



FY 2025 Charges Rollout Meeting #4

January 18, 2024



Agenda

1. Welcome & Agenda Review
2. Proposed **Budget and Financial Forecast** Highlights
3. Water & Wastewater Charges Q&A
Follow-up from Charges Roll Out # 3 and One-on-One Meetings
4. Break
5. Further Discussion of Hot Topics from Charges Rollout #3
6. Next Steps
7. Closing Comments and Adjourn

Three Key Takeaways

- 1. Charges:** The System-Wide Charges Revenue Increase is 3.25 Percent for Water and 3.0 Percent for Sewer – Well Below the Rate of Inflation for utilities
- 2. Sewer SHARES:** The FY 2025 Sewer Charges are being updated for the first time in three years and the resulting changes in individual Member Partner Charge adjustments (generally) reflect moderate variances from the System-Wide adjustment of 3.0%.
- 3. Simplified Water Charge Methodology:** The FY 2025 Water Charges embrace the recently endorsed “10/50/40 with Delivery Factor” methodology. Charge adjustments for all but 3 Member Partners are uniform and approximate the System-Wide increase of 3.25%.

Charge Adjustments Well Below Inflation

- Since FY 2018, GLWA's average combined Water and Sewer Charge adjustments have been less than $\frac{1}{2}$ of inflationary increases, as measured by the CPI-U
 - *1.7% Average Charge increase vs 3.5% inflation*
- Future Charge Adjustments are *forecasted* to increase to “correct the over-delivery of the 4% Promise” to achieve improved sustainability for GLWA's Water and Sewer Systems
 - *These projected increases are forecasts – and not part of any formal charge proposals for FY 2025*

Proposed System Charge Adjustments

- Proposed increase on overall Budgeted Revenue Requirements is 4.0% for both the Water and Sewer Systems
 - Last year of the “4% Promise”*
- Increased budgeted investment earnings help offset a portion of the Budget Increase
- Lower forecasted Water Sales require ~ .8% increase in Water Charges
- Proposed System Charge Adjustments:
 - 3.25%** for Water
 - 3.0%** for Sewer

	Water System		Sewer System	
	<u>Adjustment</u>	<u>Charge Impact</u>	<u>Adjustment</u>	<u>Charge Impact</u>
Revenue Requirement Increase	\$14.81	4.1%	\$20.03	4.1%
Increased Investment Earnings	(6.0)	-1.7%	(5.6)	-1.1%
Decreased Sales Revenue	<u>3.0</u>	<u>0.8%</u>	<u>0.4</u>	<u>0.1%</u>
Wholesale Charge Adjustment	\$11.80	3.25%	\$14.79	3.00%

Sewer SHARES Updated for the First Time Since FY 2022

- Sewer SHARES are being updated for the FY 2025 Sewer Charges
 - *First update since FY 2022*
- SHARE update reflects two separate analysis:
 - *Updated Units of Service from Flow Balance – new 10-year data period from FY 2014 through FY 2023 (Drop off FY 2013)*
 - *FY 2025 Cost of Service Study*
- The Sewer Charge impact for most Member Partners varies from a decrease of less than 1% to an increase of less than 5%
 - *There are some unique exceptions*

Water Charge Methodology has been Simplified – Generally Stable Charge Adjustments

- Three Member Partners have modified Contract Demands since original Units of Service were presented in November
 - *These “MOD” Customers will receive charge reductions that total ~ 11% as a class*
- All other “No MOD” Member Partners will receive a uniform wholesale charge increase of 3.33%
 - *Total effective charge increase is 3.06% after recognition of fixed contractual adjustments*
- Water Charge Calculations embrace the new simplified methodology
 - *10/50/40 Commodity/Max Day/Peak Hour Cost Pools*
 - *Water Delivery Factor replaces Distance and Elevation*

Budget & Charges Calendar Align With Contractual Commitment

Overall Budget & Charges Timing – To Date

- Friday, September 8, 2023 – Internal Deadline for Cost Center Budget Request
- Tuesday, September 12, 2023 – Capital Planning Committee – Preliminary CIP Spend Update and Presentation – Actual, Forecasted, and Proposed
- Wednesday, September 13, 2023 – Board of Directors Meeting
 - Economic Outlook Task Force Report – Quarterly Update
 - Budget and Charges Briefing
- Thursday, October 19, 2023 - Charges Rollout #1 – CIP Version 1.0
- Tuesday, November 14, 2023 - Charges Rollout #2 - Units of Service
- Thursday, November 30, 2023 – Pencils Down to Compile Proposed Materials
- **Milestone Date: Friday, December 15, 2023 – Audit Committee - Proposed Budget and Related Charges Strategy ([12.15.2023 Draft 1](#) available online)**

Overall Budget & Charges Timing - January

- Thursday, January 11, 2024 – Charges Rollout #3 – Proposed Charges and Introduction of Proposed Budget
- GLWA “Office Hours” to review Charge related material with individual Member Partner representatives
 - 1/16/2024 (all day), 1/17/2024 (morning only), 1/22/2024 (all day)
- Thursday, January 18, 2024 – Charges Rollout #4 – Feedback on Charges, Office Hours Q&A, and Further Review of Proposed Budget
- ➔ • Wednesday, January 24, 2024 - GLWA Board Briefing – Budget & Charges
- Friday, January 26, 2024 – GLWA Audit Committee – Ongoing Budget & Charges Review
- **Milestone Date: Based on Contract, January 29, 2024 - Mail Notice to Member Partners of Public Hearing to be held on February 28, 2024**

Overall Budget & Charges Timing – February+

- ★ **Milestone Date:** Wednesday, February 28, 2024 (Tentative) – Board Meeting
 - Public Hearing FY 2025 & FY 2026 Biennial Budget
 - Public Hearing FY 2025 Schedule of Revenues and Charges
 - Proposed Adoption of FY 2025 & FY 2026 Biennial Budget (subject to public comment)
 - Proposed Approval of the FY 2025 & FY 2026 Biennial Budget (subject to public comment)
 - Proposed Approval of FY 2025–2029 Capital Improvement Plan
- Tentative weekly Board meeting dates if budget and charges not approved in February 2024
 - Thursday, March 7, 2024
 - Wednesday, March 13, 2024
 - Thursday, March 21, 2024
 - Wednesday, March 27, 2024
- Monday, July 1, 2024 – Effective date of budget, charges, and capital plan

Budget Highlights

GLWA Revenue Requirement / Budget – Fast Facts

- ◆ Approximately 44% is debt service and 44% is operations & maintenance
 - ◆ Balance of 12% is lease payment, pay-as-you go capital funding, WRAP, and other
- ◆ Three Largest Operations & Maintenance Expense Categories – Personnel (33%), Contractual Services (29%), and Utilities (18%)
- ◆ The “Capital Spending Ratio” is at 100% based on demonstrated capital delivery performance and a hedge on cost increases

FY 2025 “Making Sense of Your Dollar” – Sent with Meeting Agenda

MAKING SENSE OF YOUR DOLLARS

Every dollar paid to GLWA for **Water Services** provides for...

FY 2025 Water System Budget Infographic

45.5% DEBT SERVICE
45.5¢ ON THE DOLLAR
Physical improvements to GLWA's regional water system and its assets are financed with debt. Debt service principal, interest, and other required deposits are funded monthly.

44.0% OPERATIONS AND MAINTENANCE
44.0¢ ON THE DOLLAR
The cost for people, utilities, chemicals, and services to deliver water of unquestionable quality around-the-clock, every day of the year.

5.8% REGIONAL SYSTEM LEASE
5.8¢ ON THE DOLLAR
This money goes to the Detroit Water and Sewerage Department (DWSD) to pay for GLWA's lease of the regional water system. DWSD uses those funds for improvements to the local system and to pay debt related to capital improvements.

1.9% REVENUE FINANCED CAPITAL
1.9¢ ON THE DOLLAR
To lower the debt burden, GLWA sets aside money each year from revenues to pay for capital improvements in future years. This pay-as-you-go approach eliminates the need to pay interest on debt in future years and improves financial resiliency.

1.6% RECEIVING FUND WORKING CAPITAL
1.6¢ ON THE DOLLAR
The amount required to maintain sufficient liquidity in the Master Bond Ordinance Receiving Fund.

0.6% CLOSED PENSION
0.6¢ ON THE DOLLAR
GLWA inherited a portion of the city of Detroit's pension plan expense for employees and retirees that maintained the water system before GLWA was formed. Over time, the annual payment will decrease.

0.5% WRAP (WATER RESIDENTIAL ASSISTANCE PROGRAM)
0.5¢ ON THE DOLLAR
Half a percent of GLWA's revenue goes straight to funding WRAP, making it the only sustainably-funded assistance program in the country. WRAP provides not only financial assistance, but also conservation education and minor plumbing repairs and replacements.

Note: Percentages based on FY 2025 proposed budget.

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MAKING SENSE OF YOUR DOLLARS

Every dollar paid to GLWA for **Wastewater Services** provides for...

FY 2025 Wastewater System Budget Infographic

44.0% OPERATIONS AND MAINTENANCE
44.0¢ ON THE DOLLAR
The cost for people, utilities, chemicals, and services to deliver effective and efficient wastewater services around-the-clock, every day of the year.

43.5% DEBT SERVICE
43.5¢ ON THE DOLLAR
Physical improvements to GLWA's regional wastewater system and its assets are financed with debt. Debt service principal, interest, and other required deposits are funded monthly.

5.4% REVENUE FINANCED CAPITAL
5.4¢ ON THE DOLLAR
To lower the debt burden, GLWA sets aside money each year from revenues to pay for capital improvements in future years. This pay-as-you-go approach eliminates the need to pay interest on debt in future years and improves financial resiliency.

5.3% REGIONAL SYSTEM LEASE
5.3¢ ON THE DOLLAR
This money goes to the Detroit Water and Sewerage Department (DWSD) to pay for GLWA's lease of the regional wastewater system. DWSD uses those funds for improvements to the local system and to pay debt related to capital improvements.

0.9% CLOSED PENSION
0.9¢ ON THE DOLLAR
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0.4% RECEIVING FUND WORKING CAPITAL
0.4¢ ON THE DOLLAR
The amount required to maintain sufficient liquidity in the Master Bond Ordinance Receiving Fund.

Note: Percentages based on FY 2025 proposed budget.

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MAKING SENSE OF YOUR DOLLARS

Every dollar paid to GLWA for combined **Water and Wastewater Services** provides for...

FY 2025 Water and Wastewater Combined Budget Infographic

44.3% DEBT SERVICE
44.3¢ ON THE DOLLAR
Physical improvements to GLWA's regional water and wastewater system assets are financed with debt. Debt service principal, interest and other required deposits are funded monthly.

44.0% OPERATIONS AND MAINTENANCE
44.0¢ ON THE DOLLAR
The cost for people, utilities, chemicals, and services to deliver water of unquestionable quality and effective and efficient wastewater services around-the-clock, every day of the year.

5.5% REGIONAL SYSTEM LEASE
5.5¢ ON THE DOLLAR
This money goes to the Detroit Water and Sewerage Department (DWSD) to pay for GLWA's lease of the regional water and wastewater systems. DWSD uses those funds for improvements to the local system and to pay debt related to capital improvements.

3.9% REVENUE FINANCED CAPITAL
3.9¢ ON THE DOLLAR
To lower the debt burden, GLWA sets aside money each year from revenues to pay for capital improvements in future years. This pay-as-you-go approach eliminates the need to pay interest on debt in future years and improves financial resiliency.

0.9% RECEIVING FUND WORKING CAPITAL
0.9¢ ON THE DOLLAR
The amount required to maintain sufficient liquidity in the Master Bond Ordinance Receiving Fund.

0.8% CLOSED PENSION
0.8¢ ON THE DOLLAR
GLWA inherited a portion of the city of Detroit's pension plan expense for employees and retirees that maintained the water system before GLWA was formed. Over time, the annual payment will decrease.

0.5% WRAP (WATER RESIDENTIAL ASSISTANCE PROGRAM)
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Note: Percentages based on FY 2025 proposed budget.

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Three Key BUDGET Categories

- “BUDGET” = “Revenue Requirement”
 1. *Operations & Maintenance Expense*
 2. *Capital Program (Past, Present, and Future)*
 - ✓ Debt Service
 - ✓ Deposit to the Improvement and Extension (I&E) Fund (a/k/a Revenue Financed Capital Improvements or Paygo Capital)
 3. *Non-Operating Expenses*
 - ✓ GLWA’s Share of the Closed, Legacy DWSD Pension Liability Pool
 - ✓ Water Residential Assistance Program Deposit
 - ✓ Lease Payment

Note: Master Bond Ordinance defines (*in much greater detail*) how funds received are prioritized among the above categories

Core GLWA Budget Schedules

Water Revenue Requirement

Schedule 1A – Water System Revenue Requirement Biennial Budget

	FY 2023 Actual	FY 2024 Adopted Budget	FY 2024 Estimated Budget	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance	FY 2026 Department Requested	FY 2026 Dollar Variance	FY 2026 Percent Variance
Water System Revenue Requirement									
Revenues									
Revenues from Charges									
Suburban Wholesale Customers	\$334,141,200	\$340,540,600	\$336,540,600	\$347,758,000	\$ 7,217,400	2.1%	\$372,639,700	\$ 24,881,700	7.2%
Local System Charges	22,834,300	25,537,200	25,537,200	27,094,800	1,557,600	6.1%	30,730,900	3,636,100	13.4%
Total Revenue from Charges	356,975,500	366,077,800	362,077,800	374,852,800	8,775,000	2.4%	403,370,600	28,517,800	7.6%
Other Revenue	1,378,700	175,000	440,000	400,000	225,000	128.6%	400,000	-	0.0%
Investment Earnings									
Investment Earnings - Unrestricted	5,501,600	3,067,000	8,530,200	6,692,200	3,625,200	118.2%	7,606,400	914,200	13.7%
Investment Earnings - Restricted for Debt Service	3,660,000	994,700	3,531,500	3,182,100	2,187,400	219.9%	2,634,600	(547,500)	-17.2%
Total Investment Earnings	9,161,600	4,061,700	12,061,700	9,874,300	5,812,600	143.1%	10,241,000	366,700	3.7%
Total Revenues	\$367,515,800	\$370,314,500	\$374,579,500	\$385,127,100	\$ 14,812,600	4.0%	\$414,011,600	\$ 28,884,500	7.5%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$154,327,800	\$152,906,400	\$163,100,500	\$169,625,000	\$ 16,718,600	10.9%	\$176,410,000	\$ 6,785,000	4.0%
General Retirement System Legacy Pension	6,048,000	-	-	-	-	0.0%	-	-	0.0%
Debt Service	150,055,300	159,482,800	162,634,000	175,300,800	15,818,000	9.9%	186,537,300	11,236,500	6.4%
General Retirement System Accelerated Pension	6,268,300	3,395,500	1,505,500	2,283,300	(1,112,200)	-32.8%	2,252,200	(31,100)	-1.4%
Water Residential Assistance Program Contribution	1,770,500	1,851,600	1,851,600	1,947,800	96,200	5.2%	2,070,100	122,300	6.3%
Extraordinary Repair & Replacement Deposit	2,200,000	-	-	-	-	0.0%	-	-	0.0%
Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	-	-	6,200,000	6,200,000	0.0%	5,700,000	(500,000)	0.0%
Improvement & Extension Fund Transfer Pending	23,766,000	30,178,200	22,987,900	7,270,200	(22,908,000)	-75.9%	18,542,000	11,271,800	155.0%
Annual Water System Revenue Requirements	\$366,935,900	\$370,314,500	\$374,579,500	\$385,127,100	\$ 14,812,600	4.0%	\$414,011,600	\$ 28,884,500	7.5%



Core GLWA Budget Schedules

Sewer Revenue Requirement

Schedule 1C – Sewer System Revenue Requirement Biennial Budget

	FY 2023 Actual	FY 2024 Adopted Budget	FY 2024 Estimated Budget	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance	FY 2026 Department Requested	FY 2026 Dollar Variance	FY 2026 Percent Variance
Sewer System Revenue Requirement									
Revenues									
Revenues from Charges									
Suburban Wholesale Customers	\$275,917,500	\$282,687,600	\$282,687,600	\$287,074,800	\$ 4,387,200	1.6%	\$302,551,200	\$ 15,476,400	5.4%
Local System Charges	191,042,200	196,569,600	196,569,600	206,366,400	9,796,800	5.0%	218,013,000	11,646,600	5.6%
Industrial Waste Control Charges	8,393,100	8,584,200	8,584,200	8,719,300	135,100	1.6%	9,198,600	479,300	5.5%
Pollutant Surcharges	4,894,600	5,328,300	5,328,300	5,434,400	106,100	2.0%	5,733,100	298,700	5.5%
Total Revenue from Charges	480,247,400	493,169,700	493,169,700	507,594,900	14,425,200	2.9%	535,495,900	27,901,000	5.5%
Other Revenue	4,901,300	400,000	717,000	700,000	300,000	75.0%	700,000	-	0.0%
Investment Earnings									
Investment Earnings - Unrestricted	8,395,900	5,567,000	13,399,700	10,495,700	4,928,700	88.5%	11,624,800	1,129,100	10.8%
Investment Earnings - Restricted for Debt Service	4,102,400	1,490,300	2,657,600	1,861,500	371,200	24.9%	1,467,300	(394,200)	-21.2%
Total Investment Earnings	12,498,300	7,057,300	16,057,300	12,357,200	5,299,900	75.1%	13,092,100	734,900	5.9%
Total Revenues	\$497,647,000	\$500,627,000	\$509,944,000	\$520,652,100	\$ 20,025,100	4.0%	\$549,288,000	\$ 28,635,900	5.5%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$207,330,200	\$205,643,700	\$220,128,400	\$228,934,000	\$ 23,290,300	11.3%	\$238,091,400	\$ 9,157,400	4.0%
General Retirement System Legacy Pension	10,824,000	-	-	-	-	0.0%	-	-	0.0%
Debt Service	212,669,100	228,328,300	231,781,500	226,279,400	(2,048,900)	-0.9%	226,618,700	339,300	0.1%
General Retirement System Accelerated Pension	11,620,700	6,479,300	3,096,800	4,846,300	(1,633,000)	-25.2%	4,776,300	(70,000)	-1.4%
Water Residential Assistance Program Contribution	2,394,200	2,503,100	2,503,100	2,651,700	148,600	5.9%	2,746,400	94,700	3.6%
Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Receiving Fund Working Capital Requirement	-	-	-	2,300,000	2,300,000	0.0%	3,600,000	1,300,000	0.0%
Improvement & Extension Fund Transfer Pending	26,236,800	30,172,600	24,934,200	28,140,700	(2,031,900)	-6.7%	45,955,200	17,814,500	63.3%
Annual Sewer System Revenue Requirements	\$498,575,000	\$500,627,000	\$509,944,000	\$520,652,100	\$ 20,025,100	4.0%	\$549,288,000	\$ 28,635,900	5.5%



Core GLWA Budget Schedules

Operating Expense Summary

Schedule 2C – Operations & Maintenance Biennial Budget by Service Area

Operating Area	FY 2023 Actual	FY 2024 Adopted Budget	FY 2024 Amended Budget	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance	FY 2026 Department Requested	FY 2026 Dollar Variance	FY 2026 Percent Variance
A Water System Operations	\$ 86,771,900	\$ 82,732,800	\$ 87,738,200	\$ 94,669,900	\$ 11,937,100	14.4%	\$ 97,884,000	\$ 3,214,100	3.4%
B Wastewater System Operations	139,525,100	132,934,300	141,655,800	147,245,100	14,310,800	10.8%	154,308,800	7,063,700	4.8%
C Centralized Services	100,031,200	106,900,500	116,537,400	116,980,200	10,079,700	9.4%	120,417,000	3,436,800	2.9%
D Administrative & Other Services	35,329,800	35,982,500	37,297,500	39,663,800	3,681,300	10.2%	41,891,600	2,227,800	5.6%
Grand Total	\$361,658,000	\$358,550,100	\$383,228,900	\$398,559,000	\$ 40,008,900	11.2%	\$414,501,400	\$ 15,942,400	4.0%

Schedule 2E – Operations & Maintenance Expense by Fund with Centralized & Administrative Services Allocated – Biennial Budget

System	FY 2023 Actual	FY 2024 Adopted Budget	FY 2024 Amended Budget	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance	FY 2026 Department Requested	FY 2026 Dollar Variance	FY 2026 Percent Variance
Water System	\$154,327,800	\$152,906,400	\$163,100,500	\$169,625,000	\$ 16,718,600	10.9%	\$176,410,000	\$ 6,785,000	4.0%
Sewer (Wastewater) System	207,330,200	205,643,700	220,128,400	228,934,000	23,290,300	11.3%	238,091,400	9,157,400	4.0%
Grand Total	\$361,658,000	\$358,550,100	\$383,228,900	\$398,559,000	\$ 40,008,900	11.2%	\$414,501,400	\$ 15,942,400	4.0%

Core GLWA Budget Schedules

Operating Expense Summary

Schedule 2A – Operations & Maintenance Expense by Expense Category (Water and Sewer Combined) – Biennial Budget

Operations & Maintenance Expense	FY 2023 Actual	FY 2024 Adopted Budget	FY 2024 Amended Budget	FY 2025 Department Requested	FY 2025 Dollar Variance	FY 2025 Percent Variance	FY 2026 Department Requested	FY 2026 Dollar Variance	FY 2026 Percent Variance
2.1 Salaries & Wages	\$ 70,113,800	\$ 74,765,400	\$ 74,935,400	\$ 81,643,800	\$ 6,878,400	9.2%	\$ 92,188,200	\$ 10,544,400	12.9%
2.2 Workforce Development	1,413,900	1,391,500	1,391,500	2,105,000	713,500	51.3%	2,326,400	221,400	10.5%
2.3 Overtime	8,570,400	7,383,000	7,453,000	8,074,200	691,200	9.4%	8,955,900	881,700	10.9%
2.4 Employee Benefits	24,789,400	28,218,500	28,263,500	30,347,300	2,128,800	7.5%	34,551,400	4,204,100	13.9%
2.5 Transition Services	9,920,100	9,128,700	9,128,700	8,198,000	(930,700)	-10.2%	8,292,000	94,000	1.1%
Total Personnel Costs	114,807,600	120,887,100	121,172,100	130,368,300	9,481,200	7.8%	146,313,900	15,945,600	12.2%
3.1 Electric	48,176,300	42,820,200	46,769,200	49,020,700	6,200,500	14.5%	49,611,600	590,900	1.2%
3.2 Gas	10,821,600	10,168,000	9,865,000	7,000,000	(3,168,000)	-31.2%	7,137,700	137,700	2.0%
3.3 Sewage Service	3,051,900	2,563,100	2,872,800	2,980,100	417,000	16.3%	2,980,700	600	0.0%
3.4 Water Service	15,228,000	7,843,900	12,108,500	11,601,700	3,757,800	47.9%	11,603,700	2,000	0.0%
Total Utility Costs	77,277,800	63,395,200	71,615,500	70,602,500	7,207,300	11.4%	71,333,700	731,200	1.0%
4.1 Chemicals	30,542,200	30,451,800	33,108,600	34,834,900	4,383,100	14.4%	35,299,600	464,700	1.3%
4.2 Supplies & Other	34,491,700	31,371,200	40,013,700	40,357,200	8,986,000	28.6%	37,595,300	(2,761,900)	-6.8%
4.3 Contractual Services	109,703,700	106,889,200	111,763,400	114,508,700	7,619,500	7.1%	118,918,000	4,409,300	3.9%
5.1 Capital Program Allocation	(2,189,600)	(4,232,700)	(4,232,700)	(4,581,800)	(349,100)	8.2%	(6,687,100)	(2,105,300)	45.9%
5.2 Shared Services	(3,270,200)	(1,655,800)	(1,655,800)	(2,279,500)	(623,700)	37.7%	(2,342,100)	(62,600)	2.7%
5.5 Intergovernmental Agreement	(977,600)	-	-	(638,200)	(638,200)	100.0%	-	638,200	-100.0%
6.0 Capital Outlay	1,273,900	2,648,300	2,648,300	3,181,500	533,200	20.1%	2,586,300	(595,200)	-18.7%
7.0 Unallocated Reserve	-	8,795,800	8,795,800	12,205,400	3,409,600	38.8%	11,483,800	(721,600)	-5.9%
Total Other Categories	169,574,100	174,267,800	190,441,300	197,588,200	23,320,400	13.4%	196,853,800	(734,400)	-0.4%
Grand Total	\$ 361,659,500	\$ 358,550,100	\$ 383,228,900	\$ 398,559,000	\$ 40,008,900	11.2%	\$ 414,501,400	\$ 15,942,400	4.0%

Staffing Plan

- ◆ “Staffing Plan” vs. “Full Time Equivalent”
- ◆ An increase in the number of staffing positions to 38
- ◆ Increase of 50.25 FTEs where FTE staffing represents the number of hours that a position is filled per year.
- ◆ See page 302 of [Draft #1 Budget](#)
- ◆ History

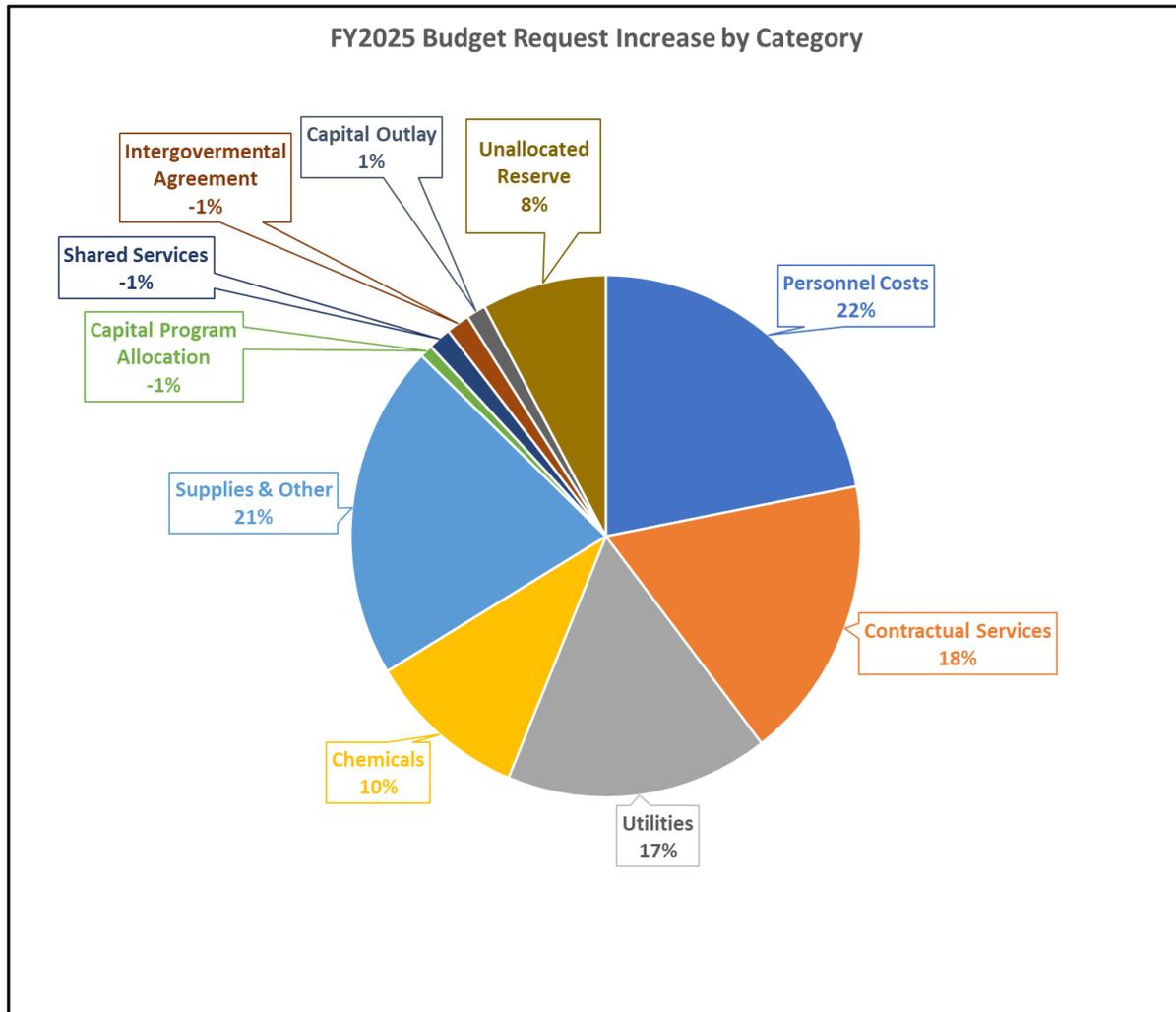
Status	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Positions Filled at Year-end	881	968	1,024	1,062	1,037	1,015	1,069	*1081	
FTEs Budgeted	1,106	1,168	1,171	1,187	1,200	1,216	1,234	1,153	1,203
*As of the 12.01.2023 pay date									

Total Operations & Maintenance Expense Variance Drivers FY2025 Proposed Budget v FY2024 Adopted Budget

- ❖ **Water Operations** - Utilities expense is the largest increase at \$4.8 million due to supplier cost increases, followed by Chemicals at \$1.3 million due to market cost increases, and Personnel at \$2.4 million due to increased hiring and market adjustments.
- ❖ **Sewer Operations** – Contractual services expense is the largest increase at \$3.3 million due to a facilities maintenance contract and for residual solids disposal, followed by Chemicals at \$3.1 million due to market cost increases, and Personnel at \$2.7 million due to increased hiring and market adjustments.
- ❖ **Centralized Services** - Supplies & Small Capital is the largest increase at \$6.0 million and Contractual Services increased \$1.5 million. Both increases are mainly due to the new ERP system implementation.
- ❖ **Administrative Services** – Contractual Services is the largest increase at \$2.0 million mainly due to increased insurance premiums. Personnel increased at \$1.5 million due to increased hiring and market adjustments.

Operations & Maintenance Expense *Increase / Decrease*: FY2025 Proposed Budget v FY2024 Adopted Budget

1



Expense Category	FY 2025 Proposed Budget v FY2024 Adopted Budget Increase / (Decrease)	FY 2025 Proposed Budget v FY2024 Adopted Budget Variance %
Personnel Costs	9,481,200	7.8%
Contractual Services	7,619,500	7.1%
Utilities	7,207,300	11.4%
Chemicals	4,383,100	14.4%
Supplies & Other	8,986,000	28.6%
Capital Program Allocation	(349,100)	8.2%
Shared Services	(623,700)	37.7%
Intergovernmental Agreement	(638,200)	100.0%
Capital Outlay	533,200	20.1%
Unallocated Reserve	3,409,600	38.8%
Grand Total	40,008,900	11.2%

1 - Please reference Schedule 2A in Core Financial Plan Schedules on page 30 for more detail

Budget & Financial Plan



Draft #1

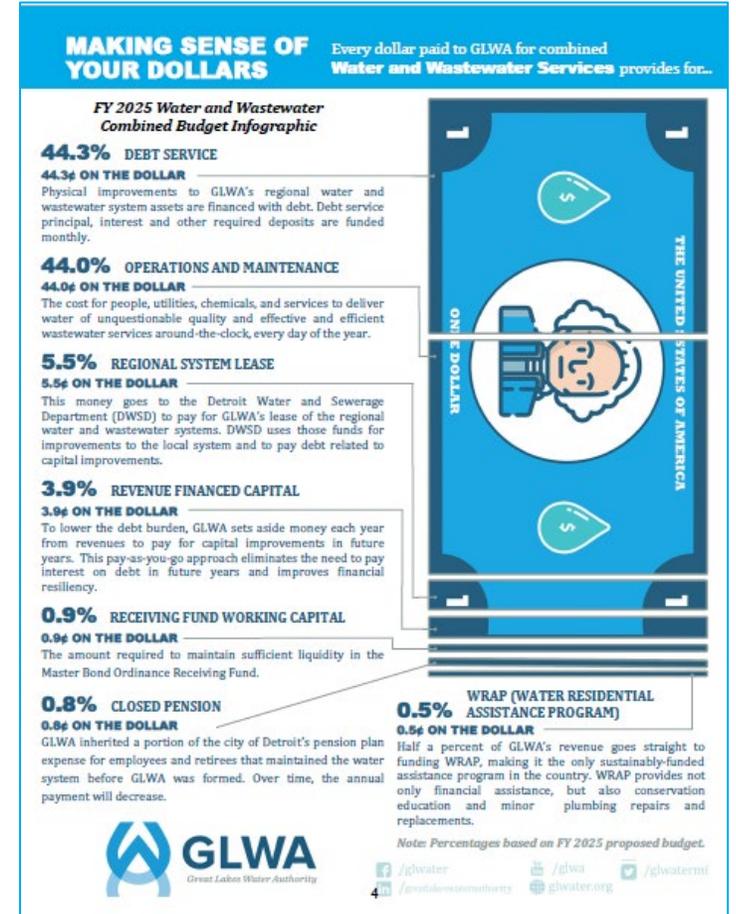
Proposed FY 2025 – FY 2026
Biennial Budget &
Five Year Financial Plan
FY 2025 through FY 2029

Presented to the
Audit Committee
December 15, 2023

***Draft 1 – Discussion Draft -
Posted on website as a
standalone document***

***Draft 2 – Supplementary
Information - In process – open
items noted in table of contents
– will be completed much earlier
than prior years***

***Draft 3 – Hopefully Final –
will be posted after Board action
with approved resolutions***

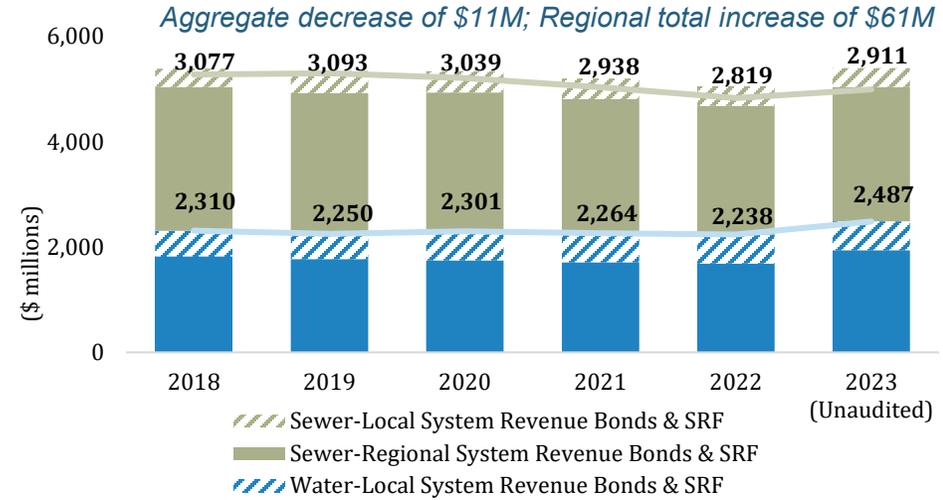




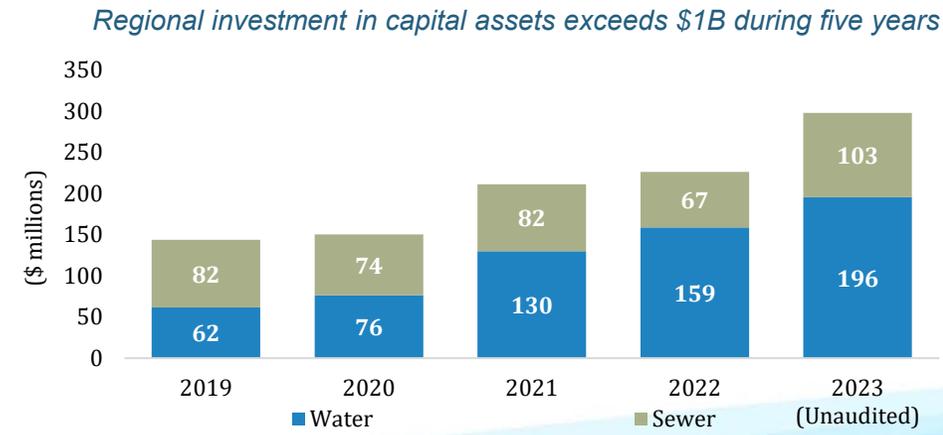
Controlling Leverage AND Investing in Capital Assets

- Because of GLWA's emphasis in limiting customer charge increases, conventional measures of leverage, such as debt to operating revenue (while improving), do not capture the full extent of System deleveraging and improvements to overall financial sustainability
- GLWA's results over the last five years demonstrate remarkable progress in reducing leverage while investing in capital assets
 - Water system regional allocation of bonds and loans outstanding increased from year end 2018 to 2023 by \$120M while \$622M was invested in capital assets**
 - Sewer system regional allocation of bonds and loans outstanding decreased from year end 2018 to 2023 by \$181M while \$407M was invested in capital assets**
- In total, the Regional and Local System bonds and loans outstanding have increased by \$11M over five years in total
 - Increase of \$176M for water and decrease of \$165M for sewer

GLWA Water & Sewer Revenue Bonds & SRF Outstanding (Year End)



GLWA Regional System Capital Project Investments Activity



Source: GLWA financial statements
 *Outstanding debt net of current and non-current contract obligations



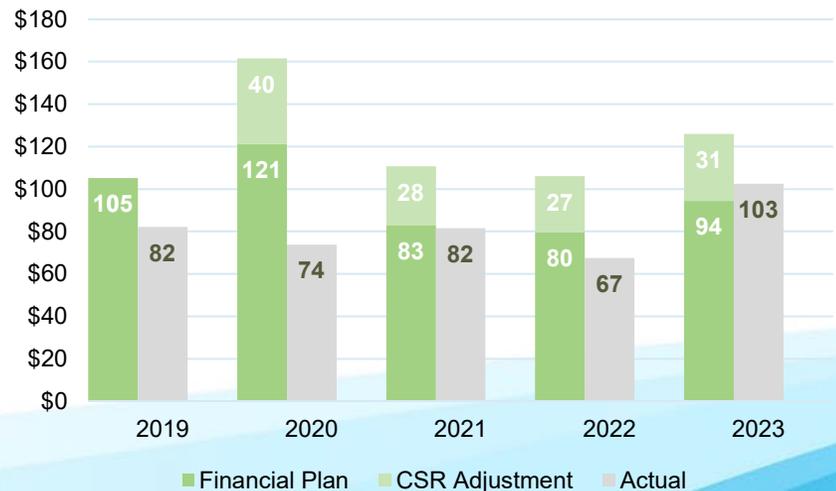
Aligning Capital Plan & Financial Plan to Right-Size Financing Needs & Lower Borrowing

- The Capital Improvement Plan (CIP) includes, in total, **168 projects** for water and sewer systems.
- GLWA has a relatively new, centralized capital planning group that provides training and process standardization, program management, and expertise to support the Water and Wastewater Engineering Groups. Along with Financial Services, the teams align on monthly updates to cashflow and spending forecasts.
- A large capital program carries external dependencies that alter timing and/or shifting priorities. For this reason, GLWA’s financial plans (starting in 2020) utilized a “**Capital Spend Rate**” (CSR) assumption, adopted by the Board, to bridge from the CIP to more detailed cashflow/ debt needs to lower financing costs.
- The CSR has ranged from 75% and 80%. For FY 2024 and beyond, the CSR is at 100%.
- Actual CIP investments have materially increased
 - Water System projects are moving from design phase to construction phase which accelerates the spending pace.
 - Sewer system projects are resiliency focused and span many facilities – CSOs, pump stations, and plant facilities.

GLWA Regional System Water Capital Project Investments



GLWA Regional System Sewer Capital Project Investments



Source: GLWA financial statements



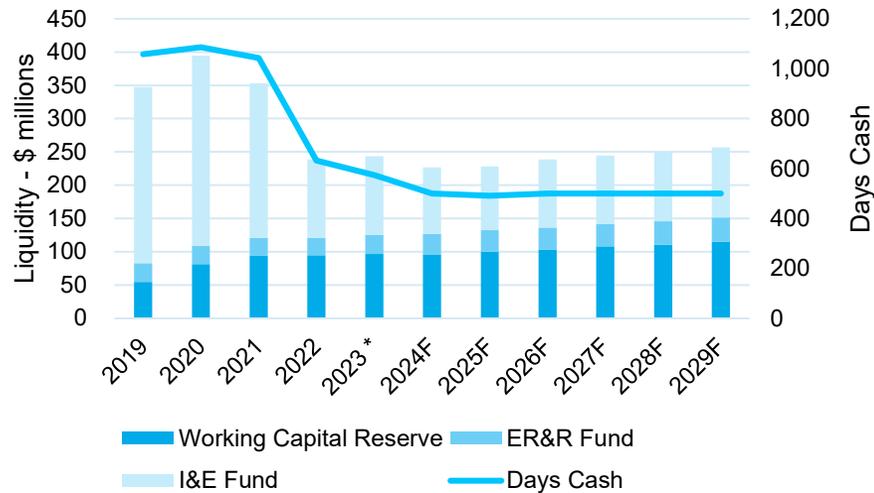
Working Capital / Cash Management Strategy

Working Capital	Improvement & Extension
-----------------	-------------------------

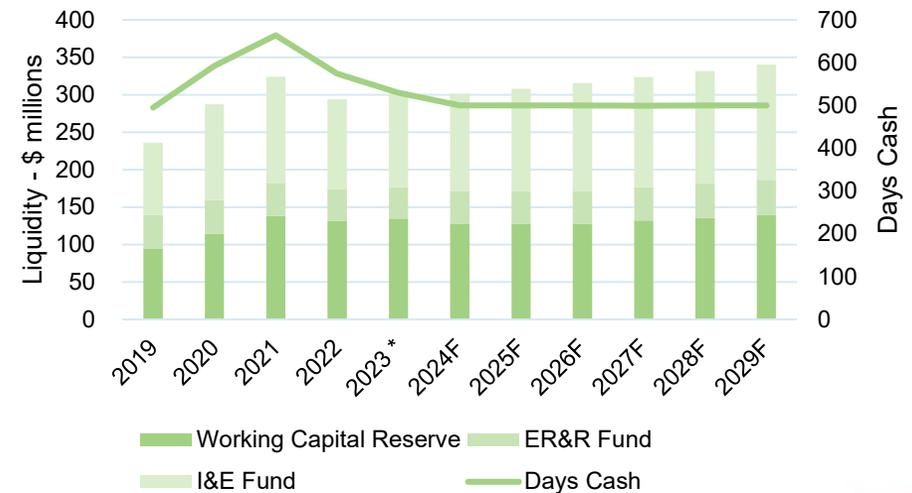
- Working capital consists of the Receiving Fund, Operations and Maintenance Fund (O&M), and Emergency Repair & Replacement (ER&R) Fund
- The cash management target is 3.5 months of budgeted Regional System O&M and 2 months of other non-discretionary MBO requirements resulting in approximately 200 to 225 “days cash”
- The ER&R Fund is required to have a minimum balance of 15% of budgeted (combined Regional and Local) O&M expense. The 2018 MOU places funding of this reserve on GLWA. ER&R Fund provides approximately 70 “days cash”

- Purpose is to fund capital improvements to the system and is the last bucket GLWA fill in the Master Bond Ordinance flow of funds
- The strategy of the financial plan is designed to finance capital in a mix of debt and pay-go funds that results in I&E Fund balances that produce an overall liquidity level of 500 “days cash”

Water Liquidity



Sewer Liquidity



* Expressed as funding of daily GLWA Regional System operating expense

One-on-One Session Question: Specifics on How Series 2023 Bonds Impacted Budgeted FY 2025 Water Debt Service?

- Compared to the Original FY 2024 Budget, FY 2025 Water Debt Service reflects an increase of \$15.8 million:
 - ✓ *Naturally occurring scheduled maturity = \$1.0 million*
 - ✓ *Originally projected FY 2025 New Money = \$14.3 million*
 - ✓ *Acceleration of projected New Money into FY 2024 = \$1.2 million*
 - Net of elimination of planned SRF transaction
 - Still allows for planned additional transaction in FY 2025
 - ✓ *Refunding Savings = \$0.7 million decrease*

One-on-One Session Question: Specifics on How Series 2023 Bonds Impacted Budgeted FY 2025 Sewer Debt Service

- Compared to the Original FY 2024 Budget, FY 2025 Sewer Debt Service reflects a **decrease of \$2 million**:
 - ✓ *Final retirement of SRF Loans = \$6.4 million decrease*
 - ✓ *Naturally occurring scheduled SRF maturity = \$2.7 million decrease*
 - ✓ *FY 2024 New Money Bonds = \$5.0 million*
 - ✓ *Acceleration of projected New Money into FY 2024 = \$1.6 million **
 - *New SRF planned loans = \$1.6 million **
 - ✓ *Refunding Savings = \$1.1 million decrease*
- * *Specific impacts reflect replacing planned new money transaction in FY 2025 with recently approved loans for SRF projects totaling ~ \$250 million*

GLWA Average System Charge Adjustments

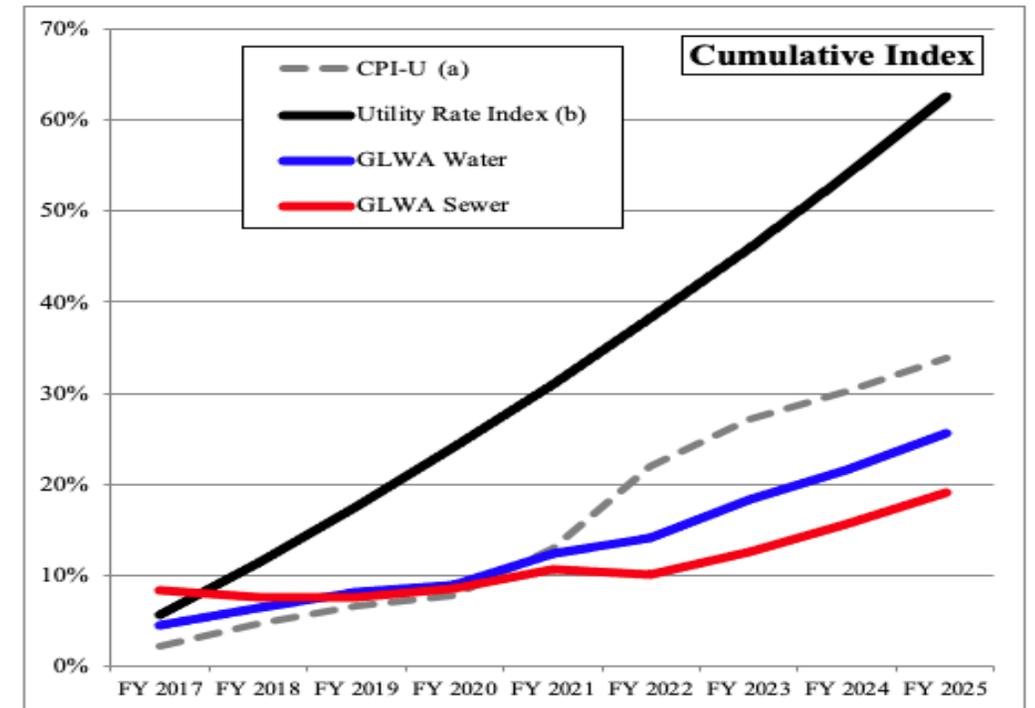
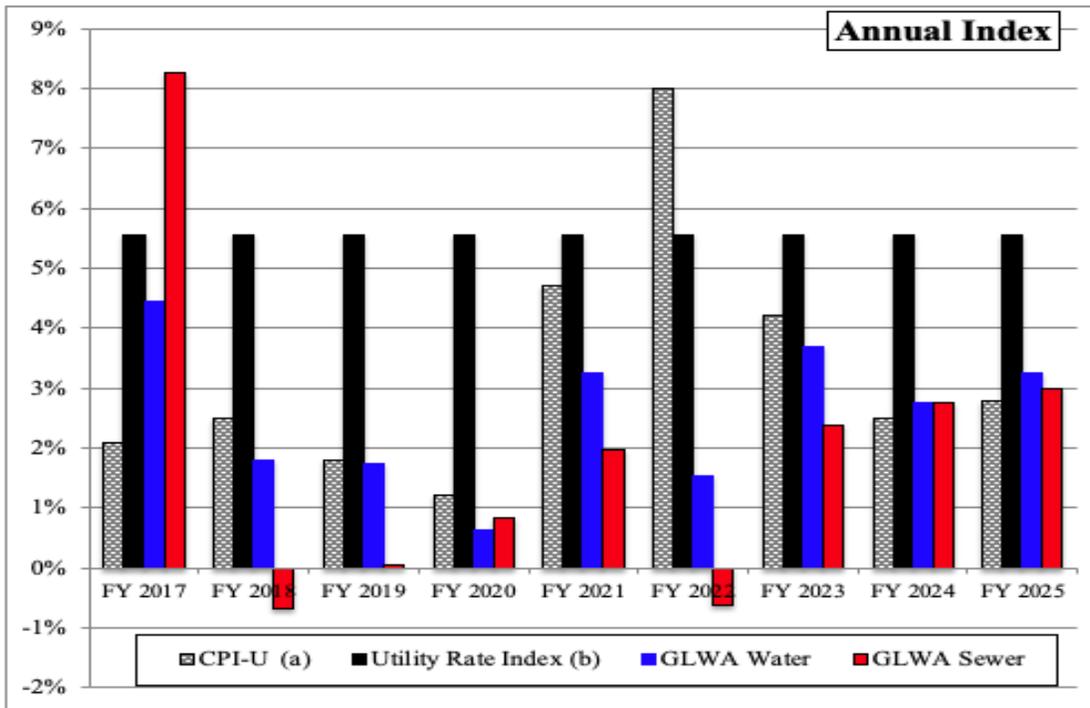
Average System Charge Adjustments

Year	Water	Sewer
2018	1.8%	-0.7%
2019	1.8%	0.1%
2020	0.6%	0.8%
2021	3.2%	2.0%
2022	1.5%	-0.6%
2023	3.7%	2.4%
2024	2.75%	2.75%
2025	3.25%	3.0%
8-Year Average	2.3%	1.2%

GLWA CHARGE Adjustments Compared to Utility Indices

Annual	Annual Index									Average Annual
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	
CPI-U (a)	2.1%	2.5%	1.8%	1.2%	4.7%	8.0%	4.2%	2.5%	2.8%	3.3%
Utility Rate Index (b)	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
GLWA Water	4.5%	1.8%	1.8%	0.6%	3.2%	1.5%	3.7%	2.75%	3.25%	2.6%
GLWA Sewer	8.3%	-0.7%	0.1%	0.8%	2.0%	-0.6%	2.4%	2.75%	3.00%	2.0%
GLWA Overall	6.7%	0.3%	0.7%	0.7%	2.5%	0.3%	2.9%	2.8%	3.1%	2.2%

Cumulative Index	Cumulative Index								
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
CPI-U (a)	2.1%	4.7%	6.5%	7.8%	12.9%	21.9%	27.0%	30.2%	33.9%
Utility Rate Index (b)	5.6%	11.4%	17.6%	24.1%	31.0%	38.3%	46.0%	54.1%	62.6%
GLWA Water	4.5%	6.3%	8.2%	8.9%	12.4%	14.1%	18.3%	21.6%	25.5%
GLWA Sewer	8.3%	7.5%	7.6%	8.5%	10.6%	9.9%	12.6%	15.6%	19.1%
GLWA Overall	6.7%	7.0%	7.8%	8.6%	11.3%	11.6%	14.9%	18.0%	21.7%



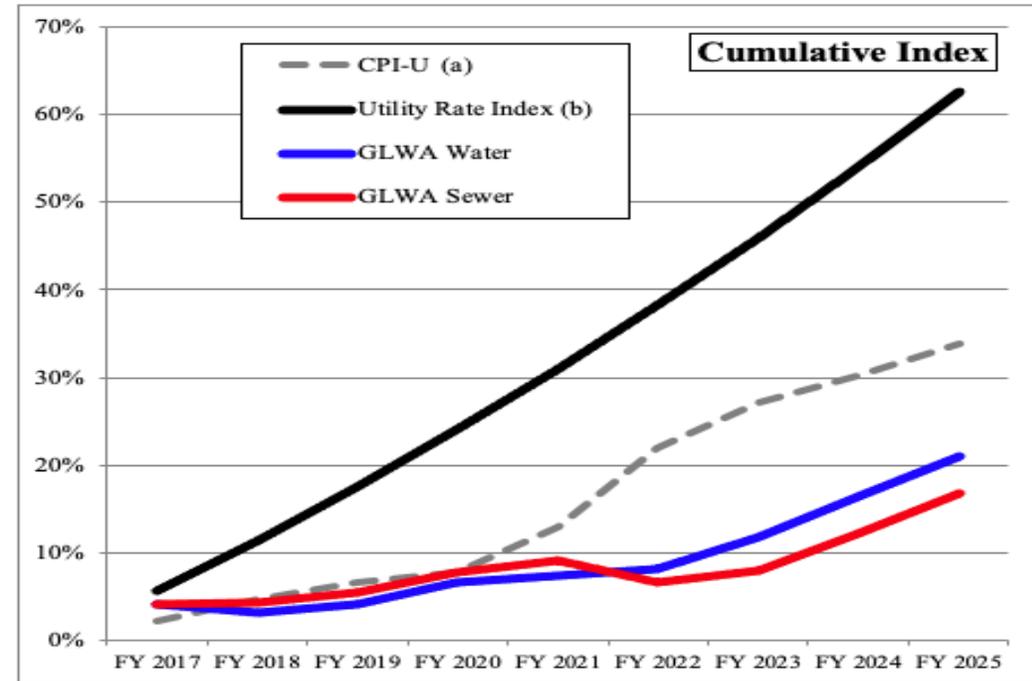
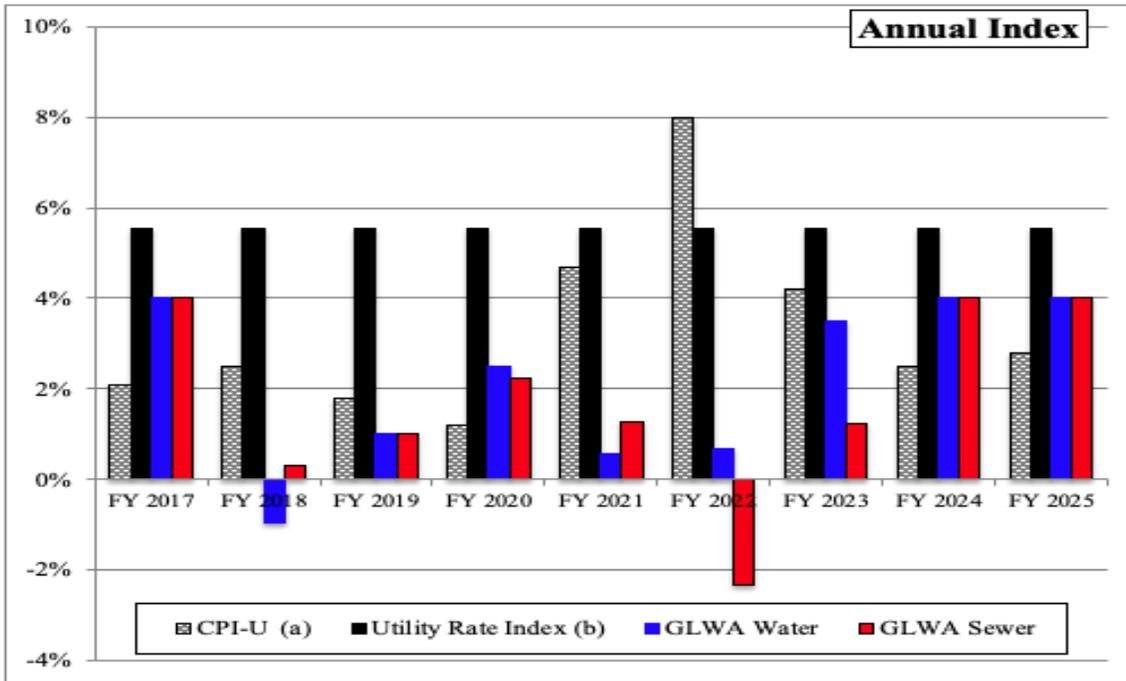
(a) Source: Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2024 and FY 2025 estimated by Economic Outlook Task Force

(b) Source: Black & Veatch 50 Largest Cities Rate Survey - 2021 - average 2001-2020

GLWA BUDGET Adjustments Compared to Utility Indices

Annual	Annual Index									Average Annual
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	
CPI-U (a)	2.1%	2.5%	1.8%	1.2%	4.7%	8.0%	4.2%	2.5%	2.8%	3.3%
Utility Rate Index (b)	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
GLWA Water	4.0%	-0.9%	1.0%	2.5%	0.6%	0.7%	3.5%	4.0%	4.0%	2.1%
GLWA Sewer	4.0%	0.3%	1.0%	2.2%	1.3%	-2.3%	1.3%	4.0%	4.0%	1.7%
GLWA Overall	4.0%	-0.2%	1.0%	2.3%	1.0%	-1.1%	2.2%	4.0%	4.0%	1.9%

Annual	Cumulative Index								
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
CPI-U (a)	2.1%	4.7%	6.5%	7.8%	12.9%	21.9%	27.0%	30.2%	33.9%
Utility Rate Index (b)	5.6%	11.4%	17.6%	24.1%	31.0%	38.3%	46.0%	54.1%	62.6%
GLWA Water	4.0%	3.0%	4.1%	6.7%	7.3%	8.0%	11.8%	16.3%	20.9%
GLWA Sewer	4.0%	4.3%	5.4%	7.7%	9.1%	6.5%	7.9%	12.2%	16.7%
GLWA Overall	4.0%	3.8%	4.8%	7.3%	8.3%	7.2%	9.5%	13.9%	18.4%



(a) Source: Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2024 and FY 2025 estimated by Economic Outlook Task Force

(b) Source: Black & Veatch 50 Largest Cities Rate Survey - 2021 - average 2001-2020

Transparency in the Budgeting Process

- ✓ Proposed Budget and Charges Analysis presented to Audit Committee on December 15, 2023 posted on GLWA website
- ✓ One Pager Series
- ✓ Cost of Service Study posted on GLWA website
- ✓ Always seeking feedback on what communication materials are helpful

GLWA
Great Lakes Water Authority

One Pager Series
FY 2025 Operations & Maintenance Budget Analysis
As Proposed December 15, 2023

Wastewater Operations - increase of \$14.4 million Driven by contractual operating services (\$3.3 million) for a facility maintenance contract and for residual disposal; chemicals (\$3.1 million base price adjustments for chlorine products); utility costs (\$2.4 million); & other (\$2.0 million) for maintenance activities. An increase in personnel costs (\$2.5 million) for positions to insource capital engineering services (six positions) inclusion sewage conveyance pumping stations (five positions) reserve increased (\$1.2 million) decrease in other items (\$0.2 million).

Centralized Services - increase of \$1.9 million This is mainly driven by the cost for new cloud-based Planning (ERP) and Management (EAM) systems (\$7.0 million). Other costs include the Emerson contract (\$2.3 million), the Emergency Response Portal and to increase currently performing (0.5 million). Net of other items of (\$0.2 million).

Administrative - increase of \$1.1 million Includes five additional Development on-board increase CFO salary category. Quarterly Performance

Staffing & Personnel The staffing plan is at 1,356 (increase of 38), with Full-time Equivalents (FTE) at 1,203 (increase of 50). The increase in FTEs beyond the number of new positions reflects budgeting at a fractional percentage when a position has not been filled.

Water Operations - increase of \$11.9 million Driven by personnel (\$2.4 million) due to the filling of key positions (Water Engineering Life Cycle Project Managers, Water Quality Investigators, and apprentices within several Water Treatment Plants), there is an increase of nine FTEs. Other increases include electrical costs for Treatment Plant and Pump Stations (\$4.9 million); Supplies & Other (\$0.8 million); Contractual Services due to Mobile Dredging activities (\$0.9 million); Chemicals (\$1.3 million); All other categories decreased (\$0.2 million). Unallocated reserves increased (\$1.8 million) to accommodate for inflationary factors.

One Pager Series
FY 2025 Water & Sewer Service Charges
As Proposed December 15, 2023

Preliminary proposed Water and Service Charges for FY 2025 have been presented to the GLWA Audit Committee. This is the first step in a review process that will include a Public Hearing before the GLWA Board of Directors on February 28, 2024.

Charges are Based on Four Key Elements.

- 1) Budget:** The daily costs to provide service (such as the people, utilities, chemicals, contractors, and materials to operate plants and maintain the pipes), the lease payment for the regional system, Water Residential Assistance Program (WRAP) funding, debt service, legacy pension and capital project funding. The budget is also known as the "revenue requirement" as it defines the amount of revenue required to run the utility.
- 2) Capital Improvement Plan (CIP):** Annually the GLWA's engineers evaluate the physical improvement needs of the regional systems. These needs are funded by a combination of cash on hand and debt.
- 3) Units of Service (UOS):** Quantifies each engineering studies, metering data, and other criteria. Each member partner is assigned an allocation of the annual revenue requirement based on their relative use of the system. For the water system, this includes the amount of water purchased each year and contracted demands during peak periods. For the sewer system, each member partner's SHARE is based on contributed wastewater.
- 4) Cost of Service Study (COS):** The inputs from the three sources above are applied to an agreed upon charges methodology to allocate the revenue requirement (i.e., budget) by functional categories (such as purification for the water system or sludge disposal for the sewer system) and then allocated to each customer. The outcome is the charge calculation for each member partner.

Looking for more information? Visit us online at www.glwawater.org

Proposed FY 2025 Water System Charges
The average system charge adjustment for water is a 3.25 percent increase. This is the result of a proposed Water budget increase of 4.0 percent offset by 0.75 percent reflecting the net effect of a) increased investment earnings and b) reductions in estimated sales volumes. As a result of the 2022 Contract Alignment Process (CAP), the FY 2025 Units of Service (MOD). Proposed charges for these three Member Partners have been calculated using the new simplified Water Charge Methodology. There are no significant variances from the system-wide charge (after consideration of contract adjustments) increase of 3.06 percent for the remaining 85 (No MOD) Member Partners.

Proposed FY 2025 Sewer System Charges
The average system charge adjustment for sewer is a 3.0 percent increase. This is the result of a proposed Sewer budget increase of 4.0 percent offset by increased investment earnings which funds 1.0 percent of the proposed budget increase. The proposed FY 2023 flow balance data in the average for the FY 2025 Units of Service, and the updated COS. These proposed SHARES are scheduled to remain in effect until the Sewer SHARES are updated for FY 2028.

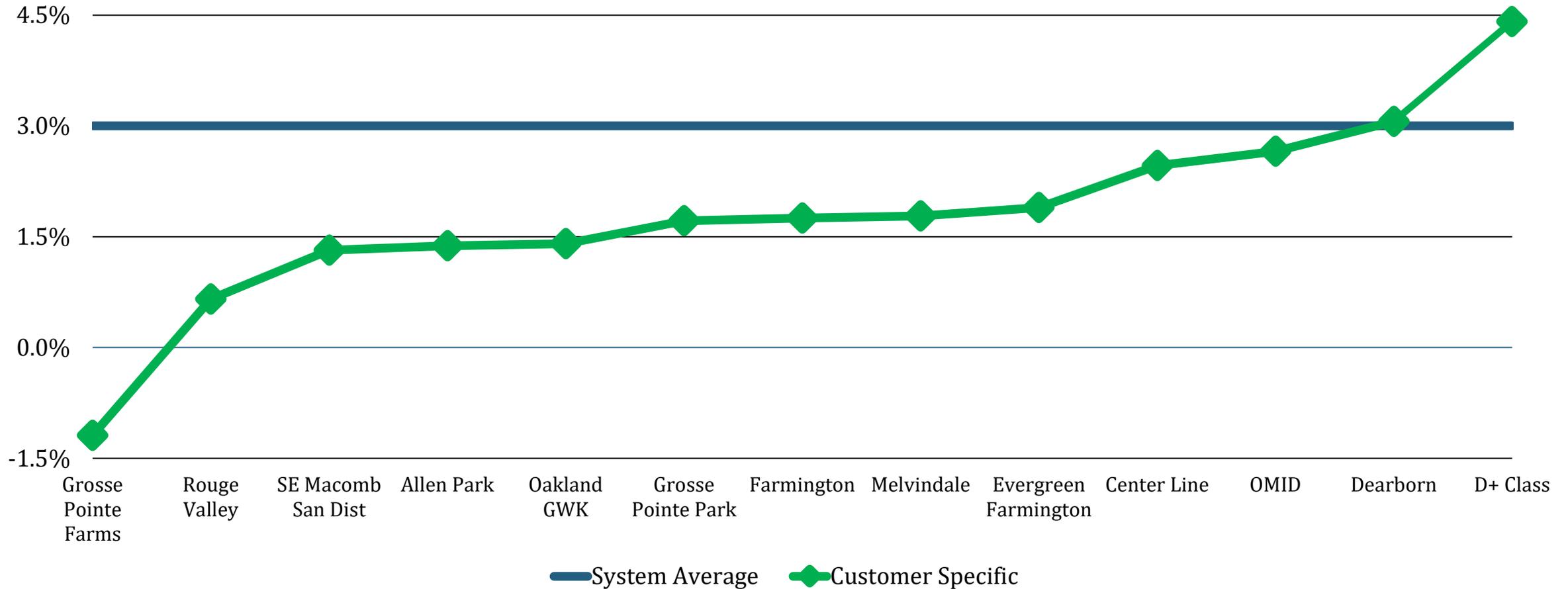
Year	Water	Sewer
2018	1.8%	-0.7%
2019	1.8%	-0.1%
2020	0.6%	0.8%
2021	3.2%	-0.6%
2022	1.5%	2.4%
2023	3.7%	2.75%
2024	2.75%	3.0%
2025	3.25%	3.0%
6-Year Average	2.3%	1.2%

Hot Topics from Charges Rollout #3

Water Charge Methodology has been Simplified – Generally Stable Charge Adjustments

- Three Member Partners have modified Contract Demands since original Units of Service were presented in November
 - *These “MOD” Customers will receive charge reductions that total ~ 11% as a class*
- All other “No MOD” Member Partners will receive a uniform wholesale charge increase of 3.33%
 - *Total effective charge increase is 3.06% after recognition of fixed contractual adjustments*
- Water Charge Calculations embrace the new simplified methodology
 - *10/50/40 Commodity/Max Day/Peak Hour Cost Pools*
 - *Water Delivery Factor replaces Distance and Elevation*

FY 2025 Sewer Charge Adjustment Summary



• Excludes Grosse Pointe and does not reflect individual D+ Member Partners



D+ Sewer SHAREs Allocation

Sewer Charges Summary: Customer Class Definitions

- “**M**” Customer Class = those communities whose wastewater contributions are metered by what was formerly referred to as “billing meters”
 - *Major County Districts and certain other communities*
 - *Grosse Pointe now included in this class as 5 years of metered data is available*
- “**D+**” Customer Class = Detroit plus certain other inner ring communities whose wastewater is not directly metered
 - *Primarily Detroit, Highland Park, Hamtramck*
 - *Small portion of Dearborn is unmetered but flows are reallocated to the M class*

Allocation Flows to Individual Customers: SHARE History and D+ Specifics

- This discussion is intended to provide historical perspective on how sewer flow volumes were determined over the years for purposes of Sewer Charges
- All of these efforts were primarily designed to determine allocations between the M Class customers and the D+ Customer Class at large
 - ✓ *And amongst individual members of the M Customer Class*
- Flow allocations amongst individual customers within the D+ Customer Class followed same principles, but did not reflect same level of detail and annual change
 - ✓ *In part due to the lack of meter data of the same quality as the “billing” meters*
 - ✓ *In part because Detroit represents over 95% of the total class under any approach*
- A new approach for allocating **D+ Class flows amongst D+ customers** is being proposed for the FY 2025 Sewer Charges
 - ✓ *This does not impact the allocation to the M Class at large, nor any M Class member*

Allocation Flows to Individual Customers: SHARE History

- In the 1990s and prior ...
 - ✓ *All costs allocated to customers solely based on total contributed sewer volume*
 - ✓ *DWII from D+ area estimated based on technical assumptions*
 - ✓ *Wet weather flows from ALL customers estimated based on area served, relative combined sewers, runoff coefficients, rainfall data, etc.*
 - Wet weather flows from **unmetered** customers (D+) reduced by an “overflow credit” of 67% (tributary to Rouge River) and 48% (tributary to Detroit River)
 - Oakland County GWK (SOCSDS) negotiates 8% overflow credit
 - ✓ *Annual “Look-Back” analyses to true up projected costs and flows to actual amounts after the fact, and issue charges and credits to individual customers accordingly*
 - ✓ *Litigation re: CSO cost allocation and flow measurement for charges*

Allocation Flows to Individual Customers: SHARE History

- 1999 Rate Settlement Agreement
 - ✓ Created 83/17 allocation (Detroit/Suburbs) for Specific CSO Control Facilities
 - ✓ “DWSD (GLWA) shall utilize the most current data developed by the Greater Detroit Regional Sewer System (GDRSS) model to estimate the volume of infiltration and inflow into the System”
 - ✓ Wet weather flows from **ALL** customers reduced by a uniform “overflow credit” of 30.8%
 - ✓ DWII related to “common use” sewer infrastructure (defined as Detroit + one other customer) in Detroit treated as “common” cost responsibility, subject to additional allocation analyses
 - ✓ Created a phase in strategy to implement the agreements
 - ✓ Maintained annual “Look-Back” analyses

Allocation Flows to Individual Customers: SHARE History

- 1999 Rate Settlement Agreement Implementation
 - ✓ *Commitment to use of “best available, verifiable” information led to detailed annual review by individual customer flow contributions and annual “GDRSS Flow Balance Reports”*
 - ✓ *Coupled with CSO 83/17 provision, resulted in significant cost shift from M Customer Class to D+ Customer Class*
 - ✓ *Agreement provides for a phased approach to implement Sewer Charge adjustments*

Allocation of Flows to Individual Customers: SHARE History

- FY 2002 – FY 2011 Sewer Charges
 - ✓ *Sewer Charges (for non-CSO Cost Pool) based solely on average flow contributions from GDRSS flow balances*
 - ✓ *Wet weather flows from ALL customers reduced by a uniform “overflow credit” of 30.8%*
 - ✓ *Look-Back concept continues*
 - FY 2004 charges to each customer include an adjustment (charge or credit) reflecting review of actual costs, cost allocations, and flow contributions during FY 2002
 - Concept begins to create instability
 - ✓ *Late during this period, DWSD introduces potential to add “strength of flow” considerations to the charge methodology*

Allocation Flows to Individual Customers: SHARE History

- FY 2012 Sewer Charges
 - ✓ *Introduced “strength of flow” concept, which lowered charges to customers with relatively higher levels of non-sanitary flows (mostly D+ customers)*
 - All non-sanitary flow in the system carried 45% of the relative amount of pollutants as sanitary flow, and allocated treatment costs accordingly
 - ✓ *Reduced uniform overflow credit from 30.8% to 15%*
- FY 2013 Sewer Charges
 - ✓ *Continued “strength of flow” concept and reduced relative non-sanitary strength from 45% to 33% - further lowering charges to high non-sanitary flow customers*
- ***Introduction of Strength of Flow considerations resulted in significant cost shift from D+ Customer Class to M Customer Class***

Allocation Flows to Individual Customers: SHARE History

- Initial FY 2015 SHARES (Rate Simplification Initiative)
 - ✓ *Embraced long term averages for flow data*
 - ✓ *Continued “strength of flow” concept*
 - ✓ *Applied a complex review of flow data that resulted in 14.87% of the total flow to the System being treated as “System” non-sanitary flow responsibility - this amounted to approximately 33% of the non-sanitary flow in the D+ area*
 - ✓ *Killed the Look-Back (final LB for FYs 2008 – 2012 phased in through FY 2016)*
- 2nd SHARE Period - FY 2018
 - ✓ *Extended and complicated “strength of flow” concept*
 - Different strengths for all 3 types of flow (sanitary, DWII, wet weather) and all 4 pollutant cost pools in the charge methodology
 - ✓ *Refined and complicated the determination of what should be considered “System” flow and extended that concept to certain members of the M Customer Class*

Allocation Flows to Individual Customers: SHARE History

- 3rd SHARE Period - FY 2022
 - ✓ *Introduce Think Tank – current thinking*
 - ✓ *Embraced objectives of original Rate Simplification Initiative*
 - ✓ *Abandoned “strength of flow” concept*
 - Replaced by an approach that assigned 50% of the treatment costs to customers based on sanitary volumes, and 50% based on total volumes
 - **This results in approximately 40% of the total “non CSO” System revenue requirements being allocated to customers based on sanitary volumes, and the other 60% based on total flow contributions**
 - ✓ *Simplified manner for determination of “System” Flow*
 - 50% of the unmetered, non-sanitary flow volumes in the system should be treated as “system” responsibility - meaning that it is effectively the proportional responsibility of all customers, including the M Customer Class - and the other 50% allocated to the D+ class at large

Allocation Flows to Individual Customers: SHARE History and D+ Specifics

- All of these efforts at “precision” were primarily designed to determine allocations between the M Class customers and the D+ Customer Class at large
 - ✓ *And amongst individual members of the M Customer Class*
- Flow allocations amongst individual customers within the D+ Customer Class followed same principles, but did not reflect same level of detail and annual change
 - ✓ *In part due to the lack of meter data of the same quality as the “billing” meters*
 - ✓ *In part because Detroit represents over 95% of the total class under any approach*
- A new approach for allocating **D+ Class flows amongst D+ customers** is being proposed for the FY 2025 Sewer Charges
 - ✓ *This does not impact the allocation to the M Class at large, nor any M Class member*

Allocation D+ Flows to Individual D+ Customers: Flow Balance Inputs / Prior Approach

- Flow Balance does not provide information on wet weather flows by individual D+ customers
- Nor does it provide intel on from where specific total non-sanitary flows emerged, nor how much of each D+ customer's non-sanitary flow should be considered a "System" responsibility
- Allocation amongst D+ customers in all prior SHAREs was determined via legacy flow balance data from pre-Rate Simplification era flow balance data and analyses (FY 2013 Sewer Charges) – which did include estimates of wet weather by individual D+ customers
 - *Also reflected legacy strength of flow concepts and suburban only cost pool considerations*

Allocation D+ Flows to Individual D+ Customers: Prior Approach Example

- Based on flow balance information circa 2007 – 2011, and the strength of flow and suburban only cost pools structure at the time, Hamtramck's responsibility for D+ flow related costs was 1.95% of the “remaining” D+ class
 - ✓ *Excludes GP Farms, Dearborn, and reflects modified Highland Park data*
- Therefore Hamtramck was assigned 1.95% of the total D+ flows **in all flow categories** in the FY 2022 SHAREs
 - *Prior SHAREs were determined via the same approach*
- To reiterate, this approach was applied because there was not sufficient information available to isolate (amongst D+ communities) from where specific total non-sanitary flows emerged, nor how much of each customer's non-sanitary should be considered a “System” responsibility

Allocation D+ Flows to Individual D+ Customers: Proposed New Approach

- Utilize specific Flow Balance information, including that regarding the amount of “common use” sewer inventory in each D+ customer’s area
 - ✓ *38% of the sewer inventory within Hamtramck is identified as either “common use interceptors” or “common use sewers” – therefore . . .*
 - ✓ *38% of Hamtramck’s estimated DWII should be treated as “System” responsibility*
- Same approach for wet weather flows, but reduction based on inch miles of sewers is reduced by 50%
- Changes Hamtramck’s flow responsibility within the D+ class from 1.95% to 2.04%
 - ✓ *Other members impacted via same approach*
- See Table 8 of the SHAREs Period Memo (Appendix C)

Allocation D+ Flows to Individual D+ Customers: Proposed New Approach

- Illustration of Impact on Flow Volume allocation within the D+ area

✓ *Note – does not reflect CSO 83/17 cost allocation measures*

Relative D+ Allocations of Updated Flow Balance Data

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Prior Approach								
Legacy		Proposed New Approach						
<u>Allocation%</u>	<u>Sanitary</u>	<u>DWII</u>	<u>Wet Weather</u>	<u>Total</u>	<u>Effective *</u>	<u>Change</u>	<u>% Change</u>	
					~(2) & ~(5)	(6) - (1)	(7) / (1)	
<u>Allocation to D+ Customers</u>								
Highland Park	2.65%	1.05%	2.60%	3.82%	2.56%	1.97%	-0.67%	-25.4%
Hamtramck	1.95%	2.07%	1.45%	2.82%	2.03%	2.04%	0.09%	4.8%
Harper Woods	0.14%	0.19%	0.00%	0.06%	0.07%	0.11%	-0.02%	-15.5%
Redford Township	0.12%	0.16%	0.11%	0.23%	0.16%	0.16%	0.04%	31.3%
Wayne County #3	0.02%	0.01%	0.01%	0.02%	0.02%	0.01%	-0.01%	-28.6%
Detroit	95.13%	96.52%	95.81%	93.05%	95.17%	95.70%	0.57%	0.6%
D+ Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.0%

* Recognizes that ~ 40% of flow based costs are allocated based on Sanitary and ~60% based on total flow.

Allocation D+ Flows to Individual D+ Customers: Proposed New Approach

- I believe this approach reasonably and accurately allocates flow responsibility to individual members of the D+ class that reflects the best available, verifiable information available from the Flow Balance analyses
- Other approaches towards achieving the objectives are available
- **All approaches regarding this topic solely impact the allocation amongst D+ customers, and do not impact the D+ class responsibility at large, nor any M customer**

Allocation Flows to Individual Customers: SHARE History Summary

- Throughout the years the manner by which information regarding contributed wastewater volumes has been reflected in Sewer Charges has evolved
- The various approaches applied towards this end have embraced a commitment to utilize the “best available, verifiable” information – while also recognizing that precision is unattainable and embracing simplification objectives
- All of the various approaches have reasonably assigned costs to customers in proportion to their use of the System

Grosse Pointe Sewer SHAREs Plan for Proposed FY 2025 Charges

Grosse Pointe SHARES

- Grosse Pointe has requested consideration of potential adjustments to flow balance data provided by their sewer meter, including:
 - ✓ *Potential modifications to raw meter data to reflect anomalous events related to main break repairs, etc.*
 - ✓ *Potentially waiting until 10 full years of meter data was available, given that others have 10 years.; and*
 - ✓ *Potential consideration of the sewer separation project the city is pursuing*
- GLWA has agreed to:
 - ✓ *Compute the differences in Grosse Pointe flow inputs between:*
 1. *The average historical data assigned to Grosse Pointe as a D+ member, including the reduction for “System” non-sanitary flows;*
 2. *The 5-years of data indicated by the new master meter*
 - ✓ *Use an average of the two data sets for Grosse Pointe’s flow data for the FY 2025 SHARES*

Proposed FY 2025 Grosse Pointe SHARES: Flow Balance Allocation Approach

City of Grosse Pointe Flow Balance Data for FY 2025 SHARES - mgd

	(1)	(2)	(3)	(4)
	Effective Existing <u>Data</u> <i>(a)</i>	New Metered <u>Data</u> <i>(b)</i>	<u>Difference</u> <i>(2) - (1)</i>	Use for FY 2025 <u>SHAREs</u> <i>Avg (1) & (2)</i>
Sanitary	0.268	0.428	0.160	0.348
DWII	<u>0.467</u>	<u>0.527</u>	<u>0.060</u>	<u>0.497</u>
Subtotal Dry Weather	0.735	0.955	0.220	0.845
Wet Weather	<u>0.293</u>	<u>0.795</u>	<u>0.502</u>	<u>0.544</u>
Total	1.028	1.750	0.722	1.389
<i>Subtotal Non-Sanitary</i>	<i>0.760</i>	<i>1.322</i>	<i>0.562</i>	<i>1.041</i>

(a) 0.483% of total D+ data from FY 2013 - 2019, after consideration of "System" non-sanitary flow

(b) Metered data from FY 2019 - 2023 - no consideration of "System" non-sanitary flow

Proposed FY 2025 Grosse Pointe SHARES: Summary

- Grosse Pointe flow balance data represents an average of their effective existing data and the new 5-year average provided by their sewer meter pending additional data review by the parties
 - *Assumes annual interim reopeners during the next 3-year SHARE period, with potential for true up adjustments*
 - *Reduces Grosse Pointe's SHARE increase from **56%** to **28%***
- Increases SHARES to ALL other Member Partners by ~0.05%
 - ✓ *Approximately \$255,000 out of total SHARES Charge Revenue of \$491 million*

Sewer Fixed Asset Data Review & Capital Revenue Requirement Allocation

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- Construction of the Oakwood CSO / Pump Station Facility under DWSD Contract PC-755 has traditionally been subject to uncertainty
 - ✓ *Project was originally required in the 2003 NPDES Permit*
 - ✓ *See snip below from 2013 surviving terms document*

APPROVED WET WEATHER FACILITIES

<u>Project Description</u>	<u>Actual Capital Cost</u>	<u>Cost Allocation</u> (Detroit/Suburban)
a. Completed Facilities Not on Exhibit B		
• Belle Isle CSO Basin	\$16.1 M	100% / 0%
• Oakwood CSO Basin & Pump Station (082)	\$168.7 M	
a. CSO Basin	TBD	83% / 17%
b. Pump Station	TBD	Common-to-all

Sewage Disposal System Capital Improvement Program

Fiscal Years 2008 Through 2012
November, 2007 (Final Print)

Sewage Disposal System Capital Improvement Program Projected Expenditures Spread by Fiscal Year Active Projects (000)

Project Title	DRMS No.	CIP No.	Contract No.	Type	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	Remaining	Total	Primary Project Purpose	Allocation Status
36 Oakwood CSO Control Facility and Pump Station	004063	420	CS-1364	S/D/CA	2,200	2,200	2,200	3,183			9,783	1	83/17
<i>This project involves the necessary study, design and construction assistance for retrofitting the Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													
37 CSO Control for Oakwood Pumping Station	004063	420	PC-755	C	31,500	61,000	56,000	9,007			157,507	1	83/17
<i>Retrofit Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													

Sewage Disposal System Capital Improvement Program

Fiscal Years 2009 Through 2013
July, 2008

Sewage Disposal System Capital Improvement Program Projected Expenditures Spread by Fiscal Year Active Projects

(000)

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
33 Oakwood CSO Control Facility and Pump Station	004063	420	CS-1364	S/D/CA	3,300	3,300	1,097				7,697	1	83/17
<i>This project involves the necessary study, design and construction assistance for retrofitting the Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													
34 CSO Control for Oakwood Pumping Station	004063	420	PC-755	C	61,000	56,000	9,572				126,572	1	83/17
<i>Retrofit Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													

Sewage Disposal System Capital Improvement Program

Fiscal Years 2015 Through 2018
January 2014

DRAFT I
8-22-2013

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Projects Pending Close-out
(000)

Project Title	DRMS No.	CIP No.	Contract No.	Type	2014 - 15	2015 - 16	2016 - 17	2017 - 18	2018 - 19	Remaining	Total	Primary Project Purpose	Allocation Status
8 Oakwood CSO Control Facility and Pump Station	004063	420	PC-755	C	5						5	1	83/17

This project includes construction of the Oakwood CSO control facility and the pump station to meet the MDEQ/NPDES permit requirement to provide adequate treatment, including disinfection, of combined sewage discharges to protect public health.

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- FY 2009– FY 2010
 - ✓ *Cash Basis Sewer Rates – allocate Debt Service based on CIP*
 - ✓ *SRF Loans for Oakwood Project*
 - ✓ *Entire Oakwood Debt Service Assigned to **CSO 83/17 Cost Pool***
- FY 2011 – FY 2014
 - ✓ *Utility Basis based on Asset Registry*
 - ✓ *Oakwood Project reflected by CWIP and Reclass*
 - ✓ *Entire Oakwood Capital Costs Assigned to **CSO 83/17 Cost Pool***

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- FY 2015 – FY 2017 (1st SHAREs period)
 - ✓ *Utility Basis based on “Simplified Assumptions” reflecting Pre-Bifurcation Asset Registry*
 - ✓ *Effectively locks in prior relative assumptions – complicated by pre-bifurcation realities*
 - ✓ *Entire Oakwood Capital Costs Assigned to **CSO 83/17 Cost Pool***
- FY 2018 (1st year of 2nd SHAREs period)
 - ✓ *First Charges set by GLWA*
 - ✓ *Continuation of prior simplified Utility Basis assumptions – still reflects pre-bifurcation Asset Registry analysis*
 - ✓ *Entire Oakwood Capital Costs Assigned to **CSO 83/17 Cost Pool***

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- FY 2019 – FY 2021 (remaining 2nd SHAREs period)
 - ✓ *Utility Basis based on Post-Bifurcation Asset Registry*
 - ✓ *Oakwood Project now part of the Asset Registry – **listed as Sewer Lift Station***
 - ✓ *Entire Oakwood Capital Costs Assigned to **Pump Station (Conveyance) Cost Pool***
- FY 2022 – FY 2024 (3rd SHAREs period)
 - ✓ *Continuation of Utility Basis based on Post-Bifurcation Asset Registry*
 - ✓ *Entire Oakwood Project remains listed as Sewer Lift Station in Asset Registry*
 - ✓ *Entire Oakwood Capital Costs Assigned to **Pump Station (Conveyance) Cost Pool***

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- FY 2025 – FY 2027 (4th SHARES period)
 - ✓ *Significant effort has been expended to attempt to fill in the “TBD” allocation of the Oakwood project between “CSO Basin” and “Pump Station” categories, including a detailed review of invoices and related support documents for the project*
 - ✓ *That effort has not resulted in a definitive answer, and is subject to judgement re: the interpretation of the data available and the intent of the original agreement*
 - In particular there are 2 Pump Stations at the Oakwood facility: one integral to the CSO Facility, and another sanitary station
 - ✓ *A “reasonable allocation” executive decision was warranted*

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- FY 2025 – FY 2027 (4th SHAREs period)
 - ✓ *Based on review of available data and consultation with GLWA Executives an allocation this asset has been assigned*
 - **80% to the CSO 83/17 Cost Pool**
 - **20% to the Conveyance Cost Pool**
 - ✓ *All else being equal, this shift results in a \$5.2 million (~ +/- 2.0% to 2.5%) shift from the M Class to the D+ class*

	<u>FY 2022</u>	<u>Proposed FY 2025</u>	<u>Change</u>
<u>TOTAL Revenue Req'ts</u>			
WRRF (50% San / 50% Total Volume)	65.8%	64.7%	-1.1%
Conveyance (100% Total Volume)	20.9%	19.2%	-1.6%
CSO 83/17	13.4%	16.1%	2.7%
Sanitary Volume	32.5%	32.5%	0.0%
Total Volume	54.0%	51.5%	-2.5%
CSO 83/17	13.5%	16.0%	2.5%

Fixed Asset Data: Rate / Charge History: Sewer Rates – Oakwood CSO / Pump Station Project

- Absent the change to this asset classification, no change in simplified cost pool weights would occur, and the Cost of Service Study would not impact proposed charges
 - ✓ *Variances in Charge Adjustments for individual Member Partners would be solely attributable to changes in Flow Balance inputs*

	<u>FY 2022</u>	Hypothetical <u>FY 2025</u>	<u>Change</u>
<u>TOTAL Revenue Req'ts</u>			
WRRF (50% San / 50% Total Volume)	65.8%	64.6%	-1.1%
Conveyance (100% Total Volume)	20.9%	22.1%	1.2%
CSO 83/17	13.4%	13.3%	-0.1%
Sanitary Volume	32.5%	32.5%	0.0%
Total Volume	54.0%	54.0%	0.0%
CSO 83/17	13.5%	13.5%	0.0%

Fixed Asset Data: Current CIP CWIP Projects

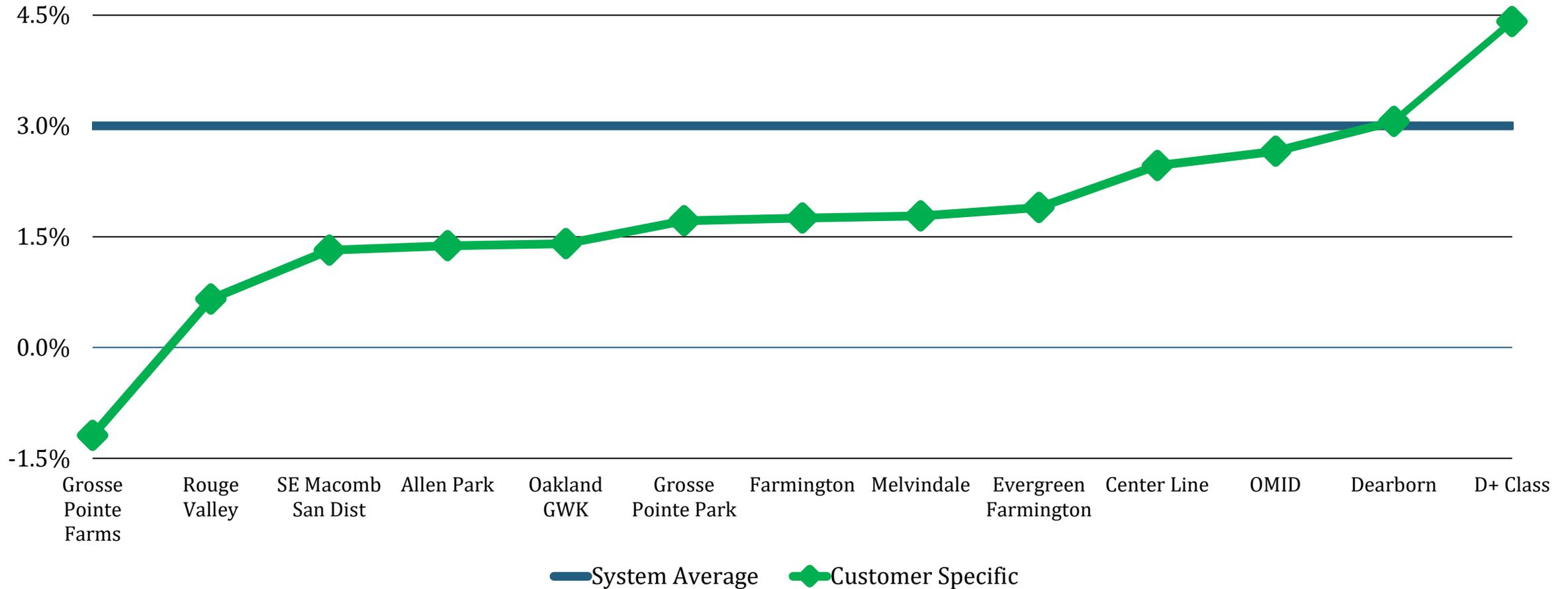
- At Charges Rollout #1 in October, “Primary Cost Pools” were identified for all Sewer CIP projects
 - ✓ *Reminder that CIP projects do not impact charges until after money has been spent on them - however amounts spent through FY 2023 on active projects (and included in CWIP) do impact the FY 2025 charges*
- Subsequently some Member Partner representatives objected to the assignment of “Conveyance” for 7 specific projects, 5 of which have spent amounts in the FY 2013 CWIP records
 - ✓ *GLWA has opted to treat amounts related to these CWIP assets as “TBD” with respect to Cost Pool assignments*
 - ✓ *As such they have no direct impact on the FY 2025 Charges – however*

Fixed Asset Data: Current CIP CWIP Projects

- All else being equal, reversing this “TBD” decision and assigning those CWIP assets as “Conveyance” would increase the allocation to Conveyance revenue requirements – but not by enough to change the Simplified Cost Pool Weights, which are rounded to the nearest 0.5% in the Charge Methodology

	<u>Proposed FY 2025</u>	<u>Hypothetical FY 2025</u>	<u>Change</u>
<u>TOTAL Revenue Req'ts</u>			
WRRF <i>(50% San / 50% Total Volume)</i>	64.7%	64.5%	-0.2%
Conveyance <i>(100% Total Volume)</i>	19.2%	19.5%	0.3%
CSO 83/17	16.1%	16.0%	-0.1%
Sanitary Volume	32.5%	32.5%	0.0%
Total Volume	51.5%	51.5%	0.0%
CSO 83/17	16.0%	16.0%	0.0%

FY 2025 Sewer Charge Adjustment Summary



• Excludes Grosse Pointe and does not reflect individual D+ Member Partners



Discussion