



Preliminary FY 2021 Budget and Long Term Financial Plan

*Board of Directors
Workshop Meeting
January 8, 2020*

Key Takeaways

- The FY 2021 GLWA BUDGET represents a 2.2% increase compared to FY 2020
 - ✓ *Water = 1.1%*
 - ✓ *Sewer = 3.0%*
- Projected negative revenue variances
 - ✓ *Reduced Water sales volumes and revenues;*
 - ✓ *Reduced investment earnings for Water and Sewer*
- Overall average FY 2021 “System Charge”

Adjustments:

✓ *Water = 3.8%*

✓ *Sewer = 3.7%*

	<u>Water</u>	<u>Sewer</u>	<u>Combined</u>
<u>Charge Increase Drivers - %</u>			
Revenue Requirement Increase	1.1%	3.0%	2.2%
Negative Sales Revenue Variance	1.4%	0.0%	0.6%
Negative Investment Income Variance	<u>1.3%</u>	<u>0.7%</u>	<u>0.9%</u>
Total	3.8%	3.7%	3.7%

Presentation Topics

1. Introduction and Key Terms
2. FY 2019 Revenue Requirement Review
3. FY 2021 BUDGET and Revenue Requirements for Charges
4. FY 2021 – FY 2030 Financial Plan Forecast
5. Update on Cost of Service Studies for FY 2021 Charges

Introduction and Key Terms



“BUDGET” = Comprehensive Annual Revenue Requirement:

- Budgeted O&M Expense
- Master Bond Ordinance Commitments
 - ✓ *Projected Debt Service*
 - ✓ *“Fixed” Non-Operating Expenses*
 - Pension Reimbursement Obligations;
 - WRAP Deposit;
 - Lease Payment (part of revenue financed capital below);
 - Other Reserve Requirements, etc.
- Deposit to the Improvement and Extension (I&E) Funds
 - ✓ *Revenue Financed Capital Improvements*

“Financial Plan” Consists of

- Capital Improvement Program
- Operation and Maintenance Expense Budget
- Capital Financing elements of the BUDGET
✓ Debt Service, Revenue Financed Capital, etc.
- Charges for Service
- *Each of these are subject to individual action by the Board*

“The Agreements” Include:

- The Lease(s) establishing GLWA;
- The Water and Sewer Services Agreement between GLWA and the City of Detroit;
- The Master Bond Ordinance(s), authorizing issuance of debt by GLWA;
- The Trust Agreement(s) supporting the Master Bond Ordinances;
- The 2018 GLWA / DWSD Memorandum of Understanding
 - ✓ *Implementation Plan for “The Agreements”*
- Related supporting documentation

“4% Increase Limitation” as defined by The Agreements

“As provided in the MOU, through the Fiscal Year ending June 30, 2025, the Water (Sewer) System is assumed to experience annual increases in the Authority Revenue Requirement of not more than 4%; provided however, this limitation shall not be applicable if the Authority Revenue Requirement must increase beyond the 4% assumption in order to satisfy the Rate Covenant or to pay the cost of improvements to the Leased Water (Sewer) Facilities that are required to be made by Applicable Laws.”

FY 2019 Revenue Requirement Review



FY 2019 Revenue Requirement Review - Revenues

- Revenues from Member Partners were:
 - ✓ *Slightly lower than budget for Water as a result of low summer water sales*
 - ✓ *Slightly higher than budget for Sewer as a result of fixed charge structure and lower than expected bad debt expense*
- Investment Income was higher than budget due to implementation of active management strategies and favorable rates

FY 2019 Revenue Requirement Review – Operating Expenses

- Operating expenses were ~ 93.3% of budget, resulting in savings vs budget of:
 ✓ \$3.8 million for Water
 ✓ \$17.1 million for Sewer

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Adopted Budget	Amended Budget	Audited Actual	Variance - Adopted Budget		Variance - Amended Budget	
				<u>Variance</u>	<u>%Variance</u>	<u>Variance</u>	<u>%Variance</u>
				(3) vs. (1)	(4) / (1)	(3) vs. (2)	(6) / (2)
<u>Operating Expenses</u>							
1 Personnel	102.47	104.22	98.59	3.88	3.79%	5.63	5.40%
2 Contractual services	106.48	100.86	99.62	6.87	6.45%	1.24	1.23%
3 Utilities	57.35	51.79	51.40	5.95	10.38%	0.39	0.76%
4 Chemicals	16.62	13.39	13.28	3.35	20.13%	0.11	0.82%
5 Supplies and other expenses	36.02	36.23	37.12	(1.10)	-3.05%	(0.89)	-2.47%
6 Capital adjustment	0.00	0.00	2.26	(2.26)	0.00%	(2.26)	0.00%
7 Capital program allocation	(4.00)	(3.36)	(3.38)	(0.62)	15.48%	0.03	-0.75%
8 Shared services allocation	(9.12)	(9.00)	(7.14)	(1.98)	21.74%	(1.87)	20.72%
9 Capital outlay	0.50	0.00	0.00	0.50	100.00%	0.00	0.00%
10 Unallocated reserve	<u>6.32</u>	<u>18.52</u>	<u>0.00</u>	6.32	100.00%	<u>18.52</u>	100.00%
11 Total Operating Expenses	312.64	312.64	291.73	20.91	6.69%	20.91	6.69%

FY 2019 Revenue Requirement Review – Capital Elements

- Debt Service was lower than budget due to refinancing transactions during the year
 - ✓ *Water savings = \$3.0 million*
 - ✓ *Sewer savings = \$4.6 million*
- Collectively, these variances allowed for originally budgeted deposits to reserves to be made
 - ✓ *Water positive variance = \$11.9 million*
 - ✓ *Sewer positive variance = \$28.7 million*

FY 2019 Revenue Requirement Review: Water Summary - \$ *millions*

	(1)	(2)	(3)	(4)
<u>Impact Analysis</u>	<u>Adopted Budget</u>	<u>Amended Budget</u>	<u>Audited Actual</u>	Pos / (Neg) <u>Variance</u> (3) vs. (1)
<u>Revenues</u>				
1 Sales Revenue	327.6	327.6	324.6	(3.0)
2 Investment Income & Other Revenue	<u>3.8</u>	<u>9.4</u>	<u>11.8</u>	<u>8.0</u>
3 Subtotal	331.4	337.0	336.4	5.0
<u>Revenue Requirements</u>				
4 O&M Expense	121.6	121.6	117.7	3.8
5 Debt Service	134.2	131.2	131.2	3.0
6 MBO Requirementts	<u>36.5</u>	<u>36.5</u>	<u>36.5</u>	<u>0.0</u>
7 Subtotal	292.3	289.3	285.4	6.9
8 Available for Reserves	39.1	47.7	51.1	11.9
9 <i>Transferred to I&E Fund</i>	<i>39.1</i>	<i>47.7</i>	<i>47.7</i>	<i>8.6</i>
10 <i>Available in O&M Fund</i>	<i>0.0</i>	<i>0.0</i>	<i>3.4</i>	<i>3.4</i>

FY 2019 Revenue Requirement Review: Sewer Summary - \$ *millions*

		(1)	(2)	(3)	(4)
		Adopted	Amended	Audited	Pos / (Neg)
<u>Impact Analysis</u>		<u>Budget</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
					(3) vs. (1)
<u>Revenues</u>					
1	Sales Revenue	467.5	467.5	469.0	1.5
2	Investment Income & Other Revenue	<u>4.6</u>	<u>6.9</u>	<u>10.1</u>	<u>5.5</u>
3	Subtotal	472.0	474.3	479.1	7.0
<u>Revenue Requirements</u>					
4	O&M Expense	191.1	191.1	174.0	17.1
5	Debt Service	214.6	208.4	210.0	4.6
6	MBO Requirementts	<u>52.3</u>	<u>52.3</u>	<u>52.3</u>	<u>0.0</u>
7	Subtotal	458.0	451.8	436.3	21.7
8	Available for Reserves	14.0	22.5	42.7	28.7
9	<i>Transferred to I&E Fund</i>	<i>14.0</i>	<i>22.5</i>	<i>22.5</i>	<i>8.5</i>
10	<i>Available in O&M Fund</i>	<i>0.0</i>	<i>0.0</i>	<i>20.2</i>	<i>20.2</i>

FY 2021 BUDGET and Revenue Requirements for Charges



FY 2021 BUDGET and “System Charge” Adjustments

- GLWA FY 2021 BUDGET reflects an increase compared to FY 2020 for both Water and Sewer
 - ✓ *Water = 1.1%*
 - ✓ *Sewer = 3.0%*
- The “Revenue Requirement from Charges” is net of “non Customer” revenue, including:
 - ✓ *Investment Income*
 - ✓ *Other Miscellaneous Revenue*
 - ✓ *Bad Debt Expense Adjustments*
- The net impact of these figures produces a “Charge adjustment” that is different from the BUDGET adjustment

FY 2021 Water “System Charge” Adjustments: *Impact of Revenue Variances*

- Revenues from sales to Customers reflect a **negative** budget variance of \$4.5 million.
- Investment income, reflecting recent reduction in interest rates, program improvements, results in a **negative** budget variance of \$4.2 million.
- Together, the net impact is a **negative** revenue variance of \$8.8 million that must be met via increased service charges to Member Partners, even without a BUDGET increase.

FY 2021 Sewer “System Charge” Adjustments: *Impact of Revenue Variances*

- Investment income, reflecting recent reduction in interest rates, program improvements, results in a **negative** budget variance of \$3.1 million.
- This **negative** revenue variance must be met via increased service charges to Member Partners, even without a BUDGET increase.

FY 2021 BUDGET and “System Charge” Adjustments

- Average “System Charge Adjustment” is 3.8% for Water and 3.7% for Sewer

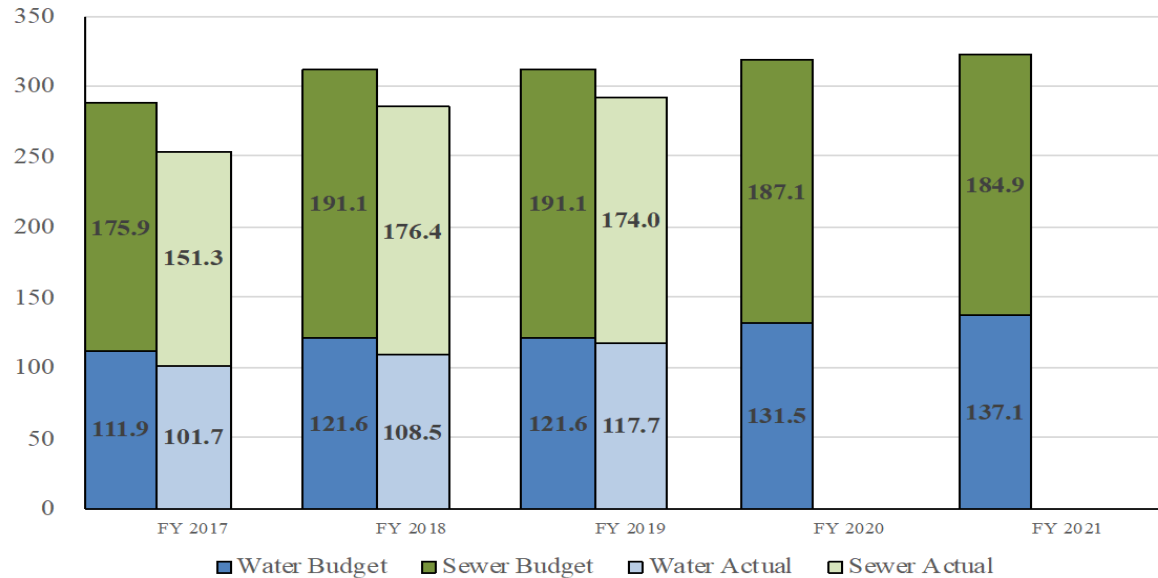
	Water System				Sewer System				Total GLWA			
	FY 2020	FY 2021	Variance	% Variance	FY 2020	FY 2021	Variance	% Variance	FY 2020	FY 2021	Variance	% Variance
<u>Annual BUDGET</u>												
1 Operation and Maintenance Expense	131.5	137.1	5.6	4.3%	187.1	184.9	(2.1)	-1.1%	318.5	322.1	3.5	1.1%
2 Debt Service	137.6	138.8	1.2	0.9%	215.7	202.7	(13.0)	-6.0%	353.3	341.5	(11.8)	-3.3%
3 Master Bond Ordinance ("MBO") Commitments	36.5	36.5	(0.0)	-0.1%	52.3	52.4	0.1	0.1%	88.9	88.9	0.0	0.0%
4 Deposit to I&E (and other reserve) Funds	34.1	31.0	(3.1)	-9.2%	25.5	55.0	29.5	115.9%	59.6	85.9	26.4	44.3%
5 Total BUDGET	339.7	343.4	3.7	1.1%	480.6	495.0	14.4	3.0%	820.3	838.4	18.2	2.2%
<u>Charge Adjustment Illustration</u>												
<u>Proforma Revenue - Existing Charges</u>												
6 Revenue from Charges	330.6	326.1	(4.5)	1.4%	471.9	471.9	0.0	0.0%	802.5	798.0	(4.5)	0.6%
7 Investment (and other miscellaneous) Income	9.1	4.8	(4.2)	1.3%	8.7	5.6	(3.1)	0.7%	17.8	10.4	(7.4)	0.9%
8 Net Proforma Revenue Comparison	339.7	330.9	(8.8)		480.6	477.5	(3.1)		820.3	808.4	(11.9)	
9 Adjustment to Address Revenue Variance				2.7%				0.7%				1.5%
10 Adjustment to Address BUDGET Variance (Line 5)				1.1%				3.0%				2.2%
11 Average Charge Adjustment				3.8%				3.7%				3.7%

FY 2021 Operation and Maintenance Expense Budget

- Recognizes detailed review and recognition of 3 full years of GLWA audited results
 - ✓ *Overall increase from FY 2020 budget is 1.1%*
 - ✓ *Water / Sewer impacts reflect actual experience and specific budget programs*

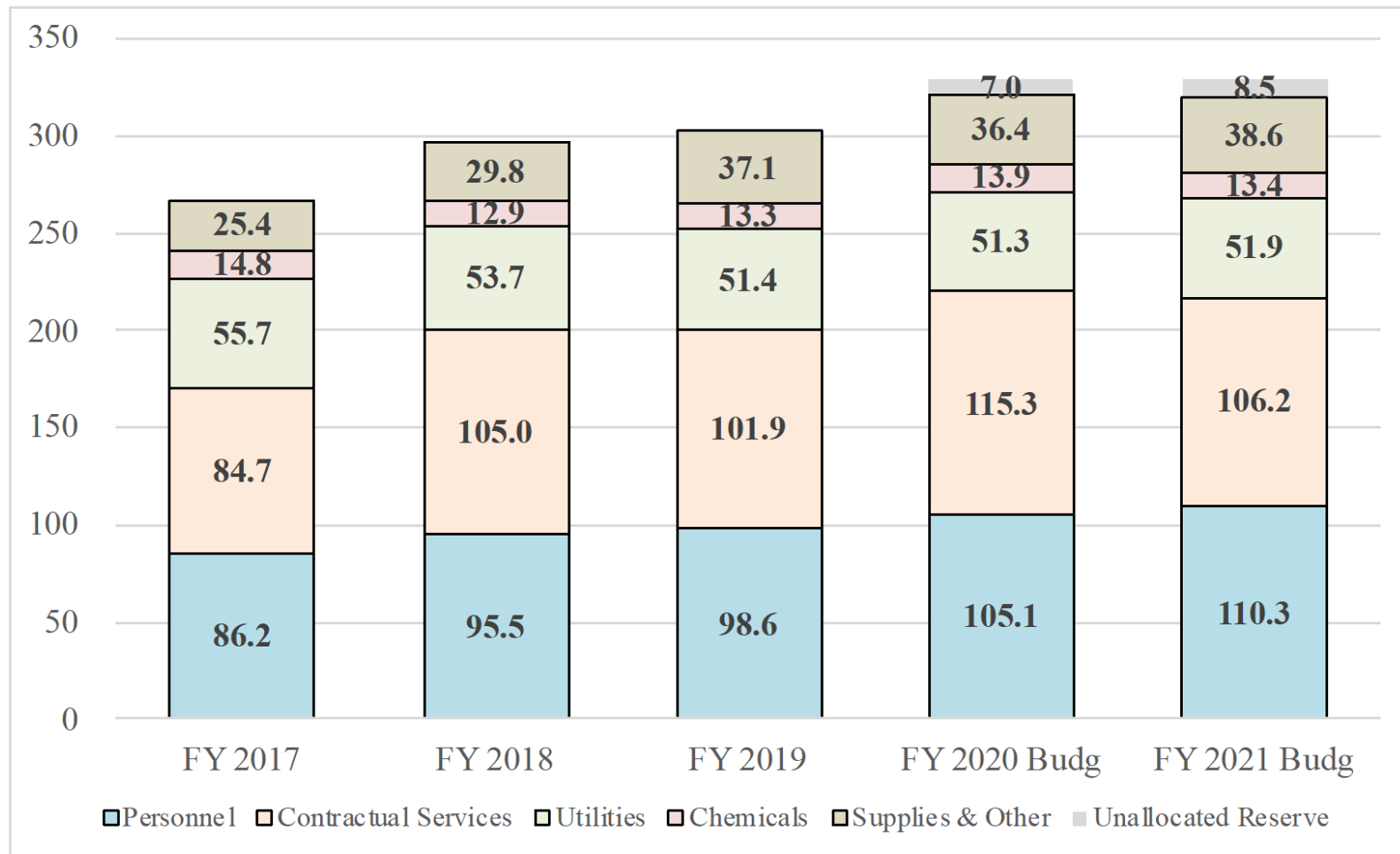
	<u>FY 2020</u>	<u>FY 2021</u>	<u>Variance</u>	<u>% Variance</u>
<u>O&M Expense - \$ millions</u>				
Water	131.5	137.1	5.6	4.3%
Sewer	<u>187.1</u>	<u>184.9</u>	<u>(2.1)</u>	-1.1%
Combined	318.5	322.1	3.5	1.1%

GLWA Operation and Maintenance Expenses



	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
Water Budget	111.9	121.6	121.6	131.5	137.1
Sewer Budget	175.9	191.1	191.1	187.1	184.9
Total Budget	287.7	312.6	312.6	318.5	322.1
Water Actual	101.7	108.5	117.7		
Sewer Actual	151.3	176.4	174.0		
Total Actual	253.0	284.9	291.7		
Water Variance	(10.1)	(13.0)	(3.8)		
Sewer Variance	(24.5)	(14.7)	(17.1)		
Total Variance	(34.7)	(27.7)	(20.9)		
Water % Variance	-9.1%	-10.7%	-3.2%		
Sewer % Variance	-14.0%	-7.7%	-8.9%		
Total % Variance	-12.1%	-8.9%	-6.7%		

GLWA Operation and Maintenance Expenses - \$ *millions*



GLWA Operation and Maintenance Expenses - \$ *millions*

	Actual			Budget		FY 2021 Budg vs		FY 2021 Budg vs	
	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2019</u>	<u>FY 2020 B</u>	<u>FY 2019</u>	<u>FY 2020 B</u>
Personnel (a)	86.2	95.5	98.6	105.1	110.3	11.7	5.2	11.9%	5.0%
Contractual Services	84.7	105.0	101.9	115.3	106.2	4.3	(9.2)	4.2%	-7.9%
Utilities	55.7	53.7	51.4	51.3	51.9	0.5	0.6	1.1%	1.2%
Chemicals	14.8	12.9	13.3	13.9	13.4	0.1	(0.5)	1.1%	-3.4%
Supplies & Other	25.4	29.8	37.1	36.4	38.6	1.5	2.2	4.1%	6.1%
Subtotal	266.7	296.9	302.3	322.0	320.5	18.2	(1.6)	6.0%	-0.5%
Unallocated Reserve	0.0	0.0	0.0	7.0	8.5	8.5	1.5	NA	22.2%
Gross Total	266.7	296.9	302.3	329.0	329.0	26.7	(0.0)	8.8%	0.0%
Capital Program Allocation	(2.1)	(1.7)	(3.4)	(5.4)	(3.5)	(0.1)	1.9	3.4%	-35.4%
Shared Services	(11.7)	(9.9)	(7.1)	(5.0)	(3.4)	3.7	1.6	-52.2%	-32.1%
Operation and Maintenance Expense	252.9	285.3	291.7	318.5	322.1	30.3	3.5	10.4%	1.1%
(a) FTE Data									
Positions (FTE) Filled at Year End	881	968	1,024						
Positions (FTE) Budgeted	1,106	1,168	1,173	1,187	1,200				

FY 2021 Debt Service Budget

- Recognizes moderate natural changes in amortization schedules on existing bonds
- **Recognizes anticipated savings from upcoming refinancing transactions**
 - ✓ *Projected Water savings = \$4.8 million*
 - ✓ *Projected Sewer savings = \$7.0 million*
- Does not include any debt service on new money bonds - next transactions anticipated for FY 2022

FY 2021 Debt Service Budget - \$ *millions*

	<u>FY 2020</u>	<u>FY 2021</u>	<u>Variance</u>	<u>% Variance</u>
<u>Water Supply System</u>				
Existing Revenue Bonds	135.8	139.9	4.1	3.0%
Forecasted Revenue Bonds	0.0	0.0	0.0	0.0%
Existing SRF Loans	1.8	2.6	0.9	48.5%
Forecasted SRF Loans	<u>0.0</u>	<u>1.0</u>	<u>1.0</u>	0.0%
Subtotal	137.6	143.6	6.0	4.4%
less: Forecasted Refinancing Savings	<u>0.0</u>	<u>(4.8)</u>	<u>(4.8)</u>	0.0%
Budgeted Water Debt Service	137.6	138.8	1.2	0.9%
<u>Sewage Disposal System</u>				
Existing Revenue Bonds	161.0	155.7	(5.3)	-3.3%
Forecasted Revenue Bonds	1.8	0.0	(1.8)	-100.0%
Existing SRF Loans	52.9	53.6	0.7	1.3%
Forecasted SRF Loans	<u>0.0</u>	<u>0.4</u>	<u>0.4</u>	0.0%
Subtotal	215.7	209.7	(6.0)	-2.8%
less: Forecasted Refinancing Savings	<u>0.0</u>	<u>(7.0)</u>	<u>(7.0)</u>	0.0%
Budgeted Sewer Debt Service	215.7	202.7	(13.0)	-6.0%

FY 2021 MBO Requirements Budget

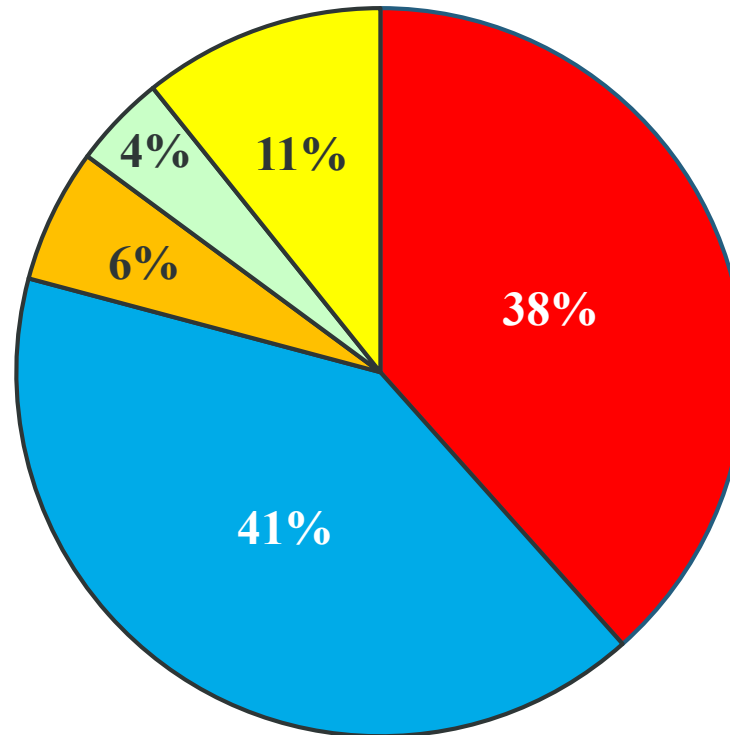
- Largely fixed items – no material budget variance from FY 2020 to FY 2021
 - ✓ *Legacy Pension Obligation*
 - Fixed through FY 2023
 - ✓ *Lease Payment*
 - Fixed @ \$50 million
 - ✓ *WRAP Fund Deposit*
 - 0.5% of Sales Revenue

FY 2021 I&E (and other reserves) Budget

- Amounts not required to fund O&M, debt service, and MBO requirements represent funds available to “bottom line” contributions to the I&E Fund (and operating reserves)
- These amounts support the measure of debt service coverage
 - ✓ *The Water “bottom line” amounts are stable compared to FY 2020*
 - ✓ *The Sewer “bottom line” amounts reflect significant improvement compared to FY 2020, and are now more closely aligned with the Water figures*
 - ✓ ** To the extent that actual refinancing results vary from those assumed above, GLWA intends to adjust the I&E deposits accordingly, without impacting the overall BUDGET or Charge Adjustments*

FY 2021 BUDGET Allocation to Major Categories

- Much of the entity-wide budget is related to fixed commitments



FY 2021 Budget Indices Compared to Prior GLWA Budgets

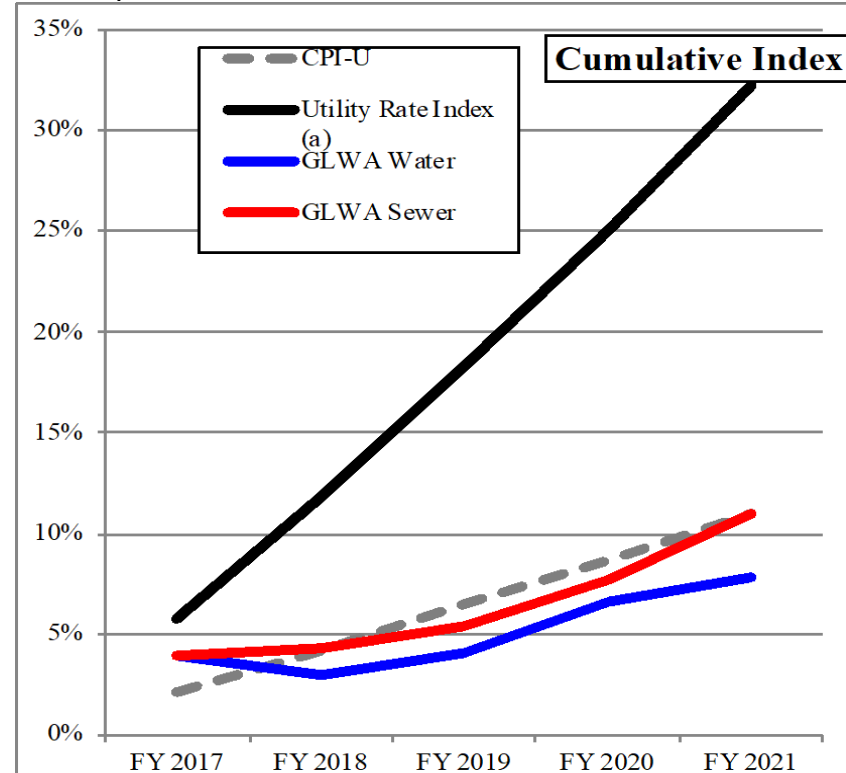
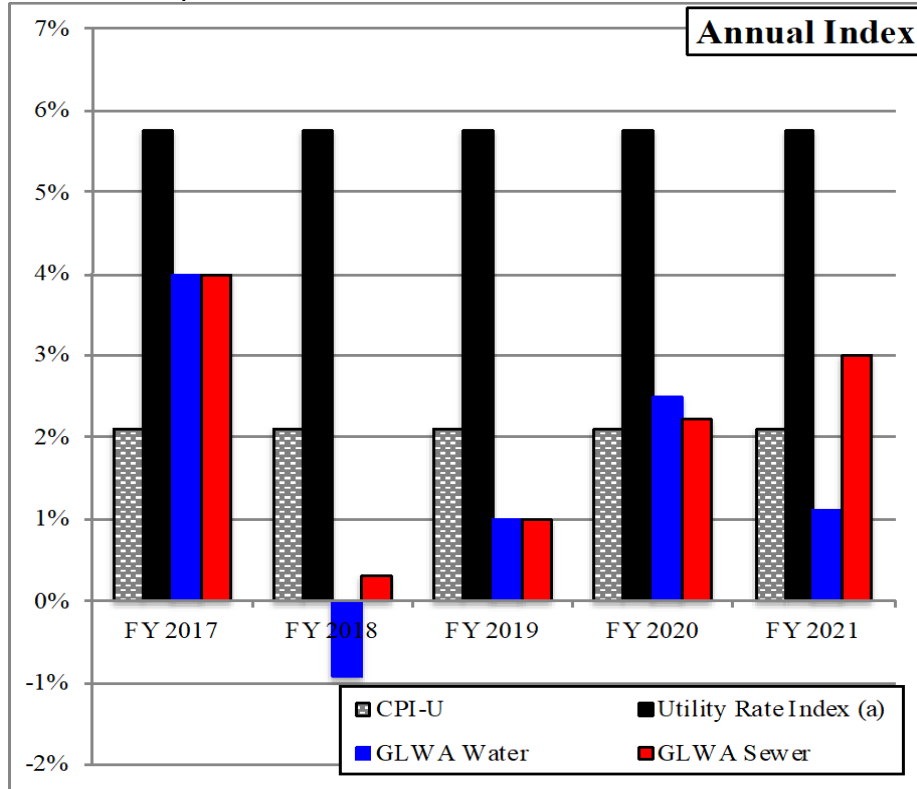
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
<u>Water</u>					
Annual Change in Budgeted Revenue Req't (a)	4.0%	-0.9%	1.0%	2.5%	1.1%
<u>Annual Average Charge Increase</u>					
Total Regional System, Including Detroit Customer Class	4.5%	1.9%	1.6%	0.6%	3.8%
<u>(a) Revenue Requirement Budget Indices</u>		(b)			
O&M Budget Adjustment (b)	4.0%	8.7%	0.0%	8.2%	4.3%
Budgeted Deposit to I&E Fund - \$ millions	23.8	32.8	39.1	30.1	30.1
Budgeted Deposit to All Reserve Funds - \$ millions	23.8	34.6	39.1	34.1	31.0
Regional System Debt Service Coverage	1.34	1.48	1.52	1.47	1.44
<u>Sewer</u>					
Annual Change in Budgeted Revenue Req't (a)	4.0%	0.3%	1.0%	2.2%	3.0%
<u>Annual Average Charge Increase</u>					
Total Regional System, Including Detroit Customer Class	8.3%	-0.7%	0.1%	0.8%	3.7%
<u>(a) Revenue Requirement Budget Indices</u>		(b)			
O&M Budget Adjustment (b)	4.0%	8.7%	0.0%	-2.1%	-1.1%
Budgeted Deposit to I&E Fund - \$ millions	14.1	11.9	12.2	25.5	55.0
Budgeted Deposit to All Reserve Funds - \$ millions	14.1	14.5	12.2	25.5	55.0
Regional System Debt Service Coverage	1.25	1.27	1.25	1.31	1.48
<u>Combined Water and Sewer</u>					
Annual Change in Budgeted Revenue Req't (a)	4.0%	-0.2%	1.0%	2.3%	2.2%
<u>Annual Average Charge Increase</u>					
Total Regional System, Including Detroit Customer Class	6.7%	0.3%	0.7%	0.7%	3.8%
<u>(a) Revenue Requirement Budget Indices</u>		(b)			
O&M Budget Adjustment (b)	4.0%	8.7%	0.0%	1.9%	1.1%
Budgeted Deposit to I&E Fund - \$ millions	37.9	44.7	51.3	55.6	85.1
Budgeted Deposit to All Reserve Funds - \$ millions	37.9	49.1	51.3	59.6	85.9
Regional System Debt Service Coverage	1.29	1.35	1.35	1.37	1.46

(b) FY 2018 Budget reflects reassignment of \$10 million per system from minor capital expense to O&M expense.

GLWA BUDGET Adjustments Compared to Utility Indices

Annual	Annual Index				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
CPI-U (a)	2.1%	2.1%	2.1%	2.1%	2.1%
Utility Rate Index (a)	5.8%	5.8%	5.8%	5.8%	5.8%
GLWA Water	4.0%	-0.9%	1.0%	2.5%	1.1%
GLWA Sewer	4.0%	0.3%	1.0%	2.2%	3.0%

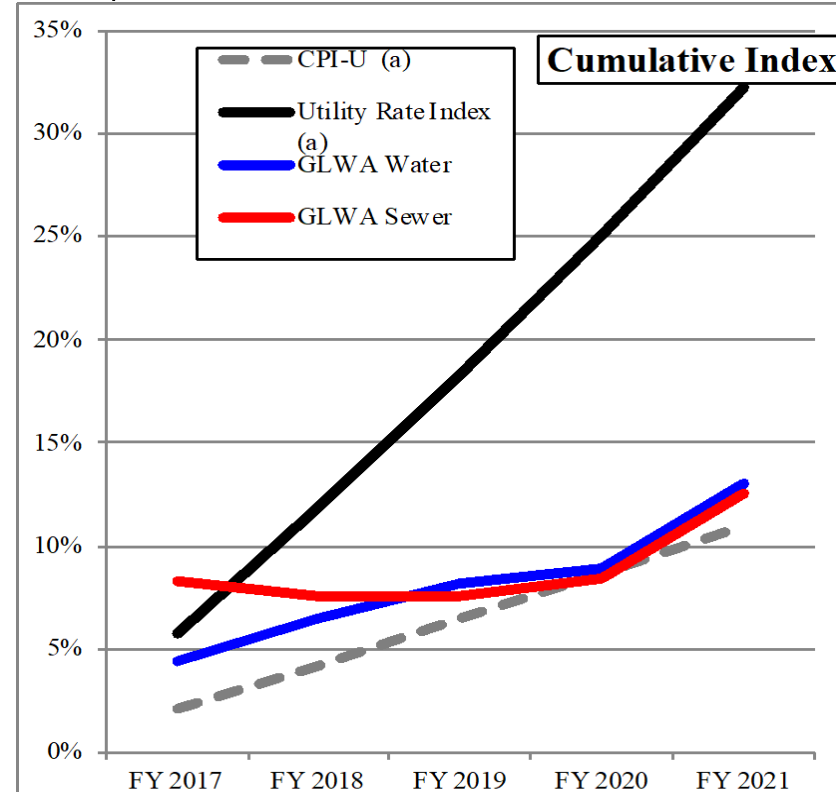
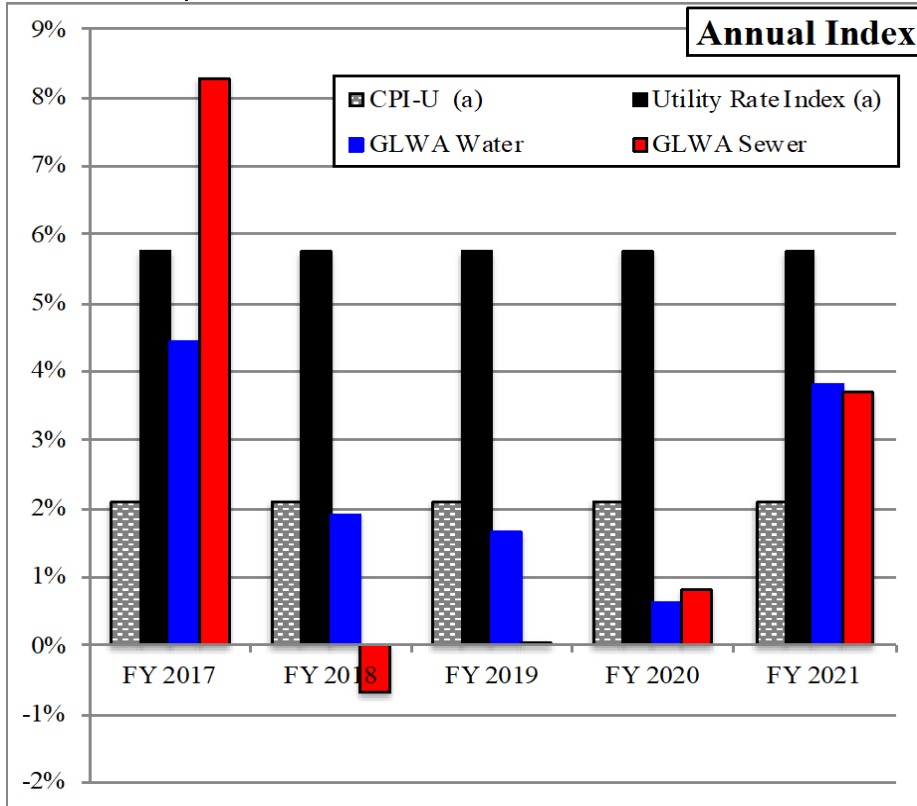
	Cumulative Index				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
CPI-U (a)	2.1%	4.2%	6.4%	8.7%	11.0%
Utility Rate Index (a)	5.8%	11.8%	18.3%	25.1%	32.3%
GLWA Water	4.0%	3.0%	4.1%	6.7%	7.8%
GLWA Sewer	4.0%	4.3%	5.4%	7.7%	10.9%



GLWA CHARGE Adjustments Compared to Utility Indices

Annual	Annual Index				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
CPI-U (a)	2.1%	2.1%	2.1%	2.1%	2.1%
Utility Rate Index (a)	5.8%	5.8%	5.8%	5.8%	5.8%
GLWA Water	4.5%	1.9%	1.6%	0.6%	3.8%
GLWA Sewer	8.3%	-0.7%	0.1%	0.8%	3.7%

	Cumulative Index				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
CPI-U (a)	2.1%	4.2%	6.4%	8.7%	11.0%
Utility Rate Index (a)	5.8%	11.8%	18.3%	25.1%	32.3%
GLWA Water	4.5%	6.4%	8.2%	8.9%	13.0%
GLWA Sewer	8.3%	7.5%	7.6%	8.5%	12.5%



*FY 2021 – FY 2030 Financial
Plan Forecast*



FY 2021 – FY 2030 Financial Forecast

Assumptions / Policies

- Annual Revenue Requirement (BUDGET) increases of 3.0% starting FY 2022
- Stable Revenues from Member Partners (assuming existing charges)
- Operating Expense
 - ✓ *Preliminary FY 2021 Budget Forecast for F Y 2021 – FY 2025*
 - ✓ *2.0% Inflation thereafter*
- Legacy Pension Obligation Reduced from \$45.4 million to \$9 million starting FY 2024
 - ✓ *Proportionally allocated to GLWA / DWSD Water and Sewer Systems*

FY 2021 – FY 2030 Financial Forecast Assumptions / Policies *continued*

- CIP Spending Ratio = 75% through FY 2025
✓ *FY 2026 – FY 2030 CIP Estimated*
- Capital Financing Strategy:
 1. *Use Existing I&E Balances, while maintaining \$90 million annual year end balances*
 - Recognizes amounts transferred to I&E at year end
 2. *Use Low Interest State Revolving Fund Loans*
 3. *Assume Revenue Bond Sales for Remaining CIP Requirements, while maintaining \$50 million annual year end balances*

See attachments . . .

*Update on Cost of Service
Studies for FY 2021 Charges*



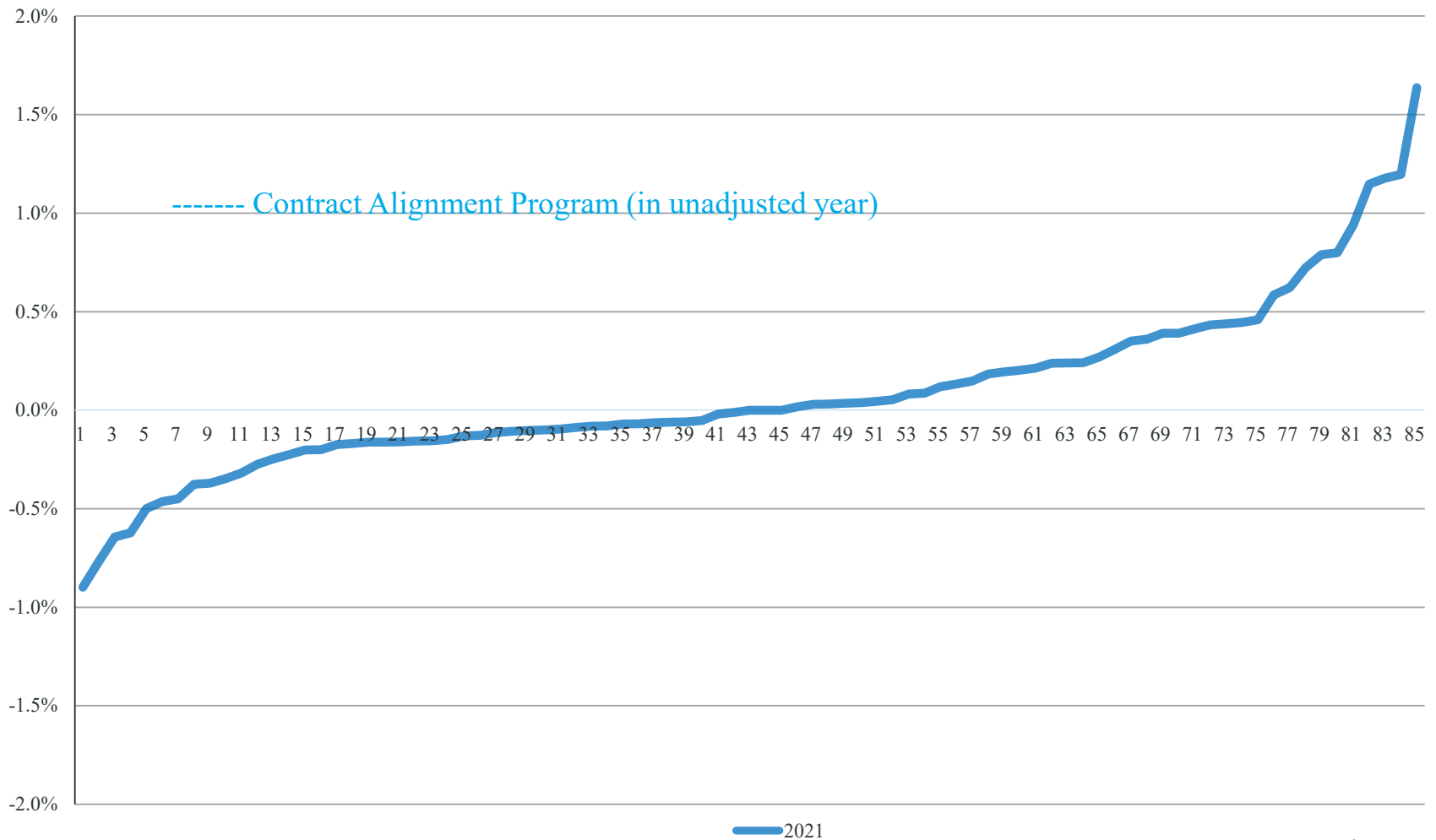
FY 2021 Units of Service Update

- One minor adjustment will be made to Bruce Township's Max Day Demand
 - *Impact is not material*
- Discussions with Dearborn continue . . .

FY 2021 Cost of Service Study Update: Specific Focus Areas

- Detailed review of cost allocation of budgeted activities to Cost Pools
- Incorporation of Updated Fixed Asset Records, and impact on Cost Pool allocations
- No material adjustments pending final review, which would result in fairly “homogenous” impacts on Member Partners

SAMPLE Wholesale Water Charge Adjustments Specific Customers Compared to Average





GLWA

Great Lakes Water Authority