



Audit Committee

**Friday, October 18, 2019 at 8:00 a.m.**

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

## AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
  - A. July 19, 2019 (Page 1)
5. PUBLIC PARTICIPATION
6. OLD BUSINESS
  - A. Update: Potential Refunding Transactions (Page 4)
7. NEW BUSINESS
  - A. Charges Rollout Update (Page 22)
  - B. Annual Financial Audit Update (Page 24)
  - C. Industrial Pretreatment Program Financial Analysis & Charges (Page 26)
  - D. Ten Year Financial Forecast Discussion Draft (Page 31)
  - E. Proposed Audit Committee Meeting Schedule Updates (Page 51)
  - F. Audit Firm Staffing (hand out)
8. REPORTS
  - A. Monthly Financial Report for July 2019 (Page 52)
  - B. Water Residential Assistance Program Update (Page 53)
  - C. August Audit Committee Binder (Page 60)  
<https://www.glwater.org/wp-content/uploads/2019/08/GLWA-Audit-Committee-Binder-8.16.2019-.pdf>
  - D. September Audit Committee Binder (Page 61)  
<https://www.glwater.org/wp-content/uploads/2019/09/GLWA-Audit-Committee-Binder-9.20.19new.pdf>
  - E. CFO Updates (verbal)
9. LOOK AHEAD
  - Next Audit Committee Meetings
    - A. Special Meeting October 31, 2019 at 12:00 p.m.
    - B. Regular Meeting November 15, 2019 at 8:00 a.m.
10. INFORMATION
11. OTHER MATTERS
12. ADJOURNMENT

Note: Agenda Item 7F was handed out at the meeting and was not included in the original binder.



# Great Lakes Water Authority

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

## Meeting Minutes - Draft

### Audit Committee

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Friday, July 19, 2019

8:00 AM

Water Board Building 5th Floor

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#### 1. Call To Order

Chairman Daddow called the meeting to order at 8:00 a.m.

#### 2. Quorum Call

**Present:** 2 - Chairman Robert Daddow, and Director Gary Brown

**Excused:** 1 - Director Brian Baker

#### 3. Approval of Agenda

Chairman Daddow requested a Motion to approve the Agenda.

**Motion By:** Gary Brown

**Support:** Robert Daddow

**Action:** Approved

The motion carried by a unanimous vote.

#### 4. Approval of Minutes

##### A. [2019-281](#) Approval of Minutes of June 21, 2019

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [June 21, 2019 Audit Committee Meeting Minutes.pdf](#)

Chairman Daddow requested a Motion to approve the June 21, 2019 Audit Committee Meeting Minutes.

**Motion By:** Gary Brown

**Support By:** Robert Daddow

**Action:** Approved

The motion carried by a unanimous vote.

#### 5. Public Comment

There were no public comments.

#### 6. Old Business

None

## 7. New Business

- A. [2019-282](#) Series Ordinance Authorizing the Issuance of Water Supply System Revenue Bonds

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [Approval of Series Ordinance- Water Revenue Bonds 7.19.19.pdf](#)  
[REVISED- Approval of Series Ordinance- Water Revenue Bonds 7.24.19.pdf](#)  
[REVISED- Series Ordinance \(2019 4th Quarter SRF\) 7.24.19 Board Meeting.pdf](#)  
[REVISED- Resolution Approving 2019 SRF-23 Ordinance 7.24.19 Board Meeting.docx](#)

**Motion By: Gary Brown**

**Support By: Robert Daddow**

**Action: Recommended for Approval to the Board of Directors**

**Agenda of July 24, 2019**

**The motion carried by a unanimous vote.**

## 8. Reports

- A. [2019-283](#) Monthly Financial Report for April 2019

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

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

**Motion By: Gary Brown**

**Support By: Robert Daddow**

**Action: Received and Filed**

**The motion carried by a unanimous vote.**

- B. [2019-284](#) PFM Financial Advisors Presentation: B&C Note History and Recent Transactions; Refinancing and New Money Opportunities in FY 2020

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [Audit Committee Communication- PFM Update 7.19.19.pdf](#)  
[PFM July 2019 Presentation to Audit Committee - B&C Notes and 2019 Financing Opportunities REVISED 7.16.19PW.pdf](#)

**Motion By: Gary Brown**

**Support By: Robert Daddow**

**Action: Received and Filed**

**The motion carried by a unanimous vote.**

**C.**     [2019-285](#)     Quarterly Debt Report as of March 31, 2019

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Attachments:** [Quarterly Debt Report as of 3.31.2019\\_updated 7.19.2019.pdf](#)

**Motion By:** Gary Brown

**Support By:** Robert Daddow

**Action:** Received and Filed

The motion carried by a unanimous vote.

**D.** CFO Updates (verbal)

Nicolette Bateson, Chief Financial Officer/Treasurer, provided a verbal update on the following topics:

- Strategic Asset Management Plan
- General Retirement System
- 2018 CAFR
- Submittal of the Budget to the GFOA, which has been extended to July 31st
- Draft report from Raftelis on sewer charges methodology

**9. Look Ahead**

The next Audit Committee Meeting is scheduled for Friday, August 16, 2019 at 8:00 a.m.

**10. Information**

None

**11. Other Matters**

Chairman Daddow noted that Oakland County has hired Dave Gajda to assist him with GLWA duties.

**12. Adjournment**

Chairman Daddow requested a Motion to adjourn.

**Motion By:** Gary Brown

**Support:** Robert Daddow

**Action:** Approved

The motion carried by a unanimous vote.

There being no further business, the meeting was adjourned at 9:37 a.m.



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** Update: Potential Refunding Transactions

**Background:** The Great Lakes Water Authority has been monitoring declining interest rates with the support of PFM Financial Advisors. They have provided an update to the refunding analysis that was reviewed by the Audit Committee at its meeting on July 19, 2019. Since that presentation, interest rates on municipal debt have dropped to historic lows. Although GLWA does not have any currently callable water or sewer bonds, PFM has prepared a refunding analysis assuming a taxable, advanced refunding approach and a tax-exempt, forward delivery approach.

**Next Steps:** Since the time to complete a refunding transaction may take three to five months, it is recommended that GLWA position itself to execute a transaction if the market conditions remain favorable. In order to start the transaction process, GLWA will need to assemble its financing team consisting of bond counsel, financial advisor, underwriter and feasibility consultant. This team will work closely with GLWA on developing a strategy and time schedule for preparing its disclosure documents, rating agency presentations and investor outreach efforts in order to have a successful outcome to GLWA's proposed refunding transaction. While some of the professional services are within existing contracts, others are not as it was not anticipated until very recently that GLWA would be considering any market transactions for another 18 +/- months as provided to the Audit Committee earlier in the year. The table below presents the status of each professional service contract.

Service	Firm	Recommendation
Bond Counsel	Dickinson Wright	Existing contract expires March 31, 2021. Working with the vendor to determine that the remaining dollar amount on the contract is sufficient. The fee is transaction based.

Service	Firm	Recommendation
Financial Advisor	PFM Financial Advisors	Existing contract expires March 19, 2020. Working with vendor to determine that the dollar amount remaining on contract is sufficient. The fee is <i>not</i> transaction based (which is a best practice for advisor services).
Underwriter	A pool was approved by the GLWA Board on June 20, 2018.	Consistent with the Board’s action on June 20, 2018, a request for updated underwriter proposals from the pre-approved underwriting pool will be solicited. This is scheduled to occur after the Audit Committee meeting on October 18, 2019. The fees are transaction based.
Feasibility Consultant	None under contract for non-State Revolving Fund loans	Recommend amendment to The Foster Group contract for the amount referenced during vendor contract negotiations in early 2019 of \$100,000 per system with all expenses included. The fee is transaction based.

**Budget Impact:** The proposed FY 2020 water and sewer budgets do not include the potential impacts of any refunding bond savings or expenses. Transaction based expenses are only incurred if a transaction occurs.

**Proposed Action:** Direct the GLWA management team to a) proceed with the next steps to explore the refunding opportunity, b) proceed with assembling of a financing team to inform the refunding decision, and c) recommend an amendment to The Foster Group contract for feasibility consultant services not to exceed \$200,000.



# Update to Audit Committee on Potential Refunding Transactions

October 18, 2019

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PFM Financial Advisors LLC

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555 Briarwood Circle  
Suite 333  
Ann Arbor, MI 48108

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[pfm.com](http://pfm.com)



## Summary and Recommendation

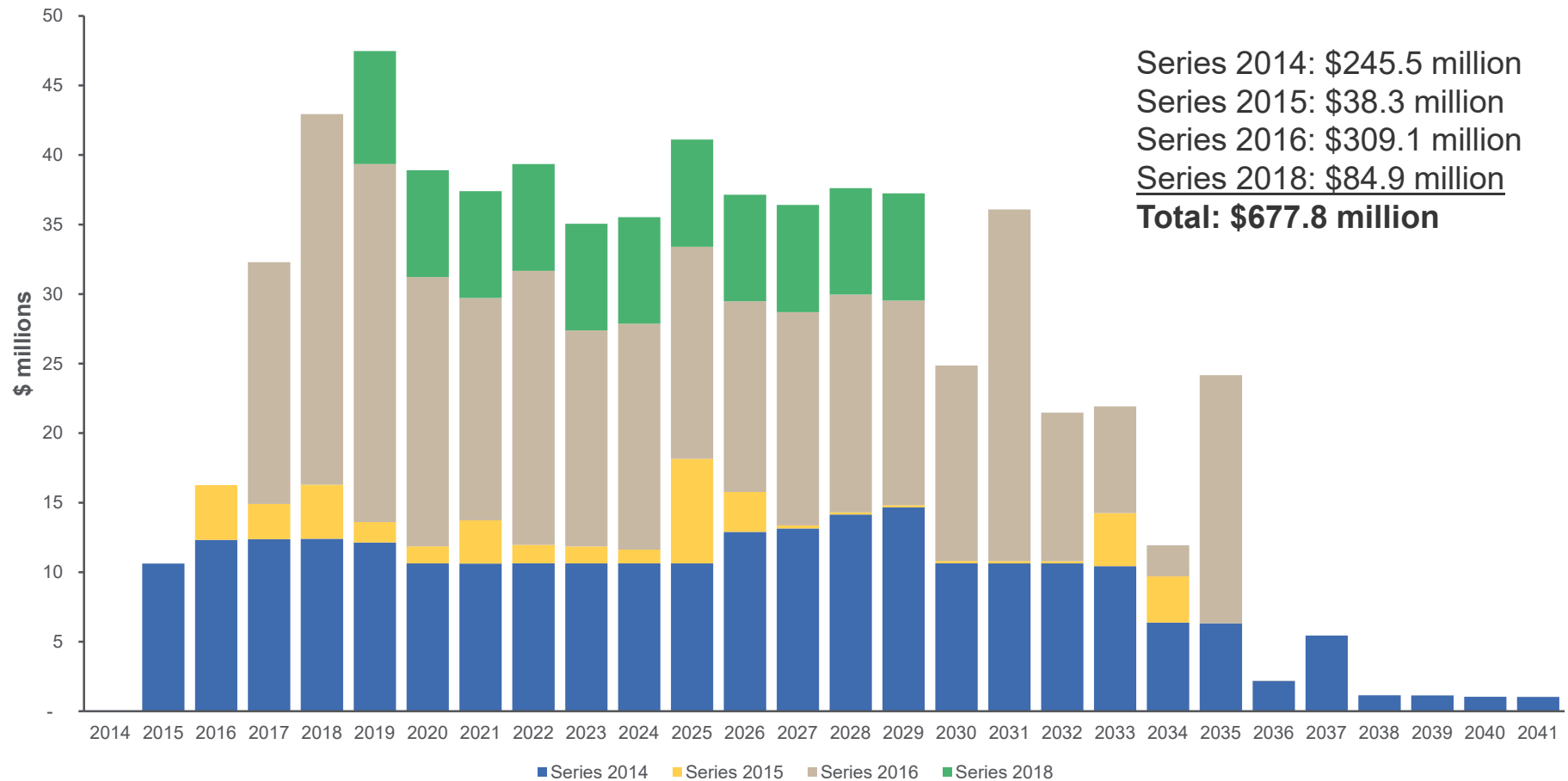
- While tax-exempt advance refundings are no longer allowable under current tax law, historically low interest rates have created an opportunity to attain significant savings on a taxable basis for a large universe of bonds
- PFM now recommends pursuing a taxable advance refunding of potentially \$375 million water and \$675 million sewer bonds
  - Market volatility continues but interest rates have moved to historic lows, creating substantial additional value for GLWA
  - Passage of time now also brings tax-exempt forward delivery bonds into viable consideration as well
  - GLWA should consider portfolio approach to manage significant tradeoffs that exist between taxable advance refundings (or forward delivery tax-exempt refunding) now versus tax-exempt current refundings later
- Among water and sewer credits, GLWA can consider up to \$450 million of forward delivery bonds and up to \$1 billion of taxable advance refunding bonds
  - Water system has viable candidates for \$375 million of either tax-exempt forward delivery bonds or taxable advance refunding bonds
  - Sewer system has viable candidates for \$85 million of tax-exempt forward delivery bonds and \$590 million of taxable advance refunding bonds
- Given lead time of 3-5 months for underwriter procurement and to prepare bond offering, beginning preparations now will give GLWA most flexibility to execute when advantageous and meeting Board-adopted guidelines for the transaction





## History of Debt Service Savings Achieved Since 2014

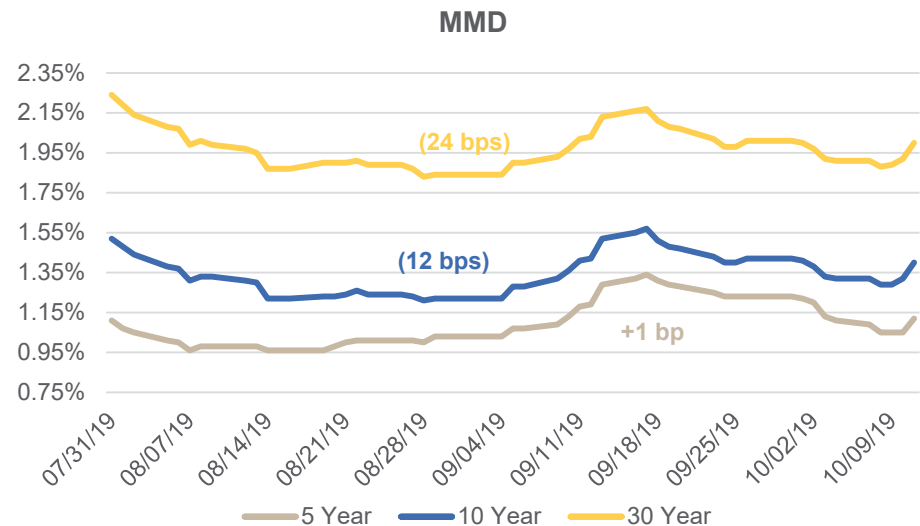
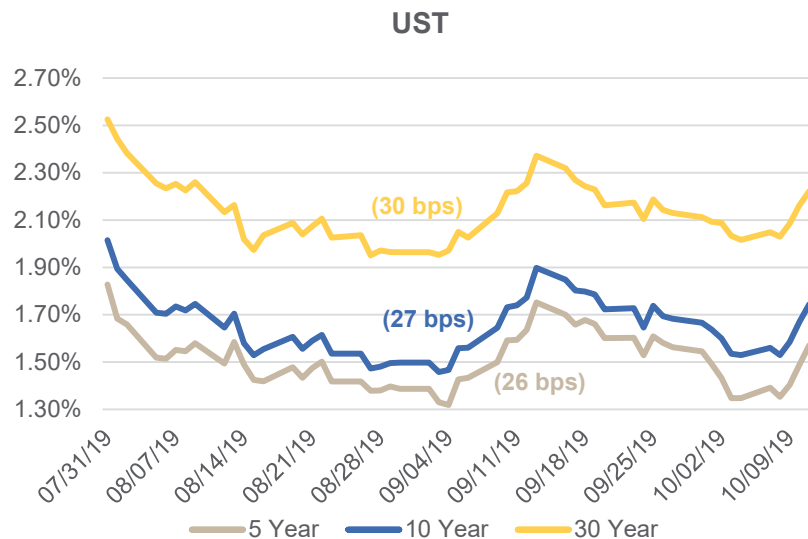
Through the leadership of the Authority's management team, the financing team has been able to achieve nearly \$678 million of cash flow debt service savings for the systems since the tender and refunding transaction in 2014





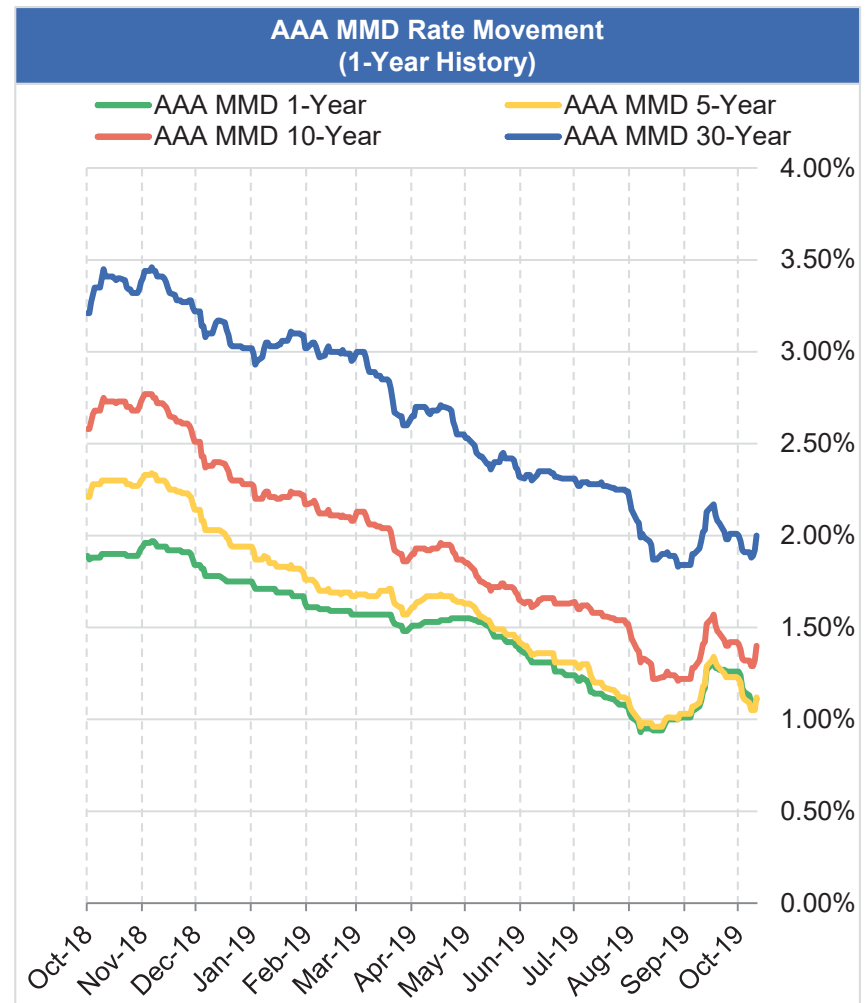
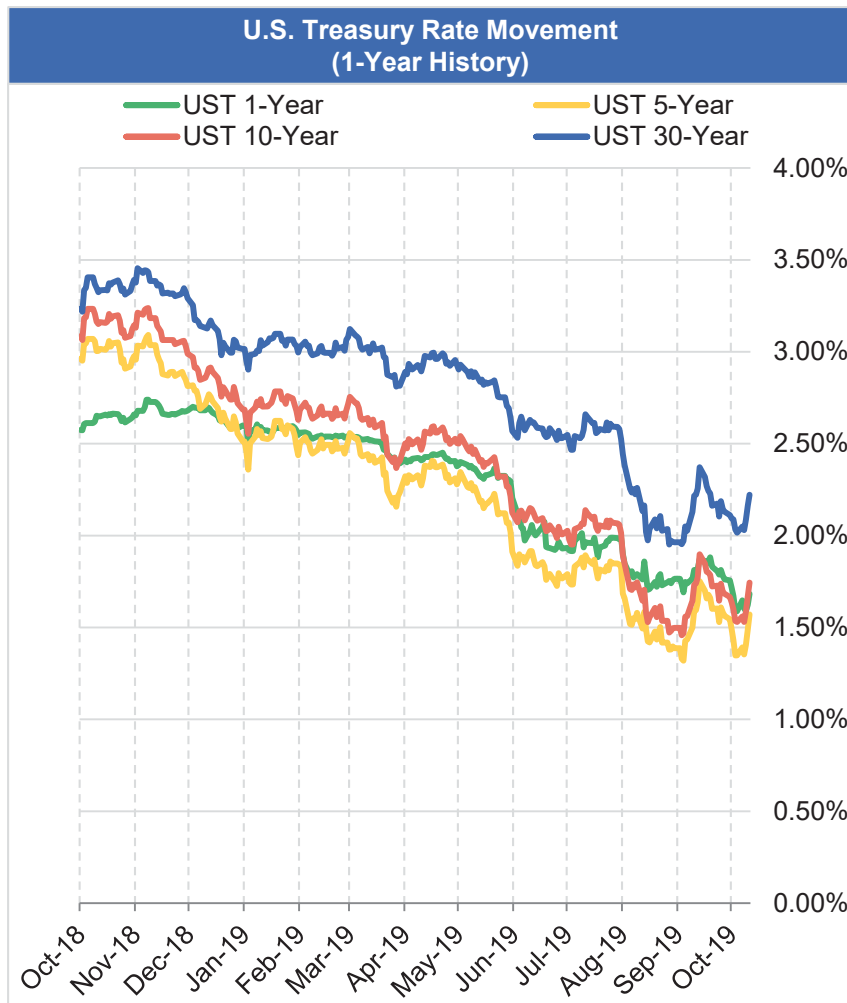
## Significant Market Movements – July 31 to October 15

- Significant decline in rates kicked off by the cut in the federal funds rate at the July FOMC meeting and accelerated by the trade situation between the U.S. and China
- Tensions surrounding trade war with China continue to drive market
- Recent poor Chinese and German economic data have fanned fears of a global slowdown
- The 30yr UST and MMD maturities have both reached and set new historic lows in the past month
- The federal funds futures market currently prices a 72% chance of a 25bps rate decrease at the October FOMC meeting
- MMD has underperformed Treasuries in the past month with significant decreases in treasuries echoed by more modest declines in MMD





## U.S. Treasury & AAA MMD Rate Movement

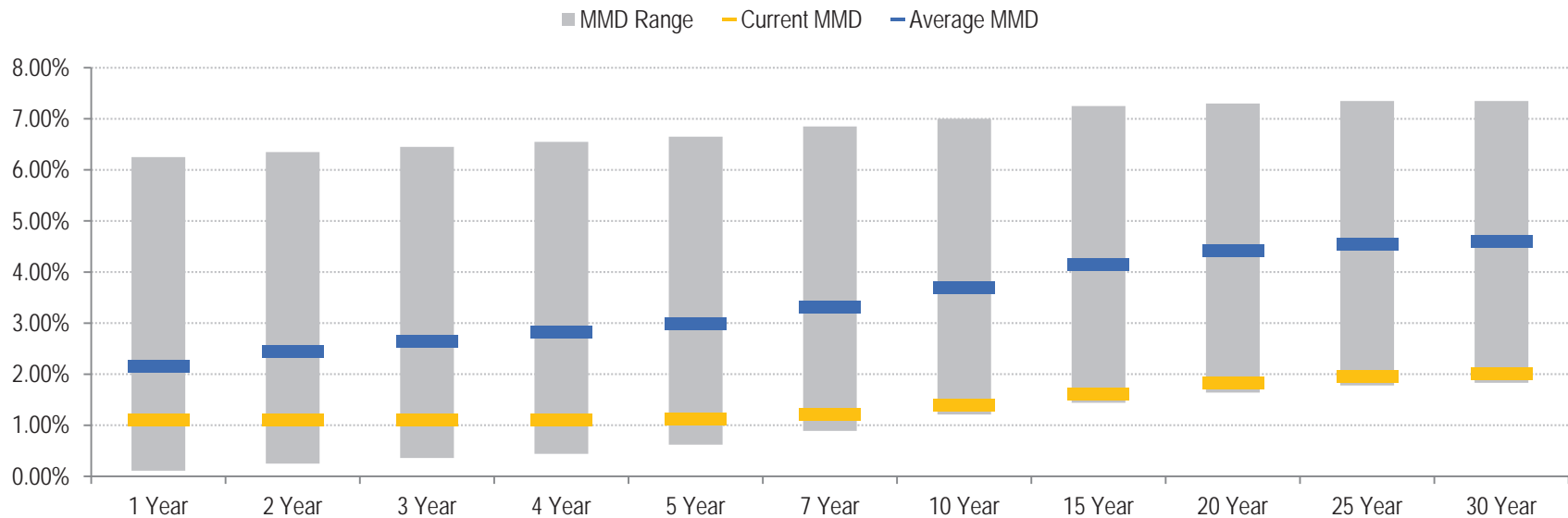


Source: Thomson Reuters



## AAA MMD Position Since Inception

30 Year History of AAA MMD Rate Position  
(October 12, 1989 to October 11, 2019)



Statistic	1 Year	2 Year	3 Year	4 Year	5 Year	7 Year	10 Year	15 Year	20 Year	25 Year	30 Year
10/11/2019	1.11%	1.10%	1.10%	1.11%	1.12%	1.21%	1.40%	1.61%	1.82%	1.95%	2.00%
Average	2.15%	2.44%	2.64%	2.82%	2.99%	3.32%	3.69%	4.15%	4.41%	4.55%	4.59%
Spread to Avg.	-1.04%	-1.34%	-1.54%	-1.71%	-1.87%	-2.11%	-2.29%	-2.54%	-2.59%	-2.60%	-2.59%
Minimum	0.11%	0.25%	0.36%	0.44%	0.62%	0.89%	1.21%	1.44%	1.64%	1.78%	1.83%
Spread to Min.	1.00%	0.85%	0.74%	0.67%	0.50%	0.32%	0.19%	0.17%	0.18%	0.17%	0.17%
Maximum	6.25%	6.35%	6.45%	6.55%	6.65%	6.85%	7.00%	7.25%	7.30%	7.35%	7.35%
Spread to Max.	-5.14%	-5.25%	-5.35%	-5.44%	-5.53%	-5.64%	-5.60%	-5.64%	-5.48%	-5.40%	-5.35%
Percent of Market Days Lower	36.75%	31.46%	28.50%	22.37%	13.03%	5.69%	0.60%	0.48%	0.45%	0.50%	0.50%



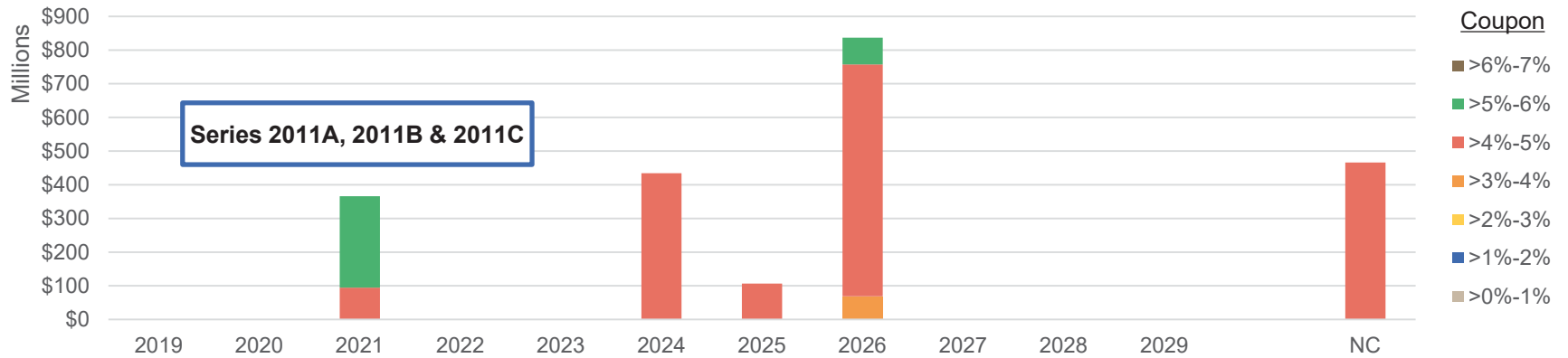
## Interest Rate Forecasts

Bond Yield Forecast (As of October 15, 2019)							
Average Forecasts	Current	Q4 19	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21
30-Year UST	2.16%	2.11%	2.15%	2.22%	2.28%	2.34%	2.42%
10-Year UST	1.69%	1.66%	1.72%	1.80%	1.85%	1.87%	1.97%
2-Year UST	1.55%	1.55%	1.57%	1.58%	1.60%	1.62%	1.66%
3M LIBOR	2.00%	1.86%	1.79%	1.76%	1.75%	1.76%	1.77%
Fed Funds Target Rate (Upper)	2.00%	1.75%	1.65%	1.60%	1.55%	1.55%	1.55%
Fed Funds Target Rate (Lower)	1.75%	1.51%	1.38%	1.33%	1.31%	1.30%	1.32%

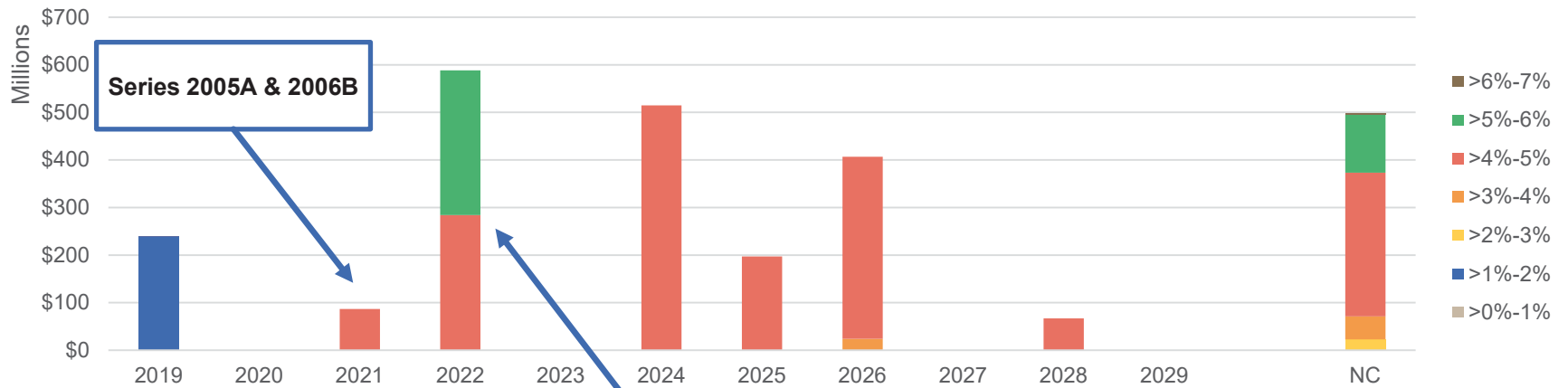


# Fixed Rate Par Call Options

Distribution of Par Call Options on Water Debt (Senior & Second Lien)



Distribution of Par Call Options on Sewer Debt (Senior & Second Lien)





## GLWA Refunding Candidate Summary

Water							
Senior Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2011A Senior	Water	Senior	Tax-Exempt	5.00 – 5.75	293,970	7/1/2021	289,605
Series 2011B Senior	Water	Senior	Taxable	6.00	3,950	7/1/2021	2,295
Series 2011C Senior	Water	Senior	Tax-Exempt	4.50 – 5.25	75,145	7/1/2021	74,125
					<b>373,065</b>		<b>373,065</b>
Sewer							
Senior Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2012A Senior	Sewer	Senior	Tax-Exempt	5.00 – 5.25	495,175	7/1/2022	437,795
Series 2014C-1 Senior	Sewer	Senior	Tax-Exempt	5.00	123,220	7/1/2022	123,200
Series 2014C-2 Senior	Sewer	Senior	AMT	5.00	27,470	7/1/2022	27,450
					<b>645,865</b>		<b>588,445</b>
Second Lien							
Series Name	Indenture	Lien	Tax Status	Coupons	Outstanding (\$000s)	Next Call Date	Callable Par (\$000s)
Series 2005A Sec.(Call Mod) <sup>1</sup>	Sewer	Second	Tax-Exempt	5.00	31,785	7/1/2021	31,785
Series 2006B Sec.(Call Mod) <sup>2</sup>	Sewer	Second	Tax-Exempt	5.00	55,000	7/1/2021	55,000
					<b>86,785</b>		<b>86,785</b>

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

1. The call date on \$31.8 million of the series 2005A Sewer Bonds was modified to July 1, 2021.
2. The call date on \$55.0 million of the Series 2006B Sewer Bonds was modified to July 1, 2021.



## Comparison of Savings Opportunities

Water System												
Candidate				Taxable Advance Refunding			Tax-Exempt Forward Refunding			Future Tax-Exempt Current Refunding		
Series	Lien	Refunded Par	Call Date	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)
Series 2011A	Senior	289,605	7/1/2021	81,236	63,606	21.96%	102,584	65,720	22.69%	124,928	79,737	27.53%
Series 2011B	Senior	2,295	7/1/2021	462	419	18.26%	N/A	N/A	N/A	N/A	N/A	N/A
Series 2011C	Senior	74,125	7/1/2021	13,650	11,246	15.17%	17,527	11,929	16.09%	21,716	14,728	19.87%
<b>Total Water</b>		<b>366,025</b>		<b>95,348</b>	<b>75,271</b>	<b>20.56%</b>	<b>120,111</b>	<b>77,649</b>	<b>21.21%</b>	<b>146,644</b>	<b>94,465</b>	<b>25.81%</b>

Sewer System												
Candidate				Taxable Advance Refunding			Tax-Exempt Forward Refunding			Tax-Exempt Current Refunding		
Series	Lien	Refunded Par	Call Date	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)
Series 2012A	Senior	437,795	7/1/2022	83,099	70,826	16.18%	N/A	N/A	N/A	166,861	108,946	24.89%
Series 2014C-1	Senior	123,200	7/1/2022	25,634	20,408	16.56%	N/A	N/A	N/A	50,008	28,436	23.08%
Series 2014C-2	Senior	27,450	7/1/2022	5,704	4,543	16.55%	N/A	N/A	N/A	9,492	5,401	19.68%
<b>Total Senior</b>		<b>588,445</b>		<b>114,437</b>	<b>95,777</b>	<b>16.28%</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>226,361</b>	<b>142,783</b>	<b>24.26%</b>

Series	Lien	Refunded Par	Call Date	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)	Gross Savings (\$000s)	PV Savings (\$000s)	PV Savings (%)
Series 2005A	Second	31,785	7/1/2021	7,144	6,014	18.92%	9,134	6,391	20.11%	11,349	7,940	24.98%
Series 2006B	Second	55,000	7/1/2021	12,442	10,338	18.80%	15,795	10,912	19.84%	19,905	13,595	24.72%
<b>Total Second</b>		<b>86,785</b>		<b>19,586</b>	<b>16,352</b>	<b>18.84%</b>	<b>24,929</b>	<b>17,303</b>	<b>19.94%</b>	<b>30,444</b>	<b>21,535</b>	<b>24.81%</b>

<b>Total Sewer</b>		<b>675,230</b>		<b>134,023</b>	<b>112,129</b>	<b>16.60%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>256,805</b>	<b>164,318</b>	<b>24.34%</b>
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Assumptions: Matched lien refunding with Delivery Date of January 1, 2020; Interest rates as of September 5, 2019; Maturity by Maturity savings structure; SLGS escrow; issuance costs of \$5/bond. All figures present valued at Taxable Advance Yields to January 1, 2020. Future current refunding savings calculated using current tax-exempt rates. Forward refunding assumes an 18 month forward period with 3.5bps of premium per month. Tax-exempt refunding bonds issued with 5% premium coupon structure and 01 year par call; taxable refunding bonds issued with par coupon structure and 10 year par call.





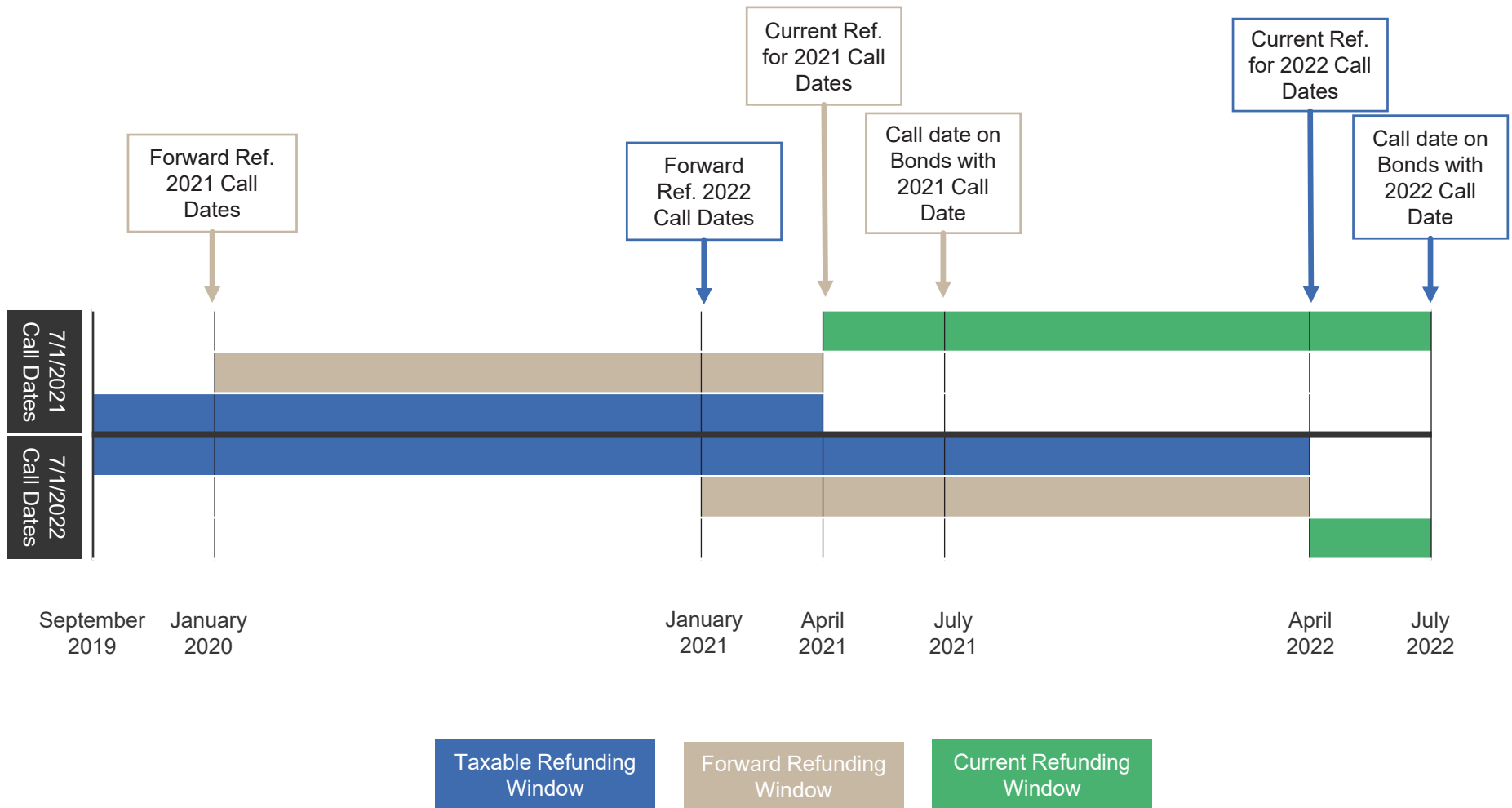
## Considerations and Risks

- Each strategy to extract refunding savings from outstanding debt portfolio comes with a set of trade-offs that should be carefully considered

	Taxable Advance Refunding	Tax-Exempt Current Refunding	Tax-Exempt Forward Refunding	Forward-Starting Interest Rate Swap
<b>Ability to Accomplish Today</b>	✓		✓	✓
<b>Future Obligations</b> (Disclosure, Opinions, etc.)		✓	✓	✓
<b>Interest Rate Risk</b>		✓		
<b>Tax and Credit Risk</b>		✓	✓	✓
<b>Swap-Related (Derivative) Risk</b> (Counterparty, Basis, Liquidity, etc.)				✓
<b>Savings Accrue Immediately</b>	✓			
<b>Maximize <u>Potential</u> Savings</b>		✓		✓
<b>Maximize Value of Future Call Option</b>	✓	✓	✓	
<b>Policy Concerns on Tax-Exemption</b>	✓			



## Potential Refunding Timing





## Taxable Advance Refunding – Water System (as of October 7)

### Savings Summary

- Over \$107 million in gross cashflow savings can be achieved (>\$77 million present value)
- Potential to accelerate savings as desired

### Refunding Candidates

- Includes all callable bonds from Series 2011A/B/C
- Advance refunding on a tax-exempt basis not an option under current tax law

### Assumptions

- Uninsured, matched lien refunding
- Interest rates as of September 5, 2019
- Conservatively assumes no DSRF release
- Contribution of accrued interest from DS fund
- Hypothetical SLGS escrow as of September 5, 2019
- Savings structured for level aggregate savings
- Par coupon structure
- Assumes par call on 1/1/2030
- PV at Bond Yield of 3.17% to 1/1/2020

### Refunding Results

Delivery Date:	1/1/2020
Call Date:	1/1/2030
Refunding Par (\$):	387,600,000
Callable Refunding Par (\$):	323,325,000
Advance Refunded Par (\$):	366,025,000
NPV Savings (\$):	77,250,371
NPV Savings as % :	21.10%
Negative Arbitrage (\$) <sup>1</sup> :	(8,779,862)
Escrow Efficiency <sup>1</sup> :	89.79%
TIC:	3.19%
WAM:	16.8 yrs
Refunded Bonds WAM:	17.6 yrs
PV of 0.01% Change in Interest Rates (\$)	501,766

Date	Prior Net Cashflow (\$)	Refunding DS (\$)	Savings (\$)
6/30/2021	19,091,363	11,824,897	7,266,466
6/30/2022	19,091,363	14,334,547	4,756,816
6/30/2023	19,290,213	14,532,043	4,758,170
6/30/2024	21,235,113	16,475,009	4,760,104
6/30/2025	29,345,550	24,585,588	4,759,963
6/30/2026	27,971,206	23,209,652	4,761,554
6/30/2027	18,032,825	13,274,280	4,758,546
6/30/2028	31,210,650	26,449,643	4,761,008
6/30/2029	21,155,525	16,394,591	4,760,935
6/30/2030	20,940,500	16,180,296	4,760,204
6/30/2031	20,204,225	15,446,639	4,757,586
6/30/2032	20,158,100	15,399,197	4,758,903
6/30/2033	20,002,725	15,245,231	4,757,495
6/30/2034	19,943,275	15,181,749	4,761,526
6/30/2035	19,654,175	14,896,048	4,758,128
6/30/2036	19,600,300	14,838,727	4,761,574
6/30/2037	28,577,925	23,818,051	4,759,874
6/30/2038	42,720,631	37,963,345	4,757,286
6/30/2039	71,625,694	66,867,036	4,758,658
6/30/2040	71,546,513	66,788,066	4,758,447
6/30/2041	71,465,238	66,708,182	4,757,056
6/30/2042	70,117,125	65,359,904	4,757,221
	<b>702,980,231</b>	<b>595,772,716</b>	<b>107,207,515</b>

1. Negative arbitrage and escrow efficiency calculated for illustrative purposes assuming earnings cap on investments at refunding bond yield.



## Taxable Advance Refunding – Sewer System (as of October 7)

### Savings Summary

- Over \$170 million in gross cashflow savings can be achieved (>\$120 million present value)
- Potential to accelerate savings as desired

### Refunding Candidates

- Includes all callable bonds from series 2005A, 2006A, 2012A, 2014C-1 and 2014C-2
- Advance refunding on a tax-exempt basis not an option under current tax law

### Assumptions

- Uninsured, matched lien refunding
- Interest rates as of September 5, 2019
- Conservatively assumes no DSRF release
- Contribution of accrued interest from DS fund
- Hypothetical SLGS escrow as of September 5, 2019
- Savings structured for level aggregate savings by lien
- Par coupon structure
- Assumes par call on 1/1/2030
- PV at Bond Yield of 3.14% to 1/1/2020

### Refunding Results

Delivery Date:	1/1/2020
Call Date:	1/1/2030
Refunding Par (\$):	732,650,000
Callable Refunding Par (\$):	649,330,000
Advance Refunded Par (\$):	675,230,000
NPV Savings (\$):	120,709,254
NPV Savings as % :	17.87%
Negative Arbitrage (\$) <sup>1</sup> :	(27,141,452)
Escrow Efficiency <sup>1</sup> :	81.64%
TIC:	3.14%
WAM:	16.6 yrs
Refunded Bonds WAM:	17.7 yrs
PV of 0.01% Change in Interest Rates (\$)	936,873

Date	Prior Net Cashflow (\$)	Refunding DS (\$)	Savings (\$)
6/30/2021	34,522,363	22,263,259	12,259,104
6/30/2022	34,522,363	27,490,330	7,032,033
6/30/2023	34,522,363	27,489,765	7,032,598
6/30/2024	52,067,488	45,035,075	7,032,412
6/30/2025	33,632,363	26,603,036	7,029,327
6/30/2026	33,631,863	26,600,791	7,031,072
6/30/2027	42,560,650	35,530,648	7,030,002
6/30/2028	35,398,800	28,364,564	7,034,236
6/30/2029	38,892,288	31,862,325	7,029,963
6/30/2030	34,208,413	27,176,686	7,031,727
6/30/2031	38,889,913	31,855,026	7,034,887
6/30/2032	45,769,788	38,738,977	7,030,811
6/30/2033	68,699,413	61,669,854	7,029,559
6/30/2034	29,738,663	22,702,188	7,036,475
6/30/2035	53,965,075	46,933,241	7,031,834
6/30/2036	68,186,813	61,151,863	7,034,950
6/30/2037	51,341,638	44,305,910	7,035,728
6/30/2038	129,464,838	123,692,394	5,772,444
6/30/2039	129,316,281	123,544,919	5,771,362
6/30/2040	129,164,138	123,390,680	5,773,458
6/30/2041	34,117,125	28,345,853	5,771,273
6/30/2042	34,079,375	28,309,212	5,770,163
6/30/2043	34,041,875	28,269,220	5,772,655
6/30/2044	34,006,000	28,236,088	5,769,912
6/30/2045	33,758,375	27,987,420	5,770,955
	<b>1,288,498,256</b>	<b>1,117,549,321</b>	<b>170,948,936</b>

1. Negative arbitrage and escrow efficiency calculated for illustrative purposes assuming earnings cap on investments at refunding bond yield.



## Summary of Key Decision-Making Considerations for a Taxable Advance Refunding

- While taxable bonds lock in a permanent interest rate penalty versus any tax-exempt option, with the elimination of tax-exempt advance refundings municipal issuers have limited other options to “lock in” current rates
- Current taxable rates offer effective refinancing economics of two separate future tax-exempt refundings with 10% PV savings each
- By pursuing a refunding now, GLWA potentially forgoes the opportunity to generate even greater savings later
- Should interest rates increase less than breakeven yield curve movements of approximately 0.50% - 1.60%, higher savings would be generated by a tax-exempt current refunding at each call date
- Future tax-exempt refunding options carry more option value with tax-exempt 5.00% coupons than taxable par coupons
- Alternative options that could generate greater savings for GLWA exist as well – namely forward tax-exempt delivery bonds and use of interest rate swaps – but each has its own limitations
- Forward delivery bonds can typically be completed only within 18 months of the call date, and with a premium to a current refunding transaction and additional disclosure at closing
- Interest rate swaps (and other derivative products) can provide efficient solutions, but come with a set of different business risks and policy considerations
- Despite trade-offs, taxable bonds have extremely strong economics in the current environment and fairly low breakeven yield curve movements to each call date
- Compression vs. tax-exempt rates
- Use of par coupons that increases savings vs. typical 5.00% tax-exempt coupon that is priced to call
- Ability to tax-exempt advance or current refund taxable refunding bonds, once prior tax-exempt bonds are retired



## Potential Refunding Process and Timeline

- October 2019 – Financing team and GLWA staff begin work on transactions
- November 2019 – Appointment of underwriting team; Work on legal and disclosure documents
- December 2019 / January 2020 – Rating Agency meetings
- January 2020 – Audit Committee review and Board approval of documents, including:
  - Preliminary Official Statements
  - Series Ordinances
  - Escrow Agreements
  - Sale Orders
- February 2020 (or thereafter as market conditions permit) – Bond Pricing



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** FY 2021 Charges Rollout Update

**Background:** Over the next few months, the Great Lakes Water Authority (GLWA) will host the annual charges rollout meetings for Fiscal Year 2021. This is an essential process to ensure member partner engagement in the financial recommendations that result in charges for services for the upcoming fiscal year. During these meetings GLWA will present and discuss how our capital improvement plan (CIP) and Budget form the basis for GLWA's proposed Revenue Requirements and how the Units of Service for each of our members is used to determine each members' charges in alignment with the Service Agreements. The rollout meeting schedule for FY 2021 is shown below

### **Rollout Meeting #1 (Water and Sewer Capital Improvement Plan)**

- Thursday, October 17, 2019

### **Rollout Meeting #2 (Units of Service & Sewer SHARES)**

- Thursday, November 21, 2019

### **Rollout Meeting #3 (Proposed FY 2021 Revenue Requirements)**

- Thursday, January 9, 2020

### **Rollout Meeting #4 (Proposed FY 2021 Service Charges)**

- Thursday, January 23, 2020

**Analysis:** As a backdrop to the charges rollout discussion for FY 2021, GLWA continues to experience reduced water usage and flow demands from its member partners. At the September 24, 2019 Water Analytical Work Group meeting, the 2019 summer Max Day information was presented. The highest daily pumpage occurred on July 14, 2019 and the highest hourly pumpage on that date occurred between 7:00 p.m. EST and 8:00 p.m. EST.

The Max Day demand was 619 MGD (down from 693 MGD in 2018) and Peak Hour demand was 700 MGD (down from 823 MGD in 2018). The table below shows the historical decline in Max Day and Peak Hour demands since 2003 which spans the operation of the system by DWSD prior to January 1, 2016 and subsequently GLWA.

	Customer Proxy		System Max Day		Reported Pumpage Days Over . . .				
	Max Day	Peak Hour	Max Day	Peak Hour	600 mgd	700 mgd	800 mgd	900 mgd	1,000 mgd
2003	13	13	1,195	1,290					
2004	2	1	1,082	1,168					
2005	26	26	1,067	1,347					
2006	17	8	1,041	1,337					
2007	16	18	1,092	1,388			96	40	11
2008	3	2	961	1,184			23	5	-
2009	-	1	802	989			1	-	-
2010	1	-	962	1,114			4	2	-
2011	-	4	1,008	1,143			22	6	1
2012	4	8	969	1,171			32	8	-
2013	-	1	729	914	47	7	-	-	-
2014	1	1	720	853	23	2	-	-	-
2015	NA	NA	725	897	18	2	-	-	-
2016	NA	NA	777	924	70	30	-	-	-
2017	NA	NA	723	812	38	4	-	-	-
2018	NA	NA	693	823	20	-	-	-	-
2019	NA	NA	619	700	6	-	-	-	-
	-----	-----	1,195	1,388			-----	-----	-----
	83	83					178	61	12

**Budget Impact:** The results of the CIP, Units of Service, Revenue Requirements and Service Charges presented at these meetings will be incorporated into the FY 2021 – FY 2025 five year financial plan. The FY 2021 proposed service charges and will be presented to the Board of Directors in January 2020 and at a public hearing tentatively scheduled for February 26, 2020.

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





## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

**From:** Steve Hoover, CPA, Financial Reporting Manager

**Re:** Annual Financial Audit Update

**Background:** Annually, the Great Lakes Water Authority (GLWA) prepares a Comprehensive Annual Financial Report (CAFR) and Schedule of Expenditures of Federal Awards (SEFA) in accordance with financial accounting standards and federal guidelines. Baker Tilly Virchow Krause LLP (Baker Tilly) has been engaged to perform the GLWA annual financial audit and issue an opinion as to whether the financial statements are fairly stated in accordance with accounting standards for fiscal years ending 2019, 2020 and 2021.

**Analysis:** Baker Tilly began their preliminary review in September 2019 for the FY 2019 fiscal year. Field work at the GLWA site began on October 14, 2019. Please see the attached communication from Baker Tilly related to the timing for the release of this year's audit report which may require a modification to the Audit Committee meeting date for November 2019.

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

# Memo

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

**From:** Gwen Zech, Manager (Baker Tilly)

**c.c.** Jodi Dobson, Partner (Baker Tilly), Sara Schnelle, Senior Associate (Baker Tilly)

**Date:** October 18, 2019

**Subject:** Great Lakes Water Authority Audit Status and Comprehensive Annual Financial Report (CAFR)

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We have prepared this memo to communicate to the audit committee our expectations regarding the timing of fieldwork, review, draft reports and issuance of the CAFR. The schedule below summarizes expected milestone dates to meet a deadline of issuance on December 20, 2019.

	<b>Due Date</b>
All audit workpapers uploaded to portal for audit	<b>Friday, October 18, 2019</b>
End of Fieldwork (Including first review)	<b>Friday, October 25, 2019</b>
Manager level financial statement review	<b>Friday, November 1, 2019</b>
Draft to Jodi Dobson	<b>Monday, November 4, 2019</b>
Draft to concurring partner for technical review	<b>Monday, November 4, 2019</b>
Comments returned from GLWA management to Baker Tilly*	<b>Friday, November 8, 2019</b>
Draft back from detail check by Baker Tilly	<b>Tuesday, November 12, 2019</b>
Presentation of draft to Audit Committee (Proposed)	<b>Friday, November 22, 2019</b>
Preparation of separate CAFRs'	<b>Friday, December 13, 2019</b>
Presentation of draft to full Board of Directors	<b>Thursday, December 19, 2019</b>
Issuance of the CAFRs'	<b>Friday, December 20, 2019</b>

\* - Comments should include everyone on team in addition to various third parties (i.e. attorneys, bond advisors, etc.). Ideally, all changes would be accumulated into one file and given to us.

The information provided here is of a general nature and is not intended to address the specific circumstances of any individual or entity. In specific circumstances, the services of a professional should be sought. Baker Tilly Virchow Krause, LLP trading as Baker Tilly is a member of the global network of Baker Tilly International Ltd., the members of which are separate and independent legal entities. © 2018 Baker Tilly Virchow Krause, LLP



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

**From:** Kim Garland, CPA, Reporting & Compliance Manager

**Re:** Industrial Pretreatment Program Financial Analysis & Charges

**Background:** On October 8, 2019 the Great Lakes Water Authority Board of Directors approved an Industrial Pretreatment Program (IPP) Agreement ('Agreement') between GLWA and the City of Pontiac Wastewater Treatment Facility Drainage District (COPWTFDD) and the Clinton River Water Resource Recovery Facility Drainage District (CRWRRFDD).

Oakland County has a wastewater interceptor system known as the Clinton-Oakland Sewage Disposal System (COSDS). This system collects wastewater from municipalities in the central and eastern portion of Oakland County and delivers it to both above referenced Drainage Districts and the Oakland Macomb Interceptor Drain Drainage District (OMIDDD).

The OMIDDD has an agreement with GLWA for wastewater services. This includes conveyance to, and treatment at, GLWA's Water Resource Recovery Facility (WRRF) which allows for a portion of the wastewater flow in the COSDS interceptor that is diverted, such that it is delivered to the WRRF in Pontiac and the remaining flow travels downstream to the OMIDDD to the GLWA collection system and is delivered to GLWA's WRRF. It should be noted that at the diversion point, most of the flow is diverted to the WRRF in Pontiac.

This flow diversion results in overlapping service areas and creates a geographic area that is governed by two IPPs with differing requirements and IPP rules. This Agreement addresses that overlap by dividing the IPP program into an administrative component (for reporting and oversight functions) and field work-only component (mainly sampling and testing).

**Charges Impact:** The GLWA Financial Services Area (FSA) in coordination with the Industrial Waste Control (IWC) team and The Foster Group (TFG) reviewed the costs associated with the each of the two components of the IPP. A detailed analysis of historical costs and budgeted expenses led to a conclusion that 25% of current IWC charges relate to administrative cost components and 75% relate to field work components.

The intent of the Agreement is that Industrial Waste Control customers that fall within the geographical area defined in this Agreement will therefore be invoiced for 25% of the current GLWA IWC charges monthly and 75% by the relevant Drainage District monthly.

It is anticipated that less than \$182,000 of GLWA's overall IWC annual revenues will be impacted by this change when implemented. A summary of the potential impact is shown in Table 1 – Scope of Impact Analysis. The actual amount will not be known until the specific meters impacted are identified by each of the six member partner communities.

**Process Rollout:** GLWA will work with the six member partner communities impacted to facilitate the implementation and rollout of this Agreement. FSA will revise the IWC count sheets provided by member partners monthly to allow for two, meter count columns—one for Admin-only meters and one for standard customer meters. Each of the six, member partner communities will need to conduct an initial review of the addresses for each IWC customer to determine which fall within the defined geographic area specified in the Agreement. The six, member partner communities will then report these two counts monthly. GLWA will continue to provide one bill inclusive of charges for full-service IWC meters and those for Admin-only meters within the geographic area identified in the Agreement. A process rollout timeline is included as Table 2 – Proposed Rollout Timeline. This table highlights target completion dates for the FSA team pending resolution of any rollout issues related to GLWA Operations.

A revised FY 2020 Schedule of Charges will be presented to the Audit Committee for consideration in November 2019 with proposed Board approval in December 2019 for the revision to the current IWC Schedule of Charges as demonstrated in Table 3 - FY 2020 IWC Charges. This agenda item will include a draft resolution for review and potential presentation to the GLWA Board of Directors at their first meeting in December 2019.

**Future Years' Charges Impact:** Moving forward, GLWA will include review of this allocation and its impact into the annual Cost of Service study. The annual allocation will be updated as needed and continue to be footnoted on the IWC charge sheet.

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

**Table 1 – Scope of Impact Analysis**

Member Partner	Oct 2018 Count of Meter Size	Estimated FY2019 Monthly Revenue by Meter Size	Estimated FY2020 Monthly Revenue by Meter Size	Estimated FY 2020 Admin- Only @ 25% - Potential Impact	Estimated FY 2020 Field Work-Only Fee @ 75% - Potential Impact
<b>Auburn Hills</b>	<b>192</b>	<b>\$6,554.11</b>	<b>\$6,231.03</b>	<b>\$1,557.76</b>	<b>\$4,673.27</b>
1"	22	\$195.58	\$185.90	\$46.48	\$139.43
1.5"	32	\$625.92	\$594.88	\$148.72	\$446.16
10"	1	\$248.84	\$236.60	\$59.15	\$177.45
2"	64	\$1,820.16	\$1,730.56	\$432.64	\$1,297.92
3"	45	\$2,319.75	\$2,205.45	\$551.36	\$1,654.09
3/4"	12	\$64.08	\$60.84	\$15.21	\$45.63
4"	14	\$995.40	\$946.40	\$236.60	\$709.80
6"	1	\$106.64	\$101.40	\$25.35	\$76.05
8"	1	\$177.74	\$169.00	\$42.25	\$126.75
<b>Clarkston</b>	<b>33</b>	<b>\$167.08</b>	<b>\$158.86</b>	<b>\$39.72</b>	<b>\$119.15</b>
1"	3	\$26.67	\$25.35	\$6.34	\$19.01
1.5"	1	\$19.56	\$18.59	\$4.65	\$13.94
3/4"	10	\$53.40	\$50.70	\$12.68	\$38.03
5/8"	19	\$67.45	\$64.22	\$16.06	\$48.17
<b>Independence</b>	<b>22</b>	<b>\$442.70</b>	<b>\$420.81</b>	<b>\$105.20</b>	<b>\$315.61</b>
1"	1	\$8.89	\$8.45	\$2.11	\$6.34
1.5"	2	\$39.12	\$37.18	\$9.30	\$27.89
2"	5	\$142.20	\$135.20	\$33.80	\$101.40
3"	1	\$51.55	\$49.01	\$12.25	\$36.76
3/4"	11	\$58.74	\$55.77	\$13.94	\$41.83
4"	2	\$142.20	\$135.20	\$33.80	\$101.40
<b>Orion</b>	<b>42</b>	<b>\$650.64</b>	<b>\$618.54</b>	<b>\$154.64</b>	<b>\$463.91</b>
1"	10	\$88.90	\$84.50	\$21.13	\$63.38
1.5"	9	\$176.04	\$167.31	\$41.83	\$125.48
2"	12	\$341.28	\$324.48	\$81.12	\$243.36
3/4"	3	\$16.02	\$15.21	\$3.80	\$11.41
5/8"	8	\$28.40	\$27.04	\$6.76	\$20.28
<b>Waterford</b>	<b>1209</b>	<b>\$12,446.26</b>	<b>\$11,835.07</b>	<b>\$2,958.77</b>	<b>\$8,876.30</b>
1"	300	\$2,667.00	\$2,535.00	\$633.75	\$1,901.25
1.5"	116	\$2,268.96	\$2,156.44	\$539.11	\$1,617.33
2"	127	\$3,611.88	\$3,434.08	\$858.52	\$2,575.56
3"	17	\$876.35	\$833.17	\$208.29	\$624.88
4"	5	\$355.50	\$338.00	\$84.50	\$253.50
5/8"	641	\$2,275.55	\$2,166.58	\$541.65	\$1,624.94
6"	2	\$213.28	\$202.80	\$50.70	\$152.10
8"	1	\$177.74	\$169.00	\$42.25	\$126.75
<b>West Bloomfield</b>	<b>51</b>	<b>\$972.45</b>	<b>\$924.43</b>	<b>\$231.11</b>	<b>\$693.32</b>
1"	13	\$115.57	\$109.85	\$27.46	\$82.39
1.5"	11	\$215.16	\$204.49	\$51.12	\$153.37
2"	11	\$312.84	\$297.44	\$74.36	\$223.08
3"	4	\$206.20	\$196.04	\$49.01	\$147.03
3/4"	7	\$37.38	\$35.49	\$8.87	\$26.62
4"	1	\$71.10	\$67.60	\$16.90	\$50.70
5/8"	4	\$14.20	\$13.52	\$3.38	\$10.14
<b>Monthly Totals</b>	<b>1549</b>	<b>\$21,233.24</b>	<b>\$20,188.74</b>	<b>\$5,047.19</b>	<b>\$15,141.56</b>

X 12 Months  
**Potential Annual Impact** **\$181,698.66**  
**FY 2019 Total IWC Revenue** **\$9,059,024.37**

**Table 2 – Proposed Rollout Timeline**

Key Steps	Timeframe	Target Completion Date
1. Identify Member Partner team members to confirm impacted customers/meters	2 weeks	11/1/2019
2. Train Member Partner billing contacts on new IWC count forms and process	1 month	11/30/2019
3. Integrate new IWC Admin-Only counts and process into IWC bills for December	1 month	12/31/2019

**Table 3 - FY 2020 IWC Charges with Proposed Footnote Revision**

Great Lakes Water Authority - FY 2020 Sewage Disposal System  
Industrial Specific Retail Sewer Charges  
Approved by the GLWA Board on March 13, 2019

Industrial Waste Control Charges		Pollutant Surcharges	
Meter Size - inches	Charge \$/mo	Pollutant	Charge \$/lb
5/8	3.38	BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.491
3/4	5.07		
1	8.45		
1-1/2	18.59	TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.499
2	27.04		
3	49.01		
4	67.60		
6	101.40		
8	169.00	PHOSPHORUS (P) for concentrations > 12 mg/l	7.354
10	236.60		
12	270.40		
14	338.00		
16	405.60	FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.473
18	473.20		
20	540.80		
24	608.40		
30	676.00	SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	48.00
36	743.60		
48	811.20		

Note: On October 8, 2019 the GLWA Board of Directors approved an Agreement between the Great Lakes Water Authority, the City of Pontiac Wastewater Treatment Facility Drainage District, and the Clinton River Water Resource Recovery Facility Drainage District which allowed for the application of an 'administrative-only' IWC charge of 25% to be applied to a specific geographic range of Industrial Waste Control customers. The remainder of the Industrial Pretreatment Program charges for these customers will be applied by the agreed-upon entity performing the associated field services. This allocation will be revisited as part of the annual cost of service study.



## Background

On October 8, 2019 the Great Lakes Water Authority Board of Directors approved an Industrial Pretreatment Program (IPP) Agreement ('Agreement') between GLWA and the City of Pontiac Wastewater Treatment Facility Drainage District (COPWTFDD) and the Clinton River Water Resource Recovery Facility Drainage District (CRWRRFDD).

Oakland County has a wastewater interceptor system known as the Clinton-Oakland Sewage Disposal System (COSDS). This system collects wastewater from municipalities in the central and eastern portion of Oakland County and delivers it to both above referenced Drainage Districts and the Oakland Macomb Interceptor Drain Drainage District (OMIDDD).

The OMIDDD has an agreement with GLWA for wastewater services. This includes conveyance to, and treatment at, GLWA's Water Resource Recovery Facility (WRRF) which allows for a portion of the wastewater flow in the COSDS interceptor that is diverted, such that it is delivered to the WRRF in Pontiac and the remaining flow travels downstream to the OMIDDD to the GLWA collection system and is delivered to GLWA's WRRF. It should be noted that at the diversion point, most of the flow is diverted to the WRRF in Pontiac.

This flow diversion results in overlapping service areas and creates a geographic area that is governed by two IPPs with differing requirements and IPP rules. This Agreement addresses that overlap by dividing the IPP program into an administrative component (for reporting and oversight functions) and field work-only component (mainly sampling and testing).

## FY 2020 Budget Impact

The GLWA Financial Services Area (FSA) in coordination with the Industrial Waste Control (IWC) team and The Foster Group (TFG) reviewed the costs associated with the each of the two components of the IPP. A detailed analysis of historical costs and budgeted expenses led to a conclusion that 25% of current IWC charges relate to administrative cost components and 75% relate to field work components.

Industrial Waste Control customers that fall within the geographical area defined in this Agreement will therefore be invoiced for 25% of the current GLWA IWC charges monthly and 75% by the relevant Drainage District monthly.

Effective **TBD**, an FY 2020 amended schedule of charges will be in place that references the Agreement and the current Administrative-Only allocation for the affected IWC customer meters for each of the six, member partner communities impacted (the specific meters impacted will be identified with the help of the member communities as part of the process rollout).

For FY 2020, it is anticipated that less than **\$XXX,XXX** or **X%** of GLWA's overall IWC annual revenues will be impacted by this change when implemented.

## Future Years' Charges Impact

Moving forward, the annual allocation will be revisited as part of the cost of service study. The maximum exposure to a reallocation of fixed costs, based on the FY 2020 budget and charges, is expected to be less than **\$XXX,XXX** or **X%** of GLWA's overall IWC annual revenues.



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** Ten Year Financial Forecast Discussion Draft

**Background:** In the continuing effort to ensure long-term financial sustainability, the ten-year financial plan is being updated to account for new information as it relates to FY 2019 preliminary close and the many activities underway for the FY 2021+ financial planning cycle.

**Analysis:** See attached.

**Proposed Action:** Receive and file.





**GLWA**  
*Great Lakes Water Authority*

**GLWA Ten Year Financial Forecast  
Discussion Draft  
October 14, 2019**





October 16, 2019

To Our Stakeholders,

The Great Lakes Water Authority is committed to ensuring long-term sustainability of the systems that it operates and supporting regional collaboration through your engagement. The purpose of the ten-year financial forecast is to provide a financial blueprint for aligning and fulfilling operational and capital needs while maintaining a focus on affordability and environmental stewardship.

The attached discussion draft forecast through FY 2030, prepared by The Foster Group based upon information from across GLWA, occurs at a time when GLWA is in the initial stages of updating and presenting initial plan documents for FY 2021 – in particular, the capital improvement plan, operating budget, and service charges.

It should be noted that the draft forecast is management's representation of what could be, not necessarily what will be, based on a given set of scenarios and assumptions. The forecast will continue to evolve as we work through the FY 2021+ planning cycle and seek stakeholder feedback and continue to refine the scenarios and assumptions.

We thrive on your feedback. The Office of the Chief Financial Officer & Treasurer is easily reached via email at [cfo@glwater.org](mailto:cfo@glwater.org).

Regards,

Nicolette Bateson, CPA  
Chief Financial Officer & Treasurer



## THE FOSTER GROUP

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### MEMORANDUM

GLWA Financial Forecast Update  
Preliminary First Discussion Draft

October 14, 2019

To: Nicolette Bateson

From: Bart Foster

This memorandum is intended to introduce updated long-term financial plan forecasts for the GLWA Regional System Water and Sewer funds. These PRELIMINARY updated projections reflect forecasted financial results for a ten-year projection period (*Fiscal Year 2021 through Fiscal Year 2030*) for GLWA's capital and operating requirements. Separate exhibits are designed to summarize forecasts for both the Water Fund and the Sewer Fund. These forecast summaries are presented in similar format to prior published work products we have prepared in various forums, which largely focused on revenue requirements (reflected as either "budget" or "cash" basis) in a manner that aligns with requirements of the GLWA Master Bond Ordinances (MBO's). In addition, this document introduces summaries in a "GAAP basis" format that aligns with GLWA's "Statement of Changes in Net Position" contained in annual audited financial statements. We have also attempted to provide a reconciliation between the two separate, but related, depictions. Where appropriate, the exhibits present actual GAAP basis results to provide context.

At this point we are compelled to provide appropriate caveats to the forecasts presented herein. First, the efforts undertaken to prepare these forecasts are consistent with the analyses that we utilize to prepare financial feasibility report(s) that we have provided to GLWA in support of financial transactions. However, the efforts to date should be considered in the context of the "Preliminary First Discussion Draft" that introduces this commentary. We encourage stakeholders to review these forecasts with that understanding in mind. In addition, our formally published forecasts always carry this caveat:

*In conducting our studies and formulating our projections and opinions contained herein, we reviewed the books, records, agreements, capital improvement programs and other information produced by the Authority as we deemed necessary. While we consider such books, records, and other documents to be reliable, we have not verified the accuracy of these documents. The projections set forth herein are intended as "forward-looking statements". Actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur.*

Having said all that, let's review our first look at the updated forecasts. First, an introduction of the core executive summary assumptions we've incorporated into the baseline analysis.

1. FY 2021 O&M = as indicated in year 2 of FY 2020 Biennial Budget (*FY 2020 + 2%*)
2. Future O&M growth = 2%
3. CIP's reflects drafts submitted for review last week, expected to be same as "rolled out" 10/17
4. CIP Expenditure Level = 85% (*up from 75% in FY 2020 Biennial Budget*)
5. No recognition of potential refinancing savings in debt service
6. Investment earnings rate = 2.0% (*down from 2.5% in FY 2020 Biennial Budget*)
7. Capital financing policy:
  - o Apply "confirmed" SRF resources to specific projects;
  - o Spend existing I&E Funds until they reach policy minimum (*\$90 million*);
  - o Do not rely on annual deposits to I&E to finance CIP until subsequent year(s);
  - o Issue debt to finance remainder of annual capital requirements;
  - o Plan annual bond sales in amounts that result in \$50 million "carryover" at year end
8. "Top Line" increase in annual revenue requirements = 3% (*down from 4% in FY 2020 Biennial Budget*)
9. GAAP basis elements reflect "best estimates" based on current guidelines
  - o These are occasionally difficult to forecast
  - o Depreciation expense reflects:
    - Detailed review of existing asset records;
    - New assets reflect 1/2 year of depreciation in year of addition;
    - Capital outlay depreciates over 7 years;
    - Major CIP assets average life (based on detail review of CIP) = ~ 40 years
10. Total GLWA / DWSD "Legacy Pension Obligation" annual payments reduce from \$45.4 million to \$9.0 million starting in FY 2024

The forecasted financial results resulting from our application of these assumptions are summarized in the attached exhibits. We note that we have arranged the exhibits to introduce the "new" GAAP basis forecasts at the beginning, and the traditional "budget/cash" basis projections at the end. In reality, traditional financial planning (supported by the commitment to limiting annual revenue requirement increases to 4%) focusses entirely on the budget/cash basis approach – while using the GAAP basis results as a reality check.

Herewith we introduce each exhibit in an executive summary format. The exhibit page number references are consistent between the separate Water (W) and Sewer (S) page numbers.

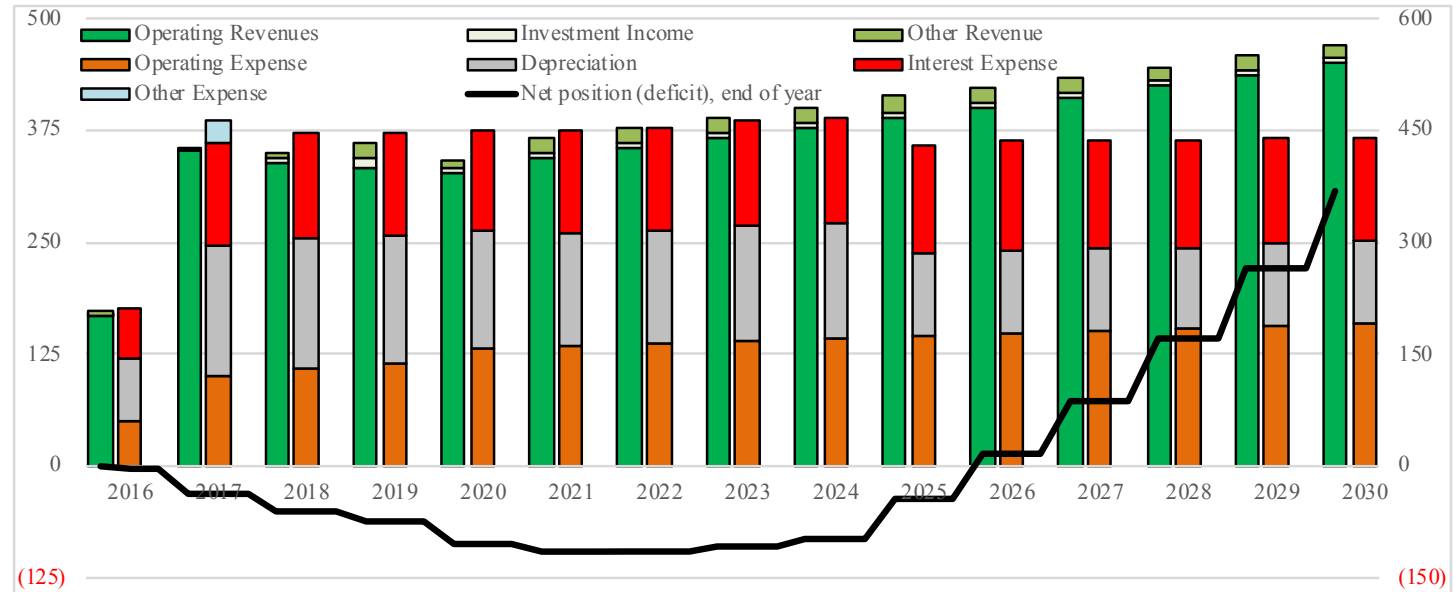
1. Forecasted (*and reported actual / estimated for FY 2016 - 2019*) Statement of Changes in Net Position
  - o Presents the GAAP basis forecast of annual results - and actual / estimated results for prior years. Shows anticipated short-term continuation of annual

losses, followed by material structural changes and inclining net position. This forecast is largely a result of . . .

2. Compares forecasted Budget / Cash basis forecast with GAAP basis forecast
  - Several “revenue requirements” (O&M, debt service interest, WRAP) are identical between the two approaches. Others are materially different. This exhibit illustrates the comparison. In general, if “cash basis” non-common capital items (which are used to establish charges and revenue levels) exceed their GAAP basis elements, a net gain will be forecasted, and vice versa. In recent years, the GAAP basis elements have exceeded the cash basis elements, and decreases in Net Position have resulted. This trend is forecasted to dramatically reverse, due primarily to . . .
3. Forecasted Depreciation Expense
  - When GLWA “acquired” its capital assets, a total asset value and depreciation schedule was established via a “valuation study”. The nature of the analysis produced a material increase in asset value (from what was on the DWSD books) and a corresponding acceleration of depreciation schedules for the acquired assets. This is illustrated in the chart, which shows a material drop off in annual depreciation expense. We’ve added forecasted depreciation expense on new assets (from annual capital outlay and the CIP) but the pace of new depreciation does not make up for the drop off of depreciation on existing assets.
4. Forecasted CIP Financing Plan
  - Illustrates forecasted plan resulting from application of CIP financing policy noted above. Note that the forecast anticipates the next “new money Regional System” Water bond transaction for FY 2023 and the next Sewer transaction in FY 2021 - the upcoming budget year. These are subject to change, and could be impacted by DWSD Local System needs.
5. Forecasted Application of CIP Funding Sources
  - Illustrates growing utilization of I&E monies to finance annual capital improvements. The Water picture is “muddied” because of the early year spend down of existing balances while the Sewer picture is more evident of steady growth - as the existing balance is slightly higher than the \$90 million policy minimum.
6. Forecasted Operating Fund Financing Plan (Revenue Requirements)
  - Graphical depiction of the “business plan” under a 3% top line / 2% O&M growth rate assumption
7. Forecasted Fund Balance Summary
  - Illustrates “non-restricted” liquidity balances and debt service coverage (as computed for the Regional System portion)

We are hopeful that this executive summary presentation provides a platform for discussion of financial planning policies and assumptions as the development of the FY 2021 Budget and related forecast proceeds. We are prepared to discuss this matter at your convenience.

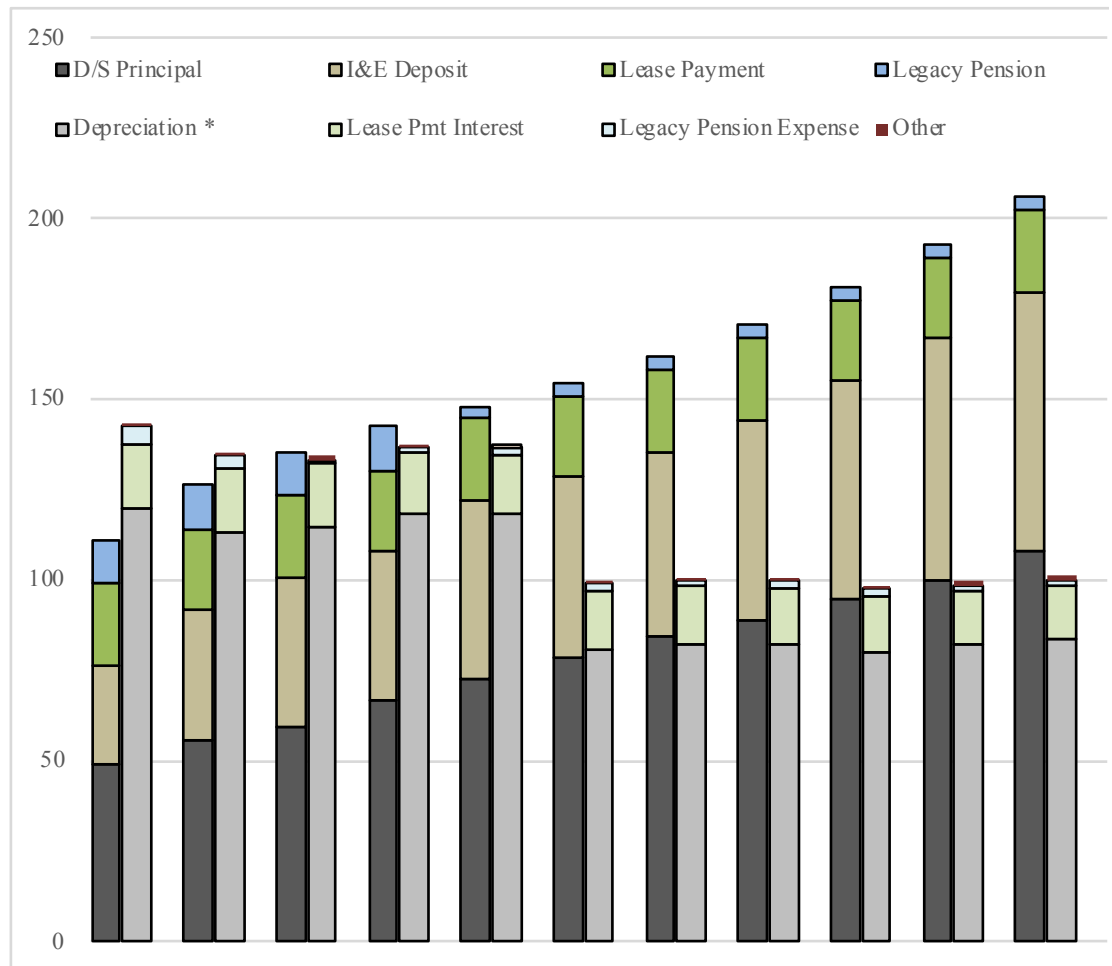
Water Supply System - Reported and Forecasted Statement of Changes in Net Position (\$ millions)



	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Est.</i>	<i>Est.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>
1 Total operating revenues	167.7	351.7	338.3	331.6	326.1	343.1	355.3	366.0	377.0	388.4	400.2	412.3	424.8	437.6	450.9
2 Operating expenses	49.5	101.7	108.5	114.5	131.5	134.1	136.8	139.5	142.3	145.2	148.1	151.0	154.1	157.1	160.3
3 Depreciation/Amortization	71.3	144.1	146.1	144.1	131.9	125.5	127.0	130.4	130.0	92.3	93.3	92.8	90.3	91.5	92.1
4 Total operating expenses	120.8	245.9	254.6	258.7	263.4	259.6	263.8	269.9	272.3	237.5	241.4	243.8	244.4	248.6	252.4
5 Operating income	46.8	105.9	83.7	72.9	62.7	83.5	91.5	96.1	104.7	150.9	158.8	168.5	180.4	189.0	198.5
<b>Nonoperating revenue (expenses)</b>															
6 Earnings on investments	0.4	1.8	6.1	13.1	7.1	6.8	5.0	5.1	5.3	5.3	5.4	5.4	5.5	5.6	5.6
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(114.2)	(111.6)	(114.7)	(113.3)	(115.5)	(117.7)	(121.0)	(121.0)	(120.3)	(119.0)	(116.9)	(114.0)
8 Other Non-Operating	5.2	6.4	4.4	15.6	9.3	15.3	18.0	19.0	18.0	19.1	17.9	16.7	15.9	15.7	14.7
9 Special Item	0.0	(32.8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Change in net position	(4.1)	(32.4)	(24.0)	(12.5)	(32.5)	(9.2)	1.3	4.8	10.3	54.4	61.1	70.3	82.8	93.4	104.9
10 Net position (deficit), beginning of yea	0.0	(4.1)	(36.5)	(60.4)	(72.9)	(105.4)	(114.6)	(113.3)	(108.5)	(98.2)	(43.8)	17.2	87.6	170.4	263.8
11 <b>Net position (deficit), end of year</b>	<b>(4.1)</b>	<b>(36.5)</b>	<b>(60.4)</b>	<b>(72.9)</b>	<b>(105.4)</b>	<b>(114.6)</b>	<b>(113.3)</b>	<b>(108.5)</b>	<b>(98.2)</b>	<b>(43.8)</b>	17.2	87.6	170.4	263.8	368.7



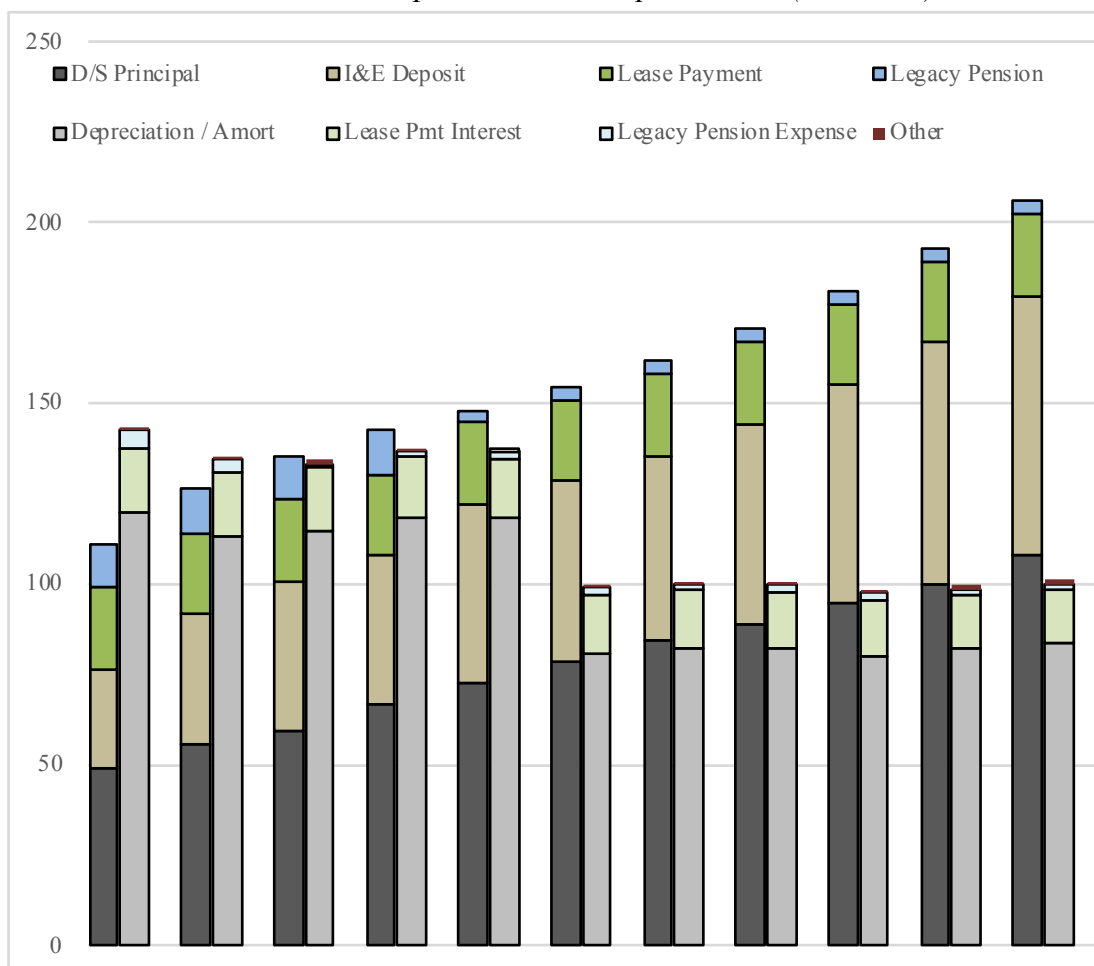
Water Supply System  
 Comparison of Forecasted "Non-Common" Capital Revenue Requirements - (\$ millions)



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Budget (Cash) Basis</u>											
Debt Service Principal	48.6	55.5	58.9	66.8	72.8	78.5	84.5	88.9	94.4	99.9	108.3
I&E Deposit	27.6	36.0	41.6	40.9	49.2	50.0	51.0	55.5	60.4	67.0	71.5
Lease Payment	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Legacy Pension Payments	12.3	12.3	12.3	12.3	3.1	3.1	3.9	3.9	3.7	3.6	3.5
Total Cash Basis	111.1	126.3	135.4	142.5	147.7	154.2	161.9	170.8	181.0	192.9	205.8
<u>GAAP Basis</u>											
Depreciation (and other amortization)	119.9	113.3	114.9	118.3	118.2	80.8	82.2	82.1	80.2	81.8	83.6
Lease Payment Interest	17.5	17.2	17.0	16.8	16.6	16.3	16.0	15.8	15.5	15.2	14.9
Legacy Pension Expense	5.2	4.0	1.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Other	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8
Total accrual Basis	143.5	135.5	134.1	137.7	137.4	99.8	100.9	100.5	98.2	99.5	100.9
Difference = Change in net position	(32.5)	(9.2)	1.3	4.8	10.3	54.4	61.1	70.3	82.8	93.4	104.9



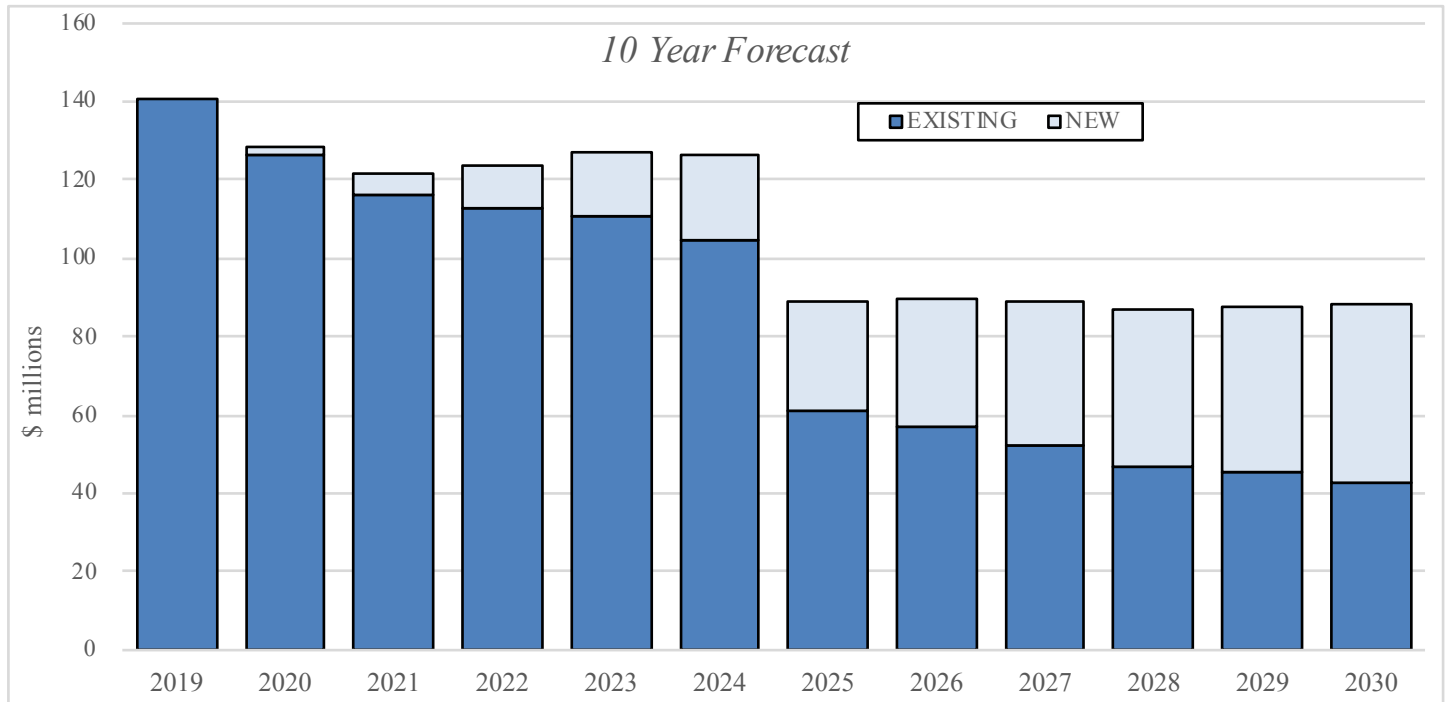
Water Supply System  
Comparison of Forecasted "Non-Common" Capital Revenue Requirements - (\$ millions)



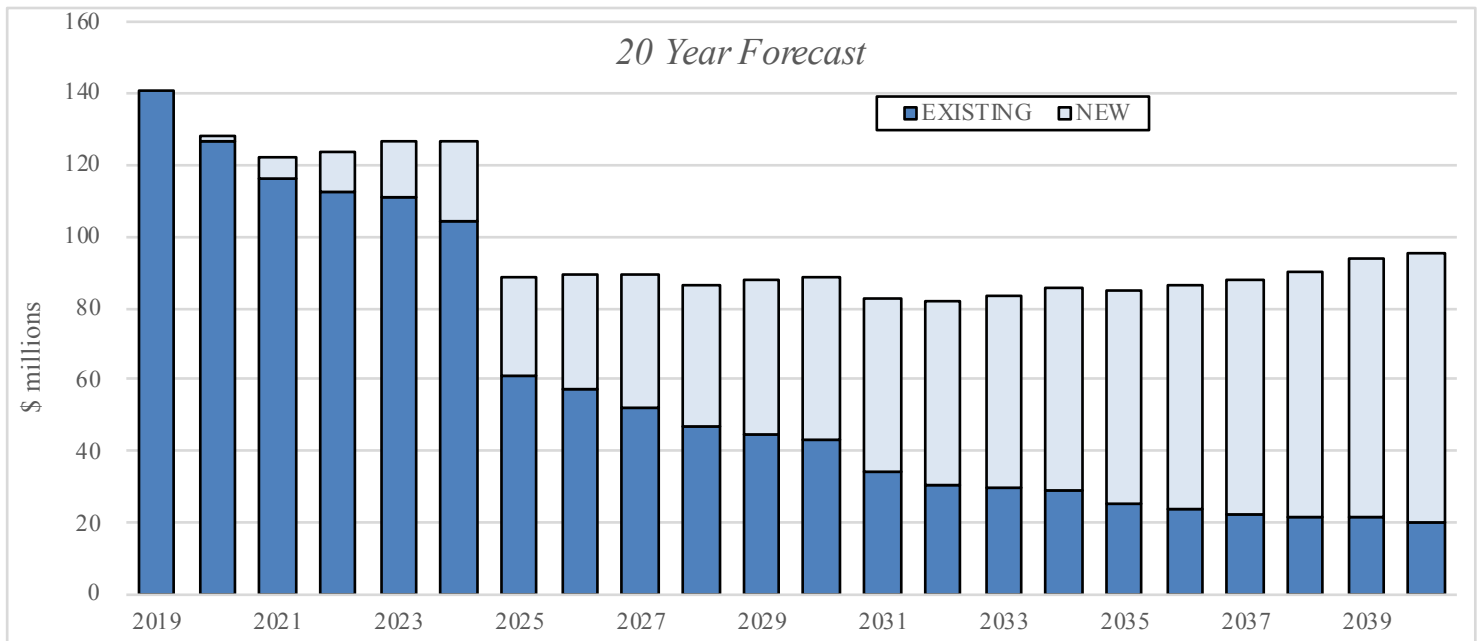
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Budget (Cash) Basis</u>											
Debt Service Principal	48.6	55.5	58.9	66.8	72.8	78.5	84.5	88.9	94.4	99.9	108.3
I&E Deposit	27.6	36.0	41.6	40.9	49.2	50.0	51.0	55.5	60.4	67.0	71.5
Lease Payment	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Legacy Pension Payments	12.3	12.3	12.3	12.3	3.1	3.1	3.9	3.9	3.7	3.6	3.5
Total Cash Basis	111.1	126.3	135.4	142.5	147.7	154.2	161.9	170.8	181.0	192.9	205.8
<u>GAAP Basis</u>											
Depreciation (and other amortization)	119.9	113.3	114.9	118.3	118.2	80.8	82.2	82.1	80.2	81.8	83.6
Lease Payment Interest	17.5	17.2	17.0	16.8	16.6	16.3	16.0	15.8	15.5	15.2	14.9
Legacy Pension Expense	5.2	4.0	1.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Other	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8
Total accrual Basis	143.5	135.5	134.1	137.7	137.4	99.8	100.9	100.5	98.2	99.5	100.9
Difference = Change in net position	(32.5)	(9.2)	1.3	4.8	10.3	54.4	61.1	70.3	82.8	93.4	104.9



Illustration of Forecasted GLWA Depreciation Expense  
Water Existing and New Assets - \$ millions

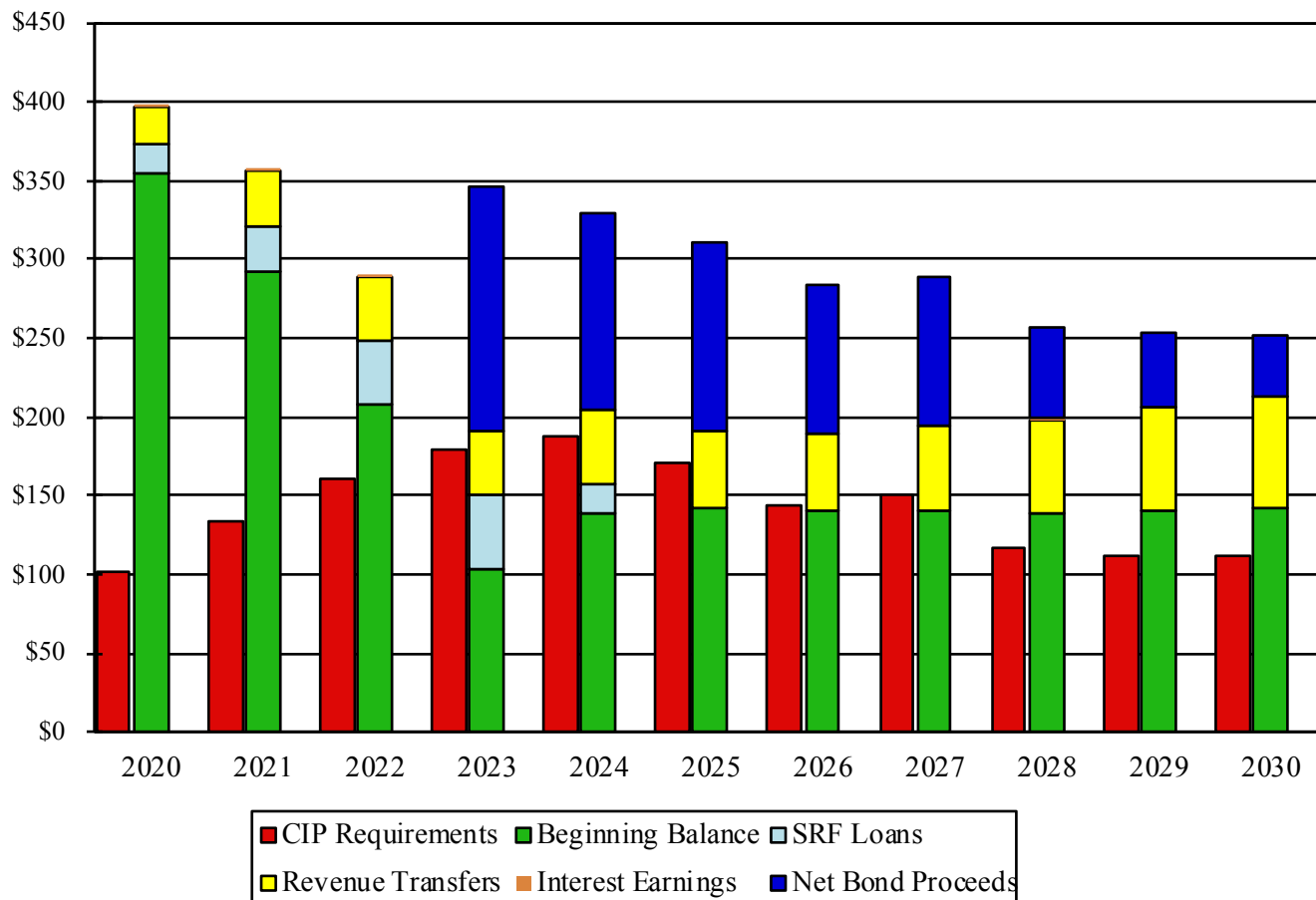


EXISTING	140.5	126.5	116.0	112.7	110.7	104.5	61.2	57.0	52.4	46.7	45.1	43.0
NEW	<u>0.0</u>	<u>1.9</u>	<u>5.9</u>	<u>10.7</u>	<u>16.1</u>	<u>21.9</u>	<u>27.5</u>	<u>32.7</u>	<u>36.8</u>	<u>40.0</u>	<u>42.8</u>	<u>45.5</u>
TOTAL	140.5	128.4	121.9	123.5	126.8	126.4	88.7	89.7	89.2	86.7	87.9	88.5



GLWA Water Supply System Financial Plan Summary (\$ millions)

### Capital Improvement Program Financing Plan

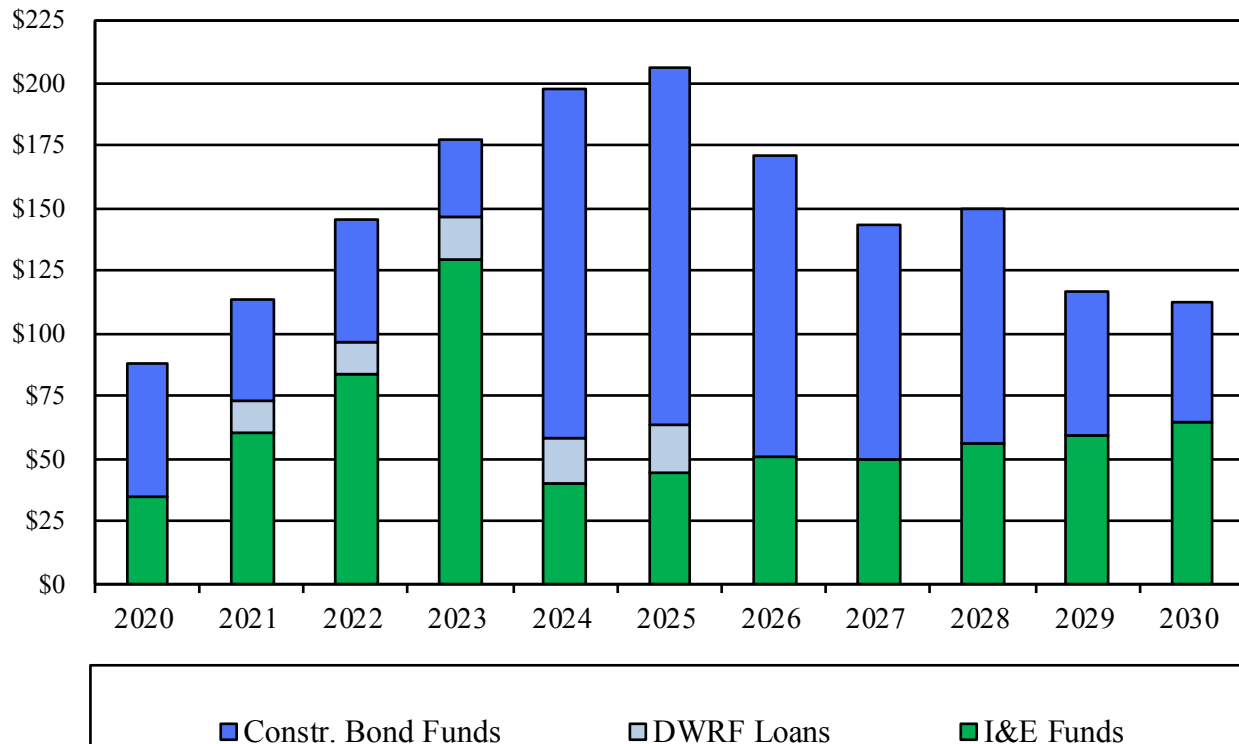


	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
CIP Requirement	101.2	133.3	161.1	179.2	187.7	171.2	143.8	149.8	116.3	112.1	111.4
<u>Sources</u>											
Begin Balance	355.6	292.3	207.3	103.8	138.6	141.8	140.0	140.3	139.0	139.8	142.1
Bond Sale		0.0	100.0	0.0	215.0	182.0	128.0	100.0	103.6	87.1	78.5
Net Prem / Disc											
less: DWSD CIP		0.0	(94.0)	0.0	(47.0)	(47.0)	0.0	0.0	(3.4)	(24.5)	(25.9)
less: Issue Exp		0.0	(6.0)	155.1	(43.9)	(14.7)	(34.0)	(6.0)	(42.9)	(14.6)	(14.1)
SRF Loans	18.5	28.3	41.6	47.4	18.5	0.0	0.0	0.0	0.0	0.0	0.0
Revenue Xfers	23.6	35.1	40.8	40.0	48.3	49.1	50.1	54.5	59.4	65.9	70.4
Total Sources	397.8	355.8	289.7	346.3	329.5	311.2	284.1	288.8	255.8	253.7	251.1
End Balance	296.5	222.5	128.5	167.1	141.8	140.0	140.3	139.0	139.4	141.6	139.7



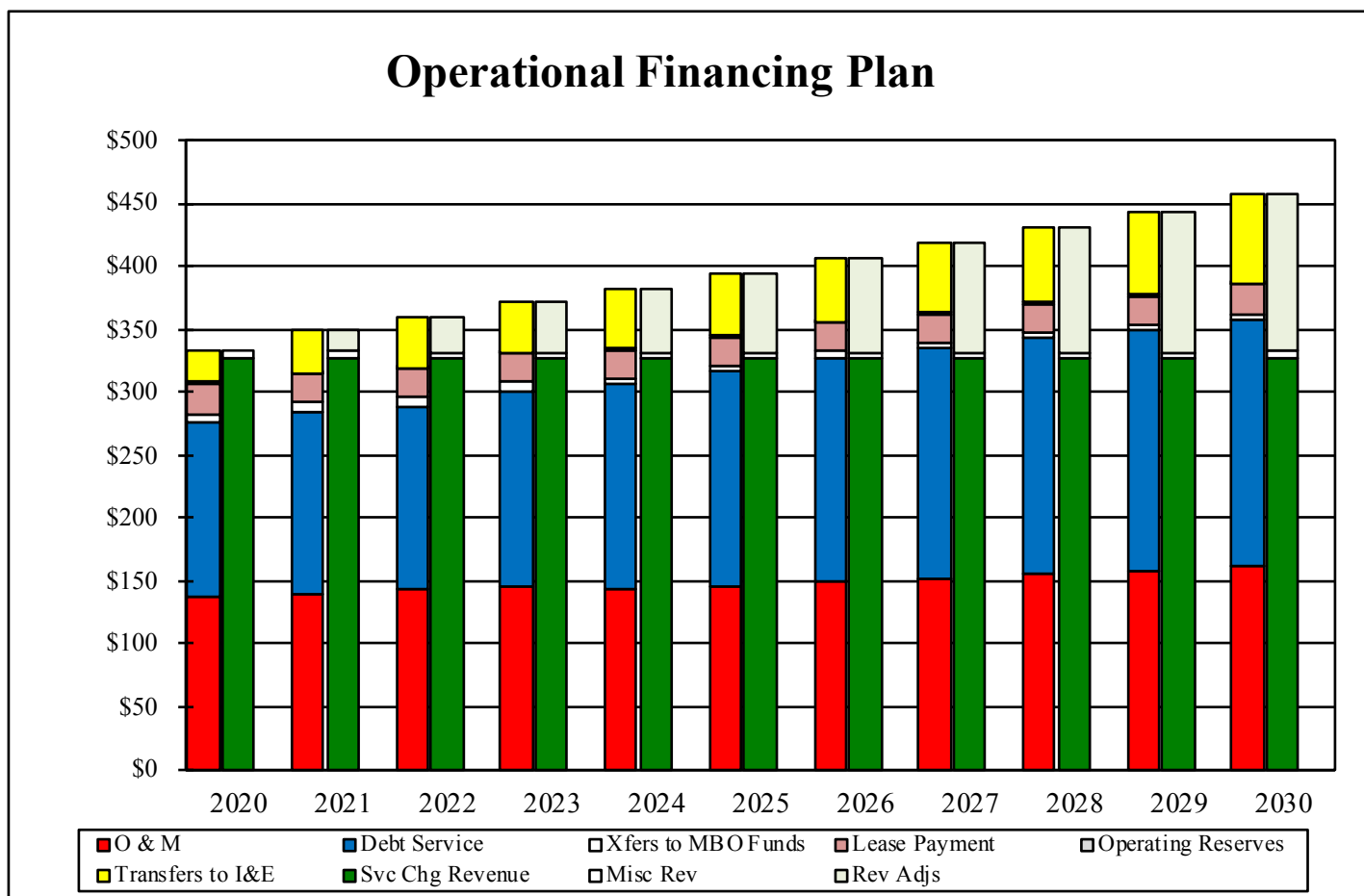
GLWA Water Supply System Financial Plan Summary (\$ millions)

### Application of CIP Funding Sources



	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
I&E Funds	35.3	60.1	84.2	129.7	39.7	44.9	50.7	49.8	56.1	58.9	64.3
DWRF Loans	0.0	12.9	12.4	16.6	18.9	18.5	0.0	0.0	0.0	0.0	0.0
Constr. Bond Funds	52.9	41.1	49.1	31.4	139.5	142.8	120.4	93.9	93.7	57.4	47.8
<i>I&amp;E % of Total</i>	40%	53%	58%	73%	20%	22%	30%	35%	37%	51%	57%

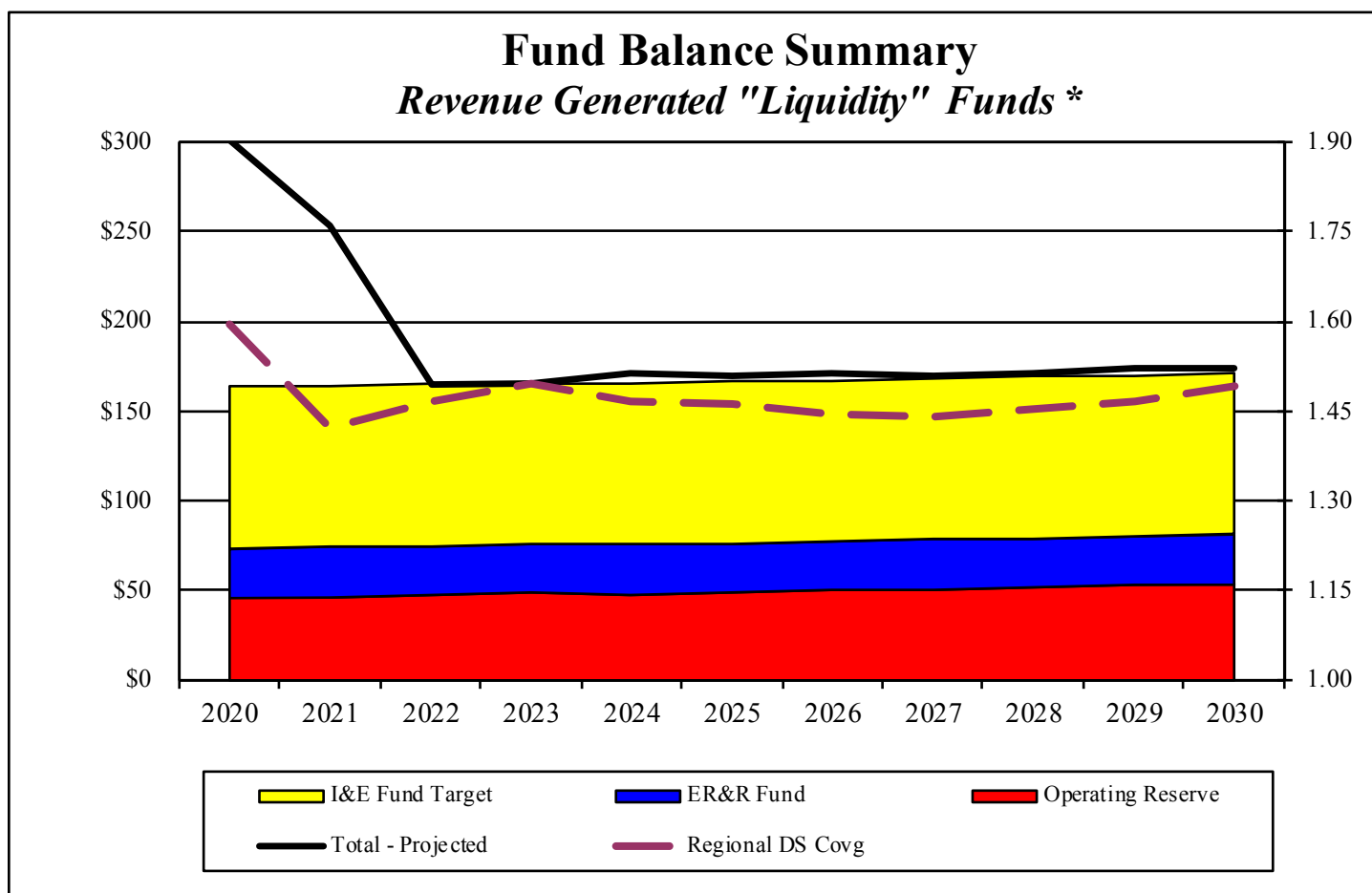
GLWA Water Supply System Financial Plan Summary (\$ millions)



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>REVENUE</b>											
Svc. Chg. Revenue	326.1	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
<i>Revenue Adjustments</i>		<i>5.1%</i>	<i>3.6%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>
Revenue from Adjs		16.7	28.9	39.7	50.6	62.1	73.8	85.9	98.4	111.2	124.5
Other	7.1	6.8	5.0	5.1	5.3	5.3	5.4	5.4	5.5	5.6	5.6
<b>Total Revenue</b>	<b>333.2</b>	<b>349.9</b>	<b>360.3</b>	<b>371.2</b>	<b>382.3</b>	<b>393.8</b>	<b>405.6</b>	<b>417.7</b>	<b>430.3</b>	<b>443.2</b>	<b>456.5</b>
<b>BUDGET</b>											
O&M Expense	137.5	140.2	142.9	145.6	143.5	146.4	149.3	152.2	155.3	158.3	161.5
Debt Service	137.6	143.2	145.3	154.0	163.2	171.0	178.0	182.7	187.5	190.8	196.4
Xfers to MBO Funds	8.0	8.0	8.1	8.1	3.8	3.9	4.7	4.8	4.7	4.6	4.6
Lease Payment	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Operating Reserves	4.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Transfers to I&E	23.6	35.1	40.8	40.0	48.3	49.1	50.1	54.5	59.4	65.9	70.4
<b>Total BUDGET</b>	<b>333.2</b>	<b>349.9</b>	<b>360.3</b>	<b>371.2</b>	<b>382.3</b>	<b>393.8</b>	<b>405.6</b>	<b>417.7</b>	<b>430.3</b>	<b>443.2</b>	<b>456.5</b>
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0



GLWA Water Supply System Financial Plan Summary (\$ millions)

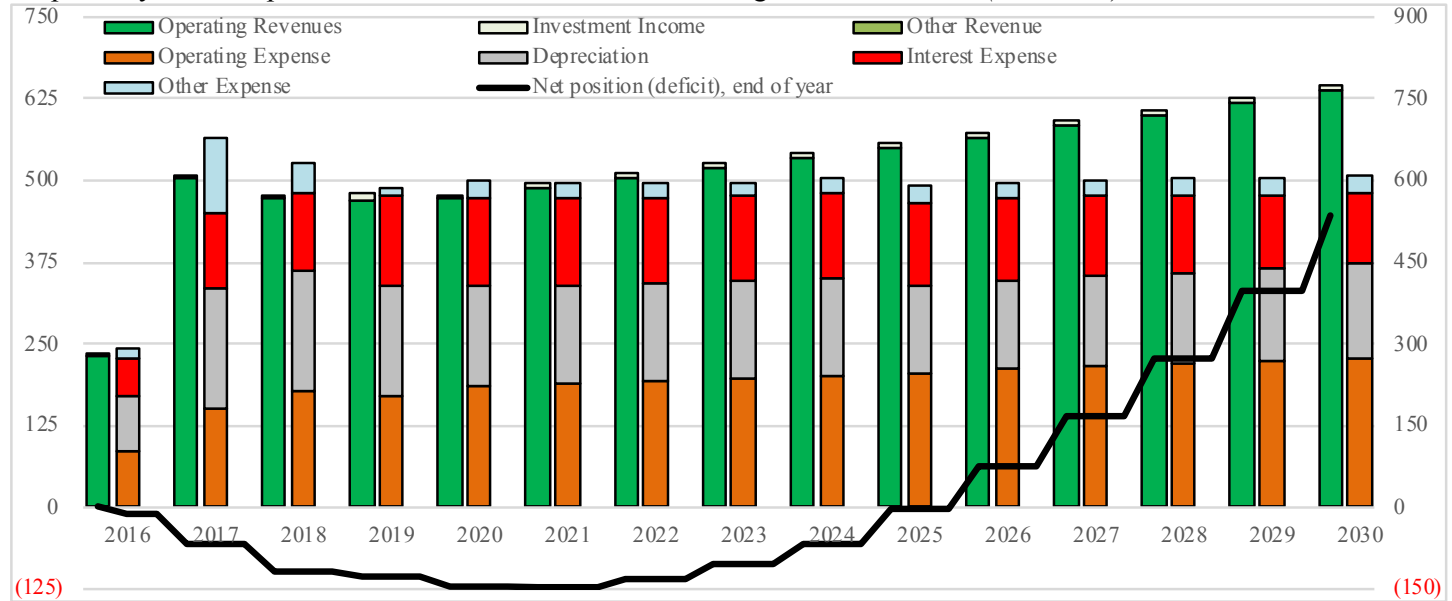


	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Fund Balance Minimums</u>											
Operating Reserve	45.9	46.7	47.6	48.5	47.8	48.8	49.8	50.8	51.8	52.8	53.8
ER&R Fund	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
I&E Fund Target	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total - Minimums	163.4	164.2	165.1	166.0	165.3	166.3	167.3	168.3	169.3	170.3	171.3

<u>Projections</u>											
Operating Reserve	46.8	47.7	48.6	49.5	50.4	51.3	52.3	53.3	54.3	55.3	56.4
ER&R Fund	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
I&E Fund	226.8	177.7	88.8	89.1	92.5	90.8	91.0	89.4	89.9	91.5	89.5
Total - Projected	301.1	252.9	164.8	166.1	170.4	169.6	170.8	170.2	171.7	174.4	173.4
Projected > Minimum	137.8	88.7	(0.3)	0.0	5.0	3.4	3.6	2.0	2.5	4.1	2.1
Regional DS Covg	1.60	1.42	1.46	1.50	1.46	1.46	1.45	1.44	1.45	1.47	1.49

\* Revenue Generated Funds only. Excludes Debt Service Reserve & Construction Funds (Bond Generated) & "Pass Thru" Funds (Debt Sevc, etc)

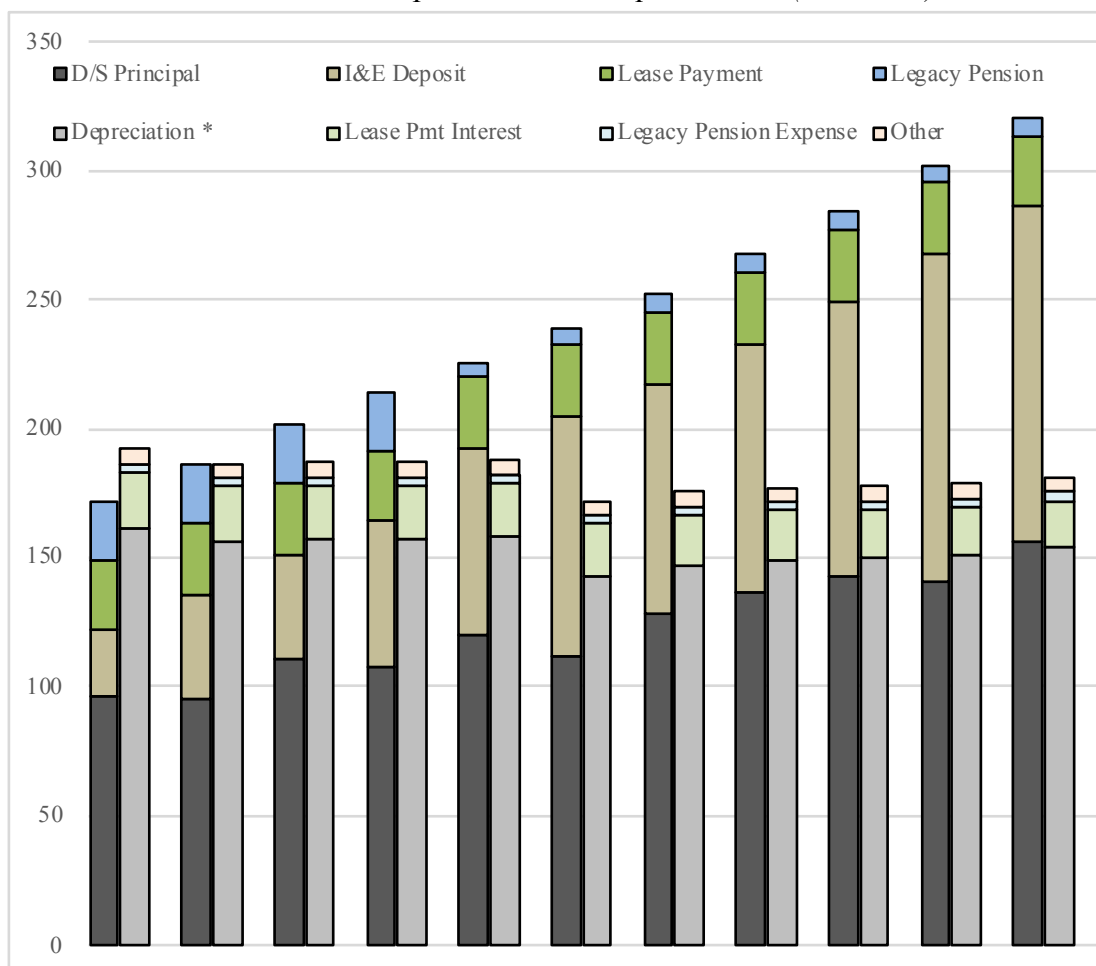
Sewage Disposal System - Reported and Forecasted Statement of Changes in Net Position (\$ millions)



	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Est.</i>	<i>Est.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>	<i>Proj.</i>
1 Total operating revenues	230.5	505.8	473.6	469.5	471.9	487.8	502.6	517.9	533.6	550.0	566.5	583.8	601.5	619.9	638.6
2 Operating expenses	84.4	151.3	176.4	170.7	187.1	190.8	194.6	198.5	202.5	206.5	210.7	214.9	219.2	223.6	228.0
3 Depreciation/Amortization	86.0	185.6	187.3	168.5	151.8	146.8	147.6	147.8	149.0	133.4	137.4	139.0	140.0	141.3	144.2
4 Total operating expenses	170.4	336.9	363.6	339.3	338.9	337.6	342.2	346.3	351.5	339.9	348.0	353.9	359.1	364.9	372.2
5 Operating income	60.1	168.9	110.0	130.2	133.0	150.2	160.5	171.6	182.2	210.1	218.5	229.9	242.4	255.0	266.4
<b>Nonoperating revenue (expenses)</b>															
6 Earnings on investments	1.1	2.2	5.3	11.1	6.6	7.2	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.1	7.3
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(136.8)	(135.7)	(134.2)	(130.2)	(129.1)	(128.6)	(127.4)	(124.8)	(121.8)	(118.2)	(113.8)	(109.9)
8 Other Non-Operating	(17.2)	(51.7)	(46.9)	(11.6)	(24.0)	(24.1)	(23.2)	(22.5)	(23.0)	(23.5)	(24.0)	(24.6)	(24.9)	(24.9)	(24.7)
9 Special Item	0.0	(61.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Change in net position	(12.6)	(55.8)	(50.0)	(7.1)	(20.2)	(0.9)	14.3	27.1	37.8	66.3	77.0	90.7	106.5	123.5	139.1
10 Net position (deficit), beginning of year	0.0	(12.6)	(68.4)	(118.3)	(125.4)	(145.6)	(146.5)	(132.1)	(105.0)	(67.2)	(0.8)	76.1	166.9	273.4	396.9
11 <b>Net position (deficit), end of year</b>	<b>(12.6)</b>	<b>(68.4)</b>	<b>(118.3)</b>	<b>(125.4)</b>	<b>(145.6)</b>	<b>(146.5)</b>	<b>(132.1)</b>	<b>(105.0)</b>	<b>(67.2)</b>	<b>(0.8)</b>	76.1	166.9	273.4	396.9	536.0

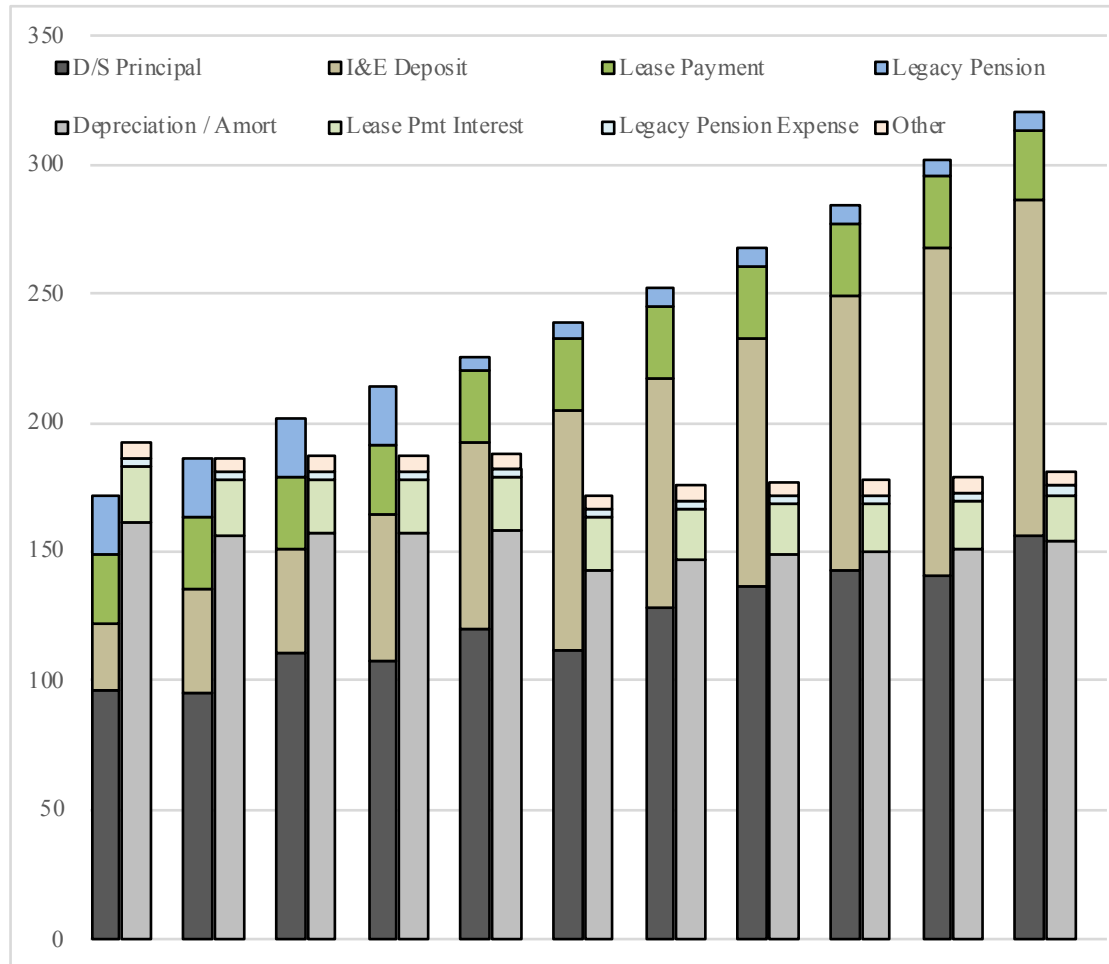


Sewage Disposal System  
Comparison of Forecasted "Non-Common" Capital Revenue Requirements - (\$ millions)



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Budget (Cash) Basis</u>											
Debt Service Principal	96.6	95.0	110.7	108.0	119.7	112.2	128.1	137.1	142.6	140.9	155.7
I&E Deposit	25.2	40.8	40.9	56.3	72.7	92.8	89.5	95.6	106.9	126.9	130.1
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Legacy Pension Payments	22.4	22.4	22.4	22.4	6.0	6.0	7.7	7.6	7.2	6.9	6.9
Total Cash Basis	171.8	185.8	201.5	214.3	225.9	238.5	252.7	267.8	284.2	302.2	320.2
<u>GAAP Basis</u>											
Depreciation (and other amortization)	161.6	156.6	157.4	157.6	158.8	143.2	147.2	148.8	149.8	151.1	154.0
Lease Payment Interest	21.4	21.1	20.8	20.5	20.3	19.9	19.6	19.3	18.9	18.6	18.2
Legacy Pension Expense	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Other	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Total accrual Basis	192.0	186.7	187.2	187.2	188.0	172.1	175.8	177.1	177.7	178.7	181.2
Difference = Change in net position	(20.2)	(0.9)	14.3	27.1	37.8	66.3	77.0	90.7	106.5	123.5	139.1

Sewage Disposal System  
 Comparison of Forecasted "Non-Common" Capital Revenue Requirements - (\$ millions)

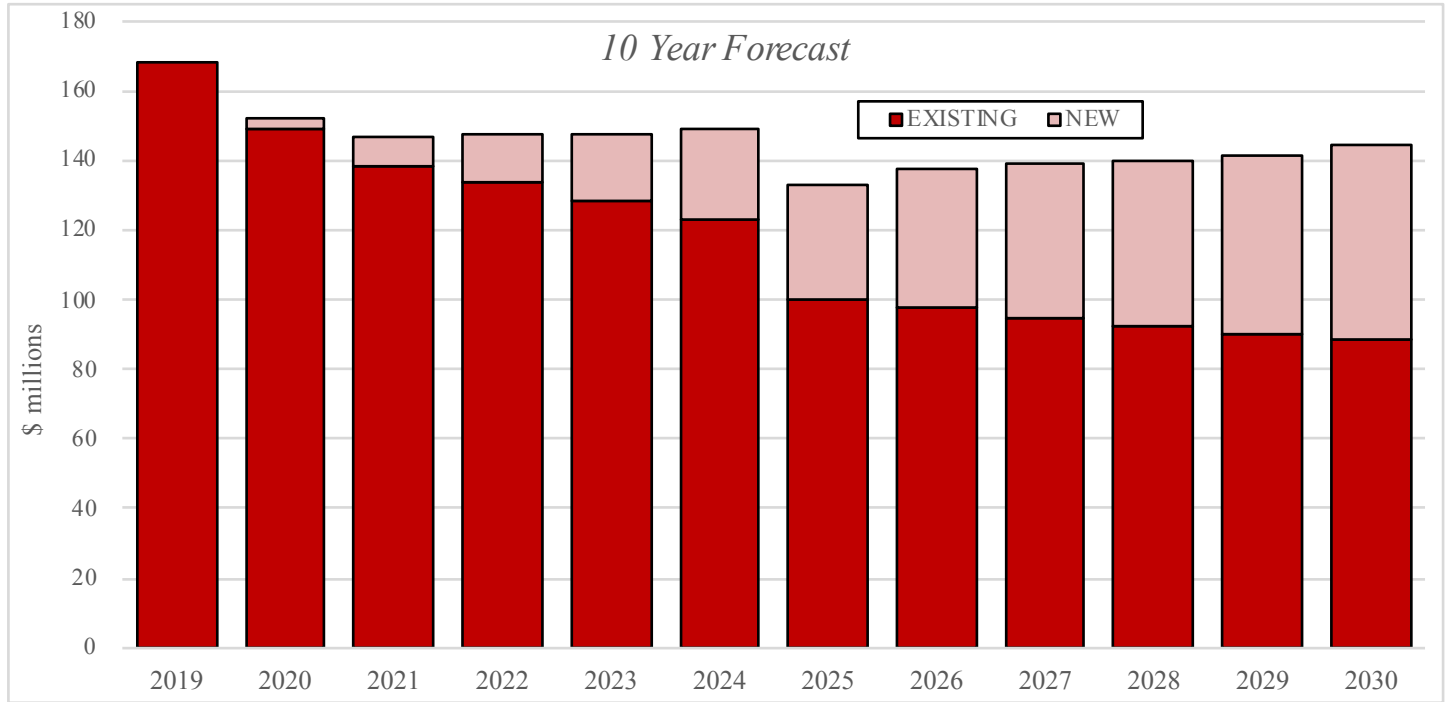


	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Budget (Cash) Basis</u>											
Debt Service Principal	96.6	95.0	110.7	108.0	119.7	112.2	128.1	137.1	142.6	140.9	155.7
I&E Deposit	25.2	40.8	40.9	56.3	72.7	92.8	89.5	95.6	106.9	126.9	130.1
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Legacy Pension Payments	22.4	22.4	22.4	22.4	6.0	6.0	7.7	7.6	7.2	6.9	6.9
<b>Total Cash Basis</b>	<b>171.8</b>	<b>185.8</b>	<b>201.5</b>	<b>214.3</b>	<b>225.9</b>	<b>238.5</b>	<b>252.7</b>	<b>267.8</b>	<b>284.2</b>	<b>302.2</b>	<b>320.2</b>
<u>GAAP Basis</u>											
Depreciation (and other amortization)	161.6	156.6	157.4	157.6	158.8	143.2	147.2	148.8	149.8	151.1	154.0
Lease Payment Interest	21.4	21.1	20.8	20.5	20.3	19.9	19.6	19.3	18.9	18.6	18.2
Legacy Pension Expense	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Other	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
<b>Total accrual Basis</b>	<b>192.0</b>	<b>186.7</b>	<b>187.2</b>	<b>187.2</b>	<b>188.0</b>	<b>172.1</b>	<b>175.8</b>	<b>177.1</b>	<b>177.7</b>	<b>178.7</b>	<b>181.2</b>
<b>Difference = Change in net position</b>	<b>(20.2)</b>	<b>(0.9)</b>	<b>14.3</b>	<b>27.1</b>	<b>37.8</b>	<b>66.3</b>	<b>77.0</b>	<b>90.7</b>	<b>106.5</b>	<b>123.5</b>	<b>139.1</b>

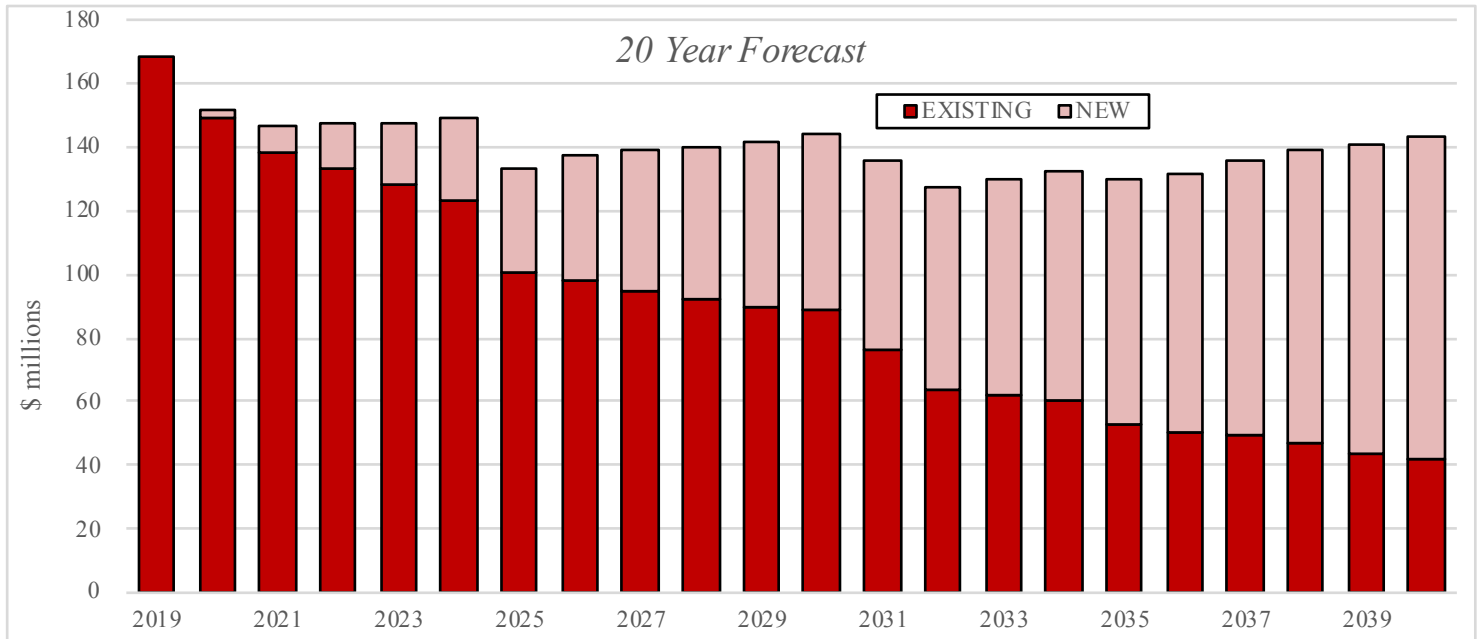




Illustration of Forecasted GLWA Depreciation Expense  
*Sewer Existing and New Assets - \$ millions*

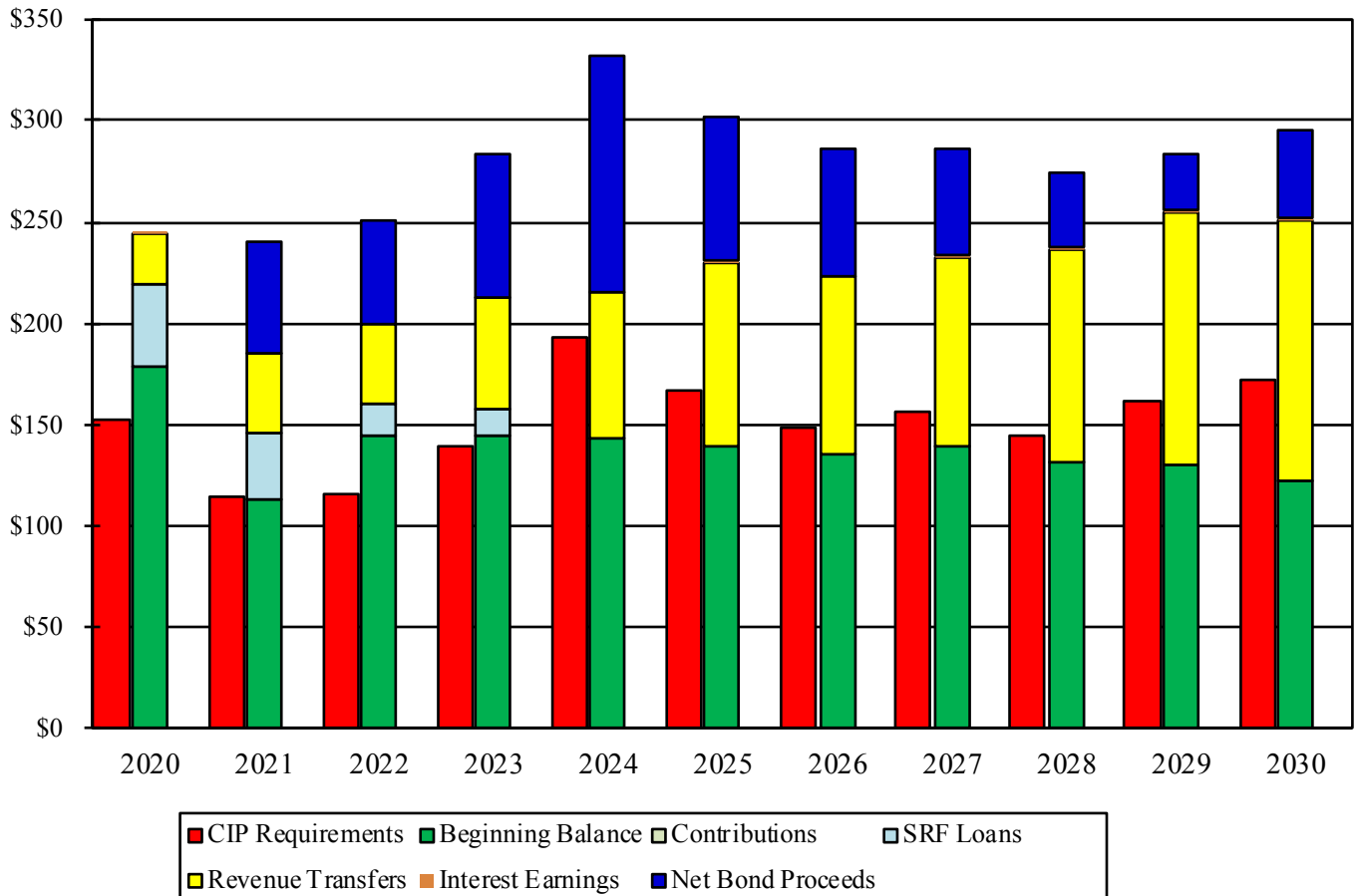


EXISTING	168.2	148.7	138.1	133.6	128.3	122.9	100.4	98.0	94.7	92.2	90.0	88.8
NEW	<u>0.0</u>	<u>3.1</u>	<u>8.8</u>	<u>14.0</u>	<u>19.5</u>	<u>26.1</u>	<u>33.0</u>	<u>39.4</u>	<u>44.3</u>	<u>47.8</u>	<u>51.4</u>	<u>55.3</u>
TOTAL	168.2	151.8	146.8	147.6	147.8	149.0	133.4	137.4	139.0	140.0	141.3	144.2



GLWA Sewage Disposal System Financial Plan Summary (\$ millions)

### Capital Improvement Program Financing

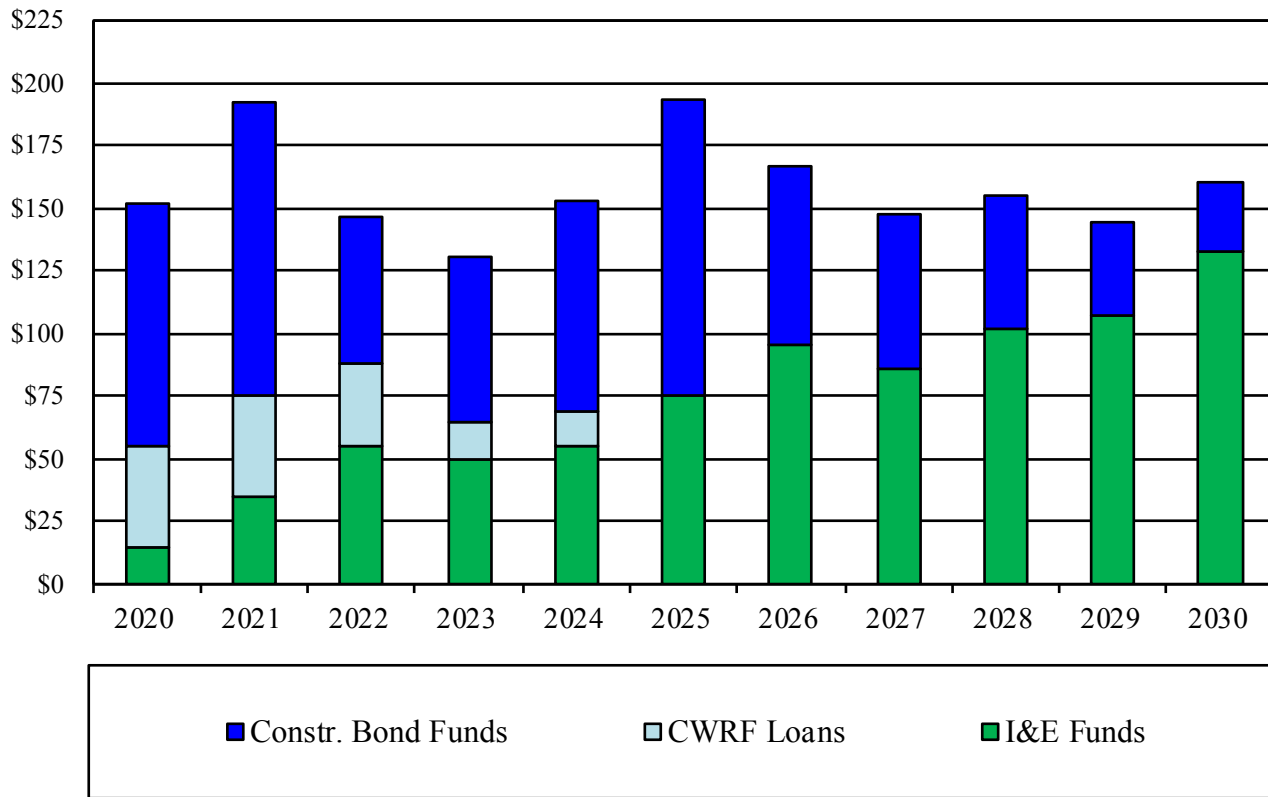


	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
CIP Req't	151.8	113.9	115.8	139.7	193.2	166.9	148.1	155.6	145.0	160.8	172.4
<b>Sources</b>											
Begin Balance	178.4	112.4	145.0	143.7	143.2	139.0	135.2	138.5	131.1	129.8	122.4
CIAC / Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bond Sale		0.0	58.0	104.0	75.0	125.0	76.0	67.0	57.0	52.0	47.0
less: DWSD CIP		0.0	0.0	(47.0)	0.0	0.0	0.0	0.0	0.0	(11.3)	(16.9)
less: Issue Exp		0.0	(3.5)	(6.2)	(4.5)	(7.5)	(4.6)	(4.0)	(3.4)	(3.1)	(2.8)
SRF Loans	41.1	40.5	46.0	27.9	13.5	0.0	0.0	0.0	0.0	0.0	0.0
Revenue Xfers	25.2	39.6	39.6	55.0	71.4	91.4	88.1	94.2	105.5	125.4	128.6
<b>Total Sources</b>	<b>244.7</b>	<b>192.5</b>	<b>285.2</b>	<b>277.5</b>	<b>298.6</b>	<b>347.9</b>	<b>294.7</b>	<b>295.7</b>	<b>290.2</b>	<b>292.8</b>	<b>278.3</b>
End Balance	92.9	78.5	169.4	137.8	105.5	180.9	146.6	140.1	145.2	132.0	105.9



GLWA Sewage Disposal System Financial Plan Summary (\$ millions)

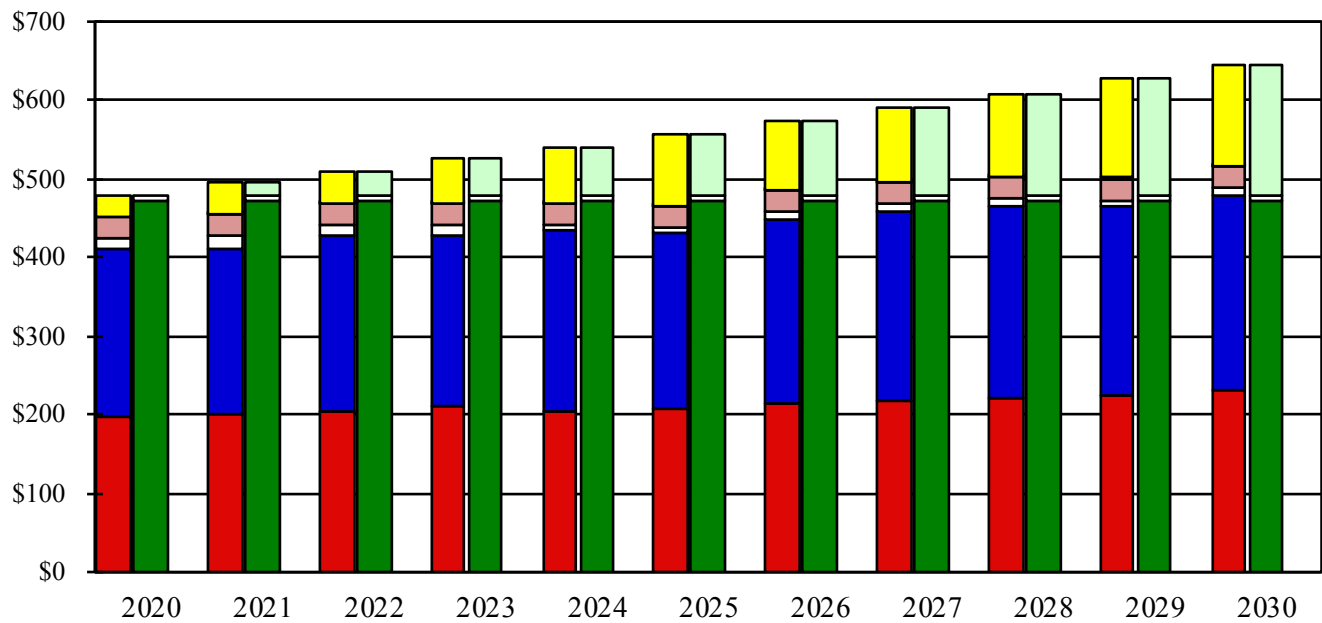
### Application of CIP Funding Sources



	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
I&E Funds	14.3	35.1	54.9	50.0	55.0	75.4	95.8	85.4	101.6	107.0	132.4
CWRP Loans	41.1	40.5	33.2	15.1	13.5	0.0	0.0	0.0	0.0	0.0	0.0
Constr. Bond Funds	96.9	116.7	59.0	65.8	84.7	117.8	71.1	62.7	54.0	38.0	28.4
<i>I&amp;E % of Total</i>	9%	18%	37%	38%	36%	39%	57%	58%	65%	74%	82%

GLWA Sewage Disposal System Financial Plan Summary (\$ millions)

**Operating Fund Financing Plan**



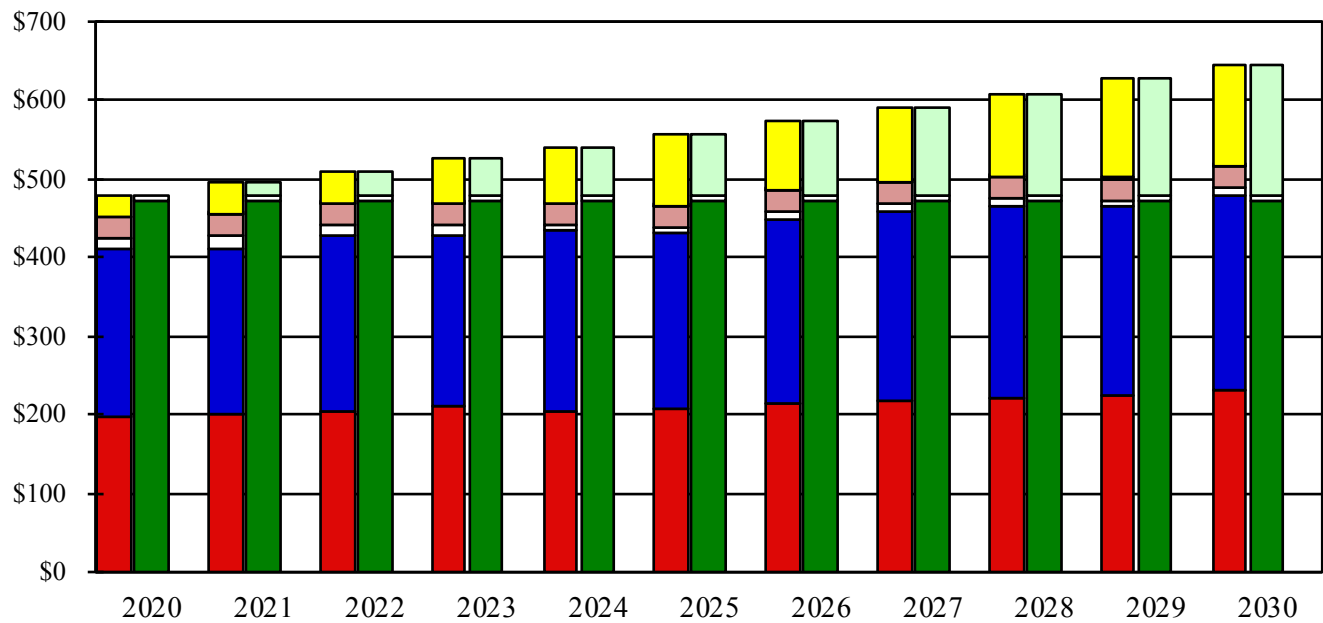
■ O & M	■ Debt Service	□ Xfers to MBO Funds	■ Lease Payment	■ Operating Reserves
■ Transfers to I&E	■ Svc. Chg. Revenue	□ Misc Rev	□ Rev Adjs	

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>REVENUE</b>											
Svc. Chg. Revenue	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9
<i>Revenue Adjustments</i>		<i>0.0%</i>	<i>3.4%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.0%</i>	<i>3.1%</i>
Revenue from Adjs	0.0	16.0	30.7	46.0	61.8	78.1	94.6	111.9	129.7	148.1	166.7
Other	6.6	7.2	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.1	7.3
Total Revenue	478.4	495.0	509.9	525.2	540.9	557.2	573.9	591.1	608.8	627.1	645.9
<b>BUDGET</b>											
O&M Expense	197.9	201.6	205.4	209.3	204.6	208.6	212.8	217.0	221.3	225.7	230.1
Debt Service	213.8	211.0	221.9	217.7	229.5	221.6	235.7	242.5	245.0	239.1	250.1
Xfers to MBO Fund	14.0	14.1	14.2	14.2	6.6	6.6	8.5	8.5	8.2	8.0	8.0
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Operating Reserves	0.0	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5
Transfers to I&E	25.2	39.6	39.6	55.0	71.4	91.4	88.1	94.2	105.5	125.4	128.6
Total BUDGET	478.4	495.0	509.9	525.2	540.9	557.2	573.9	591.1	608.8	627.1	645.9
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



GLWA Sewage Disposal System Financial Plan Summary (\$ millions)

**Operating Fund Financing Plan**



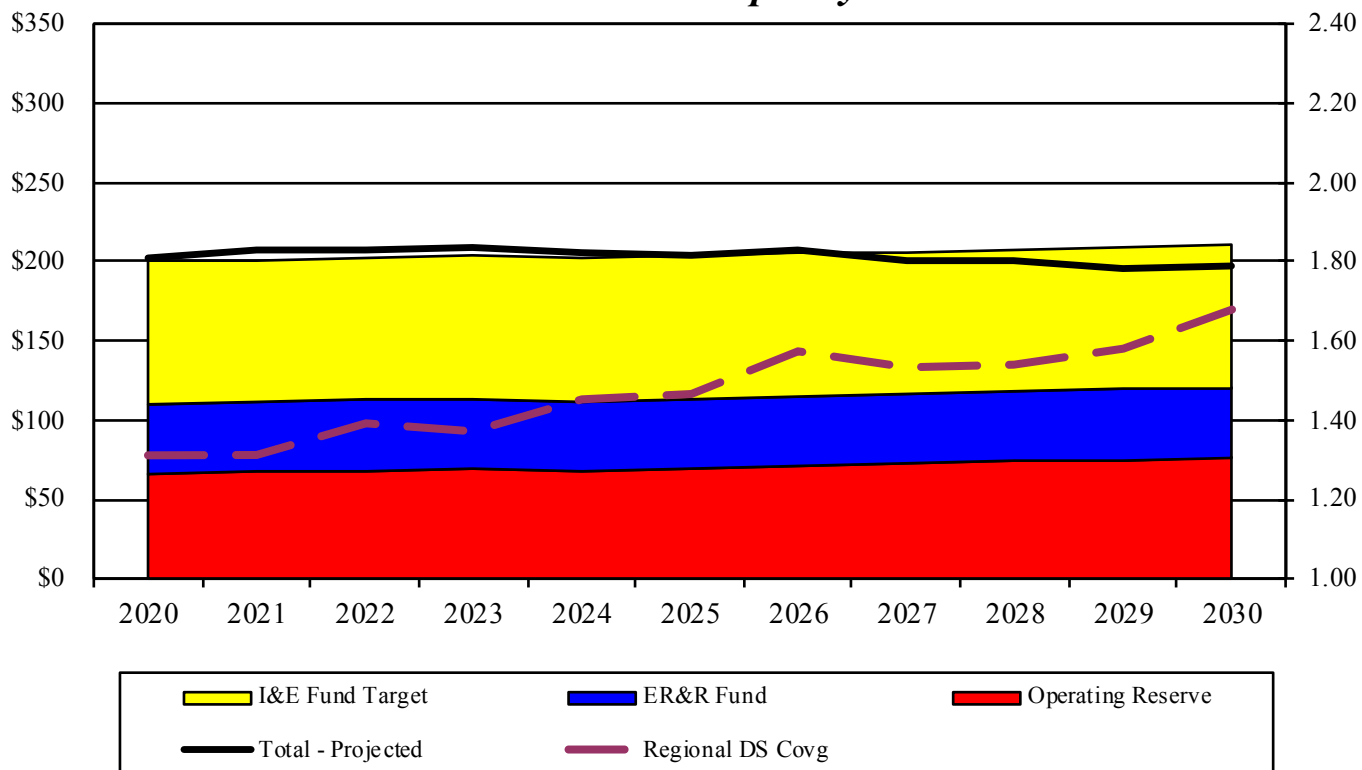
■ O & M	■ Debt Service	□ Xfers to MBO Funds	■ Lease Payment	■ Operating Reserves
■ Transfers to I&E	■ Svc. Chg. Revenue	□ Misc Rev	□ Rev Adjs	

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>REVENUE</b>											
Svc. Chg. Revenue	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9	471.9
<i>Revenue Adjustments</i>		<i>3.4%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.0%</i>
Revenue from Adjs	0.0	16.0	30.7	46.0	61.8	78.1	94.6	111.9	129.7	148.1	166.7
Other	6.6	7.2	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.1	7.3
<b>Total Revenue</b>	<b>478.4</b>	<b>495.0</b>	<b>509.9</b>	<b>525.2</b>	<b>540.9</b>	<b>557.2</b>	<b>573.9</b>	<b>591.1</b>	<b>608.8</b>	<b>627.1</b>	<b>645.9</b>
<b>BUDGET</b>											
O&M Expense	197.9	201.6	205.4	209.3	204.6	208.6	212.8	217.0	221.3	225.7	230.1
Debt Service	213.8	211.0	221.9	217.7	229.5	221.6	235.7	242.5	245.0	239.1	250.1
Xfers to MBO Fund	14.0	14.1	14.2	14.2	6.6	6.6	8.5	8.5	8.2	8.0	8.0
Lease Payment	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Operating Reserves	0.0	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5
Transfers to I&E	25.2	39.6	39.6	55.0	71.4	91.4	88.1	94.2	105.5	125.4	128.6
<b>Total BUDGET</b>	<b>478.4</b>	<b>495.0</b>	<b>509.9</b>	<b>525.2</b>	<b>540.9</b>	<b>557.2</b>	<b>573.9</b>	<b>591.1</b>	<b>608.8</b>	<b>627.1</b>	<b>645.9</b>
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



GLWA Sewage Disposal System Financial Plan Summary (\$ millions)

### Fund Balance Summary Revenue Generated "Liquidity" Funds \*



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<u>Fund Balance Minimums</u>											
Operating Reserve	66.0	67.2	68.5	69.8	68.2	69.5	70.9	72.3	73.8	75.2	76.7
ER&R Fund	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
I&E Fund Target	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Total - Minimums	200.0	201.2	202.5	203.8	202.2	203.5	204.9	206.3	207.8	209.2	210.7
<u>Projections</u>											
Operating Reserve	67.3	68.5	69.8	71.1	72.4	73.8	75.2	76.6	78.0	79.5	81.0
ER&R Fund	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
I&E Fund	91.4	95.4	93.7	93.8	89.8	85.4	88.1	80.7	79.1	72.1	73.0
Total - Projected	202.7	208.0	207.6	208.9	206.2	203.2	207.2	201.2	201.1	195.6	198.0
Projected > Min	2.7	6.7	5.1	5.1	4.1	(0.3)	2.3	(5.1)	(6.6)	(13.6)	(12.8)
Regional DS Covg	1.31	1.31	1.39	1.37	1.45	1.47	1.57	1.53	1.54	1.58	1.68

\* Revenue Generated Funds only. Excludes Debt Service Reserve & Construction Funds (Bond Generated) & "Pass Thru" Funds (Debt Svc, etc)



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** Proposed Audit Committee Meeting Schedule Updates

**Background:** The Audit Committee is generally scheduled for the third Friday of each month.

**Analysis:** Operational needs of the Financial Services Area result in a request to the Audit Committee to ask for reconsideration of the current schedule for two reasons.

1. As noted in the report related to Item 7B – FY 2019 Audit, the timing of the year-end audit review does not align well with the currently scheduled Friday, November 15, 2019 Audit Committee meeting date. A feasible date is Friday, November 22, 2019.
2. The Great Lakes Water Authority solicited a request for proposal for investment management services. Nine proposals were received which resulted in 1300 pages of documents for the evaluation team to review. The schedule has slid due to the workload. An award recommendation is likely available by October 21, 2019. Staff would respectfully ask the Audit Committee if a one-topic special meeting could be held to review the recommendation and advance the matter to the full Board of Directors for consideration on October 31, 2019.

**Proposed Action:** Discussion item.



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** Audit Firm Staffing

**Background:** On June 12, 2019 the Great Lakes Water Authority (GLWA) Board of Directors appointed Baker Tilly to be the external auditors. This appointment was made after a competitive procurement which included a written proposal, proposal presentation document, and oral interview with the Audit Committee.

**Analysis:** In the proposal response materials, it was disclosed that Baker Tilly, *as a firm*, provides consulting services to the Detroit Water & Sewerage Department (DWSD). It was *not* disclosed in the written materials, or in the oral interview, however, that staffing, including assignment of the audit partner, would overlap the GLWA audit and the DWSD consulting project. While the two entities, DWSD and GLWA, enjoy an exemplary level of collaboration, there is a material business element to the relationship and points of legal clarification which involve financial amounts in the normal course of operations and/or arbitration to clarify certain matters given the complexities of the leases.

Over the course of the past few weeks, it has been discovered that staffing, including assignment of the GLWA audit, overlap the DWSD and GLWA assignments. Given the key role of the audit partner in conferring with GLWA on certain sensitive legal and financial matters, the GLWA management team is concerned that a potential conflict of interest exists either in fact or in appearance. Further, the familiarity of staffing between the two entities, including one known audit staff member who has security badge access between the two entities' offices may provide an opportunity that certain matters may be inadvertently or inappropriately be shared between the two entities.

The GLWA management team has brought this concern to the attention of Baker Tilly. The response is attached.

For reference, excerpts from Baker Tilly audit services proposal are below followed by an excerpt from the contract for services.



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*4. Describe your knowledge of local conditions, GLWA requirements and procedures, and how the proposing firm's knowledge will benefit the engagement.*

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Baker Tilly's Detroit area office is located in Southfield, just a just a short 20 minute drive from GLWA. The office opened in 2003 and is home to 97 employees, including 10 partners. Our firm's Chief Executive Officer, Alan Whitman, is based in Detroit — along with Laurie, the local office liaison partner assigned to your engagement. Our employees and partners are deeply involved in the local community, volunteering their talents and time in support of local organizations like Gleaners Community Food Bank of Southeastern Michigan, Susan G. Komen Foundation, Cornerstone Schools, Habitat for Humanity, March of Dimes and the Michigan Humane Society. Many of our team members also serve on boards of directors and committees.

In addition to providing audit and advisory services to hundreds of local clients in a variety of industries, Baker Tilly is currently engaged in a multi-year project serving as DWSD's outsourced compliance management function, documenting and make recommendations to improve policies and procedures, assisting in designing and improved internal control environment, providing training on policies and control, and performing risk-based monitoring and internal audit type activities.

Baker Tilly's in-depth knowledge of local conditions — coupled with our expertise in auditing numerous utilities like GLWA throughout the country — means we are well positioned to understand your requirements and procedures and add value to your audit.

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*11. Describe any conflicts of interest, real or perceived, in performing the audit for GLWA with other clients and how your firm would address such conflicts.*

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Baker Tilly's quality control policies and procedures are in place to monitor our compliance with the independence standards governing our profession. Annually, we require all staff members to complete and sign representations regarding their compliance with the firm's and our profession's independence policies and procedures. As part of this process, selected partners and managers verify compliance with independence requirements and we conduct firmwide conflict checks prior to accepting attest work for publicly traded companies. We also maintain a real-time list of those companies in which investments may be prohibited.

As part of GLWA's engagement planning process, we will ensure the independence of your engagement team members, management-level personnel and other applicable individuals in the firm.

## B. Experience and Qualifications

*1. Explain how the engagements noted above provide you the ability to be uniquely qualified and experienced to fulfill GLWA's audit requirements including the location of the office from which the engagement was performed, and the size of the audit team assigned to the engagement.*

As described in detail in the **Executive summary**, **Firm profile** and **Specialized audit services** sections of our proposal, Baker Tilly is uniquely qualified to fulfill GLWA's audit requirements due to the following factors:

- Utility specialization and knowledge, serving more than 600 utility clients nationwide
- Specialized public utility audit expertise extending across more than 40 states
- Exemplary record of assisting clients in achieving the GFOA Certificate of Achievement for Excellence in Financial Reporting for their CAFR
- Single audit capabilities, performing more than 500 single audits each year
- Experience with bond issuance services and recognition by bond rating agencies
- Large firm resources with responsive client service from our Detroit office

Baker Tilly strives to assign staff based on skill set, rather than location. We have assembled a team that best fits the needs of your audit, utilizing several offices to bring our finest talent to GLWA. This team will be centrally managed from our Madison, Wisconsin office — the home of our energy and utilities team — with seamless support of local Detroit office resources.

This arrangement provides you a team with relevant industry knowledge, best practices they can share with you and practical solutions to issues that may arise. It has been very successful for many other clients, including the **DWSD**, and we will strive to make it successful for you. We will schedule on-site meetings and fieldwork to meet your schedule and provide same-day responses to your questions.

The proposed audit team for GLWA consists of four partners, one audit manager and a pool of utility-specialized senior and staff accountants. The deep resources of our energy and utilities team enable us assign as many additional team members to your engagement as necessary to meet and exceed your audit requirements.

Contract excerpt:

6.02 GLWA may interview Consultant's managerial staff and other employees assigned to this Contract. Consultant shall not use any managerial staff or other employees to whom GLWA objects and shall replace in an expedient manner those rejected by GLWA. In the absence of circumstances beyond its control, Consultant shall not, without the prior written consent of GLWA, remove or replace any Associate acceptable to GLWA with a new Associate until this Contract is terminated. Immediately upon receipt of written notification by GLWA, Consultant shall replace any Associate, including the Project Manager. In all cases in which an Associate must be replaced for any reason, Consultant shall supply an acceptable replacement as soon as possible, and shall not substitute a lower classified or less qualified Associate to perform the Services without obtaining the prior written approval of GLWA. Consultant will furnish the replacement Associate on a no-charge basis for the time necessary, as agreed to by GLWA, for any training or job orientation.

**Proposed Action:** Material is presented for discussion.

# Memo

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To: Nicolette Bateson, CPA,  
Chief Financial Officer/Treasurer Great Lakes Water Authority

From: Jodi Dobson, CPA, Partner

Date: October 7, 2019

Subject: Independence

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This memo is in response to your inquiry into Baker Tilly's evaluation of our independence given that both the Great Lakes Water Authority and the Detroit Water and Sewer Department are clients of the firm.

Baker Tilly and our partners and staff are independent with respect to the Great Lakes Water Authority as defined by generally accepted auditing standards and the U.S. General Accountability Office's (GAO's) *Government Auditing Standards*, and we will maintain an independent attitude and appearance through the full term of the engagement.

Formal independence guidelines are contained in our Employee Handbook based upon rules and regulations established by the Comptroller General of the United States and the AICPA. Baker Tilly's quality control policies and procedures are in place to monitor our compliance with the independence standards governing our profession. Annually, we required all staff members to complete and sign representations regarding their compliance with the firm's and our profession's independence policies and procedures.

The AICPA Cod of Professional Conduct (Code) is based on the principles of public interest, integrity, objectivity and independence, and due care. Integrity requires a member to maintain client confidentiality. The Code defines *confidential client information* as any information obtained from the client that is not available to the public.

Our team has extensive experience serving governmental entities or agencies that have unique relationships such as:

- joint action agencies and their municipal utility members
- regional treatment facilities and their municipal customers
- municipalities and their joint venture special purpose districts or
- municipal utility districts and their joint power authorities for financing
- neighbouring communities that have joint service or shared service contracts
- counties and the local municipalities that they provide funding or services to

We pride ourselves on the ability to maintain our independence, in both appearance and in fact, in these situations. While we provide expertise, specialized knowledge and industry insights to our clients, we are careful not to make management decisions or act in any capacity that would result in us serving as management.

For any situation that is not specifically addressed by independence, integrity, and objectivity rules, the firm applies the Conceptual Framework within the AICPA Code of Professional Conduct to evaluate the situation and determine appropriate action to mitigate with effective safeguards.

**GLWA**

*Great Lakes Water Authority*



# Monthly Financial Report Binder

July 2019

**Presented to the  
Great Lakes Water Authority  
Audit Committee on October 18, 2019**

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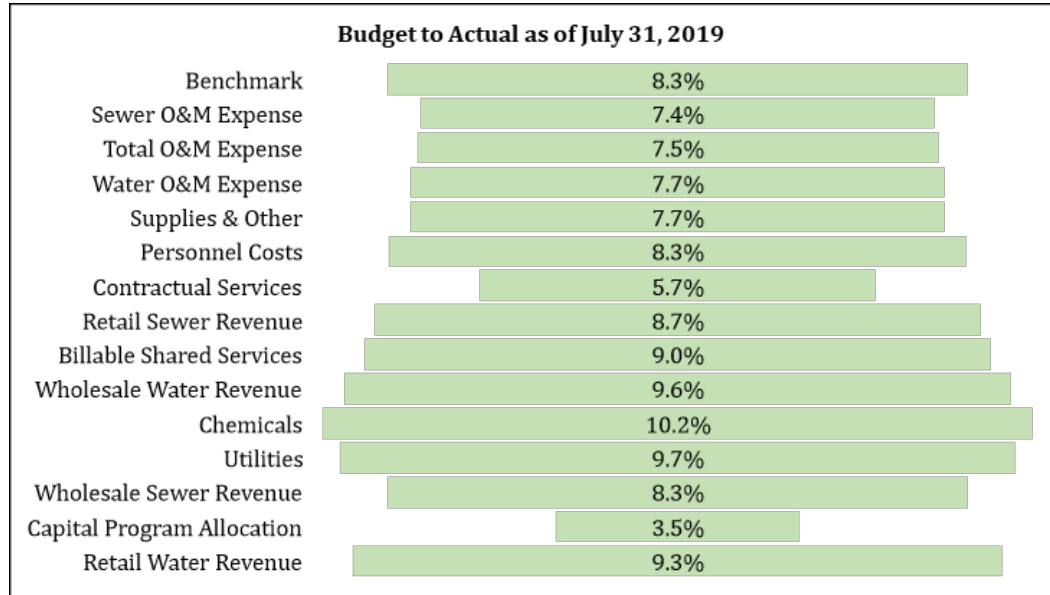
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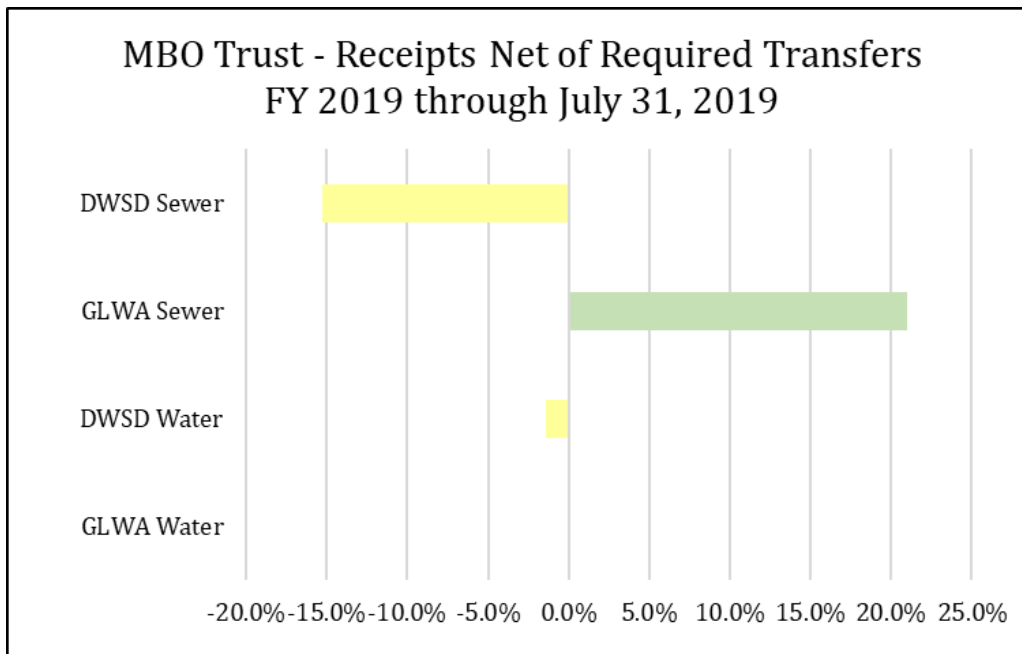
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**Revenue and Expense Budget to Actual<sup>1</sup> – Pro-rata Benchmark of 8.3%**

Current period financial results indicate all revenue and expense reporting categories fall within the 7.5% of the pro-rata budget to actual benchmark.



**Master Bond Ordinance (MBO) Trust Net Receipts**



Net cash flow (receipts) is positive for GLWA Sewer and at breakeven for GLWA Water. This means that all legal commitments of the MBO Trust and the lease payment are fully funded to date – and that positive cash flow is

available for additional capital program funding in subsequent year(s). DWSD Water and Sewer fell short in the first month of the fiscal year although preliminary August activity shows improvement.

**Questions?** Contact the Office of the Chief Financial Officer at [CFO@glwater.org](mailto:CFO@glwater.org)

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

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

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

## Revenue Requirement Budget Basis Analysis

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

**Table 1A – Water Revenue Requirement Budget** and **Table 1B – Sewer Revenue Requirement Budget** presents a year-over-year budget to actual performance report. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for July 2019, the pro-rata benchmark is 8.3% (1 of 12 months of the fiscal year).

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

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



4. **Operations & Maintenance Expense:** Actual expenses<sup>1</sup> for *both* systems are less than the pro-rata benchmark; the *water* system is slightly under the pro-rata benchmark for FY 2020 at 7.7%, while the *sewer* system O&M expense is at 7.4%.
5. **Debt Service:** *Both* systems are less than the pro-rata benchmark; the *water* system is slightly under the pro-rata benchmark for FY 2020 at 8.2%; while the *sewer* system is at 7.0%. The activity is based on the payment schedules that have been adjusted for the State Revolving Fund loans that are still being drawn down.
6. **DWSD Budget Shortfall Pending:** To the extent that the local (DWSD) system experiences budgetary shortfalls as defined by the Water & Sewer Services Agreement, the GLWA budget is impacted.<sup>2</sup> Steps to proactively detect, and ideally prevent, this shortfall scenario were put into place with the 2018 Memorandum of Understanding (dated June 27, 2018). For FY 2018, the DWSD sewer shortfall through June 30, 2018, was \$24.1 million. A plan for payment of this shortfall is in place with the outer boundary of payment terms being paid over three years plus interest at the three-year treasury rate plus 1.5% with payments beginning in July 2019. For FY 2019, the DWSD sewer shortfall through July 31, 2018, was \$20.6 million (the ending shortfall for FY 2019 was zero). In order to achieve the goal of positive, net cash flows for FY 2019, DWSD reduced its sewer system O&M transfers in May and June. The transfers reduced were \$5,676,792 each for a total of \$11,353,584. For FY 2020, the DWSD water system has budgetary shortfall of \$113 thousand and the DWSD sewer system budgetary shortfall is approximately \$2.6 million through July 31, 2019.
7. **Improvement & Extension (I&E) Fund Transfer Pending:** The contribution to the I&E Fund is for improvements, enlargements, extensions or betterment of the Water System. Transfers to the I&E Fund from net revenues typically occur later in the year or after year end close when final net revenue is validated.
8. **Other Revenue Requirements:** The remaining revenue requirements for *both* systems are funded on a 1/12<sup>th</sup> basis each month in accordance with the Master Bond Ordinance.
9. **Overall:** Total revenue requirements for *both* systems are in line with the benchmark.

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

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

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

	FY2019 AMENDED BUDGET	FY 2019 THRU 7/31/2018	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 7/31/2019	Percent Year-to- Date
<b>Water System</b>							
<b>Revenues</b>							
Wholesale Customer Charges	\$ 307,383	\$ 32,786	10.7%	\$ 309,285	\$ 309,285	\$ 29,825	9.6%
Retail Services Agreement	20,181	1,694	8.4%	21,295,500	21,295,500	1,774,625	8.3%
Investment Earnings	9,425	532	5.6%	9,084,200	9,084,200	(784,506)	-8.6%
Other Revenues	-	6	0.0%	-	-	-	0.0%
<b>Total Revenues</b>	<b>\$ 336,989</b>	<b>\$ 35,018</b>	<b>10.4%</b>	<b>\$ 339,664</b>	<b>\$ 339,664</b>	<b>\$ 30,815</b>	<b>9.1%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 121,563	\$ 8,401	6.9%	\$ 131,491	\$ 131,491	\$ 10,067	7.7%
O&M Legacy Pension	6,048	504	8.3%	6,048	6,048	504	8.3%
Debt Service	131,242	11,070	8.4%	137,558	137,558	11,313	8.2%
Accelerated Legacy Pension	6,268	522	8.3%	6,268	6,268	522	8.3%
Extraordinary Repair & Replacement							
Deposit	-	-	0.0%	-	-	-	0.0%
Lease Payment	22,500	1,875	8.3%	22,500	22,500	1,875	8.3%
Operating Reserve Deposit	-	-	0.0%	3,976	3,976	331	0.0%
Water Residential Assistance Program	1,673	139	8.3%	1,698	1,698	142	8.3%
Improvement & Extension Fund							
Transfer Pending	47,695	3,975	8.3%	30,126	30,126	2,510	8.3%
<b>Total Revenue Requirements</b>	<b>\$ 336,989</b>	<b>\$ 26,487</b>	<b>7.9%</b>	<b>\$ 339,664</b>	<b>\$ 339,664</b>	<b>\$ 27,265</b>	<b>8.0%</b>
<b>Net Difference</b>		<b>\$ 8,531</b>				<b>\$ 3,550</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 6,935				\$ 2,509	
Revenue Requirement Variance		1,596				1,041	
Overall Variance		<b>\$ 8,531</b>				<b>\$ 3,550</b>	

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

	FY 2019 AMENDED BUDGET	FY 2019 THRU 7/31/2018	Percent Year-to- Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 THRU 7/31/2019	Percent Year-to- Date
<b>Sewer System</b>							
<b>Revenues</b>							
Wholesale Customer Charges	\$ 271,296	\$ 22,913	8.4%	\$ 272,324	\$ 272,324	\$ 22,883	8.4%
Retail Services Agreement	181,159	15,251	8.4%	185,807	185,807	15,484	8.3%
Industrial Waste Control Charges	15,001	833	5.6%	13,744	13,744	722	5.3%
Pollutant Surcharges	-	452	0.0%	-	-	460	0.0%
Investment Earnings	6,879	1,136	16.5%	8,731	8,731	170	1.9%
Other Revenues	-	52	0.0%	-	-	46	0.0%
<b>Total Revenues</b>	<b>\$ 474,335</b>	<b>\$ 40,636</b>	<b>8.6%</b>	<b>\$ 480,605</b>	<b>\$ 480,605</b>	<b>\$ 39,764</b>	<b>8.3%</b>
<b>Revenue Requirements</b>							
Operations & Maintenance Expense	\$ 191,079	\$ 14,326	7.5%	\$ 187,057	\$ 187,057	\$ 13,768	7.4%
O&M Legacy Pension	10,824	902	8.3%	10,824	10,824	902	8.3%
Debt Service	208,389	16,573	8.0%	215,739	215,739	15,050	7.0%
Accelerated Legacy Pension	11,621	968	8.3%	11,621	11,621	968	8.3%
Extraordinary Repair & Replacement							
Deposit	-	-	0.0%	-	-	-	0.0%
Lease Payment	27,500	2,292	8.3%	27,500	27,500	2,292	8.3%
Operating Reserve Deposit	-	-	0.0%	-	-	-	0.0%
Water Residential Assistance Program	2,374	198	8.3%	2,403	2,403	200	8.3%
DWSD Budget Shortfall Pending	-	20,596	0.0%	-	-	2,574	0.0%
Improvement & Extension Fund							
Transfer Pending	22,548	1,879	8.3%	25,462	25,462	2,122	8.3%
<b>Total Revenue Requirements</b>	<b>\$ 474,335</b>	<b>\$ 57,734</b>	<b>12.2%</b>	<b>\$ 480,605</b>	<b>\$ 480,605</b>	<b>\$ 37,876</b>	<b>7.9%</b>
<b>Net Difference</b>		<b>\$ (17,099)</b>				<b>\$ 1,888</b>	
<i>Recap of Net Positive Variance</i>							
Revenue Variance		\$ 1,108				\$ (287)	
Revenue Requirement Variance		(18,207)				2,175	
Overall Variance		<b>\$ (17,099)</b>				<b>\$ 1,888</b>	

## Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of July 31, 2019, is 8.3% (one month). When comparing FY 2020 to FY 2019 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, it appears that overall spending is consistent.

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

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

Major Budget Categories	FY 2019 AMENDED BUDGET	FY 2019 ACTIVITY THRU 7/31/2018	Percent Year-to-Date	FY 2020 BOARD ADOPTED BUDGET	FY 2020 AMENDED BUDGET	FY 2020 ACTIVITY THRU 7/31/2019	Percent Year-to-Date
Water	\$ 66,596	\$ 8,061	12.1%	\$ 66,021	\$ 66,021	\$ 5,799	8.8%
Sewer	118,319	8,495	7.2%	115,985	115,985	8,916	7.7%
Centralized	99,045	5,364	5.4%	106,914	106,914	7,363	6.9%
Administrative	28,683	1,671	5.8%	29,628	29,628	1,919	6.5%
Employee Benefits	-	(864)	0.0%	-	-	(163)	0.0%
<b>Total O&amp;M Budget</b>	<b>\$ 312,642</b>	<b>\$ 22,727</b>	<b>7.3%</b>	<b>\$ 318,548</b>	<b>\$ 318,548</b>	<b>\$ 23,835</b>	<b>7.5%</b>

## Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

The purpose of **Table 3 – Operations & Maintenance Expense Variance Analysis** is to evaluate whether the actual spend rate within a natural cost category is in alignment with the budget. Given the effort to develop an accurate budget, a variance is a red flag of a *potential* budget amendment or misalignment of priorities.

**Total:** In total, the O&M expenses are at 7.5% which is reasonably within the pro-rata benchmark of 8.3%. This positive variance equates to a dollar amount of \$2.7 million. The expense category commentary is provided below for items highlighted on Table 3.

**Personnel Costs:** The overall category is on target with the pro-rata benchmark; coming in at 8.3% through July 2019.

**Utilities:** The overall category is higher than the benchmark; coming in at 9.7% through July 2019. This variance is not unexpected as usage varies throughout the year. Electric is higher than the benchmark; coming in at 10.8%. This increase is primarily due to the pumps being required to run longer than normal as a result of the wet weather that Michigan has been experiencing. Gas is lower than the benchmark; coming in at 5.7%. The related bills are currently being reviewed to identify the cause for the lower readings.

**Chemicals:** This category is higher than the benchmark; coming in at 10.2% through July 2019. While variances in this category are not unexpected as usage varies throughout the year, the variance for July 2019 was primarily due to the high lake levels which caused the CSO basins to process more flow than is typical. This resulted in higher use of Sodium Hypochlorite.

**Supplies & Other:** This category is lower than the benchmark; coming in at 7.7% through July 2019. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time.

**Contractual Services:** The overall category is lower than the benchmark; coming in at 5.7% through July 2019. Variances in this category are not unexpected as the usage of contracts varies throughout the year. While this category is being reviewed, this variance is not a concern at this time.

**Capital Program Allocation:** This category is lower than the benchmark; coming in at 3.5% through July 2019. A review of this category is being conducted; however, it has been noted that a portion of the time spent on direct capital delivery in July 2019 was not approved until August 2019.

**Shared Services:** This category is slightly higher than the benchmark; coming in at 9.0% through July 2019. The shared services reimbursement is comprised of both labor (tracked via BigTime) and expenses, such as annual fees for software licensing. Staff from both GLWA and DWSD have been working together to evaluate and refine the budget for the shared services agreements. Based on these evaluations, adjustments have been made to both the billings and accounting accruals to more accurately reflect the forecasted activity for FY 2020. A budget amendment will be entered to adjust the shared services budget to this revised FY 2020 forecast.

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

Expense Categories Entity-wide	FY 2019	FY 2019	Percent	FY 2019	Percent	FY 2020	FY 2020	FY 2020	Percent	PRORATED
	AMENDED BUDGET	ACTIVITY THRU 7/31/2018	Year-to- Date at 7/31/2018	ACTIVITY THRU 6/30/2019	Year-to- Date at 6/30/2019	AMENDED BUDGET	PRORATED BUDGET (1 MONTH)	ACTIVITY THRU 7/31/2019	Year-to- Date	BUDGET LESS FY 2020 ACTIVITY
Salaries & Wages	\$ 61,600	\$ 4,883	7.9%	\$ 59,922	8.1%	\$ 68,301	\$ 5,692	\$ 5,354	7.8%	\$ 338
Workforce Development	751	60	8.0%	794	7.5%	1,014	85	72	7.1%	12
Overtime	7,612	624	8.2%	7,554	8.3%	6,140	512	653	10.6%	(142)
Employee Benefits	23,778	2,115	8.9%	21,823	9.7%	23,005	1,917	2,113	9.2%	(196)
Transition Services	8,556	908	10.6%	8,322	10.9%	6,630	553	697	10.5%	(144)
Employee Benefits Fund	-	(864)	0.0%	135	0.0%	-	-	(163)	0.0%	163
<i>Personnel Costs</i>	<u>102,296</u>	<u>7,725</u>	7.6%	<u>98,549</u>	7.8%	<u>105,091</u>	<u>8,758</u>	<u>8,727</u>	8.3%	<u>31</u>
Electric	39,019	3,530	9.0%	39,103	9.0%	38,386	3,199	4,131	10.8%	(932)
Gas	6,631	505	7.6%	6,568	7.7%	6,444	537	366	5.7%	171
Sewage Service	2,491	1	0.1%	2,094	0.1%	1,847	154	145	7.8%	9
Water Service	3,648	144	4.0%	3,631	4.0%	4,658	388	327	7.0%	61
<i>Utilities</i>	<u>51,789</u>	<u>4,181</u>	8.1%	<u>51,396</u>	8.1%	<u>51,334</u>	<u>4,278</u>	<u>4,968</u>	9.7%	<u>(690)</u>
Chemicals	13,385	902	6.7%	13,276	6.8%	13,899	1,158	1,418	10.2%	(259)
Supplies & Other	36,206	2,307	6.4%	34,486	6.7%	36,392	3,033	2,799	7.7%	234
Contractual Services	102,803	8,456	8.2%	100,018	8.5%	115,307	9,609	6,568	5.7%	3,041
Capital Program Allocation	(3,356)	(220)	6.5%	(3,381)	6.5%	(5,414)	(451)	(191)	3.5%	(261)
Shared Services	(9,005)	(624)	6.9%	(7,139)	8.7%	(5,025)	(419)	(453)	9.0%	35
Unallocated Reserve	18,524	-	0.0%	-	0.0%	6,965	580	-	0.0%	580
<b>Total Expenses</b>	<u>\$ 312,642</u>	<u>\$ 22,727</u>	7.3%	<u>\$ 287,204</u>	7.9%	<u>\$ 318,548</u>	<u>\$ 26,546</u>	<u>\$ 23,835</u>	7.5%	<u>\$ 2,711</u>

The Basic Financial Statements report includes the following four tables.

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

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

The Comparative June 2019 basic financial statements are presented in a draft format. Adjustments related to fiscal year end 2019 audit affect the basic financial statements. The results of these adjustments will be presented in the audited CAFR.

### Statement of Net Position – All Funds Combined

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

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

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2019
<b>Assets</b>				
Cash (a)	\$ 112,038	\$ 182,497	\$ 294,536	\$ 571,015
Investments (a)	381,864	275,990	657,854	460,078
Accounts Receivable	95,606	100,238	195,844	208,511
Due from Other Funds (b)	9,355	-	9,355	3,027
Other Assets (c)	595,847	453,941	1,049,788	1,049,157
Cash Held FBO DWSD Advance (d)	-	2,574	2,574	-
Capital Assets, net of Depreciation	1,658,616	2,433,200	4,091,815	4,116,160
Construction Work in Process (e)	187,304	228,886	416,190	409,378
<b>Total assets</b>	<b>3,040,630</b>	<b>3,677,325</b>	<b>6,717,955</b>	<b>6,817,326</b>
<b>Deferred Outflows (f)</b>	<b>93,532</b>	<b>178,882</b>	<b>272,414</b>	<b>273,596</b>
<b>Liabilities</b>				
Liabilities - Short-Term (g)	109,035	143,507	252,542	321,233
Due to Other Funds (b)	-	9,355	9,355	3,027
Other Liabilities (h)	2,828	6,332	9,161	9,097
Cash Held FBO DWSD (d)	2,071	-	2,071	2,807
Liabilities - Long-Term (i)	3,038,913	3,775,098	6,814,011	6,853,419
<b>Total liabilities</b>	<b>3,152,848</b>	<b>3,934,292</b>	<b>7,087,140</b>	<b>7,189,583</b>
<b>Deferred Inflows (f)</b>	<b>60,057</b>	<b>47,890</b>	<b>107,946</b>	<b>108,541</b>
<b>Total net position (j)</b>	<b>\$ (78,742)</b>	<b>\$ (125,975)</b>	<b>\$ (204,717)</b>	<b>\$ (207,202)</b>

*Totals may be off due to rounding*

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

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

### **Footnotes to Statement of Net Position**

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

capital asset values in the opening Statement of Net Position on January 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.

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

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

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position  
- All Funds Combined  
For the One Month ended July 31, 2019  
(\$000)**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- type Activities	Comparative June 30, 2019
<b>Revenue</b>						
Wholesale customer charges	\$ 30,379	94.5%	\$ 22,883	57.8%	\$ 53,261	\$ 584,172
Local system charges	1,775	5.5%	15,484	39.1%	17,259	201,341
Industrial waste charges	-	0.0%	722	1.8%	722	9,106
Pollutant surcharges	-	0.0%	460	1.2%	460	5,933
Other revenues	-	0.0%	46	0.1%	46	528
<b>Total Revenues</b>	<b>\$ 32,154</b>	<b>100%</b>	<b>\$ 39,594</b>	<b>100%</b>	<b>\$ 71,748</b>	<b>\$ 801,079</b>
<b>Operating expenses</b>						
Operations and Maintenance	10,067	31.3%	13,814	34.9%	23,881	288,215
Depreciation	11,246	35.0%	13,138	33.2%	24,384	309,115
<b>Total operating expenses</b>	<b>21,312</b>	<b>66.3%</b>	<b>26,953</b>	<b>68.1%</b>	<b>48,265</b>	<b>597,330</b>
<b>Operating income</b>	<b>10,841</b>	<b>33.7%</b>	<b>12,641</b>	<b>31.9%</b>	<b>23,482</b>	<b>203,749</b>
<b>Total Nonoperating (revenue) expense</b>	<b>9,086</b>	<b>28.3%</b>	<b>11,911</b>	<b>30.1%</b>	<b>20,997</b>	<b>223,400</b>
Increase/(Decrease) in Net Position	<b>1,755</b>	<b>5.5%</b>	<b>731</b>	<b>1.8%</b>	<b>2,485</b>	<b>(19,652)</b>
Net position (deficit), beginning of year	<u>(80,497)</u>		<u>(126,705)</u>		<u>(207,202)</u>	<u>(187,551)</u>
<b>Net position (deficit), end of year</b>	<b><u>\$ (78,742)</u></b>		<b><u>\$ (125,975)</u></b>		<b><u>\$ (204,717)</u></b>	<b><u>\$ (207,202)</u></b>

*Totals may be off due to rounding*



## Water Fund

- ✓ The increase in Water Fund Net Position is \$1.7 million.
- ✓ Wholesale water customer charges of \$30.4 million account for 94.5% of Water System revenues.
- ✓ Operating expenses of \$21.3 million represent 66.3% of total operating revenue. Depreciation is the largest operating expense at \$11.2 million or 52.8% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$10.8 million or 33.7% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$7.4 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

## Sewage Disposal Fund

- ✓ The increase in the Sewage Disposal Fund Net Position is \$731 thousand.
- ✓ Wholesale customer charges of \$22.8 million account for 57.8% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$15.5 million account for 39.1% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$26.9 million represent 68.1% of total operating revenue. Depreciation is the largest operating expense at \$13.1 million or 48.7% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$12.6 million or 31.9% of operating revenue.
- ✓ The largest category within nonoperating activities is bonded debt interest expense of \$10.0 million (this equates to the bonded debt interest expense less the offset from DWSD contractual obligation income).

## Supplemental Schedule of Operations & Maintenance Expenses - All Funds Combined

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

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses  
- All Funds Combined  
For the One Month ended July 31, 2019  
(\$000)**

	Water	Percent of Total	Sewage Disposal	Percent of Total	Total Business- type Activities	Percent of Total
<b>Operating expenses</b>						
Personnel						
Salaries & Wages	2,001	19.9%	4,122	29.8%	6,123	25.6%
Overtime	373	3.7%	280	2.0%	653	2.7%
Benefits	1,167	11.6%	784	5.7%	1,950	8.2%
Total Personnel	\$ 3,540	35.2%	\$ 5,186	37.5%	\$ 8,727	36.5%
<b>Utilities</b>						
Electric	3,098	30.8%	1,032	7.5%	4,131	17.3%
Gas	13	0.1%	353	2.6%	366	1.5%
Sewage	24	0.2%	120	0.9%	145	0.6%
Water		0.0%	327	2.4%	327	1.4%
Total Utilities	\$ 3,136	31.2%	\$ 1,832	13.3%	\$ 4,968	20.8%
Chemicals	531	5.3%	887	6.4%	1,418	5.9%
Supplies and other	999	9.9%	1,800	13.0%	2,799	11.7%
Contractual services	2,404	23.9%	4,210	30.5%	6,614	27.7%
Capital program allocation	(117)	-1.2%	(73)	-0.5%	(191)	-0.8%
Shared services allocation	(426)	-4.2%	(28)	-0.2%	(453)	-1.9%
<b>Operations and Maintenance Expenses</b>	<b>\$ 10,067</b>	<b>100.0%</b>	<b>\$ 13,814</b>	<b>100.0%</b>	<b>\$ 23,881</b>	<b>100.0%</b>

Totals may be off due to rounding.

- ✓ Core expenses for water and sewage disposal systems are utilities (20.8% of total O&M expenses) and chemicals (5.9%).
- ✓ Personnel costs (36.5% of total O&M expenses) include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (27.7%) includes:
  - Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$1.2 million); and
  - Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, field, planning and other services.

## Supplemental Schedule of Nonoperating Expenses – All Funds Combined

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

**Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined  
For the One Month ended July 31, 2019  
(\$000)**

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2019
<b>Nonoperating (Revenue)/Expense</b>				
Interest income contractual obligation	\$ (1,862)	\$ (1,516)	\$ (3,378)	\$ (40,673)
Interest income DWSD Shortfall	-	(133)	(133)	(1,104)
Investment earnings	689	(184)	505	(26,518)
Other nonoperating revenue				6,107
Interest expense				-
Bonded debt	9,292	11,536	20,828	250,966
Lease obligation	1,463	1,788	3,252	39,264
Other obligations	406	131	538	6,364
Total interest expense	11,162	13,455	24,617	296,594
Other capital / non-capital expense	150	135	285	2,258
Capital Contribution	-	-	-	2,000
Amortization, issuance costs, debt	(1,350)	154	(1,195)	(3,995)
Amortization, raw water rights	297	-	297	3,567
(Gain) loss on disposal of capital assets	-	(1)	(1)	(81)
Loss on impairment of capital assets	-	-	-	-
Water Residential Assistance Program	-	-	-	2,024
Legacy pension expense	-	-	-	(16,778)
<b>Total Nonoperating (Revenue)/Expense</b>	<b>\$ 9,086</b>	<b>\$ 11,911</b>	<b>\$ 20,997</b>	<b>\$ 223,400</b>

Totals may be off due to rounding.

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

FY 2019. FY 2019 market value adjustments for Water and Sewer totaled of \$1.6 million and \$600 thousand, respectively.

- ✓ Interest expense, the largest category of nonoperating expenses, is made up of three components:
  - Bonded debt;
  - Lease obligation for the regional assets from the City of Detroit; and
  - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to the KWA Pipeline.

*FY 2019 Items of note:*

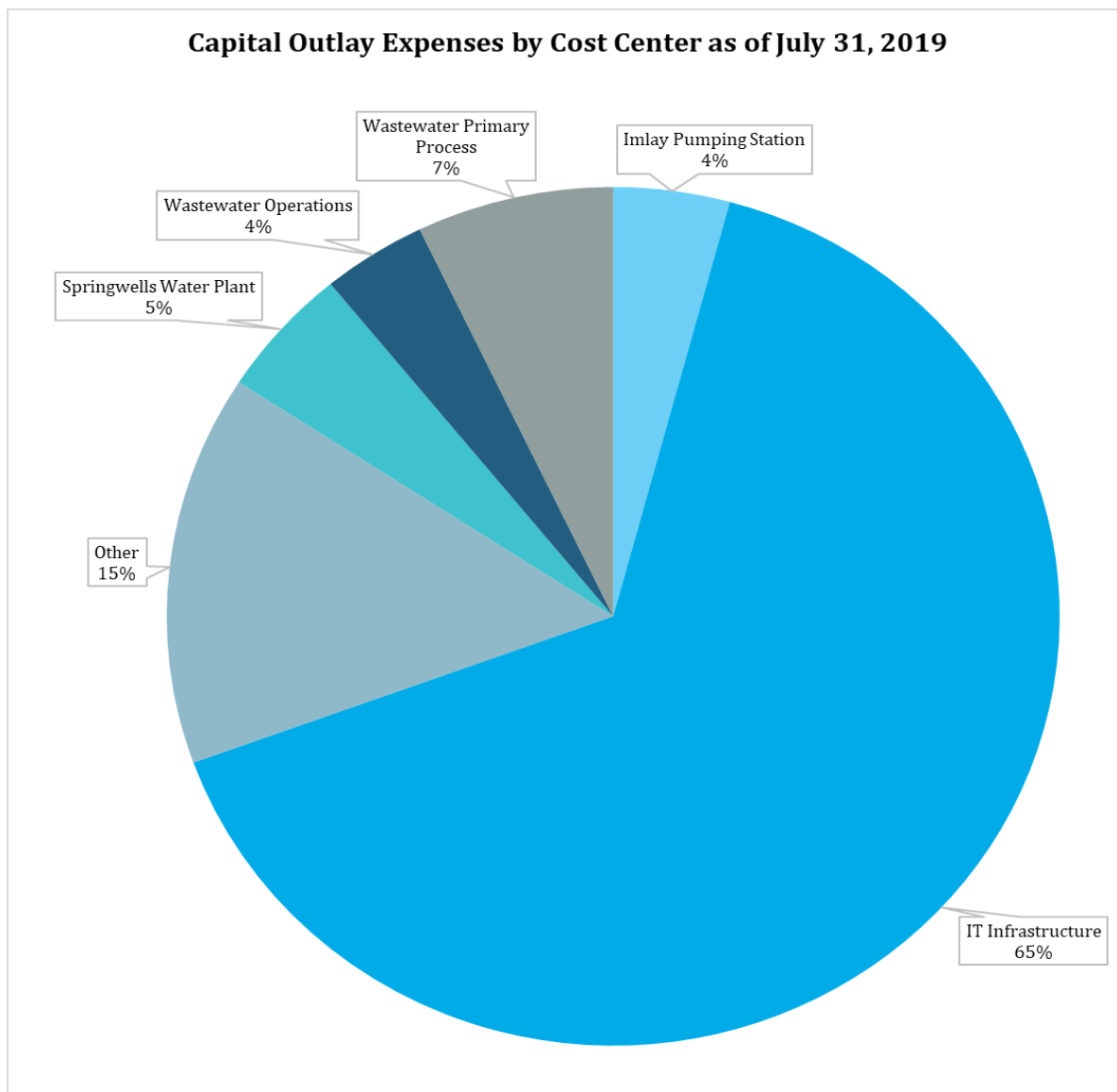
- ✓ Legacy Pension expense is reflected as income due to changes in actuarial assumptions and rates from the June 30, 2018 City of Detroit General Retirement System Component II audited financial statement.
- ✓ Sewer Other Non-operating expense includes the 2018 MOU Item 8a from June 27, 2018 for a final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

## Financial Activity Charts

### Chart 1 – Capital Outlay – Water and Sewer System Combined

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

Through July 31, 2019, total capital outlay spend is \$1.2 million. Following this chart is a sample list of projects and purchases from the total spend of \$1.2 million:



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

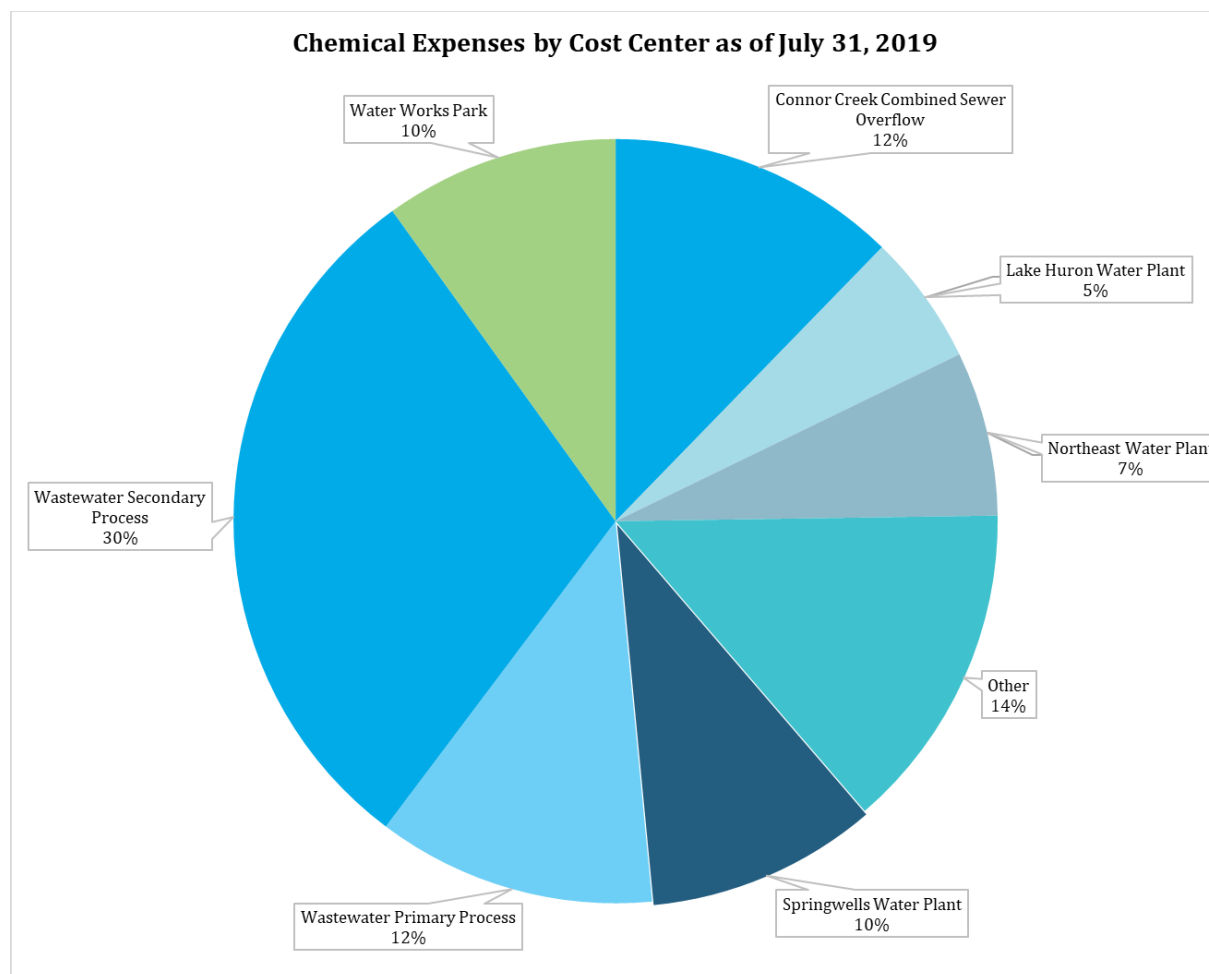
**Water Operations:** a chlorine liquid header replacement (\$61k) at the Springwells Water Plant and a skid steer loader (\$44k) under ‘other’ for the Southwest Water Plant

**Wastewater Operations:** a water heater for Scum building (\$76k); HVAC controls upgrade (\$52k); Transformer C structure at Water Resource Recovery Facility (\$47k)

**Centralized & Administrative Facilities:** An Office Suite renovation (\$26k) under the category of ‘other’ for the Logistics and Materials team

### Chart 2 – Chemical Spend – Water and Sewer System Combined

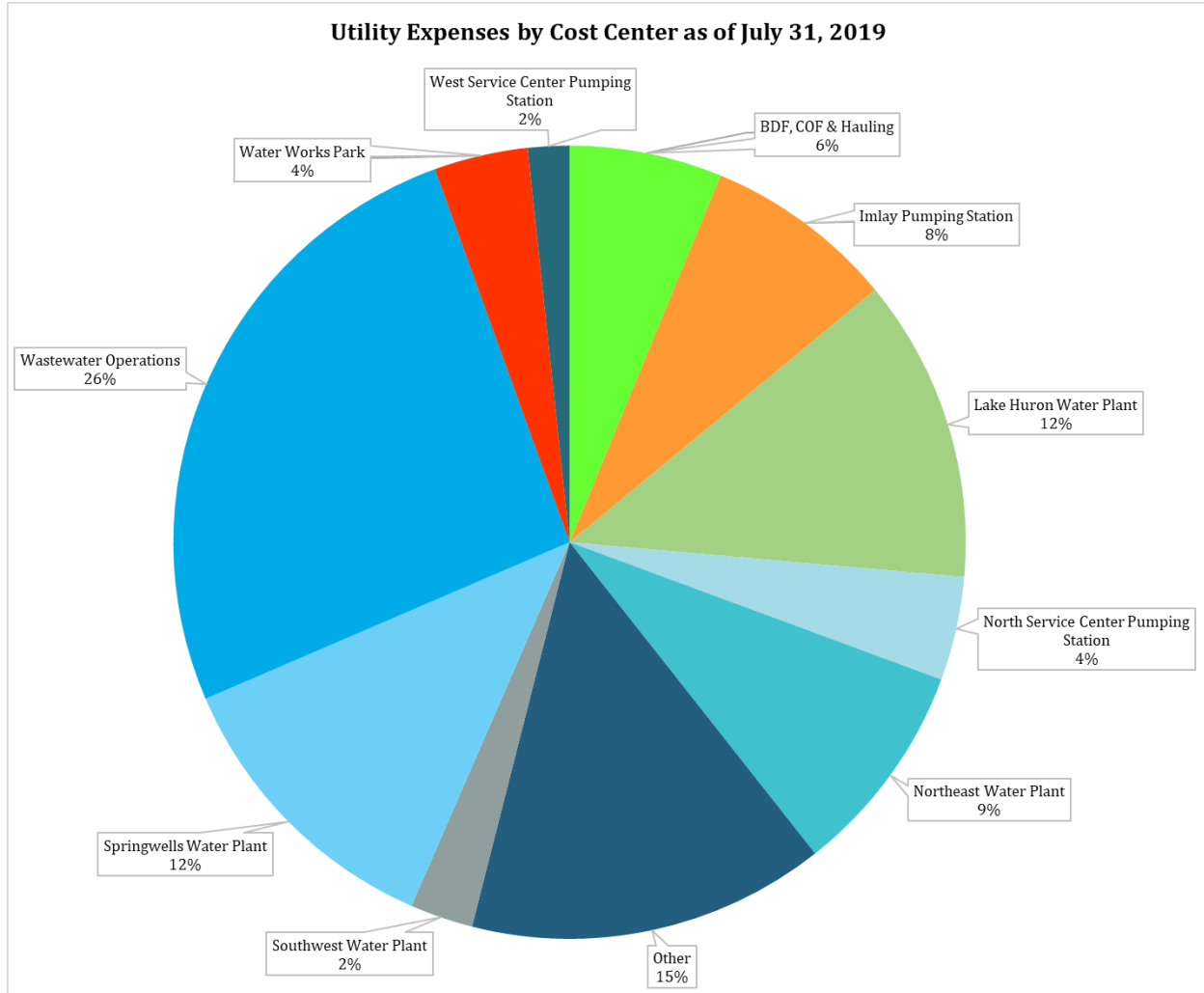
Chemical spend is \$1.4 million through July 31, 2019. The allocation is shown in the chart below and remains consistent with prior periods.



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

### Chart 3 – Utility Spend – Water and Sewer System Combined

Utility spend is \$4.9 million through July 31, 2019. The allocation is shown in the chart below and consistent with prior periods.



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



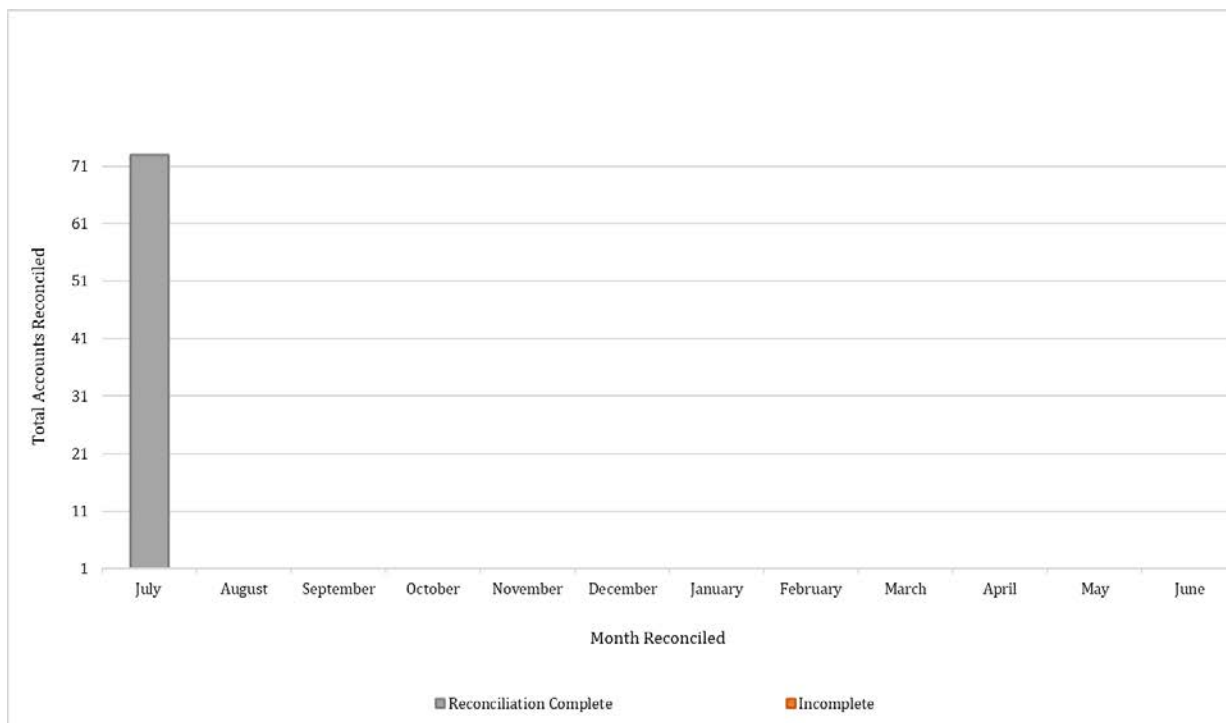
## Financial Operations KPI

This key performance indicator shown in Chart 1 below provides a measure of the progress made in the month-end close process which includes bank reconciliations with a completed status at month end.

There were two new General Ledger (GL) accounts needed in July 2019. These accounts were necessary to reflect retainage allocations among the various funds.

There were no other changes in accounts from June 2019.

**Chart 1 – Bank Reconciliation Completion Status**



**Table 1 – Fiscal Year 2020 GL Cash Account Rollforward**

Total GL Cash accounts as of July 1, 2019	71
New GL Cash accounts	2
Inactivated GL Cash accounts	<u>0</u>
Total GL Cash accounts as of July 31, 2019	<u><u>73</u></u>

The monthly Budget to Financial Statements Crosswalk includes the following.

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

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

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

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

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

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

**Financial Reporting:** The Authority’s financial statements are prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Authority maintains its records on the accrual basis of accounting to conform to GAAP. Revenues from operations, investments and other sources are recorded when earned. Expenses (including depreciation) are recorded when incurred.

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

**Table 1 – Crosswalk Budget Basis to Financial Reporting Basis (\$000)  
For the Eleven Months Ended July 31, 2019**

	Water	Sewer	Total
<b>Net Revenue Requirement Budget Variance (a)</b>	\$ 3,550	\$ 1,888	\$ 5,438
<b>Budgetary categories adjustments to financial reporting basis</b>			
Pension delayed accounting election adjustments			
Current year pension transfers/payments recorded as deferral (c)	953	1,706	2,659
Prior year pension contribution accounted for in current year (d)	-	-	-
Administrative prepaid adjustment (e)	-	-	-
Debt service (f)	3,884	5,030	8,914
Accelerated pension B&C notes obligation portion (g)	15	33	48
Lease payment (h)	412	504	916
WRAP (i)	142	200	342
DWSD short term allocation (j)	-	2,574	2,574
Improvement & Extension Fund (j)	2,841	2,075	4,916
<b>Nonbudgeted financial reporting categories adjustments</b>			
Depreciation (k)	(11,246)	(13,138)	(24,384)
Amortization (k)	1,053	(154)	899
Other nonoperating income (k)	-	-	-
Other nonoperating expense (k)	(150)	(135)	(285)
Gain(loss) on disposal of capital assets (k)	-	1	1
Raw water rights (l)	206	-	206
Investment earnings construction fund (m)	95	147	242
<b>Net Position Increase/(Decrease) per Financial Statements (b)</b>	\$ 1,755	\$ 731	\$ 2,486

**Table 2- Explanatory Notes for Crosswalk**

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

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

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

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

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

## **Construction Work in Progress**

Great Lakes Water Authority (GLWA) capital improvement projects generally span two or more years due to size and complexity. Therefore, the GLWA Board of Directors adopts a biennial budget that establishes allowable amounts for construction spending during that period to support a five-year capital improvement plan (CIP). The CIP is a five-year, rolling plan which is updated annually, reviewed, and formally adopted by the GLWA Board of Directors.

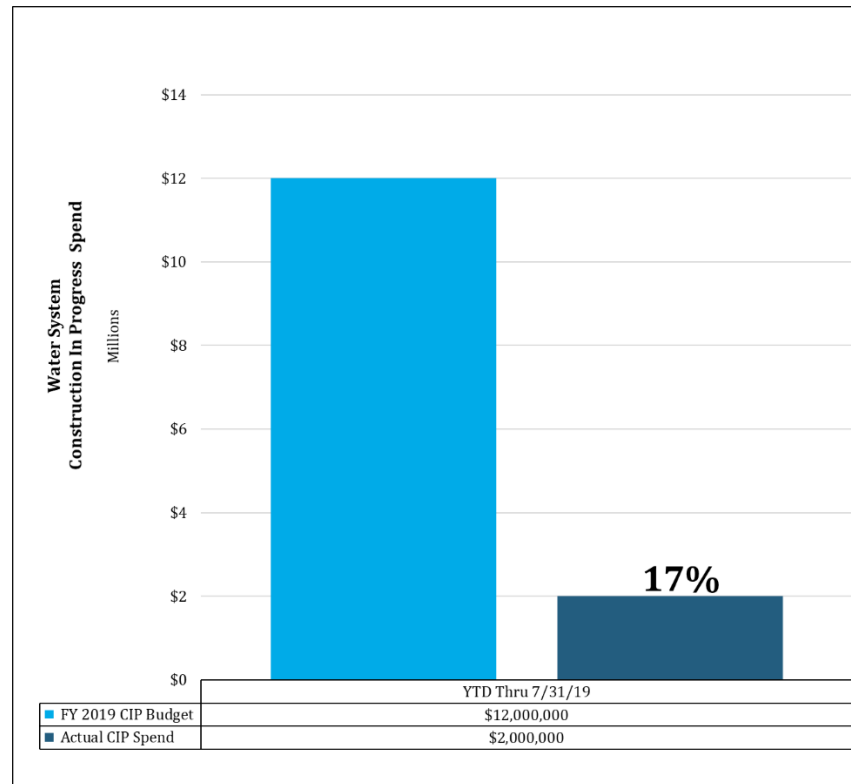
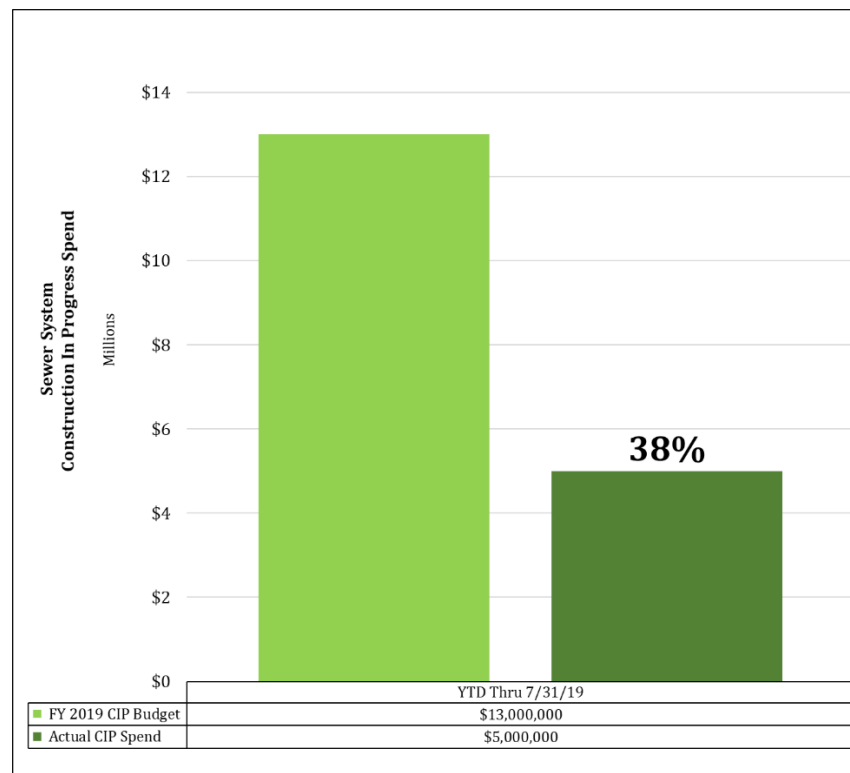
This report presents quarterly and monthly CWIP spending trends against a prorated spending plan. The prorated spending plan is calculated by dividing the total fiscal year 2020 board-approved CIP plan by twelve equal months. It should be noted that these interim reports are prepared on a modified cash basis. Known expenses, where material in nature, have been accrued.

### **Chart 1 – Water System Construction in Work in Progress Spend**

As of July 2019, the Water system incurred nearly \$2 million of construction costs to date. While this is only 17% of the fiscal year 2020 prorated spending plan through July, future months are anticipated to increase closer to plan.

### **Chart 2 – Sewer System Construction in Work in Progress Spend**

As of July 2019, the Sewer system incurred over \$5 million of construction costs to date. While this is only 38% of the fiscal year 2020 prorated spending plan through July, future months are anticipated to increase closer to plan.

**Chart 1 – Water System Construction Work in Progress Spend**

**Chart 2 – Sewer System Construction Work in Progress Spend**


This report includes the following.

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

## **MBO Transfers to Accounts Held by GLWA**

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

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

***Table 1 - GLWA FY 2020 Water MBO Transfers*** reflects the required transfers for FY 2020 completed through July 1, 2019. MBO transfers for water totaling \$12.5 million have been transferred to GLWA accounts.

***Table 2 - GLWA FY 2020 Sewer MBO Transfers*** reflects the required transfers for FY 2020 completed through July 1, 2019. MBO transfers for sewer totaling \$18.0 million have been transferred to GLWA accounts.

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



**Table 1 – GLWA FY 2020 Water MBO Transfers**

<b>WATER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
<b>FY 2020</b>							
July 2019	10,957,542	504,000	891,308	165,067	-	-	12,517,917
<b>Total FY 2020</b>	<b>\$10,957,542</b>	<b>\$504,000</b>	<b>\$891,308</b>	<b>\$165,067</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,517,917</b>

**Table 2 – GLWA FY 2020 Sewer MBO Transfers**

<b>SEWER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
<b>FY 2020</b>							
July 2019	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
<b>Total FY 2020</b>	<b>\$15,588,100</b>	<b>\$902,000</b>	<b>\$1,223,959</b>	<b>\$240,608</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,954,667</b>

**Table 3 – GLWA MBO Transfer History**

<b>GLWA MBO Transfer History</b>							
<b>WATER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
Total FY 2019	121,562,604	6,048,000	10,695,696	2,061,000	-	-	140,367,300
Total FY 2020 (1 month)	10,957,542	504,000	891,308	165,067	-	-	12,517,917
<b>Life to Date</b>	<b>\$437,014,350</b>	<b>\$24,674,300</b>	<b>\$42,877,100</b>	<b>\$8,445,967</b>	<b>\$2,686,900</b>	<b>\$606,000</b>	<b>\$516,304,617</b>
<b>SEWER</b>							
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Sewer
Total FY 2016	\$100,865,600	\$10,838,400	\$14,025,800	\$2,523,400	\$5,591,700	\$779,600	\$134,624,500
Total FY 2017	175,858,800	10,838,400	14,026,800	2,654,400	2,654,400	-	206,032,800
Total FY 2018	191,079,396	10,824,000	14,687,496	2,760,804	-	-	219,351,696
Total FY 2019	191,079,396	10,824,000	14,687,496	2,870,992	-	-	219,461,884
Total FY 2020 (1 month)	15,588,100	902,000	1,223,959	240,608	-	-	17,954,667
<b>Life to Date</b>	<b>\$674,471,292</b>	<b>\$44,226,800</b>	<b>\$58,651,551</b>	<b>\$11,050,204</b>	<b>\$8,246,100</b>	<b>\$779,600</b>	<b>\$797,425,547</b>

## **MBO Required and Lease Payment Transfers to DWSD**

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

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

**Table 4 - DWSD FY 2020 Water MBO Transfers** reflects the required transfers for FY 2020 completed through July 1, 2019. MBO transfers for Water totaling \$4.8 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$3,548,000.00 of the lease payment be utilized to offset a portion of debt service.

**Table 5 - DWSD FY 2020 Sewer MBO Transfers** reflects the required transfers for FY 2020 completed through July 1, 2019. MBO transfers for Sewer totaling \$7.9 million have been transferred to accounts held by DWSD. For FY 2020, DWSD has requested that \$5,032,700.00 of the lease payment be utilized to offset a portion of debt service.

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

**Table 4 – DWSD FY 2020 Water MBO Transfers**

<b>WATER</b>				
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Water</u>
<b>FY 2020</b>				
July 2019	\$ 2,888,533	\$ 356,000	\$ 1,579,333	\$ 4,823,866
Total FY 2020	\$ 2,888,533	\$ 356,000	\$ 1,579,333	\$ 4,823,866

**Table 5 – DWSD FY 2019 Sewer MBO Transfers**

<b>SEWER</b>				
	<u>Operations &amp; Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&amp;E Fund)</u>	<u>Total Sewer</u>
<b>FY 2020</b>				
July 2019	\$ 5,778,625	\$ 238,000	\$ 1,872,275	\$ 7,888,900
Total FY 2020	\$ 5,778,625	\$ 238,000	\$ 1,872,275	\$ 7,888,900

**Table 6 – DWSD MBO and Lease Payment Transfer History**

Transfers to DWSD				
WATER				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Water
<b>FY 2016 *</b>				
MBO/Lease Requirement	\$ 26,185,600	\$ 4,262,700	\$ 22,500,000	\$ 52,948,300
Offset to Debt Service	-	-	(2,326,900)	(2,326,900)
Net MBO Transfer	26,185,600	4,262,700	20,173,100	50,621,400
<b>FY 2017</b>				
MBO/Lease Requirement	33,596,400	4,262,400	22,500,000	60,358,800
Offset to Debt Service	-	-	-	-
Net MBO Transfer	33,596,400	4,262,400	22,500,000	60,358,800
<b>FY 2018</b>				
MBO/Lease Requirement	35,059,704	4,272,000	22,500,000	61,831,704
Offset to Debt Service	-	-	(1,875,000)	(1,875,000)
Net MBO Transfer	35,059,704	4,272,000	20,625,000	59,956,704
<b>FY 2019</b>				
MBO/Lease Requirement	35,484,300	4,272,000	22,500,000	62,256,300
Offset to Debt Service	-	-	(3,972,200)	(3,972,200)
Net MBO Transfer	35,484,300	4,272,000	18,527,800	58,284,100
<b>FY 2020 (1 month)</b>				
MBO/Lease Requirement	2,888,533	356,000	1,875,000	5,119,533
Offset to Debt Service	-	-	(295,667)	(295,667)
Net MBO Transfer	2,888,533	356,000	1,579,333	4,823,866
<b>Life-to-Date</b>				
MBO/Lease Requirement	133,214,537	17,425,100	91,875,000	242,514,637
Offset to Debt Service	-	-	(8,469,767)	(8,469,767)
<b>Total Water</b>	<b>\$ 133,214,537</b>	<b>\$ 17,425,100</b>	<b>\$ 83,405,233</b>	<b>\$ 234,044,870</b>
<b>SEWER</b>				
	Operations & Maintenance	Operations & Maintenance Pension	Lease Payment (I&E Fund)	Total Sewer
<b>FY 2016 *</b>				
MBO/Lease Requirement	\$ 19,774,300	\$ 2,861,800	\$ 27,500,000	\$ 50,136,100
Offset to Debt Service	-	-	(19,991,500)	(19,991,500)
Total MBO Transfer	19,774,300	2,861,800	7,508,500	30,144,600
<b>FY 2017</b>				
MBO/Lease Requirement	41,535,600	2,862,000	27,500,000	71,897,600
Offset to Debt Service	-	-	-	-
Total MBO Transfer	41,535,600	2,862,000	27,500,000	71,897,600
<b>FY 2018</b>				
MBO/Lease Requirement	60,517,992	2,856,000	27,500,000	90,873,992
Offset to Debt Service	-	-	(9,166,664)	(9,166,664)
Total MBO Transfer	60,517,992	2,856,000	18,333,336	81,707,328
<b>FY 2019</b>				
MBO/Lease Requirement	56,767,920	2,856,000	27,500,000	87,123,920
Offset to Debt Service	-	-	(4,415,000)	(4,415,000)
Total MBO Transfer	56,767,920	2,856,000	23,085,000	82,708,920
<b>FY 2020 (1 month)</b>				
MBO/Lease Requirement	5,778,625	238,000	2,291,667	8,308,292
Offset to Debt Service	-	-	(419,392)	(419,392)
Total MBO Transfer	5,778,625	238,000	1,872,275	7,888,900
<b>Life-to-Date</b>				
MBO/Lease Requirement	184,374,437	11,673,800	112,291,667	308,339,904
Offset to Debt Service	-	-	(33,992,556)	(33,992,556)
<b>Total Sewer</b>	<b>\$ 184,374,437</b>	<b>\$ 11,673,800</b>	<b>\$ 78,299,111</b>	<b>\$ 274,347,348</b>

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

This report includes the following:

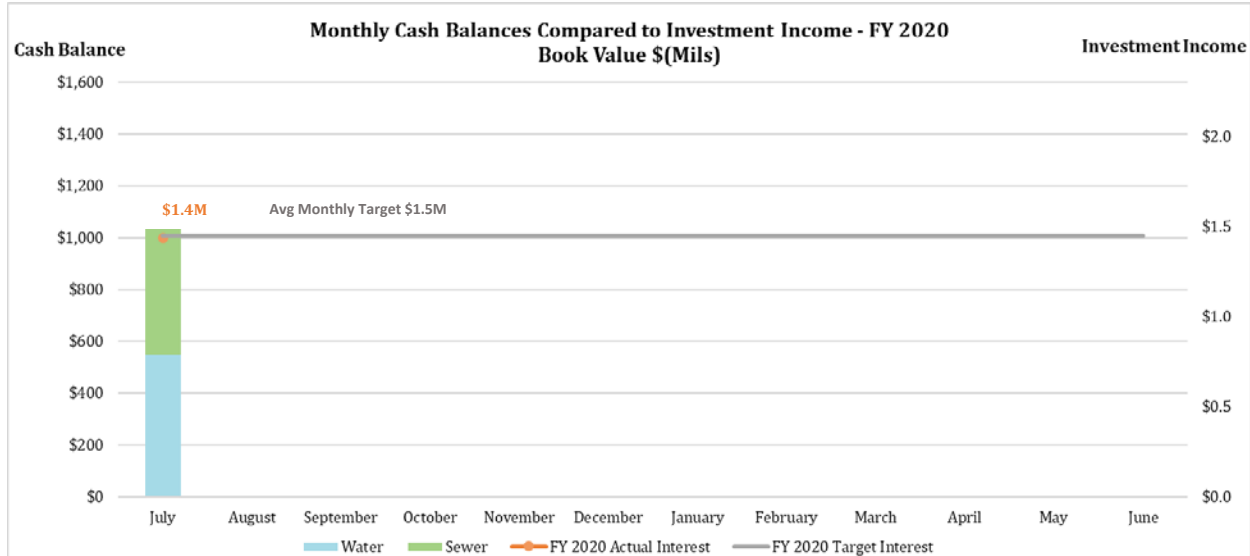
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

## Monthly Cash Balances Compared to Investment Income

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

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The FY 2020 budget for investment earning is \$19.3 million. Based on the current market environment, the FY 2020 projection has been revised to \$17.4 million.

**Chart 1 – Monthly Cash Balances Compared to Investment Income**



\$(Mils)	July	August	September	October	November	December	January	February	March	April	May	June
Water	\$549											
Sewer	\$501											
Total	\$1,050											
Investment Income	\$1.4											

## Cash Balance Detail

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

### ***Funds Held Within Trust:***

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

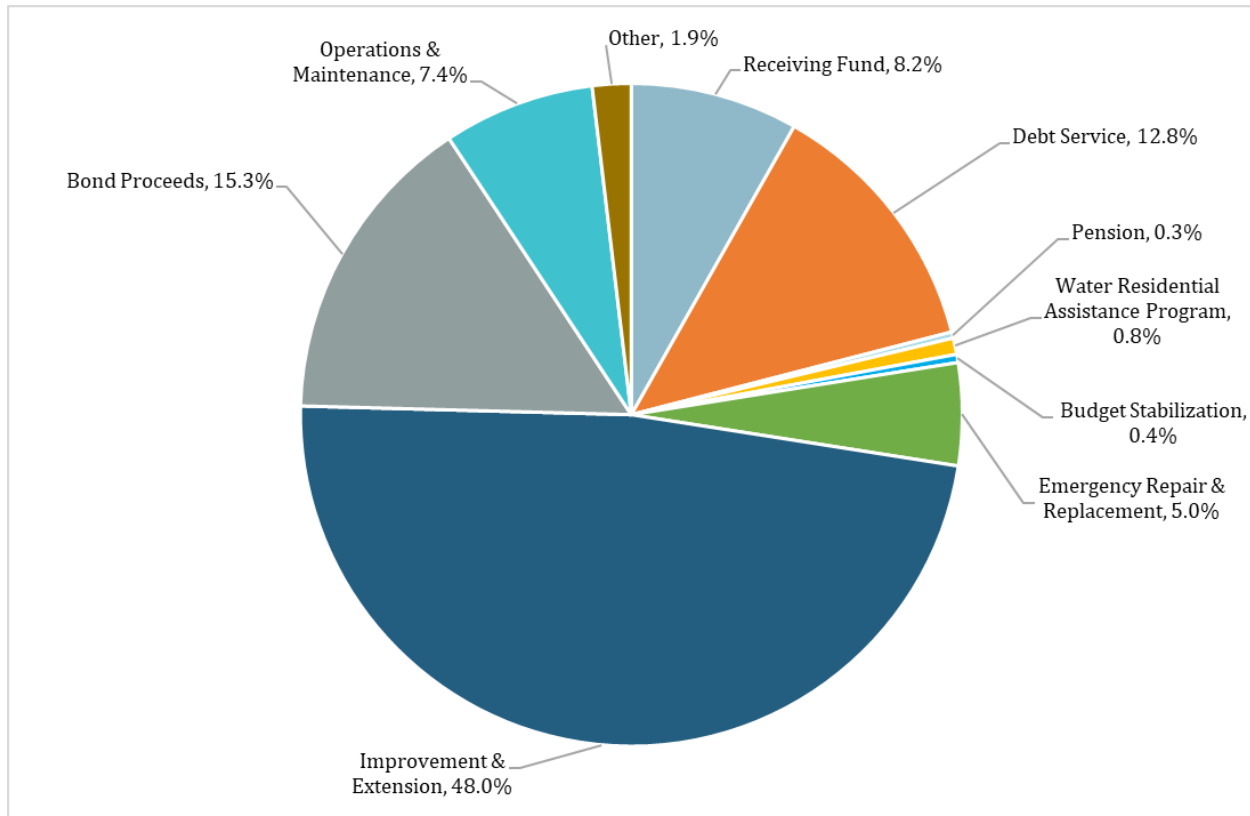
### ***Funds Held Outside Trust:***

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

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

**Chart 2 – Cash Balances - Water Funds** - Shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of July 31, 2019 is \$549 million. The allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA’s commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future.

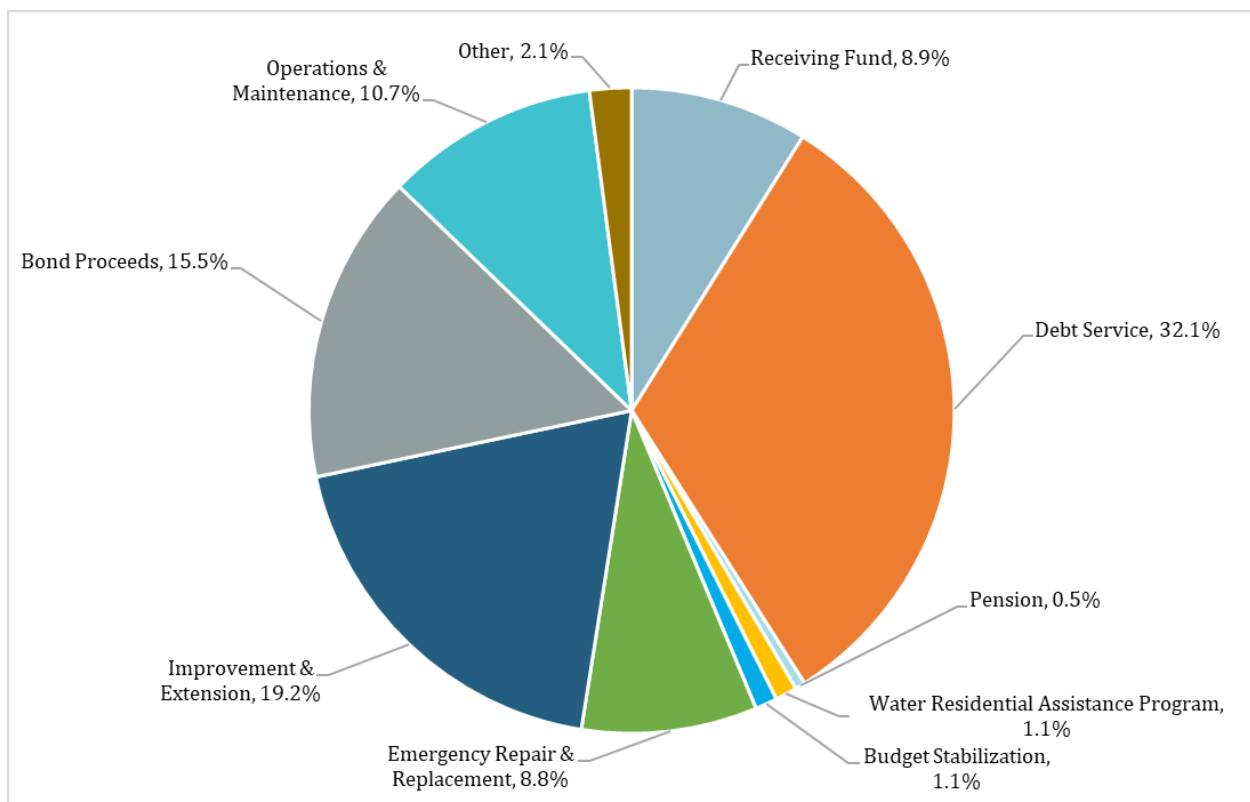
**Chart 2 – Cash Balances - Water Funds**



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

**Chart 3 – Cash Balances - Sewer Funds** - Shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of July 31, 2019 is \$501 million. Like the Water Funds, the allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA’s commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you-go capital funding to reduce long-term debt in the future. The pace for Sewer Funds I&E deposits has been less than budget to address a budget shortfall over multiple years by DWSD. Beginning in February 2019, DWSD began making payments which will replenish the I&E Fund.

**Chart 3 – Cash Balances - Sewer Funds**



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



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

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

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

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

## DWSD Retail Water Billings and Collections

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

**Table 1 - DWSD Retail Billings** shows the FY 2020 water usage and billed revenue which are provided by DWSD staff. As of July 31, 2019, the DWSD usage was at 93.09% of the budget and billed revenue was at 97.59% of budget.

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

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

**Table 1 – DWSD Retail Water Billings**

RETAIL WATER CUSTOMERS								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue (2)	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	286,871	9,909,302	34.54	267,054	9,670,167	36.21	(19,817)	(239,135)
August	288,810	9,698,584	33.58					
September	246,846	9,159,992	37.11					
October	228,814	8,288,490	36.22					
November	218,154	8,078,402	37.03					
December	216,372	7,975,070	36.86					
January	228,259	8,282,968	36.29					
February	225,150	8,294,177	36.84					
March	222,601	8,159,386	36.65					
April	215,049	8,120,879	37.76					
May	230,957	8,499,721	36.80					
June	254,554	9,084,129	35.69					
<b>Total</b>	<b>2,862,437</b>	<b>103,551,100</b>	<b>36.18</b>	<b>267,054</b>	<b>9,670,167</b>	<b>36.21</b>	<b>(19,817)</b>	<b>(239,135)</b>
<i>Subtotals ytd</i>	<i>286,871</i>	<i>9,909,302</i>	<i>34.54</i>	<i>267,054</i>	<i>9,670,167</i>	<i>36.21</i>	<i>(19,817)</i>	<i>(239,135)</i>
<i>Achievement of Budget</i>				<i>93.09%</i>	<i>97.59%</i>			

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

**Table 2 – DWSD Retail Water Collections**

Water				
Month	Current Year	Prior Year	Variance	Ratio
August	8,692,784	9,509,488	(816,704)	-8.59%
September	9,766,449	8,949,906	816,543	9.12%
October	9,015,400	9,528,528	(513,128)	-5.39%
November	7,938,517	8,049,328	(110,811)	-1.38%
December	7,297,698	8,265,636	(967,938)	-11.71%
January	8,158,817	8,066,448	92,369	1.15%
February	7,927,299	6,432,245	1,495,054	23.24%
March	8,707,578	8,280,635	426,943	5.16%
April	8,475,657	9,226,675	(751,018)	-8.14%
May	8,415,767	8,969,019	(553,252)	-6.17%
June	7,554,457	7,940,939	(386,482)	-4.87%
July	8,093,394	7,858,272	235,122	2.99%
<b>Rolling, 12-Month Total</b>	<b>100,043,817</b>	<b>101,077,118</b>		
<b>Rolling, 12-Month Average</b>	<b>8,336,985</b>	<b>8,423,093</b>		

## DWSD Retail Sewer Billings and Collections

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

**Table 3 - DWSD Retail Sewer Billings** shows the FY 2020 sewer billed revenue which are provided by DWSD staff. As of July 31, 2019, the DWSD usage was at 97.25% of the budget and billed revenue was at 98.07% of budget.

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

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

**Table 3 - DWSD Retail Sewer Billings**

RETAIL SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	251,738	28,535,420	244,810	27,985,611	(6,928)	(549,809)
August	258,984	28,327,270				
September	255,527	26,788,442				
October	227,141	26,444,548				
November	211,617	25,759,684				
December	195,192	25,905,017				
January	197,099	26,341,264				
February	206,164	26,312,394				
March	200,672	26,467,728				
April	204,606	25,894,612				
May	203,480	27,185,600				
June	218,340	27,376,921				
<b>Total</b>	<b>2,630,560</b>	<b>321,338,900</b>	<b>244,810</b>	<b>27,985,611</b>	<b>(6,928)</b>	<b>(549,809)</b>
<i>Subtotals ytd</i>	<i>251,738</i>	<i>28,535,420</i>	<i>244,810</i>	<i>27,985,611</i>	<i>(6,928)</i>	<i>(549,809)</i>
<i>Achievement of Budget/Goal</i>			<i>97.25%</i>	<i>98.07%</i>		

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

(2) Retail Revenues include Miscellaneous Revenues and Penalties

**Table 4 – DWSD Retail Sewer Collections**

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
August	21,746,714	24,263,141	(2,516,427)	-10.37%
September	23,727,505	21,320,358	2,407,147	11.29%
October	23,938,933	23,786,903	152,030	0.64%
November	20,624,039	19,485,270	1,138,769	5.84%
December	19,612,154	19,522,952	89,203	0.46%
January	21,140,835	18,308,458	2,832,377	15.47%
February	20,758,852	17,495,563	3,263,289	18.65%
March	22,111,691	23,015,525	(903,834)	-3.93%
April	20,930,511	16,159,844	4,770,667	29.52%
May	22,807,283	18,341,298	4,465,985	24.35%
June	20,426,151	21,461,926	(1,035,775)	-4.83%
July	20,940,157	27,332,605	(6,392,448)	-23.39%
<b>Rolling 12-Month Total</b>	<b>258,764,825</b>	<b>250,493,842</b>		
<b>Rolling, 12-Month Average</b>	<b>21,563,735</b>	<b>20,874,487</b>		

## DWSD Retail Water and Sewer Accounts Receivable Aging Report

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

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

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

Sales Class	# of Accounts	Avg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Accounts Receivable Balance
Residential	287,231	\$ 316.81	\$ 13,972,000 15.4%	\$ 7,092,000 7.8%	\$ 18,199,000 20.0%	\$ 51,734,000 56.9%	\$ 90,998,000 100.0%
Commercial	28,166	1,322.51	9,470,000 25.4%	2,521,000 6.8%	6,731,000 18.1%	18,528,000 49.7%	37,250,000 100.0%
Industrial	4,816	3,342.00	3,929,000 24.4%	1,050,000 6.5%	2,574,000 16.0%	8,542,000 53.1%	16,095,000 100.0%
Tax Exempt Entities	8,156	1,825.70	1,959,000 13.2%	1,207,000 8.1%	2,640,000 17.7%	9,085,000 61.0%	14,890,000 100.0%
Government Entities	2,821	1,598.64	1,491,000 33.1%	206,000 4.6%	835,000 18.5%	1,978,000 43.9%	4,510,000 100.0%
<b>Subtotal - Active Accounts</b>	<b>331,190</b>	<b>\$ 494.41</b>	<b>\$ 30,821,000</b> 18.8%	<b>\$ 12,075,000</b> 7.4%	<b>\$ 30,980,000</b> 18.9%	<b>\$ 89,867,000</b> 54.9%	<b>\$ 163,743,000</b> 100.0%
Inactive Accounts	264,729	81.26	141,000 0.7%	165,000 0.8%	1,270,000 5.9%	19,936,000 92.7%	21,512,000 100.0%
<b>Total</b>	<b>595,919</b>	<b>\$ 310.87</b>	<b>\$ 30,962,000</b>	<b>\$ 12,240,000</b>	<b>\$ 32,250,000</b>	<b>\$ 109,803,000</b>	<b>\$ 185,255,000</b>
% of Total A/R			16.7%	6.6%	17.4%	59.3%	100.0%
Water Fund	220,073	175.13	\$ 7,220,000	\$ 2,519,000	\$ 6,243,000	\$ 22,559,000	\$ 38,541,000
Sewer Fund	280,223	523.56	\$ 23,741,000	\$ 9,721,000	\$ 26,006,000	\$ 87,244,000	\$ 146,714,000
<b>Total July 31, 2019</b>	<b>595,919</b>	<b>310.87</b>	<b>\$ 30,962,000</b>	<b>\$ 12,240,000</b>	<b>\$ 32,250,000</b>	<b>\$ 109,803,000</b>	<b>\$ 185,255,000</b>
Water Fund- Allowance							\$ (25,042,000)
Sewer Fund- Allowance							\$ (85,399,000)
<b>Total July 31, 2019 Bad Debt Allowance</b>							<b>\$ (110,441,000)</b>
<b>Comparative Totals from July 31, 2018</b>	<b>578,863</b>	<b>287.60</b>	<b>\$ 28,568,000</b>	<b>\$ 13,816,000</b>	<b>\$ 31,231,000</b>	<b>\$ 92,865,000</b>	<b>\$ 166,480,000</b>

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

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

## Wholesale Water Billings and Collections

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

### Service Arrangement Type

Model Contract	82
Emergency	1
Older Contracts	<u>4</u>
Total	<u><u>87</u></u>

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

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

**Table 1 - Wholesale Water Billings** shows the FY 2020 water billed usage and revenues. As of July 31, 2019, the billed usage was at 86.97% of budget and billed revenue at 93.28% of budget. Billings and usage from the City of Flint are included as they were assumed in the FY 2020 Budget.

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

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

**Table 1 - FY 2020 Wholesale Water Billings Report**

WHOLESALE WATER CUSTOMERS								
Month (1)	FY 2020 - Budget/Goal			FY 2020 - Actual			FY 2020 - Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,777,138	32,544,400	18.31	1,545,631	30,356,570	19.64	(231,507)	(2,187,830)
August	1,549,587	30,383,100	19.61					
September	1,368,496	28,270,400	20.66					
October	1,066,653	25,351,200	23.77					
November	917,034	24,049,100	26.22					
December	1,004,420	24,714,000	24.61					
January	1,018,192	24,861,000	24.42					
February	893,007	23,780,800	26.63					
March	1,008,766	24,753,300	24.54					
April	948,751	24,262,000	25.57					
May	1,073,966	25,549,300	23.79					
June	1,383,200	28,595,300	20.67					
<b>Total</b>	<b>14,009,210</b>	<b>317,113,900</b>	<b>22.64</b>	<b>1,545,631</b>	<b>30,356,570</b>	<b>19.64</b>	<b>(231,507)</b>	<b>(2,187,830)</b>
Subtotals ytd	1,777,138	32,544,400	18.31	1,545,631	30,356,570	19.64	(231,507)	(2,187,830)
Achievement of Budget				86.97%	93.28%			

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

**Table 2 - Wholesale Water Collections**

Water				
Month	Current Year	Prior Year	Variance	Ratio
August	31,920,586	25,280,453	6,640,133	26.27%
September	26,037,313	26,757,992	(720,679)	-2.69%
October	27,827,722	38,336,777	(10,509,055)	-27.41%
November	29,238,260	27,261,391	1,976,869	7.25%
December	27,720,646	22,125,972	5,594,674	25.29%
January	23,430,974	32,002,334	(8,571,360)	-26.78%
February	26,147,082	21,352,903	4,794,179	22.45%
March	24,967,335	27,715,696	(2,748,361)	-9.92%
April	23,045,654	18,489,754	4,555,900	24.64%
May	20,755,103	30,447,581	(9,692,478)	-31.83%
June	25,676,458	21,815,013	3,861,445	17.70%
July	23,212,979	21,923,590	1,289,389	5.88%
<b>Rolling 12-Month Total</b>	<b>309,980,112</b>	<b>313,509,456</b>		
<b>Rolling, 12-Month Average</b>	<b>25,831,676</b>	<b>26,125,788</b>		

## Wholesale Sewer Billings and Collections

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

Service Arrangement Type

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

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

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

**Table 3 - Wholesale Sewer Billings** shows the FY 2020 sewer billed revenue. Consistent with expectations as a result of sewer rate simplification, billed revenue is at 100.00% of budget through July 31, 2019.

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

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

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received. There are several large accounts whose payments swing between the end of the current month and the beginning of the next month. Table 6 confirms that these payments are not delinquent as sewer past due balances relate in full to Highland Park.

**Table 3 – FY 2020 Wholesale Sewer Billings Report**

WHOLESALE SEWER CUSTOMERS						
Month (1)	FY 2020 - Budget/Goal		FY 2020 - Actual		FY 2020 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,882,500	N/A	22,882,500	N/A	-
August	N/A	22,882,500	N/A		N/A	
September	N/A	22,882,500	N/A		N/A	
October	N/A	22,882,500	N/A		N/A	
November	N/A	22,882,500	N/A		N/A	
December	N/A	22,882,500	N/A		N/A	
January	N/A	22,882,500	N/A		N/A	
February	N/A	22,882,500	N/A		N/A	
March	N/A	22,882,500	N/A		N/A	
April	N/A	22,882,500	N/A		N/A	
May	N/A	22,882,500	N/A		N/A	
June	N/A	22,882,500	N/A		N/A	
<b>Total</b>		274,590,000		22,882,500		-
<i>Subtotals ytd</i>		22,882,500		22,882,500		0
<i>Achievement of Budget</i>				100.00%		

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

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

**Table 4 - Wholesale Sewer Collections**

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
August	28,384,600	21,949,300	6,435,300	29.32%
September	22,672,400	21,040,913	1,631,487	7.75%
October	16,105,200	21,902,800	(5,797,600)	-26.47%
November	28,633,300	22,662,700	5,970,600	26.35%
December	24,440,000	23,643,400	796,600	3.37%
January	26,874,927	22,057,972	4,816,955	21.84%
February	13,895,100	30,280,800	(16,385,700)	-54.11%
March	22,388,600	15,552,000	6,836,600	43.96%
April	23,203,703	27,812,417	(4,608,714)	-16.57%
May	9,284,000	15,342,700	(6,058,700)	-39.49%
June	32,639,436	28,810,500	3,828,936	13.29%
July	27,222,400	16,179,117	11,043,283	68.26%
<b>Rolling 12-Month Total</b>	275,743,666	267,234,619		
<b>Rolling, 12-Month Average</b>	22,978,639	22,269,552		



## City of Highland Park Billings and Collections

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

As of July 31, 2019, Highland Park had a delinquent balance of \$41.1 million, including \$31.9 million for wastewater treatment services, \$1.7 million for industrial waste control services, and \$7.5 million for water supply services.

**Table 5 - City of Highland Park Billings and Collections** provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2020 through July 31, 2019. Please note the numbers below reflect the month the billing was sent and not the month the service was provided. A life-to-date summary is provided as an appendix to this monthly financial report.

**Table 5 - City of Highland Park Billings and Collections**

	Water	Sewer	IWC	Total
August 31, 2018 Balance	6,330,467	31,406,411	1,635,009	39,371,887
September 2018 Billing	109,780	467,900	4,261	581,941
September 2018 Payments	-	-	-	-
September 30, 2018 Balance	6,440,247	31,874,311	1,639,270	39,953,828
October 2018 Billing	109,298	467,900	4,281	581,479
October 2018 Payments	-	-	-	-
October 31, 2018 Balance	6,549,545	32,342,211	1,643,551	40,535,307
November 2018 Billing	104,007	467,900	3,963	575,869
November 2018 Payments	-	-	-	-
November 30, 2018 Balance	6,653,552	32,810,111	1,647,514	41,111,176
December 2018 Billing	101,944	467,900	3,961	573,805
December 2018 Payments	-	-	-	-
December 31, 2018 Balance	6,755,496	33,278,011	1,651,474	41,684,981
January 2019 Billing	98,430	467,900	3,961	570,290
January 2019 Payments	-	(2,116,727)	-	(2,116,727)
January 31, 2019 Balance	6,853,926	31,629,183	1,655,435	40,138,544
February 2019 Billing	98,898	467,900	3,932	570,731
February 2019 Payments	-	-	-	-
February 28, 2019 Balance	6,952,824	32,097,083	1,659,368	40,709,275
March 2019 Billing	98,353	467,900	3,881	570,134
March 2019 Payments	-	-	-	-
March 31, 2019 Balance	7,051,177	32,564,983	1,663,248	41,279,409
April 2019 Billing	99,879	467,900	4,101	571,880
April 2019 Payments	-	(1,089,003)	-	(1,089,003)
April 30, 2019 Balance	7,151,056	31,943,880	1,667,350	40,762,286
May 2019 Billing	98,118	467,900	3,963	569,981
May 2019 Payments	-	-	-	-
May 31, 2019 Balance	7,249,174	32,411,780	1,671,312	41,332,267
June 2019 Billing	101,871	467,900	3,931	573,702
June 2019 Payments	-	(1,406,836)	-	(1,406,836)
June 30, 2019 Balance	7,351,045	31,472,844	1,675,243	40,499,132
July 2019 Billing	104,702	467,900	4,121	576,722
July 2019 Payments	-	-	-	-
July 31, 2019 Balance	7,455,747	31,940,744	1,679,363	41,075,854

## Wholesale Water & Sewer Accounts Receivable Aging Report

The detailed accounts receivable aging is in the Appendix to this monthly report. This report reflects the wholesale receivables only and does not include DWSD.

**Table 6 - Wholesale Accounts Receivable Aging Report Summary** is a summary of the total, current and non-current receivables by category as of July 31, 2019.

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

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

**Table 6 - Wholesale Accounts Receivable Aging Report Summary**

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 40,772,504.46	\$ 33,495,854.98	\$ 125,593.46	\$ 99,878.81	\$ 7,051,177.21
Sewer	\$ 51,783,743.61	\$ 20,310,899.50	\$ 467,900.00	\$ 467,900.00	\$ 30,537,044.11
IWC	\$ 3,393,684.58	\$ 656,033.59	\$ 45,882.20	\$ -	\$ 2,691,768.79
Pollutant Surcharge	\$ 1,311,242.43	\$ 1,258,729.23	\$ 7,901.41	\$ 6,244.27	\$ 38,367.52
<b>Total</b>	<b>\$ 97,261,175.08</b>	<b>\$ 55,721,517.30</b>	<b>\$ 647,277.07</b>	<b>\$ 574,023.08</b>	<b>\$ 40,318,357.63</b>
	100.00%	57.29%	0.67%	0.59%	41.45%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 33,316,757.87	\$ 33,289,282.34	\$ 27,475.53	\$ -	\$ -
Sewer	\$ 19,842,999.50	\$ 19,842,999.50	\$ -	\$ -	\$ -
IWC	\$ 1,714,320.88	\$ 647,982.15	\$ 41,919.61	\$ -	\$ 1,024,419.12
Pollutant Surcharge	\$ 1,311,242.43	\$ 1,258,729.23	\$ 7,901.41	\$ 6,244.27	\$ 38,367.52
<b>Total</b>	<b>\$ 56,185,320.68</b>	<b>\$ 55,038,993.22</b>	<b>\$ 77,296.55</b>	<b>\$ 6,244.27</b>	<b>\$ 1,062,786.64</b>
	100.00%	97.96%	0.14%	0.01%	1.89%

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

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 33,316,757.87	\$ 33,289,282.34	\$ 27,475.53	\$ -	\$ -
Sewer	\$ 19,842,999.50	\$ 19,842,999.50	\$ -	\$ -	\$ -
IWC	\$ 580,685.20	\$ 575,238.63	\$ 5,547.85	\$ -	\$ (101.28)
Pollutant Surcharge	\$ 1,311,242.43	\$ 1,258,729.23	\$ 7,901.41	\$ 6,244.27	\$ 38,367.52
<b>Total</b>	<b>\$ 55,051,685.00</b>	<b>\$ 54,966,249.70</b>	<b>\$ 40,924.79</b>	<b>\$ 6,244.27</b>	<b>\$ 38,266.24</b>
	100.00%	99.84%	0.07%	0.01%	0.07%

**Note:** percentages vary from 100% due to rounding.

The Monthly Trust Receipts & Disbursements Report includes the following.

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

## GLWA Trust Receipts & Disbursements

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

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

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

Water fund cash receipts are at a breakeven status between net receipts and required MBO disbursements through July 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 15% since January 1, 2016.

Sewer fund cash receipts exceeded disbursements by 26% through July 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 5% since January 1, 2016. This is a correction of the lower net receipts in June which were driven by a late payment by a large customer and was caught up in July. This ratio is expected to return to its average level consistent with prior years in the next period.

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

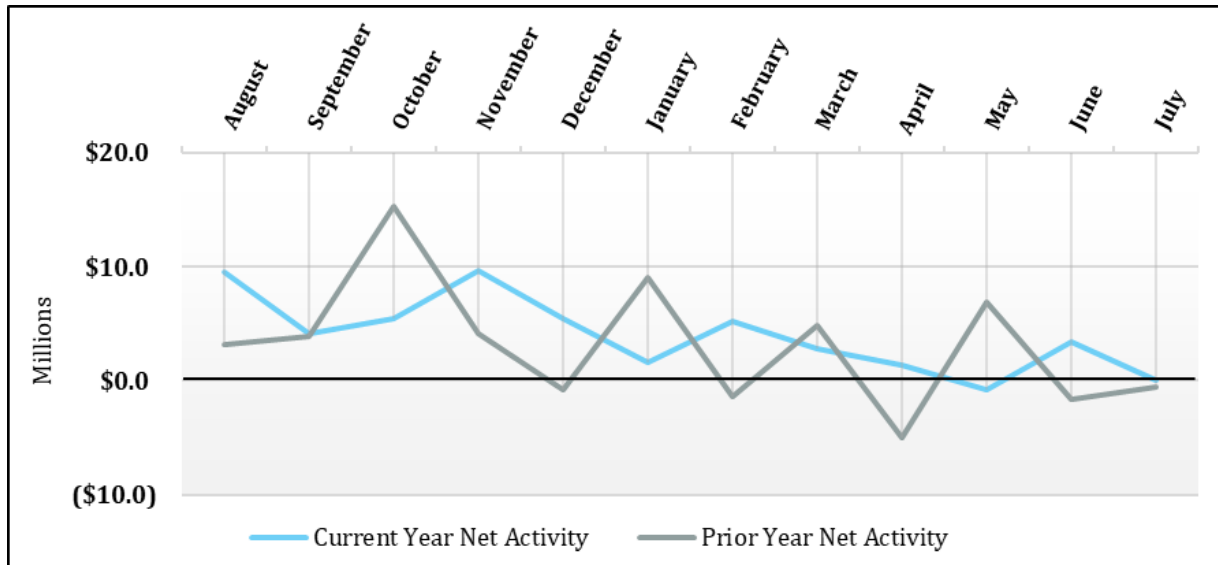
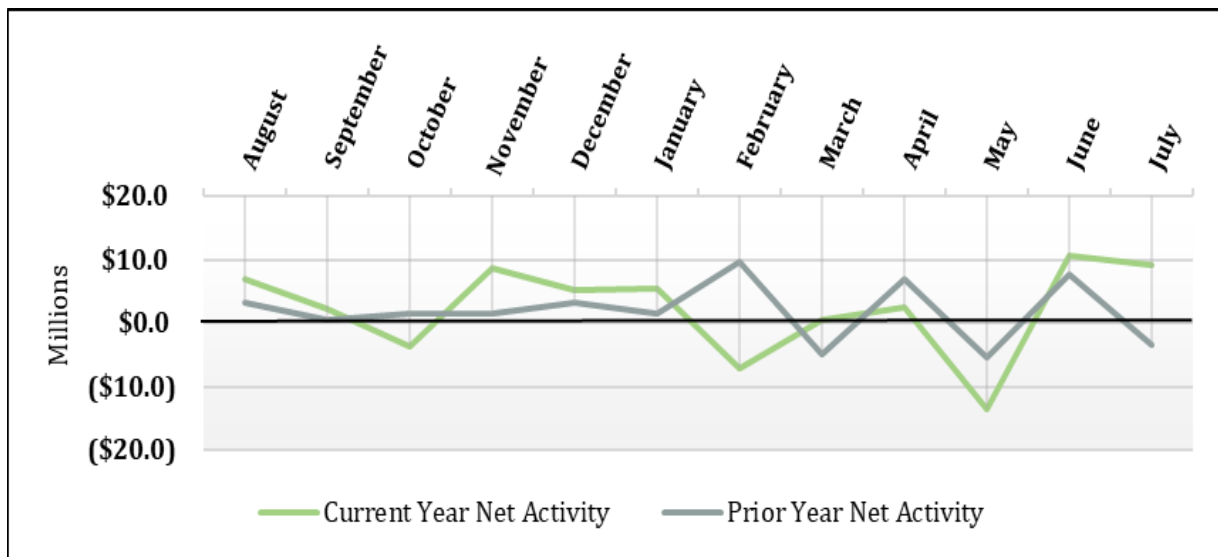
**Chart 2 – GLWA 12-Month Net Receipts – Sewer** outlines monthly cash receipt trends across two points of reference for the regional sewer system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

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

	FY 2016	FY 2017	FY 2018	FY 2019 (Prelim)	FY 2020	Life-to-Date Total
<b>Water</b>						
1 Receipts	\$ 149,688,711	\$ 352,941,909	\$ 338,452,001	\$ 336,594,234	\$ 25,338,603	\$ 1,203,015,458
2 MOU Adjustments	-	-	-	-	-	-
3 Adjusted Receipts	149,688,711	352,941,909	338,452,001	336,594,234	25,338,603	1,203,015,458
4 Disbursements	(146,256,185)	(288,777,985)	(297,064,810)	(289,230,481)	(25,313,811)	(1,046,643,272)
5 Receipts Net of Required Transfers	3,432,526	64,163,924	41,387,191	47,363,753	24,792	156,372,186
6 I&E Transfer	-	-	(25,739,700)	(47,695,000)	-	(73,434,700)
7 Net Receipts	\$ 3,432,526	\$ 64,163,924	\$ 15,647,491	\$ (331,247)	\$ 24,792	\$ 82,937,486
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	102%	122%	114%	116%	100%	115%
<b>Sewer</b>						
9 Receipts	\$ 232,377,715	\$ 469,788,882	\$ 476,269,761	\$ 467,743,744	\$ 44,226,775	\$ 1,690,406,877
10 MOU Adjustments	-	-	-	-	-	-
11 Adjusted Receipts	232,377,715	469,788,882	476,269,761	467,743,744	44,226,775	1,690,406,877
12 Disbursements	(219,538,325)	(441,443,340)	(458,903,335)	(453,406,636)	(35,000,331)	(1,608,291,967)
13 Receipts Net of Required Transfers	12,839,390	28,345,542	17,366,426	14,337,108	9,226,444	82,114,910
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	-	(45,245,800)
15 DWSD Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
16 Shortfall Repayment (principal)	-	-	-	9,367,355	1,437,142	10,804,497
17 Net Receipts	\$ 11,553,924	\$ 331,008	\$ (29,444,708)	\$ 1,156,763	\$ 10,663,586	\$ (5,739,427)
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	106%	106%	104%	103%	126%	105%
<b>Combined</b>						
19 Receipts	\$ 382,066,426	\$ 822,730,791	\$ 814,721,762	\$ 804,337,978	\$ 69,565,378	\$ 2,893,422,335
20 MOU Adjustments	-	-	-	-	-	-
21 Adjusted Receipts	382,066,426	822,730,791	814,721,762	804,337,978	69,565,378	2,893,422,335
22 Disbursements	(365,794,510)	(730,221,325)	(755,968,145)	(742,637,117)	(60,314,142)	(2,654,935,239)
23 Receipts Net of Required Transfers	16,271,916	92,509,466	58,753,617	61,700,861	9,251,236	238,487,096
24 I&E Transfer	-	-	(48,437,800)	(70,242,700)	-	(118,680,500)
25 Shortfall Advance	(1,285,466)	(28,014,534)	(24,113,034)	-	-	(53,413,034)
26 Shortfall Repayment	-	-	-	9,367,355	1,437,142	10,804,497
27 Net Receipts	\$ 14,986,450	\$ 64,494,932	\$ (13,797,217)	\$ 825,516	\$ 10,688,378	\$ 77,198,059
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	104%	113%	108%	108%	115%	109%

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

**Note:** The Sewer net receipts shortfall is a result of the shortfall advance made to DWSD and has been temporarily covered by initial, start-up transfer activity and more recently reduced by loan receivable payments made by DWSD. It is expected to resolve entirely in FY 2020 due to ongoing, positive receipts net of required transfers and continued DWSD loan receivable payments.

**Chart 1 - GLWA 12-Month Net Receipts - Water**

**Chart 2 - GLWA 12-Month Net Receipts - Sewer**


## DWSD Trust Receipts & Disbursements

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

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

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

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

Sewer fund cash receipts fell short of required MBO disbursements by 13% through July 31, 2019 with a historic shortfall of 6% since January 1, 2016.

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

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

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

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

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

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

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

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

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

	FY 2016	FY 2017	FY 2018	FY 2019 (Prelim)	FY 2020	Life-to-Date Total
<b>Water</b>						
1 Receipts	\$ 26,201,881	\$ 96,451,105	\$ 101,233,147	\$ 99,868,219	\$ 8,095,333	\$ 331,849,685
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	44,647,981	96,451,105	101,233,147	99,868,219	8,095,333	350,295,785
4 Disbursements	(47,809,552)	(93,066,144)	(93,049,457)	(97,694,600)	(8,208,540)	(339,828,293)
5 Receipts Net of Required Transfers	(3,161,571)	3,384,961	8,183,690	2,173,619	(113,207)	10,467,492
6 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
7 Net Receipts	\$ (3,161,571)	\$ 3,384,961	\$ 8,183,690	\$ (6,233,461)	\$ (113,207)	\$ 2,060,412
8 Ratio of Receipts to Disbursements	93%	104%	109%	102%	99%	103%
<b>Sewer</b>						
9 Receipts	\$ 65,256,734	\$ 233,723,367	\$ 242,104,791	\$ 265,339,797	\$ 20,947,519	\$ 827,372,208
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	121,011,834	233,723,367	242,104,791	271,866,997	20,947,519	889,654,508
12 Disbursements	(122,297,300)	(261,963,973)	(266,217,825)	(271,018,306)	(24,143,818)	(945,641,222)
13 Receipts Net of Required Transfers	(1,285,466)	(28,240,606)	(24,113,034)	848,691	(3,196,299)	(55,986,714)
14 I&E Transfer	-	-	-	-	-	-
15 Shortfall Advance	1,285,466	28,014,534	24,113,034	-	-	53,413,034
16 Net Receipts (a)	\$ -	\$ (226,072)	\$ -	\$ 848,691	\$ (3,196,299)	\$ (2,573,680)
17 Ratio of Receipts to Disbursements	99%	89%	91%	100%	87%	94%
<b>Combined</b>						
18 Receipts	\$ 91,458,615	\$ 330,174,472	\$ 343,337,938	\$ 365,208,016	\$ 29,042,852	\$ 1,159,221,893
19 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
20 Adjusted Receipts	165,659,815	330,174,472	343,337,938	371,735,216	29,042,852	1,239,950,293
21 Disbursements	(170,106,852)	(355,030,117)	(359,267,282)	(368,712,906)	(32,352,358)	(1,285,469,515)
22 Receipts Net of Required Transfers	(4,447,037)	(24,855,645)	(15,929,344)	3,022,310	(3,309,506)	(45,519,222)
23 I&E Transfer	-	-	-	(8,407,080)	-	(8,407,080)
24 Shortfall Advance	1,285,466	28,014,534	24,113,034	-	-	53,413,034
25 Net Receipts	\$ (3,161,571)	\$ 3,158,889	\$ 8,183,690	\$ (5,384,770)	\$ (3,309,506)	\$ (513,268)
26 Ratio of Receipts to Disbursements	97%	93%	96%	101%	90%	96%

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

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

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

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

**Table 3 – FY 2017 DWSD Loan Receivable - Sewer**

Date	Transaction	Amount	Balance
6/30/2019	Record FY 16 and FY 17 Loan Receivable		29,300,000
2/8/2019	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	24,664,538
2/22/2019	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	22,310,770
4/15/2019	Loan Receivable Payment (for the month of Apr)	789,990	21,520,780
5/8/2019	Loan Receivable Payment (for the month of May)	792,705	20,728,075
6/7/2019	Loan Receivable Payment (for the month of June)	795,430	19,932,645
7/5/2019	Loan Receivable Payment (for the month of July)	798,164	19,134,480
		<b>10,165,520</b>	<b>19,134,480</b>

**Table 4 – FY 2017 DWSD Loan Receivable Payments - Sewer**

Date	Transaction	Principal	Interest	Total Paid
2/8/2019	Loan Receivable Payment (for the months of Jul - Dec)	4,635,462	564,636	5,200,098
2/22/2019	Loan Receivable Payment (for the months of Jan - Mar)	2,353,768	246,280	2,600,049
4/15/2019	Loan Receivable Payment (for the month of Apr)	789,990	76,693	866,683
5/8/2019	Loan Receivable Payment (for the month of May)	792,705	73,978	866,683
6/7/2019	Loan Receivable Payment (for the month of June)	795,430	71,253	866,683
7/5/2019	Loan Receivable Payment (for the month of July)	798,164	68,518	866,683
		<b>10,165,520</b>	<b>1,101,358</b>	<b>11,266,878</b>

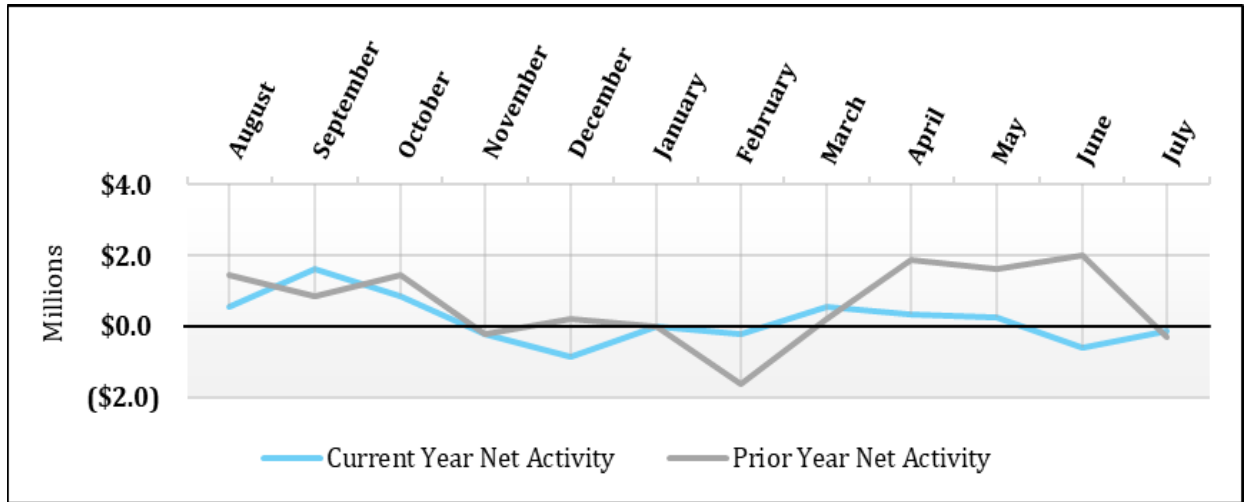
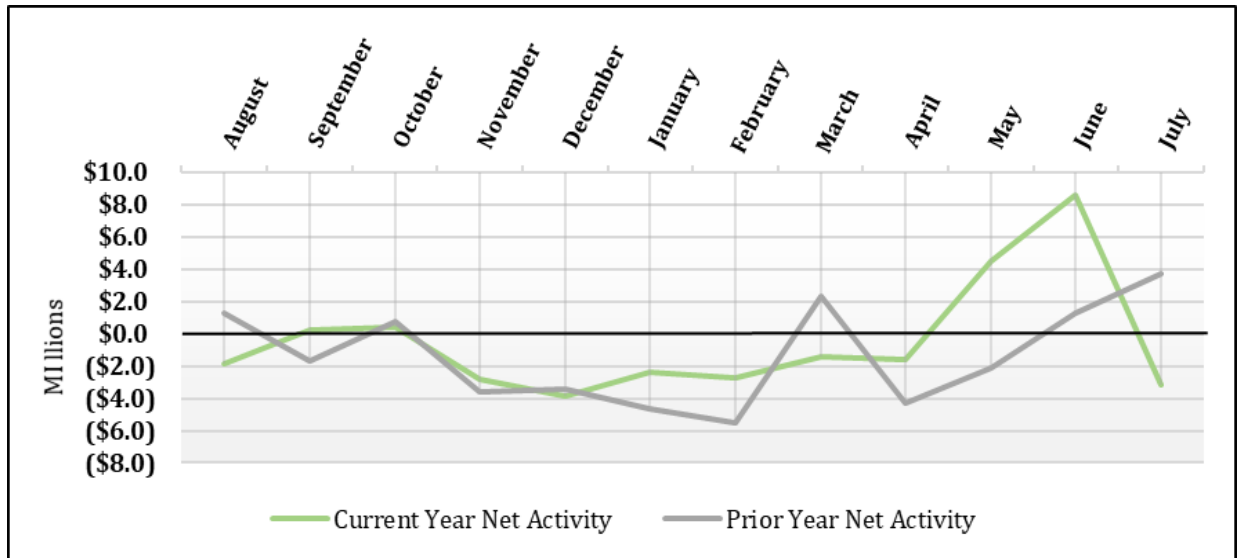
**Table 5 – FY 2018 DWSD Loan Receivable - Sewer**

Date	Transaction	Amount	Balance
6/30/2019	Record FY 18 Loan Receivable		24,113,034
7/15/2019	Loan Receivable Payment (for the month of July)	638,978	23,474,056
		<b>638,978</b>	<b>23,474,056</b>

**Table 6 – FY 2018 DWSD Loan Receivable Payments - Sewer**

Date	Transaction	Principal	Interest	Total Paid
7/15/2019	Loan Receivable Payment (for the month of July)	638,978	64,482	703,460
		<b>638,978</b>	<b>64,482</b>	<b>703,460</b>



**Chart 3 – DWSD 12-Month Net Receipts - Water**

**Chart 4 – DWSD 12-Month Net Receipts – Sewer**


## Combined System Trust Receipts & Disbursements

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

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

Water fund cash receipts are at a breakeven status between net receipts and required MBO disbursements through July 31, 2019 with a historical ratio of cash receipts exceeding MBO disbursements by 12% since January 1, 2016.

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

**Table 7 – Combined Net Cash Flows from Trust Receipts & Disbursements**

	FY 2016	FY 2017	FY 2018	FY 2019 (Prelim)	FY 2020	Life-to-Date Total
<b>Water</b>						
1 Receipts	\$ 175,890,592	\$ 449,393,014	\$ 439,685,148	\$ 436,462,453	\$ 33,433,936	\$ 1,534,865,143
2 MOU Adjustments	18,446,100	-	-	-	-	18,446,100
3 Adjusted Receipts	194,336,692	449,393,014	439,685,148	436,462,453	33,433,936	1,553,311,243
4 Disbursements	(194,065,737)	(381,844,129)	(390,114,267)	(386,925,081)	(33,522,351)	(1,386,471,565)
5 Receipts Net of Required Transfers	270,955	67,548,885	49,570,881	49,537,372	(88,415)	166,839,678
6 I&E Transfer	-	-	(25,739,700)	(56,102,080)	-	(81,841,780)
7 Net Receipts	\$ 270,955	\$ 67,548,885	\$ 23,831,181	\$ (6,564,708)	\$ (88,415)	\$ 84,997,898
8 <i>Ratio of Receipts to Required Disbursements (Line 3/Line 4)</i>	100%	118%	113%	113%	100%	112%
<b>Sewer</b>						
9 Receipts	\$ 297,634,449	\$ 703,512,249	\$ 718,374,552	\$ 733,083,541	\$ 65,174,294	\$ 2,517,779,085
10 MOU Adjustments	55,755,100	-	-	6,527,200	-	62,282,300
11 Adjusted Receipts	353,389,549	703,512,249	718,374,552	739,610,741	65,174,294	2,580,061,385
12 Disbursements	(341,835,625)	(703,407,313)	(725,121,160)	(724,424,942)	(59,144,149)	(2,553,933,189)
13 Receipts Net of Required Transfers	11,553,924	104,936	(6,746,608)	15,185,799	6,030,145	26,128,196
14 I&E Transfer	-	-	(22,698,100)	(22,547,700)	-	(45,245,800)
15 Shortfall Advance	-	-	-	-	-	-
16 Shortfall Repayment (principal)	-	-	-	9,367,355	1,437,142	10,804,497
17 Net Receipts	\$ 11,553,924	\$ 104,936	\$ (29,444,708)	\$ (7,361,901)	\$ 7,467,287	\$ (8,313,106)
18 <i>Ratio of Receipts to Required Disbursements (Line 11/Line 12)</i>	103%	100%	99%	102%	110%	101%
<b>Combined</b>						
19 Receipts	\$ 473,525,041	\$ 1,152,905,263	\$ 1,158,059,700	\$ 1,169,545,994	\$ 98,608,230	\$ 4,052,644,228
20 MOU Adjustments	74,201,200	-	-	6,527,200	-	80,728,400
21 Adjusted Receipts	547,726,241	1,152,905,263	1,158,059,700	1,176,073,194	98,608,230	4,133,372,628
22 Disbursements	(535,901,362)	(1,085,251,442)	(1,115,235,427)	(1,111,350,023)	(92,666,500)	(3,940,404,754)
23 Receipts Net of Required Transfers	11,824,879	67,653,821	42,824,273	64,723,171	5,941,730	192,967,874
24 I&E Transfer	-	-	(48,437,800)	(78,649,780)	-	(127,087,580)
25 Shortfall Advance	-	-	-	-	-	-
26 Shortfall Repayment	-	-	-	9,367,355	1,437,142	10,804,497
27 Net Receipts	\$ 11,824,879	\$ 67,653,821	\$ (5,613,527)	\$ (4,559,254)	\$ 7,378,872	\$ 76,684,792
28 <i>Ratio of Receipts to Required Disbursements (Line 21/Line 22)</i>	102%	106%	104%	106%	106%	105%

## APPENDIX

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$194,780.38	\$194,780.38	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$67,934.40	\$67,934.40	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$26,575.66	\$26,575.66	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$63,490.35	\$63,490.35	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$299,672.19	\$299,672.19	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$12,355.37	\$12,355.37	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$26,013.20	\$26,013.20	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$1,597,619.81	\$1,597,619.81	\$0.00	\$0.00	\$0.00
CENTER LINE	\$37,442.28	\$37,442.28	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$673,695.64	\$673,695.64	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$674,541.40	\$674,541.40	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$306,106.84	\$306,106.84	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,669,476.86	\$1,669,476.86	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$298,703.73	\$298,703.73	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$123,350.92	\$123,350.92	\$0.00	\$0.00	\$0.00
ECORSE	\$130,261.87	\$130,261.87	\$0.00	\$0.00	\$0.00
FARMINGTON	\$83,072.67	\$83,072.67	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$756,051.24	\$756,051.24	\$0.00	\$0.00	\$0.00
FERNDALE	\$85,322.40	\$85,322.40	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$99,419.36	\$99,419.36	\$0.00	\$0.00	\$0.00
FLINT	\$385,716.06	\$385,716.06	\$0.00	\$0.00	\$0.00
FRASER	\$97,154.09	\$97,154.09	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$139,564.06	\$139,564.06	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$27,855.06	\$27,855.06	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$45,285.45	\$45,285.45	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$113,565.14	\$113,565.14	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$122,351.90	\$122,351.90	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$48,344.98	\$48,344.98	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$133,928.04	\$133,928.04	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$119,426.59	\$119,426.59	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$66,676.61	\$66,676.61	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$126,873.49	\$126,873.49	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$117,684.33	\$117,684.33	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$7,455,746.59	\$206,572.64	\$98,117.93	\$99,878.81	\$7,051,177.21
HURON TOWNSHIP	\$124,633.38	\$124,633.38	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$113,816.36	\$113,816.36	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,217.22	\$1,217.22	\$0.00	\$0.00	\$0.00
INKSTER	\$204,172.53	\$204,172.53	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$26,073.10	\$26,073.10	\$0.00	\$0.00	\$0.00
LAPEER	\$117,394.78	\$117,394.78	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$22,715.84	\$22,715.84	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$196,547.24	\$196,547.24	\$0.00	\$0.00	\$0.00
LIVONIA	\$1,164,538.07	\$1,164,538.07	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$922,944.52	\$922,944.52	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$152,031.25	\$152,031.25	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MAYFIELD TOWNSHIP	\$4,652.89	\$4,652.89	\$0.00	\$0.00	\$0.00
MELVINDALE	\$54,855.28	\$54,855.28	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$32,031.82	\$32,031.82	\$0.00	\$0.00	\$0.00
NOCWA	\$3,798,201.26	\$3,798,201.26	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$65,330.21	\$65,330.21	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$456,093.76	\$456,093.76	\$0.00	\$0.00	\$0.00
NOVI	\$761,075.86	\$761,075.86	\$0.00	\$0.00	\$0.00
OAK PARK	\$114,180.53	\$114,180.53	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$8,062.33	\$8,062.33	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$90,400.86	\$90,400.86	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$365,248.33	\$365,248.33	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$255,608.70	\$255,608.70	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$50,589.64	\$50,589.64	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$76,421.60	\$76,421.60	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$25,666.49	\$25,666.49	\$0.00	\$0.00	\$0.00
ROMEO	\$22,892.52	\$22,892.52	\$0.00	\$0.00	\$0.00
ROMULUS	\$343,229.54	\$343,229.54	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$215,468.06	\$215,468.06	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$18,824.86	\$18,824.86	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,173,231.26	\$1,173,231.26	\$0.00	\$0.00	\$0.00
SOCWA	\$3,817,849.03	\$3,817,849.03	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$8,798.08	\$8,798.08	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$187,597.66	\$187,597.66	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$251,367.83	\$251,367.83	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$1,227,949.06	\$1,227,949.06	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$58,393.78	\$58,393.78	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$19,465.75	\$19,465.75	\$0.00	\$0.00	\$0.00
TAYLOR	\$753,207.00	\$753,207.00	\$0.00	\$0.00	\$0.00
TRENTON	\$185,079.04	\$185,079.04	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,069,213.55	\$1,069,213.55	\$0.00	\$0.00	\$0.00
UTICA	\$90,860.86	\$90,860.86	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$577,937.41	\$550,461.88	\$27,475.53	\$0.00	\$0.00
VILLAGE OF ALMONT	\$18,765.28	\$18,765.28	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$75,978.70	\$75,978.70	\$0.00	\$0.00	\$0.00
WARREN	\$865,394.93	\$865,394.93	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$186,899.23	\$186,899.23	\$0.00	\$0.00	\$0.00
WAYNE	\$258,675.66	\$258,675.66	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$1,742,270.10	\$1,742,270.10	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,019,023.95	\$1,019,023.95	\$0.00	\$0.00	\$0.00
WIXOM	\$213,465.35	\$213,465.35	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$136,945.93	\$136,945.93	\$0.00	\$0.00	\$0.00
YCUA	\$803,157.23	\$803,157.23	\$0.00	\$0.00	\$0.00
<b>TOTAL WATER ACCOUNTS</b>	<b>\$40,772,504.46</b>	<b>\$33,495,854.98</b>	<b>\$125,593.46</b>	<b>\$99,878.81</b>	<b>\$7,051,177.21</b>



## GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 07/31/19

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	\$85,599.50	\$85,599.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,881,500.00	\$2,881,500.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$31,940,744.11	\$467,900.00	\$467,900.00	\$467,900.00	\$30,537,044.11
MELVINDALE	\$126,900.00	\$126,900.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,747,700.00	\$3,747,700.00	\$0.00	\$0.00	\$0.00
OMID	\$6,461,100.00	\$6,461,100.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,480,100.00	\$4,480,100.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,056,000.00	\$2,056,000.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,100.00	\$4,100.00	\$0.00	\$0.00	\$0.00
<b>TOTAL SEWER ACCOUNTS</b>	<b>\$51,783,743.61</b>	<b>\$20,310,899.50</b>	<b>\$467,900.00</b>	<b>\$467,900.00</b>	<b>\$30,537,044.11</b>

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,612.35	\$1,612.35	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$19,485.31	\$19,485.31	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$366.30	\$366.30	\$0.00	\$0.00	\$0.00
BERKLEY	\$3,162.51	\$3,162.51	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$999.14	\$999.14	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$2,406.92	\$2,406.92	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$16,732.42	\$11,184.57	\$5,547.85	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,491.77	\$7,491.77	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$594,203.28	\$38,132.92	\$19,066.46	\$0.00	\$537,003.90
CENTER LINE	\$3,683.10	\$3,683.10	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$24,411.60	\$24,411.60	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$ (101.28)	\$0.00	\$0.00	\$0.00	\$ (101.28)
CITY OF FERNDALE	\$8,904.91	\$8,904.91	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLARKSTON	\$277.48	\$277.48	\$0.00	\$0.00	\$0.00
CLAWSON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$25,476.06	\$25,476.06	\$0.00	\$0.00	\$0.00
DEARBORN	\$36,969.96	\$36,969.96	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$9,548.08	\$9,548.08	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$106.64	\$106.64	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$6,470.70	\$6,470.70	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
FARMINGTON	\$4,046.54	\$4,046.54	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$4,960.88	\$4,960.88	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,088.99	\$2,088.99	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,182.65	\$1,182.65	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,590.26	\$2,590.26	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,175.13	\$4,175.13	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,896.19	\$1,896.19	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,166.76	\$3,166.76	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$6,285.50	\$6,285.50	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,679,363.70	\$8,051.44	\$3,962.59	\$0.00	\$1,667,349.67
HUNTINGTON WOODS	\$572.36	\$572.36	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$4,813.00	\$4,813.00	\$0.00	\$0.00	\$0.00
INKSTER	\$11,119.74	\$11,119.74	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$803.30	\$803.30	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,406.81	\$1,406.81	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$325.36	\$325.36	\$0.00	\$0.00	\$0.00
LIVONIA	\$40,305.48	\$40,305.48	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MACOMB TWP	\$206.29	\$206.29	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$18,609.31	\$18,609.31	\$0.00	\$0.00	\$0.00
MELVINDALE	\$3,629.99	\$3,629.99	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$4,208.19	\$4,208.19	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$142,576.20	\$9,148.06	\$4,574.03	\$0.00	\$128,854.11
NOVI	\$17,372.17	\$17,372.17	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,723.45	\$6,723.45	\$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)	\$5,442.73	\$5,442.73	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,071.90	\$1,071.90	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$547.54	\$547.54	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$396,856.20	\$25,462.54	\$12,731.27	\$0.00	\$358,662.39
REDFORD TOWNSHIP	\$11,551.75	\$11,551.75	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$18,276.47	\$18,276.47	\$0.00	\$0.00	\$0.00
ROMULUS	\$926.07	\$926.07	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,929.74	\$14,929.74	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,513.62	\$13,513.62	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,457.40	\$12,457.40	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$28,464.89	\$28,464.89	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,804.28	\$3,804.28	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$12,050.97	\$12,050.97	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,372.28	\$31,372.28	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$384.09	\$384.09	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$37,196.48	\$37,196.48	\$0.00	\$0.00	\$0.00
UTICA	\$6,021.76	\$6,021.76	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,017.52	\$2,017.52	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,400.66	\$1,400.66	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$12,485.35	\$12,485.35	\$0.00	\$0.00	\$0.00
WAYNE	\$5,017.87	\$5,017.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$920.91	\$920.91	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,363.09	\$6,363.09	\$0.00	\$0.00	\$0.00
WESTLAND	\$45,975.51	\$45,975.51	\$0.00	\$0.00	\$0.00
<b>TOTAL IWC ACCOUNTS</b>	<b>\$3,393,684.58</b>	<b>\$656,033.59</b>	<b>\$45,882.20</b>	<b>\$0.00</b>	<b>\$2,691,768.79</b>

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$2,637.58	\$2,637.58	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$4,310.88	\$4,310.88	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$201.38	\$201.38	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$87.90	\$87.90	\$0.00	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$729.87	\$729.87	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$32,159.71	\$32,159.71	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$5,861.83	\$5,861.83	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$22,853.22	\$22,853.22	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNING	\$956.23	\$956.23	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$16,533.05	\$0.00	\$0.00	\$0.00	\$16,533.05
ALL CHEM CORP, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALPHA STAMPING COMPANY	\$348.62	\$348.62	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERITI MFG. CO.	\$5,718.90	\$5,718.90	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$51.66	\$51.66	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$4.68	\$4.68	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$212.70	\$212.70	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$1.01	\$1.01	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$228.80	\$0.00	\$119.85	\$0.00	\$108.95
BARON INDUSTRIES	\$1,313.08	\$1,313.08	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$87.03	\$87.03	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$39.47	\$39.47	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BATCH BREWING COMPANY	\$203.93	\$175.05	\$0.00	\$28.88	\$0.00
BAYS MICHIGAN CORPORATION	\$14.24	\$14.24	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$17,792.62	\$17,792.62	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$355.25	\$54.24	\$0.00	\$72.32	\$228.69
BOZEK'S MARKET	\$55.95	\$55.95	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$6,678.87	\$6,668.87	\$10.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$ (83.23)	\$0.00	\$0.00	\$0.00	\$ (83.23)
BROOKS BREWING, LLC.	\$214.82	\$107.19	\$0.00	\$107.63	\$0.00
BROWN IRON BREWHOUSE	\$43.89	\$43.89	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CAPITAL REPRODUCTIONS	\$1.62	\$1.62	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$15,975.99	\$15,975.99	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,377.63	\$42.72	\$23.73	\$23.73	\$2,287.45
CINTAS CORP. - MACOMB TWP.	\$52,552.05	\$52,552.05	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$26,758.36	\$26,758.36	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$10,865.38	\$10,865.38	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$24.07	\$15.95	\$8.12	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$360.82	\$360.82	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$2,422.38	\$2,422.38	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$3,625.78	\$3,625.78	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$ (1,925.97)	\$0.00	\$0.00	\$0.00	\$ (1,925.97)
DARLING INGREDIENTS, INC.	\$4,910.47	\$4,910.47	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$373.49	\$373.49	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$44.15	\$44.15	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE	\$6,022.07	\$6,022.07	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$8,285.76	\$8,285.76	\$0.00	\$0.00	\$0.00
DETROIT BEER	\$112.79	\$112.79	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$497,306.20	\$497,306.20	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$2,906.29	\$2,906.29	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$25.18	\$25.18	\$0.00	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$110.70	\$110.70	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$29,184.23	\$29,184.23	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$119.91	\$119.91	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$997.18	\$997.18	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,280.16	\$1,280.16	\$0.00	\$0.00	\$0.00
DOWNEY BREWING COMPANY	\$89.55	\$40.47	\$0.00	\$49.08	\$0.00
E.W. GROBBEL'S SONS, INC.	\$2,839.51	\$2,839.51	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMPF	\$283.68	\$160.13	\$0.00	\$123.55	\$0.00
ENVIROSOLIDS, L.L.C.	\$28,710.82	\$28,710.82	\$0.00	\$0.00	\$0.00



## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$4,223.71	\$4,223.71	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$12,549.28	\$12,549.28	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$ (1,136.47)	\$0.00	\$0.00	\$0.00	\$ (1,136.47)
EQ DETROIT, INC.	\$ (4,588.50)	\$0.00	\$0.00	\$0.00	\$ (4,588.50)
ETON ST BREWERY- GRIFFIN CLF	\$3,428.58	\$3,428.58	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$302.01	\$302.01	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$25.24	\$25.24	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$9,034.83	\$9,034.83	\$0.00	\$0.00	\$0.00
FORD NEW MODEL PROGRAM	\$623.68	\$623.68	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$71.94	\$71.94	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$339.55	\$339.55	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$5,586.46	\$2,762.80	\$1,343.60	\$1,480.06	\$0.00
GENERAL LINEN SUPPLY CO.	\$17,385.26	\$11,517.87	\$4,704.48	\$1,162.91	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$86.61	\$86.61	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$72.49	\$72.49	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$94.12	\$94.12	\$0.00	\$0.00	\$0.00
GREAT BARABOO BREWING CO.	\$ (1,802.64)	\$0.00	\$0.00	\$0.00	\$ (1,802.64)
HACIENDA MEXICAN FOODS	\$2,152.13	\$708.35	\$621.91	\$621.91	\$199.96
HENKEL CORPORATION	\$238.85	\$238.85	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOME STYLE FOOD INC.	\$6,051.95	\$6,051.95	\$0.00	\$0.00	\$0.00
HOMEGROWN BREWING COMPANY	\$61.99	\$61.99	\$0.00	\$0.00	\$0.00
HOODS CLEANERS	\$211.33	\$0.00	\$0.00	\$0.00	\$211.33
HOUGHTON INTERNATIONAL INC.	\$167.50	\$167.50	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$147.08	\$147.08	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$2,720.91	\$2,720.91	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$545.15	\$545.15	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$466.55	\$466.55	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$2,763.82	\$2,763.82	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$7.91	\$7.91	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$(53.16)	\$(53.16)	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$72.32	\$37.88	\$0.00	\$34.44	\$0.00
KAR NUT PRODUCTS	\$1,224.03	\$1,224.03	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$1,314.90	\$1,314.90	\$0.00	\$0.00	\$0.00
KUHNHENN BREWING	\$228.17	\$120.54	\$0.00	\$107.63	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$1,207.56	\$1,207.56	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$114.34	\$114.34	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$3,713.09	\$3,713.09	\$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	\$55.97	\$55.97	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$1,827.61	\$1,827.61	\$0.00	\$0.00	\$0.00
MCCLURE'S PICKLES	\$452.09	\$452.09	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELLO MEATS INC, - KUBISCH S	\$139.88	\$139.88	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$490.52	\$490.52	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$104.59	\$104.59	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$85,165.97	\$85,165.97	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$2,772.93	\$2,772.93	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$574.50	\$574.50	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MILANO BAKERY	\$1,538.88	\$1,538.88	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$3,834.21	\$3,834.21	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$128.77	\$25.00	\$0.00	\$0.00	\$103.77
MOTOR CITY BREWING WORKS	\$781.77	\$0.00	\$175.22	\$0.00	\$606.55
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEZ	\$51.90	\$51.90	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$147.20	\$147.20	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$148.52	\$148.52	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$1,879.70	\$1,879.70	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$75,415.65	\$75,415.65	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$30.81	\$30.81	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$78,932.64	\$78,932.64	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$1,775.60	\$1,775.60	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$332.36	\$332.36	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$1,378.50	\$1,378.50	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$75.64	\$75.64	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$42.65	\$21.61	\$0.00	\$21.04	\$0.00
RIVER ROUGE BREWING COMPANY	\$606.64	\$606.64	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$937.83	\$937.83	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$261.47	\$261.47	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$5,602.96	\$1,131.61	\$0.00	\$1,388.30	\$3,083.05
RTT	\$27,016.28	\$1,512.66	\$718.62	\$942.79	\$23,842.21
SEAFARE FOODS, INC.	\$223.11	\$223.11	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$828.06	\$0.00	\$98.74	\$0.00	\$729.32
SMITH-WATKINS, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$47.85	\$47.85	\$0.00	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$1,474.66	\$148.57	\$77.14	\$80.00	\$1,168.95
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$(1,162.69)	\$0.00	\$0.00	\$0.00	\$(1,162.69)
TOM LAUNDRY CLEANERS	\$8.71	\$8.71	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$20.66	\$20.66	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$24,284.16	\$24,284.16	\$0.00	\$0.00	\$0.00

## GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 07/31/19

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
U-METCO, INC.	\$2,228.17	\$2,228.17	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$62,165.83	\$62,165.83	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$2,695.04	\$2,695.04	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$12.04	\$12.04	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$304.58	\$304.58	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
URBANREST BREWING COMPANY	\$80.87	\$80.87	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$759.26	\$759.26	\$0.00	\$0.00	\$0.00
US ECOLOGY ROMULUS, INC.	\$2,476.63	\$2,476.63	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$5,048.41	\$5,048.41	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$13,435.52	\$13,435.52	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$6,300.55	\$6,300.55	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$ (36.26)	\$0.00	\$0.00	\$0.00	\$ (36.26)
WIGLEY'S MEAT PROCESS	\$545.53	\$545.53	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$833.67	\$833.67	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$167.85	\$167.85	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$7,028.90	\$7,028.90	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$3,060.52	\$3,060.52	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>TOTAL POLLUTANT SURCHARGE ACCOUNTS</b>	<b>\$1,311,242.43</b>	<b>\$1,258,729.23</b>	<b>\$7,901.41</b>	<b>\$6,244.27</b>	<b>\$38,367.52</b>

## City of Highland Park Billings and Collections

	<u>Water</u>	<u>Sewer</u>	<u>IWC</u>	<u>Cumulative Total</u>
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	<u>(65,652)</u>	<u>(2,206,211)</u>	<u>-</u>	<u>(2,271,863)</u>
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	<u>-</u>	<u>(1,612,633)</u>	<u>-</u>	<u>(1,612,633)</u>
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	<u>-</u>	<u>(1,444,623)</u>	<u>-</u>	<u>(1,444,623)</u>
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	<u>-</u>	<u>(2,022,335)</u>	<u>-</u>	<u>(2,022,335)</u>
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	<u>-</u>	<u>(2,309,186)</u>	<u>-</u>	<u>(2,309,186)</u>
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	<u>-</u>	<u>(4,108,108)</u>	<u>-</u>	<u>(4,108,108)</u>
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings (12 Months)	1,238,797	5,617,100	51,220	6,907,117
FY 2019 Payments (12 Months)	<u>-</u>	<u>(5,241,583)</u>	<u>-</u>	<u>(5,241,583)</u>
				-
June 30, 2019 Balance	\$ 7,351,045	\$ 31,472,844	\$ 1,675,243	\$ 40,499,132
FY 2020 Billings (1 Month)	104,702	467,900	4,121	576,722
FY 2020 Payments (1 Months)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
				-
<b>Balance as of June 30, 2020</b>	<b><u>\$ 7,455,747</u></b>	<b><u>\$ 31,940,744</u></b>	<b><u>\$ 1,679,363</u></b>	<b><u>\$ 41,075,854</u></b>



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

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

**Re:** Quarterly Water Residential Assistance Program Report as of June 30, 2019

**Background:** The Water Residential Assistance Program (“WRAP”) provides sustainable funding for qualifying low-income residents served by the Great Lakes Water Authority’s (“GLWA”) customers. The program is funded by GLWA at an amount equal to 0.5 percent of budgeted revenues with the budgeted FY 2020 funding level of \$4.9 million combined for water and sewer services.

The scope of funding uses includes a) payment assistance and b) water audit and water conservation measures. Eligible residential customers with a past due bill and/or who are in active shut off can receive assistance with paying down arrears and receive \$25 toward monthly bill payment assistance annually up to \$1,000. High volume water users can receive a one-time home audit and home water conservation services up to \$1,000. Maximum annual assistance per household is \$2,000. To participate in WRAP, an applicant must have household gross incomes at or below 150% of the federal poverty income thresholds. Customers with water usage at or above 120% of the average residential usage are eligible to participate in a water audit and install water conservation measures. WRAP participants are also encouraged to participate in both financial coaching and water conservation workshops as well as other support services. The program is administered by Wayne Metro Community Action Agency (“Wayne Metro”), a nonprofit agency.

The WRAP began assisting residents in the GLWA service area on March 1, 2016 and to date has committed over \$13 million in assistance and conservation funds to qualified WRAP participants. WRAP has the potential to serve over 100 communities within the GLWA service area, but to assist qualified households, each community must opt into the program and sign a Memorandum of Agreement (MOA) with Wayne Metro.

**Analysis:** The following is a recap of key aspects the program to date.

### WRAP Community Participation

A community participating in WRAP must receive water and/or sewer service from GLWA. Eligible communities must formally opt into the program by signing a memorandum of agreement with Wayne Metro. To date, 76 communities have opted into WRAP. A list of

current participating communities is presented in **Table 1 – WRAP Participating Communities**.

**Table 1 – WRAP Participating Communities**

This table shows the level of participation that each community has chosen. Option 1 includes bill assistance, arrearage assistance and conservation. Option 2 includes bill assistance and conservation and Option 3 includes conservation only.

Member Partner	Option #1	Option #2	Option #3	In Progress	No Response	Not Opted In
<b>Wayne County</b>						
Allen Park	X					
Belleville						X
Brownstown Township	X					
Canton Township	X					
Dearborn	X					
Dearborn Heights	X					
Detroit	X					
Ecorse	X					
Flat Rock	X					
Garden City	X					
Gibraltar		X				
Grosse Ile						X
Grosse Pointe						X
Grosse Pointe Farms						X
Grosse Pointe Park						X
Grosse Pointe Shores	X					
Grosse Pointe Woods					X	
Hamtramck	X					
Harper Woods		X				
Huron Township						X
Inkster		X				
Lincoln Park		X				
Livonia	X					
Melvindale	X					
Northville	X					
Northville Township					X	
Plymouth		X				
Plymouth Township						X
Redford Township	X					
River Rouge	X					
Riverview						X
Rockwood						X
Romulus		X				
Southgate	X					
Sumpter Township						X
Taylor		X				
Trenton	X					
Van Buren Township	X					
Wayne	X					
Westland	X					
Woodhaven		X				
<b>Oakland County</b>						
Auburn Hills					X	
Berkley	X					
Beverly Hills	X					
Bingham Farms	X					
Birmingham	X					
Bloomfield Hills	X					
Bloomfield Township						X
Clawson	X					
Commerce Township	X					
Farmington	X					
Farmington Hills	X					
Ferndale	X					
Hazel Park		X				
Huntington Woods	X					
Keego Harbor	X					
Lake Orion					X	
Lathrup Village	X					
Madison Heights	X					
Novi						X
Oak Park		X				
Orchard Lake	X					
Orion Township	X					
Oxford	X					
Pleasant Ridge	X					
Pontiac	X					
Rochester Hills						X
Royal Oak	X					
Royal Oak Township	X					
Southfield	X					
Sylvan Lake						X
Troy					X	
Walled Lake				X		
Waterford Township				X		
West Bloomfield Twp.						
Wixom						
<b>Monroe County</b>						
Ash Township	X					
Berlin Township					X	
South Rockwood					X	
<b>Macomb County</b>						
Centerline	X					
Chesterfield Township	X					
Clinton Township		X				
Eastpointe	X					
Fraser	X					
Harrison Township				X		
Lenox Township				X		
Macomb Township	X					
New Haven	X					
Roseville					X	
Shelby Township	X					
St. Clair Shores	X					
Sterling Heights	X					
Utica	X					
Warren	X					
Washington Township		X				
<b>Washtenaw County</b>						
Augusta Township	X					
Pittsfield Township	X					
Superior Township	X					
Ypsilanti	X					
Ypsilanti Township	X					
<b>Lapeer County</b>						
Almont		X				
Imlay City					X	
Lapeer	X					
<b>Genesee County</b>						
Flint	X					
<b>St. Clair County</b>						
Burtchville Twp.					X	



## WRAP Activity

Monies are transferred from GLWA to Wayne Metro as needed to fund the program and support the WRAP Assistance and Conservation efforts. Wayne Metro maintains records of this activity which are reviewed and monitored by GLWA. Following are summaries of this activity for current and prior fiscal years.

**Table 2 – WRAP Activity for FY 2019**

This table summarizes the budgeted assistance and conservation funds for the City of Detroit and the participating counties within the GLWA service area for FY 2019. The City of Detroit and the City of Flint have fully committed their allocated funds. The participating counties have significant uncommitted balances through the end of FY 2019.

County/City	July 1, 2018 - June 30, 2019				
	Allocated Assistance and Conservation	Committed Assistance and Conservation	Reallocated Assistance and Conservation	Committed Reallocated Assistance and Conservation	Remaining Balance
<b>Wayne County</b>					
City of Detroit	1,732,962	1,732,962	-	-	-
Out Wayne	1,009,805	489,059	-	-	520,746
<b>Total Wayne County</b>	<b>2,742,767</b>	<b>2,222,021</b>	<b>-</b>	<b>-</b>	<b>520,746</b>
<b>Oakland County</b>	1,068,211	88,434	-	-	979,777
<b>Macomb County</b>	557,340	100,660	-	-	456,680
<b>Genesee County</b>	-	-	-	-	-
City of Flint	21,211	21,211	-	-	-
<b>Washtenaw County</b>	49,054	17,477	-	-	31,577
<b>Lapeer County</b>	13,725	-	-	-	13,725
<b>Monroe County</b>	7,882	-	-	-	7,882
<b>St. Clair County</b>	3,529	-	-	-	3,529
<b>Total</b>	<b>4,463,719</b>	<b>2,449,803</b>	<b>-</b>	<b>-</b>	<b>2,013,916</b>

**Table 3 – WRAP Activity March 2, 2016 through June 30, 2019**

This table shows the WRAP cashflow of budgeted and committed funds in total and for each of the participating counties and the City of Detroit as of June 30, 2019. From March 1, 2016 to June 30, 2019, \$16.8 million was budgeted for WRAP bill assistance and conservation assistance and \$13.1 million was utilized by WRAP participants during that time. As of June 30, 2019, the suburban counties still had uncommitted funds (combined assistance and conservation) of over \$2.5 million. The City of Detroit had uncommitted funds of \$794,400 million and the City of Flint had uncommitted funds of \$427,756 due to the reallocation of the uncommitted FY 2018 suburban assistance funds.

# Table 3

## TOTAL Activity March 1, 2016 to June 30, 2019

Row	Sources (Net Revenues)	Detroit	Out-Wayne County	Oakland County	Macomb County	Washtenaw County	St Clair County	Lapeer County	Monroe County	Genesee County	City of Flint	Total
1	<b>FY 2016 Assistance Budget Allocation</b>											
2	Bill and Arreage Assistance	\$ 1,238,736	\$ 748,629	\$ 740,155	\$ 379,764	\$ 35,419	\$ 3,051	\$ 10,080	\$ 5,093	\$ 63,842	\$ -	\$ 3,224,769
3	Home Audit and Repairs	288,022	174,066	172,096	88,300	8,235	709	2,344	1,194	14,500	-	749,457
4	<b>Total FY 2016 Assistance Budget Allocation</b>	<b>\$ 1,526,759</b>	<b>\$ 922,695</b>	<b>\$ 912,250</b>	<b>\$ 468,064</b>	<b>\$ 43,654</b>	<b>\$ 3,760</b>	<b>\$ 12,424</b>	<b>\$ 6,277</b>	<b>\$ 78,342</b>	<b>\$ -</b>	<b>\$ 3,974,226</b>
5	<b>FY 2017 Assistance Budget Allocation</b>											
6	Bill and Arreage Assistance	\$ 1,278,103	\$ 806,833	\$ 774,825	\$ 400,804	\$ 37,998	\$ 2,431	\$ 10,059	\$ 5,561	\$ -	\$ -	\$ 3,316,615
7	Home Audit and Repairs	297,856	188,029	180,570	93,406	8,855	578	2,344	1,296	-	-	772,934
8	<b>Total FY 2017 Assistance Budget Allocation</b>	<b>\$ 1,575,960</b>	<b>\$ 994,862</b>	<b>\$ 955,395</b>	<b>\$ 494,209</b>	<b>\$ 46,853</b>	<b>\$ 3,009</b>	<b>\$ 12,403</b>	<b>\$ 6,858</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,089,549</b>
9	<b>FY 2018 Assistance Budget Allocation</b>											
10	Bill and Arreage Assistance	\$ 1,303,229	\$ 848,677	\$ 827,662	\$ 429,388	\$ 40,961	\$ 2,604	\$ 9,970	\$ 5,908	\$ 28,679	\$ -	\$ 3,497,078
11	Home Audit and Repairs	303,712	197,780	192,883	100,067	9,546	607	2,323	1,377	6,684	-	814,979
12	<b>Total FY 2018 Assistance Budget Allocation</b>	<b>\$ 1,606,941</b>	<b>\$ 1,046,457</b>	<b>\$ 1,020,545</b>	<b>\$ 529,455</b>	<b>\$ 50,507</b>	<b>\$ 3,211</b>	<b>\$ 12,294</b>	<b>\$ 7,285</b>	<b>\$ 35,363</b>	<b>\$ -</b>	<b>\$ 4,312,057</b>
13	<b>FY 2019 Assistance Budget Allocation</b>											
14	Bill and Arreage Assistance	\$ 1,405,432	\$ 818,952	\$ 866,319	\$ 452,003	\$ 39,783	\$ 2,862	\$ 11,131	\$ 6,392	\$ -	\$ 17,202	\$ 3,620,075
15	Home Audit and Repairs	327,530	190,853	201,892	105,337	9,271	667	2,594	1,490	-	4,009	843,643
16	<b>Total FY 2019 Assistance Budget Allocation</b>	<b>\$ 1,732,962</b>	<b>\$ 1,009,805</b>	<b>\$ 1,068,211</b>	<b>\$ 557,340</b>	<b>\$ 49,054</b>	<b>\$ 3,529</b>	<b>\$ 13,725</b>	<b>\$ 7,882</b>	<b>\$ -</b>	<b>\$ 21,211</b>	<b>\$ 4,463,718</b>
17	<b>NET FY 2016-2019 Assistance Available</b>	<b>\$ 6,442,621</b>	<b>\$ 3,973,819</b>	<b>\$ 3,956,402</b>	<b>\$ 2,049,068</b>	<b>\$ 190,069</b>	<b>\$ 13,509</b>	<b>\$ 50,846</b>	<b>\$ 28,301</b>	<b>\$ 113,705</b>	<b>\$ 21,211</b>	<b>\$ 16,839,550</b>
18	<b>Reallocation of Uncommitted Funds</b>											
19	Reallocation of Uncommitted Funds from FY 2016 (1)											
20	Bill and Arreage Assistance Reallocated to Detroit	\$ 1,664,833	\$ (718,353)	\$ (591,163)	\$ (355,316)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	Uncommitted FY 2016 Conservation Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	Bill and Arreage Assistance Reallocated to Flint	\$ -	\$ -	\$ -	\$ -	\$ (35,419)	\$ (3,051)	\$ (10,080)	\$ (5,093)	\$ (63,842)	\$ 117,485	\$ -
23	<b>Total Reallocation of Uncommitted Funds from FY 2016</b>	<b>\$ 1,664,833</b>	<b>\$ (718,353)</b>	<b>\$ (591,163)</b>	<b>\$ (355,316)</b>	<b>\$ (35,419)</b>	<b>\$ (3,051)</b>	<b>\$ (10,080)</b>	<b>\$ (5,093)</b>	<b>\$ (63,842)</b>	<b>\$ 117,485</b>	<b>\$ -</b>
24	<b>Reallocation of Uncommitted Funds from FY 2017 (2)</b>											
25	FY 2017 Reallocation of Assistance Funds	\$ 549,784	\$ (486,355)	\$ (268,078)	\$ (262,634)	\$ (28,401)	\$ (2,431)	\$ (10,059)	\$ (5,561)	\$ -	\$ 307,535	\$ (206,200)
26	FY 2017 Reallocation of Conservation Funds	237,197	(71,911)	(62,120)	(6,248)	(5,866)	(405)	(1,641)	(907)	-	118,100	206,200
27	<b>Total Reallocation of Uncommitted Funds from FY 2017</b>	<b>\$ 786,981</b>	<b>\$ (558,266)</b>	<b>\$ (330,198)</b>	<b>\$ (268,882)</b>	<b>\$ (34,267)</b>	<b>\$ (2,836)</b>	<b>\$ (11,700)</b>	<b>\$ (6,468)</b>	<b>\$ -</b>	<b>\$ 425,635</b>	<b>\$ -</b>
28	<b>Proposed Reallocation of Uncommitted Funds from FY 2018 (3)</b>											
29	FY 2018 Reallocation of Assistance Funds	\$ 438,750	\$ (298,775)	\$ (313,067)	\$ (241,763)	\$ (28,966)	\$ (2,604)	\$ (9,970)	\$ (5,908)	\$ (28,679)	\$ 236,250	\$ (254,732)
30	FY 2018 Reallocation of Conservation Funds	355,650	(96,982)	(116,197)	(59,108)	(9,145)	(607)	(2,323)	(1,377)	(6,684)	191,505	254,732
31	<b>Total Proposed Reallocation of Uncommitted Funds from FY 2018</b>	<b>\$ 794,400</b>	<b>\$ (395,757)</b>	<b>\$ (429,264)</b>	<b>\$ (300,871)</b>	<b>\$ (38,111)</b>	<b>\$ (3,211)</b>	<b>\$ (12,293)</b>	<b>\$ (7,285)</b>	<b>\$ (35,363)</b>	<b>\$ 427,755</b>	<b>\$ -</b>
32	<b>Total Reallocation of Uncommitted Funds</b>	<b>\$ 3,246,213</b>	<b>\$ (1,672,375)</b>	<b>\$ (1,350,625)</b>	<b>\$ (925,069)</b>	<b>\$ (9,097)</b>	<b>\$ (9,097)</b>	<b>\$ (34,073)</b>	<b>\$ (99,205)</b>	<b>\$ (99,205)</b>	<b>\$ 970,875</b>	<b>\$ -</b>
33	<b>NET FY 2016-2019 Assistance Available</b>	<b>\$ 9,688,834</b>	<b>\$ 2,301,444</b>	<b>\$ 2,605,777</b>	<b>\$ 1,123,999</b>	<b>\$ 82,272</b>	<b>\$ 4,411</b>	<b>\$ 16,772</b>	<b>\$ 9,455</b>	<b>\$ 14,500</b>	<b>\$ 992,086</b>	<b>\$ 16,839,550</b>
34	<b>Uses 3/01/2016 to 6/30/2019</b>											
35	Home Audits and Repair Paid to Date	1,454,318	259,759	221,369	159,776	3,067	-	-	-	-	122,109	2,220,398
36	Bill Assistance and Arreages Paid to Date	4,247,810	698,962	970,804	311,922	19,735	-	-	-	-	153,083	6,402,318
37	<b>Total Uses 3/01/2016 to 6/30/2019</b>	<b>\$ 5,702,128</b>	<b>\$ 958,721</b>	<b>\$ 1,192,173</b>	<b>\$ 471,698</b>	<b>\$ 22,803</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 275,192</b>	<b>\$ 8,622,716</b>
38	<b>Less: Committed Funds 3/01/2016 to 6/30/2019</b>											
39	Future Bill Assistance	\$ 1,176,727	\$ 134,477	\$ 36,696	\$ 40,212	\$ 3,006	\$ -	\$ -	\$ -	\$ -	\$ 106,399	\$ 1,497,516
40	Future Arreage Assistance	2,015,579	484,900	209,878	70,043	14,136	-	-	-	-	182,740	2,977,276
41	<b>Total Committed Funds 3/01/2016 to 6/30/2019</b>	<b>\$ 3,192,306</b>	<b>\$ 619,377</b>	<b>\$ 246,574</b>	<b>\$ 110,255</b>	<b>\$ 17,142</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 289,138</b>	<b>\$ 4,474,792</b>
42	<b>Total Expenditures/Committed Funds</b>	<b>\$ 8,894,435</b>	<b>\$ 1,578,098</b>	<b>\$ 1,438,747</b>	<b>\$ 581,953</b>	<b>\$ 39,945</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 564,331</b>	<b>\$ 13,097,508</b>
43	<b>Uncommitted Funds as of 6/30/2019 (line 31 - line 40)</b>	<b>\$ 794,400</b>	<b>\$ 723,345</b>	<b>\$ 1,167,029</b>	<b>\$ 542,046</b>	<b>\$ 42,327</b>	<b>\$ 4,411</b>	<b>\$ 16,772</b>	<b>\$ 9,455</b>	<b>\$ 14,500</b>	<b>\$ 427,756</b>	<b>\$ 3,742,042</b>
44	<b>Summary of Uncommitted Funds 6/30/2019</b>											
45	Uncommitted Conservation	\$ 355,650	\$ 322,077	\$ 347,754	\$ 161,978	\$ 17,829	\$ 1,549	\$ 5,641	\$ 3,063	\$ 14,500	\$ 191,505	\$ 1,421,547
46	Uncommitted Assistance	438,750	401,268	819,275	380,068	24,498	2,862	11,131	6,392	-	236,251	2,320,495
47	<b>Total Uncommitted Funds as of 6/30/2019</b>	<b>\$ 794,400</b>	<b>\$ 723,345</b>	<b>\$ 1,167,029</b>	<b>\$ 542,046</b>	<b>\$ 42,327</b>	<b>\$ 4,411</b>	<b>\$ 16,772</b>	<b>\$ 9,455</b>	<b>\$ 14,500</b>	<b>\$ 427,756</b>	<b>\$ 3,742,042</b>

## Reallocation of Funds

After the completion of each fiscal year, Wayne Metro recommends to the GLWA Board of Directors the reallocation of uncommitted assistance and conservation funds to those member partners that have fully committed its annual budgeted funds, due to the increased need within their community.

***Table 4 – Total WRAP Reallocation of Uncommitted Funds***

Reallocated Funds	July 1, 2018 - June 30, 2019		
	Detroit	Flint	Total
FY 2016	\$1,664,833	\$117,485	\$1,782,318
FY 2017	786,981	425,635	1,212,616
FY 2018	794,400	427,755	1,222,155
<b>Total Reallocation</b>	<b>\$3,246,214</b>	<b>\$970,875</b>	<b>\$4,217,089</b>

This table summarizes the Board authorized reallocation of uncommitted FY 2016 to FY 2018 WRAP funds to the City of Detroit and the City of Flint. To date, \$3,246,213 has been reallocated to Detroit and \$970,875 to the City of Flint from the other counties within GLWA.

## FY 2020 WRAP Budget and Allocations

Consistent with the previous fiscal years funding allocation for WRAP, the FY 2020 budgeted allocation is based on the proportionality of the revenues derived from each county and the City of Detroit, based on the approved FY 2020 water and sewer service charges and budget.

**Table 5 - FY 2020 WRAP Budget and Allocations**

This table shows the allocation of the FY 2020 budgeted WRAP funds, which is reflective of the approved FY 2020 budget of \$4.9 million.

Community	Budgeted Direct Assistance	Budgeted Conservation Assistance	Budgeted Administration Costs	Total Budgeted Revenue	Allocation
<b>WAYNE COUNTY</b>					
CITY OF DETROIT	\$1,405,874	\$351,469	\$210,900	\$1,968,243	40.43%
SUBURBAN	685,847	171,462	102,900	960,209	19.72%
<b>TOTAL WAYNE COUNTY</b>	<b>\$2,091,722</b>	<b>\$522,930</b>	<b>\$313,800</b>	<b>\$2,928,452</b>	<b>62.86%</b>
<b>OAKLAND COUNTY</b>	825,138	206,285	82,600	1,114,023	22.88%
<b>MACOMB COUNTY</b>	533,093	133,273	53,320	719,687	14.78%
<b>GENESEE COUNTY</b>	17,528	4,382	1,753	23,663	0.49%
<b>WASHTENAW COUNTY</b>	39,556	9,889	3,960	53,405	1.10%
<b>LAPEER COUNTY</b>	12,225	3,056	1,223	16,504	0.34%
<b>MONROE COUNTY</b>	6,262	1,565	627	8,454	0.17%
<b>ST. CLAIR COUNTY</b>	2,897	724	290	3,912	0.08%
<b>TOTAL</b>	<b>\$3,528,422</b>	<b>\$882,105</b>	<b>\$457,573</b>	<b>\$4,868,100</b>	<b>100.00%</b>

## Approved Program Changes

As a first-of-its-kind assistance program in the state of Michigan, changes to WRAP may be required as the program matures. Following is a summary of program changes made to WRAP since 2016, as approved by the GLWA Board of Directors.

### November 30, 2016:

Allow customer communities to opt into program features that best meet the needs of their community. This is captured in the three options below:

#### *Option 1*

- Assistance up to \$300 per year in the form of \$25 monthly bill credits. (Applicable if client continues to pay all current monthly/quarterly charges).
- Up to \$700 in arrearage assistance to be paid 50% (up to \$350) after six months in the program, and 50% (up to \$350) after one year. Enrollees are eligible for a second-year arrearage assistance totaling \$700.

- One-time home water audit for households above 120% of average usage.
- Home repairs up to \$1,000 per household to fix minor plumbing issues leading to high usage (finding and fixing leaks, upgrading water using fixtures) and/or minor lead replacement assistance.

*Option 2*

- Assistance up to \$300 per year in the form of \$25 monthly bill credits. (Applicable if client continues to pay all current monthly/quarterly charges).
- One-time home water audit for households above 120% of average usage.
- Home repairs up to \$1,000 per household to fix minor plumbing issues leading to high usage (finding and fixing leaks, upgrading water using fixtures) and/or minor lead replacement assistance.

*Option 3*

- One-time home water audit for households above 120% of average usage.
- Home repairs up to \$1,000 per household to fix minor plumbing issues leading to high usage (finding and fixing leaks, upgrading water using fixtures) and/or minor lead replacement assistance.

**August 22, 2018:**

Removal of the 120% usage requirement for the lead fixture replacement for in-home faucets that pre-date the lead-free plumbing code change.

**January 23, 2019:**

Extend the 2-year time limitation to provide monthly bill assistance to senior citizens and disabled citizens.

**Budget Impact:** None

**Proposed Action:** Receive and file.



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

**From:** Kim Garland, Reporting & Compliance Manager

**Re:** August 2019 Audit Committee Binder

**Background:** The August 2019 Audit Committee meeting was cancelled. An Audit Committee Binder was, however, prepared and posted at [www.glwater.org](http://www.glwater.org). Following are key topics from the binder prepared and included with the October 2019 Audit Committee package.

- An update related to closing out FY 2018 and FY 2019 Shared Services activity by the end of FY 2020.
- The Quarterly Investment Report which highlights the improvements in GLWA investment earnings over time due to long-term planning and portfolio management. Despite these efforts, the recent economic downturn in interest rates is causing an ongoing review of FY 2020 investment income projections and strategies to lessen the impact.
- The May 2019 Monthly Financial Report Binder which presents positive budget performance for the GLWA regional system and continued reduction of the DWSD local system sewer shortfall for FY 2019.

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



## Financial Services Audit Committee Communication

**Date:** October 18, 2019

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

**From:** Kim Garland, Reporting & Compliance Manager

**Re:** September 2019 Audit Committee Binder

**Background:** The September 2019 Audit Committee meeting was cancelled. An Audit Committee Binder was, however, prepared and posted at [www.glwater.org](http://www.glwater.org). Following are key topics from the binder prepared and included with the October 2019 Audit Committee package.

- An update on potential debt refunding transactions due resulting from recent economic conditions and an FY 2019 annual financial audit update. Both of which will be carried forward as separate presentations at the October 2019 Audit Committee meeting.
- The June 2019 Monthly Financial Report Binder which presents preliminary yearend performance for the GLWA regional system and a small, positive yearend surplus for the DWSD local sewer system.
- The Quarterly Debt Report which highlights the activities and yearend balances associated with GLWA debt issuances as well as State Revolving Funds (SRF).

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