b>\$0</b>	<b>\$206,032,800</b>
<b>FY 2018</b>							
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							-
March 2018							-
April 2018							-
May 2018							-
June 2018							-
<b>Total FY 2018</b>	<b>\$111,462,981</b>	<b>\$6,314,000</b>	<b>\$8,567,706</b>	<b>\$1,610,469</b>	<b>\$0</b>	<b>\$0</b>	<b>\$127,955,156</b>
<b>Total Sewer Since Jan 1 2016</b>	<b>\$388,187,381</b>	<b>\$21,676,800</b>	<b>\$28,052,600</b>	<b>\$5,177,800</b>	<b>\$8,246,100</b>	<b>\$779,600</b>	<b>\$340,657,300</b>
<b>Total FY 2016 Water &amp; Sewer</b>	<b>\$171,917,600</b>	<b>\$16,875,500</b>	<b>\$24,323,000</b>	<b>\$4,506,700</b>	<b>\$7,918,600</b>	<b>\$1,385,600</b>	<b>\$226,927,000</b>
<b>Total FY 2017 Water &amp; Sewer</b>	<b>\$287,738,400</b>	<b>\$16,875,600</b>	<b>\$24,324,000</b>	<b>\$4,731,600</b>	<b>\$3,014,400</b>	<b>\$0</b>	<b>\$336,684,000</b>
<b>Total FY 2018 Water &amp; Sewer</b>	<b>\$182,374,500</b>	<b>\$9,842,000</b>	<b>\$14,806,862</b>	<b>\$2,870,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$209,893,481</b>



## Audit Committee

Friday, January 19, 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
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
  - A. January 19, 2018
5. PUBLIC PARTICIPATION
6. OLD BUSINESS

Items highlighted in gray are included in  
Audit Committee Binder #1

Items highlighted in turquoise are  
included in Audit Committee Binder #2

- A. Status Report: FY 2017 Year End Financial Statements (verbal update)
  - B. Update: FY 2017 Audit Schedule (verbal update)
  - C. Update: FY 2019 – FY 2020 Biennial Budget and FY 2019 – 2023 Financial Plan
  - D. Final Update: 2017 Wholesale Water Contract Reopeners
  - E. Update on Cost of Service Studies for FY 2019 Charges - The Foster Group
    - i. Chart: Comparison of FY 2019 "Unit Charge" Adjustments
7. NEW BUSINESS
  - A. Annual Update & Financing Strategy with PFM (Part 1 of 2)
  - B. Review of the FY 2017 Audit and Internal Control Reports for the City of Detroit General Retirement System
  - C. Analysis of Retail and DWSD Receivable as of June 30, 2017
  - D. Capital Overhead Cost Allocation Project
8. REPORTS
  - A. Monthly Revenue & Collections Report for November 2017
  - B. Treasury Report: Cash Transfers through December 1, 2017
  - C. GLWA and DWSD Shared Services True-Up Status
  - D. CFO Update (verbal)
9. LOOK AHEAD

Next Audit Committee Meeting – February 16, 2018 at 8 am (Regular Meeting)
10. INFORMATION
11. OTHER MATTERS
12. ADJOURNMENT



## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

**From:** Nicolette Bateson, CPA, Chief Financial Officer & Treasurer

**Re:** Update: FY 2019 – FY 2020 Biennial Budget and FY 2019 – 2023 Financial Plan

**Background:** On January 5, 2018 the Great Lakes Water Authority (GLWA) was presented with discussion draft materials for the FY 2019 – FY 2020 Biennial Budget and FY 2019 – 2023 Financial Plan. Subsequently the draft budget was presented to the GLWA Board at its meeting on January 10, 2018. A combination of materials from both of those meetings was presented at the Customer Outreach meeting on January 11, 2018.

**Analysis:** Additional information was requested at the Audit Committee meeting on January 5, 2018, of which many items were subsequently presented at the Board meeting on January 10, 2018. Additional items were requested on January 10, 2018 that could not be compiled in time for today's meeting on January 19, 2018 due to a number of conflicting priorities and circumstances. Those supplemental materials will be distributed next week.

A significant element in finalizing the biennial budget and five-year financial plan is incorporating the proposed FY 2019 to FY 2023 Capital Improvement Plan (CIP). GLWA staff has been diligently revising the CIP to align with a new level of performance as we enter GLWA's third year of operations. It is expected that a revised annual spending level and related sub-categories of spending will be submitted early next week for the Financial Planning & Analysis team and myself to update and review the overall financial plan.

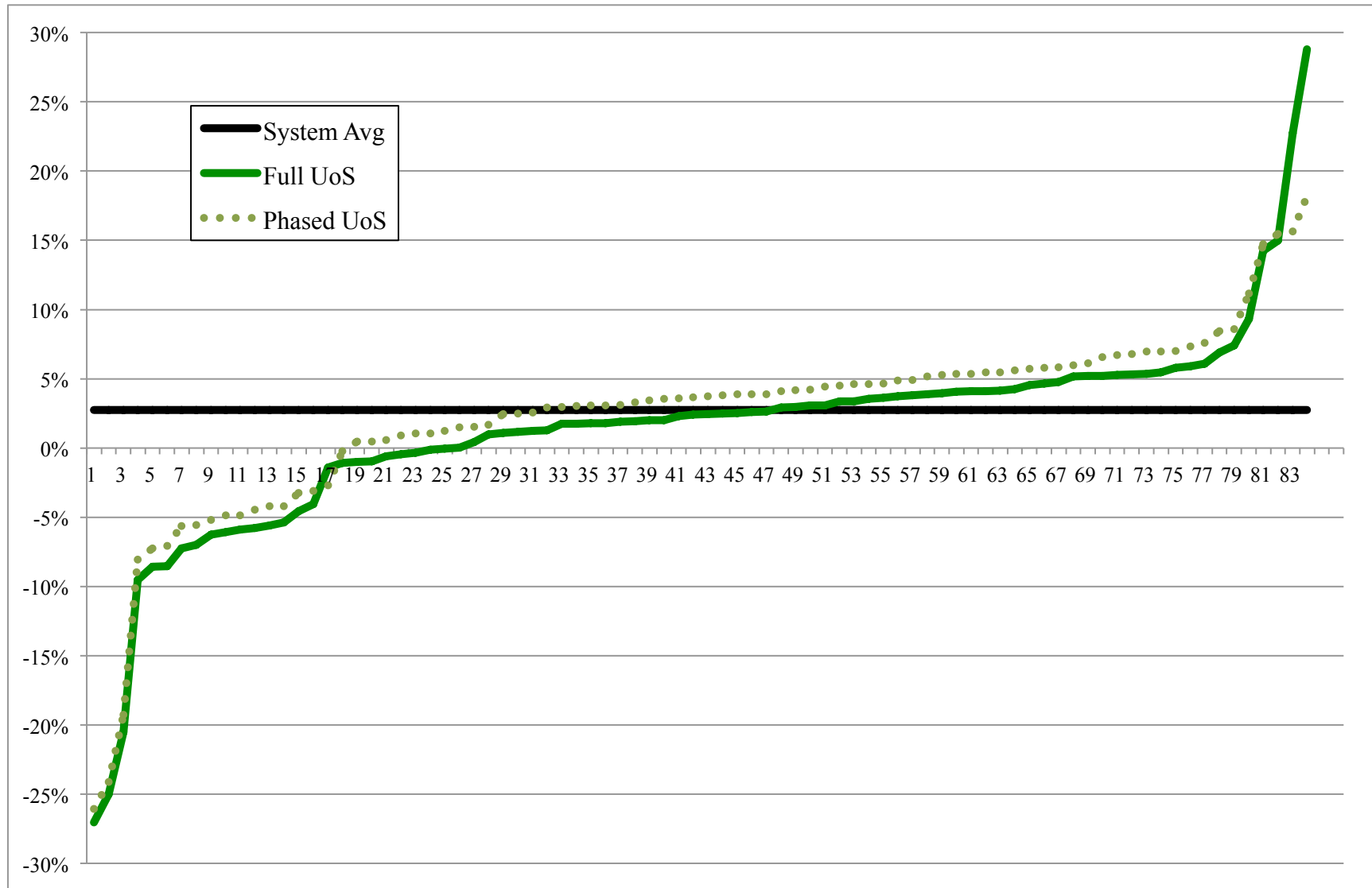
Given the timing to revise the financial plan and the capital improvement plan, receive feedback from Audit Committee, Capital Improvement Planning Committee, full Board feedback, other stakeholder feedback as well as to compile and/or update the related documents and plans, staff respectfully requests the Audit Committee considers moving the February 16, 2018 Audit Committee meeting to February 9, 2018 to allow for adequate Board review while keeping to a preferred adoption date of February 28, 2018. A possible flow of activities is outlined in the table below.



<b>Date</b>	<b>Activity</b>
<b>Friday, February 9, 2018</b>	<b>Audit Committee review of final, proposed Biennial Budget and Five-Year Plan (rescheduled meeting from February 9, 2018)</b>
<b>Wednesday, February 14, 2018</b>	<b>GLWA Board Review of final, proposed Biennial Budget and Five-Year Plan</b>
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019 & FY 2020 Biennial Budget
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019–2023 Capital Improvement Plan
Wednesday, February 28, 2018	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2019 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date)

**Proposed Action:** Move that the Audit Committee reschedule its February 2018 meeting from the February 16, 2018 at 8 am to February 9, 2018 at 8 am.

*Comparison of FY 2019 "Unit Charge" Adjustments  
Comparison of "Full" and "Phased" UoS Implementation Scenarios*





## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

**From:** Kim Garland, Management Professional – Public Finance

**Re:** Analysis of Retail and DWSD Receivable as of June 30, 2017

**Background:** On the effective date of the regional water and sewer system leases for the Great Lakes Water Authority (GLWA), certain assets and liabilities of the Detroit Water & Sewerage Department (DWSD) transferred to the GLWA. The assets included the retail system accounts receivable as of December 31, 2015 which were recorded in the financial records of the GLWA (“Assumed Retail Accounts Receivable”). Subsequent retail system customer billings and receivables for services provided in the month of January 2016 and after are recorded in the financial records of the DWSD in accordance with the terms of the leases.

Beginning January 2016, water and sewer system services are provided by GLWA to the City of Detroit through the DWSD. Accordingly, DWSD is allocated a revenue requirement for those regional system 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 transferred to GLWA on the effective date, the cash receipts of both DWSD and GLWA are deposited in a Trust Estate and distributed in accordance with the terms of the Master Bond Ordinance (MBO). Those cash receipts are then distributed in accordance with the MBO in accordance with a defined flow of funds for both GLWA (the “Regional System”) and DWSD (the “Local System”) for their respective financial commitments (“MBO Requirements”) including operations & maintenance funds, debt service, legacy pension, water residential assistance program, budget stabilization fund, improvement & extension fund, and reserves.

The complexity of the accounting, reconciliation, and coordination of these transactions is significant. The staff of both GLWA and DWSD work together to coordinate these activities. As both entities near the completion of their respective FY 2017 year-end close and related audit fieldwork, the financial impact of the nature of the transaction and related cash flows results in a cumulative receivable from DWSD as shown on the attached analysis. The analysis provides the status of retail cash receipts applied to the a) assumed retail accounts receivable on January 1, 2016 and b) Regional System service charges billed and credited

through June 30, 2017 as recorded on the books of the GLWA. While the nature of the two activities are distinct, both are linked to the same cash collections and were subject to business judgement on how to best appropriately apply the cash receipts.

**Analysis:** Key points related to these two activities is noted below.

Assumed Retail Accounts Receivable: The January 1, 2016 Assumed Retail Accounts Receivable (AR) includes all related activities and account balances including: Retail AR, Allowance for Retail AR, Wayne County ("County") Revolving Fund Loan and related AR and Allowance, City General and Tax Fund balances related to County Revolving Fund, Customer Deposits, and Detroit Residential Water Assistance Program.

1. It should be noted that, in October 2017, the City of Detroit ("City") transferred \$16,851,450 to GLWA consisting of retail receipts and a County Revolving Fund settlement for property tax year 2016 (consisting largely of original billings from 2015 and/or prior). This transfer has further reduced the GLWA December 31, 2015 assumed retail accounts receivable balance presented.
2. The Assumed Retail Accounts Receivable was recorded on January 1, 2016 net of an allowance for doubtful accounts consistent with prior assumptions of collection rates. The subsequent cash collections of the Assumed Retail Accounts Receivable have had a positive variance. Collections exceeded what appears to have now been conservative allowance reserves as of January 1, 2016 by nearly \$31 million.

Regional System Service Charges to DWSD and Local System MBO Requirements: The following relates to new transactions since January 1, 2016.

1. The attached schedule presents total balances due per the general ledger. This balance provides a current and non-current portion. The current portion represents two months of Regional System Service Charges and MBO Requirements which total \$2.6 million for water and \$31.2 million for sewer. Bills for Regional System Services are due 45 days from the bill date. The MBO requirements are considered due when the monthly transfers are made.
2. There are differences between DWSD and GLWA balances as of June 30, 2017. These are summarized as follows:
  - a. *Treatment of First Month of MBO Requirements* (i.e. January 2016) – DWSD recorded five months of MBO requirements in fiscal year 2016 instead of six. GLWA believes that six months of MBO requirements is consistent with the terms of the lease terms. (Note that the effective date of the leases was halfway through FY 2016, hence six months of activity.) This difference is \$8.4 million.

- b. Various other differences* – DWSD reports \$1.28 million less due to variances related to various collection activities and allocations, such as customer refunds, bank charges, debt payment variances, and miscellaneous other retail receipt transactions.

Overall Financial Position: Cumulatively, the retail cash receipts are not sufficient to fund the Assumed Retail Accounts Receivable and Regional System service charges to DWSD as well as the Local System MBO Requirements

**Proposed Action:** Receive and file report.

**Great Lakes Water Authority**  
**Cumulative Application of post-January 1, 2016 Retail Cash Receipts to:**  
**1) Assumed Accounts Receivable at January 1, 2016, and**  
**2) Subsequent Regional System Charges to DWSD for Services + Master Bond Ordinance (MBO) Requirements**  
**Through June 30, 2017**

	<b>Water System</b>		<b>Sewer System</b>	
	<b>Retail Accounts Receivable [1]</b>	<b>Service Charges + MBO Requirements Due from DWSD [2]</b>	<b>Retail Accounts Receivable [1]</b>	<b>Service Charges + MBO Requirements Due from DWSD [2]</b>
<b>Beginning Balance, January 1, 2016</b>	<b>\$25,601,331</b>	<b>\$ -</b>	<b>\$62,922,381</b>	<b>\$ -</b>
Service Charges & MBO Requirements		\$47,809,552		\$122,297,300
Cash Receipts	(\$21,792,154)	(\$26,201,881)	(\$50,332,413)	(\$65,256,734)
Other Account Adjustments	\$28,922,201		\$49,886,840	
<b>Balance, June 30, 2016*</b>	<b>\$32,731,378</b>	<b>\$21,607,671</b>	<b>\$62,476,809</b>	<b>\$57,040,566</b>
Service Charges & MBO Requirements	\$ -	\$93,066,144	\$ -	\$261,963,973
Cash Receipts	(\$9,153,903)	(\$96,451,105)	(\$38,827,133)	(\$233,723,367)
Other Account Adjustments	(\$9,923,281)	-	(\$32,843,991)	
<b>Balance, June 30, 2017 (unaudited)*</b>	<b>\$13,654,194</b>	<b>\$18,222,710</b>	<b>(\$9,194,315)</b>	<b>\$85,281,172</b>
<i>Payments received October 2017 [3]</i>	<i>(\$16,851,450)</i>			
<i>Balance after applying the payments from the City</i>	<i>(\$3,197,256)</i>			
<b>Current: Due 7/15/17 and 8/15/17</b>		\$2,581,720		\$31,217,350
<b>Non-Current: Past Due</b>		\$15,640,990		\$54,063,822
		<b>\$18,222,710</b>		<b>\$85,281,172</b>

\* Agrees with GLWA's audit workpapers

[1] Includes all AR related accounts: Retail AR, Allowance for Retail AR, Wayne County Revolving Fund Loan and related AR and allowance, City General & Tax Fund balances related to County Revolving Fund, Customer Deposits, Detroit Residential Water Assistance Program.

[2] Unbilled IWC at 6/30/17 \$236,388.96 is not included in the numbers above.

[3] Payments received from City of Detroit for 6/30/2017 County Settlements. Once the delinquent tax accounts are submitted to the City Assessor, the character of water/sewer is lost, and the special assessment listed on the property tax bills is "Delinquent Water". Therefore, the percentage of water/sewer balances to the total amount placed on the delinquent tax roll is used to assign the loan, receivable and subsequent payments.



## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** Capital Overhead Cost Allocation Project

**Background:** The FY 2017 budget for the Great Lakes Water Authority (GLWA) was prepared in late calendar year 2015 and early calendar year 2016. This spanned GLWA's operational effective date of January 1, 2016. GLWA's financial system was launched in March 2016. The predecessor entity's financial system was challenging at best. In addition, financial staff vacancy approached a 50% mark as staff for one consolidated entity was now split between two entities at the time of bifurcation.

As we approach the second anniversary of the launch of GLWA's financial system, basic functions are running well and we now have one full fiscal year of data for analysis. This was sorely needed to begin to establish financial patterns and expectations. One area that was more elusive in the prior system was the accumulation and tracking of internal capital project time and overhead. Today, while progress has been made, cost allocation (a high priority need for GLWA) is largely manual via spreadsheets. Tracking time is time consuming, and worse, untimely, inconsistent, and difficult to implement. In the long-term, the Information Technology group is evaluating options for tracking time by project.

Aside from the technology and business process issues, we need to formulate an informed policy related to capital project overhead.

**Analysis:** There are two aspects of this topic that we want to bring to the Audit Committee's attention: 1) Self-constructed Asset Capitalization Policy (under evaluation) and 2) Impact on FY 2017 Budget.

**1) Self-constructed Asset Capitalization Policy:** Many public entities, including water and sewer systems, have capitalization policies with wording akin to the following.

Self-Constructed Assets: When the entity uses internal staff, resources, equipment, and/or materials to construct a building or piece of machinery or equipment for its own use that meets the capitalization dollar criteria, an acquisition cost will be established and the asset will be recorded as if it had been purchased.

All direct costs, including material and labor costs, will be included in the total cost of the asset. Overhead (indirect) costs will not be included unless they are increased by the construction of the asset.

The above policy statement is consistent with generally accepted accounting principles which references any “ancillary charges necessary to place the asset into its intended location and condition for use”.

Given the intensive capital nature of GLWA’s operations, the question of indirect overhead allocations is complex (especially with limited, quality data from our short life) but is also significant. This is especially true in areas where costs are incurred to provide internal services that are clearly related to projects, but not to one specific project.

Revolving Fund guidelines address “force account costs” as “direct labor costs, indirect costs, and other project allocable expenses, such as travel, printing, or postage incurred by an applicant for administration and technical services are eligible for reimbursement if such costs are adequately documented, as described in the “Instructions for Completing the Project Cost Worksheet” (requires detailed project time accounting)”.

There are several considerations in evaluating the indirect overhead allocation.

1. How those costs should be funded. The predecessor entity’s practice was to optimize the use of debt for capital improvements. That may not be consistent with GLWA’s long-term financial sustainability objectives.
2. System limitations and the cost/benefit of work-arounds may impact an approach.
3. Implementing business processes and systems to align the CIP cost build-up by project, by year and the budget for each year.
4. Preventing bloating of the asset cost (and related annual depreciation expense) with a high percentage of indirect costs.
5. Ensuring that soft costs do not accumulate in construction work-in-progress (CWIP) that do not materialize into capitalizable assets.



**2) Impact on FY 2017 Budget:** As we were closing the books for FY 2017, to varying degrees, all five of the above considerations led us to a conservative application of overhead allocation. In hindsight, the original FY 2017 overhead allocation budget may have been high (even though they were significantly lower than the predecessor entity). We had no history. Also, as a new entity, our level of capital delivery was lower which may have overstated asset value if we applied indirect overhead in addition to capitalized interest on CWIP. And, as a new entity, we simply did not have the people, processes, or technology in place to develop and manage an effective indirect cost allocation plan.

The result is a material variance in “contra-expenses” of \$24.2 million or 92%. It should be noted however, that a significant portion of this variance is offset by many related expense categories being under budget. The preliminary FY 2017 overall operations and maintenance budget is expected to have a positive variance of approximately \$32 million, inclusive of this variance.

Category	FY 2017 Original Budget (No Amendments)	FY 2017 Activity (Direct Labor Only)	Variance	Variance Percent
Water - Capital Program Allocation	\$ (2,895,500)	\$ (869,300)	\$ (2,026,200)	70.0%
Wastewater - Capital Program Allocation	(3,061,400)	(1,150,300)	(1,911,100)	62.4%
Centralized - Capital Program Allocation	(20,225,100)	(108,300)	(20,116,800)	99.5%
Administrative - Capital Program Allocation	(195,000)		(195,000)	100.0%
<b>Total</b>	<b>\$ (26,377,000)</b>	<b>\$ (2,127,900)</b>	<b>\$ (24,249,100)</b>	<b>92%</b>

Next Steps: The next steps include the following.

1. Given the closing of FY 2017 as we are preparing the FY 2019+ Budget, a further review of the proposed O&M budget will occur.
2. Assignment of staff to plan and conduct a Capital Overhead Cost Allocation Project including policy, process, technology, and the next level of alignment with CIP.
3. Fiscal Note for FY 2018 based on review of capital spend-to-date versus capital program allocation.

**Proposed Action:** Receive and file report.



## Financial Services Audit Committee Communication

**Date:** January 19, 2018

**To:** Great Lakes Water Authority Audit Committee

**From:** Alicia Haskin, Management Professional – Intergovernmental Relations

**Re:** Update: GLWA and DWSD Shared Services True-Up Status

**Background:** As a result of the regional water and sewer system implementation, it was agreed by both Great Lakes Water Authority (GLWA) and Detroit Water and Sewerage Department (DWSD) that certain services would be provided by one agency to the other. These Shared Services were outlined in the Shared Services Agreement (the Agreement) on December 1, 2015, in order to facilitate and enhance the efficiency of the operation of both systems, as well as, to avoid duplication of services and functions by both parties.

For the fiscal year June 30, 2016 (FY 2016) there was a monthly invoice for each Shared Service based on an agreed upon budget, as provided in the Agreement. Per Section 5.1 of the Agreement, at the end of each fiscal year there is a requirement for a Cost Analysis to be completed (“True-up”) to determine the actual costs of providing such services compared to the originally budgeted amounts.

The Shared Service Agreement states that:

“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 Costs for Services provided.” (Section 5.1)

The Shared Services Team for GLWA has diligently reviewed all costs for each service provided to DWSD in FY 2016. The FY 2016 True-up for each shared service provided by GLWA has been given to DWSD for analysis.

**Analysis:** The following is an update of the True-Up process.

## Fiscal Year 2016 Update

The table below lists the status of each Shared Service based upon GLWA's staff analysis. Those items with "Outstanding Issue" will be further discussed below. As of the last meeting on January 12, 2018 between the GLWA and DWSD Shared Services Teams, there was no known issues identified by DWSD with the true-up materials submitted by GLWA for the items identified as "Resolved."

Shared Service	Description	Provider	GLWA Status
OPS-001	Fleet	DWSD	Outstanding Issue
OPS-002	MISS DIG	DWSD	Outstanding Issue
OPS-003	As Needed Field Service	DWSD	Outstanding Issue
OPS-004	Water Quality	GLWA	Resolved
OPS-005	Security and Integrity	GLWA	Resolved
OPS-006	Facilities	DWSD	Outstanding Issue
<del>OPS-007</del>	<del>WWTP IWC Underground Storage Tank</del>	N/A – not needed	
OPS-008	Systems Control	GLWA	Outstanding Issue
ITS-001	Retail AMR	GLWA	Resolved
ITS-002	Customer Service Tech Suite	GLWA	Resolved
ITS-003	See Click Fix	GLWA	Resolved
ITS-004	WAM	GLWA	Resolved
ITS-005	Mobile Workforce Management	GLWA	Resolved
ITS-006	ESRI-GIS	GLWA	Resolved
ITS-007	DADS	GLWA	Resolved
ITS-008	Tibco	GLWA	Resolved
ITS-009	Infrastructure	GLWA	Resolved
DoIT-001	Financial Information System	City of Detroit	Outstanding Issue
DoIT-002	Radios	City of Detroit	Outstanding Issue
DoIT-003	Customer Service Tech Suite	City of Detroit	Outstanding Issue
Training	Training	GLWA	Resolved
PRO-001	Applications Analyst	GLWA	Resolved
LS-001 - LS-003	Legal Services	Both	Resolved

The following list describes the nature of the outstanding issue for FY 2016 Shared Services.

OPS-006 – Facilities

- Although this service was to be provided by DWSD, DWSD was unable to provide the level of service as stated in the agreement due to staffing shortage. GLWA provided some of the service to DWSD on an interim basis.
- At this time, GLWA management is reviewing the information received and is submitting questions to DWSD as it relates to personnel costs and assignments.
  - Update: January 12, 2018 - DWSD informed GLWA Shared Services Team that additional staff hours needed to be added to the DWSD True-Up received at a prior date by GLWA.
  - Update: Due to DWSD's request to add staff hours GLWA Shared Services Team is meeting with Cheryl Porter and Paula Anderson on Friday, January 26, 2018 to discuss the addition of staff hours.

- OPS-008 – Systems Control

- In the process of completing the True-up for this Shared Service the detail regarding the allocation of facilities and sites was not available. GLWA staff has recreated the allocation based on best available information.
- DWSD has requested a meeting with GLWA management to discuss the proposed new allocation by GLWA.
  - Update: January 12, 2018 - DWSD has completed a written response by Deputy Director Palencia Mobley's team. DWSD is conducting an internal meeting on January 24, 2018 prior to submitting the information to GLWA for review.
- DWSD also provided certain Shared Services to GLWA. All True-ups have been received by GLWA. There are outstanding questions with the provided information from DWSD as summarized below.

- OPS-001 – Fleet

- GLWA has requested backup documentation to detail both the salary and other costs associated with this True-up.

- Update: On January 18, 2018 the payroll information was provided to GLWA Shared Service Team by DWSD.
- OPS-002 – MISS DIG
  - GLWA management is reviewing the True-up to determine if all charges are acceptable.
    - Update: GLWA Shared Services Team is meeting with Cheryl Porter and Paula Anderson on Friday, January 26, 2018 to get final approval of DWSD True-Up.
- OPS-003 – As Needed Field Services
  - GLWA management has reviewed the information provided and on November 13, 2017 submitted a detailed list of the disputed costs for DWSD's review.
- OPS-006 – Facilities
  - DWSD has requested a meeting to discuss a possible administrative fee for this Shared Service, rather than the actual costs of employee time.
    - Update: GLWA Shared Services Team is meeting with Cheryl Porter and Paula Anderson on Friday, January 26, 2018 to discuss this request.

There are three Shared Services that are provided by the City of Detroit. There are outstanding issues with each of these Shared Services as detailed below.

- DoIT-001 – Financial Information System
  - GLWA management is reviewing the information as received by the City of Detroit.
- DoIT-002 – Radios
  - This True-up has not been received to date.
    - Update: January 12, 2018 - DWSD informed GLWA Shared Services Team that this True-Up may never be received from the City of Detroit.
- DoIT-003 – Customer Service Tech Suite
  - This True-up has not been received to date.
    - Update: January 12, 2018 - DWSD informed GLWA Shared Services Team that DWSD is waiting for a report that will specify the breakout

of the costs for this service. There are some costs that are DWSD only and others that will be shared costs.

There were also transition costs that were associated with the bifurcation. The following list of transition costs paid by GLWA have no outstanding issues as of the last meeting with DWSD Shared Services Group.

- Lakeshore Invoices
- Bank/Credit Card Fees
- Invoices paid by GLWA on behalf of DWSD
- P-Card activity

The following is a list of transition costs paid by DWSD and the related status.

- Employee termination payouts (no outstanding issues)
- Fuel (currently being reviewed by GLWA management)
  - GLWA Shared Services Team is meeting with Cheryl Porter and Paula Anderson on Friday, January 26, 2018 to discuss the fuel charges by DWSD.
- Joint contract billing (currently being reviewed by GLWA management)

**Next Steps FY 2016:** There are several meetings that will be needed between GLWA and DWSD staff to come to an agreement on the outstanding issues.

- Update: Meetings have been scheduled with GLWA management to review FY16 outstanding issues and other meetings will be scheduled after DWSD provides the requested information.

Per Section 5.1 of the Agreement the parties shall engage, and share the costs of, a third-party to analyze the actual Service Costs. This will be the final step to complete the FY 2016 True-Up.

### **Fiscal Year 2017 Update**

Below lists the status of each Shared Service for GLWA. Those items with “In progress” are currently being reviewed for all costs that are associated with providing the service to DWSD. There are several items that are “Complete” with the analysis of costs by the GLWA Shared Services Team.

<b>Shared Service</b>	<b>Description</b>	<b>Provider</b>	<b>GLWA Status</b>
OPS-001	Fleet	DWSD	Open
OPS-002	MISS DIG	DWSD	In progress
OPS-003	As Needed Field Service	DWSD	Open

<b>Shared Service</b>	<b>Description</b>	<b>Provider</b>	<b>GLWA Status</b>
OPS-004	Water Quality	GLWA	Complete
OPS-005	Security and Integrity	GLWA	In progress
OPS-006	Facilities	DWSD	Complete
<del>OPS-007</del>	<del>WWTP IWC Underground Storage Tank</del>	N/A – not needed	
OPS-008	Systems Control	GLWA	In progress
ITS-001	Retail AMR	GLWA	In progress
ITS-002	Customer Service Tech Suite	GLWA	In progress
ITS-003	See Click Fix	GLWA	In progress
ITS-004	WAM	GLWA	In progress
ITS-005	Mobile Workforce Management	GLWA	In progress
ITS-006	ESRI-GIS	GLWA	In progress
ITS-007	DADS	GLWA	In progress
ITS-008	Tibco	GLWA	In progress
ITS-009	Infrastructure	GLWA	In progress
DoIT-001	Financial Information System	City of Detroit	Open
DoIT-002	Radios	City of Detroit	Open
DoIT-003	Customer Service Tech Suite	City of Detroit	Open
Training	Training	GLWA	Complete
<del>PRO-001</del>	<del>Applications Analyst</del>	N/A – not needed	
LS-001 - LS-003	Legal Services	Both	In progress

There is one major outstanding issues for FY 2017 True Up. This is the clarification needed for the allocation for OPS-008 – Systems Control. This issue is left over from the FY 2016 outstanding issues. When the meeting between management occurs and if an agreement can be reached for the allocation than FY 2017 True-up of OPS-008 will be calculated.

**Next Steps FY 2017:** The GLWA and DWSD Shared Services Teams will continue to meet to discuss any open issues for FY 2017. Once all Shared Services True-Ups are complete the information will be shared with the other party for review.

Per Section 5.1 of the Agreement the parties shall engage, and share the costs of, a third-party to analyze the actual Service Costs. This is a requirement for each fiscal year. This will be the final step to complete the FY 2017 True-Up.

**Proposed Action:** Receive and file report.

Great Lakes Water Authority  
FY 2016 Shared Services True-up  
As of January 19, 2018

GLWA Provider Shared Service Description	Budget per Shared Services Agreement	Total Actual Expenses	Budget vs Actual Dollar Amount	Budget vs Actual Variance
OPS-002 Miss Dig	\$ -	\$ 142,634	\$ 142,634	
OPS-004 Water Quality	125,569	112,085	(13,484)	89%
OPS-005 Security	949,596	1,206,648	257,052	127%
OPS-005 Security Training	-	4,732	4,732	
OPS-006 Facilities	-	120,903	120,903	
OPS-008 Systems Control Center	696,799	692,473	(4,326)	99%
ITS-001 Retail AMR	156,264	355,962	199,698	228%
ITS-002 Customer Service Tech Suite	171,609	59,208	(112,401)	35%
ITS-003 See Click Fix	89,543	91,988	2,445	103%
ITS-004 WAM	493,022	577,009	83,987	117%
ITS-005 Mobile Work Force	200,497	140,940	(59,557)	70%
ITS-006 ESRI-GIS	345,311	740,993	395,682	215%
ITS-007 DADS	68,565	54,081	(14,484)	79%
ITS-008 TIBCO	59,664	55,376	(4,288)	93%
ITS-009 IT Infrastructure	1,331,714	2,001,645	669,931	150%
PRO-001 Application Analyst	19,458	19,700	242	101%
LS-001-A Joint Litigation and Defense, LS 001-B Environment, LS-002 Environment, LS-003 Contract Drafting	-	73,586	73,586	
<b>Subtotals</b>	<b>\$ 4,707,611</b>	<b>\$ 6,449,963</b>	<b>\$ 1,742,352</b>	

Other items to bill not a defined shared service code				
DWSD-R Staff Training by GLWA		5,587		
DWSD-R Bills paid by GLWA-see detail with support		186,346		
Bank Fees		373,831		
P-Card		29,742		
Lakeshore Invoices		1,291,699		
Subtotal		1,887,205		
<b>Grand Total</b>		<b>\$ 8,337,169</b>		

DWSD/City of Detroit Provider Shared Service Description	Budget per Shared Services Agreement	Total Actual Expenses	Budget vs Actual Dollar Amount	Budget vs Actual Variance
OPS-001 Fleet	\$ 1,075,448	\$ 743,456	\$ (331,992)	69%
OPS-002 MISS DIG	47,450	14,619	(32,831)	31%
*OPS-003 As Needed Field Services	-	188,201	188,201	
OPS-006 Facilities	552,983	687,641	134,658	124%
DoIT-001 Financial Information Services	288,938	225,896	(63,042)	78%
DoIT-002 Radios	148,908	148,908	-	100%
DoIT-003 Customer Service Technology Suite	65,780	65,780	-	100%
OCFO-001 Support for Financial Services	-	-	-	
<b>Subtotals</b>	<b>\$ 2,179,507</b>	<b>\$ 1,954,350</b>	<b>\$ 1,122,898</b>	

Other items to bill not a defined shared service code		
Fuel		38,632
Employee Termination Payouts		5,699,054
Subtotal		5,737,686
<b>Grand Total</b>		<b>\$ 7,192,982</b>

\*GLWA has formally disputed \$60,137.32

In process  
No True Up received