

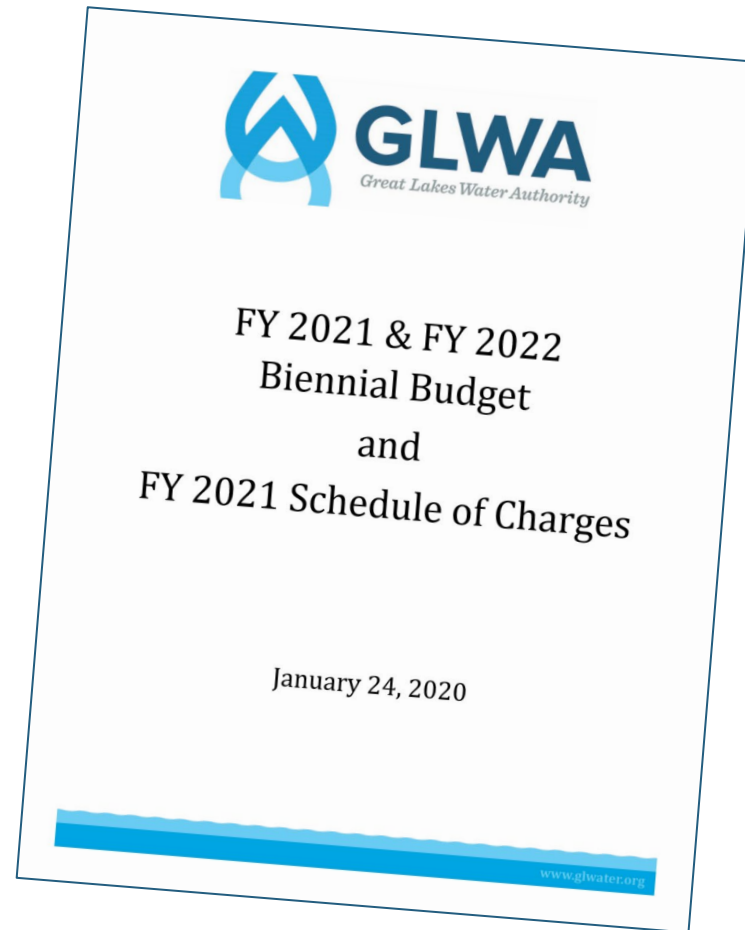
Proposed FY 2021 & FY 2022 Biennial Budget and FY 2021 Charges

*Board of Directors
Meeting*

February 26, 2020

Public Hearing Budget & Charges Report

Available online at
www.glwater.org



Key Takeaways

- The FY 2021 GLWA BUDGET represents a 1.9% increase compared to FY 2020
 - ✓ *Water = 1.1%*
 - ✓ *Sewer = 2.5%*
- 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 = 3.2%*

	<u>Water</u>	<u>Sewer</u>	<u>Combined</u>
<u>Charge Increase Drivers - %</u>			
Revenue Requirement Increase	1.1%	2.5%	1.9%
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%	3.2%	3.4%

Key Takeaways

- FY 2021 Service Charges reflect a simplified “across the board” adjustment strategy
 - ✓ *Wholesale Service Charges to ALL Member Partners proposed to increase 3.5%*
 - Certain modifications required to reflect specific contract requirements
- Detroit
 - ✓ *Water 3.5% before ownership benefit credit of \$20.7 million (net 6.9%)*
 - ✓ *Sewer 3.5% before ownership benefit credit of \$5.5 million (3.6% net)*

Budget & Charges Parameters



“Financial Plan” Consists of

1. Capital Improvement Plan
2. Biennial Budget
 - ✓ *Operation and Maintenance Expense Budget*
 - ✓ *Capital Financing elements of the BUDGET*
 - ✓ Debt Service, Revenue Financed Capital, etc.
 - ✓ Capital Spending Ratio
 - ✓ *Other “MBO” Requirements (see next slide)*
3. Charges for Service

***Each of these financial plan elements
are subject to individual action by the Board***

MBO Requirements

- Master Bond Ordinance (MBO) outlines legal priorities of payment
- Budget presentation aligns with the MBO
- Addresses other 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 Budgeted Sales Revenue

“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.”

Member Partner Rollout Meetings

Rollout Meeting #1

Water and Sewer Capital Improvement Plans

Thursday, October 17, 2019

Rollout Meeting #2

Water Units of Service & Sewer SHAREs

Thursday, November 21, 2019

Rollout Meeting #3

Proposed FY 2021 Revenue Water and Sewer Requirements

Thursday, January 9, 2020

Rollout Meeting #4

Proposed FY 2021 Water and Sewer Service Charges

Thursday, January 23, 2020

Audit Committee & Board Review

Audit Committee

- December 19, 2019
- January 27, 2020
- February 21, 2020

Board of Directors

- January 8, 2020
- January 22, 2020

BUDGET > Charges Revenue Requirement

- Operations & Maintenance Expense
- Master Bond Ordinance Commitments
 - ✓ *Projected Debt Service*
 - ✓ *“Fixed” Non-Operating Expenses*
 - Pension Reimbursement Obligations;
 - WRAP Deposit;
 - Lease Payment
 - Other Reserve Requirements, etc.
- Deposit to the Improvement and Extension (I&E) Funds
 - ✓ *“Revenue Financed” Capital Improvements*
- Charges Revenue Requirement are *net* of other income
 - ✓ *The net impact a “Charge adjustment” that is different from the BUDGET adjustment*

“System Charge Adjustment” vs. “Wholesale Charge Adjustment”

- System Charge Adjustment
 - ✓ *The amount by which revenues from existing charges must be adjusted to meet budgeted revenue requirements*
- Wholesale Charge Adjustment
 - ✓ *Recognizes that certain GLWA revenue requirements are fixed by contract*
 - Detroit’s Water and Sewer “ownership benefit”
 - Flint’s Water KWA debt service credit
 - OMID specific Sewer revenue requirements
 - Highland Park bad debt expense adjustment
 - ✓ *Will be slightly different than Wholesale Charge Adj*

Proposed FY 2021 & FY 2022 Biennial Budget



FY 2021 BUDGET and “System Charge” Adjustments

- Average “System Charge Adjustment” is 3.8% for Water and 3.2% for Sewer
 - ✓ *Can be implemented with an across the board “Wholesale Charge Adjustment” of 3.5%*

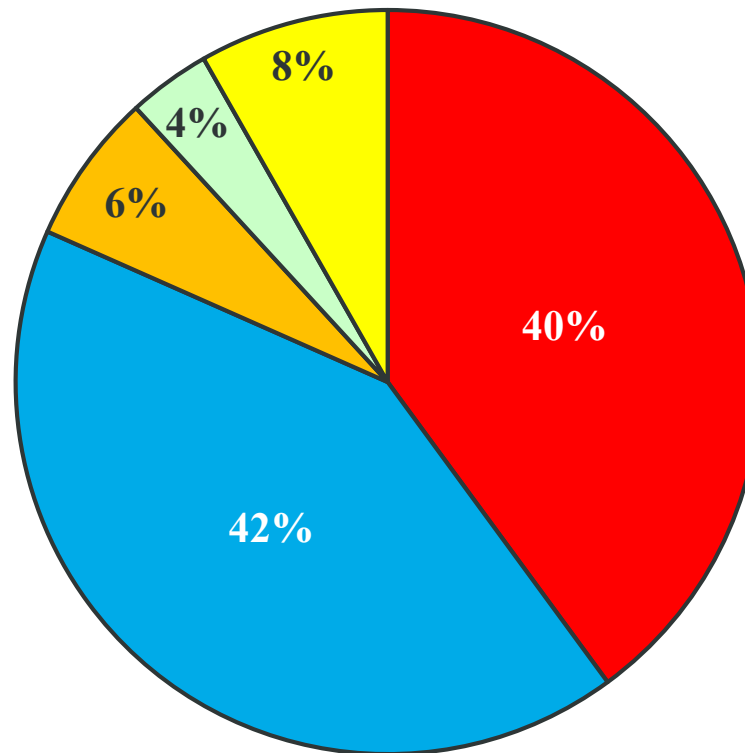
	Water System				Sewer System				Total GLWA			
	FY 2020	FY 2021	Variance	% Variance	FY 2020	FY 2021	Variance	% Variance	FY 2020	FY 2021	Variance	% Variance
<u>Annual BUDGET</u>												
1 Operation and Maintenance Expense	131.5	137.1	5.6	4.3%	187.1	184.9	(2.1)	-1.1%	318.5	322.1	3.5	1.1%
2 Debt Service	137.6	143.2	5.6	4.1%	215.7	209.7	(6.0)	-2.8%	353.3	352.9	(0.4)	-0.1%
3 Master Bond Ordinance ("MBO") Commitments	36.5	36.5	(0.0)	-0.1%	52.3	52.4	0.0	0.1%	88.9	88.9	0.0	0.0%
4 Deposit to I&E (and other reserve) Funds	34.1	26.6	(7.5)	-22.0%	25.5	45.5	20.1	78.8%	59.6	72.1	12.6	21.1%
5 Total BUDGET	339.7	343.4	3.7	1.1%	480.6	492.6	12.0	2.5%	820.3	836.0	15.7	1.9%
<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	797.9	(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	(3.2)		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%				2.5%				1.9%
11 Average Charge Adjustment				3.8%				3.2%				3.4%

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 Improvement & Extension Fund (and operating reserves)
- These amounts support the measure of debt service coverage
 - ✓ *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*
- Allows for deferral of future new money borrowing for both Water and Sewer until at least FY 2023 (except for lower cost SRF/DWRF opportunities)

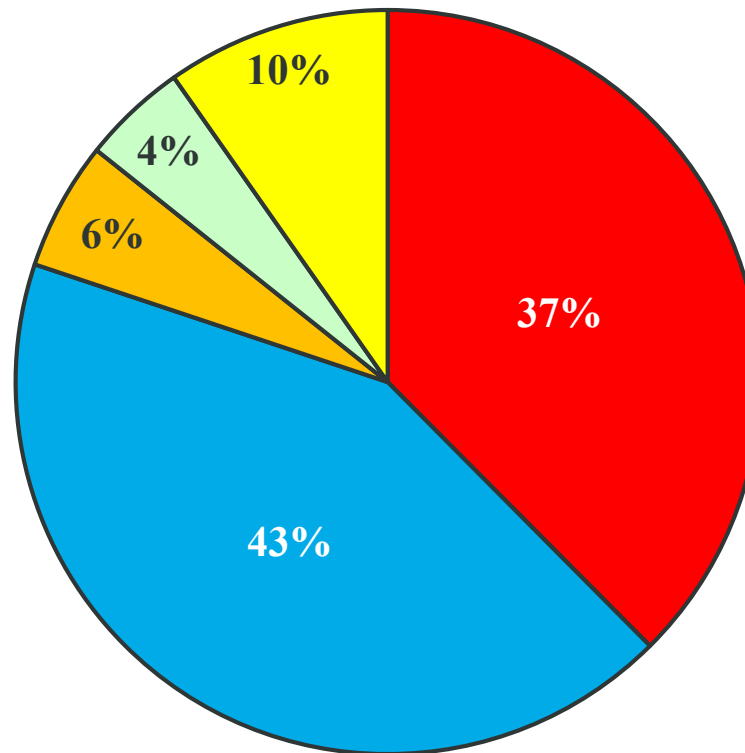
FY 2021 BUDGET Allocation to Major Categories – Water Supply System

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



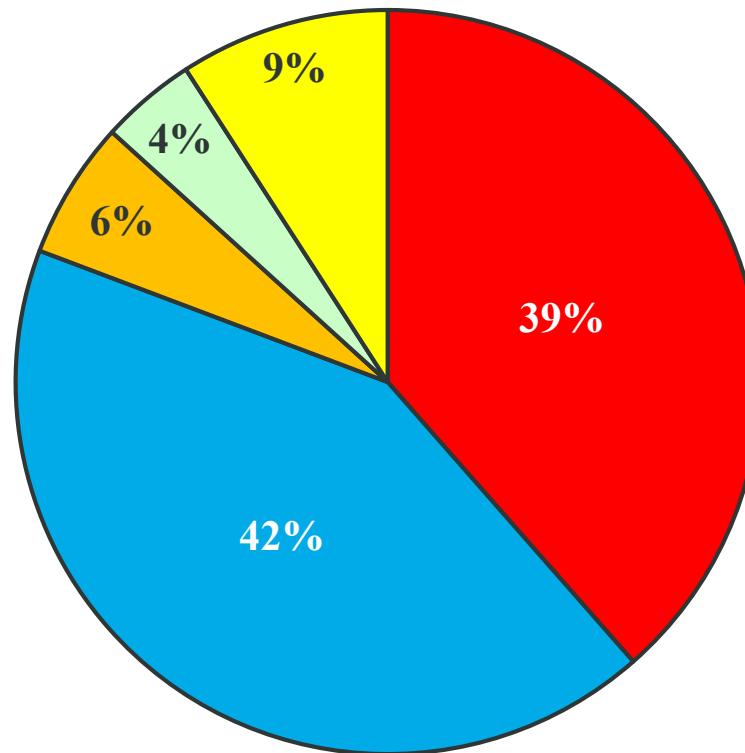
FY 2021 BUDGET Allocation to Major Categories – Sewage Disposal System

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



FY 2021 BUDGET Allocation to Major Categories – Combined Water & Sewer

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



FY 2030 Financial Plan



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 \$7.5 million starting FY 2024
 - ✓ *Proportionally allocated to GLWA / DWSD Water and Sewer Systems*
 - ✓ *Treated entirely as a non-operating expense*

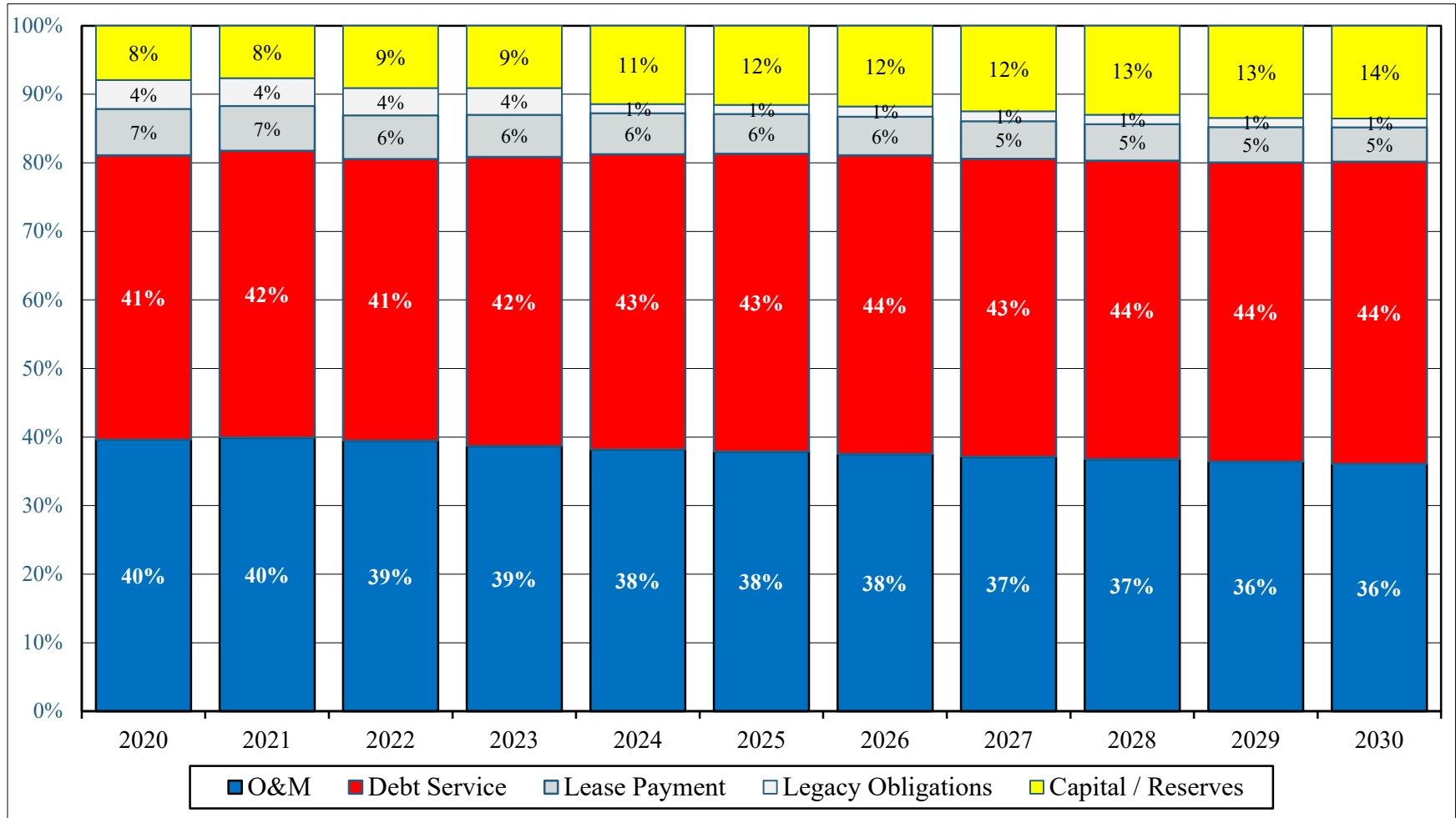
FY 2021 – FY 2030 Financial Forecast Assumptions / Policies *continued*

- 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*

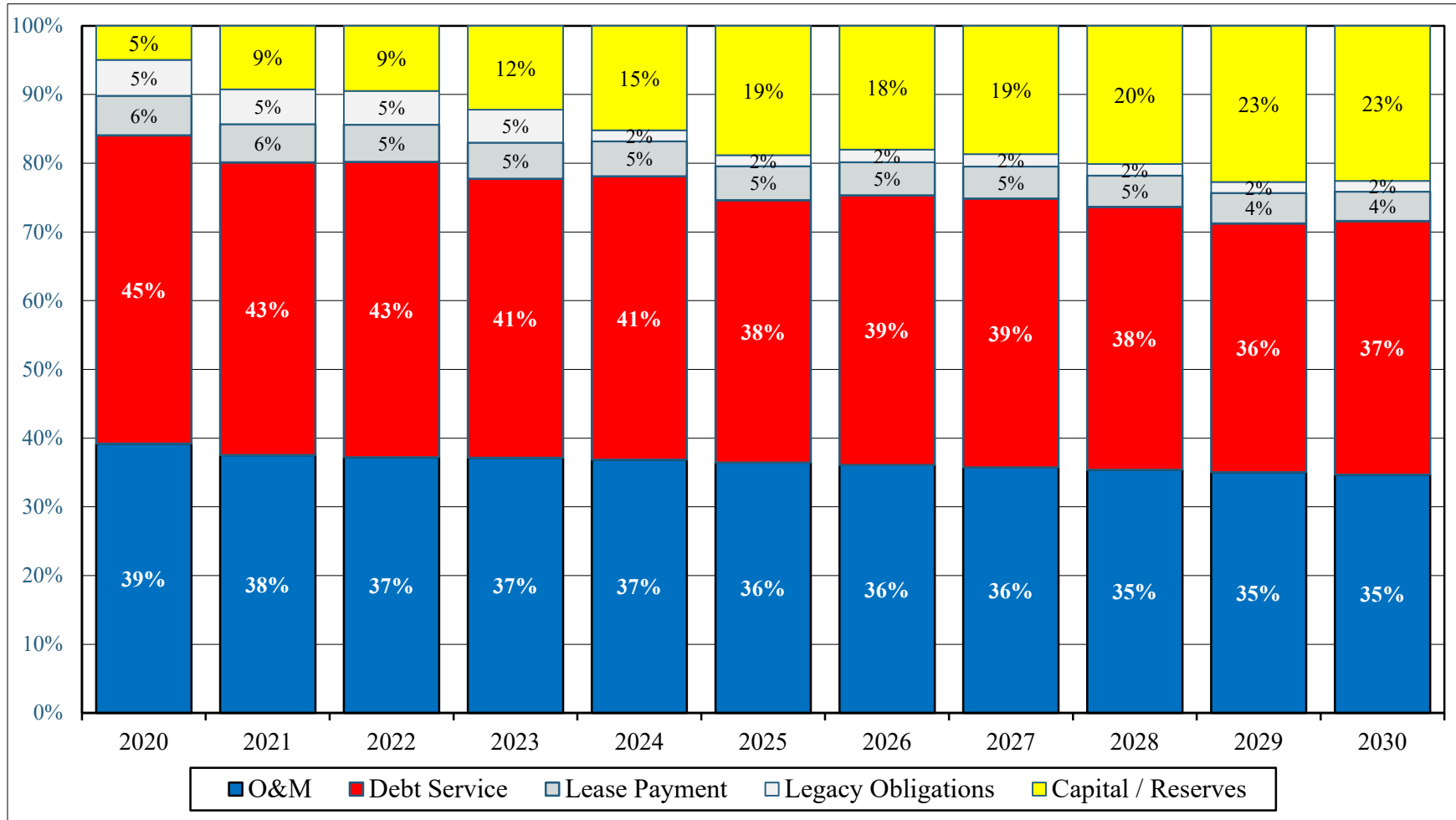
FY 2021 – FY 2030 Financial Plan Forecast

- Forecasts still preliminary
 - ✓ *Updates and revisions will continue in support of the Final FY 2021 Budget and Charges and the upcoming refinancing transactions*
- Further review may result in additional changes
 - ✓ *Not material to the core forecasts*
- Post potential refunding, a formal update will be prepared with those results

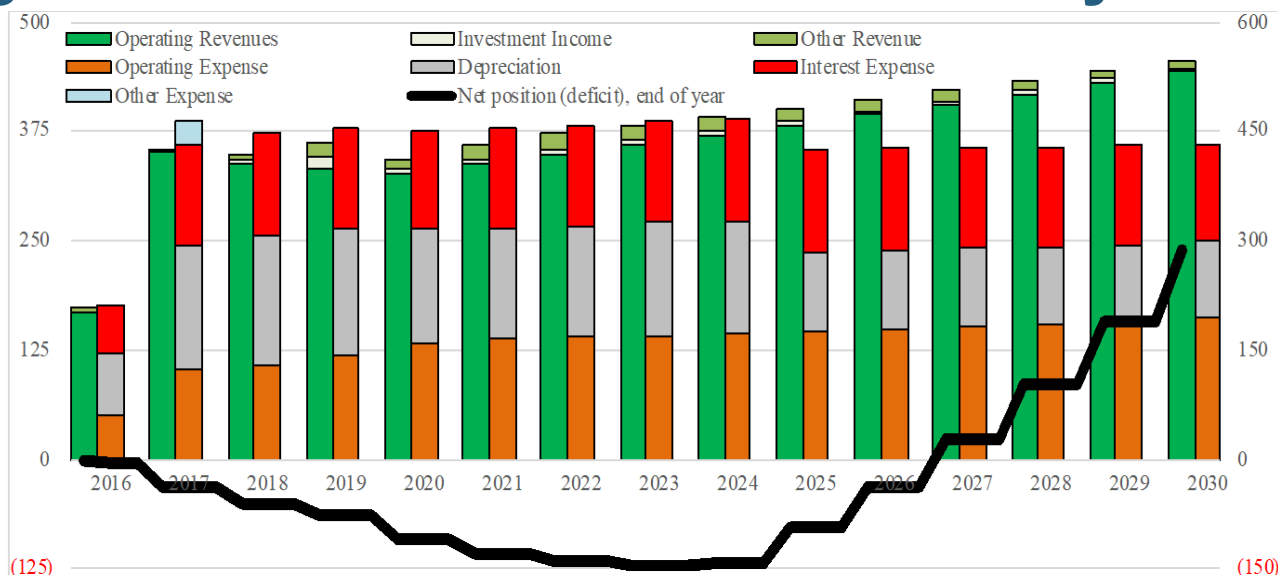
FY 2021 – FY 2030 Financial Plan Forecast: *Relative Water Revenue Requirement Distribution*



FY 2021 – FY 2030 Financial Plan Forecast: *Relative Sewer Revenue Requirement Distribution*

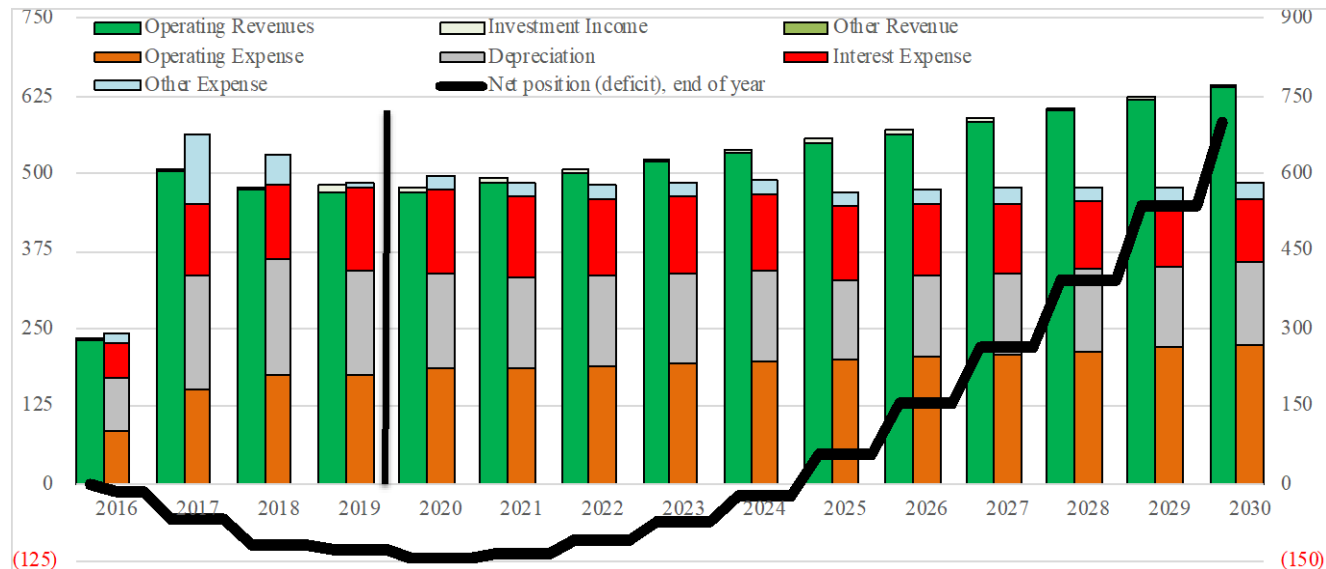


Reported and Forecasted Statement of Changes in Net Position: Water System



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Act.	Act.	Act.	Act.	Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
1 Total operating revenues	167.7	351.7	338.3	331.6	326.2	338.6	349.9	360.5	371.4	382.6	394.1	406.0	418.2	431.0	443.9
2 Operating expenses	49.5	101.7	108.5	119.8	131.5	137.1	139.6	141.0	143.3	146.4	149.4	152.4	155.4	158.5	161.7
3 Depreciation/Amortization	71.3	144.1	146.1	144.1	131.9	125.7	127.8	130.7	129.2	90.5	90.7	89.8	86.8	87.2	87.8
4 Total operating expenses	120.8	245.9	254.6	264.0	263.3	262.9	267.5	271.7	272.5	236.9	240.0	242.2	242.2	245.7	249.4
5 Operating income	46.8	105.9	83.7	67.6	62.9	75.7	82.4	88.7	98.8	145.7	154.1	163.8	176.1	185.3	194.5
Non operating revenue (expenses)															
6 Earnings on investments	0.4	1.8	6.1	14.8	5.7	4.8	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.1	4.1
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(114.2)	(112.3)	(114.8)	(113.6)	(115.6)	(117.0)	(116.7)	(116.2)	(115.7)	(115.1)	(113.0)	(110.6)
8 Other Non-Operating	5.2	6.4	4.4	15.3	10.1	15.4	18.4	17.2	16.2	15.2	14.1	12.9	11.5	10.3	8.2
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)	(16.4)	(33.6)	(18.9)	(9.0)	(5.8)	1.9	48.1	55.9	65.0	76.6	86.6	96.3
10 Net position (deficit), beginning of year	0.0	(4.1)	(36.5)	(60.4)	(76.9)	(110.5)	(129.4)	(138.4)	(144.1)	(142.2)	(94.1)	(38.1)	26.9	103.5	190.1
11 Net position (deficit), end of year	(4.1)	(36.5)	(60.4)	(76.9)	(110.5)	(129.4)	(138.4)	(144.1)	(142.2)	(94.1)	(38.1)	26.9	103.5	190.1	286.4

Reported and Forecasted Statement of Changes in Net Position: Sewer System



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Act.</i>	<i>Act.</i>	<i>Act.</i>	<i>Act.</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	487.0	502.0	517.2	532.9	549.0	565.6	582.7	600.3	618.5	637.1
2 Operating expenses	84.4	151.3	176.4	174.0	187.1	184.9	188.9	194.0	198.5	202.0	206.1	210.2	214.4	218.7	223.1
3 Depreciation/Amortization	86.0	185.6	187.3	168.5	151.4	145.8	146.0	144.9	144.2	127.0	130.0	130.9	131.1	132.2	135.6
4 Total operating expenses	170.4	336.9	363.6	342.6	338.4	330.7	334.9	339.0	342.7	329.0	336.1	341.1	345.5	350.9	358.6
5 Operating income	60.1	168.9	110.0	126.9	133.4	156.3	167.0	178.3	190.1	220.0	229.5	241.6	254.8	267.6	278.5
Nonoperating revenue (expenses)															
6 Earnings on investments	1.1	2.2	5.3	11.8	5.1	5.6	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.6
7 Interest Expense - Bonded Debt	(56.5)	(113.7)	(118.2)	(136.8)	(135.7)	(132.9)	(125.5)	(124.2)	(122.9)	(119.5)	(116.1)	(112.3)	(108.3)	(103.5)	(99.1)
8 Other Non-Operating	(17.2)	(51.7)	(46.9)	(7.5)	(21.6)	(21.7)	(21.8)	(22.2)	(22.6)	(23.1)	(23.6)	(24.1)	(24.6)	(25.2)	(25.7)
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)	(5.6)	(18.8)	7.3	25.1	37.3	50.0	82.8	95.3	110.7	127.4	144.5	159.3
10 Net position (deficit), beginning of year	0.0	(12.6)	(68.4)	(118.3)	(123.9)	(142.7)	(135.5)	(110.3)	(73.0)	(23.0)	59.8	155.2	265.9	393.3	537.8
11 Net position (deficit), end of year	(12.6)	(68.4)	(118.3)	(123.9)	(142.7)	(135.5)	(110.3)	(73.0)	(23.0)	59.8	155.2	265.9	393.3	537.8	697.0

Proposed FY 2021 Water and Sewer Service Charges



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.

Background Dynamics Impacting Proposed FY 2021 Service Charges

- What we've heard from Member Partners:
 - ✓ *Embrace core principles of simplicity and stability*
- Current (FY 2020) Service Charges reflect detailed Cost of Service Study
- Overall FY 2021 BUDGET reflects minor changes in total and amongst GLWA business areas
 - ✓ *Not likely that cost pool allocations would vary materially if finalized for FY 2021*

Background Dynamics Impacting Proposed FY 2021 Service Charges *(continued)*

- FY 2021 Units of Service are virtually unchanged from those used for current charges
 - ✓ *Due to Water Contract Alignment Process (“CAP”) only one Member Partner (Bruce Township) has a revised Exhibit B Demand*
 - ✓ *Estimates of non-revenue water and peak demand use for NMM Member Partners are unchanged from Phase 2 of UoS Study*
 - ✓ *Sewer SHAREs unchanged from FY 2020 Charges*

Background Dynamics Impacting Proposed FY 2021 Service Charges *(continued)*

- This stability opportunity for FY 2021 is not likely to be long lasting
 - ✓ *Sewer SHAREs are anticipated to be adjusted for FY 2022 via adjustments to the “Sewer Charge Methodology Review” project and related discussions*
 - ✓ *GLWA is embarking on a “Water Charge Methodology Review” which may introduce material changes as soon as FY 2022*
 - At the very least, distance factors will need to be updated to remove Northeast Water Treatment Plant from calculations

Strategy for Proposed FY 2021 Service Charges

- Given these unique circumstances, a simplified approach for FY 2021 Service Charges is in order
- Proposed Service Charges increase ALL Wholesale Service Charges “across the board” by 3.5%
 - ✓ *This amount required to produce revenues that meet revenue requirements of the FY 2021 BUDGET*
 - ✓ *Certain additional adjustments necessary to reflect specific contract requirements*

Strategy for Proposed FY 2021 Service Charges *(continued)*

- Precedent for this approach
 - ✓ *FY 2014 Suburban Wholesale Sewer Service Charges were increased "across the board" by 3.7%*
 - ✓ *FY 2014 and FY 2015 Suburban Wholesale Water Service Charges*
 - "Mod" Member Partners with changing contract demands were adjusted in accordance with cost of service results on their individual demands
 - All other "No Mod" Member Partners received an average charge adjustment for the class at large

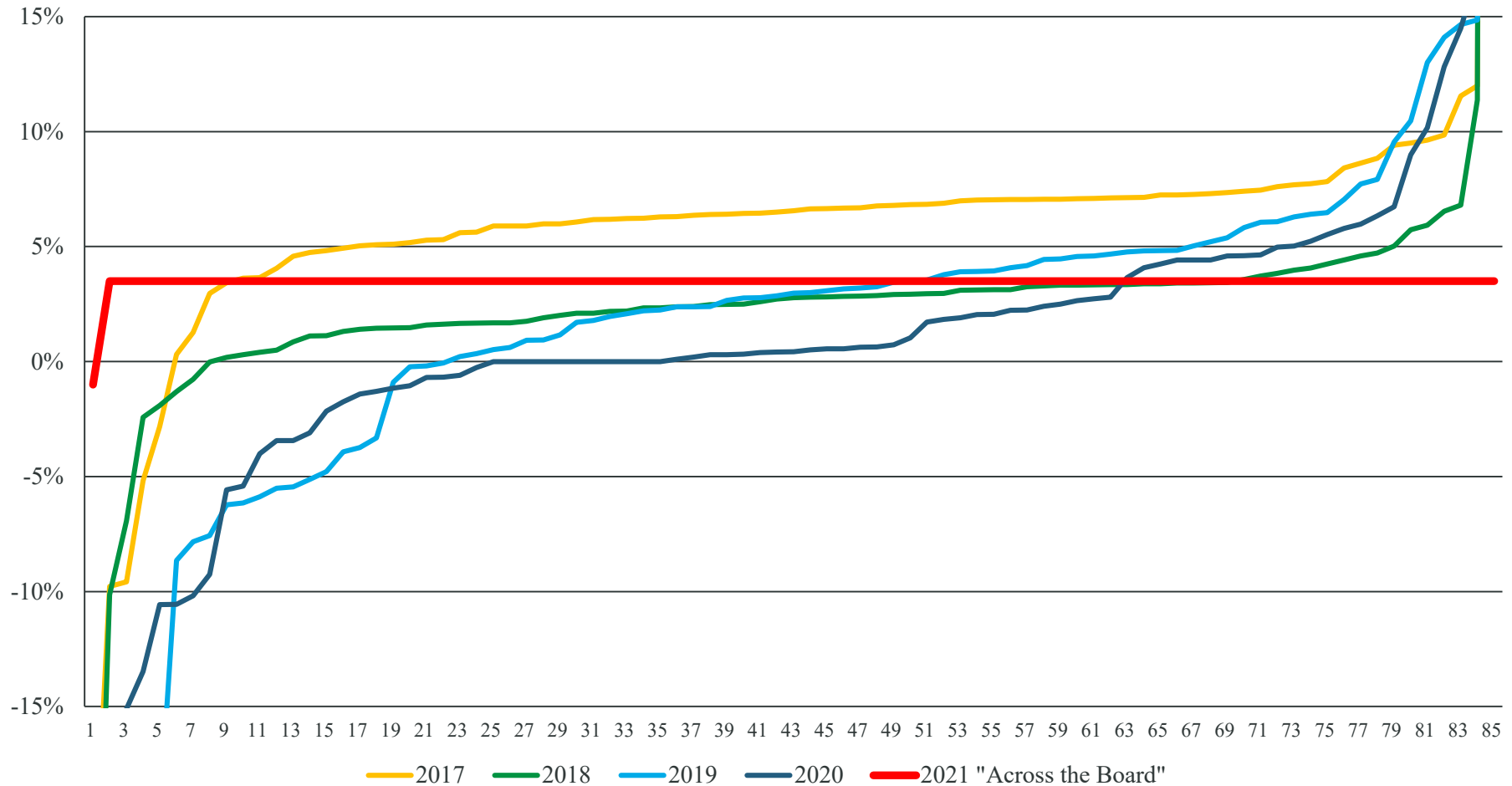
Strategy for Proposed FY 2021 Service Charges – Special Considerations

- One Water Member Partner has modified contract demands and should be allocated revenue requirements accordingly
- The “across the board” adjustment needs to be applied to the “wholesale proxy” for Member Partners with specific contract requirements
 - ✓ *Detroit ownership benefit adjustments for both Water and Sewer*
 - ✓ *Flint KWA Water debt service credit*
 - ✓ *OMID specific Sewer cost pool*

Strategy for Proposed FY 2021 Service Charges – Special Considerations *(continued)*

- FY 2020 Charges to Suburban Wholesale Sewer Member Partners carry \$2.26 million for prospective FY 2020 bad debt expense related to Highland Park
- Proposed FY 2021 Charges
 - ✓ *Reduce the prospective amount to \$1.31 million*
 - ✓ *Recognize a potential “bad debt true-up” credit of \$1.31 million for FYs 2019 and 2020*
- Net result is no Highland Park bad debt adjustment in FY 2021 Sewer Charges
 - ✓ *Reduces 3.5% “across the board” increase to 2.6%*

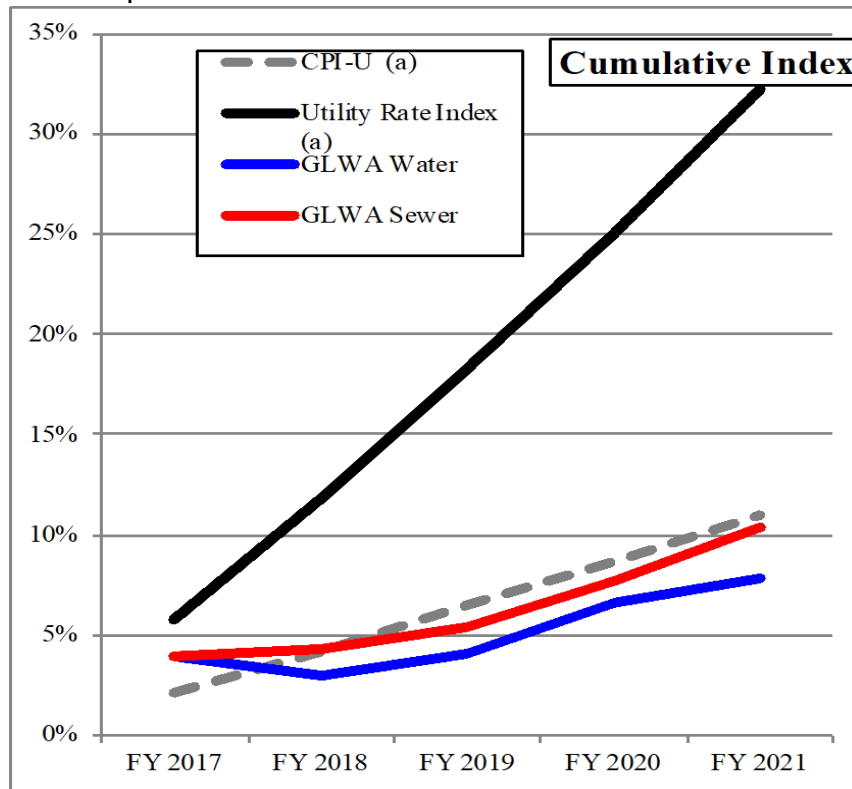
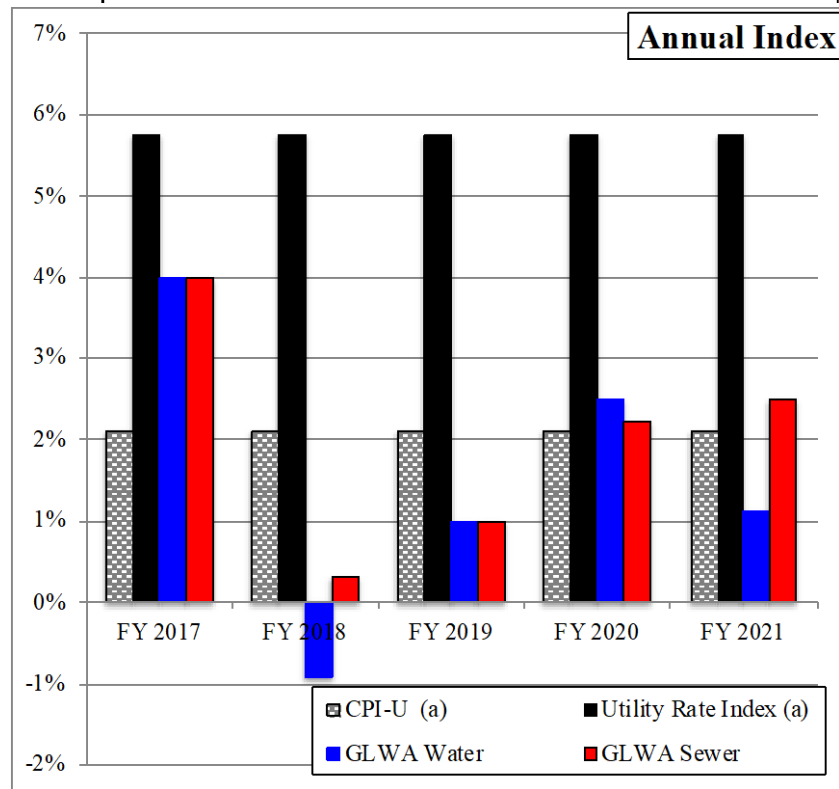
Wholesale Water Charge Adjustments Specific Customers Compared to Average



GLWA BUDGET Adjustments Compared to Utility Indices

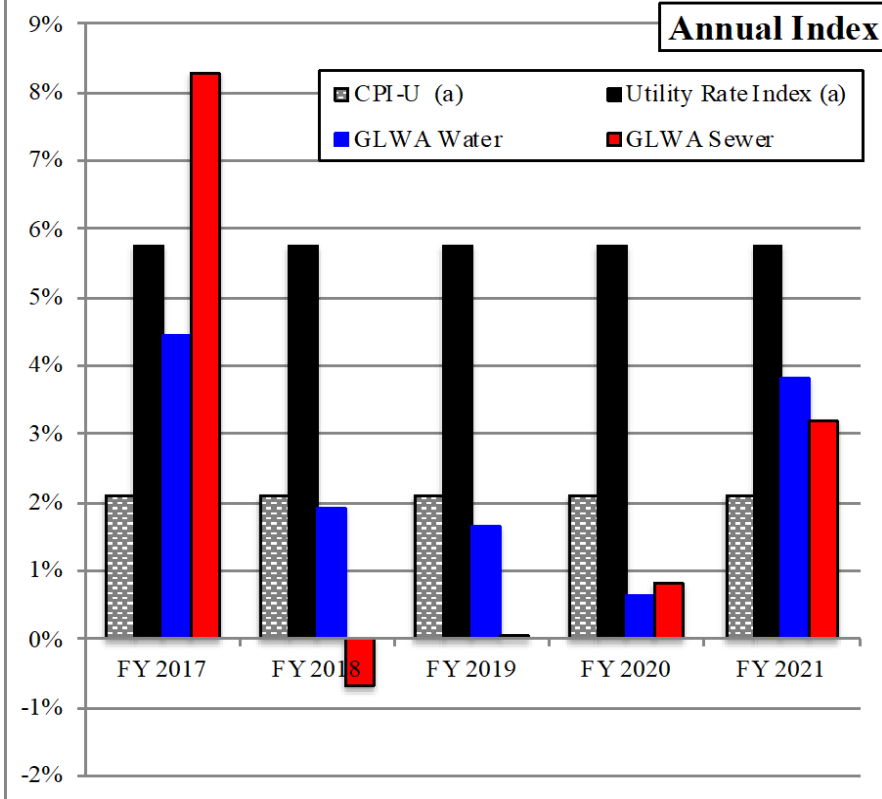
Annual	Annual Index				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
CPI-U (a)	2.1%	2.1%	2.1%	2.1%	2.1%
Utility Rate Index (a)	5.8%	5.8%	5.8%	5.8%	5.8%
GLWA Water	4.0%	-0.9%	1.0%	2.5%	1.1%
GLWA Sewer	4.0%	0.3%	1.0%	2.2%	2.5%

	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%	10.4%

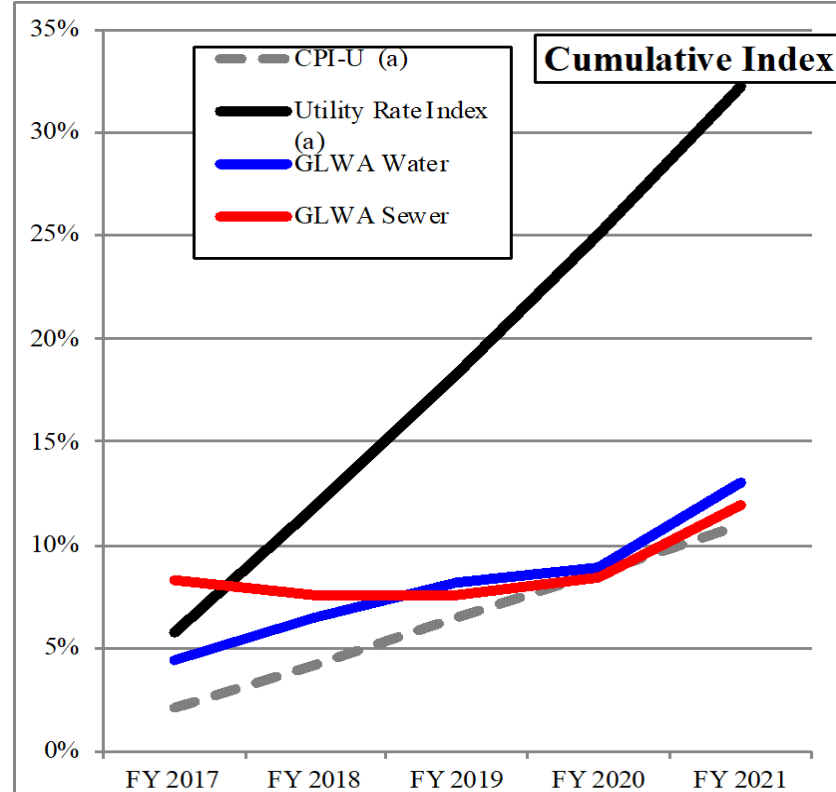


GLWA System CHARGE Adjustments Compared to Utility Indices

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%	3.2%



Cumulative	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%	12.0%





GLWA

Great Lakes Water Authority