



GLWA

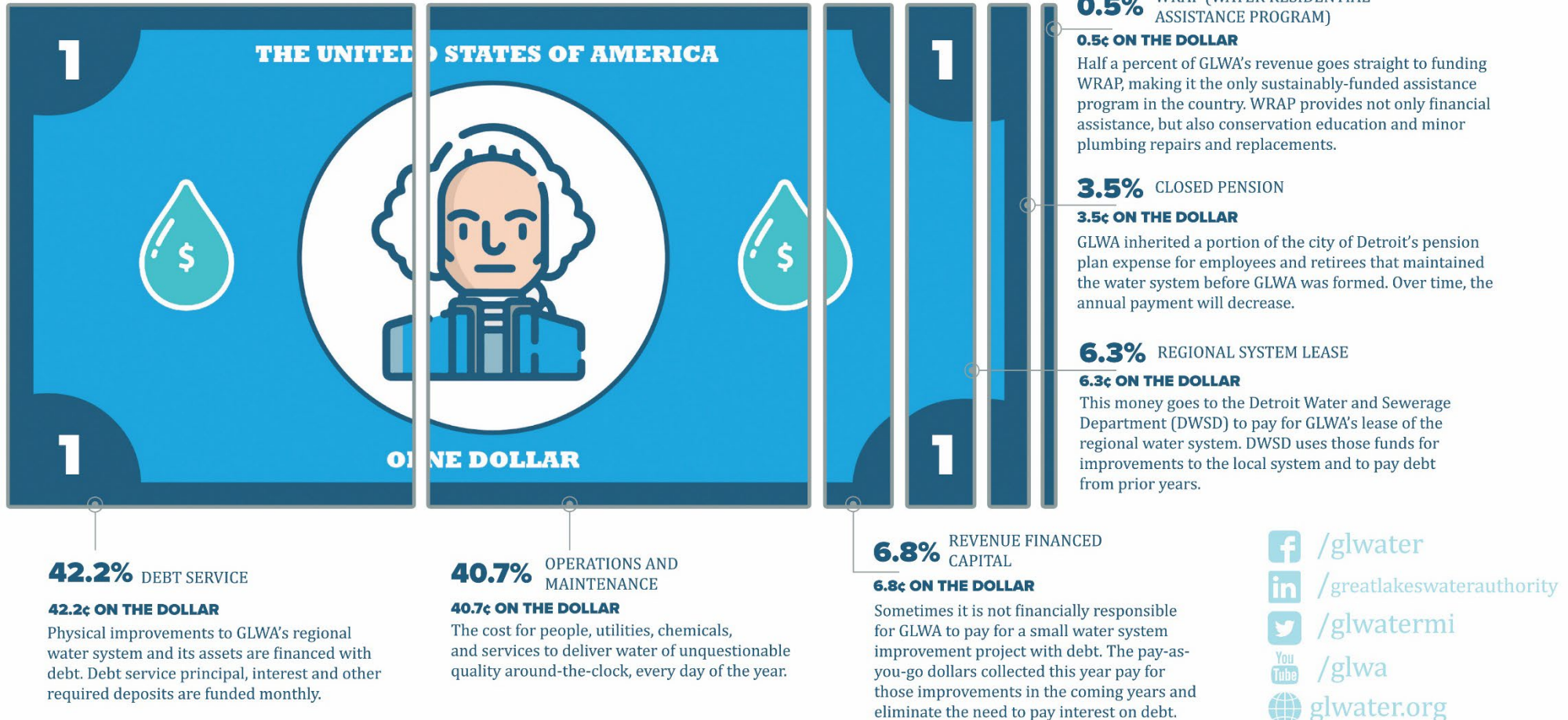
Great Lakes Water Authority
Detroit, Michigan

**FY 2023 and FY 2024
Biennial Budget &
Five-Year Financial Plan
FY 2023 through FY 2027**

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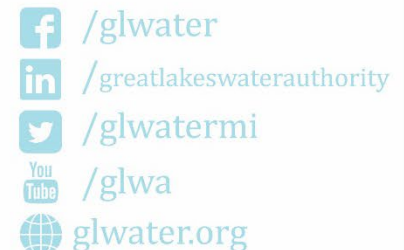
MAKING SENSE OF YOUR DOLLARS

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



WE ARE ONE WATER

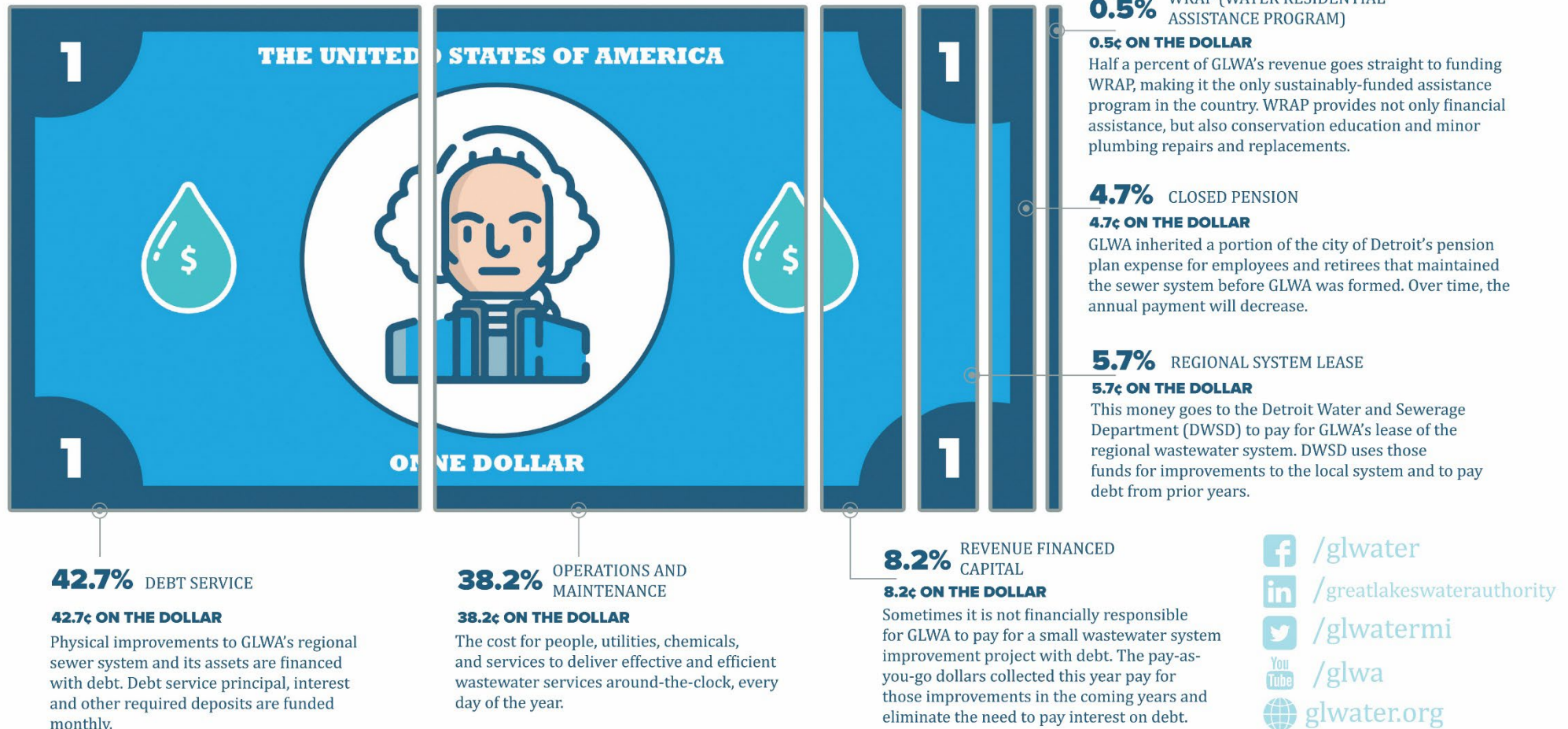
Note: Percentages based on FY 2023 approved budget.



FY 2023 Water System Budget Infographic

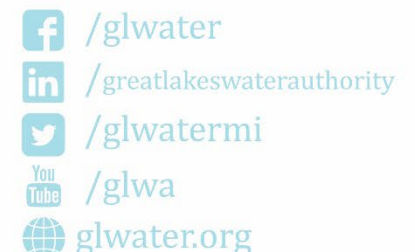
MAKING SENSE OF YOUR DOLLARS

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



Note: Percentages based on FY 2023 approved budget.

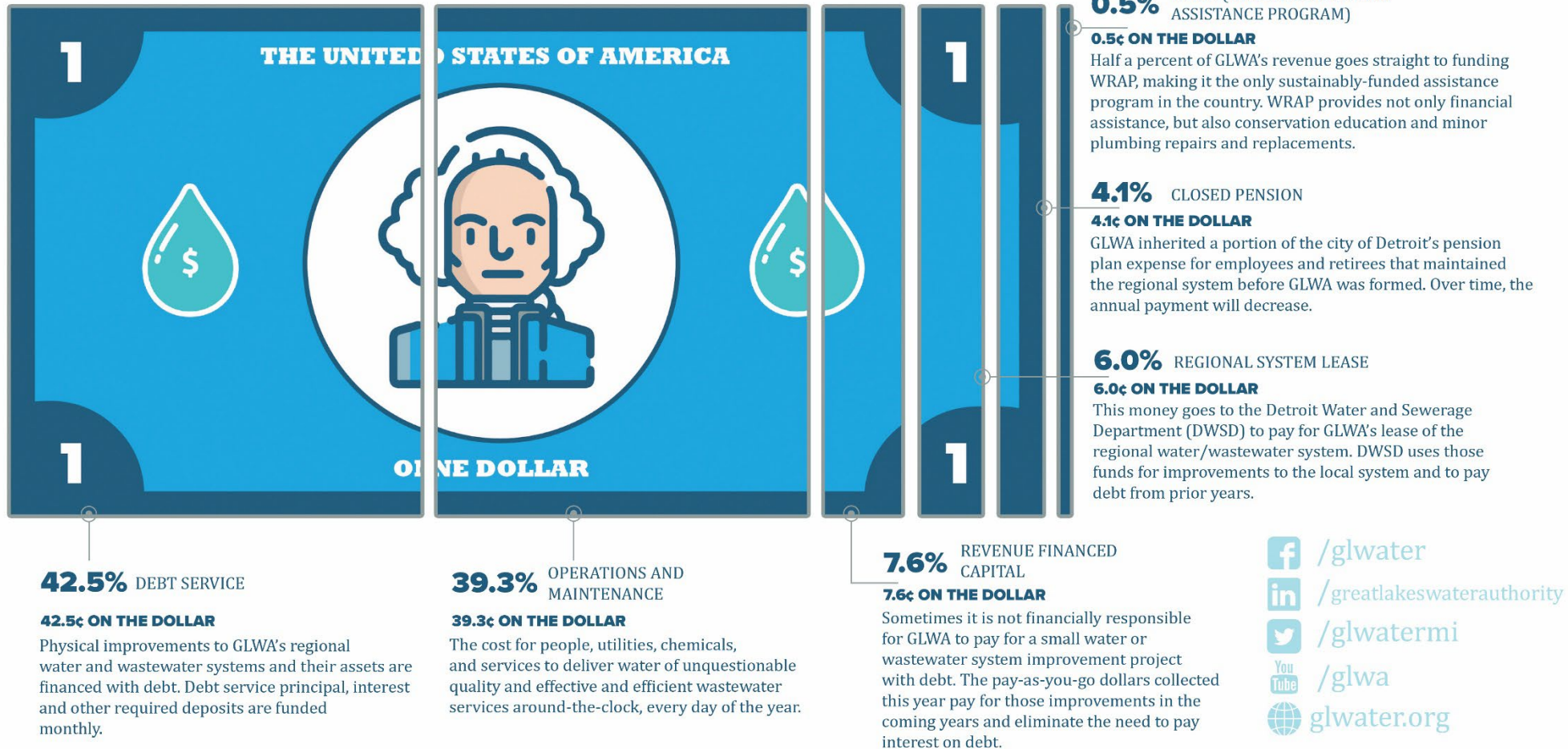
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FY 2023 Wastewater System Budget Infographic

MAKING SENSE OF YOUR DOLLARS

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



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Note: Percentages based on FY 2023 approved budget.

FY 2023 Water and Wastewater Combined Budget Infographic

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A Message from Interim Chief Executive Officer Suzanne R. Coffey

To Our Valued Partners,

The GLWA team is honored to be entrusted with providing safe, reliable drinking water and environmentally responsible wastewater service to southeast Michigan. GLWA has delivered on the vision that was established as we launched the new regional water authority on January 1, 2016. As we present this budget at the beginning of our seventh year of operations, we are an organization that has demonstrated consistent delivery of water of unquestionable quality, exemplary environmental stewardship, and a continued focus on both sustainability and affordability. The budget and five-year financial plan are designed to demonstrate the transition of those objectives into an actionable plan that encompasses cost control, transparency, and strong financial management.

FY 2023 Budget Highlights

The FY 2023 Budget delivers on accomplishing our financial plan objectives and reaching our organizational strategic goals. Five key priorities shape budget development decisions:

- 1) *Four Percent Promise*: managing the overall budget within the commitment established in GLWA's founding documents to limit annual increases in the overall budget to four percent or less;
- 2) *Long-Term Financial Sustainability*: advancing the path toward long-term stability and equity in the services charge model;
- 3) *Controlled O&M*: annual operations and maintenance (O&M) increases indicative of activities that support operational optimization;
- 4) *Asset Management Focus*: strategic investment in the regional system; and
- 5) *Charges Equity & Stability*: ongoing effort to ensure that cost of service is equitably shared and is predictable and moderated.

Water System – The approved water system budget and schedule of charges translates the above outlined goals into actions – which results in an outcome where water charges for wholesale member partners increased an average of 3.5 percent and the local system charge to the Detroit customer class increased by 3.0 percent, for a system-wide adjustment of 3.7 percent. Those goals and related actions include:

- 1) *Four Percent Promise*: limiting the water system revenue requirement (budget) to a 3.5 percent increase from the prior year; under the four percent promise. The average overall charges increase to all member partners is 3.7 percent, which is attributed mostly to a moderate decrease in sales volume (0.2 percent), to reconcile the 3.5 percent budget increase to the average charge increase of 3.7 percent;
- 2) *Long-Term Financial Sustainability*: budgeted debt service coverage of 1.80 on Senior Lien Bonds and 1.27 on all bonds, and a \$24 million deposit to the Improvement & Extension fund to lower the cost of future borrowing;
- 3) *Controlled O&M*: water O&M increase controlled at 0.6 percent – overall water and sewer O&M increase of 1.1 percent;
- 4) *Asset Management Focus*: budget reflects launch of improvement initiatives from the Strategic Asset Management Plan adopted in FY 2020;

- 5) *Charges Stability and Equity Goal:* For the 84 of 88 water system member partners that did not have changes in contractual demands, the FY 2023 water charges reflect a uniform charge adjustment. Charges for the remaining four member partners were calculated based on their new units of service.

Sewer System – Similarly, the approved sewer system budget and schedule of charges translates the above outlined goals into actions – which results in an outcome where sewer charges for wholesale member partners will increase by an average of 3.2 percent and a local system to the Detroit customer class charge increase of 1.2 percent, for a system-wide increase of 2.4 percent. Those goals and related actions include:

1. *Four Percent Promise:* reducing the sewer system revenue requirement (budget) to a 1.3 percent increase from the prior year; well under the four percent promise. The average overall charges increase to all member partners is 2.4 percent. The difference between the two figures is mainly due to the reinstitution of Highland Park bad debt adjustment (1.2 percent) which is offset by a slight increase in investment earnings;
2. *Long-Term Financial Sustainability:* budgeted debt service coverage of 2.17 on Senior Lien Bonds and 1.37 on all bonds, and a \$39.3 million deposit to the Improvement & Extension fund to lower the cost of future borrowing;
3. *Controlled O&M:* sewer O&M increase of 1.5 percent – overall water and sewer O&M increase of 1.1 percent;
4. *Asset Management Focus:* budget reflects launch of improvement initiatives from the Strategic Asset Management Plan adopted in FY 2020;
5. *Charges Stability and Equity Goal:* The FY 2023 sewer service charges reflect an across-the-board uniform charge adjustment for all member partners with subsequent application of minor adjustments to reflect contractual requirements.

COVID-19 Pandemic

GLWA has been successful in its response to COVID-19 pandemic because it understood that like with any crisis, the response must evolve as the situation evolves. Paramount to those efforts is a focus on team members' health and safety and assuring continuity of operations and service levels. The Authority's Emergency Operations Center opened immediately in March 2020 and continues today to keep all areas of the organization in sync. GLWA is committed to clear, honest, and concise communications with its Board of Directors, team members, member partner communities, vendors, and other stakeholders on a steady cadence to successfully navigate through this challenging time.

GLWA has applied for federal grants from the Federal Emergency Management Agency (FEMA) for reimbursement of COVID-19 related expenditures including facility disinfection, health screenings and supplies to help us keep our team members safe and maintain our continuity of operation. The financial plan provides agility for the many unknowns that continue to exist balanced with systemwide priorities with a focus on long-term sustainability and affordability.

Unprecedented Wet Weather Events

Historic rain events that occurred in the summer of 2021 impacted thousands of people across southeast Michigan. This deluge of precipitation amounted to approximately eight inches of rain in less than 19 hours, which is more than typically occurs in the month of June and more than double the National Oceanic and Atmospheric Administration (NOAA) standard published for utilities. A review of the rain gauge data for some gauges in the service area indicated that the rain event was far beyond the design standard which GLWA and all other collection systems in Michigan are held to, which is conveying a “10-year, one-hour storm.” That translates to an event that would statistically occur once every 10 years. Many gauges registered rain intensities beyond a 100-year event and three gauges in the city registered a 1,000-year event. Simply put, the amount and intensity of the rain overwhelmed the regional collection system, as it would have overwhelmed any collection system. The Authority has worked to identify and address operational changes to increase GLWA’s preparedness and ability to respond as quickly as possible to any future unprecedented wet weather events. That being said, GLWA and its partners throughout the region and state continue to evaluate the impacts of climate change on the system’s operations and capital investment.

Other Initiatives

Transparency

While we recognize that budget documents are lengthy in order to foster transparency by sharing large amounts of information, we also recognize that documents which are succinct, often have a more effective and far-reaching impact to further enhance transparency. Following this budget message are two documents from the GLWA One-Pager series. The *Biennial Budget and Five-Year Financial Plan* and *Water and Sewer Service Charges* one-pager documents are designed for our Member Partners and other stakeholders to share with their constituents. Budget infographics on the inside cover of this document provide further transparency and improved communication.

WRAP Success

The Water Residential Assistance Program (WRAP) is a unique program in our service sector that started with the formation of GLWA. The program administration began in March 2016. It has been modified by GLWA’s Board of Directors over the years, as the program matures, to increase the eligibility criteria and to allow an increased contribution percentage. The program provides that an amount equal to half of one percent (.50 percent) of GLWA Regional Systems revenue and not less than half of one percent (.50 percent) but not greater than one percent (1.0 percent) of DWSD Local Systems revenues be set aside to provide assistance to qualified residents in participating communities across southeast Michigan. For the FY 2023 budget, this amounts to \$4.1 million from GLWA revenues and \$2.1 million from DWSD revenues for a total of \$6.2 million. WRAP includes water bill payment assistance, arrearage assistance, in-home water audits, water conservation education, and an average of \$1,500 per home to fix leaks and other minor home plumbing repairs. Program goals are to educate the homeowner on responsible water usage, provide conservation measures in the home to reduce water consumption, and repair leaking and/or nonfunctioning plumbing and other water fixtures to create a safe, livable home. GLWA works with a network of

action agency partners including the Oakland Livingston Human Service Agency (OLHSA), Macomb Community Action Agency (MCA), and support from Genesee County Community Action Resource Department (GCCARD), in addition to the founding-service delivery partner Wayne Metropolitan Community Action Agency (Wayne Metro). More information can be found online at www.waynemetro.org/WRAP/.

Looking Ahead: FY 2023 through FY 2027 Financial Plan

In order to achieve our goals and validate our assumptions, a biennial budget combined with a five-year plan is developed to provide a roadmap for the future and allows us to lessen risk of events beyond our control. Supplemental schedules and analysis are provided to address unique budget elements.

As you read this document, you will notice our commitment to:

- ✓ The promise to keep the revenue requirement increase to less than four percent;
- ✓ Work with our member partners to advance equity and stability in charges;
- ✓ Build revenue financed capital to reduce the burden of long-term debt;
- ✓ Attract, engage, empower, and develop team members and foster technical and leadership opportunities in the region;
- ✓ Provide strong debt service coverage to achieve a lower cost of capital for our member partners; and
- ✓ Strategically initiate programs and implement new technology.

Thank You!

The GLWA team is grateful to the vast number of stakeholders who support the Authority's day-to-day activities while setting the course for the future as outlined in this financial plan. We are truly *One Water, One Team*.



Suzanne R. Coffey, PE
Interim Chief Executive Officer

The GLWA “revenue requirement budget” is the basis for establishing the annual charges for services. Nearly 53% of the FY 2023 budget of \$837 million are legal commitments such as debt service (43%), lease payment (6%), Water Residential Assistance Program (WRAP) (0.5%) and legacy liabilities (4%). Capital funding reserve for replacement is 7.6% of the total budget. The Operations & Maintenance (O&M) expense represents \$329 million, or 39% of the total. This analysis focuses on O&M expense, as compared to the prior year, to provide insight into O&M expense increase of 1.1%, or \$3.7 million.

Staffing & Personnel The staffing plan (number of positions) is at 1,293 (increase of 54). Full-time Equivalents (FTE), which is the pro-rata hours that a position is budgeted is at 1,234.44 (increase of 18.19). Rationale for these changes is noted in each category.

Water Operations – increase of \$1.7 million Increases are mainly due to Personnel Costs (\$3.3 million) related to the staffing plan increase of 29 (24.25 FTEs), 25 positions are for the new Water Technician Apprenticeship Program, as well as increases in medical plan fringe benefits. Decreases include reduced Contractual Services which (\$1.6 million) due to the alum sludge removal, hauling, and disposal project for the Springwells, Northeast, and Southwest Water Treatment Plants.

Wastewater Operations – increase of \$1.2 million Increases are mainly due to Personnel Costs (\$1.8 million) reflecting an increase in base level wages for some classifications to recruit and retain personnel. Note that the staffing plan positions has increased by 2 but FTEs decreased by 9.56 due to vacancies caused by recruiting challenges. Increases have also been recognized in the medical plan

fringe benefits. Unallocated Reserves increased (\$1.8 million) to cover area of risk such as chemical price increases. Decreases include Supplies & Other (\$2.4 million) from a review of existing contracts.

Centralized Services¹ – increase \$0.7 million Increases include the 11 positions (6.25 FTEs) (\$1.9 million) in Planning Services to support the Capital Improvement Plan. Security is adding 3 officers for (\$0.5 million) for expanded coverage. The Systems Operations Control services contract increased (\$0.3 million) and Facility Operations increased (\$0.5 million) for a gate repair. Decreases were realized from adjusted project timelines for the Linear System Integrity Program (LSIP) (\$1.2 million) and the Water Master Plan (\$0.4 million). Information Technology decreased contracts (\$0.8 million) as well as Energy, Research & Innovation for (\$0.1 million).

Administrative Services² – increase \$0.1 million Increases are mainly due to Personnel Costs: Organizational Development is adding 5 positions (4 FTEs) to support onboarding and training (\$0.6 million); Procurement is adding 3 positions (1.5 FTEs) to manage increased workload (\$0.4 million); Financial Services, while decreasing 9 positions (9.75 FTE), has an overall increase to in costs due to the skill level for succession and in-sourcing as well as increases fringe benefits (\$0.6 million). Contractual Services increased (\$0.5 million) to support ERP implementation. Decreases include Unallocated Reserves (\$1.1 million); Contractual services for the Board of Directors (\$0.7 million) for a one-time project; and supplies & contractual services (\$0.2 million) for Organizational Development.

Questions? Contact the Office of the Chief Financial Officer at cfo@glwater.org

¹ Includes the Planning Services, Systems Control; Facility and Fleet Operations; Field Service Operations; Energy, Research & Innovation; Transformation; Information Technology; and Security & Integrity (includes HazMat).

² Includes the Board of Directors, Chief Executive Officer, Chief Administrative & Compliance Officer (includes Risk Management & Safety), General Counsel, Public Affairs, Organizational Development and Financial Services.

FY 2023 Service Charges Highlights

The GLWA Board of Directors held a Public Hearing On February 23, 2022 and approved the proposed schedule of charges for the fiscal year beginning July 1, 2022.

Charges are Based on Four Key Elements.

1) Budget: The costs for the daily operations and maintenance activities (such as the people, services, utilities, chemicals, and parts to operate plants and maintain the pipelines), 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”.

2) Capital Improvement Plan (CIP): Annually the GLWA’s engineers evaluate the physical improvement needs of the regional systems. Those needs are funded by a combination of cash on hand and debt.

3) Units of Service (UOS): Quantifies each community’s service needs based on engineering studies, metering data, and other criteria. For the water system, this includes the amount of water purchased each year. For the sewer system, each member partner is assigned a percentage “share.”

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.glwater.org

Approved FY 2023 Water System Charges

The average system charge adjustment for water is a 3.7 percent increase. This is the result of 1) an approved Water budget increase of 3.5 percent; and 2) reduced baseline revenues related to decreased estimated sales volumes, which adds approximately 0.2 percent to the needed charge increase. As a result of the 2018 Contract Alignment Process (CAP), the FY 2023 Units of Service changed for only 4 member partners. This has significantly improved charge stability among member partner communities. The water charges reflect a uniform increase in wholesale revenue requirements of 3.7 percent, with a uniform average charge increase of 3.4 percent for the 84 member partners that did not have changes in contractual or estimated demands.

Approved FY 2023 Sewer System Charges

The average system charge adjustment for sewer is a 2.4 percent increase. This is the result of 1) an approved Sewer budget increase of 1.25 percent; and 2) reinstitution of a bad debt surcharge related to Highland Park which adds 1.15 percent to the charge increase. The Sewer SHARES, which were collaboratively established through the Sewer Charges Workgroup, were updated for the FY 2022 charges and will remain in effect until FY 2025. The use of the FY 2022 SHARES calculation for FY 2023 charges results in a uniform impact of charge adjustments for all member partners.

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%
Six-Year Average	2.1%	0.7%

Water Fund Revenues and Revenue Requirements [1]						
	Actual 2019 [1]	Actual 2020	Actual 2021	Amended 2022	Budget 2023	Budget 2024
Revenues (Budget Basis)						
Wholesale customer charges	\$ 311,399,136	\$ 312,701,777	\$ 322,423,768	\$ 325,135,500	\$ 338,613,600	\$ 348,664,100
Charge credits (Flint-KWA) [2]	(6,979,503)	(6,652,348)	(6,652,253)	(6,652,800)	(6,651,600)	(6,651,600)
Net wholesale charges	304,419,633	306,049,429	315,771,515	318,482,700	331,962,000	342,012,500
Local system charges	20,181,400	21,295,500	21,925,500	21,925,500	22,985,900	24,514,900
Other revenue [3]	361,384	2,659,660	267,562	291,000	175,000	175,000
Investment earnings [4]	11,818,203	9,115,115	4,195,305	1,923,800	948,700	1,831,700
Total Revenues	<u>\$ 336,780,620</u>	<u>\$ 339,119,704</u>	<u>\$ 342,159,882</u>	<u>\$ 342,623,000</u>	<u>\$ 356,071,600</u>	<u>\$ 368,534,100</u>
Revenue Requirements						
O&M expense [5]	\$ 117,714,203	\$ 131,840,040	\$ 118,840,855	\$ 143,933,800	\$ 144,847,700	\$ 148,707,300
O&M legacy pension	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	-
Debt service requirement	131,178,181	132,835,624	138,100,407	135,121,000	150,337,100	159,237,000
Accelerated legacy pension	6,268,296	6,268,300	6,268,300	6,268,300	6,268,300	3,647,500
WRAP	1,673,400	1,698,300	1,669,400	1,705,500	1,770,500	1,842,700
Local system shortfall [6]	-	937,400	-	-	-	-
Regional system lease	18,527,800	18,952,000	14,221,700	14,243,700	14,161,100	14,026,000
Regional system lease payment applied to DWSD debt	3,972,200	3,548,000	8,278,300	8,256,300	8,338,900	8,474,000
Improvement & extension fund	47,695,000	29,456,300	35,094,800	27,046,400	24,300,000	32,599,600
Total Revenue Requirements	<u>\$ 333,077,080</u>	<u>\$ 331,583,964</u>	<u>\$ 328,521,762</u>	<u>\$ 342,623,000</u>	<u>\$ 356,071,600</u>	<u>\$ 368,534,100</u>
Revenue Requirement Variance [7]	<u>\$ 3,703,540</u>	<u>\$ 7,535,740</u>	<u>\$ 13,638,120</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

[1] This presentation is based on the Schedule of Revenue Requirements-Budget to Actual as reported in the Supplementary Information of the Annual Comprehensive Financial Report. FY 2019 has been revised for the current presentation methodology.

[2] Credits applied reduce cash available to meet revenue requirements, therefore they are removed for this presentation. The credits applied reduce the Authority's liability for the raw water rights.

[3] Other revenues include other operating revenues and other nonoperating revenues for the Operations Funds. Numbers will not match those reported in the Annual Report as other nonoperating is net of income and expenses in the Supplementary Information of the Annual Report.

[4] Investment earnings excludes investment income for the construction fund and the WRAP accounts. Once bond money has been depleted in the construction fund, I&E funds are transferred to the construction fund. Interest earnings of I&E funds that were transferred to the construction fund are included.

[5] Includes the Operations Fund operating expenses as reported in the Supplementary Information of the Annual Report. Does not include I&E Fund operating expenses as those are paid with I&E funds and not current revenue.

[6] The amount of local system revenue requirements that were not covered by the local system receipts resulting in a receivable from the local system. System revenues were used to cover local system shortfall making less funds available to deposit in the I&E Fund. As the receivable is repaid by DWSD in subsequent periods, amounts are deposited into the I&E fund.

[7] Revenue Requirement Variance represents additional funds available for cash flow purposes that may be moved to I&E funds in future years. It reflects a budgeting basis analysis that is used to prepare member charges. It does not reflect net income for financial reporting purposes. See the Annual Comprehensive Financial Report for the financials based on generally accepted accounting principals.

Sewage Disposal Fund Revenues and Revenue Requirements [1]						
	Actual 2019 [1]	Actual 2020	Actual 2021	Amended 2022	Budget 2023	Budget 2024
Revenues (Budget Basis)						
Wholesale customer charges	\$ 272,772,460	\$ 266,003,286	\$ 267,567,816	\$ 266,055,300	\$ 275,560,600	\$ 279,232,000
Local system charges	181,159,300	185,807,300	187,959,700	187,959,700	191,042,200	197,921,700
Industrial waste and surcharges	15,038,824	14,303,101	14,724,903	13,890,900	13,213,700	13,542,200
Wholesale customer other [2]	-	5,960,000	5,960,000	-	-	-
Other revenue [3]	1,216,351	1,276,352	2,217,405	490,000	400,000	400,000
Investment earnings [4]	9,592,270	7,775,080	2,802,041	1,876,200	1,155,600	2,310,500
Total Revenues	<u>\$ 479,779,205</u>	<u>\$ 481,125,119</u>	<u>\$ 481,231,865</u>	<u>\$ 470,272,100</u>	<u>\$ 481,372,100</u>	<u>\$ 493,406,400</u>
Revenue Requirements						
O&M expense [5]	\$ 174,019,805	\$ 174,514,562	\$ 172,312,815	\$ 181,299,800	\$ 184,052,600	\$ 189,357,800
O&M legacy pension	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	-
Debt service requirement	210,008,452	211,331,439	201,945,083	204,984,500	205,638,100	220,662,100
Accelerated legacy pension	11,620,692	11,620,700	11,620,700	11,620,700	11,620,700	6,930,300
WRAP	2,374,092	2,403,000	2,415,100	2,358,300	2,394,200	2,467,000
Local system shortfall [6]	-	10,817,800	-	-	-	-
Regional system lease	\$23,085,004	\$22,467,300	\$24,242,800	25,480,900	27,500,000	27,500,000
Regional system lease payment applied to DWSD debt	\$4,415,000	\$5,032,700	\$3,257,200	2,019,100	-	-
Improvement & extension fund	22,547,700	20,797,600	42,742,700	31,684,800	39,342,500	46,489,200
Total Revenue Requirements	<u>\$ 458,894,745</u>	<u>\$ 469,809,101</u>	<u>\$ 469,360,398</u>	<u>\$ 470,272,100</u>	<u>\$ 481,372,100</u>	<u>\$ 493,406,400</u>
Revenue Requirement Variance [7]	<u>\$ 20,884,460</u>	<u>\$ 11,316,018</u>	<u>\$ 11,871,467</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

[1] This presentation is based on the Schedule of Revenue Requirements-Budget to Actual as reported in the Supplementary Information of the Annual Comprehensive Financial Report. FY 2019 has been revised for the current presentation methodology.

[2] Relates to capital contribution from OMIDD agreement and how funds were treated for budgeting purposes in computing member charges.

[3] Other revenues include other operating revenues and other nonoperating revenues for the Operations Funds. Numbers will not match those reported in the Annual Report as other nonoperating is net of income and expenses in the Supplementary Information of the Annual Report.

[4] Investment earnings excludes investment income for the construction fund and the WRAP accounts. Once bond money has been depleted in the construction fund, I&E funds are transferred to the construction fund. Interest earnings of I&E funds that were transferred to the

[5] Includes the Operations Fund operating expenses as reported in the Supplementary Information of the Annual Report. Does not include I&E Fund operating expenses as those are paid with I&E funds and not current revenue.

[6] The amount of local system revenue requirements that were not covered by the local system receipts resulting in a receivable from the local system. System revenues were used to cover local system shortfall making less funds available to deposit in the I&E Fund. As the receivable is repaid by DWSD in subsequent periods, amounts are deposited into the I&E fund.

[7] Revenue Requirement Variance represents additional funds available for cash flow purposes that may be moved to I&E funds in future years. It reflects a budgeting basis analysis that is used to prepare member charges. It does not reflect net income for financial reporting purposes. See the Annual Comprehensive Financial Report for the financials based on generally accepted accounting principals.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Great Lakes Water Authority
Michigan**

For the Fiscal Year Beginning

July 01, 2021A handwritten signature in black ink that reads "Christopher P. Morill".**Executive Director**

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Great Lakes Water Authority, Michigan, for its Biennial Budget for the biennium beginning July 1, 2021. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device.

This award is valid for a period of two years only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award. This is the Authority's 3rd year of receiving the award.

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Section 1

Overview

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We Are One Water

The Great Lakes Water Authority (GLWA) provides nearly 40 percent of Michigan's population with water of unquestionable quality, as well as effective and efficient wastewater services to nearly 30 percent of the state. GLWA is all about the movement of water, from the environment, to our member partners, and back to the environment. We ensure our member partner communities get the highest quality water using treatment standards that are stricter than state or federal regulatory requirements. Once the water has been used, we run it through our treatment process again before returning it to the environment – often cleaner than when we received it. Working hand-in-hand with our member partners, we provide water and wastewater services of the highest quality. Together, we are one water.

Our Mission

To exceed our member partners' expectations by utilizing best practices in the treatment and transmission of water and wastewater, while promoting healthy communities and economic growth.

Our Vision

Through regional collaboration, GLWA strives to be the provider of choice, dedicated to efficiently delivering the nation's best water and sewer services in partnership with our member partners.

Our Members

The collaborative relationship we share with our members makes up the bedrock of GLWA's operating philosophy. As we work together for the greater good of the region, GLWA coordinates projects for civic improvement and provides members with educational resources. Our One Water Partnership Agreement outlines the mutual commitment between GLWA and those we serve, including the One Water Mission: To collaboratively ensure a One Water system approach to our regional water and wastewater system that will be economically, socially, and environmentally responsible and sustainable.

Our members include GLWA team members, board members, water and wastewater partners, associated stakeholders, elected officials, consultants and regulatory agencies. GLWA has a dedicated Member Outreach Program that collaborates with its members on water and wastewater activities. Work groups are used to involve members in technical service and financial discussions that support decision-making for GLWA's water and wastewater systems. GLWA has designated team members working within the Member Outreach Program and includes a contracted third-party facilitator responsible for ensuring and sustaining the rules of collaboration and furthering the transparent exchange of information between GLWA and its members.

History

GLWA began operations on January 1, 2016 and is the result of a monumental collaboration among regional leaders. Working to meet the needs of sustainable and affordable infrastructure, a memorandum of understanding (MOU) was agreed upon on September 9, 2014. Subsequently, GLWA was incorporated by the City of Detroit (City) and the counties of Macomb, Oakland and Wayne on November 26, 2014, pursuant to Act 233, Public Acts of Michigan, 1955, as amended. At the time of GLWA's incorporation, the City, through its Detroit Water and Sewerage Department (DWSD), was providing water supply services within and outside of the City through a water supply system and drainage and sewage disposal services within and outside of the City through a sewage disposal system.

On June 12, 2015, the City and GLWA executed the Regional Water Supply and Sewerage Disposal System Leases, transferring the regional water and sewage disposal facilities from the City to GLWA for an initial term of 40 years. In addition, the City and GLWA entered into a Water and Sewer Services Agreement where GLWA provides water and sewer services to the City; the City then supplies these services to Detroit retail customers via the DWSD. The agreements required the satisfaction of several conditions before becoming effective. By January 1, 2016 (the Effective Date), those conditions were met and GLWA, under the terms of the Regional System Leases, became responsible for the assets, all bonded indebtedness, and operations for the regional water and wastewater systems.

GLWA leases the regional water and wastewater systems from the City for an allocation of \$50 million per year to fund capital improvements for the City's retail system and/or debt obligations. GLWA also funds a Water Residential Assistance Program (WRAP) to assist low-income residential households in enrolled member partner communities.

Board of Directors *as of February 23, 2022*

Jaye Quadrozzi	GLWA Board Chair; Representative for Oakland County
Freman Hendrix.....	GLWA Board Vice-Chair; Representative for the City of Detroit
Brian Baker	GLWA Board Secretary; Representative for Macomb County
Gary A. Brown.....	GLWA Board Representative for the City of Detroit
Beverly Walker-Griffa, PH.D.....	GLWA Board Representative for the State of Michigan
John J. Zech.....	GLWA Board Representative for Wayne County

Executive Leadership Team *as of February 23, 2022*

Suzanne R. Coffey, PE.....Interim Chief Executive Officer
William M. WolfsonChief Administrative and Compliance Officer
Nicolette N. Bateson, CPAChief Financial Officer/Treasurer - Financial Services
Cheryl D. Porter.....Chief Operating Officer – Water & Field Services
Navid Mehram, PE.....Chief Operating Officer – Wastewater Operating Services
Jody Caldwell.....Interim Chief Planning Officer
Jeffrey E. Small.....Chief Information Officer
Terri Tabor Conerway.....Chief Organizational Development Officer
W. Barnett JonesChief Security and Integrity Officer
Randal M. BrownGeneral Counsel
Michelle A. ZdrodowskiChief Public Affairs Officer



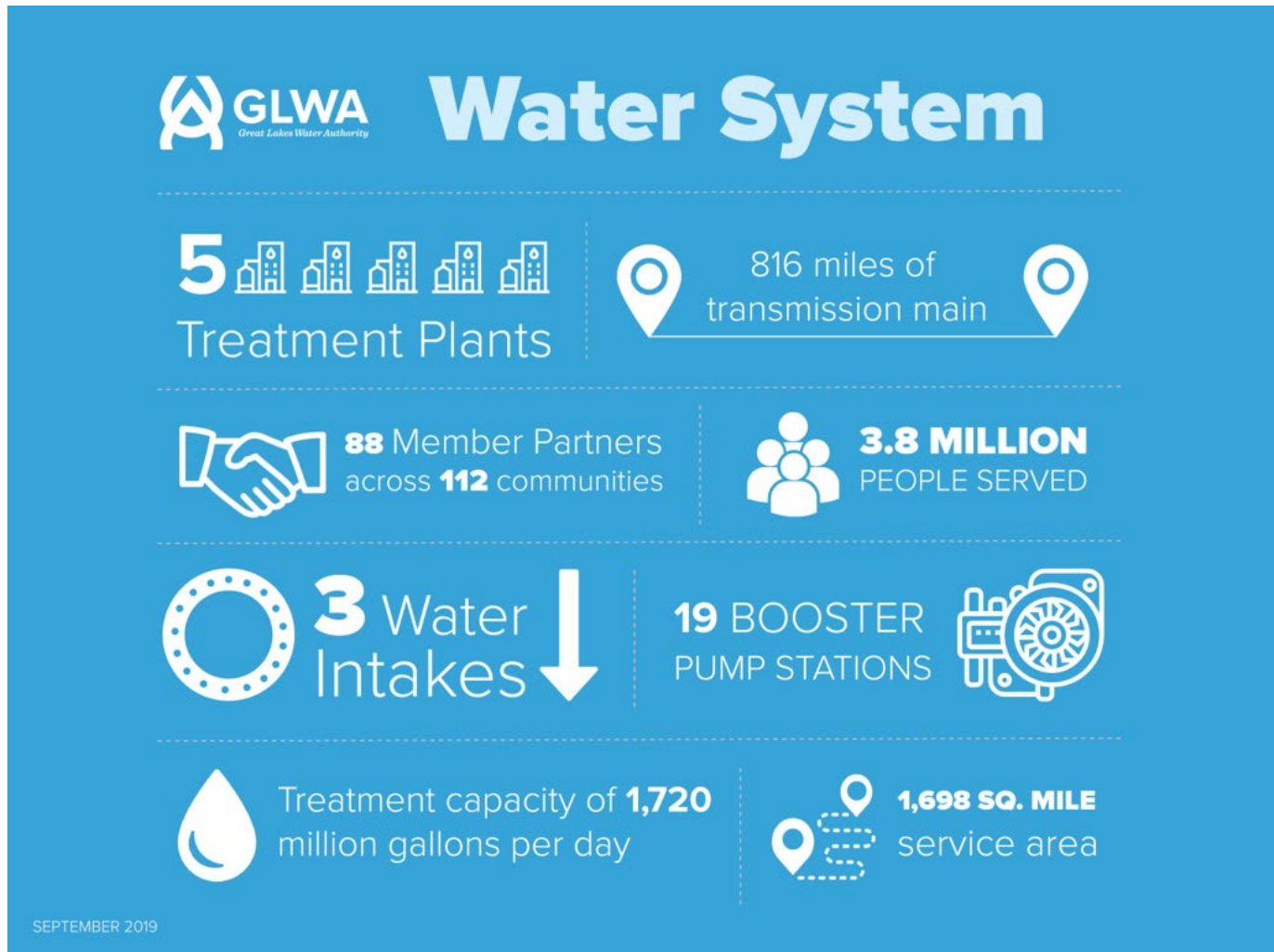
ONE WATER ONE TEAM

Organization

GLWA is organized into six intersecting operating areas. Within each area, there are functional groups. Together, these groups work in a cross-functional manner to achieve the organization's mission. Collaboration is our mode of operation. As One Team we succeed together. An organization line of reporting chart is included in Section 3, Operating Financial Plans Introduction which is color coded to show which operating area of the budget the department is included.



Our Water System

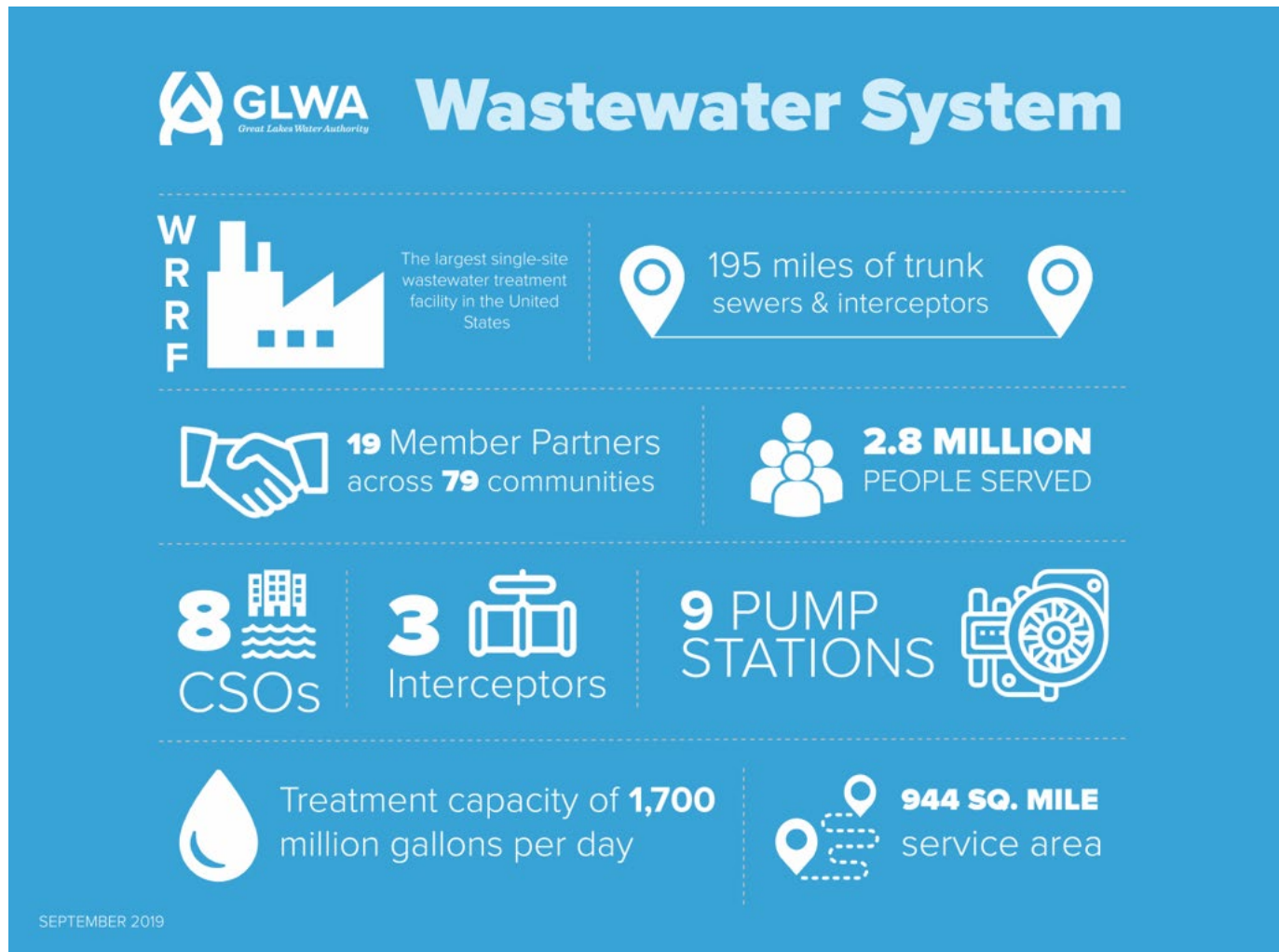


The Authority's water system is one of the largest in the United States, both in terms of water produced and population served. The water system currently serves an area of 1,698 square miles located in eight Michigan counties and an estimated population of approximately 3.8 million or approximately 38% of Michigan's population. Suburban wholesale member partners comprise approximately 82% of the population in the service area and the DWSD retail water customers comprise the remainder.

The water supply system consists of three intake facilities, five water treatment plants, 19 booster pumping stations, 32 water storage reservoirs and a conveyance system with over 816 miles of transmission mains. Water is drawn from Lake Huron and the Great Lakes tributary, the Detroit River. Recognizing that quality begins at the source, GLWA invests time and resources into the continued protection of our source water. We work with world-class universities and foundations to

ensure a level of water quality that not only meets but surpasses all federal and state standards. And a continued focus on environmental impact has helped GLWA become a leader on environmental practices and compliance in the Midwest.

Our Wastewater System



The Authority's sewer system is one of the largest in the United States, both in terms of treatment capacity and population served. The sewer system currently serves an area of 944 square miles located in three Michigan counties and an estimated population of approximately 2.8 million or approximately 28% of Michigan's population. Suburban member partners comprise approximately 76% of the population in the service area and the DWSD retail sewer customers comprise the remainder.

The wastewater system consists of one of the largest single-site wastewater treatment plants in the world, three major interceptors, nine pump stations, eight Combined Sewer Overflow (CSO) Control Facilities, including five retention treatment basins and three flow-through type facilities, and a conveyance system with 195 miles of trunk sewers and interceptors.

Our wastewater treatment plant is used as a benchmark for other plants across the Midwest. In a giant step toward becoming a Utility of the Future, GLWA is transitioning its Wastewater Treatment Plant (WWTP) to a Water Resource Recovery Facility (WRRF), that will ultimately operate on renewable energy. At the end of this process, the WRRF will be energy neutral, meaning the facility will create enough energy to power its own operations, and perhaps even create excess energy that can be fed into the power grid. Additionally, a Biosolids Dryer Facility (BFD) has the ability to turn roughly one billion gallons of biosolids into environmentally friendly fertilizer. This alternative to burning or dumping in a landfill will significantly decrease emissions year-over-year.

Facilities

We are continually updating our facilities to optimize water and wastewater treatment for the benefit of our member partners and the environment. To improve and optimize system efficiency, we invest significant time into maintaining and improving our facilities. This includes, but is not limited to, performing regular condition assessments and installing greener technology to become a Utility of the Future.

WATER TREATMENT FACILITIES



Water Works Park
WATER TREATMENT FACILITY



Lake Huron
WATER TREATMENT FACILITY



Northeast
WATER TREATMENT FACILITY



Southwest
WATER TREATMENT FACILITY



Springwells
WATER TREATMENT FACILITY

WASTEWATER AND COMBINED SEWER OVERFLOW (CSO) FACILITIES



Water Resource
Recovery Facility
PRIMARY & SECONDARY TREATMENT



Baby Creek Facility
SCREENING, DISINFECTION & CSO



Conner Creek Facility
CSO & RTB



Hubbell-Southfield
Facility
CSO & RTB



Leib Facility
SCREENING, DISINFECTION & CSO



Oakwood Facility
CSO & RTB



Puritan-Fenkell Facility
CSO & RTB



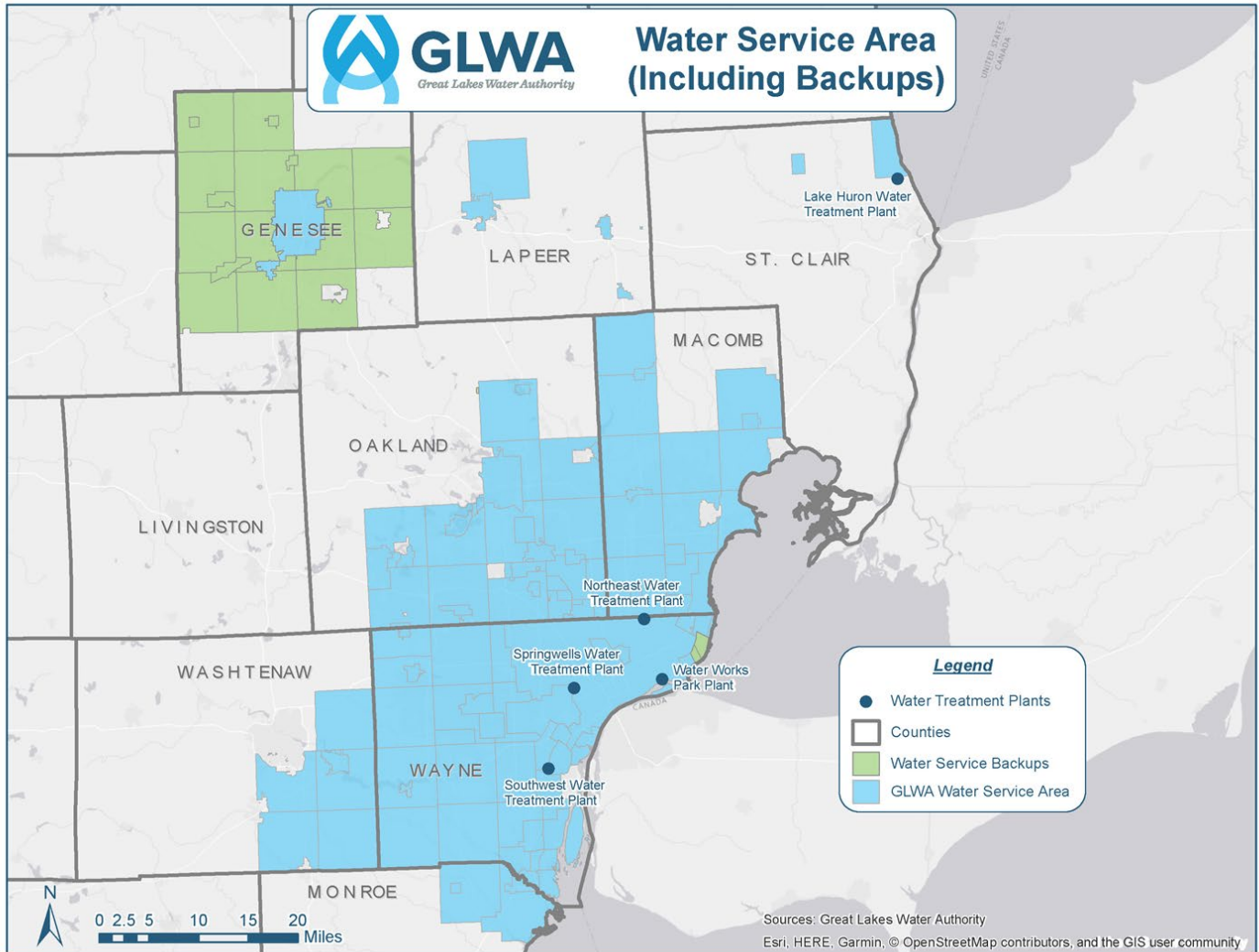
St. Aubin Facility
SCREENING, DISINFECTION & CSO

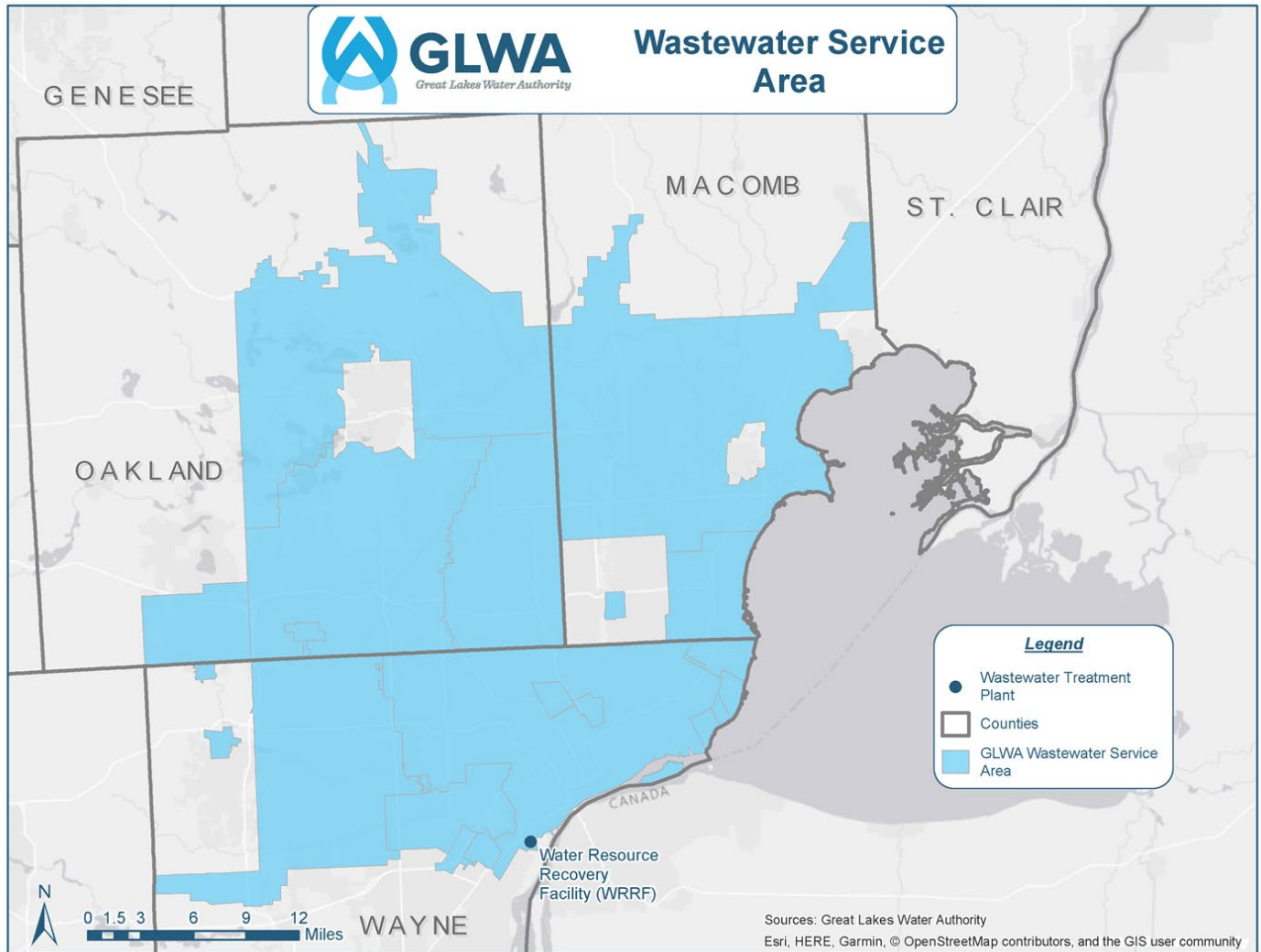


7 Mile Facility
CSO & RTB

Service Area Maps

The following two maps show the service area for the water system and wastewater system.





Community Profile

The Authority services many communities in southeastern Michigan. Southeastern Michigan's largest city is Detroit. The Detroit retail customer class is collectively the Authority's largest member partner. The City of Detroit's Water & Sewage Department owns and operates the local water and sewer systems and serves as agent for the Authority for setting retail rates, billing, collecting, and enforcing the collection of amounts due from the Detroit retail customer class. That relationship is further defined by the Water and Sewer Services Agreement, consistent with the provisions of the Regional System Leases and related agreements. The Authority may revoke or terminate its appointment of the City as agent for the Authority if the City fails to perform its duties, obligations, or administrative functions in accordance with the Water and Sewer Services Agreement (WSSA).

The water system provides services to all or a portion of eight Michigan counties: Oakland, Macomb, Wayne, Lapeer, Genesee, Washtenaw, St. Clair and Monroe Counties. The Authority has 88 member partners across 112 communities. The 88 member partners are comprised of the City of Detroit and 87 wholesale member partners. Model contracts are in effect for 83 of the 87 current wholesale member partners. Of the 4 current wholesale member partners not under model contracts, 3 are served under the former contract structure, and 1 is served under an emergency service contract.

The sewer system provides services in three Michigan counties: Oakland, Macomb, and Wayne Counties. The Authority has 19 member partners across 79 communities. The 19 member partners are comprised of the City of Detroit and 18 wholesale service contracts with municipal and other public entity member partners. These service areas are part of the Detroit-Warren-Dearborn Metropolitan Statistical Area (the "Detroit MSA").

Employment

The Detroit MSA's economy is highly susceptible to swings in the national economy due to its high concentration of employment in the durable goods industries, particularly the automotive industry. Over the past two decades, all three major automotive companies have experienced severe financial problems which have adversely affected the economy of the Detroit area.

The following tables provides information on the service area employment:

- Employment by industry group for the Detroit MSA
- Employment by industry group for the United States (provided for comparing)
- Largest employers in the service area

The region has in the past consistently maintained a greater percentage of persons employed in the manufacturing sector than the United States as whole. This reflects the area's dependence on the automotive industry.

Employees by Industry
Nonfarm, Not Seasonally Adjusted (numbers in thousands)

Detroit-Warren-Dearborn MSA				
	June 2020		June 2021	
Mining, logging and construction	75.4	4.2%	82.0	4.2%
Manufacturing	227.0	12.8%	234.9	12.2%
Trade, transportation & utilities	337.4	19.0%	368.5	19.1%
Information	24.7	1.4%	25.2	1.3%
Financial activities	119.4	6.7%	126.4	6.5%
Professional and business services	351.5	19.8%	382.7	19.8%
Education and health services	277.4	15.6%	294.9	15.3%
Leisure & hospitality	129.5	7.3%	170.2	8.8%
Other services	58.4	3.3%	66.4	3.4%
Government	178.0	10.0%	179.9	9.3%
Total	1,778.7	100.0%	1,931.1	100.0%

U.S.				
	June 2020		June 2021	
Mining & logging	600	0.4%	633	0.4%
Construction	7,359	5.3%	7,592	5.2%
Manufacturing	12,069	8.7%	12,389	8.5%
Trade, transportation & utilities	25,930	18.7%	27,263	18.6%
Information	2,606	1.9%	2,743	1.9%
Financial activities	8,675	6.3%	8,840	6.0%
Professional and business services	19,683	14.2%	20,946	14.3%
Education and health services	22,491	16.2%	23,355	15.9%
Leisure & hospitality	12,637	9.1%	15,329	10.5%
Other services	5,217	3.8%	5,710	3.9%
Government	21,234	15.3%	21,717	14.8%
Total	138,501	100.0%	146,517	100.0%

Source: U.S. Department of Labor Bureau of Labor Statistics

Largest Employers in the Service Area

Employer	Type of Business	Full-time Employees (a)	Rank	Percentage of MSA Employment (b)
Ford Motor Co.	Automobile Manufacturer	47,750	1	2.41%
Stellantis NV formerly FCA US LLC	Automobile Manufacturer	37,761	2	1.90%
University of Michigan	Public University and Health System	35,185	3	1.77%
General Motors Co.	Automobile Manufacturer	33,935	4	1.71%
Beaumont Health	Health Care System	24,668	5	1.24%
U.S. Government	Federal Government	19,953	6	1.01%
Rocket Companies Inc.	Holding company consisting of technology, personal finance and consumer service brands	18,000	7	0.91%
Henry Ford Health System	Health Care System	17,875	8	0.90%
Trinity Health Michigan	Health Care System	12,991	9	0.65%
Ascension Michigan	Health Care System	12,452	10	0.63%
Total		<u>260,570</u>		<u>13.13%</u>

(a) Employment data from Crain's Detroit Business, Largest Southeast Michigan Employers - Ranked by full-time employees July 2021

(b) Percentage base on U.S. Bureau of Labor Statistics employment for July 2021 of 1,984,530 for the Detroit-Warren-Dearborn, MI Metropolitan Statistical Area (MSA)

Service Area Demographics

The following table provides the population, unemployment, per capita income and the Authority's debt service requirements for the last ten years. Debt service requirements are also shown per capita and as a percentage of income.

Service Area Demographics

Year	Total Population (1)	Unemployment (2)	Per Capita Income (3)	Total Debt Service (4)	Debt Per Capita	Debt Service as a Percentage of Income
Water Fund						
2021	3,800,000	4.8%	\$53,316	\$179,214,379	\$47.16	0.09%
2020	3,800,000	11.7%	\$50,069	\$172,869,073	\$45.49	0.09%
2019	3,800,000	4.3%	\$54,172	\$162,377,261	\$42.73	0.08%
2018	3,800,000	4.3%	\$52,572	\$172,549,890	\$45.41	0.09%
2017	3,800,000	4.6%	\$50,863	\$175,010,012	\$46.06	0.09%
2016 *	3,800,000	5.3%	\$48,692	\$171,138,525	\$45.04	0.09%
2015 *	3,800,000	5.9%	\$46,894	\$178,923,900	\$47.09	0.10%
2014 *	3,800,000	8.1%	\$44,718	\$182,464,900	\$48.02	0.11%
2013 *	3,800,000	9.7%	\$42,555	\$172,458,800	\$45.38	0.11%
2012 *	3,800,000	10.1%	\$42,168	\$153,524,200	\$40.40	0.10%

Sewage Disposal Fund

2021	2,800,000	4.8%	\$53,316	\$230,162,876	\$82.20	0.15%
2020	2,800,000	11.7%	\$50,069	\$245,641,464	\$87.73	0.18%
2019	2,800,000	4.3%	\$54,172	\$235,381,235	\$84.06	0.16%
2018	2,800,000	4.3%	\$52,572	\$232,491,813	\$83.03	0.16%
2017	2,800,000	4.6%	\$50,863	\$234,554,814	\$83.77	0.16%
2016 *	2,800,000	5.3%	\$48,692	\$228,570,571	\$81.63	0.17%
2015 *	2,807,000	5.9%	\$46,894	\$232,612,800	\$82.87	0.18%
2014 *	2,807,000	8.1%	\$44,718	\$229,611,100	\$81.80	0.18%
2013 *	2,807,000	9.7%	\$42,555	\$225,222,900	\$80.24	0.19%
2012 *	2,807,000	10.1%	\$42,168	\$203,092,300	\$72.35	0.17%

- (1) Source: Estimated based on data from Southeast Michigan Council of Governments (SEMCOG).
- (2) Source: Bureau of Labor Statistics Detroit-Warren-Dearborn MSA Annual Average (For 2021 the June rate was used). The Detroit-Warren-Dearborn Metropolitan Statistical Area (MSA) is comprised of six counties: Wayne, Oakland, Macomb, Livingston, Lapeer and St. Clair. This represents the majority of the service area customers.
- (3) Source: FRED Economic Data, St. Louis Fed (2012-2019); Michigan State University Center for Economic Analysis (2020-2021)
- (4) Debt service is based on a debt set aside basis to provide cash for when debt service payments are due.

* GLWA assumed operations on January 1, 2016. The information in this table from 2012-2015 is based on operations under the City of Detroit Water and Sewerage Department (DWSD). Data for 2016 includes six months of operation under DWSD and six months of operation under GLWA.

Largest Member Partners

The following tables provide information about the operating revenues and the ten largest wholesale member partners for the water system and sewage disposal system for the last three years.

Water Fund Operating Revenues and Largest Water Customers

	2019	2020	2021
Operating Revenues			
Suburban wholesale charges (1)	\$ 311,399,136	\$ 312,701,777	\$ 322,423,768
Local system charges	20,181,400	21,295,500	21,925,500
Other revenue	21,340	256,300	265,822
Total Operating Revenues	\$ 331,601,876	\$ 334,253,577	\$ 344,615,090
Suburban wholesale charges % of total operating revenue	93.91%	93.55%	93.56%
Local system charges % of total operating revenue	6.09%	6.37%	6.36%
Ten Largest Suburban Wholesale Member Partners			
Southeast Oakland County Water Authority	\$ 23,311,743	\$ 23,089,967	\$ 23,722,602
North Oakland County Water Authority	23,464,096	22,293,795	22,667,931
Sterling Heights	14,644,368	15,242,912	16,375,729
Shelby Township	13,719,053	14,482,451	15,690,553
Troy	13,700,093	13,607,770	14,324,990
Macomb Township	11,063,225	12,870,377	13,388,385
Livonia	14,001,058	11,553,730	11,806,151
West Bloomfield Township	10,733,617	-	11,010,166
Flint [2]	11,604,504	10,325,345	10,980,526
Canton Township	-	10,491,407	10,919,607
Ypsilanti Community Utilities Authority	-	10,450,861	-
Warren	10,648,162	-	-
Total Revenue Ten Largest Suburban Wholesale Member Partners	\$ 146,889,919	\$ 144,408,615	\$ 150,886,640
Ten largest suburban wholesale member partners % of total operating revenues	44.30%	43.20%	43.78%

(1) Net of bad debt expense.

(2) Represents billed revenues prior to the credit to Flint for its proportional share of KWA debt service.

Sewage Disposal Fund Operating Revenues and Largest Sewer Customers

	2019	2020	2021
Operating Revenues			
Suburban wholesale charges (1)	\$ 272,772,460	\$ 266,003,286	\$ 267,567,816
Local system charges	181,159,300	185,807,300	187,959,700
Industrial waste and surcharges	15,038,824	14,303,101	14,724,903
Bad debt recovery	-	-	-
Other revenue	506,323	521,957	501,121
Total Operating Revenues	\$ 469,476,907	\$ 466,635,644	\$ 470,753,540
Suburban wholesale charges % of total operating revenue	58.10%	57.00%	56.84%
Local system charges % of total operating revenue	38.59%	39.82%	39.93%
Ten Largest Suburban Wholesale Member Partners			
Oakland Macomb Interceptor Drainage District	\$ 77,533,200	\$ 69,870,786	\$ 70,355,029
Wayne County - Rouge Valley	53,761,200	54,162,000	54,536,400
Oakland County-George W Kuhn Drainage District	44,972,400	45,264,000	45,558,000
Evergreen Farmington	34,578,000	34,839,600	35,084,400
South Macomb Sanitation District	24,672,000	24,837,600	25,000,800
Dearborn	19,372,800	19,502,400	19,628,400
Highland Park	5,614,800	5,670,000	5,708,400
Hamtramck	3,962,400	3,994,800	4,019,400
Grosse Pointe Farms	2,727,600	2,750,400	2,769,000
Grosse Pointe Park	1,801,200	1,812,000	1,824,000
Total Revenue Ten Largest Suburban Wholesale Member Partners	\$ 268,995,600	\$ 262,703,586	\$ 264,483,829
Ten largest suburban wholesale member partners % of total operating revenues	57.30%	56.30%	56.18%

(1) Net of bad debt expense.

Housing Characteristics

The following table shows certain housing characteristics of the Detroit MSA in comparison to the State of Michigan and the United States.

Housing Characteristics – Fourth Quarter 2021 Statistics

	Detroit MSA	State of Michigan	United States
Homeownership Rates	69.7%	72.3%	65.5%
Rental Vacancy	4.0%	4.4%	5.6%
Homeownership Vacancy	0.3%	0.5%	0.9%

Source: United States Census Bureau

Detroit/Wayne County Port Authority

The Detroit/Wayne County Port Authority is a governmental agency advancing southeast Michigan's maritime and related industries with the purpose of delivering prosperity and economic benefit to citizens and businesses. Its mission is to plan, develop, and foster economic and recreational growth, through environmental stewardship, in promoting Detroit and southeast Michigan as an import and export freight transportation and distribution hub for the United States, Canada, and the world marketplace. It operates the Port of Detroit, (the "Port") which provides direct water service to world markets via the Great Lakes/St. Lawrence Seaway. The port consists of multiple marine terminals handling general, liquid, and bulk cargo as well as passengers. The Port of Detroit's single most valuable commodity is steel, and the largest commodity handled by tonnage is ore. Other important commodities handled at the port include stone, coal and cement. The Port Authority oversees millions of tons of cargo at 29 private and public sector terminal facilities in the Port of Detroit. International and domestic high-grade steel products, coal, iron ore, cement, aggregate and other road building commodities are shipped in and out of Detroit's port. It is the third largest steel-handling port in the nation. At the Port of Detroit's own terminal, steel, aluminum, and project cargoes are handled for the support of the manufacturing community in Southeast Michigan. The Port of Detroit is responsible for close to 16,000 jobs in Southeast Michigan. This translates into one-half billion in direct business revenue, \$255 million in personal income, and \$288 million in State and Federal tax revenue.

Transportation Network

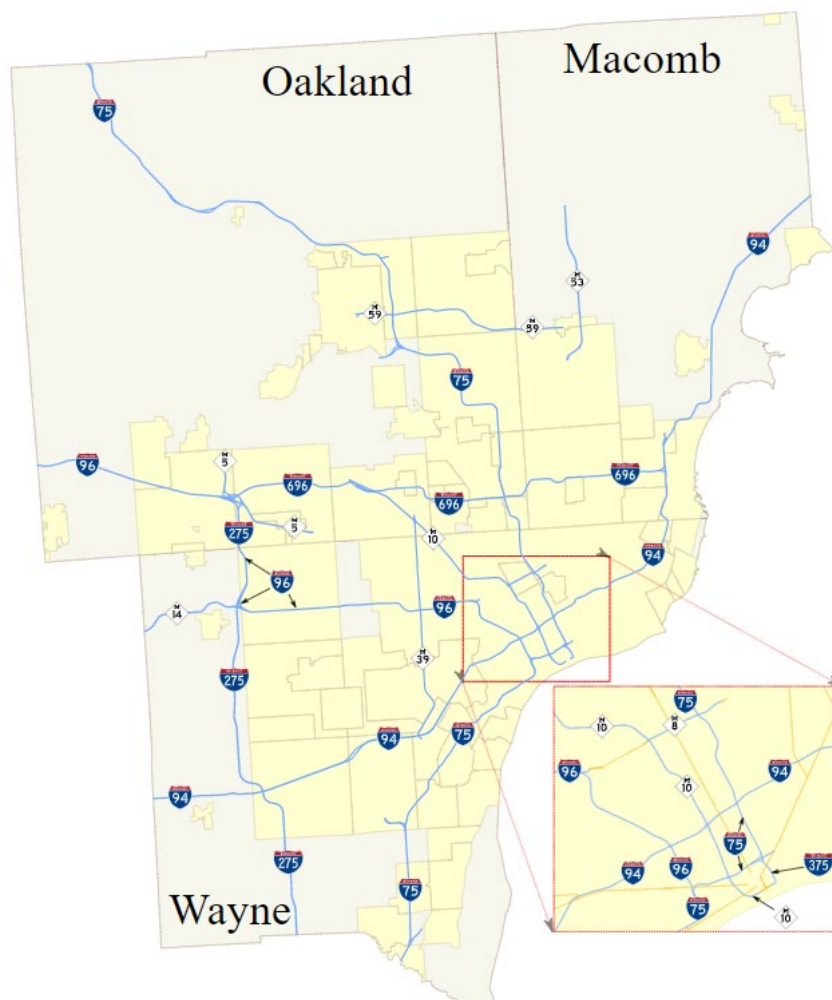
Major rail lines providing direct service to the Detroit area include railroad companies Conrail, Norfolk Southern, CN and CSX Transportation. Major cargo handled by the rail lines in the Detroit area include transportation equipment, chemicals and agriculture.

Passenger rail service is provided by Amtrack.

Air transportation service is provided by the following airports:

- Coleman A. Young International Airport (DET), which has general aviation and cargo services
- Willow Run Airport (YIP), which is an important corporate, cargo and general aviation facility
- Detroit Metropolitan Wayne County Airport (DTW), one of the world's leading air transportation hubs with more than 1,100 flights per day to and from four continents.

The Detroit area has an extensive toll-free highway system, which includes the I-94, I-75, I-96, I-696 and I-275 interstate highways and Canadian Highway 401.



Budget Requirement

The Authority, which reports as an enterprise fund, is not required to adopt a legal budget under the State of Michigan's Uniform Budgeting and Accounting Act 2 of 1968. Enterprise funds are excluded under Section 141.422a (4)(c) and Section 141.436 of this act. The Authority's articles of incorporation, Article 9.H., requires the Board to adopt a budget each fiscal year in accordance with the uniform budget and accounting act, 1968 PA 2, MCL 141.421 to 141.440a. Article 9.I. of the Authority's articles of incorporation requires a two-year operating budget. The Authority's bylaws also require the Board to adopt a two-year operations budget and five-year capital improvement program under Article X, Sections 5(b) and (c) and Section 7.

Budgetary Funds

The Authority's budget consists of six funds. For Financial Reporting the Operations Fund, Improvement and Extension Fund, and Construction Fund are combined and reported under the respective Water Fund and Sewage Disposal Fund which are the major funds in the Authority's Annual Comprehensive Annual Report (ACFR). Combining schedules are provided in the supplementary information of the ACFR. The terms wastewater and sewer are also used when referring to the Sewage Disposal Fund throughout this document.

- *Water Operations Fund* – All water revenues are credited to this fund. All expenses for the operations and maintenance (O&M) of the water system are paid from this fund. The total Water O&M funds budgeted are detailed in Schedule 2 of the Core Financial Plan Schedules.
- *Sewer Operations Fund* – All sewer revenues are credited to this fund. All expenses for the operations and maintenance of the wastewater system are paid from this fund. The total Sewer O&M funds budgeted are detailed in Schedule 2 of the Core Financial Plan Schedules.
- *Water Improvement & Extension Fund (I&E)* – The budget includes amounts from water charges revenues that are transferred to the I&E fund to reduce debt financing. Management may determine other water funds that are available for this use besides those that are budgeted. This fund is used for water system capital outlays and capital improvements. The budgeted transfer from water charges revenue to the Water I&E fund is included in Schedule 1A of the Core Financial Plan Schedules. The budgeted activity of the Water I&E Fund is provided in Schedule 5A of the Core Financial Plan Schedules.
- *Sewer Improvement & Extension Fund (I&E)* - The budget includes amounts from sewage disposal charges revenues that are transferred to the I&E fund to reduce debt financing. Management may determine other sewage disposal funds that are available for this use besides those that are budgeted. This fund is used for wastewater system capital outlay and capital improvements. The budgeted transfer from sewage disposal charges revenue to the Sewer I&E fund is included in Schedule 1B of the Core Financial Plan Schedules. The budgeted activity of the Sewer I&E Fund is provided in Schedule 5B of the Core Financial Plan Schedules.
- *Water Construction Fund* – This fund is used for the proceeds of water debt obligations and investment earnings thereon. I&E funds may also be transferred to this fund when bond proceeds have been exhausted. Funds are used to pay for water system capital improvements

in accordance with the debt obligations. The budgeted activity of the Water Construction Fund is provided in Schedule 5C of the Core Financial Plan Schedules.

- *Sewer Construction Fund* – This fund is used for the proceeds of sewer debt obligations and investment earnings thereon. I&E funds may also be transferred to this fund when bond proceeds have been exhausted. Funds are used to pay for the wastewater system capital improvements in accordance with the debt obligations. The budgeted activity of the Sewer Construction Fund is provided in Schedule 5D of the Core Financial Plan Schedules

Budget Basis and Revenue Requirements

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

- Operation & Maintenance (O&M) expenses based on an accrual basis as reported in the Annual Comprehensive Financial Report plus lease payments for right to use assets recorded under GASB 87 and contracts recorded under GASB 96
- O&M Legacy Pension Allocation and Accelerated Legacy Pension Allocation based on a cash basis
- Debt Service Allocation based on a cash set aside basis to provide the cash for the debt payments on the due dates
- Water Residential Assistance Program based on a percentage of revenue
- Regional System Lease payments based on a cash basis
- Extraordinary Repair & Replacement Reserve Fund (ER&R) allocation on a cash basis if the ER&R balance is below the requirement
- Regional System Improvement & Extension Fund Allocation on a cash basis

Once the revenue requirements amount is determined, customer charges are calculated to meet the revenue requirements. See the Water System Charges and Sewer System Charges in Section 4 for information about the approved charges.

Accounting Basis

The Authority's financial statements are prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Authority has a water enterprise fund and a sewerage disposal enterprise fund, both of which are presented as major funds. The Authority maintains its records on the accrual basis of accounting to conform to GAAP. Revenues from operations, investments and other sources are recorded when earned. Expenses (including depreciation) of providing services to the public are recorded when incurred.

The Authority provides a crosswalk in the ACFR which shows the differences between the budget basis and GAAP. The key areas of reconciliation include the following:

- O&M Legacy Pension and Accelerated Legacy Pension to the City of Detroit General Employees Retirement System defined benefit plan. Annual contributions are an expense for the budget

basis while the accrual basis financial report reflects the current year payment as a deferred outflow.

- Debt Service (principal and interest) is an expense for the budget basis while the accrual basis financial report treats interest as an expense and principal payments as a reduction of a liability.
- Regional System Lease payments (principal and interest) are an expense for the budget basis while the accrual basis financial report treats interest as an expense and principal payments as a reduction of a liability.
- Right to use asset lease payments recorded under GASB 87 and payments on subscription liabilities recorded under GASB 96 are an expense for the budget basis while the accrual basis financial report treats the payments as principal and interest payments with interest being an expense and principal a reduction of a liability.
- Contributions to the Regional System Improvement & Extension Fund and the Extraordinary Repair & Replacement Reserve Fund are an expense for the budget basis while the accrual basis financial report treats this activity as an increase in assets.
- Depreciation and amortization are not components of the budget basis while the accrual basis financial report treats these as an expense.

Budget Process - Biennial Budget and Five-Year Financial Plan

For the preparation of the FY 2023 and FY 2024 biennial budget and five-year financial plan for FY 2023 through FY 2027, the individual budgets for Operations and Maintenance (O&M) expenditures as well as Capital Outlay expenditures (funded through O&M and I&E) were submitted by budget managers which were utilized in the preparation of the overall financial plan for the Authority. In July 2021, to keep within the framework of the long-term financial plan, the budget managers were given the goal of maintaining no more than a 2% increase in the O&M budget. Budget managers were told if there were specific costs that were needed that would put the increase over 2%, that they were to include those in the budget requests. Budget requests for the next five years were due to be entered into the accounting software by September 17, 2021. During the months of September and October 2021, the budgets for each cost center were reviewed and finalized by the Financial Planning & Analysis (FP&A) team and management.

Proposed charges are calculated and presented with the proposed budget throughout the budget process. The preliminary units of service to be used in the calculation of the water charges to member partners and an update on the preliminary wastewater SHARES for the wastewater charges to member partners was presented at the Charges Rollout meeting # 2 on November 16, 2021.

A budget discussion draft for the FY 2023 and FY 2024 Biennial Budget and Five-Year Plan, proposed 2023 charges and updated long-term financial plan was presented to the Audit Committee on December 17, 2021. The draft focused on a) overall strategy of key budget elements including system-wide service charges and b) proposed operating group budgets. Summarized below is the effect of the proposed budget on proposed charges:

Proposed FY 2023 Water Charges reflected:

- Budgeted Revenue Requirement increase of \$12.0 million (3.5%);
- System Charge Adjustment equal to a 3.7% increase;
- Wholesale Charge Adjustment equal to a 3.6% increase;
- Uniform Charge Increase of 3.4% for almost all Member Partners;
- Uniform Charge Increase of 2.6% for Non Master Metered Member Partners;
- Slightly higher increase for local system (Detroit) and Flint after recognizing specific contract requirements.

Proposed FY 2023 Sewer Charges reflected:

- Budgeted Revenue Requirement increase of \$11.9 million (2.5%);
- System Charge Adjustment equal to a 3.7% increase;
- Uniform System Charge Increase of 4.5% for suburban wholesale Member Partners related to Highland Park bad debt;
- Increase to local system (Detroit) is 2.5%

On January 6, 2022, the same budget and financial plan and review of the proposed charges were presented to member partners in the Charges Rollout meeting #3 on January 6, 2022. A follow up review session of the budget and financial plan and charges was held at the Charges Rollout meeting #4 on January 20, 2022.

Budget discussions were continued at the January 21, 2022 audit committee meeting. The Audit Committee requested the Administration to provide an analysis which would illustrate the impact of reducing the FY 2023 sewer system revenue requirement budget by \$5.5 million and the related impact on sewer charges. A special audit committee meeting was scheduled for February 11, 2022.

The FY 2023 & FY 2024 Biennial Budget and Five-Year Plan and FY 2023 Charges as presented to the Audit Committee on January 21, 2022 was presented to the Board of Directors on January 26, 2022. The Board receive and referred the file to the Audit Committee.

The Administration provided a proposed adjustment to the budget with a \$5.9 million reduction in the FY 2023 Sewer System Revenue Requirement at the audit committee on February 11, 2022. This resulted in a revised Budgeted Revenue Requirement increase of \$5.9 million (1.3)%. The Sewer System Charge Adjustment decreased from an increase of 3.7% to an increase of 2.4%. The Audit Committee motioned and approved to recommend that the revised FY 2023 and FY 2024 and related FY 2023 Schedule of Charges reflecting the revision presented be adopted by the Board of Directors at the Public Hearing to be held February 23, 2022.

The final budget and charges were submitted to the board during Public Hearings on February 23, 2022 which received full approval from the Board of Directors. Upon receiving approval from the GLWA Board to adopt the budget, the FP&A team and other members of the Financial Services area began work to publish the approved budget and the supporting schedules from which the budget was created. The effective date of the budget is July 1, 2022.

Budget Process - Capital Improvement Plan

The FY 2023 - 2027 Capital Improvement Plan (CIP) development and approval process began in the summer of 2021. At that time, an authority-wide request for new and updated Business Case Evaluation (BCE) documents were made for projects and programs within all business areas. BCE's were received from project managers in August 2021. In September 2021, the Water and Wastewater Review Committees prioritized the newly submitted CIP projects. Project information related to new and substantially modified projects, as well as overall summary financial information, was reviewed by the Executive Leadership Team (ELT) in October 2021.

With projects vetted internally, Draft No. 1 CIP was created and presented to the GLWA Capital Improvement Planning Committee on October 19, 2021 and to the Member Partner communities in the Charges Rollout #1 on November 9, 2021. Comments from member partners were requested by no later than November 19, 2021.

Draft No. 2 was released via GLWA website and mass email communication to community partners the week of December 6, 2021 after continual refinement based on updated information. It was presented at the December 14, 2021 Capital Improvement Planning Committee with a table of questions that were received and the answers to those questions as well as a list of the CIP changes since Draft No. 1. No major changes were made to the CIP budgets for FY 2023-2027 and FY 2028-2032 since the publication of Draft No 2.

The CIP was presented to the Board of Directors on January 26, 2022. The Board receive and referred the file to the Capital Planning Committee which reviewed the final CIP document on February 15, 2022.

On February 23, 2022, the CIP was presented to the full Board of Directors and the final approval was received. Once approved, the Capital Improvement Planning group distributed and published the final CIP plan which is effective July 1, 2022.

Budget Calendar

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

1. FY 2023 and 2024 Biennial Budget
2. FY 2023 through FY 2027 Five-Year Financial Plan
3. FY 2023 through FY 2027 Five-Year Capital Improvement Plan
4. FY 2023 Schedule of Revenues and Charges

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

Date	Activity
July 2021	Budget objectives determined based on long-term financial plan
July 2021	Budget managers provided guidance of maintaining no more than 2% increase
Friday, September 17, 2021	Internal – Deadline for Cost Center Budget Request
Tuesday, October 19, 2021	Capital Planning Committee – Review of CIP Version 1.0
Tuesday, October 19, 2021	Release CIP Version 1.0 to Member Partners for Review
Thursday, October 28, 2021	Analytical Work Group – Exceedances (exceedances to notified to communities by October 1st, meet by November 1st and AWG by December 1st)
Monday, November 1, 2021	DWSD – Proposed CIP to be provided (Water and Sewer Services Agreement 5.3d)
Tuesday, November 9, 2021	Charges Rollout Meeting #1 – Water & Sewer Capital Improvement Plan Version 1.0
Thursday, November 16, 2021	Charges Rollout Meeting #2 – Units of Service Update
Wednesday, December 1, 2021	GLWA and DWSD (City) - Exchange shared services to be provided and related costs (Shared Services Agreement 5.4)
Tuesday, December 14, 2021	Capital Planning Committee – Review of CIP Version 2.0
Friday, December 17, 2021	GLWA Audit Committee Meeting – Proposed Revenue Requirement & Charges

Saturday, January 1, 2022	DWSD – Preliminary two-year budget forecast Including key assumptions and impact statement due to GLWA (Water and Sewer Services Agreement 5.3a)
Thursday, January 6, 2022	Charges Rollout Meeting #3 – Proposed FY 2023 Revenue Requirement and Charges
Wednesday, January 12, 2022	GLWA Regular Board Workshop (Canceled)
Thursday, January 20, 2022	Charges Rollout Meeting #4 – Feedback on Service Charges and Review of Proposed FY 2023 Revenue Requirements
Friday, January 21, 2022	GLWA Special Audit Committee Meeting – Discussion of FY 2023 & FY 2024 Biennial Budget and Five-Year Plan & Update on Proposed FY 2023 Water and Sewer Service Charges
Friday, January 21, 2022 (Note 30 days before is Monday, January 24, 2022)	Mail Notice to Member Partners of Public Hearing to be held on February 23, 2022 (minimum 30 days prior to Act 279 Public Hearing) (D)
Wednesday, January 26, 2022	GLWA Board Meeting – Presentation: Proposed FY 2023 and 2024 Biennial Budget (Revenue Requirement) and Five-Year Financial Plan, Proposed FY 2023 Charges & FY 2023–2027 Capital Improvement Plan
Tuesday, February 1, 2022	DWSD – Current capital improvement plan due to GLWA (Water and Sewer Services Agreement 5.3d(i))
Friday, February 4, 2022	Publish notice of the hearing by publication in a newspaper of general circulation (B)
Friday, February 11, 2022	GLWA Special Audit Committee Meeting – Proposed Revisions to the FY 2023 & FY 2024 Biennial Budget and Five-Year Plan & related Proposed FY 2023 Water and Sewer Service Charges
Wednesday, February 23, 2022	GLWA Board Meeting – Public Hearing FY 2023 & FY 2024 Biennial Budget (A)
Wednesday, February 23, 2022	GLWA Board Meeting – Public Hearing FY 2023 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date) (C)

Wednesday, February 23, 2022	GLWA Board Meeting – Proposed Approval of the FY 2023 & FY 2024 Biennial Budget (A)
Wednesday, February 23, 2022	GLWA Board Meeting – Proposed Approval of FY 2023–2027 Capital Improvement Plan
Wednesday, February 23, 2022	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2023 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date) (C)
Tuesday, March 1, 2022	Mail Notice to Member Partners of Approved Charges
Wednesday, March 23, 2022	DWSD – Local system adopted biennial budget due to GLWA (Water and Sewer Services Agreement 5.3b)
Sunday, May 1, 2022	DWSD – Local system provides direction to GLWA on how to apply lease payment (Water and Sewer Services Agreement 4.3)
Friday, July 1, 2022	GLWA – Effective date of FY 2023 and 2024 Biennial Budget, FY 2023 Schedule of Charges, and FY 2023-2027 Capital Improvement Plan

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

- A. **Uniform Budgeting and Accounting Act, Act 2 of 1968, Section 141.434**, “Before final passage of a general appropriations act by the legislative body, a public hearing shall be held as required by 1963 (2nd Ex Sess) PA 43, MCL 141.411 to 141.415, and the open meetings act, 1976 PA 267, MCL 15.261 to 15.275.” (For purposes of Public Act 2, the GLWA Board is the legislative body.)
- B. **Budget Hearings of Local Governments, Act 43 of 1963 (2nd Ex. Sess.), Section 141.412**, “The **local** unit shall give notice of the hearing by publication in a newspaper of general circulation within the local unit at least 6 days before the hearing.” (For purposes of Public Act 2, the GLWA Board is a local unit.)
- C. **Home Rule City Act, Act 279 of 1909, Section 117.5e**, “Municipal water or sewage system; annual audit; public hearing before proposed rate increase. A municipal water or sewage system established by a city incorporated under this act which serves more than 40% of the population of the state shall:(b) Hold at least 1 public hearing at least 120 days before a proposed rate increase is scheduled to take effect. Each hearing shall be conducted in compliance with Act No. 267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws. Notice of the time, date, and place of each hearing shall be given in the manner required by Act No. 267 of the Public Acts of 1976, shall be prominently printed

in a daily newspaper of general circulation within the area, and shall be mailed to each city, village, or township served by the system not less than 30 days before each hearing. A final vote by the governing body of the city to implement a proposed rate increase shall not be taken until the hearings provided for in this subdivision are concluded and the results of those hearings are considered by the city's governing body.”

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

- D. **GLWA Wholesale Customer Model Water Contract Section 7.02 and GLWA Wholesale Customer Model Sewer Contract Section 20.02** provides: “Notification of Rates. As soon as possible in the ratemaking process, the Board shall provide information on proposed rates and the draft data and information used in the calculation of proposed rates in a format that will enable Customer to assist in the ratemaking process. Not less than thirty calendar days prior to the hearing required by Act 279, the Board shall provide Customer with written notice of a proposed rate and the underlying data used to calculate the rate. The Board shall meet with Customer to review the rate and the data.” (Act 279 is the Home Rule City Act noted above.)

Budget Amendments

The Authority’s Board of Directors adopted a two-year budget on February 23, 2022, for the fiscal years 2023 and 2024. See Board Resolution 2022-071. By this resolution the total annual revenue requirements for the Regional Water System and the Regional Sewage Disposal System were established. The resolution also established the total operations and maintenance budget, the total debt service requirements, and the total capital expenditures for both the Regional Water System and the Regional Sewage Disposal System. The legal level of budgetary control is the bottom line based on each of the budgeted revenue requirements (components of the revenue requirements are referred to as appropriation categories) and the budget shall not be increased or decreased without prior Board authorization. The Board is provided detail schedules which support the totals in the resolution. The CFO may exercise discretion to modify the detail budget line items within each approved budget requirement which would result in no change to the total budgeted revenue requirements. In June 2020 the Authority’s Board of Directors approved a formalized budget amendment policy which states that in the event that there is a proposed amendment of the budget among the appropriation categories, the matter is brought to the Audit Committee for review and consideration of a recommendation to the Board of Directors for their consideration for approval. Board budget amendments should be brought to the Audit Committee when identified and no less than quarterly. The [Budget Amendment Policy](#) can be found on the GLWA website.

Notice of Public Hearing Proposed Biennial Budget



**GREAT LAKES WATER AUTHORITY
NOTICE OF PUBLIC HEARING
PROPOSED BIENNIAL BUDGET
For the Two-Year Period ended June 30, 2024 (FY 2023 and FY 2024)**

Notice is hereby given that the Great Lakes Water Authority Board of Directors will hold a Public Hearing on the proposed FY 2023 and FY 2024 biennial budget.

DATE: Wednesday, February 23, 2022

TIME: 2:00 p.m.

PLACE: In person, Zoom Videoconferencing, and Telephonic Hearing

Join Zoom Meeting

<https://glwater.zoom.us/j/88966908345?pwd=Tkt3NTFodjEyZU44TzJQd0xweU0wUT09>

Meeting ID: 889 6690 8345

Passcode: 546743

In Person (subject to capacity)

Board Room, 5th Floor
735 Randolph Street
Detroit, Michigan 48226

Telephonic

Public Call-In Number: 877 853 5247 US Toll-Free
or 888 788 0099 US Toll-Free
Meeting ID: 889 6690 8345
Passcode: 546743

The proposed biennial budget is scheduled to take effect on July 1, 2022.

The proposed biennial budget is available for public inspection online at <https://www.glwater.org/financials/>.

Individuals or groups wishing to make oral presentations or submit prepared statements pertaining to the proposed biennial budget may do so at the Public Hearing as outlined in this notice. Individuals or groups wishing to make oral presentations may appear in person but are encouraged to participate via the Zoom as indicated in this notice.

Notice of Public Hearing Proposed Biennial Budget (continued)



Individuals or groups wishing to make oral presentations are encouraged to participate by Zoom because at this time the State of Michigan, Department of Health and Human Services as well as other local health departments within the GLWA service area have declared emergencies related to the risk of infection associated with the COVID-19 pandemic.

Individuals or groups giving oral presentations are encouraged to also submit their presentations in writing. Oral presentations should be brief to allow all parties the opportunity to participate. A time limit will be imposed based upon registration at the hearing.

The Public Hearing on the FY 2023 and FY 2024 biennial budget proposed by the Great Lakes Water Authority scheduled for February 23, 2022 at 2:00 p.m. will be held in person, through Zoom videoconferencing, and by telephone through Zoom's telephonic capabilities.

Members of the public may offer comment in the following manners:

By Zoom videoconferencing: Members of the public who wish to use Zoom videoconferencing to attend the meeting and/or offer public comment may utilize the following link to attend:

<https://glwater.zoom.us/j/88966908345?pwd=Tkt3NTFodjEyZU44TzJQd0xweU0wUT09>

During the portions of the hearing designated for public participation may "raise their hand" by using that feature within the software program.

In Person (subject to capacity): Members of the public who, subject to capacity, wish to attend the meeting and/or offer public comment in person may attend the meeting in the Board Room, 5th Floor, 735 Randolph, Detroit, MI 48226.

By Telephone: Members of the public who wish to attend the meeting and/or offer public comment by telephone should call in at the number indicated above, press *9 on their keypad to "raise their hand for public comment." During other portions of the meeting, members of the public are asked to mute their line by pressing *6 on their keypad to mute or unmute their line.

By E-Mail: Members of the public may provide written comments to the Board by emailing those comments to CEO@glwater.org on or before 3:00 p.m. on Tuesday, February 22, 2022 and should reference "February 23, 2022 Public Hearing on proposed FY 2023 and FY 2024 biennial budget" in the subject line of the e-mail. The opportunity to submit written comments by e-mail may remain open throughout the duration of the Public Hearing.

By U.S. Mail: members of the public may provide written comments by United States mail addressed to:

Suzanne R. Coffey P.E., Interim Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Notice of Public Hearing Proposed Biennial Budget (continued)



Written comments by U.S. mail should reference "February 23, 2022 Public Hearing on proposed FY 2023 and FY 2024 biennial budget" in the letter. The opportunity to submit written comments by U.S. mail may remain open throughout the duration of the Public Hearing.

If a member of the public requires accommodation due to a disability, please contact CEO@glwater.org or (844) 455-GLWA (4592) not less than 72 hours prior to the date of the meeting.

Notice of Public Hearing Proposed Service Charges**GREAT LAKES WATER AUTHORITY
NOTICE OF PUBLIC HEARING
PROPOSED FY 2023 WATER AND SEWERAGE SERVICE CHARGES**

Notice is hereby given that the Great Lakes Water Authority Board of Directors will hold a Public Hearing on Water and Sewerage service charges proposed by the Great Lakes Water Authority for Fiscal Year 2023.

DATE: Wednesday, February 23, 2022

TIME: 2:00 p.m.

PLACE: In person, Zoom Videoconferencing, and Telephonic Hearing

Join Zoom Meeting

<https://glwater.zoom.us/j/88966908345?pwd=Tkt3NTFodjEyZU44TzJQd0xweU0wUT09>

Meeting ID: 889 6690 8345

Passcode: 546743

In Person (subject to capacity)

Board Room, 5th Floor
735 Randolph Street
Detroit, Michigan 48226

Telephonic

Public Call-In Number: 877 853 5247 US Toll-Free
or 888 788 0099 US Toll-Free

Meeting ID: 889 6690 8345

Passcode: 546743

The proposed service charges are scheduled to take effect on July 1, 2022.

The proposed schedule of charges is available for public inspection online at <https://www.glwater.org/financials/>.

Individuals or groups wishing to make oral presentations or submit prepared statements pertaining to the proposed service charges may do so at the Public Hearing as outlined in this notice. Individuals or groups wishing to make oral presentations may appear in person but are encouraged to participate via the Zoom as indicated in this notice.

Notice of Public Hearing Proposed Service Charges (continued)



Individuals or groups wishing to make oral presentations are encouraged to participate by Zoom because at this time the State of Michigan, Department of Health and Human Services as well as other local health departments within the GLWA service area have declared emergencies related to the risk of infection associated with the COVID-19 pandemic.

Individuals or groups giving oral presentations are encouraged to also submit their presentations in writing. Oral presentations should be brief to allow all parties the opportunity to participate. A time limit will be imposed based upon registration at the hearing.

The Public Hearing on FY 2023 Water and Sewerage service charges proposed by the Great Lakes Water Authority scheduled for February 23, 2022 at 2:00 p.m. will be held in person, through Zoom videoconferencing, and by telephone through Zoom's telephonic capabilities.

Members of the public may offer comment in the following manners:

By Zoom videoconferencing: Members of the public who wish to use Zoom videoconferencing to attend the meeting and/or offer public comment may utilize the following link to attend:
<https://glwater.zoom.us/j/88966908345?pwd=Tkt3NTFodjEyZU44TzJQd0xweU0wUT09>
During the portions of the hearing designated for public participation may "raise their hand" by using that feature within the software program.

In Person (subject to capacity): Members of the public who, subject to capacity, wish to attend the meeting and/or offer public comment in person may attend the meeting in the Board Room, 5th Floor, 735 Randolph, Detroit, MI 48226.

By Telephone: Members of the public who wish to attend the meeting and/or offer public comment by telephone should call in at the number indicated above, press *9 on their keypad to "raise their hand for public comment." During other portions of the meeting, members of the public are asked to mute their line by pressing *6 on their keypad to mute or unmute their line.

By E-Mail: Members of the public may provide written comments to the Board by emailing those comments to CEO@glwater.org on or before 3:00 p.m. on Tuesday, February 22, 2022 and should reference "February 23, 2022 Public Hearing on service charges proposed for Fiscal Year 2023" in the subject line of the e-mail. The opportunity to submit written comments by e-mail may remain open throughout the duration of the Public Hearing.

By U.S. Mail: members of the public may provide written comments by United States mail addressed to:

Suzanne R. Coffey P.E., Interim Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Notice of Public Hearing Proposed Service Charges (continued)



Written comments by U.S. mail should reference "February 23, 2022 Public Hearing on service charges proposed for Fiscal Year 2023" in the letter. The opportunity to submit written comments by U.S. mail may remain open throughout the duration of the Public Hearing.

If a member of the public requires accommodation due to a disability, please contact CEO@glwater.org or (844) 455-GLWA (4592) not less than 72 hours prior to the date of the meeting.

Financial Policies

The Authority began operations in January 2016 and has been creating financial policies since its inception. Some of the Authority's financial policies have been formalized into policy documents and approved by the Board of Directors. Some financial policies are based on the documents upon which the Authority was formed. The Authority is in compliance with all of its financial policies.

The following are the Board adopted policies that can be found on our website.

- ❖ [Budget Amendment Policy](#) – Discussed in Budget Process section. Requires quarterly budget amendment reporting.
- ❖ [Capital Spend Rate Assumption Policy](#) – Discussed in Capital Improvement Plan (CIP) section. The rate is set annually at time of approval of CIP.
- ❖ [Debt Management Policy](#) – Discussed in Debt Management section. Although not required by the policy, the Authority provides a Quarterly Debt Report to the Audit Committee.
- ❖ [Grants, Gifts and Other Resources Delegation Policy](#) – Requires quarterly reporting.
- ❖ [Investment Policy](#) – Discussed in Revenues Overview section. Requires quarterly reporting.
- ❖ [Procurement Policy](#) – At every phase of procurement, this policy is designed to insure public trust by establishing, maintaining, and enforcing business practices that promote fair, ethical, and financially sound procurement practices. A key provision of that policy is the annual mandatory completion and submittal of a Conflict of Interest Form by all Board Members and those team members that are engaged in any phase of procurement activities. GLWA demonstrates its transparency through the widely distributed monthly *Procurement Pipeline* with upcoming solicitations is presented at the Audit Committee meetings. The by-laws and articles require an Annual Procurement Report summarizing all awarded purchase orders and/or contracts for the fiscal year. In November 2020, an amendment was made to the Procurement Policy for the formation of a new Business Inclusion & Diversity (B.I.D.) Program within the Financial Services' Procurement Group. The BID program was launched in February 2021 and requires an inclusion and diversity plan requirement for all solicitations' greater than \$1 million.

The following policies are based upon the legal foundational documents related to the creation of the Authority, which include the Articles of Incorporation, Bylaws, Compiled Master Water Bond Ordinance as amended and Compiled Master Sewer Bond Ordinance as amended:

- ❖ **Balanced Budget Policy** – The Master Bond Ordinances (MBO's) provide the revenue requirements of the budget. See the Budget Basis and Revenue Requirements in the Budget Process section.
- ❖ **Biennial Budget Policy** – Annually a biennial budget is developed and approved by the Board. The biennial budget and financial plan is submitted to the Government Finance Officers Association (GFOA) for the Distinguished Budget Presentation Award.

- ❖ Capital Improvement Plan Policy – In conjunction with the requirement of an annual biennial budget it is necessary to prepare an annual five-year capital improvement plan for approval by the Board. See the Capital Improvement Plan in the Capital Program and Debt section.
- ❖ Revenues Policy– Charges are set annually to meet the budgeted revenue requirements and so that the rate covenant debt service coverage shall not be less than the required coverage.
- ❖ Expenditures Policy – Budgeted expenditures are those that are required by the MBO. See the Budget Requirement paragraph in the Budget Process section.
- ❖ Ethics Policy – *The Way We Work - Policies, Rules and Guidelines* outlines the ethical behavior that is expected of GLWA team members.
- ❖ Accounting and Financial Reporting Policy – In order to meet the annual and quarterly reporting requirements in the foundational documents the Authority annually has an audit and submits the annual comprehensive financial (ACFR) report to GFOA for the Annual Comprehensive Financial Reporting Award. An audit of federal grant compliance is also performed. Monthly reporting is presented to the Audit Committee which includes the CFO report and a monthly financial report which includes the following items:
 - Executive Summary Dashboard
 - Budget to Actual Analysis
 - Basic Financial Statements
 - Financial Activity Charts
 - Financial Operations KPI's
 - Budget to Financial Statements Crosswalk
 - Capital Improvement Plan Financial Summary
 - Master Bond Ordinance Transfers
 - Cash and Investment
 - Retail Revenues, Receivables, & Collections
 - Wholesale Billings, Receivables, & Collections
 - Trust Receipts and Disbursements
 - Aged Accounts Receivable Report
 - Highland Park Life-to-Date Billings & Collections

The following are the other financial policies of the Authority:

- ❖ Long-term Forecasting Policy – Annually a ten-year forecast is developed at the time of the development of the biennial budget. See the Long-Range Financial Plan in the Financial Plan and Organizational Strategic Goals section.
- ❖ Asset Management Policy – Provides the framework and principles by which the Authority will ensure sound stewardship of its regional assets to deliver established service levels in the most effective and efficient manner, while maintaining compliance with regulations. The policy presents the principles by which asset management decisions will be made and the requirements needed to support those decisions.

- ❖ Risk Management Policy – Identify, analyze and control the risk of physical, financial and reputation loss. Supported by the Risk Management and Safety team in the Chief Administrative and Compliance Officer area.
- ❖ Internal Controls Policy – The Authority has a comprehensive set of internal control policies that are followed and are revised as needed and reviewed annually.
- ❖ Operating Budget Policy – In order to stay within the limitation as provided in the Memorandum of Understanding that led to the creation of the Authority of an increase of no more than 4% annual revenue requirement, the operations budget policy is to stay within a 2% annual increase for operating and maintenance expenses.
- ❖ Other Reporting Policies - Monthly reporting includes a Chief Executive Officer report to the Board of Directors which includes the Office of the General Counsel report. Key Performance Indicators and explanation of those indicators that did not reach the goal are reported monthly to the Board of Directors or to the Operations and Resources Committee.
- ❖ ESG Policy – The Authority is in the process of creating an ESG Policy.

Financial Plan

As part of its founding principle of affordability and a commitment to supporting the region it serves, GLWA is devoted to building trust through an efficient organizational structure that ensures fiscal responsibility. Building on its year-over-year financial information allows GLWA to demonstrate delivery of the high level of financial performance that has been pledged to the Authority's member partners, investors and the region at large. This section covers the four main elements of the Authority's financial plan which provide the framework for current and future decision-making to accomplish the Authority's mission and vision .

- ❖ Financial Plan Objectives
- ❖ Organization Strategic Goals
- ❖ Long-Range Operating Financial Plan
- ❖ Strategic Capital Management

Financial Plan Objectives

This overview and commentary address the following key topics to understand the context of GLWA's core financial plan which is adhered to in the preparation of the budget.

1. 4% Revenue Requirement Commitment
2. Revenue Stability for the System
3. Managing Charge Stability for Our Member Partners
4. Retail System Revenue and Collections
5. Water Residential Assistance Program
6. Closed Loop Lease Payment
7. Closed Legacy Benefit Plan Costs

1. The 4% Revenue Requirement Commitment - Since 2012, the water and sewer system has engaged an optimization effort to reduce expenses and stabilize revenues. The objectives of both efforts were to vastly improve the long-term sustainability of the system. That optimization effort revealed opportunities to significantly control costs. This resulted in a commitment to preserve the "revenue requirement" budget to an annual basis increase of 4% or less. The revenue requirement reflects those items which can be controlled by board policy and good management: operations and maintenance expenses, debt burden, and cash reserves. This 4% pledge by the management team was memorialized in the MOU that established the regional authority for the first ten years of its existence beginning with FY 2016. GLWA's long-term financial plan strives to perform well within the 4% commitment as demonstrated by a limitation of operations and maintenance ceiling of 2% for FY 2023 through FY 2027 as presented in this document.

2. Revenue Stability for the System - While the revenue requirement budget can be managed, revenues based on customer volume demands, are subject to external forces. Nationally, changes in weather and the benefits of conservation have contributed to steadily declining water volume demand.

- To stabilize water system revenue, the charge model is based on 60% fixed cost recovery and 40% of volume charges. Second, a cohesive approach to estimating water sales volumes for each customer is used. Water sales volume projections are calculated based on a uniform

forecasting method that reflects sales in both peak and non-peak months over the course of a 36-month time period. The averaging method considers the peak month volumes, from April to September, and the base month volumes in a separate manner. Revenue stability has proven successful with revenues at or near 100% of budget for fiscal years 2016-2021.

- Using a wholesale sewer rate simplification methodology, costs are allocated based on each customer's historical use of the system known as a "share" and is revisited every three years. Monthly billings are based on one-twelfth of the annual revenue requirement. The sewer system's wholesale revenue plan has a high degree of stability with achievement of wholesale revenues at 100% of budget.

3. Managing Charge Stability for Our Member Partners - The revenue stability initiatives for the water and sewer systems have improved charge stability for our customers – yet we know there is more that we can do.

- Due to water revenue stability measures, individual customer water charge adjustments now have less variability from the average charge adjustment. Our goal is to achieve an even narrower band through evaluating the timing of contract reopeners for all customers versus the previous multiple year cycle that varied by customer. In addition, due to declining usage, the Northeast Water Treatment Plant will be repurposed into a reservoir and pump station over the next several years. This impacts the geographic component of the charge model. While this optimization project entails a number of capital projects in various phases of design and construction, GLWA and its wholesale customers will begin evaluating the effect of geographic distance and elevation from water treatment facilities component on the charge model. No changes are anticipated to determining the key charge model components of annual volumes and contractual demands.
- Sewer rate simplification has provided a very predictable charge model for financial planning for both GLWA and its member partners. In 2019 an outside consultant with cost-allocation expertise was engaged to gather member partner concerns and ideas for further improvements and simplification of the charge methodology. The final recommendation of an updated approach to establish SHARES was endorsed by the Board in November 2020 and has been used since the calculation of the FY 2022 charges. Over the last few years, GLWA, its member partners and other stakeholders have worked collaboratively to develop a comprehensive, regional Wastewater Master Plan (WWMP). The WWMP was approved in September 2020. The plan was designed with affordability in mind and prioritizing lower cost, high-impact projects that provide the greatest benefit to the regional system, while first maximizing the use of existing infrastructure. By managing the entire system effectively, we reduce costs for everyone while protecting the environment.

4. Retail System Revenue and Collections - The regional collaboration that resulted in the formation of the GLWA was based on a foundation of achieving both a sustainable regional and local system as well as protecting stakeholder interests. That foundation includes sufficient operating and capital resources and a commitment to funding existing and new financial obligations. The relationship between the GLWA and the DWSD is outlined in the Regional System Leases for the water and sewer

systems, water, and sewer services agreement, and the GLWA Master Bond Ordinance (MBO). Retail system revenue is pledged revenue to the Authority for repayment of outstanding revenue bonds. DWSD is agent for GLWA in establishing the retail rates, issuing bills, and performing collections. For this reason, all revenue receipts for the local retail system are deposited into a revenue receipts fund. Collected revenues are distributed monthly based on 1/12 of the annual budget requirements in the order of the flow of funds established in the MBO. The regional system and local system operations and maintenance 1/12th budget requirements are distributed first. Next, revenues are distributed as established by the Trustee to fund revenue bond debt obligations. Further monthly distributions follow the flow of funds in the order of the Revenue Requirements as depicted in Schedule 3 in Section 2 – Core Financial Plan Schedules. The outcome of the monthly distribution of the revenue receipts is that the retail system obligations are funded 100%, on a monthly basis. To the extent that there is a collections shortfall, there are a number of remedies including a budget stabilization fund and quarterly budget reviews, to determine the appropriate course of action.

5. Water Residential Assistance Program - The MOU and Water and Sewage Disposal System Regional Leases included a provision to establish a Water Residential Assistance Program ("WRAP"). This program is funded at 0.5% of the base budgeted operating revenues of the water and sewer systems for the regional system. The funding for the local system is not less than 0.5% but not greater than 1.0%. Funding for FY 2023 will be 0.5% for the local system. The WRAP provides assistance to indigent residential customers throughout the communities served by GLWA for those municipalities that have opted in. The WRAP provides monthly bill assistance, arrearage assistance, minor plumbing repairs, and replacement of kitchen and bathroom fixtures that contain lead. Applicants must have income at or below 200% of the federal poverty threshold to qualify for WRAP. The allocation of funds to the City of Detroit and other communities within the GLWA service area is in the same proportion of revenue that customers within those geographic boundaries pay into the program. The GLWA Board may reallocate underutilized funds to ensure that the program's objectives are met across the customer base. WRAP is currently administered by Wayne Metro and other community action agency alliance partners.

6. Closed Loop Regional System Lease Payment - The Regional System Lease agreements between the City of Detroit and the Great Lakes Water Authority, provides that the Authority pay an annual amount of \$22.5 million for the regional water system and \$27.5 million for the regional sewage disposal system. The allocation of these amounts, totaling \$50 million, shall be subject to review and adjustment by the Authority every three to five years consistent with the method of allocation of other common-to-all charges between the regional water system and the regional sewage disposal system.

The lease payment is referred to as a closed loop system because the lease payment by the Authority stays within the local water and sewage disposal systems for the benefit of the water and sewage disposal systems. The City of Detroit can achieve this in one of three ways (or some combination). The lease payment may be used to:

1. pay the principal of and interest on bonds issued to finance the cost of water and sewage disposal system improvements to the Detroit local system; and/or

2. pay the City's share of the principal of and interest on bonds issued to finance the cost of common-to-all improvements to the leased water and sewage disposal facilities; and/or
3. pay the cost of improvements to the Detroit local water and sewage disposal system facilities.

7. Closed Legacy Benefit Plan Costs - The City of Detroit's Chapter 9 bankruptcy Plan of Adjustment (POA), approved on December 10, 2014, materially restructured the City's pension and retiree healthcare plan (otherwise referenced as other post-employment benefits or OPEB). The POA required annual payments by the then-existing DWSD for this closed plan for nine years with a tail liability in year ten. The first payment was in FY 2015. With the stand-up of the Authority on January 1, 2016, this annual commitment is allocated between the local and regional systems. The total annual commitment is \$45.4 million per year payable to the City of Detroit General Retirement System (GRS). The most recent actuarial evaluation of the plan for the year ended June 30, 2021, estimates that there will be no tail liability in FY 2024.

The Authority is responsible for an allocable share of the portion of the City of Detroit 30-year B Notes relating to settlement of OPEB claims and 10-year C Note related to the Systems' prior allocable share of the City's pension obligation certificates. The Authority's allocable portion of those settlement payments was approximately \$102 million at bifurcation in 2016.

The pension payments are allocated between the Operations & Maintenance Expense (O&M) for an estimated amount of what would have been the normal annual pension expense. The remainder is considered an advance payment of a liability and therefore, a non-O&M expense. The BC notes are also considered a non-O&M expense. See further information in the Legacy Commitments under Section 6 – Supplemental Analysis.

Organization Strategic Goals

The Authority's strategic goals are to:

- A. be positioned as a solid AA category credit by meeting or exceeding rating agency criteria in order to reduce the cost of capital and
- B. positive key performance indicators (KPI's) which are based on the ten attributes of the effective utility management (EUM) framework for GLWA as a whole.

Each goal is discussed in further detail below. Each O&M department in Section 5 of this budget document includes a table showing how each department's initiatives contribute towards achieving the organizational goals.

Bond Credit Rating of AA

Bond ratings are a key measure of an organization's financial strength. Ratings are established by independent agencies that conduct detailed reviews of an organization's operational and financial performance to assist those seeking to invest in an organization through the purchase of bonds.

As outlined in the official statements since GLWA's inaugural bond transaction in 2016, a positive future financial outcome of achieving a "Aa3" or "AA-" rating or higher from at least two of three

rating agencies (Moody's, S&P, and/or Fitch) would allow a reduction or elimination of reserve requirements for senior and/or second lien bonds.

The table below provides a summary of the current debt ratings for the Authority issued in March 2020.

Current Debt Ratings			
	S&P Global Ratings	Moody's Investors Service	Fitch Ratings
Water Supply System Revenue Bonds			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable
Sewage Disposal System Revenue Bonds			
Senior lien	AA-	A1	A+
Second lien	A+	A2	A
Junior lien	A+	N/A	N/A
Outlook	Stable	Stable	Stable

The path to becoming a solid AA credit is based upon rebalancing the mix of debt financing and revenue generated capital (i.e. pay-as-you go) to fund the capital improvement plan (CIP). By reducing the portion of annual revenue dollars that are dedicated to debt service, the following types of metrics used by rating agencies will improve reflecting characteristics of a strong credit.

- ✓ Operating Margin
- ✓ Debt Service Coverage Ratio
- ✓ Debt to Operating Revenue Ratio
- ✓ Free Cash as a Percentage of Depreciation
- ✓ Net Position
- ✓ Debt/Asset Ratio

Key factors in improving the Authority's financial position and credit metrics, are the focus on continuing to optimize its operations, focus on financial planning with a biennial budget, annually update the five-year capital and financial plan, annual updates of the ten-year financial plan and applying core principles in asset management.

Another key factor in improving debt ratings is to decrease annual debt service with an effective debt refunding program. Over the six years through June 2020, GLWA's leadership team has initiated refunding transactions that have achieved over \$1 billion in interest savings over the life of those outstanding bonds. In April 2020, GLWA refinanced \$366 million of taxable Water System Bonds resulting in gross cashflow savings of \$103.1 million (\$66.5 million of present value savings, or an 18.2%) and in June 2020 refinanced \$657 million of taxable Sewer System Bonds resulting in gross cashflow savings of \$221 million (\$123 million of present value savings, or an 18.7%). Notably GLWA maintained increased credit ratings despite rating agency service sector concerns during the COVID-

19 pandemic. This supported executing the transactions during the height of a global pandemic while also attracting new domestic and international investors.

The long-range operating financial forecast, presented later in this section, provides the data for the forecasted metrics presented below. As rating agencies tweak their analytical framework, some of these metrics may change over time. Also included in the metrics calculation is data for the DWSD local system which has not provided financial forecasts beyond FY 2024, therefore estimate of local system data in these metric calculations has been estimated for the calculation of these metrics. The forecast depicts moving from red (less than A metrics) to yellow (A metric), to light green (AA metric) to dark green (AAA metric).

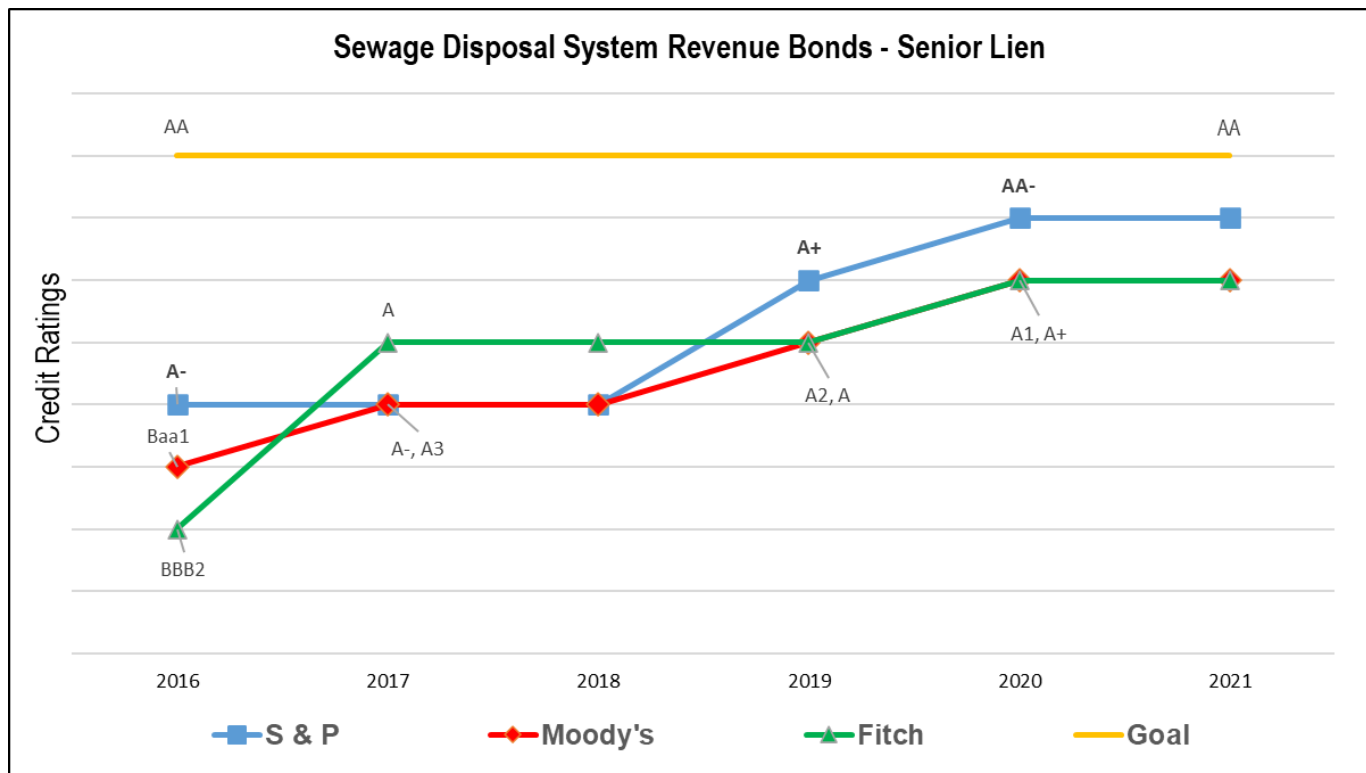
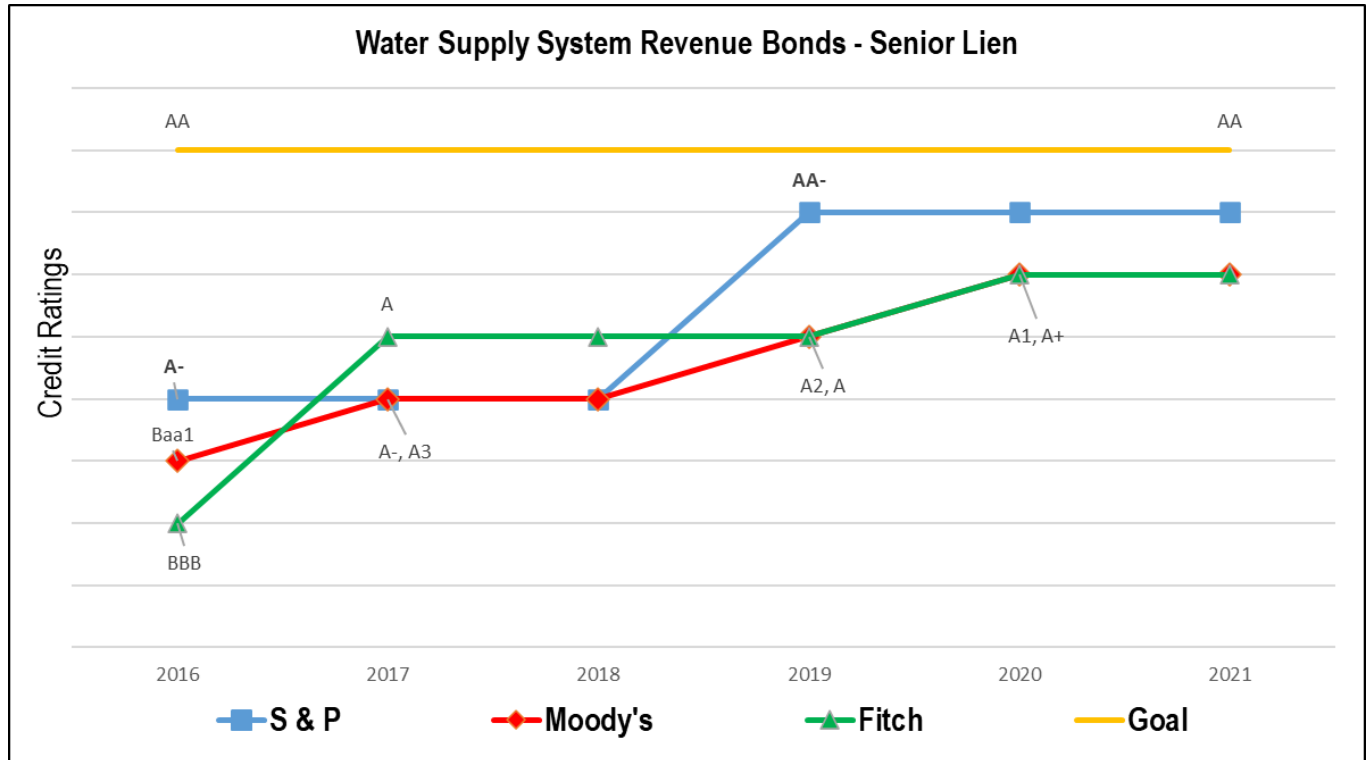
Water Supply System – FY 2031 Plan - Depiction of Improving Credit Rating Metrics

GLWA Forecast Executive Summary															
Water Supply System - \$ millions															
Metric Calculations	Metric	Target	Minimum	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	A	AA	AAA												
Operating Margin															
Depreciation Expense				126.8	129.2	135.3	117.0	97.5	97.5	94.6	97.2	102.0	101.4	99.5	101.4
Total Operating Expenses				250.5	273.1	280.2	265.7	251.9	253.2	253.8	259.5	267.6	270.3	271.7	277.2
Operating Margin				93.9	67.3	74.8	100.8	125.5	135.5	148.7	157.3	164.0	176.4	190.9	201.8
Operating Margin %	25%	40%	50%	27.3%	19.8%	21.1%	27.5%	33.3%	34.9%	36.9%	37.7%	38.0%	39.5%	41.3%	42.1%
Regional Revenue Allocation															
O&M				37.2%	43.8%	42.4%	40.4%	40.5%	39.4%	39.0%	38.4%	37.8%	37.3%	36.7%	36.2%
Debt Service	40%	33%	25%	39.6%	39.5%	42.2%	43.2%	44.7%	45.8%	45.4%	46.3%	46.4%	48.3%	47.8%	48.2%
Non-Operating Expense				8.7%	8.9%	8.6%	7.6%	7.6%	7.3%	7.0%	6.8%	6.6%	6.4%	6.1%	6.0%
Capital Financing				14.5%	7.8%	6.8%	8.8%	7.3%	7.4%	8.6%	8.6%	9.2%	8.0%	9.3%	9.7%
Total				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Debt Service Coverage															
Net Revenue - Local System				29.3	39.1	45.1	50.5	50.5	50.5	50.4	50.3	50.2	50.0	49.8	49.6
Total Net Revenues				248.4	231.2	250.2	270.4	277.6	289.6	299.8	310.9	322.3	334.1	346.4	359.2
Debt Service Coverage	1.25	1.70	2.00	1.39	1.30	1.29	1.32	1.28	1.26	1.28	1.27	1.28	1.25	1.27	1.27
Sr. Lien Debt Service Coverage	1.50	2.00	2.25	2.01	1.86	1.84	1.93	1.90	1.85	1.85	1.80	1.79	1.73	1.75	1.73
Debt to Operating Revenue															
Outstanding Debt Balance				2,473.0	2,400.0	2,317.3	2,221.7	2,116.6	2,002.5	1,884.5	1,757.2	1,624.3	1,476.8	1,322.6	1,157.2
Additional Principal					217.1	328.7	338.4	613.6	617.8	896.3	900.4	1,250.3	1,258.3	1,514.1	1,520.0
Estimated Premium/Discount				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outstanding Indebtedness				2,473.0	2,617.1	2,646.0	2,560.1	2,730.2	2,620.3	2,780.7	2,657.5	2,874.6	2,735.1	2,836.7	2,677.2
Debt to Operating Revenue	7.0	4.0	2.0	5.91	6.30	5.91	5.53	5.72	5.32	5.48	5.08	5.33	4.92	4.95	4.53
Free Cash as a % of Depreciation	65%	105%	145%	65.1%	47.5%	44.2%	50.1%	53.8%	53.4%	61.1%	60.4%	61.8%	58.0%	66.4%	68.4%
Net Position	-	250	500	(97.3)	(108.5)	(120.0)	(103.3)	(62.8)	(14.7)	44.4	111.0	181.6	260.6	353.3	456.0
Debt / Asset Ratio	1.00	0.90	0.75	1.03	1.07	1.07	1.01	1.05	0.99	1.04	0.96	1.00	0.93	0.95	0.89

Sewage Disposal System – FY 2031 Plan - Depiction of Improving Credit Rating Metrics

GLWA Forecast Executive Summary Sewage Disposal System - \$ millions													
Metric Calculations	Metric Target Minimum	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	A AA AAA												
Operating Margin													
Depreciation Expense		150.9	156.9	161.8	151.5	139.9	136.0	125.0	127.9	131.3	127.8	117.0	112.0
Total Operating Expenses		329.0	338.2	345.8	340.8	330.5	332.0	324.7	331.7	339.1	339.8	333.2	332.5
Operating Margin		141.3	132.8	134.0	149.9	170.2	179.0	199.2	205.5	211.7	225.1	246.1	261.3
Operating Margin %	25% 40% 50%	30.0%	28.2%	27.9%	30.5%	34.0%	35.0%	38.0%	38.3%	38.4%	39.9%	42.5%	44.0%
Regional Revenue Allocation													
O&M		37.5%	40.6%	40.5%	38.4%	37.7%	37.8%	37.6%	37.4%	37.2%	37.0%	36.9%	36.7%
Debt Service	40% 33% 25%	42.5%	43.3%	42.7%	44.7%	42.1%	41.6%	41.9%	42.5%	42.0%	40.9%	39.4%	38.5%
Non-Operating Expense		6.4%	8.8%	8.6%	7.5%	7.7%	7.5%	7.2%	7.0%	6.8%	6.7%	6.5%	6.3%
Capital Financing		13.5%	7.3%	8.2%	9.4%	12.6%	13.2%	13.3%	13.1%	14.0%	15.4%	17.2%	18.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Debt Service Coverage													
Net Revenue - Local System		7.5	40.3	32.0	38.6	39.0	39.4	39.7	40.1	40.5	40.9	41.2	41.6
Total Net Revenues		304.1	321.1	318.5	342.7	354.2	361.8	371.4	381.0	390.9	401.1	411.6	422.3
Debt Service Coverage	1.25 1.70 2.00	1.32	1.36	1.34	1.35	1.44	1.46	1.45	1.44	1.46	1.50	1.56	1.59
Sr. Lien Debt Service Coverage	1.50 2.00	2.25	2.55	2.46	2.13	2.28	2.34	2.28	2.28	2.21	2.13	2.24	2.29
Debt to Operating Revenue													
Outstanding Debt Balance		2,473.0	2,345.5	2,219.1	2,073.6	1,933.1	1,787.1	1,632.2	1,466.0	1,293.6	1,118.2	939.5	754.6
Additional Principal			718.7	788.4	802.0	926.9	929.9	1,083.7	1,092.2	1,232.9	1,233.2	1,236.0	1,241.7
Estimated Premium/Discount		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Outstanding Indebtedness		2,473.0	3,064.3	3,007.5	2,875.6	2,860.0	2,717.0	2,715.8	2,558.1	2,526.5	2,351.4	2,175.5	1,996.3
Debt to Operating Revenue	7.0 4.0 2.0	4.46	5.30	5.30	4.91	4.77	4.42	4.31	3.97	3.82	3.47	3.14	2.81
Free Cash as a % of Depreciation	65% 105% 145%	59.8%	54.0%	55.7%	53.3%	69.5%	73.2%	81.3%	79.7%	82.9%	93.0%	112.6%	126.5%
Net Position	- 250 500	(112.9)	(112.4)	(113.5)	(94.0)	(49.3)	8.1	87.3	175.3	272.1	384.2	522.4	680.9
Debt / Asset Ratio	1.00 0.90 0.75	0.84	1.07	1.07	1.03	1.03	0.99	1.00	0.93	0.92	0.86	0.80	0.75

The graphs below show the improvement in the debt ratings since the commencement of GLWA and the progress made in achieving the goal of an AA bond rating.



Positive Key Performance Indicators

GLWA has embraced the Effective Utility Management (EUM) framework to ensure organizational success. GLWA aligns its monthly key performance indicators (KPI) with the EUM frameworks ten attributes. The ten attributes and the components of the attributes are detailed below.

1. *Financial Viability* - Understands the full life-cycle cost of utility operations and value of water resources. Establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. Establishes predictable rates—consistent with community expectations and acceptability—adequate to recover costs, provide for reserves, maintain support from bond rating agencies, plan and invest for future needs, and taking into account the needs of disadvantaged households. Implements sound strategies for collecting customer payments. Understands the opportunities available to diversify revenues and raise capital through adoption of new business models.
2. *Product Quality* - Produces “fit for purpose” water that meets or exceeds full compliance with regulatory and reliability requirements and consistent with customer, public health, ecological, and economic needs. Products include treated drinking water, treated wastewater effluent, recycled water, stormwater discharge, and recovered resources.
3. *Infrastructure Strategy and Performance* - Understands the condition of and costs associated with critical infrastructure assets. Plans infrastructure investments consistent with anticipated growth, system reliability goals, and relevant community priorities, building in flexibility for evolution in technology and materials, and uncertainty in the overall future operating context (e.g., climate impacts, customer base). Maintains and enhances the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels. Assures asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences
4. *Operational Optimization* - Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations in service to public health and environmental protection. Makes effective use of data from automated and smart systems and learns from performance monitoring. Minimizes resource use, loss, and impacts from day-to-day operations, and reduces all forms of waste. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
5. *Enterprise Resiliency* - Ensures utility leadership and staff work together internally, and with external partners, to anticipate, respond to, and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including interdependencies with other services and utilities, legal, regulatory, financial, environmental, safety, physical and cyber security, knowledge loss, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.

6. *Customer Satisfaction* - Provides reliable, responsive, and affordable services in line with explicit, customer-derived service levels. Utilizes a mix of evolving communication technologies to understand and respond to customer needs and expectations, including receiving timely customer feedback and communicating during emergencies. Provides tailored customer service and outreach to traditional residential, commercial, and industrial customers, and understands and exercises as appropriate the opportunities presented by emergent customer groups (e.g., high strength waste producers, power companies).
7. *Water Resource Sustainability* - Ensures the availability and sustainable management of water for its community and watershed, including water resource recovery. Understands its role in the complete water cycle, understands fit for purpose water reuse options, and integrates utility objectives and activities with other watershed managers and partners. Understands and plans for the potential for water resource variability (e.g., extreme events, such as drought and flooding), and utilizes as appropriate a full range of watershed investment and engagement strategies (e.g., Integrated Planning). Engages in long-term integrated water resource management, and ensures that current and future customer, community, and ecological water-related needs are met.
8. *Stakeholder Understanding and Support* - Engenders understanding and support from stakeholders (anyone who can affect or be affected by the utility), including customers, oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions. Actively promotes an appreciation of the true value of water and water services, and water's role in the social, economic, public, and environmental health of the community. Involves stakeholders in the decisions that will affect them, understands what it takes to operate as a "good neighbor," and positions the utility as a critical asset to the community.
9. *Employee and Leadership Development* - Recruits and retains a workforce that is competent, motivated, adaptive, and safety-focused. Establishes a participatory, collaborative organization dedicated to continual learning, improvement, and innovation. Ensures employee institutional knowledge is retained, transferred, and improved upon over time. Provides a focus on and emphasizes opportunities for professional and leadership development, taking into account the differing needs and expectations of a multi-generational workforce and for resource recovery facilities. Establishes an integrated and well-coordinated senior leadership team.
10. *Community Sustainability* - Takes an active leadership role in promoting and organizing community sustainability improvements through collaboration with local partners (e.g., transportation departments, electrical utilities, planning departments, economic development organizations, watershed, and source water protection groups). Manages operations, infrastructure, and investments to support the economic, environmental, and social health of its community. Integrates water resource management with other critical community infrastructure, social, and economic development planning to support

community-wide resilience, sustainability, and livability to enhance overall water resource sustainability.

Achievement of the KPI goals is reported monthly to the Board of Directors. The expectation is that the KPI goals will be reached each month. Reporting departments provide their KPI slides monthly to the Public Affairs department which compiles them into the “KPI and EUM Metrics” report for the Board. The Chief Administrative & Compliance Officer department uses this information to create a “Red Yellow Green Report” and a written report to explain unfavorable variances. The table below summarizes the KPI and EUM Metrics report data. The table identifies the EUM Attribute, operating area responsible for reporting, what is being measured, the significance of that measurement, measurement as provided in the June 2021 report, expected measurement for June 2022, and the goals for the biennial years of this budget document. These KPIs and EUM Metrics are an element of GLWA’s performance measurement.

Key Performance Indicators and Effective Utility Management Metrics							
EUM Attribute	Operating Area Reporting	Measure	Significance	Report Date			
				Actual	Estimated	Goals	
				June 2021	June 2022	June 2023	June 2024
Financial Viability	Financial Services	Water system wholesale monthly billed revenues will meet or exceed budgeted amount	Method for establishing revenue projections are reliable	W 102.3% S 100%	100.0%	100.00%	100.00%
		GLWA Regional System Net Receipts (Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements)	While this measure may vary monthly based on billing and collection cycles, cumulative positive net receipts supports long term financial sustainability.	W 10% surplus S 6% surplus	Positive	Positive	Positive
		Reliability of Detroit Local Water and Sewer Revenue Projections	Method for establishing revenue projections are reliable	W billed 93.9% W usage 92.6% S billed 98.8% S usage 94.0%	100.0%	100.00%	100.00%
		DWSD Local System Net Receipts (Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements)	While this measure may vary monthly based on billing and collection cycles, cumulative positive net receipts supports long term financial sustainability.	W 2% shortfall S 2% shortfall	Positive	Positive	Positive
		Optimizing cash balances	Maximize future investment earnings while meeting the objectives of safety and liquidity	\$5.8 million (as of 3/31/21)	\$3.1 million	\$2.1 million	\$4.1 million
		Days to pay an invoice (monthly)	Days to pay an invoice is monitored to support healthy vendor relations and expand the early payment discount program	32	33	<30 days	<30 days
Product Quality	Water Operations	Percent Compliance with Safe Drinking Water Act (SDWA)	GLWA’s goal is to surpass Safe Drinking Water Act requirements	100%	100%	100%	100%
	Wastewater Operations	Effluent phosphorus concentration will be at least 20% below Permit levels	GLWA strives to surpass Federal and State wastewater regulatory requirements	< 20%	< 20%	< 20%	< 20%

Key Performance Indicators and Effective Utility Management Metrics							
EUM Attribute	Operating Area Reporting	Measure	Significance	Report Date			
				Actual	Estimated	Goals	
				June 2021	June 2022	June 2023	June 2024
Infrastructure Strategy and Performance	Water Operations & Field Services	Water - Preventative maintenance projects completed as planned (monthly)	Timely preventative maintenance extends asset useful life and minimizes unplanned downtime	81%	89%	80%	80%
		Water - Preventative maintenance projects completed as a percentage of total projects (monthly)	Reduced risk of unplanned downtime or inefficiencies	83%	85%	80%	80%
		Water System valves assessed (monthly)	Reduced risk of unplanned downtime or emergency repairs	67	141	65	65
		Water System valves exercised (monthly)	Reduced risk of unplanned downtime or emergency repairs	29	68	55	65
		Water System valves located (YTD)	Reduced risk of unplanned downtime or emergency repairs	96.8%	93.5%	100%	100%
		Water System valves assessed (YTD)	Reduced risk of unplanned downtime or emergency repairs	96.2%	97%	100%	100%
		Water System valves operational (YTD)	Reduced risk of unplanned downtime or emergency repairs	69.2%	81%	100%	100%
		Water System air valves and blowoff valves assessed (monthly)	Reduced risk of unplanned downtime or emergency repairs	117	182	145	145
		Water System air valves and blowoff valves located (YTD)	Reduced risk of unplanned downtime or emergency repairs	93.1%	93%	100%	100%
		Water System air valves and blowoff valves assessed (YTD)	Reduced risk of unplanned downtime or emergency repairs	94.1%	94.1%	100%	100%
	Wastewater Operations & Field Services	Wastewater - Preventative maintenance projects completed as planned (monthly)	Timely preventative maintenance extends asset useful life and minimizes unplanned downtime	91%	84%	80%	80%
		Wastewater - Preventative maintenance projects completed as a percentage of total projects (monthly)	Reduced risk of unplanned downtime or inefficiencies	85%	84%	80%	80%
Operational Optimization	Wastewater Operations	Monthly Average Solids Inventory Below 750 Dry Tons	Wastewater regulatory compliance	< 750 dry tons	< 750 dry tons	< 750 dry tons	< 750 dry tons
		Chemical & Electrical Costs	Being able to identify ongoing performance improvements for chemical and electrical usage per MG of water pumped is a key metric in managing operational cost	metric in development	metric in development	metric in development	metric in development

Key Performance Indicators and Effective Utility Management Metrics							
EUM Attribute	Operating Area Reporting	Measure	Significance	Report Date			
				Actual	Estimated	Goals	
				June 2021	June 2022	June 2023	June 2024
Enterprise Resiliency	Security & Integrity	GLWA security patrols	Risk prevention	7,301	6,880	2,350	2,350
		GLWA security reports/patrol ratio	Risk prevention	2.2%	1.9%	1.9% to 2.7%	1.9% to 2.7%
		GLWA security reports	Risk prevention	322	258	decreasing	decreasing
	General Counsel	General Counsel information requests (month)	One of the measures of organizational transparency is access to information. To the extent the information is readily available fewer FOIA requests should be received over time.	5	6	< 15	< 15
	Information Technology	GLWA will exceed the 68 % service sector standard by resolving at least 78% of Incidents reported to the Service Desk within 24 hours of receipt.	Rapid Incident response promotes Employee Productivity	81.9%	81.8%	78%	78%
		GLWA at least 78% of service requests reported to the Service Desk within 5 days of receipt.	Rapid Service Request response promotes Employee Productivity	87.2%	85.9%	78%	78%
		All GLWA sites (42 monitored) network connections will have 100% availability excluding schedule down time for maintenance.	Network Connectivity promotes Employee Productivity	99.7%	100%	100%	100%
		At least 99% of GLWA system data back-ups will be successful on the first attempt.	Network management protects data and promotes Employee Productivity	100%	100%	100%	100%
		At least 85% of GLWA team members will complete the most recent monthly cyber-security training within one month of issuance.	Cyber risk prevention	94%	94%	85%	85%
	Financial Services	Total CIP Spend to adopted capital spend ratio (YTD)	Method for establishing spending is aligned with budgeted revenue	W 114.3% S 106.1%	W 124% S 80%	W 100% S 100%	W 100% S 100%
		Procurement cycle	Established baselines are set to execute Request for Bid and Request for Proposal contracts to insure that internal customer requirements are met while constraining GLWA costs	Requirement met	Requirement met	Requirement met	Requirement met

Key Performance Indicators and Effective Utility Management Metrics							
EUM Attribute	Operating Area Reporting	Measure	Significance	Report Date			
				Actual	Estimated	Goals	
				June 2021	June 2022	June 2023	June 2024
Customer Satisfaction	Water Operations & Field Services	GLWA will maintain pressure variance within 98% of required contract amounts	System reliability	> 98%	> 98%	> 98%	> 98%
Water Resource Sustainability	Wastewater Operations	Reporting of biosolids handling by method. No more than 10% disposed of through landfilling	GLWA strives to increase nutrient recovery and beneficial reuse of biosolids	Meets	Meets	Meets	Meets
Stakeholder Understanding and Support	Public Affairs	Facebook & Twitter quarterly review (quarterly)	Effective media interaction	Facebook-11,736 Twitter-6,344	Facebook-24,210 Twitter-21,930	Facebook-21,000 Twitter-10,500	Facebook-21,000 Twitter-10,500
		Message pull through includes quotes or comments from a GLWA spokesperson, a quote from a GLWA press release or underlying theme of GLWA providing safe and clean water	Effective media interaction	77%	81%	75%	75%
Employee and Leadership Development	Organizational Development	Retention rate (quarterly)	Retention leads to decreased training costs, increased productivity, and cross training and development	98.0%	97.9%	94.9%	94.9%
Community Sustainability	Wastewater Operations	Watershed Health-Reduce phosphorus loading	Community sustainability and watershed health	below permitted level	below permitted level	below permitted level	below permitted level

Long-Range Operating Financial Plan

The organization uses a long-term financial plan recognizing that as decisions made decades ago impact the present, and decisions we make today will impact the region decades from now. With modest assumptions, the long-term financial plan provides a path forward to eliminate the net deficit – and controlling long-term debt - while continuing to invest in infrastructure asset upgrades and replacement. The long-range operating financial plan presentation to the Board and Audit Committee provides meaningful context to annual decisions, such as approving the annual schedule of charges or the updated capital improvement plan. Answering the question, “Can we afford it?” begins with that plan. By focusing on the long-term, we also focus on key areas where we cannot defer or underspend to avoid compromising system reliability and cost-effective maintenance programs. The plan communicates management’s rationale in seeking approval of the proposed budget and charge increases, as it provides the analysis of what the future holds based on the requested budget and charge increases. Looking at the long-range plan effect on the financial metrics, which are a factor in reaching our goal of an AA credit rating, provides guidance on when those metrics will be reached to achieve a lower cost of borrowing in the future as well as efficiency from the release of bond reserves. This forecast is updated at least annually, and more often as significant financial events occur, such as bond refunding transactions.

Budget Basis

An updated forecast was presented to the audit committee on December 17, 2021. That forecast has been updated to reflect the current state at the time of the FY 2023 Budget adoption. The two key assumptions that drive both the water and sewer system FY 2032 financial forecast models include a 3.5 percent annual increase in water revenues, a 2.5 percent annual increase in sewer revenues and an annual increase in the Operation & Maintenance expenses of 2 percent.

The next three tables present the budget basis Water System, Sewage Disposal System and Combined Water and Sewage Disposal Systems ten-year forecasts.

Water System (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenues											
Revenues from Charges	\$ 340.4	\$ 354.9	\$ 366.5	\$ 377.4	\$ 388.7	\$ 402.5	\$ 416.8	\$ 431.5	\$ 446.7	\$ 462.6	\$ 479.0
Other Operating Revenue	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Non-Operating Revenue	1.5	1.0	1.8	3.9	5.9	5.9	6.0	6.0	6.1	6.1	6.1
Total Revenues	\$ 342.1	\$ 356.1	\$ 368.5	\$ 381.4	\$ 394.8	\$ 408.6	\$ 422.9	\$ 437.7	\$ 453.0	\$ 468.9	\$ 485.3
Revenue Requirements											
Operations & Maintenance	\$ 143.9	\$ 144.8	\$ 148.7	\$ 154.3	\$ 155.6	\$ 159.2	\$ 162.3	\$ 165.6	\$ 168.9	\$ 172.3	\$ 175.7
GRS Legacy Pension	6.0	6.0	-	-	-	-	-	-	-	-	-
Debt Service	135.1	150.3	159.2	170.6	181.0	185.6	195.7	202.9	218.9	224.3	233.9
GRS Accelerated Pension	6.3	6.3	3.6	4.4	4.4	4.2	4.1	4.0	4.0	4.0	4.0
WRAP	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.3	2.4
Regional System Lease	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Improvement & Extension	26.6	24.3	32.6	27.7	29.3	35.1	36.2	40.4	36.4	43.5	46.8
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 342.1	\$ 356.1	\$ 368.5	\$ 381.4	\$ 394.8	\$ 408.6	\$ 422.9	\$ 437.7	\$ 453.0	\$ 468.9	\$ 485.3

Sewage Disposal System (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenues											
Revenues from Charges	\$ 471.0	\$ 479.8	\$ 490.7	\$ 500.7	\$ 511.0	\$ 523.9	\$ 537.1	\$ 550.8	\$ 564.9	\$ 579.3	\$ 593.8
Other Operating Revenue	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Non-Operating Revenue	1.5	1.2	2.3	4.6	7.0	7.0	7.1	7.0	6.9	6.8	7.0
Total Revenues	\$ 472.9	\$ 481.4	\$ 493.4	\$ 505.7	\$ 518.4	\$ 531.3	\$ 544.6	\$ 558.2	\$ 572.2	\$ 586.5	\$ 601.2
Revenue Requirements											
Operations & Maintenance	\$ 181.3	\$ 184.1	\$ 189.4	\$ 190.5	\$ 196.0	\$ 199.7	\$ 203.7	\$ 207.8	\$ 211.9	\$ 216.2	\$ 220.5
GRS Legacy Pension	10.8	10.8	-	-	-	-	-	-	-	-	-
Debt Service	205.0	205.6	220.7	212.9	215.4	222.5	231.4	234.2	234.0	231.3	231.7
GRS Accelerated Pension	11.6	11.6	6.9	8.7	8.6	8.2	7.9	7.8	7.8	7.7	7.6
WRAP	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	2.9	3.0
Regional System Lease	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
Improvement & Extension	34.3	39.3	46.5	63.6	68.3	70.7	71.4	78.1	88.1	100.9	110.9
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 472.9	\$ 481.4	\$ 493.4	\$ 505.7	\$ 518.4	\$ 531.3	\$ 544.6	\$ 558.2	\$ 572.2	\$ 586.5	\$ 601.2

Combined Water and Sewage Disposal Systems (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenues											
Revenues from Charges	\$ 811.4	\$ 834.8	\$ 857.2	\$ 878.1	\$ 899.6	\$ 926.4	\$ 953.9	\$ 982.4	\$ 1,011.6	\$ 1,041.9	\$ 1,072.7
Other Operating Revenue	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Non-Operating Revenue	3.1	2.1	4.1	8.5	13.0	13.0	13.1	13.0	13.1	12.9	13.1
Total Revenues	\$ 815.1	\$ 837.4	\$ 861.9	\$ 887.2	\$ 913.2	\$ 939.9	\$ 967.5	\$ 995.9	\$ 1,025.2	\$ 1,055.4	\$ 1,086.5
Revenue Requirements											
Operations & Maintenance	\$ 325.2	\$ 328.9	\$ 338.1	\$ 344.9	\$ 351.6	\$ 358.9	\$ 366.1	\$ 373.4	\$ 380.8	\$ 388.5	\$ 396.2
GRS Legacy Pension	16.9	16.9	-	-	-	-	-	-	-	-	-
Debt Service	340.1	356.0	379.9	383.5	396.4	408.1	427.1	437.2	453.0	455.6	465.5
GRS Accelerated Pension	17.9	17.9	10.6	13.1	13.0	12.4	12.0	11.9	11.8	11.7	11.6
WRAP	4.1	4.2	4.3	4.4	4.6	4.7	4.8	5.0	5.1	5.3	5.4
Regional System Lease	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Improvement & Extension	60.9	63.6	79.1	91.3	97.6	105.8	107.5	118.6	124.5	144.4	157.7
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 815.1	\$ 837.4	\$ 861.9	\$ 887.2	\$ 913.2	\$ 939.9	\$ 967.5	\$ 995.9	\$ 1,025.2	\$ 1,055.4	\$ 1,086.5

Net Position- GAAP Basis

The Authority's net position is the difference between the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources as accounted for under generally accepted accounting principles as applicable to governmental entities. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. Deferred inflows and deferred outflows generally relate to financing activity and the Authority's share of the GRS pension obligation.

The Authority's current deficit is representative of numerous cumulative historical financial activities via the predecessor entity. Addressing this deficit is a top priority for the GLWA Board and management, but it will take time to resolve. As noted earlier, bond refunding transactions have been a source of savings to control annual charge adjustments and help to reduce the deficit as savings are realized over the life of the refunded bonds. The current management team has tendered and refunded bonds with a total debt savings of over \$1 billion since 2014 when the regional water authority concept was emerging during the city of Detroit's bankruptcy. It is important to note that nearly 72 percent of those savings were achieved since the operating effective date of GLWA on January 1, 2016. GLWA continues to optimize its operations, focus on financial planning with a

biennial budget and five-year financial plan, a five-year capital improvement financial plan, ten-year financial forecasts and applying core principles in asset management to work towards resolving the deficit.

The projected net position through FY 2032 is presented below for the Water Fund, Sewage Disposal Fund and combined.

Water Fund Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Operating revenues	\$ 347.2	\$ 361.8	\$ 373.4	\$ 384.2	\$ 395.5	\$ 409.3	\$ 423.6	\$ 438.4	\$ 453.5	\$ 469.4	\$ 485.8
Operating expenses	(143.9)	(144.8)	(148.7)	(154.3)	(155.6)	(159.2)	(162.3)	(165.6)	(168.9)	(172.3)	(175.7)
Depreciation & amortization	(129.2)	(135.3)	(117.0)	(97.5)	(97.5)	(94.6)	(97.2)	(102.0)	(101.4)	(99.5)	(101.4)
Operating income	74.1	81.6	107.7	132.3	142.3	155.6	164.1	170.8	183.2	197.7	208.6
Nonoperating expenses	(85.4)	(93.0)	(91.0)	(91.1)	(91.4)	(93.5)	(94.6)	(97.2)	(101.4)	(102.0)	(103.0)
Change in net position	(11.3)	(11.4)	16.7	41.3	51.0	62.0	69.4	73.6	81.8	95.7	105.6
Beginning net position	(97.3)	(108.5)	(120.0)	(103.3)	(62.0)	(11.0)	51.0	120.4	194.0	275.8	371.5
Ending Net Position	\$ (108.5)	\$ (120.0)	\$ (103.3)	\$ (62.0)	\$ (11.0)	\$ 51.0	\$ 120.4	\$ 194.0	\$ 275.8	\$ 371.5	\$ 477.1

Sewage Disposal Fund Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Operating revenues	\$ 471.4	\$ 480.2	\$ 491.1	\$ 501.1	\$ 511.4	\$ 524.3	\$ 537.5	\$ 551.2	\$ 565.3	\$ 579.7	\$ 594.2
Operating expenses	(181.3)	(184.1)	(189.4)	(190.5)	(196.0)	(199.7)	(203.7)	(207.8)	(211.9)	(216.2)	(220.5)
Depreciation & amortization	(156.9)	(161.8)	(151.5)	(139.9)	(136.0)	(125.0)	(127.9)	(131.3)	(127.8)	(117.0)	(112.0)
Operating income	133.2	134.4	150.3	170.6	179.4	199.6	205.9	212.1	225.5	246.5	261.7
Nonoperating expenses	(132.8)	(135.4)	(130.7)	(125.7)	(121.0)	(119.5)	(116.9)	(114.3)	(112.5)	(107.4)	(102.2)
Capital contribution	-	-	-	-	-	-	-	-	-	-	-
Change in net position	0.4	(1.1)	19.5	45.0	58.4	80.1	88.9	97.8	113.0	139.1	159.5
Beginning net position	(112.9)	(112.4)	(113.5)	(94.0)	(49.0)	9.4	89.5	178.4	276.2	389.2	528.3
Ending Net Position	\$ (112.4)	\$ (113.5)	\$ (94.0)	\$ (49.0)	\$ 9.4	\$ 89.5	\$ 178.4	\$ 276.2	\$ 389.2	\$ 528.3	\$ 687.8

Combined Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Operating revenues	\$ 818.6	\$ 842.0	\$ 864.5	\$ 885.3	\$ 906.9	\$ 933.6	\$ 961.1	\$ 989.6	\$ 1,018.8	\$ 1,049.1	\$ 1,080.0
Operating expenses	(325.2)	(328.9)	(338.1)	(344.9)	(351.6)	(358.9)	(366.1)	(373.4)	(380.8)	(388.5)	(396.2)
Depreciation & amortization	(286.0)	(297.1)	(268.5)	(237.4)	(233.5)	(219.6)	(225.1)	(233.3)	(229.3)	(216.5)	(213.4)
Operating income	207.4	216.0	257.9	303.0	321.7	355.2	370.0	382.9	408.7	444.2	470.3
Nonoperating expenses	(218.2)	(228.5)	(221.8)	(216.7)	(212.4)	(213.1)	(211.6)	(211.6)	(213.8)	(209.4)	(205.2)
Capital contribution	-	-	-	-	-	-	-	-	-	-	-
Change in net position	(10.8)	(12.5)	36.2	86.3	109.4	142.1	158.4	171.3	194.9	234.8	265.1
Beginning net position	(210.1)	(221.0)	(233.5)	(197.3)	(111.0)	(1.6)	140.4	298.8	470.2	665.0	899.8
Ending Net Position	\$ (221.0)	\$ (233.5)	\$ (197.3)	\$ (111.0)	\$ (1.6)	\$ 140.4	\$ 298.8	\$ 470.2	\$ 665.0	\$ 899.8	\$ 1,164.9

Strategic Capital Management

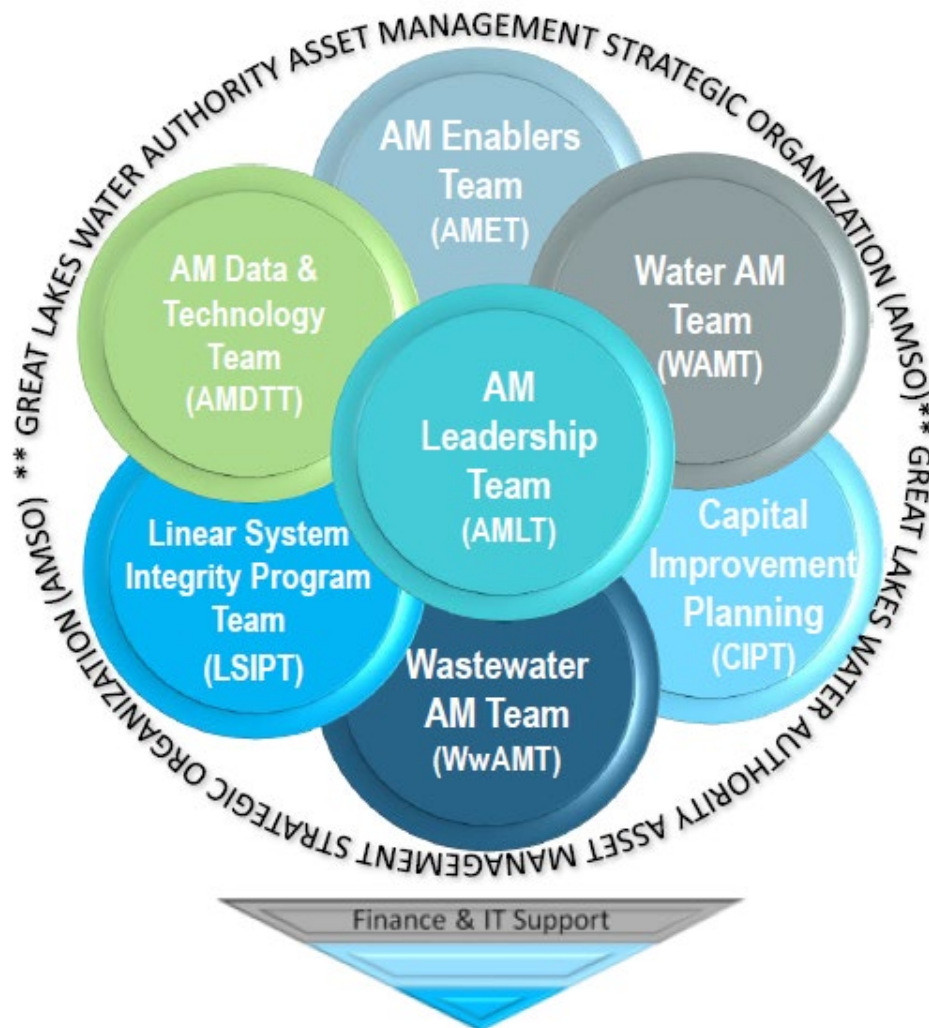
The water sector is capital intensive. For this reason, GLWA is implementing strategic multi-year initiatives in asset management and in capital program delivery.

Asset Management

In November 2019 GLWA released the initial [Strategic Asset Management Plan](#) (SAMP). The SAMP is a strategic document laying the foundation for asset management at GLWA. It includes:

- ✓ Asset management vision, policy, and objectives
- ✓ Line-of-sight that begins to link each team member's asset management contributions to GLWA's organizational objectives
- ✓ Asset management governance, roles and responsibilities, and principles for decision-making
- ✓ GLWA's commitment to align with the water service sector's best practices
- ✓ Asset management implementation plan with improvement initiatives
- ✓ Expectations for development of Asset Management Plans (AMPs)

The Planning Services area is responsible for implementation of the SAMP. The Asset Management Strategic Organization (AMSO) is the governing body charged with the responsibility to provide strategic guidance over asset management activities at GLWA. An AMSO Governance Charter was adopted to outline AMSO's role and responsibilities for strategic management of asset management to drive continuous improvements on GLWA's asset management journey.



GLWA's Wastewater Asset Management Plan (WwAMP) is a comprehensive look at all wastewater assets, their condition, risk, criticality, lifecycle costs, preventative maintenance and replacement strategies that began over a year ago and is nearing completion. Several primary focus areas of the WwAMP are:

- Condition Assessment Program – High risk wastewater asset condition scores, photos, and inspection reports
- Preventive Maintenance Optimization – For process areas related to primary, secondary, incineration, dewatering, common support
- Failure Modes Effects Analysis – For several assets within primary, secondary, dewatering process areas
- Lifecycle Modeling - To anticipate and plan for future funding needs

GLWA is also working to complete a Water Asset Management Plan (WAMP) for the assets in the water system. The process is following the same development model as the WwAMP and is planned to be completed in June of 2022.

As the steward of more than \$4 billion of essential public infrastructure, GLWA is committed to optimizing its investments by strategically timing infrastructure interventions, such as maintenance, rehabilitation, and replacement of assets. GLWA's asset management strategy ties back to its organizational strategy and involves creating a vision for asset management, an asset management policy with principles guiding asset management activities, asset management objectives, and asset lifecycle strategies. GLWA understands that its desired state of asset management is a moving target and that asset management is best viewed as a journey not a destination. With that understanding GLWA has developed plans to achieve its desired state of asset management in ten to fifteen years. The desired state must be one of continuous improvement.

Capital Program Delivery

Great Lakes Water Authority (GLWA) capital improvement projects generally span two or more years due to size and complexity. Therefore, the GLWA Board of Directors adopts a five-year capital improvement plan (CIP). The CIP is a five-year, rolling plan which is updated annually and formally adopted by the GLWA Board of Directors. In addition, the Board of Directors adopts a capital spending ratio (CSR) assumption which allows the realities of capital program delivery to align with the financial plan. The Board has adopted a Capital Spend Ratio of 80 percent for the Water Fund and 75 percent for the Sewage Disposal Fund for FY 2023. See Section 3 for more information on the Capital Improvement Plan.

Improved capital delivery management allows GLWA to better predict use of financial resources. A strategic goal of GLWA has been to reduce the use of revenue bonds raised by market transactions for funding all of its major capital improvements. That goal has been realized beginning January 1, 2021, when GLWA utilized the remaining bond funds and moved to solely using I&E and lower cost State Revolving Loans (SRF) to fund CIP expenditures. It is expected that the I&E funds and the SRF loans will be sufficient to fund the capital program through FY 2022. Additional funds will be needed for FY 2023. With the pending rise in interest rates the Authority has started the process for a bond transaction to close during calendar year 2022. This transaction will include new revenue bonds for both the water and sewage disposal systems and may also include a strategy to secure refinancing savings.

Section 2

Core Financial Plan Schedules

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Core Financial Plan Schedules

The Great Lakes Water Authority budget is presented for the two major funds, water and sewage disposal, utilizing five key schedules to depict the Core Financial Plan. The schedules present the Biennial Budget for FY 2023 and FY 2024 within the context of a five-year financial plan for FY 2023 through FY 2027. Those schedules are listed below.

Variance columns in Section 2 are based on a comparison to the original Adopted FY 2022 budget. The original budget is what is used to compute charges for the fiscal year. This is the framework from which the 4% revenue requirement commitment is derived.

Schedule 1 – Revenue Requirements

This schedule summarizes the Authority's direct costs of operations and maintenance plus its "allocable" share of debt and other long-term liabilities. These amounts establish the basis for revenue requirements and customer charges.

Schedule 2 – Operations & Maintenance Expenses Budget

This schedule, and the related analysis, provide an overview of the operations & maintenance (O&M) expenses budget. Additional analysis of the O&M budgets is presented in the **Section 5 – Operating Financial Plans**.

Schedule 3 – Sources of Revenues and Use of Revenue Requirements – Flow of Funds Basis Consistent with the Master Bond Ordinance

This schedule is most important for stakeholders that want to understand the Authority's financial plan as it relates to payment of outstanding debt, other long-term commitments, and compliance with lease terms and the Master Bond Ordinance (MBO). This schedule demonstrates alignment of the financial plan with the MBO flow of funds for the regional and local system combined.

Schedule 4 – Debt Service Coverage Calculations Consistent with the Master Bond Ordinance

Debt service coverage is a key measure of financial sustainability. This schedule demonstrates how debt service coverage is calculated and how the combined local and regional system revenues provide for payment of outstanding bond obligations.

Schedule 5 – Improvement & Extension Funds and Construction Funds

The GLWA has an Improvement & Extension Fund (I&E) and a Construction Fund for each system. Inflows to the I&E Fund represent revenues in excess of expenses. Building the I&E Fund over time is a key financial objective of GLWA to reducing reliance on revenue bonds. Inflows to the Construction Funds include proceeds from the sale of bonds and investment income on those funds. Inflows are also made to the Construction Funds from the I&E Funds when bond proceeds have been depleted. Outflows are for the costs of constructing capital assets.

Schedule 1 – Revenue Requirements

The approved FY 2023 water revenue requirements of \$356.1 million represents a budget (annual revenue requirement) increase of 3.5% from the prior year. The approved FY 2023 sewer revenue requirements of \$481.4 million represents a budget (annual revenue requirement) increase of 1.3% from the prior year. This is within the required 4% ceiling for both systems in alignment with management’s commitment which was further memorialized in the Memorandum of Understanding that established the regional authority for the first ten years of operations.

Schedule 1A – Water System Revenue Requirements Biennial Budget

	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Water System Revenue Requirements									
Revenues									
Revenues from Charges	\$337,697,000	\$342,808,200	\$340,408,200	\$354,947,900	\$ 12,139,700	3.5%	\$366,527,400	\$ 11,579,500	3.3%
Other Revenues	267,600	175,000	291,000	175,000	-	0.0%	175,000	-	0.0%
Investment Earnings	4,195,300	1,047,300	1,923,800	948,700	(98,600)	-9.4%	1,831,700	883,000	93.1%
Total Revenues	342,159,900	344,030,500	342,623,000	\$356,071,600	\$ 12,041,100	3.5%	\$368,534,100	\$ 12,462,500	3.5%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$118,840,900	\$143,933,800	\$143,933,800	\$144,847,700	\$ 913,900	0.6%	\$148,707,300	\$ 3,859,600	2.7%
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	6,048,000	-	0.0%	-	(6,048,000)	-100.0%
Debt Service	138,100,400	135,481,000	135,121,000	150,337,100	14,856,100	11.0%	159,237,000	8,899,900	5.9%
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	6,268,300	-	0.0%	3,647,500	(2,620,800)	-41.8%
Water Residential Assistance Program Contribution	1,669,400	1,705,500	1,705,500	1,770,500	65,000	3.8%	1,842,700	72,200	4.1%
Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Improvement & Extension Fund Transfer Pending	35,094,800	28,093,900	27,046,400	24,300,000	(3,793,900)	-13.5%	32,599,600	8,299,600	34.2%
Annual Water System Revenue Requirements	\$328,521,800	\$344,030,500	\$342,623,000	\$356,071,600	\$ 12,041,100	3.5%	\$368,534,100	\$ 12,462,500	3.5%

Schedule 1B – Water System Revenue Requirements – Five-Year Financial Plan

	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water System Revenue Requirements								
Revenues								
Revenues from Charges	\$337,697,000	\$342,808,200	\$340,408,200	\$354,947,900	\$366,527,400	\$377,369,800	\$388,663,000	\$402,515,800
Other Revenues	267,600	175,000	291,000	175,000	175,000	175,000	175,000	175,000
Investment Earnings	4,195,300	1,047,300	1,923,800	948,700	1,831,700	3,888,000	5,944,900	5,909,500
Total Revenues	342,159,900	344,030,500	342,623,000	\$356,071,600	\$368,534,100	\$381,432,800	\$394,782,900	\$408,600,300
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$118,840,900	\$143,933,800	\$143,933,800	\$144,847,700	\$148,707,300	\$154,338,200	\$155,636,900	\$159,155,500
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	6,048,000	-	-	-	-
Debt Service	138,100,400	135,481,000	135,121,000	150,337,100	159,237,000	170,589,900	180,955,100	185,569,700
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	6,268,300	3,647,500	4,425,300	4,394,200	4,219,400
Water Residential Assistance Program Contribution	1,669,400	1,705,500	1,705,500	1,770,500	1,842,700	1,907,200	1,973,900	2,043,000
Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000	22,500,000
Improvement & Extension Fund Transfer Pending	35,094,800	28,093,900	27,046,400	24,300,000	32,599,600	27,672,200	29,322,800	35,112,700
Annual Water System Revenue Requirements	\$328,521,800	\$344,030,500	\$342,623,000	\$356,071,600	\$368,534,100	\$381,432,800	\$394,782,900	\$408,600,300

Schedule 1C – Sewer System Revenue Requirements Biennial Budget

	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Sewer System Revenue Requirements									
Revenues									
Revenues from Charges	\$470,252,400	\$474,005,900	\$467,905,900	\$479,816,500	\$ 5,810,600	1.2%	\$490,695,900	\$ 10,879,400	2.3%
Other Revenues	2,217,400	400,000	490,000	400,000	-	0.0%	400,000	-	0.0%
Investment Earnings	2,802,000	1,023,300	1,876,200	1,155,600	132,300	12.9%	2,310,500	1,154,900	99.9%
Total Revenues	\$475,271,800	\$475,429,200	\$470,272,100	\$481,372,100	\$ 5,942,900	1.3%	\$493,406,400	\$ 12,034,300	2.5%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$172,312,800	\$181,299,800	\$181,299,800	\$184,052,600	\$ 2,752,800	1.5%	\$189,357,800	\$ 5,305,200	2.9%
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	10,824,000	-	0.0%	-	(10,824,000)	-100.0%
Debt Service	201,945,100	207,209,500	204,984,500	205,638,100	(1,571,400)	-0.8%	220,662,100	15,024,000	7.3%
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	11,620,700	-	0.0%	6,930,300	(4,690,400)	-40.4%
Water Residential Assistance Program Contribution	2,415,100	2,358,300	2,358,300	2,394,200	35,900	1.5%	2,467,000	72,800	3.0%
Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Improvement & Extension Fund Transfer Pending	42,742,700	34,616,900	31,684,800	39,342,500	4,725,600	13.7%	46,489,200	7,146,700	18.2%
Annual Sewer System Revenue Requirements	\$469,360,400	\$475,429,200	\$470,272,100	\$481,372,100	\$ 5,942,900	1.3%	\$493,406,400	\$ 12,034,300	2.5%

Schedule 1D – Sewer System Revenue Requirements – Five-Year Financial Plan

	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Sewer System Revenue Requirements								
Revenues								
Revenues from Charges	\$470,252,400	\$474,005,900	\$467,905,900	\$479,816,500	\$490,695,900	\$500,699,900	\$510,976,500	\$523,900,300
Other Revenues	2,217,400	400,000	490,000	400,000	400,000	400,000	400,000	400,000
Investment Earnings	2,802,000	1,023,300	1,876,200	1,155,600	2,310,500	4,641,700	7,008,600	7,044,400
Total Revenues	\$475,271,800	\$475,429,200	\$470,272,100	\$481,372,100	\$493,406,400	\$505,741,600	\$518,385,100	\$531,344,700
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$172,312,800	\$181,299,800	\$181,299,800	\$184,052,600	\$189,357,800	\$190,544,200	\$195,988,900	\$199,719,800
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	10,824,000	-	-	-	-
Debt Service	201,945,100	207,209,500	204,984,500	205,638,100	220,662,100	212,893,500	215,396,100	222,535,700
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	11,620,700	6,930,300	8,679,800	8,609,800	8,216,700
Water Residential Assistance Program Contribution	2,415,100	2,358,300	2,358,300	2,394,200	2,467,000	2,528,700	2,591,900	2,656,700
Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000	27,500,000
Improvement & Extension Fund Transfer Pending	42,742,700	34,616,900	31,684,800	39,342,500	46,489,200	63,595,400	68,298,400	70,715,800
Annual Sewer System Revenue Requirements	\$469,360,400	\$475,429,200	\$470,272,100	\$481,372,100	\$493,406,400	\$505,741,600	\$518,385,100	\$531,344,700

Schedule 1E – Combined Water and Sewer System Revenue Requirements Biennial Budget

Combined Water & Sewer System Revenue Requirements	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Revenues									
Revenues from Charges	\$675,394,000	\$816,814,100	\$808,314,100	\$834,764,400	\$ 17,950,300	2.2%	\$857,223,300	\$ 22,458,900	2.7%
Other Revenues	2,485,000	575,000	781,000	575,000	-	0.0%	575,000	-	0.0%
Investment Earnings	6,997,300	2,070,600	3,800,000	2,104,300	33,700	1.6%	4,142,200	2,037,900	96.8%
Total Revenues	\$684,876,300	\$819,459,700	\$812,895,100	\$837,443,700	\$ 17,984,000	2.2%	\$861,940,500	\$ 24,496,800	2.9%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$ 3,666,700	1.1%	\$338,065,100	\$ 9,164,800	2.8%
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	16,872,000	-	0.0%	-	(16,872,000)	-100.0%
Debt Service	340,045,500	342,690,500	340,105,500	355,975,200	13,284,700	3.9%	379,899,100	23,923,900	6.7%
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	17,889,000	-	0.0%	10,577,800	(7,311,200)	-40.9%
Water Residential Assistance Program Contribution	4,084,500	4,063,800	4,063,800	4,164,700	100,900	2.5%	4,309,700	145,000	3.5%
Regional System Leases	50,000,000	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Improvement & Extension Fund Transfer Pending	77,837,500	62,710,800	58,731,200	63,642,500	931,700	1.5%	79,088,800	15,446,300	24.3%
Annual Revenue Requirements	\$797,882,200	\$819,459,700	\$812,895,100	\$837,443,700	\$ 17,984,000	2.2%	\$861,940,500	\$ 24,496,800	2.9%

Schedule 1F – Combined Water and Sewer System Revenue Requirements – Five-Year Financial Plan

Combined Water & Sewer System Revenue Requirements	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Revenues								
Revenues from Charges	\$675,394,000	\$816,814,100	\$808,314,100	\$834,764,400	\$857,223,300	\$878,069,700	\$899,639,500	\$926,416,100
Other Revenues	2,485,000	575,000	781,000	575,000	575,000	575,000	575,000	575,000
Investment Earnings	6,997,300	2,070,600	3,800,000	2,104,300	4,142,200	8,529,700	12,953,500	12,953,900
Total Revenues	\$684,876,300	\$819,459,700	\$812,895,100	\$837,443,700	\$861,940,500	\$887,174,400	\$913,168,000	\$939,945,000
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$338,065,100	\$344,882,400	\$351,625,800	\$358,875,300
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	16,872,000	-	-	-	-
Debt Service	340,045,500	342,690,500	340,105,500	355,975,200	379,899,100	383,483,400	396,351,200	408,105,400
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	17,889,000	10,577,800	13,105,100	13,004,000	12,436,100
Water Residential Assistance Program Contribution	4,084,500	4,063,800	4,063,800	4,164,700	4,309,700	4,435,900	4,565,800	4,699,700
Regional System Leases	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
Improvement & Extension Fund Transfer Pending	77,837,500	62,710,800	58,731,200	63,642,500	79,088,800	91,267,600	97,621,200	105,828,500
Annual Revenue Requirements	\$797,882,200	\$819,459,700	\$812,895,100	\$837,443,700	\$861,940,500	\$887,174,400	\$913,168,000	\$939,945,000

Schedule 2 – Operations & Maintenance Expense Budget

The following schedules in section 2 provide an overview of the operations & maintenance (O&M) expenses budget in three different ways: a) by expense type, b) by service area, and c) by fund. More in-depth analysis of the O&M budgets is presented on the Operating Area Financial Plans in **Section 5 – Operating Financial Plans** and **Section 6 – Supplemental Analysis**.

Operations and Maintenance Budget by Expense Type: Schedules 2A and 2B identify the major categories of expenses and the variance from the prior year for FY 2023 and FY 2024. A commentary of the major categories follows the tables on the next page.

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

Operations & Maintenance Expense	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
2.1 Salaries & Wages	\$ 64,910,600	\$ 71,970,000	\$ 70,564,300	\$ 75,768,800	\$ 3,798,800	5.3%	\$ 80,657,500	\$ 4,888,700	1.2%
2.2 Workforce Development	829,400	976,700	976,700	1,801,900	825,200	84.5%	1,874,600	72,700	0.0%
2.3 Overtime	7,364,700	6,954,500	6,903,600	6,882,600	(71,900)	-1.0%	6,830,300	(52,300)	0.2%
2.4 Employee Benefits	25,448,100	27,134,500	26,811,100	30,087,300	2,952,800	10.9%	32,505,800	2,418,500	3.0%
2.5 Transition Services	8,392,300	8,401,700	8,652,300	7,603,700	(798,000)	-9.5%	7,603,700	-	2.9%
Total Personnel Costs	106,945,100	115,437,400	113,908,000	122,144,300	6,706,900	5.8%	129,471,900	7,327,600	6.0%
3.1 Electric	41,981,900	39,633,300	39,676,200	39,966,000	332,700	0.8%	40,151,000	185,000	0.7%
3.2 Gas	5,705,800	5,565,600	5,565,600	5,791,300	225,700	4.1%	5,861,800	70,500	1.6%
3.3 Sewage Service	2,074,500	2,079,100	2,079,100	2,268,400	189,300	9.1%	2,295,100	26,700	1.2%
3.4 Water Service	2,987,500	3,120,000	3,120,000	2,981,700	(138,300)	-4.4%	3,036,800	55,100	1.9%
Total Utilities Costs	52,749,700	50,398,000	50,440,900	51,007,400	609,400	1.2%	51,344,700	337,300	0.7%
4.1 Chemicals	13,982,100	16,044,300	17,514,700	16,118,600	74,300	0.5%	16,211,400	92,800	1.0%
4.2 Supplies & Other	29,421,800	35,024,800	34,083,900	32,097,300	(2,927,500)	-8.4%	32,145,700	48,400	-2.5%
4.3 Contractual Services	92,019,600	103,375,700	106,793,300	104,579,200	1,203,500	1.2%	105,602,100	1,022,900	1.0%
5.1 Capital Program Allocation	(3,191,800)	(3,471,000)	(3,471,000)	(4,376,200)	(905,200)	26.1%	(5,419,400)	(1,043,200)	0.4%
5.2 Shared Services	(2,566,800)	(1,892,500)	(2,929,000)	(2,925,000)	(1,032,500)	54.6%	(2,977,100)	(52,100)	-47.9%
6.0 Capital Outlay	1,794,000	3,534,900	2,998,800	2,814,500	(720,400)	-20.4%	2,972,500	158,000	5.6%
7.0 Unallocated Reserve	-	6,782,000	5,894,000	7,440,200	658,200	9.7%	8,713,300	1,273,100	30.7%
Total Other Categories	131,458,900	159,398,200	160,884,700	155,748,600	(3,649,600)	-2.3%	157,248,500	1,499,900	1.0%
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$ 3,666,700	1.1%	\$338,065,100	\$ 9,164,800	2.8%

Schedule 2B – Operations & Maintenance Expense by Expense Type (Water and Sewer Combined) – Five-Year Financial Plan

Operations & Maintenance Expense	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.1 Salaries & Wages	\$ 64,910,600	\$ 71,970,000	\$ 70,564,300	\$ 75,768,800	\$ 80,657,500	\$ 81,595,600	\$ 82,033,700	\$ 82,033,700
2.2 Workforce Development	829,400	976,700	976,700	1,801,900	1,874,600	1,874,600	1,874,600	1,874,600
2.3 Overtime	7,364,700	6,954,500	6,903,600	6,882,600	6,830,300	6,854,000	6,858,300	6,859,700
2.4 Employee Benefits	25,448,100	27,134,500	26,811,100	30,087,300	32,505,800	33,446,100	34,231,100	34,863,900
2.5 Transition Services	8,392,300	8,401,700	8,652,300	7,603,700	7,603,700	7,603,700	7,603,700	7,603,700
Total Personnel Costs	106,945,100	115,437,400	113,908,000	122,144,300	129,471,900	131,374,000	132,601,400	133,235,600
3.1 Electric	41,981,900	39,633,300	39,676,200	39,966,000	40,151,000	40,152,000	40,403,100	40,659,100
3.2 Gas	5,705,800	5,565,600	5,565,600	5,791,300	5,861,800	5,862,300	5,956,800	6,053,400
3.3 Sewage Service	2,074,500	2,079,100	2,079,100	2,268,400	2,295,100	2,295,800	2,329,500	2,363,300
3.4 Water Service	2,987,500	3,120,000	3,120,000	2,981,700	3,036,800	3,083,900	3,144,000	3,205,100
Total Utilities Costs	52,749,700	50,398,000	50,440,900	51,007,400	51,344,700	51,394,000	51,833,400	52,280,900
4.1 Chemicals	13,982,100	16,044,300	17,514,700	16,118,600	16,211,400	16,306,100	16,387,100	16,471,200
4.2 Supplies & Other	29,421,800	35,024,800	34,083,900	32,097,300	32,145,700	32,749,100	33,377,900	33,683,800
4.3 Contractual Services	92,019,600	103,375,700	106,793,300	104,579,200	105,602,100	109,271,900	107,866,900	110,012,700
5.1 Capital Program Allocation	(3,191,800)	(3,471,000)	(3,471,000)	(4,376,200)	(5,419,400)	(6,415,700)	(6,871,500)	(6,903,200)
5.2 Shared Services	(2,566,800)	(1,892,500)	(2,929,000)	(2,925,000)	(2,977,100)	(3,029,900)	(3,083,800)	(3,139,100)
6.0 Capital Outlay	1,794,000	3,534,900	2,998,800	2,814,500	2,972,500	3,031,900	3,092,400	3,154,200
7.0 Unallocated Reserve	-	6,782,000	5,894,000	7,440,200	8,713,300	10,201,000	16,422,000	20,079,200
Total Other Categories	131,458,900	159,398,200	160,884,700	155,748,600	157,248,500	162,114,400	167,191,000	173,358,800
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$338,065,100	\$344,882,400	\$351,625,800	\$358,875,300

Personnel Costs are the single largest category of expenses. It includes traditional categories (salaries & wages, overtime, and benefits) in addition to two unique categories. The first is “Contractual Transition Services” which represents the use of contractual and/or temp to hire personnel that are placed in positions that would otherwise be filled by employees. While progress has been made in filling several positions, the tight labor market has presented a challenge in the recruitment process. The second category listed in the table is “Workforce Development”. In order to overcome the labor shortage, the GLWA partnered with Focus Hope and others to implement an apprenticeship program during the latter half of FY 2017. This program, having received positive feedback, will be continued in future years.

Utilities costs are the third largest expense and are a strategic target for optimization through energy management efforts and improved review of billings. See further analysis of utilities in **Section 6 – Supplemental Analysis (Utilities)**.

Contractual Services are the second largest expense. This is not unusual for a large utility like the GLWA. This is a broad category that spans all groups from engineering, legal, operations, planning, information technology, and finance.

Capital Program Allocation denotes a portion of O&M expenses that are properly allocable to capital program management overhead based on staff time and task tracking. These costs are capitalized as part of the construction project.

Shared Services accounts for recoverable O&M costs pursuant to a shared services agreement executed in December 2015 with the City of Detroit. Shared services largely fall in the Information Technology, Systems Operations Control, Security, and Treasury budgets. See further analysis of shared services in **Section 6 – Supplemental Analysis (Shared Services)**.

Capital Outlay (O&M) are for equipment and tools, over \$5,000, that are tagged and tracked for internal control purposes and are not capitalized as an asset. See further analysis of the Capital Outlay Plan in **Section 3 – Capital Program and Debt**.

Unallocated Reserve reflects a reserve for unforeseen operational needs which are reallocated to line items as needed. This eliminates the need for contingency funds within individual cost center line items and provides assurance to operators that sufficient funds exist if emergencies arise. Uses of the unallocated reserve in the past include emergency repairs, new initiatives, mid-fiscal year medical plan increases, revenue shortfalls, and items not known at the time of the budgeting process. The provision for wage adjustments, which are based on merit, can also be funded from this category.

Operations and Maintenance Budget by Service Area: Schedules 2C and 2D depict how similar cost centers are grouped and managed by the GLWA. There are four broad categories as listed and defined below.

- A) **Water System Operations** are the direct operational activities to ensure the delivery of quality water, operation of five water treatment plants, 19 pumping (booster) stations, engineering, laboratory services, and management of those activities.
- B) **Wastewater (Sewer) System Operations** include direct operational wastewater activities related to operations (process control, primary, secondary, dewatering, and incineration), biosolids dryer facility and hauling, engineering, industrial waste control, laboratory services, one water resource recovery facility, eight combined sewer overflow facilities (five CSO retention and treatment basins and three screening and disinfection facilities), six pumping (lift) stations, and management of those facilities. In addition, GLWA maintains one CSO and four pumping stations on behalf of DWSD pursuant to a shared service agreement.
- C) **Centralized Services** include operational functions that serve both Water and Wastewater (Sewer) Operations. This includes Planning Services (Chief Planning Officer, Systems Planning & Development, Systems Planning, Systems Analytics, Asset Management, and Capital Improvement Planning); Systems Operations Control (Systems Control); Facility and Fleet Operations; Field Service Operations; Energy, Research & Innovation; Transformation, Information Technology (Office of the Chief Information Officer, Project Management, Service Delivery, Infrastructure, Business Productivity Systems, Enterprise Asset Management Systems, and Security & Risk); and Security & Integrity which includes HazMat and Office of Emergency Preparedness.
- D) **Administrative Services** include the Board of Directors, Chief Executive Officer, Chief Administrative and Compliance Officer (Risk Management & Safety), General Counsel, Public Affairs, Organizational Development, and Financial Services (Chief Financial Officer, Financial Reporting & Accounting, Financial Management & Planning, CFO Services, Treasury, Procurement Director, and Logistics & Materials).

The Centralized and Administrative Services areas act as an internal shared service to better manage resources and technical expertise. A supplemental section of this financial plan document, **Section 6 – Supplemental Analysis (Centralized & Administrative Services)**, explains the cost allocation methodology. A review of the cost allocation methodology is conducted annually.

Schedules 2C and 2D, on the following page, present the categorization of O&M expenses by the four major categories defined above.

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

Operating Area	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
A Water System Operations	\$ 69,289,200	\$ 74,813,000	\$ 74,813,000	\$ 76,518,200	\$ 1,705,200	2.3%	\$ 78,015,000	\$ 1,496,800	2.0%
B Sewer System Operations	106,769,200	111,971,400	111,971,400	113,197,500	1,226,100	1.1%	115,868,400	2,670,900	2.4%
C Centralized Services	88,128,700	103,845,900	103,845,900	104,502,900	657,000	0.6%	108,315,100	3,812,200	3.6%
D Administrative Services	26,966,600	34,603,300	34,603,300	34,681,700	78,400	0.2%	35,866,600	1,184,900	3.4%
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$ 3,666,700	1.1%	\$338,065,100	\$ 9,164,800	2.8%

Schedule 2D – Operations & Maintenance Five-Year Financial Plan by Service Area

Operating Area	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
A Water System Operations	\$ 69,289,200	\$ 74,813,000	\$ 74,813,000	\$ 76,518,200	\$ 78,015,000	\$ 79,647,900	\$ 81,188,600	\$ 82,747,900
B Sewer System Operations	106,769,200	111,971,400	111,971,400	113,197,500	115,868,400	116,869,100	121,307,700	124,351,900
C Centralized Services	88,128,700	103,845,900	103,845,900	104,502,900	108,315,100	112,122,500	112,597,800	114,557,800
D Administrative Services	26,966,600	34,603,300	34,603,300	34,681,700	35,866,600	36,242,900	36,531,700	37,217,700
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$338,065,100	\$344,882,400	\$351,625,800	\$358,875,300

Operations and Maintenance Budget by Fund: After the Centralized and Administrative Services are allocated to the water and sewage disposal operations funds, the result of the above costs being allocated is shown below in Schedules 2E and 2F. The O&M expense with the Centralized and Administrative Services allocation agrees with **Schedules 1A through 1F – Revenue Requirements Budget** which is the basis for O&M expenses reflected in customer charges.

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

System	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Water	\$118,840,900	\$143,933,800	\$143,933,800	\$144,847,700	\$ 913,900	0.6%	\$148,707,300	\$ 3,859,600	2.7%
Wastewater	172,312,800	181,299,800	181,299,800	184,052,600	2,752,800	1.5%	189,357,800	5,305,200	2.9%
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$ 3,666,700	1.1%	\$338,065,100	\$ 9,164,800	2.8%

Schedule 2F – Operations & Maintenance Expense by Fund with Centralized & Administrative Services Allocated – Five-Year Financial Plan

System	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water	\$118,840,900	\$143,933,800	\$143,933,800	\$144,847,700	\$148,707,300	\$154,338,200	\$155,636,900	\$159,155,500
Wastewater	172,312,800	181,299,800	181,299,800	184,052,600	189,357,800	190,544,200	195,988,900	199,719,800
Grand Total	\$291,153,700	\$325,233,600	\$325,233,600	\$328,900,300	\$338,065,100	\$344,882,400	\$351,625,800	\$358,875,300

Schedule 3 – Sources of Revenues and Uses of Revenues – Flow of Funds Consistent with the Master Bond Ordinance

While the prior schedules 1A through 1F provide the GLWA budget as a wholesale provider of service, Schedule 3 is provided to demonstrate compliance with the pledge of establishing sufficient regional and local system revenues to service financial commitments consistent with the Master Bond Ordinance (MBO) Flow of Funds. Noteworthy items include the following.

- ❖ The analysis validates that GLWA has a financial plan in place to ensure that revenues are sufficient to fund debt service.
- ❖ Schedule 3 is reconciled to Schedules 1A and 1C to demonstrate that all line items in the budget plan for the biennial budget approved for FY 2023 & FY 2024 (Schedules 1A through 1D) are in alignment with the financial plan.
- ❖ The local system revenue is shown net of its regional system commitments demonstrating the local system has sufficient revenues for local system operations as well as the local debt service and legacy commitments.
- ❖ The legacy pension commitment was a result of the City of Detroit's Chapter 9 Plan of Adjustment approved in December 2014. At the time of the operational start-up of the GLWA, that liability was allocated between GLWA and DWSD based on an agreed upon allocation that was formalized on January 24, 2017. Monthly funding of the annual payment for that liability occurs through the flow of funds. Schedule 3 confirms that both GLWA and DWSD have sufficient revenue to address that commitment as payments come due. It should be noted that a fixed annual payment amount was established through FY 2023 with an anticipated minimal tail pension liability in 2024. All parties (City of Detroit, Detroit General Retirement System, DWSD, and GLWA) continue to evaluate the amount of the City of Detroit General Retirement System (GRS) liability past 2023. **Section 6 – Supplemental Analysis (Legacy Commitments)** provides further information related to the pension system.
- ❖ The line item on Schedule 3 titled "Net Revenues Allocable to Regional System" quantifies GLWA's efforts to improve financial stability, debt service coverage ratio, cash position, and flexibility to meet future capital needs without maximum reliance on debt.
- ❖ The resolution adopting the FY 2023 and FY 2024 Biennial Budget (**Section 7 – Authorizing Resolutions**) affirms the annual debt service funding. See additional debt analysis in **Section 3 – Capital Program and Debt (Debt Management)**.
- ❖ All other known commitments are planned to be funded in accordance with supporting calculations and analysis. To the extent that there are any variances, they will be addressed with a budget amendment.

Schedule 3 – Sources of Revenues and Uses of Revenues – Flow of Funds Consistent with the Master Bond Ordinance*

Flow of Funds Basis	FY 2023 Water Fund Requested	FY 2023 Sewer Fund Requested	FY 2023 Combined (Informational Only)	FY 2024 Water Fund Requested	FY 2024 Sewer Fund Requested	FY 2024 Combined (Informational Only)
Revenues						
Regional System Wholesale Revenues - Suburban Wholesale Customer	\$ 331,962,000	\$ 288,774,300	\$ 620,736,300	\$ 342,012,500	\$ 292,774,200	\$ 634,786,700
Regional System Wholesale Revenues - Detroit Customers	22,985,900	191,042,200	214,028,100	24,514,900	197,921,700	222,436,600
Total Regional System Wholesale Revenues	354,947,900	479,816,500	834,764,400	366,527,400	490,695,900	857,223,300
DWSD Local System Revenues - Detroit Customers	70,104,100	96,467,800	166,571,900	70,435,100	95,338,300	165,773,400
Miscellaneous Revenue (Local System)	3,900,000	7,640,000	11,540,000	3,980,000	7,790,000	11,770,000
Other Revenues & Investment Earnings (Regional System)	1,123,700	1,555,600	2,679,300	2,006,700	2,710,500	4,717,200
Total Revenues	\$ 430,075,700	\$ 585,479,900	\$ 1,015,555,600	\$ 442,949,200	\$ 596,534,700	\$ 1,039,483,900
Revenue Requirements						
Operations & Maintenance Expense						
Regional System Wholesale Expenses	\$ 144,847,700	\$ 184,052,600	\$ 328,900,300	\$ 148,707,300	\$ 189,357,800	\$ 338,065,100
Local System Expenses	30,490,000	63,390,000	93,880,000	31,100,000	64,660,000	95,760,000
GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	0	0	0
GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	0	0	0
Total Operations & Maintenance Expense	185,657,700	261,122,600	446,780,300	179,807,300	254,017,800	433,825,100
<i>Net Revenues after Operations & Maintenance Expense</i>	<i>244,418,000</i>	<i>324,357,300</i>	<i>568,775,300</i>	<i>263,141,900</i>	<i>342,516,900</i>	<i>605,658,800</i>
Non-operating Activities						
Debt Service Allocable to Regional System	150,337,100	205,638,100	355,975,200	159,237,000	220,662,100	379,899,100
Debt Service Allocable to Local System	42,864,500	31,965,700	74,830,200	45,049,200	32,243,700	77,292,900
GRS Accelerated Pension from Regional System	6,268,300	11,620,700	17,889,000	3,647,500	6,930,300	10,577,800
GRS Accelerated Pension from Local System	4,427,400	3,066,700	7,494,100	2,398,200	1,710,200	4,108,400
WRAP Contribution from Regional System	1,770,500	2,394,200	4,164,700	1,842,700	2,467,000	4,309,700
WRAP Contribution from Local System	641,200	1,468,900	2,110,100	647,600	1,468,800	2,116,400
DWSD Budget Stabilization Fund Contribution	-	-	-	-	-	-
ER&R Fund Contribution from Regional System	-	-	-	-	-	-
ER&R Fund Contribution from Local System	-	-	-	-	-	-
Contribution to Operating Reserves	-	-	-	-	-	-
Total Nonoperating Activities	206,309,000	256,154,300	462,463,300	212,822,200	265,482,100	478,304,300
<i>Net Revenues Available for Revenue Financed Capital</i>	<i>38,109,000</i>	<i>68,203,000</i>	<i>106,312,000</i>	<i>50,319,700</i>	<i>77,034,800</i>	<i>127,354,500</i>
Reserve for Revenue Financed Capital from Net Revenues						
Lease Payment to Local System I&E Account	13,809,000	27,500,000	41,309,000	17,720,100	27,500,000	45,220,100
Net Revenues Allocable to Local System	-	1,360,500	1,360,500	-	3,045,600	3,045,600
Net Revenues Allocable to Regional System	24,300,000	39,342,500	63,642,500	32,599,600	46,489,200	79,088,800
Total Reserve for Revenue Financed Capital Both Systems	38,109,000	68,203,000	106,312,000	50,319,700	77,034,800	127,354,500
Total Revenue Requirements	\$ 430,075,700	\$ 585,479,900	\$ 1,015,555,600	\$ 442,949,200	\$ 596,534,700	\$ 1,039,483,900

*Rows highlighted in light grey in the above table are designed to align with the DWSD Budget (DWSD data preliminary at January 19, 2022).

Schedule 4 – Debt Service Coverage Calculations Consistent with the Master Bond Ordinance

The Master Bond Ordinance and Michigan PA 94 of 1933 (the Revenue Bond Act) established the Required Coverage levels. Debt service coverage is calculated as Net Revenues divided by the Maximum Annual Debt Service requirements.

Schedule 4 – Debt Service Coverage Calculations

	FY 2023 Water Fund Requested	FY 2023 Sewer Fund Requested	FY 2023 Combined (Informational Only)	FY 2024 Water Fund Requested	FY 2024 Sewer Fund Requested	FY 2024 Combined (Informational Only)
Debt Service Coverage Calculation						
Revenues						
1 Regional System Wholesale Revenues	\$ 354,947,900	\$ 479,816,500	\$ 834,764,400	\$ 366,527,400	\$ 490,695,900	\$ 857,223,300
2 Local System Revenues	70,104,100	96,467,800	166,571,900	70,435,100	95,338,300	165,773,400
3 Miscellaneous Revenue (Local System)	3,900,000	7,640,000	11,540,000	3,980,000	7,790,000	11,770,000
4 Other Revenues & Investment Earnings (Regional System)	1,123,700	1,555,600	2,679,300	2,006,700	2,710,500	4,717,200
5 Total Revenues	\$ 430,075,700	\$ 585,479,900	\$ 1,015,555,600	\$ 442,949,200	\$ 596,534,700	\$ 1,039,483,900
Revenue Requirements						
Operations & Maintenance Expense						
6 Regional System Wholesale Expenses	\$ 144,847,700	\$ 184,052,600	\$ 328,900,300	\$ 148,707,300	\$ 189,357,800	\$ 338,065,100
7 Local System Expenses	30,490,000	63,390,000	93,880,000	31,100,000	64,660,000	95,760,000
8 GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	0	0	0
9 GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	0	0	0
10 Total Operations & Maintenance Expense	185,657,700	261,122,600	446,780,300	179,807,300	254,017,800	433,825,100
11 Net Revenues after Operations & Maintenance Expense	\$ 244,418,000	\$ 324,357,300	\$ 568,775,300	\$ 263,141,900	\$ 342,516,900	\$ 605,658,800
Debt Service by Lien						
12 Senior Lien Bonds	\$ 135,939,700	\$ 149,780,900	\$ 285,720,600	\$ 140,130,000	\$ 150,299,000	\$ 290,429,000
13 Second Lien Bonds	47,200,100	36,738,500	83,938,600	48,108,100	49,387,700	97,495,800
14 SRF Junior Lien Bonds	10,061,800	51,084,400	61,146,200	16,048,100	53,219,100	69,267,200
15 Total Debt Service	\$ 193,201,600	\$ 237,603,800	\$ 430,805,400	\$ 204,286,200	\$ 252,905,800	\$ 457,192,000
Debt Service Coverage						
16 Senior Lien Bonds (11)/(12)	1.80	2.17		1.88	2.28	
17 Second Lien Bonds (11) / [(12)+(13)]	1.33	1.74		1.40	1.72	
18 SRF Junior Lien Bonds (11) / (15)	1.27	1.37		1.29	1.35	

**Rows highlighted in light grey in the above table are designed to align with the DWSD Budget (DWSD data preliminary at January 29, 2022).

Schedule 5 – Improvement & Extension Funds and Construction Bond Funds

Improvement & Extension Funds: The tables on the following pages present the FY 2023 and FY 2024 biennial budgets and five-year financial plan for the separate Improvement & Extension (I&E) Funds for the water and sewer systems. See also **Section 3 – Capital Program and Debt**.

Inflows to the I&E Fund

- ❖ Transfers from the Revenue Receipts Fund in accordance with the Master Bond Ordinance and Financial Plan
- ❖ DWSD budget shortfall loan payments in accordance with a 2018 Memorandum of Understanding
- ❖ Interest earned on the I&E funds is returned to the flow of funds monthly as required by the Master Bond Ordinance.

Outflows from the I&E Fund

- ❖ Capital spending – other (projects in the Board adopted capital improvement plan, CIP, that do not meet the criteria for debt financing)
- ❖ Capital outlay funding (generally non-construction capital outlay such as machinery, equipment, vehicles, and systems)
- ❖ Transfers to the Construction Fund for capital improvement plan projects to reduce the need of new revenue bonds and/or flexibility in timing for new bonds.

Schedule 5A – Water Improvement & Extension Fund

Water Improvement & Extension Fund Inflows & Outflows	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Revenues								
Water System Revenue Transfers In from General Operating	\$ 35,094,800	\$ 28,093,900	\$ 27,046,400	\$ 24,300,000	\$ 32,599,600	\$ 27,672,200	\$ 29,322,800	\$ 35,112,700
Investment Earnings	3,539,100	-	1,329,000	-	-	-	-	-
Net Use of Reserves	-	97,220,700	93,766,200	19,888,000	(974,600)	622,400	463,800	44,500
Total Revenues	\$ 38,633,900	\$125,314,600	\$122,141,600	\$ 44,188,000	\$ 31,625,000	\$ 28,294,600	\$ 29,786,600	\$ 35,157,200
Expenditures								
Water System Revenue Transfers Out	\$ 3,898,800	\$ -	\$ 1,329,000	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Spending - Other	4,797,200	-	567,400	-	-	-	-	-
Capital Outlay	11,893,200	17,006,600	13,975,800	15,452,600	13,403,600	10,379,900	9,626,700	9,007,600
Revenue Financed Capital - Operating Transfer to Construction Fund	95,963,700	108,308,000	106,269,400	28,735,400	18,221,400	17,914,700	20,159,900	26,149,600
Total Expenditures	\$116,552,900	\$125,314,600	\$122,141,600	\$ 44,188,000	\$ 31,625,000	\$ 28,294,600	\$ 29,786,600	\$ 35,157,200

Schedule 5B – Sewer Improvement & Extension Fund

Sewer Improvement & Extension Fund Inflows & Outflows	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Revenues								
Sewer System Revenue Transfers In from General Operating	\$ 42,742,700	\$ 34,616,900	\$ 31,684,800	\$ 39,342,500	\$ 46,489,200	\$ 63,595,400	\$ 68,298,400	\$ 70,715,800
Receipt of DWSD Shortfall Loan Interest	18,841,700	406,400	144,900	-	-	-	-	-
Investment Earnings	1,510,300	-	1,004,900	-	-	-	-	-
Net Use of Reserves	-	28,487,800	50,970,000	5,549,500	(2,705,200)	350,500	(299,800)	(611,200)
Total Revenues	\$ 63,094,700	\$ 63,511,100	\$ 83,804,600	\$ 44,892,000	\$ 43,784,000	\$ 63,945,900	\$ 67,998,600	\$ 70,104,600
Expenditures								
Sewer System Revenue Transfers Out	\$ 1,532,700	\$ -	\$ 1,004,900	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Spending - Other	5,907,400	-	722,200	-	-	-	-	-
Capital Outlay	9,120,800	15,965,100	17,345,900	18,447,100	11,610,500	8,106,700	8,671,900	10,256,600
Revenue Financed Capital - Operating Transfer to Construction Fund	50,579,100	47,546,000	64,731,600	26,444,900	32,173,500	55,839,200	59,326,700	59,848,000
Total Expenditures	\$ 67,140,000	\$ 63,511,100	\$ 83,804,600	\$ 44,892,000	\$ 43,784,000	\$ 63,945,900	\$ 67,998,600	\$ 70,104,600

Construction Funds: The tables below and on the following page present the FY 2023 and FY 2024 biennial budgets and five-year financial plan for the separate Construction Funds for the water and sewage disposal systems. See also **Section 3 – Capital Program and Debt**.

Inflows to the Construction Fund

- ❖ Transfers from the Improvement & Extension Fund for capital improvement plan projects and reduction of new revenue bonds
- ❖ Issuance of new bonds
- ❖ Interest earned on investments

Outflows from the Construction Fund

- ❖ Capital Improvement Plan projects and other large capital initiatives authorized by the Chief Executive Officer
 - Capital Spend Rate Adjustment – The Board of Directors adopts a capital spending ratio assumption (SRA) which allows the realities of capital program delivery to align with the financial plan. The SRA is an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA’s control and/or delayed for nonbudgetary reasons. Those limitations, whether financial or non-financial, necessitate the SRA for budgetary purposes, despite the prioritization established.
 - The GLWA Capital Improvement Plan document is available online at <https://www.glwater.org/CIP/>

Schedule 5C – Water Construction Fund

Water Construction Fund Inflows & Outflows	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Revenues								
Transfers from Improvement & Extension Fund	\$ 95,963,700	\$108,308,000	\$106,269,400	\$ 28,735,400	\$ 18,221,400	\$ 17,914,700	\$ 20,159,900	\$ 26,149,600
Bond Proceeds	-	-	-	-	-	256,500,000	-	261,250,000
Investment Earnings	19,800	-	-	128,800	365,900	1,199,400	1,309,400	1,088,600
SRF Loans (Grant Revenues)	20,186,500	26,100,000	36,527,000	54,992,000	59,446,000	21,442,000	2,400,000	22,505,000
Net Use of Reserves	-	-	772,700	71,644,800	102,315,700	(119,763,100)	115,875,700	(191,362,200)
Total Revenues	\$116,170,000	\$134,408,000	\$143,569,100	\$155,501,000	\$180,349,000	\$177,293,000	\$139,745,000	\$119,631,000
Expenditures								
Water System Revenue Transfers Out	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvement Plan	124,534,000	179,210,000	178,642,600	194,376,000	225,436,000	221,616,000	174,681,000	149,539,000
Capital Spend Rate Adjustment	-	(44,802,000)	(35,073,500)	(38,875,000)	(45,087,000)	(44,323,000)	(34,936,000)	(29,908,000)
Total Expenditures	\$124,534,400	\$134,408,000	\$143,569,100	\$155,501,000	\$180,349,000	\$177,293,000	\$139,745,000	\$119,631,000

Schedule 5D – Sewer Construction Fund

Sewer Construction Fund Inflows & Outflows	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Revenues								
Transfers from Improvement & Extension Fund	\$ 50,579,100	\$ 47,546,000	\$ 64,731,600	\$ 26,444,900	\$ 32,173,500	\$ 55,839,200	\$ 59,326,700	\$ 59,848,000
Bond Proceeds	-	-	-	-	-	123,500,000	-	137,750,000
Investment Earnings	23,100	-	-	86,200	277,600	617,100	479,400	497,300
SRF Loans (Grant Revenues)	17,261,300	31,992,000	14,149,000	18,720,000	10,247,000	9,785,000	15,357,000	7,198,000
Net Use of Reserves	-	-	3,108,200	49,197,900	79,036,900	(51,349,300)	43,103,900	(106,813,300)
Total Revenues	\$ 67,863,500	\$ 79,538,000	\$ 81,988,800	\$ 94,449,000	\$121,735,000	\$138,392,000	\$118,267,000	\$ 98,480,000
Expenditures								
Sewer System Revenue Transfers Out	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvement Plan	79,698,200	106,050,000	105,327,800	125,932,000	162,313,000	184,523,000	157,689,000	131,307,000
Capital Spend Rate Adjustment	-	(26,512,000)	(23,339,000)	(31,483,000)	(40,578,000)	(46,131,000)	(39,422,000)	(32,827,000)
Total Expenditures	\$ 79,698,400	\$ 79,538,000	\$ 81,988,800	\$ 94,449,000	\$121,735,000	\$138,392,000	\$118,267,000	\$ 98,480,000

Section 3

Capital Program and Debt

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Capital Program Overview

The Great Lakes Water Authority assures effective operational flexibility, while controlling spending and optimizing the cost of capital. This is accomplished by utilizing five categories in GLWA's Capital Financial Plan for funding both "Capital Outlay" and the "Capital Improvement Plan" (CIP) which are listed below.

Category	Capital Outlay - Over \$5,000 (Not Capitalized)	Capital Outlay - Direct Purchase Over \$5,000 (Capitalized)	Capital Outlay - Projects and Program (Capitalized)	Non-CIP Spending/Misc (Not Capitalized)	Capital Improvement Plan (Capital Spending) I&E	Capital Improvement Plan Construction
Fund Name	Operations & Maintenance	Improvement & Extension Fund	Improvement & Extension Fund	Improvement & Extension Fund	Improvement & Extension Fund	Construction Fund
Fund Number	5910 - Water 5960 - Sewer	5506 - Water 5404 - Sewer	5506 - Water 5404 - Sewer	5506 - Water 5404 - Sewer	5506 - Water 5404 - Sewer	5519 - Water 5421 - Sewer
Account Number	901060	901100	901100	See FP&A team	See CA&FR Team	See CA&FR Team
Rationale	Controllable asset, tagged and tracked for internal control purposes. Shorter lived assets such as computer software and hardware.	Items that cause variability in the annual financial plan that do not meet the criteria for CIP	Items that cause variability in the annual financial plan that do not meet the criteria for GLWA criteria bond funding	Items that do not meet the qualifications of capitalization	Condition assessments associated with a specific CIP project or program; Expenditures associated with a specific asset ineligible for bond funding; CIP assets that have less than 20 year life or for immediate expenditure	Engineering, design, and study services associated with a specific constructed asset in the CIP; Constructed assets eligible for bond funding
Frequency	Recurring in nature	Unique, nonrecurring purchases, and/or large dollar assets on a replacement program	Unique, nonrecurring purchases, and/or large dollar assets on a replacement program	Unique, nonrecurring purchases, and/or large dollar expenditures on a replacement program for the betterment of	Project specific	Project specific
Life	Greater than One Year	Greater than One Year	Greater than One Year	Greater than One Year	Less than 20 Years or current year	Greater than 20 Years
Examples	IT Equipment & Software that does not meet the Capitalization Policy threshold	Vehicles, large equipment, pumps, motors, and security equipment; no or low relative amount of installation costs	Infrastructure, plant, and facility upgrade/buildouts, rehabilitation, and/or replacement	Ovation upgrades, studies that will not be capitalized,	Security enhancements (cameras, fencing, gates & small dollar items by various locations), condition assessments not resulting in near term constructable design	Infrastructure, plant, and facility upgrade, rehabilitation, and/or replacement
Justification	Internal review panel, prioritization	Internal review panel, prioritization, replacement validation with asset records and other current market information	Internal review panel, prioritization, replacement validation with asset records and other current market information	Internal review panel, prioritization	Business Case Evaluation; Internal Review Panel; Member Outreach; GLWA Board Committee	Business Case Evaluation; Internal Review Panel; Member Outreach; GLWA Board Committee

Items identified as “Capital Outlay” are assets or programs acquired for the betterment of the system and are both above the dollar threshold for capitalizing on the financial statements (i.e. over \$5,000), and are assets that should be tagged and tracked for internal control purposes. In both instances, these assets have an estimated useful life of greater than one year.

Capital Outlay includes vehicles, shop, lab, plant and field equipment, office furniture and equipment, as well as software and hardware. Generally capital outlay items have a life of less than 20 years. Capital Outlay items are not included in the “Capital Improvement Plan” (CIP). The CIP focuses on longer lived constructed assets with a useful life greater than 20 years, although some of the CIP expenditures do have lives less than 20 years.

Capital Outlay

The tables in this section present an entity-wide view of GLWA's capital outlay. Some capital outlay costs are shared between the water and wastewater systems. Examples of this include centralized services capital outlay such as facilities, fleet, and information technology.

Tables 1 and 2 – *Capital Outlay by System* depicts the capital outlay by water & wastewater systems. Each system budgets for specific types of expenditures as shown in Table 5 - *Total Capital Outlay by Asset Type* which support both systems.

Table 1 – *Capital Outlay by System (funded by both O&M and I&E) – Biennial Budget*

Operating System	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity Thru 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Water System	\$ 13,463,400	\$ 16,974,600	\$ 2,342,900	\$ 18,267,100	\$ 1,292,500	7.6%	\$ 16,376,100
Operations & Maintenance	1,570,200	2,998,800	739,200	2,814,500	(184,300)	-6.1%	2,972,500
Improvement & Extension	11,893,200	13,975,800	1,603,700	15,452,600	1,476,800	10.6%	13,403,600
Wastewater System	9,344,600	17,345,900	2,557,100	18,447,100	1,101,200	6.3%	11,610,500
Operations & Maintenance	223,800	-	277,700	-	-	0.0%	-
Improvement & Extension	9,120,800	17,345,900	2,279,400	18,447,100	1,101,200	6.3%	11,610,500
Grand Total	\$ 22,808,000	\$ 34,320,500	\$ 4,900,000	\$ 36,714,200	\$ 2,393,700	7.0%	\$ 27,986,600

Table 2 – *Capital Outlay by System (funded by both O&M and I&E) – Five-Year Financial Plan*

Operating System	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water System	\$ 13,463,400	\$ 16,974,600	\$ 18,267,100	\$ 16,376,100	\$ 13,411,800	\$ 12,719,100	\$ 12,161,800
Operations & Maintenance	1,570,200	2,998,800	2,814,500	2,972,500	3,031,900	3,092,400	3,154,200
Improvement & Extension	11,893,200	13,975,800	15,452,600	13,403,600	10,379,900	9,626,700	9,007,600
Wastewater System	9,344,600	17,345,900	18,447,100	11,610,500	8,106,700	8,671,900	10,256,600
Operations & Maintenance	223,800	-	-	-	-	-	-
Improvement & Extension	9,120,800	17,345,900	18,447,100	11,610,500	8,106,700	8,671,900	10,256,600
Grand Total	\$ 22,808,000	\$ 34,320,500	\$ 36,714,200	\$ 27,986,600	\$ 21,518,500	\$ 21,391,000	\$ 22,418,400

Since assets are replaced on a periodic basis, annual expenditures may not be consistent throughout the year. In addition, some capital outlay projects span several years that are beyond the five-year planning documents. Examples of these projects include the following.

- ❖ Instrumentation & control hardware and software for the water and wastewater systems. These projects are scheduled by facility and recur on a five to seven-year cycle as technologies and control capabilities advance. Four such upgrades are scheduled within the biennial budget with a total budget of \$8.4 million
- ❖ GLWA enterprise-wide software systems. The forecast replacement of these systems is scheduled from FY 2021 through FY 2025 with a total budget of \$53.2 million.

- ❖ A program for the review and decommissioning of certain water mains is scheduled from FY 2022 through FY 2027 at an average annual budget of \$3.0 million.
- ❖ As part of GLWA's commitment to maintaining sustainable water and wastewater systems, programs are in place for the replacement and renewal of various processing equipment. These include pumps, valves, motors, pipes and other processing or treatment equipment. The average annual proposed budget of these programs is \$6.3 million
- ❖ The design, rehabilitation, and installation of flow meters for the wastewater system is scheduled from FY 2021 through FY 2024 at an average annual cost of \$0.9 million.

Funding Sources

The Capital Outlay expenditures are proposed to be \$36.7 million for FY 2023, and \$28.0 million for FY 2024. As shown in Tables 3 and 4 – *Capital Outlay by Funding Source*, Capital Outlay is funded by two primary sources: Operations & Maintenance (O&M) and Improvement & Extension (I&E) funds.

- ❖ **Operations & Maintenance (O&M):** Capital outlay items funded by O&M funds are paid with current year revenues. The nature of these items is recurring so the impact on charges from year-to-year is not significant. The total capital outlay paid with O&M funds is included in Schedules 2A and 2B in Section 2 - Core Financial Plan Schedules.
- ❖ **Improvement & Extension (I&E):** The source of the I&E Funds are revenues from charges that have been transferred to the I&E fund. Funds are budgeted annually to be added to the I&E fund to reduce debt financing and are used for capital outlay and capital improvements. The nature of these items is not necessarily recurring each year. They are, instead, replaced on a longer-term cycle or unique to a three to five-year planning horizon. The total capital outlay paid with I&E funds is included in Schedules 5A and 5B in Section 2 - Core Financial Plan Schedules.

Table 3 – *Capital Outlay by Funding Source – Biennial Budget*

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity Thru 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Operations & Maintenance	\$ 1,794,000	\$ 2,998,800	\$ 1,016,900	\$ 2,814,500	\$ (184,300)	-6.1%	\$ 2,972,500
Improvement & Extension	21,014,000	31,321,700	3,883,100	33,899,700	2,578,000	8.2%	25,014,100
Grand Total	\$ 22,808,000	\$ 34,320,500	\$ 4,900,000	\$ 36,714,200	\$ 2,393,700	7.0%	\$ 27,986,600

Table 4 – *Capital Outlay by Funding Source - Five-Year Financial Plan*

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Operations & Maintenance	\$ 1,794,000	\$ 2,998,800	\$ 2,814,500	\$ 2,972,500	\$ 3,031,900	\$ 3,092,400	\$ 3,154,200
Improvement & Extension	21,014,000	31,321,700	33,899,700	25,014,100	18,486,600	18,298,600	19,264,200
Grand Total	\$ 22,808,000	\$ 34,320,500	\$ 36,714,200	\$ 27,986,600	\$ 21,518,500	\$ 21,391,000	\$ 22,418,400

Biennial Budget Request

The biennial budget reflects a change in FY 2023, increasing \$2.4 million, or 7.0% as noted above. There are key factors that impact this change outside of the projects previously noted. These include the following.

- ❖ For the Operations and Maintenance fund - capital outlay for Information Technology was reduced by \$0.2 million. The implementation of a hybrid cloud environment will move certain applications from the on-premises data center to a secure cloud environment. This will in turn require a lower hardware cost. Additionally, there will be a reduction in the Oracle and SQL license requirements for the Detroit Water and Sewerage Department (DWSD) as a result of the further bifurcation of the two organizations.
- ❖ For the Improvement and Extension fund
 - Buildings and Structures increase \$1.3 million for the renovation of several facilities. These updates include improved, efficient lighting, heating and cooling systems (HVAC), and air handling systems for air quality
 - Leasehold improvements decreased \$0.3 million for the completion of various safety initiatives at the combined sewer overflow (CSO) facilities.
 - Information Technology decreased \$0.5 million as the implementation of two systems, part of the FY 2022 budget, moves towards completion. The Information Technology Service Management Solution was budgeted and expected to conclude during FY 2022. Additionally, the Project Management Information System (PMIS), also initiated in FY 2022, is expected to incur the majority of the implementation costs during the current fiscal year.
 - Machinery & Equipment increased \$2.2 million due to the program noted above for the Instrumentation and Controls renewals and replacements.
 - Projects and Programs decreased \$1.6 million for two significant reasons. (1) During FY 2021 GLWA began a consolidation of warehouses from three to a single facility. Allowing for economies of scale, this facility will handle inventoried supplies and equipment used in both water production and sewage treatment. The upgrades to this facility were part of the current FY 2022 budget. (\$0.8 million), (2) A structural assessment of the CSO facilities was concluded in FY 2022 and not budgeted for in FY 2023 (\$0.8 million).
 - The vehicle budget increased \$1.4 million due to the replacement of fleet vehicles including any modifications or upfitting costs. A significant number of vehicles need replacement due to age, miles and serviceability. The vehicles scheduled for replacement have been reviewed and are considered obsolete or too costly to repair. The budget for these replacements was updated to include the upfitting costs which were not included in the current FY 2022 budget.

Table 5 - Total Capital Outlay by Asset Type (funded by both O&M and I&E)

Asset Type	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Operations & Maintenance	\$ 2,998,800	\$ 2,814,500	\$ 2,972,500	\$ 3,031,900	\$ 3,092,400	\$ 3,154,200
Information Technology	2,998,800	2,814,500	2,972,500	3,031,900	3,092,400	3,154,200
Hardware	1,689,623	1,466,100	1,597,400	1,629,300	1,661,900	1,695,200
Software	1,309,171	1,348,400	1,375,100	1,402,600	1,430,500	1,459,000

Table 5 - Total Capital Outlay by Asset Type (funded by both O&M and I&E) (continued)

Asset Type	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 31,321,700	\$ 33,899,700	\$ 25,014,100	\$ 18,486,600	\$ 18,298,600	\$ 19,264,200
Building/Structures	357,500	1,637,800	368,100	373,500	379,000	384,600
Information Technology	9,080,500	8,580,500	5,080,500	580,500	80,500	80,500
Software	9,080,500	8,580,500	5,080,500	580,500	80,500	80,500
Leasehold Improvements	880,000	550,200	250,000	158,000	-	-
Machinery & Equipment	12,906,700	15,108,600	11,190,300	9,800,800	11,010,700	11,739,900
Computers & IT	1,168,000	172,000	110,000	365,500	18,000	1,822,000
Controls & Communication	2,530,000	5,994,500	2,581,000	1,997,500	3,604,200	3,207,500
Flow Measuring & Meters	1,026,600	890,000	892,100	809,200	796,400	811,700
Furniture & Fixtures	100,000	100,000	400,000	102,000	152,000	145,000
Heavy Equipment & Misc	1,060,000	515,000	120,000	72,000	45,000	110,000
Laboratory	368,100	392,400	294,200	297,400	385,700	422,400
Pipes, Gates & Valves	965,000	762,000	892,500	789,000	865,500	655,500
Process Equipment/Treatment	1,303,500	1,554,000	1,063,600	1,210,700	1,342,900	1,594,200
Pumps & Motors	4,306,500	4,658,700	4,809,600	4,147,500	3,772,000	2,892,100
Tools, Shop & Warehouse	79,000	70,000	27,300	10,000	29,000	79,500
Projects & Programs	6,105,800	4,500,000	4,500,000	4,500,000	3,500,000	3,500,000
Safety & Security	80,000	192,600	83,200	84,800	86,400	88,200
Access & Control	60,000	61,200	62,400	63,600	64,800	66,200
Safety Equipment	-	111,000	-	-	-	-
Surveillance	20,000	20,400	20,800	21,200	21,600	22,000
Site Improvements	-	23,000	-	-	-	-
Vehicles	1,911,200	3,307,000	3,542,000	2,989,000	3,242,000	3,471,000
Heavy Truck	-	650,000	1,240,000	1,070,000	1,650,000	1,350,000
Light Truck	50,000	1,090,000	620,000	690,000	690,000	450,000
Passenger	906,600	-	-	-	-	-
Trailer & Towable Equipment	40,000	-	40,000	-	40,000	40,000
Utility Vehicle	914,600	367,000	442,000	509,000	382,000	1,151,000
Van	-	1,200,000	1,200,000	720,000	480,000	480,000
Grand Total	\$ 34,320,500	\$ 36,714,200	\$ 27,986,600	\$ 21,518,500	\$ 21,391,000	\$ 22,418,400

Table 6 - Total Capital Outlay by Team (funded by both I&E and O&M) (continued on the next page)

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
881101 - Public Affairs	\$ -	\$ 9,000	\$ 9,300	\$ 11,000	\$ 5,000	\$ 2,500	\$ 9,000	\$ 11,000
881201 - Security and Integrity	5,300,700	80,000	-	65,800	41,600	42,400	43,200	44,100
882111 - Water Engineering	-	5,500	-	5,500	5,500	5,500	5,500	5,500
882121 - Water Quality	145,800	20,000	6,500	51,000	18,000	30,000	17,500	19,000
882131 - Water Works Park	1,713,100	308,100	219,200	373,800	354,000	354,000	633,000	701,000
882141 - Springwells Water Plant	39,700	510,000	20,100	1,276,000	1,326,000	350,000	359,000	440,000
882151 - Northeast Water Plant	1,075,900	1,175,000	231,500	958,000	463,000	628,000	110,000	275,000
882161 - Southwest Water Plant	237,400	250,000	138,600	169,000	265,000	280,000	250,000	250,000
882171 - Lake Huron Water Plant	149,000	490,000	14,600	205,000	608,000	205,000	177,000	177,000
882301 - Systems Operations Control	30,100	1,437,500	6,700	1,500,000	1,400,000	2,025,000	2,375,000	1,437,500
882322 - Eastside Pumping Station	115,000	-	-	-	-	-	-	-
882324 - West Service Center Pumping Station	120,600	-	-	-	-	-	-	-
882338 - Inlay Pumping Station	38,400	-	-	-	-	-	-	-
882421 - Facility Operations	577,400	62,500	1,400	62,500	62,500	62,500	62,500	62,500
882422 - Fleet Operations	2,201,700	942,600	283,400	2,220,000	2,250,000	2,190,000	2,250,000	2,250,000
882431 - Field Service Operations	24,600	3,050,000	364,200	3,050,000	3,050,000	3,050,000	3,050,000	3,050,000
882501 - Energy, Research & Innovation	8,900	170,000	68,800	155,000	155,000	155,000	35,000	35,000
883201 - OD Administration	-	-	-	350,000	-	-	-	-
883321 - Info Technology Service Delivery	202,300	1,403,200	306,800	1,259,800	1,387,000	1,414,700	1,443,000	1,471,900
883331 - Info Technology Infrastructure	598,800	1,535,900	187,900	1,218,900	1,233,100	1,247,800	762,700	777,900
883341 - Info Technology Enterprise	-	2,000,000	-	2,000,000	2,000,000	250,000	-	-
883351 - Info Technology Business Applications	762,700	3,121,200	206,000	3,021,000	1,286,400	802,100	818,100	834,500
883361 - Info Technology Security & Risk	6,400	63,500	38,500	64,800	66,000	67,300	68,600	69,900
886101 - Systems Planning	-	-	-	-	150,000	-	-	-
886301 - Energy Management	13,700	-	-	-	-	-	-	-
886401 - Systems Analytics	101,400	340,600	239,400	-	-	-	-	-
886601 - Capital Improvement Planning	-	-	-	250,000	250,000	250,000	250,000	250,000
891101 - Public Affairs	-	9,000	9,300	11,000	5,000	2,500	9,000	11,000
891201 - Security	1,900,800	-	-	65,800	41,600	42,400	43,200	44,100
891202 - HazMat	-	-	-	61,000	-	-	-	-
892201 - Wastewater Director	792,300	566,500	-	993,000	1,118,100	395,500	579,000	551,400
892211 - Wastewater Engineering	(148,900)	-	-	-	-	-	-	13,000
892221 - Wastewater Operations	74,500	370,000	-	-	-	-	-	1,454,000
892222 - Wastewater Process Control	70,700	1,855,000	-	5,205,000	1,865,000	960,500	2,720,000	2,780,000
892223 - Wastewater Primary Process	877,000	993,500	176,900	562,500	146,500	104,800	352,800	155,600
892224 - Wastewater Secondary Process	505,500	145,000	294,500	499,500	120,000	35,000	25,000	33,000
892225 - Wastewater Dewatering Process	26,500	248,500	11,200	273,000	272,400	276,800	277,700	127,600
892226 - Wastewater Incineration Process	-	168,000	19,700	178,500	24,000	356,100	140,000	83,000
892231 - Industrial Waste Control	-	-	-	48,000	-	27,500	7,000	26,000
892235 - Wastewater Laboratories	18,500	40,100	18,100	36,700	14,200	17,900	186,200	167,400
892270 - Combined Sewer Overflow	831,800	800,000	1,094,600	-	-	-	-	-
892271 - Puritan Fenkell Combined Sewer Overflow	411,400	165,000	11,600	205,500	19,000	60,000	-	220,000
892272 - 7 Mile Combined Sewer Overflow	244,200	131,000	(6,400)	35,000	68,000	750,600	14,000	-
892273 - Hubble Southfield CSO	222,600	200,000	-	287,000	400,800	138,800	189,700	595,700
892274 - Leib Combined Sewer Overflow	19,600	382,000	-	198,800	144,600	45,900	67,300	58,700

Table 6 - Total Capital Outlay by Team (funded by both I&E and O&M) (continued)

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892275 - St Aubin Combined Sewer Overflow	336,800	229,400	31,600	45,000	178,000	73,000	18,500	19,100
892276 - Conner Creek Combined Sewer Overflow	269,700	515,000	-	791,500	324,700	489,700	397,500	367,500
892277 - Baby Creek Combined Sewer Overflow	141,000	302,000	26,900	324,800	434,000	234,000	451,100	248,300
892278 - Oakwood Combined Sewer Overflow	28,700	95,000	-	113,000	95,000	114,000	-	85,000
892279 - Belle Isle Combined Sewer Overflow	223,800	-	-	-	-	-	-	-
892301 - Systems Operations Control	23,800	1,375,000	6,700	1,475,000	1,375,000	1,375,000	1,375,000	1,375,000
892343 - Blue Hill Pumping Station	-	-	207,900	-	-	-	-	-
892345 - Conner Pumping Station	-	-	141,500	-	-	-	-	-
892352 - Woodmere Pumping Station	-	-	69,800	-	-	-	-	-
892421 - Facility and Fleet Operations	179,000	62,500	-	62,500	62,500	62,500	62,500	62,500
892422 - Fleet Operations	1,636,000	1,362,600	405,900	780,000	730,000	770,000	730,000	750,000
892431 - Field Service Operations	24,600	-	-	-	-	-	-	-
892501 - Energy, Research & Innovation	15,400	-	37,300	75,000	-	-	-	-
893201 - Organizational Development	-	-	-	350,000	-	-	-	-
893331 - Info Technology Infrastructure	-	500,000	-	500,000	500,000	500,000	-	-
893341 - Info Technology Enterprise	-	2,000,000	-	2,000,000	2,000,000	250,000	-	-
893351 - Info Technology Business Applications	-	2,375,000	-	2,250,000	500,000	-	-	-
894124 - Logistics and Materials	-	1,380,800	-	-	-	-	-	-
896101 - System Planning	-	-	-	-	150,000	-	-	-
896201 - Asset Management	-	14,000	-	-	-	-	-	-
896401 - System Analytics	605,700	1,061,000	-	770,000	772,100	774,200	776,400	778,700
896601 - Capital Improvement Planning	13,400	-	-	250,000	250,000	250,000	250,000	250,000
Grand Total	\$ 22,808,000	\$ 34,320,500	\$ 4,900,000	\$ 36,714,200	\$ 27,986,600	\$ 21,518,500	\$ 21,391,000	\$ 22,418,400

Capital Improvement Plan (CIP)

GLWA's CIP outlines the major capital asset investments in programs and projects to upgrade the Authority's water and wastewater system infrastructure, as well as the centralized service facilities and programs that support both systems. The CIP is a five-year plan which identifies capital projects and programs aimed to improve the system's reliability, redundancy, and operational efficiency as well as protect health and safety and their respective financing options. The plan also includes a ten-year outlook.

Projects are included in the CIP as recommended by the Water and Wastewater Master Plans, condition and needs assessments, regulatory requirements, and operational needs. The Comprehensive Water Master Plan and the Comprehensive Regional Wastewater Master Plan are long-term strategic planning tools that provide regional collaboration and planning to balance capital expenditures while implementing best practices in the treatment and transmission/conveyance of water and wastewater. Projects are vetted and prioritized to optimize capital investments.

The primary goals of the GLWA's CIP are the following:

- Provide a condensed volume of projects in a central location.
- Demonstrate alignment with the GLWA financial plan.
- Share the GLWA integrated master schedule.
- Provide transparency to the organizational goals.
- Meet regulatory and operational needs.
- Provide an opportunity to Member Partners & Communities to contribute to the plan.
- Address projects that promote improved redundancy, system resiliency, and health and safety.

While the GLWA Board of Directors approves the plan, the authority to spend does not occur until additional project review processes are completed prior to the procurement process. Depending on the scope and dollar amount of the project, final approval to proceed may include customer engagement, Chief Executive Officer review, and GLWA Board CIP Committee review and/or GLWA Board action.

Capital Improvement Plan at-a-glance

Water System	Sewer System
The adopted FY 2023-2027 Water CIP calls for \$965.6 million of major capital expenditures over the next five fiscal years.	The FY 2023-2027 Wastewater CIP calls for \$761.8 million of major capital expenditures over the next five fiscal years.
The FY 2023-2027 capital financing plan of \$772.5 million is based on an 80% Spend Rate Assumption	The FY 2023 - 2027 capital financing plan of \$571.3 is based on a 75% Spend Rate Assumption
The CIP addresses: <ul style="list-style-type: none"> ✓ Water delivery – 41.6% of capital expenditures ✓ Production – 46.8% of capital expenditures ✓ General Purpose, Programs and Central Services – 11.6% of capital expenditures 	The CIP addresses: <ul style="list-style-type: none"> ✓ Water Resource Recovery Facility – 33.2% of capital expenditures ✓ Collection and CSO – 29.2% of capital expenditures ✓ General Purpose, Programs and Central Services – 37.6% of capital expenditures
Funding - The CIP will be funded with revenue bonds, Drinking Water Revolving Fund loans and PAYGO	Funding - The CIP will be funded with revenue bonds, Clean Water Revolving Fund loans and PAYGO

CIP Update Process

Annually, this plan is updated to reflect changing system needs, priorities and funding opportunities. The CIP process is a substantial level of effort that involves many team members throughout the Authority. Modifications, adjustments, and improvements are continuously considered and vetted internally and externally through various Member Outreach Work Groups. Projects and programs that ultimately get funded within the CIP are typically identified based upon master planning or condition/need assessment efforts. Projects also are identified internally based upon the needs of engineers, operations, or maintenance staff. An internal effort to coordinate and prioritize all identified projects is conducted to ensure the appropriate projects are being funded in a prioritized manner. Water and wastewater projects are scored based on the eight criteria shown in table below.

No.	Weight	Criteria
1	12%	Condition
2	15%	Performance (Service Level/Reliability)
3	18%	Regulatory (Environmental/Legal)
4	11%	O&M
5	18%	Health & Safety
6	8%	Public Benefit
7	10%	Financial
8	8%	Efficiency & Innovation

For each project, a criteria score of 1 to 5 has been assigned, with a score of 1 representing minimal value or benefit, and 5 representing high value or benefit based on established definitions and scoring guidelines for each criteria. Weights for the eight criteria in the table have been established based on GLWA ranking of the relative importance of each criteria to GLWA's overall priorities. This year a revised methodology has been applied to improve and optimize the scoring and prioritization of projects by refining the alignment of the resulting project scores with GLWA's overall priorities and values. Below are some of the main revisions that were implemented:

- Health and Safety weighting was increased from 17% to 18%.
- Efficiency & Innovation weighting was decreased from 9% to 8%.
- A revised approach to the scoring methodology has been implemented to improve the scoring and prioritization of projects by considering the single highest purpose and benefit of each project.

The CIP processes will continue to improve and evolve to provide the various stakeholders with improved projections and reporting. During the CIP development process, considerations were taken for balancing capital expenditure demands without compromising our mission to implement best practices in water and wastewater treatment and transmission/conveyance. The timeline of this update process is provided in the Budget Process section.

The CIP should be considered a forward-looking planning document and not necessarily a budget. It is a dynamic and evolving plan that requires continual review and improvement. The timing can be dynamic – this is particularly true when there are interagency approvals and innovative alternatives that occur in the design phase. The estimates vary in precision depending on the project phase. Short-term project cost estimates are more defined than long-term project cost estimates because short-term anticipated projects are typically better characterized by studies or scoped by design. Execution of the CIP will provide greater system reliability and result in meeting or exceeding current service levels. The current and prior [Capital Improvement Plans](#) are available on GLWA's website.

Capital Financing

The goals of the Authority's capital financing strategy are to:

- Recover the capital investment costs over the useful lives of the capital assets.
- Balance the needs of the water and sewage system with revenue requirements.
- Protect and enhance the Authority's financial position.
- Maintain affordable charges by investing wisely in system renewal and revitalization.

Recognizing the difference in scope between the CIP and the tactical financial plan, GLWA implemented a "[Capital Spend Rate Assumption Policy](#)" adopted in 2018 by the Board of Directors. The Spend Rate Assumption (SRA) policy provides an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA's control. Those limitations, whether financial or nonfinancial, necessitate the SRA for budgetary purposes, despite the prioritization established in the CIP. The outcome is a reasoned balance between a desired level of capital investment with financial strategies to manage debt levels and

control adjustments to customer charges. Annually, a projected spend rate assumption for the financial plan related to the proposed capital improvement plan will be established based upon pertinent factors and data available at that time. Such pertinent factors and data will include the mix of projects and phases in the proposed CIP, interdependency risk, criticality, and other measures provided by the GLWA team members that develop and manage the CIP projects. That spend rate assumption will be presented to the Audit Committee no later than December 31st each year after the GLWA Board, Capital Improvement Planning Committee, and Member Partners have had the opportunity to review the draft capital improvement plan. For this five-year financial plan, the capital improvement plan project expenses are netted to 80% for the water system and 75% for the sewer system. This differential is based on historical variances and the project mix in the CIP.

The intersection of the CIP and the GLWA's overall financial plan balances several objectives to support the Authority's mission. Those objectives include the following:

- ✓ Transparency in the development of the financial plan
- ✓ Collaboration internally and externally
- ✓ Ensure sustainability
- ✓ Reduced the debt burden
- ✓ Smoothing of annual adjustments to service charges
- ✓ Improve the Authority's financial position

The Authority draws upon five sources of funding for its CIP:

❖ **Bond Proceeds**

The Authority uses an incremental method of funding long-lived capital projects through a bond financing program rather than funding all projects in advance. The Authority issues revenue bonds pursuant to Michigan Public Act 94 of 1933 (the Revenue Bond Act). The Act provides a pledge of "net revenues" for the payment of the bond principal and interest. "Net revenues" means the revenues of the system remaining after deducting expenses for administration, operation, and maintenance of the water and sewer systems.

❖ **Revenue Financed Capital (Improvement & Extension Fund)**

Based upon ongoing expense, capital, and revenue optimization efforts, the Authority is able to build reserves to use pay-as-you-go funding for shorter-lived and lower-dollar capital expenditures. These funds are accounted for in the Improvement & Extension fund. In addition, establishing sufficient revenue financed capital is critical to strategically reducing the water and sewer systems' reliance on long-term debt. Striking the optimal balance between bond proceeds and revenue financed capital will lower the cost of capital over the long-term. Revenue financed capital is budgeted for use only after it is received to minimize financial plan risk. When I&E funds are assigned to offset a portion of the costs of specific capital expenses, a transfer is made from the I&E Fund to the Construction Bond Fund.

❖ **State and Federal Loan Programs**

The Authority actively seeks funding from lower cost financing programs including the State Revolving Fund (SRF) loan program which includes federal financing. The SRF loan program

includes both the Drinking Water State Revolving Fund (DWSRF) loan program and the Clean Water State Revolving Fund (CWSRF) loan program.

❖ **Grants**

The Authority utilizes public grants programs such as Stormwater, Asset Management, and Wastewater (SAW) program which provides both grants and loans. GLWA is pursuing federal and private grants for energy optimization. This funding area may evolve given recent legislation at the Federal and State levels.

❖ **Contributed Capital**

Periodically, the Authority may have the opportunity to partner with other public and private entities for the design and construction or improvement of an asset. Depending on the nature of the shared financing strategy, the Authority may offset the cost of system expansion or improvements with direct or indirect contributed capital from that partner.

The long-term financial plan differentiates between appropriate uses of long-term debt versus revenue financed capital in the Improvement & Extension (I&E) Fund as defined in the MBO. As a general rule assets with a life of less than 20 years are funded with I&E Funds. An example of an exception to the rule is some plant improvements. Otherwise, assets with a life greater than 20 years are funded with a blend of debt and I&E Funds. Building up I&E Funds over time allows GLWA to position itself to further reduce reliance on debt. Exceptions to that plan may be to take advantage of lower cost borrowings from the revolving fund loan programs or a revision of the plan to optimize refunding savings. For this reason, the five-year financial plan is regularly reviewed during the fiscal year. Updates may also occur due to grant awards, collaboration opportunities, and changes in budgetary conditions. The financial plan reflects grants and federal and state loans only after approval is received by the grantor or authorized party.

Accounting

To ensure proper accountability of funding sources and uses, the Authority's water and wastewater systems each utilizes two funds for its capital program which are described below:

❖ **Construction Fund**

This fund is used to account for constructed assets that will be capitalized improvement in future years. Revenues, or incoming resources for this fund include bond proceeds and related interest earnings as well as transfers in from the Improvement & Extension Fund for "pay as go" financing. The balance of bond funds and I&E funds is designed to lower the cost of capital improvements.

❖ **Improvement & Extension (I&E) Fund**

The I&E Fund is defined by the Authority's Master Bond Ordinance (MBO) as the "fund used for improvements, enlargements, extensions or betterment" of the System. Cash receipts of the Authority are transferred into the I&E Fund pursuant to a flow of funds after commitments are met for a monthly allocation of operations and maintenance expense, debt service, pension, WRAP, budget stabilization fund, and extraordinary repair and replacement fund as administered by a trustee. Capital outlay items are funded with I&E Funds. Capital outlay are

items that are generally purchased (rather than constructed) and with an estimated useful life of less than 20 years. As a general rule, assets in the CIP with a life of less than 20 years are funded with I&E funds.

The basis of accounting for the capital spending is the accrual basis. Under this basis of accounting, revenues are recognized when earned and measurable regardless of when collected; and expenses are recorded, or accrued, on a matching basis when incurred. Accrued expenses are expected to be paid in a subsequent accounting period.

Revenue Requirements

Revenue requirements are the basis for establishing customer charges. Included in that calculation are operations and maintenance expense, debt service, Master Bond Ordinance (MBO) reserve requirements, system lease requirements, revenue financed capital targets, water residential assistance program commitments, and legacy obligations. Each of these elements is allocated to the cost pools listed below that align with customer's use of the system. The debt service and revenue financed capital revenue requirements are allocated to cost pools based on the Authority's investment in fixed assets. The cost of capital improvements will impact future fixed asset records, and future charges.

Water Cost Pools

1. **Water Treatment Plants (WTP)** represents treatment related costs that are allocable to customers based primarily on their contractual max day demands.
2. **Conveyance** represents costs related to transmitting water to customers that are allocable to customers based primarily on their contractual peak hour demands.

There are other sub-functions that are utilized in the Water Charge Methodology.

Wastewater Cost Pools

1. **Water Resource Recovery Facility (WRRF)** represents treatment related costs that are allocable to customers based on their contribution of sanitary and total volumes.
2. **Conveyance** represents costs that are allocable to customers based on their contribution of total volumes.
3. **CSO 83/17** represents capital costs that are allocated based upon terms of service agreements with the Authority's customers. These agreements assign 83% of "combined sewer overflow control facilities" (CSO) costs to City of Detroit customers and 17% to other customers

The following table summarize the assignment of proposed capital improvement expenditures to the various cost pools. The Wastewater projects are currently all assigned as “To Be Determined” (TBD) pending discussion of Master Plan strategies and alignment with the Authority’s service agreements with Wastewater customers and the associated Wastewater Charge Methodology.

Capital Improvement Plan Cost Pool Allocation							
Cost Pool	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total FY 2023- 2027	Percent of Five Year Total
Water							
Conveyance	\$ 134,009	\$ 147,283	\$ 151,775	\$ 127,894	\$ 102,122	\$ 663,084	68.7%
WTP	60,367	78,153	69,841	46,786	47,417	302,565	31.3%
Total Water	<u>\$ 194,376</u>	<u>\$ 225,436</u>	<u>\$ 221,616</u>	<u>\$ 174,681</u>	<u>\$ 149,539</u>	<u>\$ 965,648</u>	<u>100.0%</u>
80% Spend Rate Assumption (1)	\$ 155,501	\$180,349	\$177,293	\$139,745	\$119,631	\$772,519	
Wastewater							
TBD	<u>\$ 125,932</u>	<u>\$ 162,313</u>	<u>\$ 184,523</u>	<u>\$ 157,689</u>	<u>\$ 131,307</u>	<u>\$ 761,764</u>	<u>100.0%</u>
75% Spend Rate Assumption (1)	\$94,449	\$121,735	\$138,392	\$118,267	\$98,480	\$571,323	

(1) Amounts included in Biennial Budget & Five Year Financial Plan-See Core Financial Plan Schedules 5C & 5D

Water CIP

The Water CIP supports activities to carry out the Water Master Plan completed in 2015 and accepted by the GLWA Board in 2016. The Master Plan is based on new forecasts of population and water use and by identifying the lowest life cycle solutions in collaboration with our member partners.

There are seven priorities identified in the Water Master Plan:

- ❖ Reduce water treatment plant capacity to align with projected water demand
- ❖ Reduce non-revenue water
- ❖ Reduce energy use and energy costs
- ❖ Collaborate with customers to address long standing water transmission problems
- ❖ Update water quality goals and monitoring efforts
- ❖ Optimize return on investments using asset management to prioritize capital improvements
- ❖ Renew and rehabilitate the water distribution system in the City of Detroit (Note that this priority was identified prior to the effective date of GLWA operations. The costs to rehabilitate the City's system are borne by the Detroit Water & Sewerage Department (DWSD). This significance to GLWA shifts to effective planning and coordination with the DWSD.)

The [Water Master Plan](#) is available on GLWA's website.

Sewer CIP

The Wastewater Master Plan (WWMP) which was started in 2017 was completed in June 2020. This was a collaborative effort with member partners, MDEQ and other agencies, and regional stakeholders. The plan ensures that the wastewater system meets current and future needs and is able to provide cost-efficient, regulatory-compliant and reliable services to the GLWA communities for the next 40 years.

There are five desired outcomes identified in that plan which will serve as filters in determining which projects will be included in the plan:

- ❖ Protect public health and safety
- ❖ Preserve natural resources and a healthy environment
- ❖ Maintain reliable, high-quality service
- ❖ Assure value of investment
- ❖ Contribute to economic prosperity

The [Wastewater Master Plan](#) is available on GLWA's website.

CIP Summary

The tables below summarize the Water Fund and Sewage Disposal Fund CIP Expenditures by project categories.

Water Capital Improvement Plan (\$000)									
Category	Lifetime Thru FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028 & Beyond	Project Total
Treatment Plants & Facilities									
Lake Huron	\$ 22,263	\$ 13,783	\$ 14,840	\$ 11,917	\$ 13,173	\$ 15,347	\$ 18,657	\$ 130,632	\$ 240,612
Northeast	1,416	143	3,760	17,760	6,760	2,760	2,760	51,749	87,108
Southwest	6,003	3,422	4,398	-	-	-	-	67,812	81,634
Springwells	149,374	26,829	13,523	30,650	35,252	26,580	26,000	352,425	660,633
Water Works Park	13,280	12,366	17,790	16,622	13,890	2,100	-	124,334	200,382
General Purpose	30,633	13,663	15,893	15,471	13,663	13,663	-	-	102,986
Total Treatment Plants & Facilities	222,970	70,205	70,204	92,420	82,738	60,450	47,417	726,952	1,373,356
Field Services -									
Transmission System	84,024	80,869	84,269	118,686	126,213	100,990	83,530	161,972	840,553
System Control Center -									
Pump Stations/Reservoir	17,836	26,641	17,505	1,642	3,580	5,000	10,000	287,646	369,850
Metering - General Purpose									
	8,618	2,496	545	-	-	-	-	-	11,658
Programs	13,415	16,158	21,286	11,390	8,326	8,241	8,592	219,450	306,858
Total Water Projects	346,862	196,369	193,809	224,138	220,857	174,681	149,539	1,396,019	2,902,274
Central Service Projects Allocated to Water									
Security	4,179	60	-	-	-	-	-	-	4,239
Energy Management	7	-	-	-	-	-	-	-	7
General Purpose	-	-	-	-	-	-	-	25,000	25,000
Programs	-	602	567	1,298	759	-	-	-	3,226
Total Central Services Allocated To Water	4,185	662	567	1,298	759	-	-	25,000	32,471
Total Water CIP	\$351,047	\$ 197,030	\$ 194,376	\$ 225,436	\$ 221,616	\$ 174,681	\$ 149,539	\$ 1,421,019	\$ 2,934,745
80% Spend Rate Assumption (1)			\$155,501	\$180,349	\$177,293	\$139,745	\$119,631		

(1) Amounts included in Biennial Budget & Five Year Financial Plan-See Core Financial Plan Schedules 5C & 5D

Wastewater Capital Improvement Plan (\$000)

Category	Lifetime Thru FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028 & Beyond	Project Total
Water Resource Recovery Facility									
Primary Treatment	\$ 92,733	\$ 13,282	\$ 14,068	\$ 26,074	\$ 30,574	\$ 31,494	\$ 29,161	\$ 222,648	\$ 460,033
Secondary Treatment & Disinfection	50,017	-	-	2,290	14,073	13,678	15,125	151,431	246,614
Residuals Management	20,465	4,090	750	2,417	1,667	4,867	4,500	178,500	217,255
IWC	14,232	50	-	-	-	-	-	-	14,282
General Purpose	8,464	3,916	12,714	25,088	22,021	16,745	2,488	1,050	92,486
Total WRRF	185,912	21,338	27,532	55,868	68,335	66,784	51,273	553,629	1,030,671
Field Services									
General Purpose	1,229	3,371	4,849	5,527	5,516	667	-	-	21,160
Inteceptors	38,957	17,503	26,311	21,361	25,733	21,244	16,124	19,573	186,807
Total Field Services	40,187	20,874	31,160	26,889	31,249	21,911	16,124	19,573	207,967
System Control Center									
General Purpose	30,338	17,469	32,521	38,895	31,097	10,943	6,249	44,488	212,000
Pumping Stations	40,931	13,384	10,792	19,818	32,653	32,692	30,177	122,364	302,812
In System Devices	-	-	-	233	1,000	1,229	1,229	42,626	46,317
Total SCC	71,270	30,853	43,312	58,946	64,750	44,864	37,655	209,479	561,129
Programs	22,762	29,439	15,863	12,073	13,026	11,544	9,894	1,051,965	1,166,567
CSO Facilities									
Multiple CSO Facilities	2,134	3,202	5,205	3,260	2,962	8,185	10,566	41,984	77,499
Hubbell Southfield	-	-	533	1,600	1,600	1,800	3,394	31,419	40,346
Leib	-	-	-	-	-	-	-	-	-
Conner Creek	284	2,258	-	-	-	-	-	-	2,542
Baby Creek	2,140	1,259	2,328	3,678	2,600	2,600	2,400	1,288	18,293
Oakwood	805	-	-	-	-	-	-	-	805
Total CSO Facilities	5,363	6,719	8,065	8,537	7,162	12,585	16,360	74,692	139,484
Total Wastewater Projects	325,494	109,223	125,932	162,313	184,523	157,689	131,307	1,909,338	3,105,818
Central Service Projects Allocated to Wastewater									
Security	1,901	-	-	-	-	-	-	-	1,901
Total Wastewater CIP	\$ 327,394	\$ 109,223	\$ 125,932	\$ 162,313	\$ 184,523	\$ 157,689	\$ 131,307	\$ 1,909,338	\$ 3,107,719
75% Spend Rate Assumption (1)			\$94,449	\$121,735	\$138,392	\$118,267	\$98,480		

(1) Amounts included in Biennial Budget & Five Year Financial Plan-See Core Financial Plan Schedules 5C & 5D

CIP Types

A "Project" consists of the replacement and/or rehabilitation of specific capital assets within a finite timeframe and scope.

A "Program" consists of the replacement and/or rehabilitation of specific capital assets on an ongoing or recurring basis. The program scope and/or projected expenses may vary from year-to-year depending on the needs identified within the program and as newly established programs develop consistent schedules, requirements, and history over time. Although not typically identified in the CIP future years projected expenses, these programs will typically be funded in perpetuity.

Categories

The table below lists the categories of CIP and whether they are considered recurring.

Category	Type	Recurring
Water		
Treatment Plants & Facilities	Project	No
Field Services	Program	Yes
System Control Center	Project & Program	Yes
Metering	Program	Yes
Programs	Program	Yes
Wastewater		
Water Resourc Recovery Facility	Project	No
Field Services	Program	Yes
System Control Center	Project & Program	Yes
Programs	Program	Yes
CSO Facilities	Project	No
Central Services		
Security	Program	Yes
Energy Management	Project	No
General Purpose	Program	Yes
Programs	Program	Yes

Nonrecurring Projects in the CIP for FY 2023 through FY 2027

The tables below list the nonrecurring projects that are budgeted for FY 2023 through FY 2027 that are greater than \$30 million. There are nine (9) projects in the Water category and seven (7) projects in the Wastewater category.

Water Nonrecurring Projects with 2023-2027 CIP Total Greater than \$30M (\$000)											
CIP #	Project Title	Lifetime Actual Thru FY 2021	Projected Expenditures								
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028+	FY 2023-2027 CIP Total	Project Total
114002	Springwells Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improvements	12,944	14,472	12,000	20,000	25,952	25,000	26,000	145,539	108,952	281,908
122004	96-inch Water Transmission Main Relocation and Isolation Valve Installations	9,674	8,533	15,000	40,000	40,000	40,000	35,000	71,636	170,000	259,843
122003	Water Works Park to Northeast Transmission Main	21,325	7,089	23,904	19,122	19,069	19,069	19,069	19,122	100,233	147,768
122013	14 Mile Transmission Main Loop	10,464	26,882	29,636	29,216	15,223	-	-	-	74,075	111,420
116002	Pennsylvania and Springwells Raw Water Supply Tunnel Improvements	30,633	13,663	13,663	13,701	13,663	13,663	-	-	54,690	98,986
122016	Downriver Transmission Main Loop	1,620	2,226	7,500	15,000	15,000	5,000	5,000	11,615	47,500	62,962
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	1,454	1,023	1,023	3,401	11,857	11,857	11,857	18,257	39,995	60,729
115001	Water Works Park Water Treatment Plant Yard Piping, Valves and Venturi Meters Replacement	5,750	11,790	11,790	11,822	11,790	2,100	-	-	37,502	55,042
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	-	1,999	1,999	2,004	9,582	9,582	9,582	19,190	32,749	53,938

Wastewater Nonrecurring Projects with 2023-2027 CIP Total Greater than \$30M (\$000)											
CIP #	Project Title	Lifetime Actual Thru FY 2021	Projected Expenditures								Project Total
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028+	FY 2023-2027 CIP Total	
232002	Freud & Conner Creek Pump Station Improvements	10,560	3,780	10,753	19,818	32,653	32,692	30,177	122,364	126,095	262,798
211007	WRRF PS #2 Bar Racks Replacements and Grit Collection System Improvements	1,509	3,000	2,461	13,104	13,104	13,104	13,104	29,383	54,878	88,771
211006	WRRF PS No. 1 Improvements	3,492	600	8,100	10,136	10,136	10,136	10,136	17,305	48,645	70,042
260701	Conveyance System Infrastructure Improvements	1,384	5,774	15,639	17,041	11,793	4,000	-	-	48,473	55,631
212008	WRRF Aeration Improvements 1 and 2	583	-	-	1,500	13,283	13,283	13,069	32,165	41,136	73,884
222001	Oakwood District Intercommunity Relief Sewer Modification at Oakwood District	475	1,182	1,182	1,185	10,818	14,123	13,003	11,497	40,311	53,466
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	262	1,500	2,510	10,848	10,848	14,258	-	-	38,464	40,226

The following tables outline the impact of these nonrecurring projects on the financial plan. In general, improvements to the system provide for more efficient operations. In the table below, projects are noted which have additional elements for optimizing operations and reducing O&M costs. Many of these align with the Water Master Plan Right-Sizing strategies that have incorporated the 2015 Water Master Plan recommendations to right size infrastructure to allow for future capital cost avoidance and will result in reduced O&M costs due to right sizing of the infrastructure. A specific aspect of the plan is the Northeast Water Treatment Plant (NEWTP) Repurposing in alignment with the 2015 Water Master Plan recommendations to repurpose the plant to allow for future capital cost avoidance. Redundancy & Reliability identifies projects that have a direct impact at improving system redundancy and reliability – generally a key factor ensuring service levels and reducing risk.

Water Nonrecurring Projects – Impact on Financial Plan			
Project/Project Drivers	Optimized Operations/ Reduce O&M Costs	Service Level Reliability & Redundancy Improved	DWSRF Project No. (Lower Cost of Capital)
CIP # 114002 - Springwells Water Treatment Plant Low-Lift and High-Lift Pumping Station Improvements <ul style="list-style-type: none"> Replace equipment and associated appurtenances placed in service from 1930 to 1958 (exceeded original design life). Serviceability hindered by lack of replacement parts. 	WMP Rightsizing and NEWTP Repurposing. Rightsizing the pumps (reducing number of and size of the pumps and adding variable frequency drives) will result in lower power bills.	Yes	
CIP # 122004 - 96-inch Water Transmission Main Relocation and Isolation Valve Installations <ul style="list-style-type: none"> Relocate 2.5 miles of transmission main currently located in landfill and crossing the Clinton River Install additional isolation valves 		Yes	7532-01 7532-02
CIP # 122003 - Water Works Park to Northeast Transmission Main <ul style="list-style-type: none"> Facilitates the rightsizing of the system. This project involves construction of yard piping and water transmission mains. 	WMP Rightsizing and NEWTP Repurposing	Yes	7445-01 7445-02 7445-03 7445-05
CIP # 122013 - 14 Mile Transmission Main Loop <ul style="list-style-type: none"> A single feed water transmission main serves over 250,000 people, including health care facilities, schools and businesses. This project provides a second transmission main loop to provide redundancy on this branch of the system. Operation of both mains in parallel will reduce the operating pressure on the existing main, which will lessen potential breaks on the existing main. 		Yes	7461-01 7461-02
CIP # 116002 – Pennsylvania and Springwells Raw Water Supply Tunnel Improvements <ul style="list-style-type: none"> Four sections of the Pennsylvania, Springwells, and Northeast Tunnels require repairs that range in length from 60 to 400 lineal feet. The repairs address cracking to prevent soil infiltration and potential loss of service for extensive portions of the GLWA water service area. 		Yes	
CIP # 122016 – Downriver Transmission Main Loop <ul style="list-style-type: none"> Provide a transmission main loop to the Downriver system to provide redundancy on this branch of the system. 		Yes	

Water Nonrecurring Projects – Impact on Financial Plan

Project/Project Drivers	Optimized Operations/ Reduce O&M Costs	Service Level Reliability & Redundancy Improved	DWSRF Project No. (Lower Cost of Capital)
CIP # 122017 – 7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow control Station <ul style="list-style-type: none"> • Provide backup water service from Springwells WTP to Water Works and Northeast Service Areas. • Support Northeast WTP repurposing by providing a second finished water supply main to the Northeast site 	WMP Rightsizing	Yes	
<ul style="list-style-type: none"> • CIP # 115001 - Water Works Park Water Treatment Plant Yard Piping, Valves and Venturi Meters Replacement • The existing yard piping is 80-140 years old and requires replacement with new piping installed in a more efficient configuration. • This project is being coordinated with the new Waterworks Park to Northeast Transmission Main. 	WMP Rightsizing and NE WTP Repurposing	Yes	
<ul style="list-style-type: none"> • CIP # 122018 – Garland, Hurlbut, Bewick Water Transmission System Rehabilitation • Rehab of water transmission mains within the east side of the City of Detroit. • This project will include a detailed condition assessment to evaluate the appropriate rehabilitation method. 	Innovation and NE WTP Repurposing	Yes	

Sewer Nonrecurring Projects – Impact on Financial Plan

Project/Project Drivers	Optimized Operations/ Reduce O&M Costs	Service Level Reliability & Redundancy Improved	CWSRF Project No. (Lower Cost of Capital)
CIP # 232002 - Freud & Conner Creek Pump Station Improvements <ul style="list-style-type: none"> • The primary objective is to improve performance of Connor Creek and Freud sewage pumping stations. • Optimize the utilization of interconnected piping and operation between both pumping stations and the Connor Creek Retention and Treatment Basin. 	Updated improvements are expected to reduced current O&M costs. However, a new sanitary PS will introduce additional O&M costs.	Yes	5707-01 5708-01

Sewer Nonrecurring Projects – Impact on Financial Plan			
Project/Project Drivers	Optimized Operations/ Reduce O&M Costs	Service Level Reliability & Redundancy Improved	CWSRF Project No. (Lower Cost of Capital)
CIP # 211007 - WRRF PS #2 Bar Racks Replacements and Grit Collection System Improvements <ul style="list-style-type: none"> Efficient, state-of-the-art, grit collection and pumping system and grit washing and classification to reduce truck traffic and cost of disposal. Improve the performance of all downstream processes, reduce maintenance costs and increase life of downstream equipment. New instrumentation and controls for operations and monitoring. Addresses plant operational inefficiencies that cause downtime for maintenance and risk permit violation. 	Innovation	Yes	Intent to apply
CIP # 211006 – WRRF PS No. 1 Improvements <ul style="list-style-type: none"> Condition assessment and rehabilitation of all pumps at Pump Station 1 	Innovation	Yes	Intent to apply
CIP # 260701 – Conveyance System Infrastructure Improvements <ul style="list-style-type: none"> Assess the structure and functionality of the VR-Gates, ISDs, Regulators, Backwater Gates, and Access Hatches and provide the necessary Design, Construction, and Construction Assistance for their replacement/rehabilitation as they have reached their life expectancy. 	Preventing river inflow/infiltration will reduce treatment costs	Yes	5741-01
CIP # 212008 - WRRF Aeration Improvements 1 and 2 <ul style="list-style-type: none"> The Intermediate Lift Pumps convey primary effluent to the secondary bioreactors (aeration decks) have reached their useful life and are in need of replacement. Provides for increased in operational efficiency. 	Innovation	Yes	Intent to apply
CIP # 222001 – Oakwood District Intercommunity Relief Sewer Modification at Oakwood District <ul style="list-style-type: none"> Implement the WWMP recommended relief connection from the NWI to the Oakwood PS 	WW Master Plan	Yes	Intent to apply
CIP # 216008 – Rehabilitation of Screened Final Effluent (SFE) Pump Station <ul style="list-style-type: none"> The SFE Pump Station provides SFE water to many of the GLWA WRRF treatment processes and needs to be completely rehabilitated to maintain uninterrupted supply of SFE water to these processes. 	WW Master Plan	Yes	Intent to apply

Debt Management Objective

A clear long-term objective of the Great Lakes Water Authority (GLWA) is to reduce the level of annual debt service as a percent of the revenue requirements to reach our organizational goal of a bond credit rating of AA. For the FY 2023 budget, debt service is 42% of the water system revenue requirement and 43% of the sewer system revenue requirement. For the FY 2024 budget, debt service is 43% of the water system revenue requirement and 45% of the sewer system revenue requirement. Where possible, the GLWA is seeking to maximize the use of lower interest cost loan programs through the State Revolving Fund such as the Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF) programs.

Purpose

Pursuant to the terms of the regional system lease agreements dated June 12, 2015, and subsequent bondholder consent achieved in November 2015, the GLWA is the successor obligor for the former City of Detroit Water & Sewerage Department (DWSD) revenue bonds. Revenues from both the DWSD and GLWA systems represent pledged assets for the payment of the bonds. Revenues collected from both systems are deposited with the Trustee pursuant to the terms of the GLWA Master Bond Ordinance (MBO). The Trustee then distributes and maintains trust accounts for specified purposes including the payment of debt obligations. The MBO and lease agreements are available online at <https://www.glwater.org/investor-relations/>.

The Authority issues revenue bonds to fund regional system capital improvement project costs and to refund previous revenue bond issuances if targeted savings can be achieved. The Authority also issues revenue bonds on behalf of the local system as the regional system leases provide that GLWA will finance local system improvements of the DWSD. GLWA is the obligor of 100% of the debt payable which is recorded in GLWA's books. An "obligation receivable" is recorded by GLWA which represents the amount related to the DWSD local system improvements. Accordingly, DWSD records an "obligation payable" for a like amount. GLWA maintains detailed records of all debt issuances and how the responsibility for payment of debt is allocated between the regional system and local system, as well as between the water and sewer systems. GLWA and DWSD regularly reconcile interrelated accounts between the entities.

The following table summarized the purpose of the bond issues since GLWA's inception and the savings from the refunding bond issues.

	Purpose of Bond Issue						
Bond Issue	Construction Funds			Refunding	Total Bond Issue	Cash Flow Savings	Net PV Savings
	Regional System	Local System	Total				
Water System (\$ millions)							
Series 2016	\$ 201.1	\$ 50.7	\$ 251.8	\$ 666.0	\$ 917.8	\$ 185.4	\$ 120.8
Series 2018	-	-	-	155.6	155.6	30.9	24.9
Series 2020	-	85.6	85.6	377.5	463.1	103.1	66.5
Total Water	\$ 201.1	\$ 136.3	\$ 337.4	\$ 1,199.1	\$ 1,536.5	\$ 319.4	\$ 212.2
Sewage Disposal System (\$ millions)							
Series 2016	\$ -	\$ -	\$ -	\$ 421.3	\$ 421.3	\$ 123.7	\$ 71.2
Series 2018	-	81.6	81.6	175.9	257.5	54.0	34.5
Series 2020	-	-	-	687.5	687.5	221.0	122.9
Total Sewer	\$ -	\$ 81.6	\$ 81.6	\$ 1,284.6	\$ 1,366.2	\$ 398.8	\$ 228.6
Combined (\$ millions)							
Series 2016	\$ 201.1	\$ 50.7	\$ 251.8	\$ 1,087.3	\$ 1,339.1	\$ 309.1	\$ 191.9
Series 2018	-	81.6	81.6	331.5	413.1	84.9	59.4
Series 2020	-	85.6	85.6	1,065.0	1,150.6	324.1	189.4
Total Combined	\$ 201.1	\$ 217.9	\$ 419.0	\$ 2,483.7	\$ 2,902.7	\$ 718.2	\$ 440.7

Debt Management Policy

GLWA has a Debt Management Policy that was approved by the Board. GLWA has the right to waive or modify any of the policies with Board approval. The policy governs the issuance and management of all bonds and other forms of indebtedness of the GLWA, together with any credit, liquidity, or other security instruments and agreements that may be executed in connection with the issuance of bonds and other forms of indebtedness. The Policy formally establishes parameters for issuing debt and managing a debt portfolio which considers GLWA's specific capital improvement needs, ability to repay financial obligations, and the existing legal, economic, financial and debt market conditions. The [Debt Management Policy](#) can be found on the GLWA website.

The goals and objectives of the policy are listed below.

- ❖ Promote cooperation and coordination with all stakeholders in the financing and delivery of services by:
 - Seeking the lowest cost of capital reasonably available and minimizing financing costs for capital projects and other debt issuances.

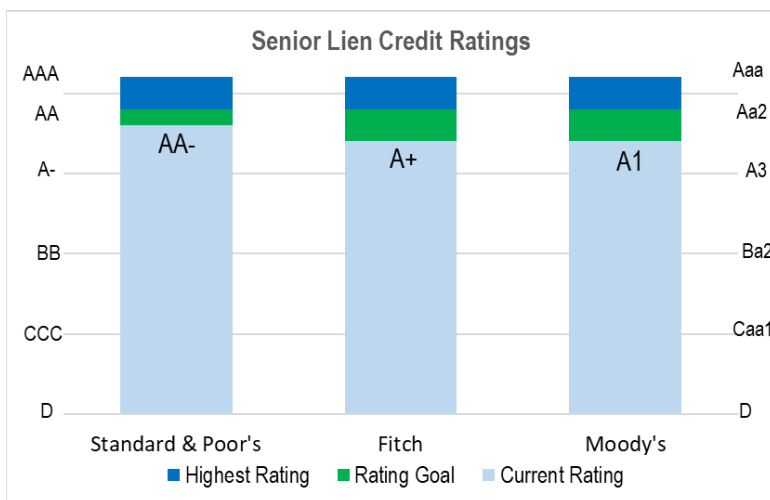
- Establishing criteria to determine use of financing sources (Long and Short-Term debt, Pay-As-You-Go (PAYGO) financing, grants, and other Alternative Forms of Financing).
- Evaluating debt issuance options including the amount and type of debt.
- Minimizing the use of unplanned, short-term cash flow borrowings by maintaining adequate working capital and authorizing the minimum amount required to offset mismatches between available cash and cash outflows determined by cash flow analysis.
- ❖ Promote sound financial management to maximize and best utilize future debt capacity by:
 - Maximizing administrative and operating flexibility.
 - Minimizing Legal and Financial Risk to current and future budgets.
 - Protecting GLWA's credit ratings in order to maintain access, on the best available terms, to local, regional and national credit markets.
 - Maintaining an appropriate level of operating cash reserves.
 - Maintaining reasonable and justifiable levels of rates and fees that address the current and future needs of stakeholders.
 - Improving the quality of decisions and parameters for justification on debt structure

Debt Limits

As a regional authority established under Michigan Public Act 233 of 1955, GLWA may only issue Revenue Bonds under Michigan Public Act 94 of 1933 (PA 94). PA 94 does not have a legal debt limitation for the amount of outstanding bonds that GLWA may issue. Under the Master Bond Ordinance (MBO), GLWA is authorized to issue additional bonds, but only if GLWA certifies that the additional bonds debt service coverage for each priority of lien (regardless of the priority of lien of the additional bonds) is not less than the required coverage as stated in the MBO.

Credit Ratings

One of the Authority's organizational strategic goals is a bond credit rating of AA. The Authority discusses a plan to reach that goal in Section 1 Financial Plan under the Organizational Strategic Goals of this budget document. The following table summarizes the Authority's progress towards meeting that credit rating goal.



The following tables provide the history of the credit ratings as of June 30th for the Water Supply System Revenue Bonds and Sewage Disposal System Revenue Bonds.

Water Supply System Revenue Bonds					
	2017	2018	2019	2020	2021
Standard & Poor's					
Senior Lien	A-	A-	AA-	AA-	AA-
Second Lien	BBB+	BBB+	A+	A+	A+
Junior Lien	N/A	N/A	A+	A+	A+
Moody's					
Senior Lien	A3	A3	A2	A1	A1
Second Lien	Baa1	Baa1	A3	A2	A2
Fitch					
Senior Lien	A	A	A	A+	A+
Second Lien	A-	A-	A-	A	A

Sewage Disposal System Revenue Bonds					
	2017	2018	2019	2020	2021
Standard & Poor's					
Senior Lien	A-	A-	A+	AA-	AA-
Second Lien	BBB+	BBB+	A	A+	A+
Junior Lien	N/A	N/A	A	A+	A+
Moody's					
Senior Lien	A3	A3	A2	A1	A1
Second Lien	Baa1	Baa1	A3	A2	A2
Fitch					
Senior Lien	A	A	A	A+	A+
Second Lien	A-	A-	A-	A	A

Debt Service Coverage

GLWA computes the debt service coverage ratio using two different methodologies. The Rate Covenant Method uses the cash basis in computing pledged revenue and the GAAP Method uses the accrual basis in computing pledged revenue. Pledged revenue is divided by the debt service requirements of each lien on a set aside basis to compute the debt service coverage ratio. The set aside basis is defined as the cash available to make the debt service payments on the due dates. The following table details the components of the pledged revenue for each methodology.

Pledged Revenue Components	Pledged Revenue Calculation	Rate Covenant Method	GAAP Method
Revenues	Addition	Cash basis	Accrual basis
GLWA O&M expenses	Subtraction	Cash basis	Accrual basis
GLWA O&M pension	Subtraction	Cash basis	Cash basis
DWSD O&M expenses & O&M pension	Subtraction	Cash transfers to DWSD	Cash transfers to DWSD

The following tables provided a summary of the MBO required minimum, historical, and budgeted debt service coverage.

Debt Service Coverage Water System							
	MBO Required Minimum	Actual 2019	Actual 2020	Actual 2021	Adopted Budget 2022	Adopted Budget 2023	Adopted Budget 2024
Rate Covenant Method							
Senior Lien Bonds	1.20	2.13	1.94	1.99	1.89	1.80	1.88
Senior and second lien bonds	1.10	1.54	1.39	1.40	1.37	1.33	1.40
All bonds, including SRF junior lien	1.00	1.51	1.37	1.38	1.32	1.27	1.29
GAAP Method							
Senior Lien Bonds		2.04	1.98	1.99			
Senior and second lien bonds		1.47	1.43	1.40			
All bonds, including SRF junior lien		1.45	1.40	1.38			

Debt Service Coverage Sewage Disposal System							
	MBO Required Minimum	Actual 2019	Actual 2020	Actual 2021	Adopted Budget 2022	Adopted Budget 2023	Adopted Budget 2024
Rate Covenant Method							
Senior Lien Bonds	1.20	2.11	2.15	2.92	2.42	2.17	2.28
Senior and second lien bonds	1.10	1.62	1.64	1.97	1.74	1.74	1.72
All bonds, including SRF junior lien	1.00	1.29	1.29	1.51	1.35	1.37	1.35
GAAP Method							
Senior Lien Bonds		2.10	2.16	2.55			
Senior and second lien bonds		1.62	1.65	1.72			
All bonds, including SRF junior lien		1.28	1.30	1.32			

Debt Requirements through Maturity

The following tables provide the aggregate debt service requirements for the Authority's debt (fixed and variable-rate) instruments as of June 30, 2021, by fund. These amounts assume that the current interest rate on the variable-rate sewer bond will remain the same through maturity. As interest rates vary, interest payments on the variable-rate sewer bond will vary.

Water Fund

Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct Placements		Total
	Principal	Interest	Principal	Interest	
2022	\$ 14,390,000	\$ 85,258,042	\$ 2,998,056	\$ 1,485,190	\$ 104,131,288
2023	69,395,000	100,051,172	4,793,700	1,432,497	175,672,369
2024	76,930,000	96,484,833	5,260,000	1,327,848	180,002,681
2025	82,590,000	92,746,039	5,192,665	1,219,158	181,747,862
2026	86,340,000	88,879,460	5,100,000	1,111,932	181,431,392
2027-2031	500,015,000	376,763,776	20,063,761	4,194,249	901,036,786
2032-2036	613,885,000	239,487,152	14,767,059	2,278,230	870,417,441
2037-2041	389,735,000	116,376,037	7,064,051	1,143,042	514,318,130
2042-2046	282,770,000	53,041,549	4,215,667	494,999	340,522,215
2047-2050	76,460,000	3,558,750	1,804,642	68,019	81,891,411
	<u>\$ 2,192,510,000</u>	<u>\$ 1,252,646,810</u>	<u>\$ 71,259,601</u>	<u>\$ 14,755,164</u>	<u>\$ 3,531,171,575</u>

Sewer Fund

Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct Placements		Total
	Principal	Interest	Principal	Interest	
2022	\$ 37,220,000	\$ 80,797,355	\$ 46,815,000	\$ 9,116,713	\$ 173,949,068
2023	79,830,000	97,276,036	47,804,430	8,024,829	232,935,295
2024	83,475,000	93,541,417	40,225,000	7,001,925	224,243,342
2025	98,650,000	89,406,369	41,125,870	6,086,982	235,269,221
2026	101,895,000	84,765,356	27,200,072	5,290,838	219,151,266
2027-2031	637,360,000	354,423,511	114,924,703	18,520,878	1,125,229,092
2032-2036	797,290,000	217,545,887	73,376,782	8,083,012	1,096,295,681
2037-2041	554,175,000	61,449,050	23,215,993	1,257,263	640,097,306
2042-2046	116,585,000	13,190,861	2,080,000	41,800	131,897,661
2047-2049	14,650,000	1,122,750	-	-	15,772,750
	<u>\$ 2,521,130,000</u>	<u>\$ 1,093,518,592</u>	<u>\$ 416,767,850</u>	<u>\$ 63,424,240</u>	<u>\$ 4,094,840,682</u>

For bonds issued through the Michigan Finance Authority (MFA) in 2014 and 2015, the Authority is required to make payment on these obligations to the MFA depository account five business days

prior to the actual due date of the bond principal and interest payments. Therefore, the payments due to the MFA for principal and interest on July 1, 2021, are not included in the debt service requirement amounts above as they were paid on June 24, 2021.

Budgeted Debt Service FY 2023 and FY 2024

The tables below provide an analysis of the annual debt service budgets for FY 2023 and FY 2024 for the water fund and the sewage disposal fund. The debt service budget is based on cash needed to make the debt payments on the respective due dates. The majority of GLWA's debt payments are due on July 1st, therefore, those amounts are included in the calculation of the debt service requirements of the previous fiscal year budget ending June 30th. Also included are prorated portions of debt payments with varying due dates throughout the year.

Annual Debt Service on a Budget Set Aside Basis - Water Fund						
	FY 2023			FY 2024		
	Current	Proposed	Total	Current	Proposed	Total
Principal						
Senior Lien	\$ 60,290,000	\$ -	\$ 60,290,000	\$ 64,210,000	\$ 3,163,200	\$ 67,373,200
Second Lien	16,640,000	-	16,640,000	18,380,000	-	18,380,000
Junior Lien-SRF	5,792,600	-	5,792,600	9,791,300	-	9,791,300
Total Principal	\$ 82,722,600	\$ -	\$ 82,722,600	\$ 92,381,300	\$ 3,163,200	\$ 95,544,500
Interest						
Senior Lien	\$ 67,787,200	\$ 7,862,500	\$ 75,649,700	\$ 64,894,300	\$ 7,862,500	\$ 72,756,800
Second Lien	30,560,100	-	30,560,100	29,728,100	-	29,728,100
Junior Lien-SRF	3,843,600	425,600 (1)	4,269,200	4,534,200	1,722,600 (1)	6,256,800
Total Interest	\$ 102,190,900	\$ 8,288,100	\$ 110,479,000	\$ 99,156,600	\$ 9,585,100	\$ 108,741,700
Total Debt Service						
Senior Lien	\$ 128,077,200	\$ 7,862,500	\$ 135,939,700	\$ 129,104,300	\$ 11,025,700	\$ 140,130,000
Second Lien	47,200,100	-	47,200,100	48,108,100	-	48,108,100
Junior Lien-SRF	9,636,200	425,600 (1)	10,061,800	14,325,500	1,722,600 (1)	16,048,100
Total Debt Service	\$ 184,913,500	\$ 8,288,100	\$ 193,201,600	\$ 191,537,900	\$ 12,748,300	\$ 204,286,200
Allocation of Debt Service (see Core Financial Plan Schedule 3)						
Debt Service Allocable to Regional System			\$ 150,337,100			\$ 159,237,000
Debt Service Allocable to Local System			42,864,500			45,049,200
Total Debt Service			\$ 193,201,600			\$ 204,286,200

(1) Includes debt service payments for increases in the Drinking Water State Revolving Fund (DWSRF) loans for regional and local system improvements.

Annual Debt Service on a Budget Set Aside Basis - Sewage Disposal Fund

	FY 2023			FY 2024		
	Current	Proposed	Total	Current	Proposed	Total
Principal						
Senior Lien Fixed	\$ 80,260,000	\$ -	\$ 80,260,000	\$ 82,615,000	\$ 2,479,200	\$ 85,094,200
Senior Lien						
Variable Rate	-	-	-	-	-	-
Senior Lien-SRF	721,300	-	721,300	-	-	-
Second Lien	3,215,000	-	3,215,000	16,035,000	-	16,035,000
Junior Lien-SRF						
& SAW	42,256,500	-	42,256,500	41,405,500	2,941,800	44,347,300
Total Principal	\$ 126,452,800	\$ -	\$ 126,452,800	\$ 140,055,500	\$ 5,421,000	\$ 145,476,500
Interest						
Senior Lien	\$ 60,224,300	\$ 6,162,500	\$ 66,386,800	\$ 56,640,900	\$ 6,162,500	\$ 62,803,400
Senior Lien						
Variable Rate	2,394,800	-	2,394,800	2,401,400	-	2,401,400
Senior Lien-SRF	18,000	-	18,000	-	-	-
Second Lien	33,523,500	-	33,523,500	33,352,700	-	33,352,700
Junior Lien-SRF						
& SAW	8,394,600	433,300 (1)	8,827,900	7,558,800	1,313,000 (1)	8,871,800
Total Interest	\$ 104,555,200	\$ 6,595,800	\$ 111,151,000	\$ 99,953,800	\$ 7,475,500	\$ 107,429,300
Total Debt Service						
Senior Lien	\$ 140,484,300	\$ 6,162,500	\$ 146,646,800	\$ 139,255,900	\$ 8,641,700	\$ 147,897,600
Senior Lien	2,394,800	-	2,394,800	2,401,400	-	2,401,400
Variable Rate						
Senior Lien-SRF	739,300	-	739,300	-	-	-
Second Lien	36,738,500	-	36,738,500	49,387,700	-	49,387,700
Junior Lien-SRF						
& SAW	50,651,100	433,300 (1)	51,084,400	48,964,300	4,254,800 (1)	53,219,100
Total Debt Service	\$ 231,008,000	\$ 6,595,800	\$ 237,603,800	\$ 240,009,300	\$ 12,896,500	\$ 252,905,800
Allocation of Debt Service (see Core Financial Plan Schedule 3)						
Debt Service Allocable to Regional System			\$ 205,638,100			\$ 220,662,100
Debt Service Allocable to Local System			31,965,700			32,243,700
Total Debt Service			\$ 237,603,800			\$ 252,905,800

(1) Includes debt service payments for increases in the Clean Water State Revolving Fund (CWSRF) loans for regional and local system improvements.

Projected Debt Balance

The tables below show the projected outstanding principal debt activity for FY 2022 through FY 2024 at the time the FY 2023 and FY 2024 Biennial Budget was approved. The beginning and ending balances are as of July 1st since the fiscal year budgeted debt requirements include payments due on July 1st of the following fiscal year.

Projected Debt Activity Water Fund								
Fiscal Year	Projected Balance July 1st (1)	Payments (2)	Additions				Projected Balance July 1st (3)	
			Regional System		Local System			
			Revenue Bonds	SRF Draws	Revenue Bonds	SRF Draws		
FY 2022	\$ 2,249,379,600	\$ (72,393,100)	\$ 185,000,000	\$ 36,527,000	\$ -	\$ 19,500,000	\$ 2,418,013,500	
FY 2023	\$ 2,418,013,500	\$ (82,722,600)	\$ -	\$ 54,992,000	\$ -	\$ 19,316,000	\$ 2,409,598,900	
FY 2024	\$ 2,409,598,900	\$ (95,544,500)	\$ -	\$ 59,446,000	\$ -	\$ 11,052,000	\$ 2,384,552,400	

Projected Debt Activity Sewage Disposal Fund								
Fiscal Year	Projected Balance July 1st (1)	Payments (2)	Additions				Projected Balance July 1st (3)	
			Regional System		Local System			
			Revenue Bonds	SRF Draws	Revenue Bonds	SRF Draws		
FY 2022	\$ 2,900,677,900	\$ (123,830,000)	\$ 145,000,000	\$ 14,149,000	\$ -	\$ 7,500,000	\$ 2,943,496,900	
FY 2023	\$ 2,943,496,900	\$ (126,452,800)	\$ -	\$ 18,720,000	\$ -	\$ 6,540,000	\$ 2,842,304,100	
FY 2024	\$ 2,842,304,100	\$ (145,476,500)	\$ -	\$ 10,247,000	\$ -	\$ 3,200,000	\$ 2,710,274,600	

- (1) Fiscal year is July 1 through June 30. Balance shown is after July 1st debt payments have been made as budgeted debt service is based on a debt set aside basis.
- (2) Principal payments are based on the budget set aside basis which includes payments made during the last week in June of the fiscal year and the payments made July 1st, the first day after the fiscal year ends.
- (3) Balance shown does not represent balance on June 30th the last day of the fiscal year. Balance is for July 1st of the next fiscal year, since the fiscal year budgeted debt requirements include payments due on July 1st of the following fiscal year.

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Section 4

Revenues

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Revenues from Charges

The major source of revenues for the Authority is the charges to Member Partners for water supply and sewage disposal services. Water charges of \$354.9 million and sewer charges of \$479.8 million represent 99.68% of the Authority's budgeted revenue.

The water and sewer regional system charge structure, developed collaboratively with member partners, supports a high degree of financial stability.

Water System revenues are set using a methodology with a basis of 60 percent fixed monthly charge and 40 percent commodity consumption using a 36-month historical average usage. Model contract reopeners previously were "staggered" which resulted in changes in individual Member Partner demands that created charge volatility every year. The Contract Alignment Process (CAP) initiated for FY 2020 charges sought to minimize annual volatility. Universal contract demand is now reviewed every 4 years. This was augmented with a "Mod"/"No Mod" strategy that started with FY 2021 charges in which specific cost of service adjustments are only implemented for Member Partners with "out of cycle" demand changes.

Sewage Disposal System revenues are a 100 percent fixed monthly charge based on each member partner's share of the annual forecasted revenue requirement. In FY 2022 GLWA implemented a new Sewer SHARES methodology that embraces simplicity and replaces the strength of flow with an appropriate weighting on sanitary volumes. This simplified sewer charge methodology was developed collaboratively by GLWA team members, advisors, and member partners. Sewer rate simplification sought to maintain fair charges while decreasing complexity and improving predictability and stability. While contributed volumes and related levels of service may vary amongst Member Partners year to year, over the long term the relative level of service is fairly stable. There is value in recognizing this stability that is fundamental in the Sewer Charges Methodology which uses 10-year historical average flow contributions to determine SHARES and holds SHARES constant for 3-year periods.

Effect of Bad Debt on Charges

When one community does not pay for their allocated cost of service, the cost shifts to the remaining communities in future years. GLWA first seeks available remedies to recover the amount owed before recognizing bad debt expense. GLWA is transparent in identifying and reporting accounts with late payments in public monthly reports and presentations. It is important for stakeholders to be informed of financial matters that impact the system – and potentially their costs in the future.

GLWA is required to allocate bad debt expense in calculating charges. The 2011 Order to Incorporate Rate Settlements into Wastewater Contracts and Dismiss All Prior Rate Settlements, requires GLWA to allocate the bad debt expense in its sewer charges. A similar approach has been applied to water charges. Water System bad debt expense is recovered from all water system customer classes. For the Sewer System the 2011 Order requires bad debt expense recovery from "wholesale contract customers" be recovered from that same customer class. There is one community, Highland Park,

that receives water and sewer services from GLWA for which we have not been able collect payment. GLWA continues to work toward resolving this matter including pursuit of legal remedies.

While GLWA continues to seek a resolution, the FY 2023 Water System Budget does not assume any collections. As such, the entirety of Highland Park's revenue requirement (\$1.257 million) is re-allocated to all other Member Partners (including Detroit) in proportion to the allocation of Wholesale Revenue Requirements. The FY 2023 Sewer Charges are designed to recover expected bad debt expense from Highland Park equivalent to one year's worth of service or approximately \$5.42 million.

See the "Water System Charges" and "Sewer System Charges" sections for more detailed information on the member charges.

Other Operating Revenues

Other operating revenues represents only 0.07% of revenues. It consists mainly of Lead and Copper rule sample testing fees charged to member partners for the water system and septage disposal fees charged to permitted companies who utilize the sewage disposal system.

Nonoperating Revenue

Investment earnings make up only 0.25% of the Authority's budgeted revenue for FY 2023. Investment earnings fluctuate as interest rates change. The Treasury group works with an investment advisory firm to identify strategies to maximize investment returns while meeting the GLWA standards for safety and liquidity. GLWA is investing its funds in a diversified portfolio which includes bank deposits, money market funds, a local government investment pool, U.S. Treasuries, Federal Agencies, and commercial paper. All securities in the portfolio comply with the GLWA investment policy.

As stated in the GLWA Investment Policy, the investment purpose of the GLWA is to endeavor to accumulate a pool of assets sufficient to build capital for future use with the corresponding obligations to support near-term and long-term needs. The assets are to be invested consistent with the policies of the GLWA's Board of Directors and the Investment Policy document, as amended from time to time and in accordance with Michigan Public Act 20 of 1943 Investment of Surplus Funds of Political Subdivisions (the Act). The investment policy requires quarterly reporting by the Treasury Manager that includes the following.

- Discussion of investment strategy
- A summary of investments by type
- A summary of available funds and percentage invested
- A summary of interest income and average invested balances by financial asset classifications
- An analysis of investments by maturity dates
- A detailed report of all investments by type including fund, investment amount, rate, purchase date and maturity date and market price

- Reporting of portfolio as compared to the average U.S. Treasury Bills or U.S. Treasury Notes that most closely commensurate with the average life of the portfolio.

The full [Investment Policy](#) can be found on the GLWA website.

Grants, Gifts and Other Resources

The Authority is allowed under Article 4 Section B(4) of its Articles of Incorporation to solicit, receive, and accept gifts, grants, labor, loans, contributions of money, property, or other things of value, and other aid or payment from any federal, state, local, or intergovernmental government agency or from any other person or entity, public or private, upon terms and conditions acceptable to the Authority, or participate in any other way in a federal, state, local, or intergovernmental government program. The Board, through the provisions of the [Grants, Gifts, and Other Resources Delegation Policy](#), delegates this authority to the Chief Executive Officer with the exceptions of loans that are subject to provisions of the GLWA Board [Debt Management Policy](#) and intergovernmental agreements and other activities that are addressed in the GLWA Board [Procurement Policy](#).

The Authority has not included any grant income in the FY 2023 – FY 2024 biennial budget.

The Authority continues to apply for grants as they become available. The American Rescue Plan Act of 2021 (ARPA) did not include authorities in the definition of entities allowed for ARPA funds. The Authority will continue to monitor the ARPA as amendments are made.

The Authority has applied for and or received some grants from the Federal Emergency Management Agency (FEMA) for Covid-19 related grants, June 2021 flood related grants and FEMA Building Resilient Infrastructure and Communities (BRIC) grants.

Grants have also been applied for or received from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water Asset Management (DWAM) grant, EGLE Surface Water Intake Protection Program (SWIPP) and from the Southeast Michigan Council of Governments (SEMCOG) for Infrastructure Asset Management Program grants.

The Authority is also involved in multiple research projects as a contributor or participant in research being conducted by universities and other entities.

Water System Charges

The Water System Charges are based on industry practices and member partner contract terms. Inputs to the charge development process include meter data, usage patterns, budgetary decisions, capital needs, debt obligations, cost allocation methodologies, and related documents. GLWA's charges are developed by a financial consultant, The Foster Group, LLC in conjunction with a robust member partner engagement process which includes four Charges Roll-Out meetings held between November 9, 2021 and January 20, 2022 in order to solicit feed-back and answer questions from member partners.

The basis for the proposed water system service charges for FY 2022 are reflected in the service charge study prepared for GLWA by The Foster Group and as set forth in a memorandum dated December 27, 2021, as finalized on March 29, 2022. The cost of service study in the memorandum report only addresses the wholesale service costs of service (revenue requirements) that are GLWA's responsibility. Retail revenue requirement elements solely attributable to the City of Detroit local system are allocated separately by GLWA through the Indirect Retail and Direct Retail revenue requirements to the City of Detroit. The results of the study were presented to wholesale member partners via the member partner outreach program at key milestone dates throughout the study period. Member partners were initially presented charges at the roll out meeting on January 6, 2022, and they were further discussed at a meeting on January 20, 2022. Member partners were formally notified of their proposed service charges on January 21, 2022. The memorandum report is available on the GLWA website at: [FY 2023 Service Charge Recommendations](#)

The FY 2023 Water Charges reflect continued application of a simplified, uniform approach to charge adjustments for the 84 Member Partners whose demands did not change from FY 2022 to FY 2023. Charges for these 84 Member Partners reflect an "across the board" uniform charge increase of 3.4% for the wholesale costs of service, with subsequent application of minor adjustments to reflect contractual requirements. The FY 2023 Water Service Charges reflect simplified calculations, but still required an evaluation of *units of service* for the entire Member Partner group to isolate the impact on the four Member Partners whose max day and peak hour demands are changing for FY 2023. It is important to note that the existing FY 2022 Water service charges were determined via a uniform adjustment to all but eleven of the Member Partners. The FY 2020 Water service charges were the last charges determined via a detailed cost of service study that treated every Member Partner uniquely and individually.

These service charge calculations did not rely on an updated cost of service study of the FY 2023 Water Revenue Requirements. The relative *cost pool allocation factors* from the FY 2022 Cost of Service Study were applied to the FY 2023 Revenue Requirements. This approach is deemed reasonable to achieve stability objectives given the pending Water Contract Alignment Process ("CAP") that will impact the FY 2024 Water Service Charges, and the absence of any known material changes in relative budgetary cost profiles.

After the public hearing on February 23, 2022, the Board approved the proposed charges as presented. The final approved charges are set forth on the following two pages:

Great Lakes Water Authority			
Approved FY 2023 Water Supply System Service Charges and Allocated Revenue Requirements			
Effective Date: July 1, 2022			
Line		Fixed Monthly Charge (a)	Commodity Charge (a)
No.	Member Partner	\$/mo	\$/Mcf
1	Allen Park	137,300	7.54
2	Almont Village	13,100	10.81
3	Ash Township	45,300	8.57
4	Belleville	18,000	9.41
5	Berlin Township	40,000	11.80
6	Brownstown Township	196,400	11.52
7	Bruce Twp	18,700	56.74
8	Burtchville Twp	18,900	17.95
9	Canton Township	564,900	12.56
10	Center Line	25,700	6.39
11	Chesterfield Township	233,800	10.60
12	Clinton Township	410,900	8.23
13	Commerce Township	195,900	15.01
14	Dearborn	550,600	7.48
15	Dearborn Heights	199,900	8.10
16	Eastpointe	84,900	6.51
17	Ecorse	78,600	4.96
18	Farmington	54,800	9.84
19	Farmington Hills	479,800	10.98
20	Ferndale	56,500	6.31
21	Flat Rock	69,800	10.69
22	Flint (b)	579,200	9.88
23	Fraser	66,100	9.09
24	Garden City	89,900	9.19
25	Gibraltar	18,200	8.83
26	Grosse Ile Township	59,700	12.53
27	Grosse Pt. Park	73,000	10.64
28	Grosse Pt. Shores	35,200	14.70
29	Grosse Pt. Woods	68,900	7.95
30	Hamtramck	43,700	5.59
31	Harper Woods	43,700	7.42
32	Harrison Township	88,400	7.40
33	Hazel Park	40,000	6.38
34	Highland Park	62,900	4.76
35	Huron Township	81,100	10.46
36	Imlay City	80,100	13.88
37	Imlay Twp	800	46.00
38	Inkster	69,500	5.49
39	Keego Harbor	16,300	13.10
40	Lapeer	83,900	12.68
41	Lenox Township	15,800	8.98
42	Lincoln Park	126,700	6.13
43	Livonia	622,800	10.58
44	Macomb Township	684,400	17.06
45	Madison Heights	100,700	7.67
46	Mayfield Twp	2,200	34.31
47	Melvindale	35,100	6.68
48	New Haven, Village of	20,400	8.84
49	N O C W A	1,196,100	10.92
50	Northville	42,000	10.82
51	Northville Township	307,100	17.78
52	Novi	492,500	13.46
53	Oak Park	75,600	6.36
54	Oakland Co. Drain Comm.	4,400	3.67
55	Plymouth	59,200	10.62
56	Plymouth Township	241,500	12.00
57	Redford Township	171,900	8.67
58	River Rouge	37,100	7.84
59	Riverview	48,300	8.04
60	Rockwood	15,100	12.31
61	Romeo	14,100	18.48
62	Romulus	233,900	8.38
63	Roseville	146,000	6.26

Great Lakes Water Authority
Approved FY 2023 Water Supply System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2022

Line No.	Member Partner	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Projected Revenue from Charges \$
64	Royal Oak Township	10,500	8.20	210,500
65	S O C W A	1,246,900	8.11	24,942,200
66	Shelby Township	783,700	15.19	15,673,300
67	South Rockwood	6,200	10.83	124,200
68	Southgate	119,000	8.53	2,380,800
69	St. Clair County Board of Public Works	71,700	22.82	1,433,200
70	St. Clair Shores	168,700	6.94	3,373,500
71	Sterling Heights	839,500	11.36	16,788,900
72	Sumpter Township	37,200	9.84	744,600
73	Sylvan Lake	12,800	15.86	255,100
74	Taylor	251,600	7.78	5,033,400
75	Trenton	91,900	8.50	1,837,200
76	Troy	741,300	12.75	14,824,400
77	Utica	30,200	10.48	604,500
78	Van Buren Township	191,700	11.32	3,834,300
79	Walled Lake	43,100	11.56	862,800
80	Warren	560,000	7.25	11,201,200
81	Washington Township	127,800	12.50	2,556,100
82	Wayne	175,300	13.30	3,505,400
83	West Bloomfield Township	569,500	17.09	11,390,200
84	Westland	336,200	8.35	6,723,100
85	Wixom	135,200	14.38	2,705,200
86	Woodhaven	91,200	12.61	1,824,500
87	Ypsilanti Comm Util Auth	565,300	9.37	11,307,400
88	Total Wholesale Contract Member Partners			339,870,600
89	Adjustment to Flint Revenue Requirement for KWA Debt Service (b)			(6,651,600)
90	Adjustment for Highland Park Bad Debt			(1,257,000)
91	Revenue from Wholesale Charges (agrees with "GLWA Budget Schedule 3")			331,962,000
Detroit Customer Class - \$				
92	Wholesale Revenue Requirement (c)			43,685,900
93	less: Ownership Benefit per Lease			(20,700,000)
94	Net Wholesale Revenue Requirement			22,985,900
95	Indirect Retail Revenue Requirements (d)			52,205,100
96	less: Use of Lease Payment for Debt Service			(8,691,000)
97	Net Indirect Retail Revenue Requirements (d)			43,514,100
98	Subtotal Subject to GLWA Board Approval (94) + (97)			66,500,000
99	Direct Retail Revenue Requirements (e)			30,490,000
100	Total Local System Revenue Requirement (97) + (99)			74,004,100
101	Total Requirement from Detroit Customer Class (agrees with "GLWA Budget Schedule 3")			96,990,000
102	Lead and Copper Rule Sample Testing Fee - \$/Sample			60.00

- (a) Proposed effective date of July 1, 2022. Effective on all bills issued on or after August 1, 2022.
(b) Net fixed monthly charge will include \$554,300 monthly credits for KWA debt service.
(c) Wholesale revenue requirements for the Detroit Customer Class.
(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)
(e) Local System operating expenses (net of shared services reimbursement) **and I&E deposit**. Not Subject to GLWA Board approval.
(d)&(e) Local System information provided from Detroit Water & Sewerage Department as of January 19, 2022.

Water System Charge History

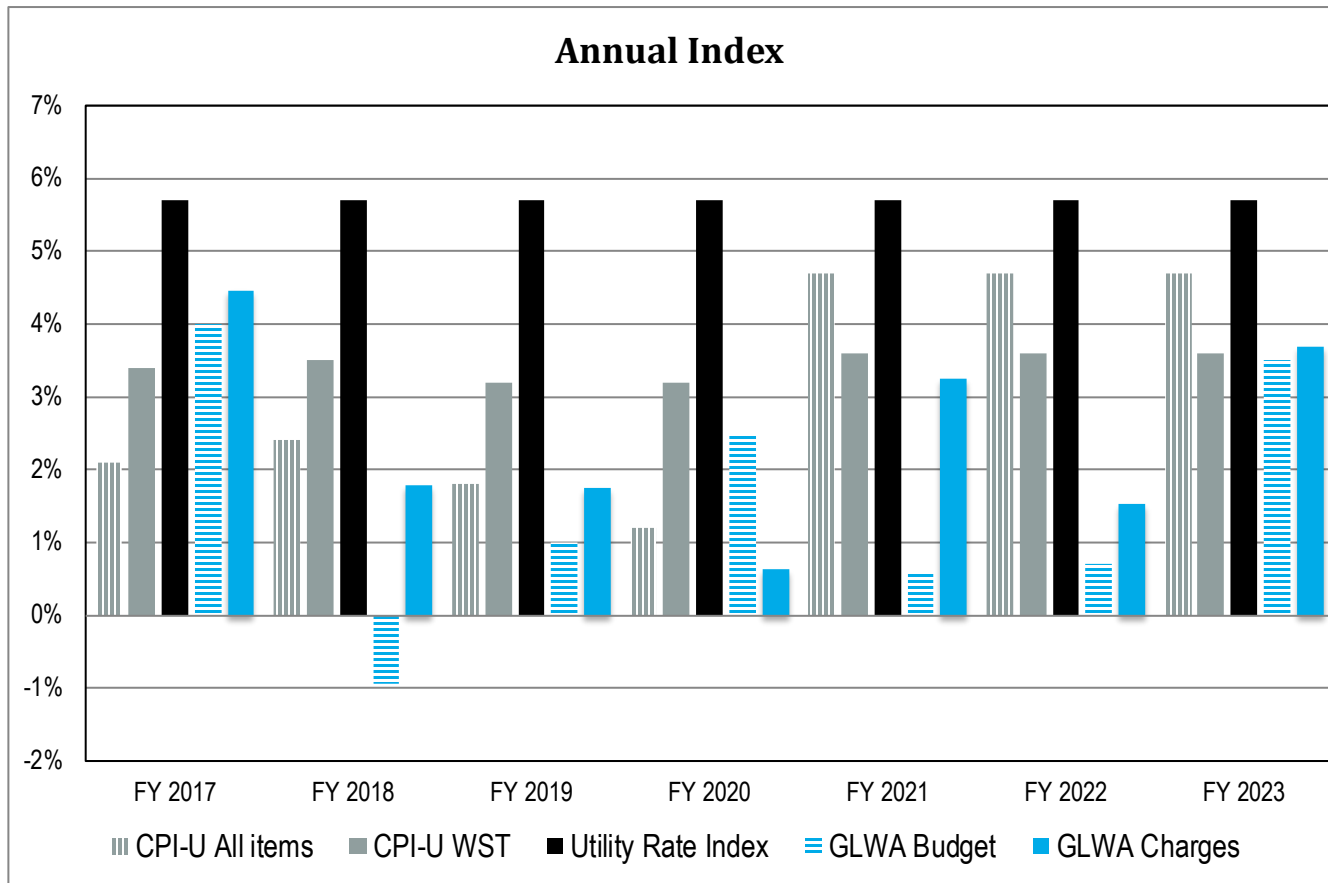
The table below shows the five-year history of the water system budgeted revenue requirement and charge adjustments:

Water System Charge Adjustments					
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Budgeted revenue requirement [1]	\$ 331,400,500	\$ 339,664,200	\$ 341,642,000	\$ 344,030,500	\$ 356,071,600
Percent change in budgeted revenue requirement	1.0%	2.5%	0.6%	0.7%	3.5%
Average annual charge adjustment [2]					
Total regional system	1.8%	0.6%	3.2%	1.5%	3.7%
Suburban wholesale	0.2%	0.3%	3.1%	1.9%	3.5%
Local system charge [3]	14.1%	2.7%	3.0%	-2.0%	3.0%
Number of wholesale water contracts [4]	87	87	87	87	87
<p>[1] This is the revenue requirement in the original adopted budget for the fiscal year which is used in the calculation of charges. The revenue requirement represents the funding requirements which are defined in the Master Bond Ordinance. Determining the revenue requirements is the starting point in the process of determining charges, as the revenue from charges and non-operating revenues are used to fund the revenue requirements. This is the number the 4% revenue requirement commitment refers to.</p> <p>[2] Average annual charge adjustment percentages is the required charge adjustment required when calculating revenue with the prior year existing charges, usage projections and any other specific individual contract requirements.</p> <p>[3] Represents the annual change in the local system charges to the Detroit customer class before the annual credit of \$20.7 million. Does not include any Detroit local system operating costs or charges included in the Detroit retail rate. Also does not include any impact of Detroit's use of the regional system lease payment to finance allocated debt service obligations.</p> <p>[4] Does not include the City of Detroit. Includes one emergency basis contract.</p> <p>Source: Great Lakes Water Authority Financial Services Area and The Foster Group</p>					

The following two charts compare the GLWA budgeted revenue requirement and charge adjustments to other price indexes.

Historical Annual "Water System Budget & Charge" Adjustments

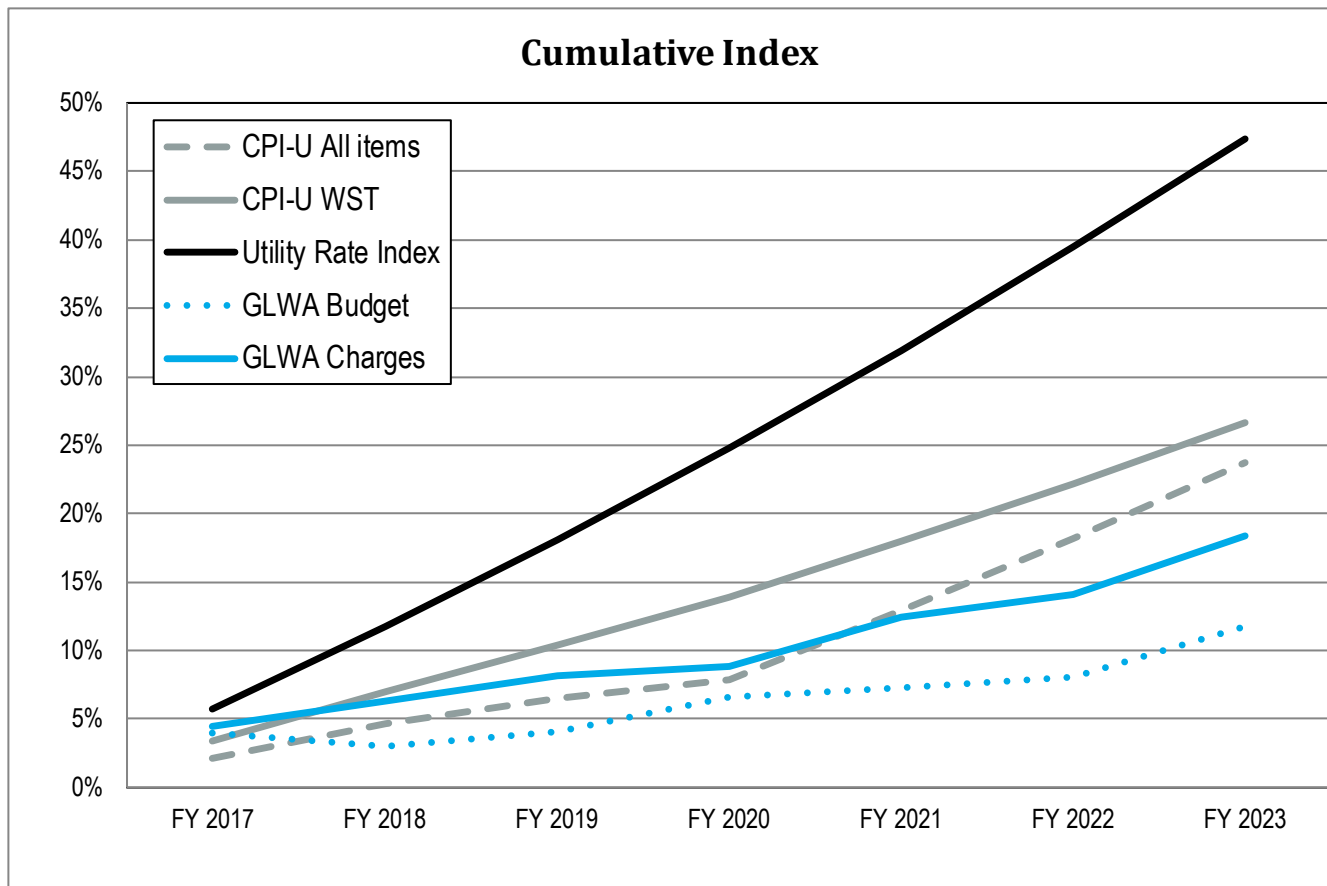
	Annual Index						
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
(a) CPI-U All items	2.1%	2.4%	1.8%	1.2%	4.7%	4.7%	4.7%
(b) CPI-U WST	3.4%	3.5%	3.2%	3.2%	3.6%	3.6%	3.6%
(c) Utility Rate Index	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%
GLWA Budget	4.0%	-0.9%	1.0%	2.5%	0.6%	0.7%	3.5%
GLWA Charges	4.5%	1.8%	1.8%	0.6%	3.2%	1.5%	3.7%



- (a) Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 estimated based on FY 2021
- (b) Bureau of Labor Statistics, CPI-U, Water and sewer and trash collection services in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 based on FY 2021
- (c) Black & Veatch 2018-2019 50 Largest Cities Rate Survey Average rate of change water bills 2001-2018. The average was used for all years.

Cummulative Historical "Water System Budget & Charge" Adjustments

	Cumulative Index						
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
(a) CPI-U All items	2.1%	4.6%	6.5%	7.8%	12.9%	18.2%	23.8%
(b) CPI-U WST	3.4%	7.0%	10.4%	13.9%	18.0%	22.2%	26.6%
(c) Utility Rate Index	5.7%	11.7%	18.1%	24.8%	31.9%	39.5%	47.4%
GLWA Budget	4.0%	3.0%	4.1%	6.7%	7.3%	8.0%	11.8%
GLWA Charges	4.5%	6.3%	8.2%	8.9%	12.4%	14.1%	18.3%



- (a) Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 estimated based on FY 2021
- (b) Bureau of Labor Statistics, CPI-U, Water and sewer and trash collection services in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 based on FY 2021
- (c) Black & Veatch 2018-2019 50 Largest Cities Rate Survey Average rate of change water bills 2001-2018. The average was used for all years.

Produced and Billed Water Volumes

The five-year historical and projected produced and billed water volumes are presented in the table below.

Produced and Billed Water Volumes (Mcf)						
Fiscal Year	Estimated Total Water Produced [1]	Wholesale Billed [2]	Water Sales Local System Billed [3]	Total Water Billed	Estimated Non-Revenue Water	Estimated Non-Revenue % of Production
Projected						
2023	20,208,100	13,512,900	4,169,200	17,682,100	2,526,000	12.5%
2022	20,314,700	13,588,930	4,186,400	17,775,330	2,539,370	12.5%
Historical						
2021	20,565,800	14,258,300	4,120,000	18,378,300	2,187,500	10.6%
2020	19,989,500	13,578,700	4,161,300	17,740,000	2,249,500	11.3%
2019	20,968,100	13,708,600	4,354,600	18,063,200	2,904,900	13.9%
2018	23,228,600	14,391,800	4,428,200	18,820,000	4,408,600	19.0%
2017	23,915,600	14,824,000	4,465,800	19,289,800	4,625,800	19.3%

The table for historical water sales and reported total water production presents water volume in thousands of cubic feet (“Mcf”) for suburban wholesale customers, for the Retail Water Customers, and for the Regional Water System as a whole, together with total water production and non-revenue water volume. As is common for all large water systems, the Regional Water System experiences a differential between the quantity of water produced by the treatment plants during the Fiscal Year and the quantity of water billed to customers over the same period, and the difference is referred to as “non-revenue water.” Non-revenue water results from a variety of factors such as the range of accuracy of production and retail meters, losses due to leaks or major breaks in the transmission and distribution systems, unmetered water that is used for fire protection, and the accuracy of estimates for unmetered use. The Authority believes that improvements in the accuracy of the reported production figures may reduce the level of non-revenue water. Production at some of the water plants is not metered, but rather is estimated based on pump curves. The data continues to be reviewed, and the Authority has initiated efforts to measure production figures and refine production estimating techniques.

[1] Represents, in part, estimated volumes based on pump curves and engineering analysis.

[2] Represents metered amounts for all suburban wholesale customers, with the exception of Dearborn which is based on self-reported billed volumes (including local system losses), and Highland Park, which is based on estimated volumes.

[3] The GLWA charges the DWSD local system a flat charge based on average historical usage from DWSD retail billings data adjusted for water loss. These amounts reflect retail water sales as reported by DWSD plus estimated real and apparent losses in the local distribution system based on engineering studies.

Source: Great Lakes Water Authority Financial Services Area and The Foster Group

Sewer System Charges

The Sewer System Charges are based on industry practices and member partner contract terms. GLWA's charges are developed by a financial consultant, The Foster Group, LLC in conjunction with a robust member partner engagement process which included four Charges Roll-Out meetings held between November 9, 2021 to January 20, 2022. During this time, proposed budget, results of the annual cost of service study, and recommended service charges were presented to the member partners to solicit feed-back and answer questions.

The basis for the proposed sewage disposal system service charges for FY 2022 are reflected in the service charge study prepared for GLWA by The Foster Group and as set forth in a memorandum dated December 27, 2021, as finalized on March 29, 2022. The study in the memorandum report only addresses the wholesale service costs of service (revenue requirements) that are GLWA's responsibility. Retail revenue requirement elements solely attributable to the City of Detroit local system are allocated separately by GLWA through the Indirect Retail and Direct Retail revenue requirements to the City of Detroit. The results of the study were presented to wholesale member partners via the member partner outreach program at key milestone dates throughout the study period. Member partners were initially presented charges at the roll out meeting on January 6, 2022, and they were further discussed at a meeting on January 20, 2022. Member partners were formally notified of their proposed service charges on January 21, 2022. The memorandum report is available on the GLWA website at: [FY 2023 Service Charge Recommendations](#)

Since the SHARES established for the FY 2022 Sewer Charges are scheduled to remain in effect until FY 2025, the major units of service for the FY 2023 Sewer Charges are completely unchanged from FY 2022. This remarkable stability provides an opportunity to implement a charge strategy that embraces the hallmark GLWA objectives of stability and simplicity.

The FY 2023 Sewer Charges reflect an "across the board" uniform charge adjustment for the wholesale costs of service to ALL Member Partners and required subsequent application of minor adjustments to reflect contractual requirements. These service charge calculations did not rely on an updated cost of service study of the FY 2023 Sewer Revenue Requirements. The relative cost pool allocation factors from the FY 2022 Cost of Service Study were applied to the FY 2023 Revenue Requirements. This approach is deemed reasonable to achieve stability objectives given the continuation of the FY 2022 Sewer SHARES and the absence of any known material changes in relative budgetary cost profiles.

The FY 2023 Sewer Service Charges can be calculated without any recognition of "units of service", as Member Partner SHARES are unchanged. Industrial Waste Control Charges and Pollutant Surcharges are being adjusted at the average index required by the FY 2023 budgeted revenue requirements.

After the public hearing on February 23, 2022, the Board approved the proposed charges as presented.

The final approved charges are set forth in the two tables that follow this page. The following two paragraphs provide additional information regarding these tables.

In the Approved FY 2023 Sewage Disposal System Charges table, member partner OMID's total annual revenue requirement of \$72,684,000 includes \$70,497,600 for wholesale services, \$1,436,400 for specific OMID O&M charges, and \$750,000 for estimated pass thru utility charges (which are billed based on actual charges).

The table for Industrial Waste Control (IWC) Charges has two separate types of charges. The first column, labeled "Full Charge", includes both the administrative and field work components of the Industrial Pretreatment Program (IPP). The second column, labeled "Admin Only Charge", does not include the field work component and is for the IWC member partners that fall within the geographical area defined in an agreement between the GLWA and the City of Pontiac Wastewater Treatment Facility Drainage District and the Clinton River Water Resource Recovery Facility Drainage District. This Agreement addresses overlapping service areas that are governed by two IPPs with differing requirements and IPP rules. The IWC charges were analyzed to determine the administrative component (for reporting and oversight functions) and field work component (mainly sampling and testing).

Great Lakes Water Authority			
Approved FY 2023 Sewage Disposal System Service Charges and Allocated Revenue Requirements			
Effective Date: July 1, 2022			
Line		Fixed Monthly Charge	Projected Revenue from Charges
No.	Suburban Wholesale	\$/mo	\$
1	OMID	6,057,000	72,684,000
2	Rouge Valley	4,753,300	57,039,600
3	Oakland GWK	3,941,500	47,298,000
4	Evergreen Farmington	3,076,100	36,913,200
5	SE Macomb San Dist	2,130,600	25,567,200
6	Dearborn	1,725,100	20,701,200
7	Grosse Pointe Farms	233,600	2,803,200
8	Grosse Pointe Park	161,900	1,942,800
9	Melvindale	133,700	1,604,400
10	Farmington	101,900	1,222,800
11	Center Line	88,600	1,063,200
12	Allen Park	72,100	865,200
13	Highland Park	460,700	5,528,400
14	Hamtramck	343,500	4,122,000
15	Grosse Pointe	76,500	918,000
16	Harper Woods	18,500	222,000
17	Redford Township	23,000	276,000
18	Wayne County #3	4,400	52,800
19	Subtotal "Regional Wholesale Revenues from Charges"		280,824,000
20	Industrial Specific Revenues		13,370,800
21	Subtotal "Regional Wholesale Revenues from Charges"		294,194,800
22	less: Highland Park Bad Debt		(5,420,500)
23	Total "Regional Wholesale Revenues" (a)		288,774,300
* Wholesale charges will be effective July 1, 2022			
Detroit Customer Class - \$			
24	Wholesale Revenue Requirement (c)		196,558,200
25	less: Ownership Benefit per Lease		(5,516,000)
26	Net Wholesale Revenue Requirement		191,042,200
27	Indirect Retail Revenue Requirements (d)		39,357,300
28	less: Use of Lease Payment for Debt Service		0
29	Net Indirect Retail Revenue Requirements (d)		39,357,300
30	Subtotal Subject to GLWA Board Approval (26) + (29)		230,399,500
31	Direct Retail Revenue Requirements (e)		64,750,500
32	Total Local System Revenue Requirement (29) + (31)		104,107,800
33	Total Requirement from Detroit Customer Class (a)		295,150,000
(a) Agrees with "GLWA Budget Schedule 3"			
(b) Reserved			
(c) Wholesale revenue requirements for the Detroit Customer Class.			
(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)			
(e) Local System operating expenses (net of shared services reimbursement) and I&E deposit. Not Subject to GLWA Board approval.			
(d)&(e) Local System information provided from Detroit Water & Sewerage Department as of January 19, 2022.			

Great Lakes Water Authority Approved FY 2023 Sewage Disposal System Industrial Specific Retail Charges Effective Date: July 1, 2022		
Industrial Waste Control Charges		
Meter Size <i>inches</i>	Full Charge <i>\$/mo</i>	Admin Only Charge <i>\$/mo</i>
5/8	3.58	0.90
3/4	5.37	1.34
1	8.95	2.24
1-1/2	19.69	4.92
2	28.64	7.16
3	51.91	12.98
4	71.60	17.90
6	107.40	26.85
8	179.00	44.75
10	250.60	62.65
12	286.40	71.60
14	358.00	89.50
16	429.60	107.40
18	501.20	125.30
20	572.80	143.20
24	644.40	161.10
30	716.00	179.00
36	787.60	196.90
48	859.20	214.80
Pollutant Surcharges		
<u>Pollutant</u>	<u>Charge</u> <i>\$/lb</i>	
BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.351	
TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.482	
PHOSPHORUS (P) for concentrations > 12 mg/l	6.448	
FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.112	
SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	36.00	

Sewage Disposal System Charge History

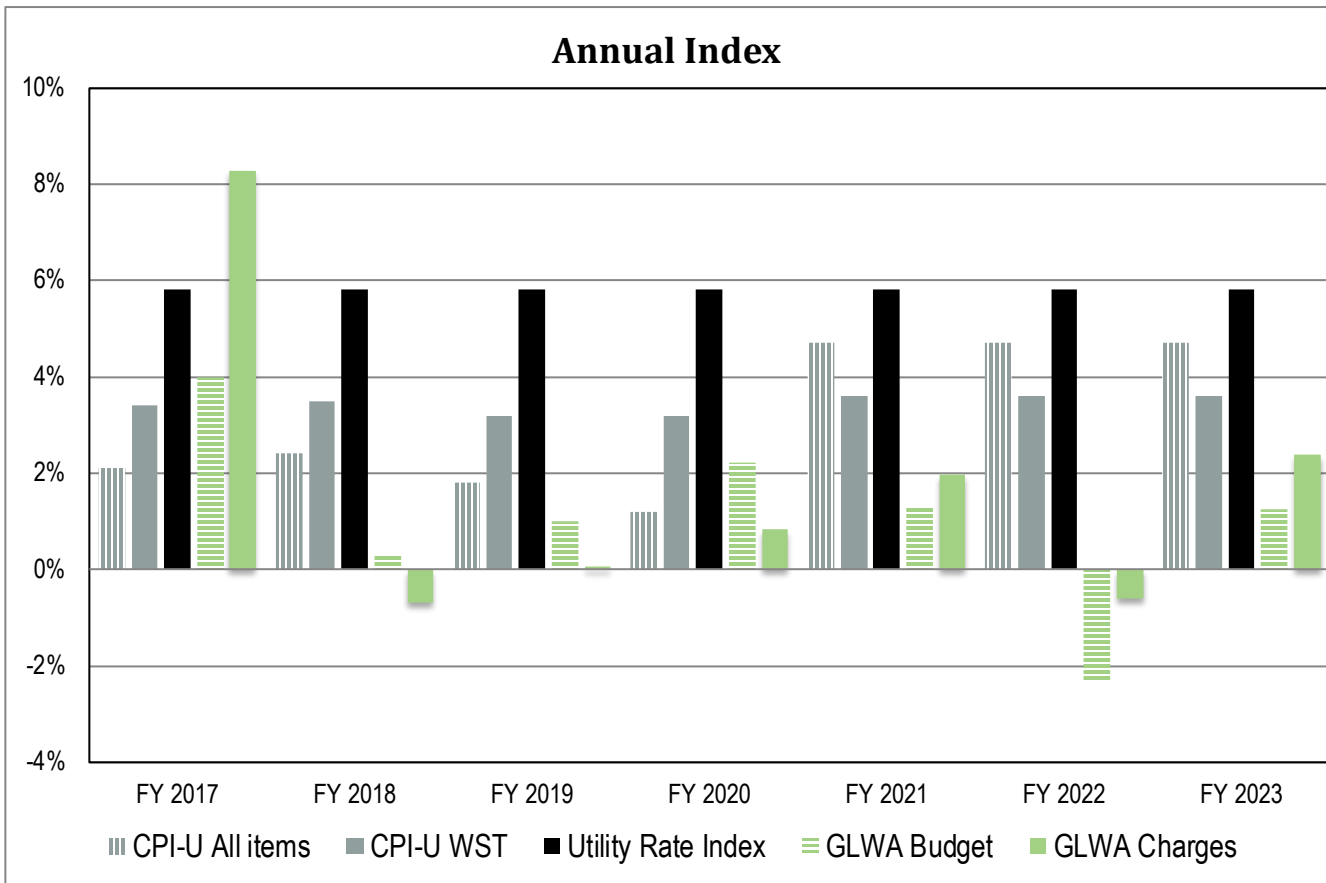
The table below shows the five-year history of the sewage disposal system budgeted revenue requirement and charge adjustments:

Sewage Disposal System Charge Adjustments					
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Budgeted revenue requirement [1]	\$ 470,156,000	\$ 480,605,300	\$ 486,751,300	\$ 475,429,200	\$ 481,372,100
Percent change in budgeted revenue requirement	1.0%	2.2%	1.3%	-2.3%	1.3%
Average annual charge adjustment [2]					
Total regional system	0.1%	0.8%	2.0%	-0.6%	2.4%
Suburban wholesale	1.3%	-0.1%	1.7%	-0.1%	3.2%
Local system charge [3]	1.2%	2.5%	2.3%	-0.7%	1.2%
Number of wholesale sewage disposal contracts [4]	18	18	18	18	18
<p>[1] This is the revenue requirement in the original adopted budget for the fiscal year which is used in the calculation of charges. The revenue requirement represents the funding requirements which are defined in the Master Bond Ordinance. Determining the revenue requirements is the starting point in the process of determining charges, as the revenue from charges and non-operating revenues are used to fund the revenue requirements. This is the number the 4% revenue requirement commitment refers to.</p> <p>[2] Average annual charge adjustment percentages is the required charge adjustment required when calculating revenue with the prior year existing charges, usage projections and any other specific individual contract requirements. Also includes the bad debt adjustment.</p> <p>[3] Represents the annual change in the local system charges to the Detroit customer class before the annual credit of \$5.516 million. Does not include any Detroit local system operating costs or charges included in the Detroit retail rate. Also does not include any impact of Detroit's use of the regional system lease payment to finance allocated debt service obligations.</p> <p>[4] Does not include the City of Detroit.</p> <p>Source: Great Lakes Water Authority Financial Services Area and The Foster Group</p>					

The following two charts compare the GLWA budgeted revenue requirement and charge adjustments to other price indexes.

Historical Annual "Sewage Disposal System Budget & Charge" Adjustments

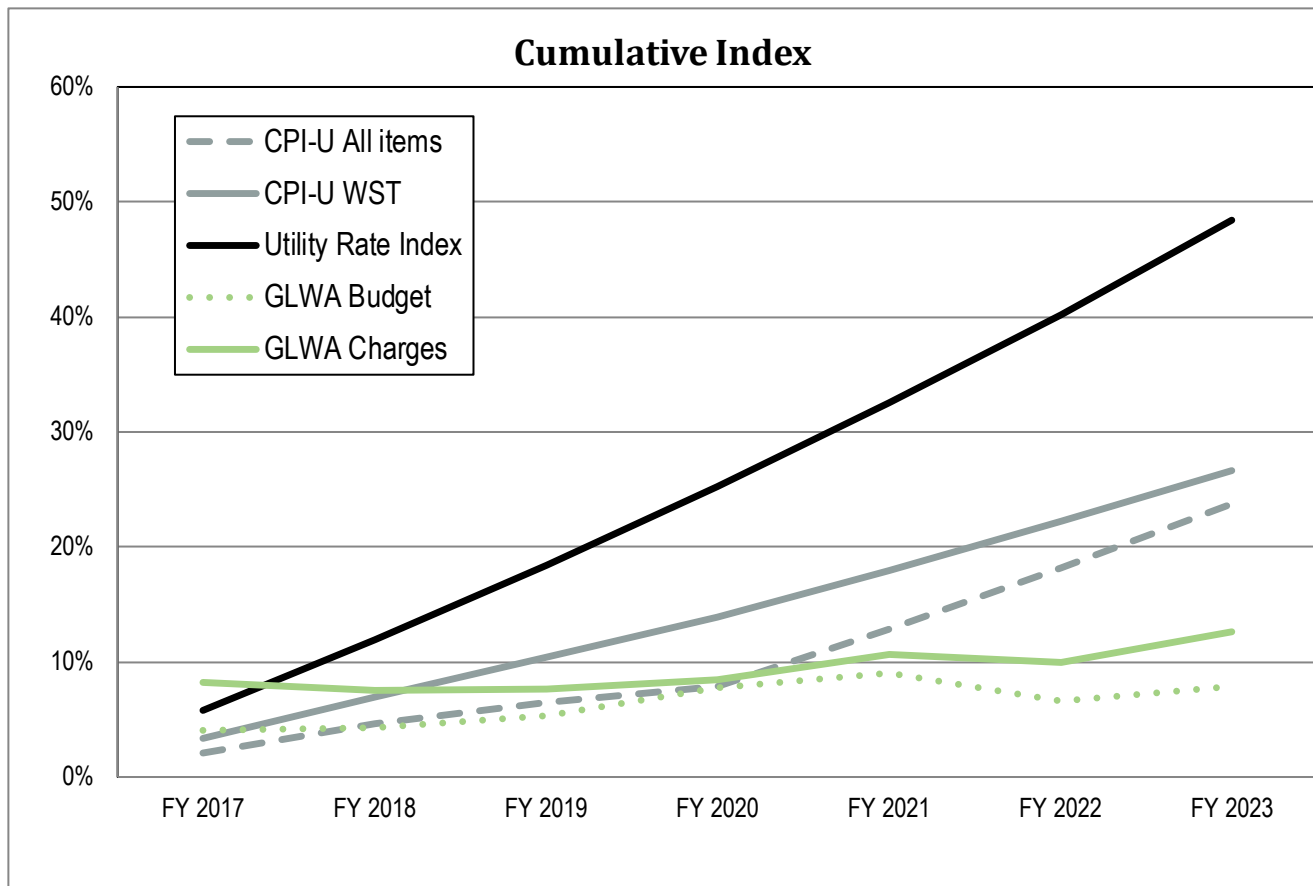
	Annual Index						
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
(a) CPI-U All items	2.1%	2.4%	1.8%	1.2%	4.7%	4.7%	4.7%
(b) CPI-U WST	3.4%	3.5%	3.2%	3.2%	3.6%	3.6%	3.6%
(c) Utility Rate Index	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%
GLWA Budget	4.0%	0.3%	1.0%	2.2%	1.3%	-2.3%	1.3%
GLWA Charges	8.3%	-0.7%	0.1%	0.8%	2.0%	-0.6%	2.4%



- (a) Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 estimated based on FY 2021
- (b) Bureau of Labor Statistics, CPI-U, Water and sewer and trash collection services in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 based on FY 2021
- (c) Black & Veatch 2018-2019 50 Largest Cities Rate Survey Average rate of change sewer bills 2001-2018. The average was used for all years.

Cumulative Historical "Sewage Disposal System Budget & Charge" Adjustments

	Cumulative Index						
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
(a) CPI-U All items	2.1%	4.6%	6.5%	7.8%	12.9%	18.2%	23.8%
(b) CPI-U WST	3.4%	7.0%	10.4%	13.9%	18.0%	22.2%	26.6%
(c) Utility Rate Index	5.8%	11.9%	18.4%	25.3%	32.6%	40.3%	48.4%
GLWA Budget	4.0%	4.3%	5.4%	7.7%	9.1%	6.5%	7.9%
GLWA Charges	8.3%	7.5%	7.6%	8.5%	10.6%	9.9%	12.6%



- (a) Bureau of Labor Statistics, CPI-U, All items in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 estimated based on FY 2021
- (b) Bureau of Labor Statistics, CPI-U, Water and sewer and trash collection services in U.S. city average, all urban consumers, not seasonally adjusted (calendar year), FY 2022 and FY 2023 based on FY 2021
- (c) Black & Veatch 2018-2019 50 Largest Cities Rate Survey Average rate of change sewer bills 2001-2018. The average was used for all years.

Wastewater Volumes

Historical wastewater volumes for the last five years are presented in the table below. Projected volumes are not presented as sewer wholesale revenues are recovered through a 100% fixed monthly charge based on allocated sewer shares and do not include a usage component. The sewer shares allocation is updated every 3 to 5 years based on historical wastewater flow data. The sewer SHAREs allocation formula was updated for FY 2022 charges and is based on historical flows for fiscal years 2013 through 2019. It is anticipated that this new sewer shares allocation will be used in computing charges through fiscal year 2024.

Wastewater Volumes (Mcf)

Fiscal Year	Total Wastewater Influent [1]	Wastewater Volume [2]		"System" Volume [3]
		Metered Customers	Unmetered Customers [3]	
2021 (preliminary)	27,589,600	11,768,100	9,475,900	6,345,600
2020	30,758,900	13,714,800	9,590,200	7,453,900
2019	33,992,100	14,569,600	10,927,200	8,495,300
2018	32,038,300	13,587,800	10,487,000	7,963,500
2017	33,458,500	14,072,100	10,788,000	8,598,400

[1] Represents total influent volume to the System, including volumes treated and discharged at the Water Resource Recovery Facility and volumes discharged via Combined Sewer Overflow facilities.

[2] The GLWA Sewer Charge Methodology uses historical wastewater volumes to allocate annual revenue requirements to the member partners based on each members share of the historical wastewater volumes, and recovers the allocated revenue requirements via fixed monthly charges.

[3] The GLWA Sewer Charge Methodology assigns a portion of the unmetered non-sanitary flow volume as a "system" responsibility allocable to all member partners. The remaining amount is assigned to unmetered customers, which includes the Local System and certain wholesale customers.

Source: Great Lakes Water Authority Financial Services Area and The Foster Group

Section 5

Operating Financial Plans

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Operating Financial Plans by Service Area

The GLWA's operating area financial plans provide the bridge from the operating units' objectives with the overall GLWA mission. The operating area plan also ensures that the organization is financially sound by aligning the allocation of resources across all levels of GLWA. This coordination requires a high level of preparation and interaction from both within and outside of the organization. Sound approaches to financial planning are imperative for ensuring long-term success in today's complex environment. The GLWA has prepared a balanced and responsible operating budget for fiscal years 2023 and 2024 and the forecasted financial plan for fiscal years 2025 through 2027.

Variance columns in Section 5 are based on a comparison to the amended FY 2022 budget. This provides a more useful analysis of the budget for FY 2023 by comparing to the expected expenditures for FY 2022.

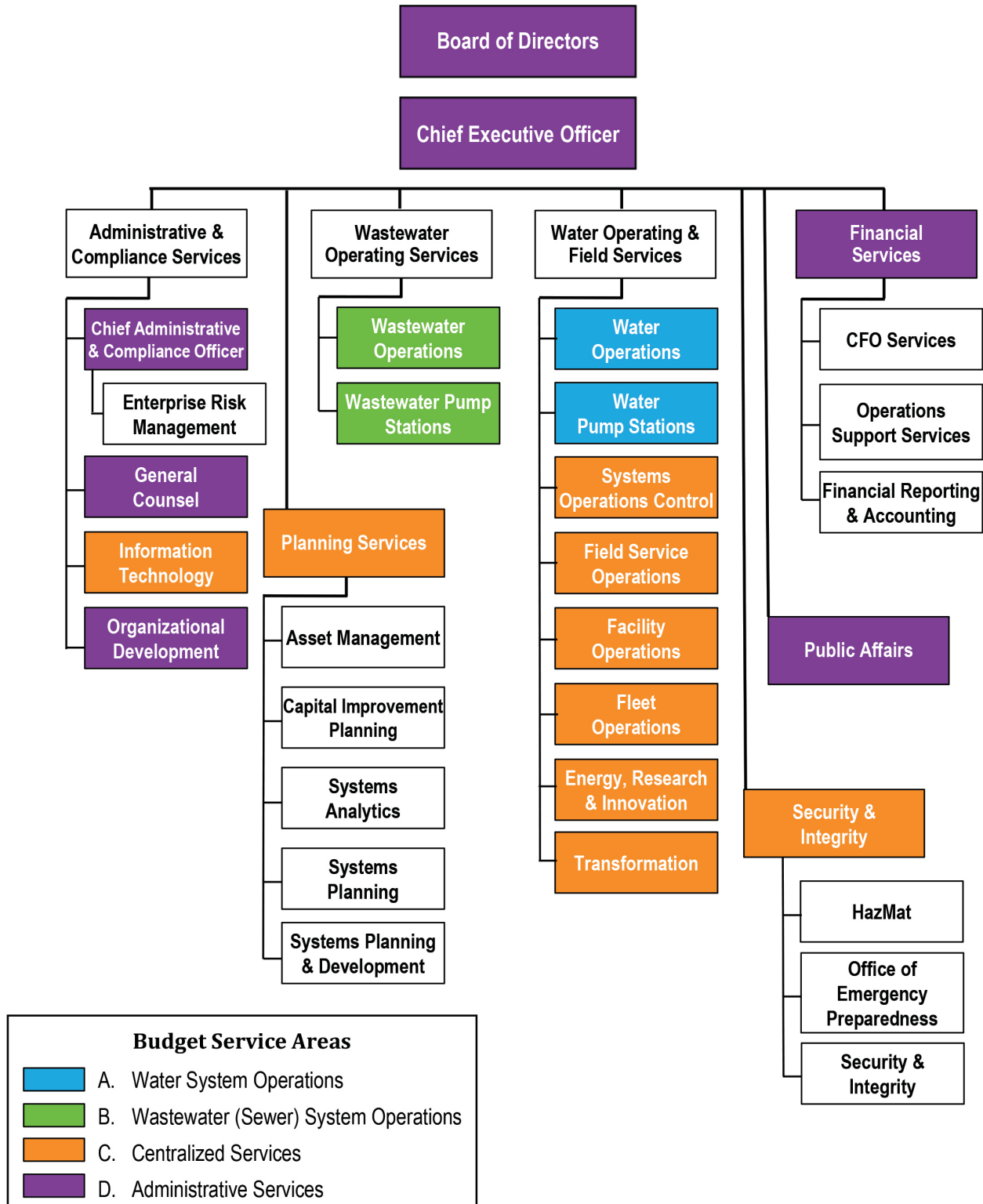
The tables in Section 5 are pulled from a database in which the underlying data is not rounded. The budget tables presented in this document are rounded to hundreds. This may result in some of the totals within the individual departments in Sections 5A, 5B, 5C and 5D not matching the department totals in Tables A, B, C and D of this Operating Financial Plans Introduction. This is due to how the rounding is applied as the data is pulled in different formats.

As discussed in Section 2, the Operations and Maintenance budget has four service areas as shown in Schedules 2C and 2D. They include:

- A. Water System Operations
- B. Wastewater (Sewer) System Operations
- C. Centralized Services
- D. Administrative Services

The following organization chart shows each department and which service area that department's costs are allocated to.

Organizational Line of Reporting Chart



The tables below provide the detail expenses by cost center of the four service areas as shown in Schedules 2C and 2D (Core Financial Plan Schedules).

A - Water System Operations Area and Related Cost Centers – Biennial Budget

A Water System Operations by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
COO - Water Operations & Field Services	\$ 465,200	\$ 494,000	\$ 417,300	\$ 877,000	\$ 383,000	77.5%	\$ 879,600
Lake Huron Water Plant	12,868,400	12,676,700	6,531,600	13,287,400	610,700	4.8%	13,303,900
Northeast Water Plant	9,863,900	10,873,700	6,502,100	10,673,000	(200,700)	-1.8%	10,690,900
Southwest Water Plant	7,728,800	9,898,600	6,080,400	9,897,000	(1,600)	0.0%	9,914,100
Springwells Water Plant	13,526,800	13,715,100	6,637,900	13,629,900	(85,200)	-0.6%	13,648,300
Water Director	1,709,000	1,835,400	839,700	1,940,400	105,000	5.7%	1,947,400
Water Engineering	1,216,500	1,501,700	689,100	1,750,100	248,400	16.5%	1,940,800
Water Quality	2,167,200	2,033,900	1,025,100	2,169,700	135,800	6.7%	2,173,900
Water Works Park	8,290,500	9,149,000	4,078,300	9,306,400	157,400	1.7%	9,324,500
Water System Operations Unallocated Reserve	-	1,798,800	-	2,284,700	485,900	27.0%	3,489,000
Total Water Operations	57,836,300	63,976,900	32,801,500	65,815,600	1,838,700	2.9%	67,312,400
Adams Road Pumping Station	682,800	605,000	387,000	605,000	-	0.0%	605,000
Eastside Pumping Station	64,200	53,500	35,100	54,000	500	0.9%	54,000
Electric Ave Pumping Station	30,600	21,500	7,600	26,000	4,500	20.9%	26,000
Ford Rd Pumping Station	384,800	423,700	187,200	423,700	-	0.0%	423,700
Franklin Road Pumping Station	953,000	875,000	480,000	895,000	20,000	2.3%	895,000
Haggerty Road Pumping Station	345,300	257,500	182,900	257,500	-	0.0%	257,500
Imlay Pumping Station	2,340,600	2,405,000	1,305,500	2,415,000	10,000	0.4%	2,415,000
Joy Road Pumping Station	622,500	662,500	319,700	642,500	(20,000)	-3.0%	642,500
Michigan Ave Pumping Station	125,800	105,700	59,400	105,700	-	0.0%	105,700
Newburgh Pumping Station	399,100	380,000	222,400	380,000	-	0.0%	380,000
North Service Center Pumping Station	2,283,000	2,461,000	977,400	2,295,000	(166,000)	-6.7%	2,295,000
Northwest Pumping Station	61,300	35,700	30,900	40,700	5,000	14.0%	40,700
Orion Township Pumping Station	74,600	73,500	38,100	73,000	(500)	-0.7%	73,000
Rochester Pumping Station	407,100	218,000	203,700	272,000	54,000	24.8%	272,000
Roseville Pumping Station	100	300	-	300	-	0.0%	300
Schoolcraft Pumping Station	511,000	433,000	211,700	448,000	15,000	3.5%	448,000
West Chicago Rd Pumping Station	38,500	37,000	10,100	32,000	(5,000)	-13.5%	32,000
West Service Center Pumping Station	847,100	798,700	451,700	747,700	(51,000)	-6.4%	747,700
Wick Road Pumping Station	761,100	605,500	406,500	605,500	-	0.0%	605,500
Ypsilanti Pumping Station	520,200	384,000	255,700	384,000	-	0.0%	384,000
Total Water Pump Stations	11,452,700	10,836,100	5,772,600	10,702,600	(133,500)	-1.2%	10,702,600
Grand Total	\$ 69,289,000	\$ 74,813,000	\$ 38,574,100	\$ 76,518,200	\$ 1,705,200	2.3%	\$ 78,015,000

A - Water System Operations Area and Related Cost Centers – Five-Year Financial Plan

A Water System Operations by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
COO - Water Operations & Field Services	\$ 465,200	\$ 494,000	\$ 877,000	\$ 879,600	\$ 882,100	\$ 884,700	\$ 887,300
Lake Huron Water Plant	12,868,400	12,676,700	13,287,400	13,303,900	13,320,500	13,337,000	13,353,600
Northeast Water Plant	9,863,900	10,873,700	10,673,000	10,690,900	10,708,800	10,726,700	10,744,500
Southwest Water Plant	7,728,800	9,898,600	9,897,000	9,914,100	9,931,100	9,948,100	9,965,100
Springwells Water Plant	13,526,800	13,715,100	13,629,900	13,648,300	13,667,100	13,685,800	13,704,500
Water Director	1,709,000	1,835,400	1,940,400	1,947,400	1,954,400	1,961,400	1,967,400
Water Engineering	1,216,500	1,501,700	1,750,100	1,940,800	2,083,200	2,197,300	2,205,500
Water Quality	2,167,200	2,033,900	2,169,700	2,173,900	2,183,200	2,197,500	2,203,300
Water Works Park	8,290,500	9,149,000	9,306,400	9,324,500	9,342,700	9,360,800	9,378,900
Water System Operations Unallocated Reserve	-	1,798,800	2,284,700	3,489,000	4,872,200	6,186,700	7,635,200
Total Water Operations	57,836,300	63,976,900	65,815,600	67,312,400	68,945,300	70,486,000	72,045,300
Adams Road Pumping Station	682,800	605,000	605,000	605,000	605,000	605,000	605,000
Eastside Pumping Station	64,200	53,500	54,000	54,000	54,000	54,000	54,000
Electric Ave Pumping Station	30,600	21,500	26,000	26,000	26,000	26,000	26,000
Ford Rd Pumping Station	384,800	423,700	423,700	423,700	423,700	423,700	423,700
Franklin Road Pumping Station	953,000	875,000	895,000	895,000	895,000	895,000	895,000
Haggerty Road Pumping Station	345,300	257,500	257,500	257,500	257,500	257,500	257,500
Imlay Pumping Station	2,340,600	2,405,000	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000
Joy Road Pumping Station	622,500	662,500	642,500	642,500	642,500	642,500	642,500
Michigan Ave Pumping Station	125,800	105,700	105,700	105,700	105,700	105,700	105,700
Newburgh Pumping Station	399,100	380,000	380,000	380,000	380,000	380,000	380,000
North Service Center Pumping Station	2,283,000	2,461,000	2,295,000	2,295,000	2,295,000	2,295,000	2,295,000
Northwest Pumping Station	61,300	35,700	40,700	40,700	40,700	40,700	40,700
Orion Township Pumping Station	74,600	73,500	73,000	73,000	73,000	73,000	73,000
Rochester Pumping Station	407,100	218,000	272,000	272,000	272,000	272,000	272,000
Roseville Pumping Station	100	300	300	300	300	300	300
Schoolcraft Pumping Station	511,000	433,000	448,000	448,000	448,000	448,000	448,000
West Chicago Rd Pumping Station	38,500	37,000	32,000	32,000	32,000	32,000	32,000
West Service Center Pumping Station	847,100	798,700	747,700	747,700	747,700	747,700	747,700
Wick Road Pumping Station	761,100	605,500	605,500	605,500	605,500	605,500	605,500
Ypsilanti Pumping Station	520,200	384,000	384,000	384,000	384,000	384,000	384,000
Total Water Pump Stations	11,452,700	10,836,100	10,702,600	10,702,600	10,702,600	10,702,600	10,702,600
Grand Total	\$ 69,289,000	\$ 74,813,000	\$ 76,518,200	\$ 78,015,000	\$ 79,647,900	\$ 81,188,600	\$ 82,747,900

B - Sewer System Operations Area and Related Cost Centers – Biennial Budget

B Sewer System Operations by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Wastewater Operations Group							
7 Mile Combined Sewer Overflow	\$ 178,900	\$ 164,100	\$ 43,200	\$ 186,400	\$ 22,300	13.6%	\$ 188,300
Baby Creek Combined Sewer Overflow	998,900	960,300	590,600	1,217,700	257,400	26.8%	1,303,600
BDF, COF & Hauling	19,939,200	20,147,600	10,616,500	20,165,200	17,600	0.1%	20,540,500
Belle Isle Combined Sewer Overflow	236,400	10,300	(9,600)	-	(10,300)	-100.0%	-
Chief Operating Officer Wastewater	1,629,800	2,269,900	911,400	2,203,000	(66,900)	-2.9%	1,819,600
Combined Sewer Overflow	4,051,300	4,494,000	1,964,100	4,016,300	(477,700)	-10.6%	4,304,700
Conner Creek Combined Sewer Overflow	1,846,100	2,357,700	1,347,400	2,214,700	(143,000)	-6.1%	2,292,600
Hubble Southfield CSO	631,200	585,300	329,100	601,300	16,000	2.7%	611,200
Industrial Waste Control	2,499,300	2,473,600	1,170,500	2,539,200	65,600	2.7%	2,786,000
Leib Combined Sewer Overflow	638,100	335,000	209,500	325,300	(9,700)	-2.9%	371,300
Oakwood Combined Sewer Overflow	1,603,700	1,314,600	726,800	1,513,600	199,000	15.1%	1,363,900
Puritan Fenkell Combined Sewer Overflow	227,100	306,500	90,400	295,800	(10,700)	-3.5%	299,600
St Aubin Combined Sewer Overflow	303,200	278,900	132,600	269,200	(9,700)	-3.5%	272,100
Suburban Only Green Infrastructure Allocation	2,000,000	340,000	-	340,000	-	0.0%	340,000
Wastewater Dewatering Process	6,407,500	6,475,400	3,120,100	6,305,000	(170,400)	-2.6%	6,582,700
Wastewater Director	5,303,500	8,219,100	4,400,700	8,065,400	(153,700)	-1.9%	7,993,400
Wastewater Engineering	2,803,100	2,758,600	1,513,600	3,524,400	765,800	27.8%	3,593,600
Wastewater Fire Damage	372,200	627,800	361,000	-	(627,800)	-100.0%	-
Wastewater Incineration Process	5,251,600	6,117,400	2,974,200	6,335,200	217,800	3.6%	6,334,000
Wastewater Laboratories	4,000,800	3,885,700	1,621,900	3,840,300	(45,400)	-1.2%	4,404,000
Wastewater Operations	21,477,600	20,265,900	10,384,900	20,830,900	565,000	2.8%	21,302,800
Wastewater Primary Process	8,259,000	8,598,600	4,595,200	8,482,000	(116,600)	-1.4%	8,724,400
Wastewater Process Control	3,449,400	4,140,000	1,454,000	3,758,200	(381,800)	-9.2%	4,107,200
Wastewater Secondary Process	9,296,900	10,856,500	5,863,100	10,531,400	(325,100)	-3.0%	10,669,100
Wastewater System Operations							
Unallocated Reserve	-	1,343,100	-	3,055,500	1,712,400	127.5%	3,082,300
Total Wastewater Operations Group	103,404,800	109,325,900	54,411,200	110,616,000	1,290,100	1.2%	113,286,900
Wastewater Pump Stations							
Belle Isle Pumping Station	(29,900)	-	21,700	-	-	0.0%	-
Blue Hill Pumping Station	8,600	-	267,100	-	-	0.0%	-
Conner Pumping Station	648,500	725,000	799,600	725,000	-	0.0%	725,000
Fairview Pumping Station	914,300	555,000	337,000	525,000	(30,000)	-5.4%	525,000
Fischer Pumping Station	7,900	-	1,500	-	-	0.0%	-
Fox Creek Pumping Station	700	1,000	300	1,000	-	0.0%	1,000
Freud Pumping Station	541,800	390,500	337,500	389,500	(1,000)	-0.3%	389,500
Northeast Pumping Station	1,116,000	796,000	404,100	790,000	(6,000)	-0.8%	790,000
Oakwood Pumping Station	135,200	178,000	101,900	151,000	(27,000)	-15.2%	151,000
Woodmere Pumping Station	21,000	-	134,400	-	-	0.0%	-
Total Wastewater Pump Stations	3,364,100	2,645,500	2,405,100	2,581,500	(64,000)	-2.4%	2,581,500
Grand Total	\$ 106,768,900	\$ 111,971,400	\$ 56,816,300	\$ 113,197,500	\$ 1,226,100	1.1%	\$ 115,868,400

B - Sewer System Operations Area and Related Cost Centers – Five-Year Financial Plan

B Sewer System Operations by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Wastewater Operations Group							
7 Mile Combined Sewer Overflow	\$ 178,900	\$ 164,100	\$ 186,400	\$ 188,300	\$ 192,200	\$ 195,200	\$ 199,900
Baby Creek Combined Sewer Overflow	998,900	960,300	1,217,700	1,303,600	983,200	941,800	951,400
BDF, COF & Hauling	19,939,200	20,147,600	20,165,200	20,540,500	20,701,500	20,942,400	21,187,400
Belle Isle Combined Sewer Overflow	236,400	10,300	-	-	-	-	-
Chief Operating Officer Wastewater	1,629,800	2,269,900	2,203,000	1,819,600	1,833,100	1,745,600	1,755,200
Combined Sewer Overflow	4,051,300	4,494,000	4,016,300	4,304,700	4,401,500	4,508,500	4,566,100
Conner Creek Combined Sewer Overflow	1,846,100	2,357,700	2,214,700	2,292,600	2,710,800	2,819,200	3,201,000
Hubble Southfield CSO	631,200	585,300	601,300	611,200	616,200	602,800	632,800
Industrial Waste Control	2,499,300	2,473,600	2,539,200	2,786,000	2,805,300	2,825,300	2,671,200
Leib Combined Sewer Overflow	638,100	335,000	325,300	371,300	373,500	377,000	382,300
Oakwood Combined Sewer Overflow	1,603,700	1,314,600	1,513,600	1,363,900	1,397,600	1,392,100	1,447,900
Puritan Fenkell Combined Sewer Overflow	227,100	306,500	295,800	299,600	300,700	304,700	307,500
St Aubin Combined Sewer Overflow	303,200	278,900	269,200	272,100	274,500	277,900	281,500
Suburban Only Green Infrastructure Allocation	2,000,000	340,000	340,000	340,000	340,000	340,000	340,000
Wastewater Dewatering Process	6,407,500	6,475,400	6,305,000	6,582,700	6,576,000	6,628,000	6,752,800
Wastewater Director	5,303,500	8,219,100	8,065,400	7,993,400	8,021,900	8,039,900	8,020,500
Wastewater Engineering	2,803,100	2,758,600	3,524,400	3,593,600	3,559,800	3,474,500	3,499,200
Wastewater Fire Damage	372,200	627,800	-	-	-	-	-
Wastewater Incineration Process	5,251,600	6,117,400	6,335,200	6,334,000	6,640,900	6,667,900	6,469,300
Wastewater Laboratories	4,000,800	3,885,700	3,840,300	4,404,000	4,441,700	4,448,900	4,474,200
Wastewater Operations	21,477,600	20,265,900	20,830,900	21,302,800	21,431,900	21,807,600	22,245,800
Wastewater Primary Process	8,259,000	8,598,600	8,482,000	8,724,400	8,757,700	8,899,000	8,922,500
Wastewater Process Control	3,449,400	4,140,000	3,758,200	4,107,200	4,018,200	4,123,500	4,365,400
Wastewater Secondary Process	9,296,900	10,856,500	10,531,400	10,669,100	10,765,400	10,857,600	10,955,600
Wastewater System Operations							
Unallocated Reserve	-	1,343,100	3,055,500	3,082,300	3,144,000	6,506,800	8,170,900
Total Wastewater Operations Group	103,404,800	109,325,900	110,616,000	113,286,900	114,287,600	118,726,200	121,800,400
Wastewater Pump Stations							
Belle Isle Pumping Station	(29,900)	-	-	-	-	-	-
Blue Hill Pumping Station	8,600	-	-	-	-	-	-
Conner Pumping Station	648,500	725,000	725,000	725,000	725,000	725,000	725,000
Fairview Pumping Station	914,300	555,000	525,000	525,000	525,000	525,000	495,000
Fischer Pumping Station	7,900	-	-	-	-	-	-
Fox Creek Pumping Station	700	1,000	1,000	1,000	1,000	1,000	1,000
Freud Pumping Station	541,800	390,500	389,500	389,500	389,500	389,500	389,500
Northeast Pumping Station	1,116,000	796,000	790,000	790,000	790,000	790,000	790,000
Oakwood Pumping Station	135,200	178,000	151,000	151,000	151,000	151,000	151,000
Woodmere Pumping Station	21,000	-	-	-	-	-	-
Total Wastewater Pump Stations	3,364,100	2,645,500	2,581,500	2,581,500	2,581,500	2,581,500	2,551,500
Grand Total	\$ 106,768,900	\$ 111,971,400	\$ 113,197,500	\$ 115,868,400	\$ 116,869,100	\$ 121,307,700	\$ 124,351,900

C - Centralized Services Operating Area and Related Cost Centers - Biennial Budget

C Centralized Services by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Planning Services							
Asset Management	\$ 1,589,000	\$ 4,591,000	\$ 811,100	\$ 2,993,900	\$ (1,597,100)	-34.8%	\$ 3,358,600
Capital Improvement Planning	4,754,500	1,328,600	2,068,800	3,123,500	1,794,900	135.1%	2,995,200
Chief Planning Officer	301,500	297,200	143,000	307,300	10,100	3.4%	309,600
Systems Analytics	4,644,700	5,939,500	2,380,700	5,978,000	38,500	0.6%	6,351,600
Systems Planning	2,045,700	2,870,100	549,000	2,099,500	(770,600)	-26.8%	2,186,500
Systems Planning & Development	-	-	-	585,900	585,900	100.0%	674,000
Total Planning Services	13,335,400	15,026,400	5,952,600	15,088,100	61,700	0.4%	15,875,500
Systems Operations Control	11,621,200	12,308,400	5,421,500	12,625,800	317,400	2.6%	13,123,600
Facility Operations	6,977,800	7,249,600	3,585,500	7,863,800	614,200	8.5%	7,933,700
Fleet Operations	1,015,400	2,295,900	1,129,100	2,295,100	(800)	0.0%	2,297,400
Field Service Operations	17,403,100	17,709,800	9,443,000	18,072,200	362,400	2.0%	18,853,900
Energy, Research & Innovation	2,107,500	2,995,800	1,106,500	3,012,900	17,100	0.6%	3,180,100
Transformation	-	1,110,300	243,200	875,900	(234,400)	-21.1%	877,000
Information Technology							
Info Tech Business Productivity Systems	2,714,500	4,722,800	1,177,600	4,177,400	(545,400)	-11.5%	4,235,700
Info Tech Enterprise Asset Mgmt Systems	6,555,600	7,835,600	2,820,600	7,880,200	44,600	0.6%	8,136,900
Info Technology Infrastructure	15,195,700	17,797,500	9,647,700	17,529,900	(267,600)	-1.5%	17,810,900
Info Technology Security & Risk	197,600	468,600	100,700	428,800	(39,800)	-8.5%	545,800
Info Technology Service Delivery	2,944,700	3,716,100	1,418,900	3,779,100	63,000	1.7%	3,936,700
Info Technology Project Management Office	1,224,400	1,328,200	660,700	1,344,400	16,200	1.2%	1,351,000
Office of the CIO	802,400	1,183,600	456,300	1,293,200	109,600	9.3%	1,665,900
Total Information Technology	29,634,900	37,052,400	16,282,500	36,433,000	(619,400)	-1.7%	37,682,900
Security & Integrity							
HazMat	1,512,500	1,717,200	756,900	1,740,200	23,000	1.3%	1,929,300
Office of Emergency Preparedness	-	170,600	-	341,200	170,600	100.0%	344,200
Security and Integrity	4,520,900	4,310,700	2,167,100	4,554,700	244,000	5.7%	4,585,500
Total Security & Integrity	6,033,400	6,198,500	2,924,000	6,636,100	437,600	7.1%	6,859,000
Centralized Services Unallocated Reserve	-	1,898,800	-	1,600,000	(298,800)	-15.7%	1,632,000
Grand Total	\$ 88,128,700	\$ 103,845,900	\$ 46,087,900	\$ 104,502,900	\$ 657,000	0.6%	\$ 108,315,100

C - Centralized Services Operating Area and Related Cost Centers – Five-Year Financial Plan

	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
C Centralized Services by Cost Center							
Planning Services							
Asset Management	\$ 1,589,000	\$ 4,591,000	\$ 2,993,900	\$ 3,358,600	\$ 7,362,400	\$ 6,039,900	\$ 6,925,100
Capital Improvement Planning	4,754,500	1,328,600	3,123,500	2,995,200	1,752,400	1,759,300	1,766,200
Chief Planning Officer	301,500	297,200	307,300	309,600	311,900	314,200	316,200
Systems Analytics	4,644,700	5,939,500	5,978,000	6,351,600	6,410,500	6,469,700	6,539,200
Systems Planning	2,045,700	2,870,100	2,099,500	2,186,500	2,219,100	2,121,700	2,054,100
Systems Planning & Development	-	-	585,900	674,000	686,800	699,600	712,400
Total Planning Services	13,335,400	15,026,400	15,088,100	15,875,500	18,743,100	17,404,400	18,313,200
Systems Operations Control	11,621,200	12,308,400	12,625,800	13,123,600	13,136,500	13,012,600	13,025,000
Facility Operations	6,977,800	7,249,600	7,863,800	7,933,700	7,994,900	8,057,100	8,120,300
Fleet Operations	1,015,400	2,295,900	2,295,100	2,297,400	2,299,700	2,302,000	2,304,300
Field Service Operations	17,403,100	17,709,800	18,072,200	18,853,900	18,888,800	18,923,600	18,958,600
Energy, Research & Innovation	2,107,500	2,995,800	3,012,900	3,180,100	3,240,100	3,304,000	3,372,000
Transformation	-	1,110,300	875,900	877,000	878,200	879,300	880,600
Information Technology							
Info Tech Business Productivity Systems	2,714,500	4,722,800	4,177,400	4,235,700	4,295,100	4,355,900	4,418,000
Info Tech Enterprise Asset Mgmt Systems	6,555,600	7,835,600	7,880,200	8,136,900	8,240,400	8,371,400	8,500,300
Info Technology Infrastructure	15,195,700	17,797,500	17,529,900	17,810,900	18,144,000	18,528,600	18,829,700
Info Technology Security & Risk	197,600	468,600	428,800	545,800	549,200	552,700	556,200
Info Technology Service Delivery	2,944,700	3,716,100	3,779,100	3,936,700	3,995,900	4,055,800	4,117,300
Info Technology Project Management Office	1,224,400	1,328,200	1,344,400	1,351,000	1,357,700	1,364,200	1,370,600
Office of the CIO	802,400	1,183,600	1,293,200	1,665,900	1,727,000	1,711,100	1,734,600
Total Information Technology	29,634,900	37,052,400	36,433,000	37,682,900	38,309,300	38,939,700	39,526,700
Security & Integrity							
HazMat	1,512,500	1,717,200	1,740,200	1,929,300	1,941,400	1,954,100	1,967,200
Office of Emergency Preparedness	-	170,600	341,200	344,200	347,300	350,400	353,500
Security and Integrity	4,520,900	4,310,700	4,554,700	4,585,500	4,678,600	4,772,700	4,804,500
Total Security & Integrity	6,033,400	6,198,500	6,636,100	6,859,000	6,967,300	7,077,200	7,125,200
Centralized Services Unallocated							
Reserve	-	1,898,800	1,600,000	1,632,000	1,664,600	2,697,900	2,931,900
Grand Total	\$ 88,128,700	\$ 103,845,900	\$ 104,502,900	\$ 108,315,100	\$ 112,122,500	\$ 112,597,800	\$ 114,557,800

D - Administrative Services Operating Area and Related Cost Centers – Biennial Budget

D Administrative Services by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Board of Directors	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ (1,450,000)	-89.5%	\$ 169,600
Chief Executive Officer	569,800	760,500	394,600	674,200	(86,300)	-11.3%	681,100
Chief Administrative and Compliance Officer							
Chief Administrative Officer	719,100	1,174,100	420,000	1,118,400	(55,700)	-4.7%	1,219,300
Enterprise Risk Management and Safety	1,045,900	1,735,800	536,200	1,706,100	(29,700)	-1.7%	1,970,300
Enterprise Risk Mgt. Insurance Fund	3,292,100	3,504,000	1,630,600	3,672,000	168,000	4.8%	3,745,400
Total Chief Administrative & Compliance Officer	5,057,100	6,413,900	2,586,800	6,496,500	82,600	1.3%	6,935,000
General Counsel	1,999,300	3,356,500	2,564,300	3,267,700	(88,800)	-2.6%	3,448,800
Public Affairs	1,005,900	1,544,400	591,900	1,602,200	57,800	3.7%	1,797,100
Organizational Development							
OD Administration	908,100	654,000	433,500	664,700	10,700	1.6%	669,400
OD Talent Management	1,948,200	2,577,100	953,200	2,815,900	238,800	9.3%	2,844,000
OD Training	1,343,100	1,586,200	648,700	1,699,000	112,800	7.1%	1,713,200
Total Organizational Development	4,199,400	4,817,300	2,035,400	5,179,600	362,300	7.5%	5,226,600
Financial Services							
CFO Services							
Chief Financial Officer	761,800	1,147,100	412,000	1,080,800	(66,300)	-5.8%	1,091,500
CFO Services	1,637,200	1,615,500	705,100	2,432,600	817,100	50.6%	2,450,600
Data Analytics & Internal Audit	208,200	30,900	30,900		(30,900)	-100.0%	
Financial Management & Planning	1,386,300	1,495,400	732,600	2,032,600	537,200	35.9%	2,045,700
Treasury	667,100	853,700	299,800	879,700	26,000	3.0%	883,700
Total CFO Services	4,660,600	5,142,600	2,180,400	6,425,700	1,283,100	25.0%	6,471,500
Operations Support Services							
Logistics and Materials	2,037,800	2,899,800	1,558,200	2,673,800	(226,000)	-7.8%	2,700,400
Owners' Representative	405,700	181,000	179,000		(181,000)	-100.0%	
Procurement Director	3,402,200	3,481,100	1,637,800	3,928,100	447,000	12.8%	4,136,000
Transformation	654,700						
Total Operations Support Services	6,500,400	6,561,900	3,375,000	6,601,900	40,000	0.6%	6,836,400
Financial Reporting & Accounting	2,816,600	3,533,300	1,510,700	3,764,300	231,000	6.5%	3,790,500
Total Financial Services	13,977,600	15,237,800	7,066,100	16,791,900	1,554,100	10.2%	17,098,400
Administrative Services Unallocated Reserve	-	853,300	-	500,000	(353,300)	-41.4%	510,000
Grand Total	\$ 26,966,600	\$ 34,603,300	\$ 15,474,600	\$ 34,681,700	\$ 78,400	0.2%	\$ 35,866,600

D - Administrative Services Operating Area and Related Cost Centers – Five-Year Financial Plan

D Administrative Services by Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Board of Directors	\$ 157,500	\$ 1,619,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600
Chief Executive Officer	569,800	760,500	674,200	681,100	688,200	695,700	702,800
Chief Administrative and Compliance Officer							
Chief Administrative Officer	719,100	1,174,100	1,118,400	1,219,300	1,232,300	1,245,500	1,258,900
Enterprise Risk Management and Safety	1,045,900	1,735,800	1,706,100	1,970,300	1,995,900	2,022,100	2,048,500
Enterprise Risk Mgt. Insurance Fund	3,292,100	3,504,000	3,672,000	3,745,400	3,820,300	3,896,700	3,974,600
Total Chief Administrative & Compliance Officer	5,057,100	6,413,900	6,496,500	6,935,000	7,048,500	7,164,300	7,282,000
General Counsel	1,999,300	3,356,500	3,267,700	3,448,800	3,499,400	3,550,900	3,603,300
Public Affairs	1,005,900	1,544,400	1,602,200	1,797,100	1,817,300	1,837,800	1,858,700
Organizational Development							
OD Administration	908,100	654,000	664,700	669,400	674,200	679,000	683,900
OD Talent Management	1,948,200	2,577,100	2,815,900	2,844,000	2,874,900	2,905,500	2,936,800
OD Training	1,343,100	1,586,200	1,699,000	1,713,200	1,727,900	1,742,800	1,757,900
Total Organizational Development	4,199,400	4,817,300	5,179,600	5,226,600	5,277,000	5,327,300	5,378,600
Financial Services							
CFO Services							
Chief Financial Officer	761,800	1,147,100	1,080,800	1,091,500	1,101,900	1,113,000	1,123,800
CFO Services	1,637,200	1,615,500	2,432,600	2,450,600	2,469,000	2,289,500	2,307,900
Data Analytics & Internal Audit	208,200	30,900					
Financial Management & Planning	1,386,300	1,495,400	2,032,600	2,045,700	2,058,400	1,873,500	1,886,400
Treasury	667,100	853,700	879,700	883,700	887,800	892,000	896,300
Total CFO Services	4,660,600	5,142,600	6,425,700	6,471,500	6,517,100	6,168,000	6,214,400
Operations Support Services							
Logistics and Materials	2,037,800	2,899,800	2,673,800	2,700,400	2,727,400	2,754,700	2,781,800
Owners' Representative	405,700	181,000					
Procurement Director	3,402,200	3,481,100	3,928,100	4,136,000	4,161,300	4,187,000	4,212,700
Transformation	654,700						
Total Operations Support Services	6,500,400	6,561,900	6,601,900	6,836,400	6,888,700	6,941,700	6,994,500
Financial Reporting & Accounting	2,816,600	3,533,300	3,764,300	3,790,500	3,816,900	3,645,800	3,672,600
Total Financial Services	13,977,600	15,237,800	16,791,900	17,098,400	17,222,700	16,755,500	16,881,500
Administrative Services Unallocated Reserve	-	853,300	500,000	510,000	520,200	1,030,600	1,341,200
Grand Total	\$ 26,966,600	\$ 34,603,300	\$ 34,681,700	\$ 35,866,600	\$ 36,242,900	\$ 36,531,700	\$ 37,217,700

Departmental Introduction

Following this section is a section for each of the service areas of the Operations & Maintenance budget. Each service area section includes the departments that make up that service area. The departmental information is organized in the following order:

- ❖ Description of the department
- ❖ Strategic initiatives
- ❖ Major contracts (if applicable)
- ❖ Organization (Teams)
- ❖ Expense Categories
- ❖ Biennial Budget
- ❖ Personnel Budget
- ❖ Five-Year Financial Plan (by expense category)
- ❖ Capital Outlay*
- ❖ Line-Item Budget and Financial Plan (five-year plan)

*The Capital Outlay information provided is for Capital Outlay greater than \$5,000 and is discussed in more detail in Section 3. Capital Outlay funded with I&E funds is not included in the department's operating budget. Expense category 6.0 Capital Outlay includes capital outlay greater than \$5,000 which is not capitalized (primarily IT related) and is funded by current year revenues. Capital outlay less than \$5,000 is reported under expense category 4.2 Supplies and Other and is not included in the capital outlay discussion.

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Section 5A

Water System Operations

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Water Operations

The Water Operations Area produces and delivers water of unquestionable quality to nearly 40% of the State of Michigan's population while meeting or exceeding all state, federal, local, and department standards for quality and safety.

Strategic Initiatives

❖ **Maintain 100% water quality compliance (Ongoing)**

Delivery of pure, safe drinking water is an essential to GLWA's mission. A monthly KPI is reported to the Board of the percentage compliance with the Safe Drinking Water Act.

❖ **Restructuring Water Production (Ongoing)**

Continue implementation of the 2015 Water Master Plan Update; specifically, those aspects which address excess production capacity.

❖ **Improve Capital Project Delivery (Ongoing)**

Sustain water treatment operations and transmission by effective and efficient delivery of capital investments.

❖ **Transmission Assessment & Rehabilitation (Ongoing)**

Complete the designs and begin construction of water mains.

❖ **Improve Operational Reliability through Automation & Equipment Maintenance (Ongoing)**

- Plan implementation of water automation.
- Support asset management to improve maintenance activities.

The Water Works Park Treatment Plant received the 2021 Partnership for Safe Water's Presidents Award for Treatment Plant Optimization. This award demonstrates the ongoing commitment to deliver customers the highest quality water. In the past, four out of five of GLWA's drinking water treatment facilities – Lake Huron, Northeast, Southwest, and Water Works Park – have also been recognized by the Partnership with its Directors Award.

The table on the following page shows how the water operations strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Water Operations Strategic Initiatives	Maintain 100% water quality compliance			x				x				x
	Restructuring Water Production			x	x	x						x
	Improve Capital Project Delivery			x	x							x
	Transmission Assessment & Rehabilitation			x	x							x
	Improve Operational Reliability through Automation and Equipment Maintenance	x	x	x	x	x						x

Water Operations Contracts

The Water Operations budget contains several contractual services to ensure system reliability, timely distribution and delivery of high-quality and safe water that complies with drinking water regulations. Budgeted amounts beyond contract date are estimates for future study updates or subsequent implementation of a program. These services would generally require a separate procurement process. It should be noted that several contracts are shared by multiple areas of GLWA. The following chart includes the key contracts for these services.

Project Description	Comprehensive Corrosion Control Optimization Study	Aluminum Sulfate	Ovation Evergreen Upgrade	Liquid Chlorine	Alum Sludge Hauling	Switchgear Maintenance & Testing Services	As Needed: CIP Implementation Assistance & Related Services	Standby Generator Preventative Maintenance & Repair Contract	Total of Significant Contracts
Prime Consultant	Arcadis of Michigan, LLC	Chemtrade Chemicals	Emerson Process Management	JCI Jones Chemicals	Mobile Dredging & Video Pipe Inc	Motor City Electric	PMA Consultants LLC	Preventive Maintenance Technologies	
Contract #	1803705	1803685	SCO-1134	1803508	GLWA-CON-170	1900995	GLWA-CS-166	2001082	
Contract Amount	\$6,931,619	\$3,317,750	\$14,000,000	\$1,795,500	\$19,608,960	\$9,702,373	\$11,300,000	\$1,587,500	
Contract End Date	11/08/24	07/01/22	07/09/22	03/31/22	03/31/24	01/25/24	01/09/22	01/01/23	
Cost Center Name	Various	Various	Various	Various	Various	Various	Various	Various	
Expense Category	Contractual Services	Chemicals	Contractual Services	Chemicals	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ 462,303	\$ 6,520,764	\$ 312,362	\$ 1,448,720	\$ 15,335,848	\$ 2,932,178	\$ 1,111,115	\$ 621,197	\$ 28,744,486
FY 2021 Spend	1,382,100	2,973,300	-	593,700	4,876,700	714,200	287,000	542,700	11,369,700
FY 2022 Budget	1,175,000	2,605,000	250,000	382,400	8,141,800	1,276,000	360,000	187,000	14,377,200
FY 2023 Requested	1,175,000	2,605,000	225,000	488,000	6,500,000	1,199,000	300,000	239,000	12,731,000
FY 2024 Requested	1,175,000	2,605,000	225,000	488,000	6,500,000	1,199,000	300,000	239,000	12,731,000
FY 2025 Requested	1,175,000	2,605,000	225,000	488,000	6,500,000	1,199,000	300,000	239,000	12,731,000
FY 2026 Requested	1,175,000	2,605,000	225,000	488,000	6,500,000	1,199,000	300,000	239,000	12,731,000
FY 2027 Requested	1,175,000	2,605,000	225,000	488,000	6,500,000	1,199,000	300,000	239,000	12,731,000
Total	\$ 8,894,403	\$ 25,124,064	\$ 1,687,362	\$ 4,864,820	\$ 60,854,348	\$ 10,917,378	\$ 3,258,115	\$ 2,545,897	\$ 118,146,386

Organization

The Water Operations Area consists of four teams that are vigilant about water quality. The Water Operations teams work to protect GLWA communities by testing water as it travels through distribution pipelines and maintaining the best water treatment possible.

❖ Administration

- Chief Operating Officer – Water Operations and Field Services
- Water Director
- Overall budget management including unallocated reserve

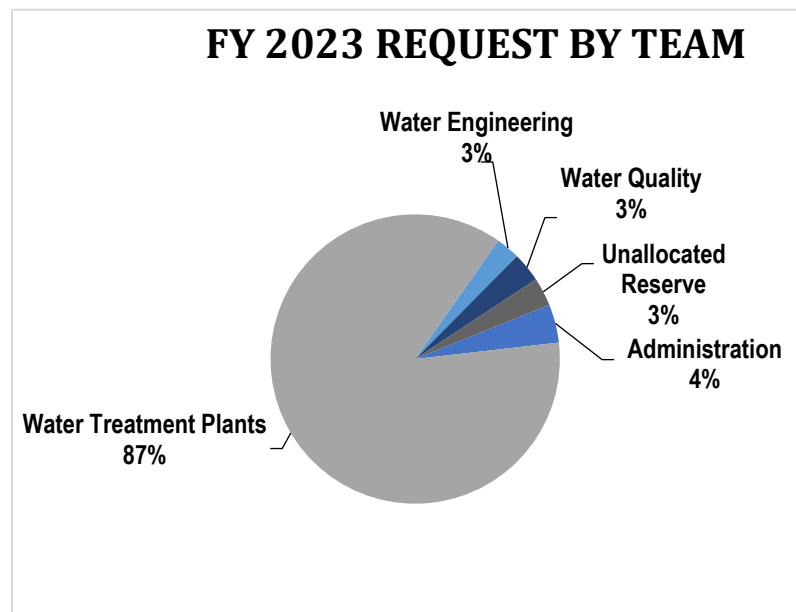
❖ Water Engineering

❖ Water Quality

❖ Water Treatment Plants

- Water Works Park
- Springwells WTP
- Northeast WTP
- Southwest WTP
- Lake Huron WTP

- ❖ **Water System Operations Unallocated** – Funds not apportioned for a specific purpose used for significant unexpected or unbudgeted expenditures



Expense Categories

There are three major categories of Water Operations expenses in the Operations and Maintenance Budget as listed below.

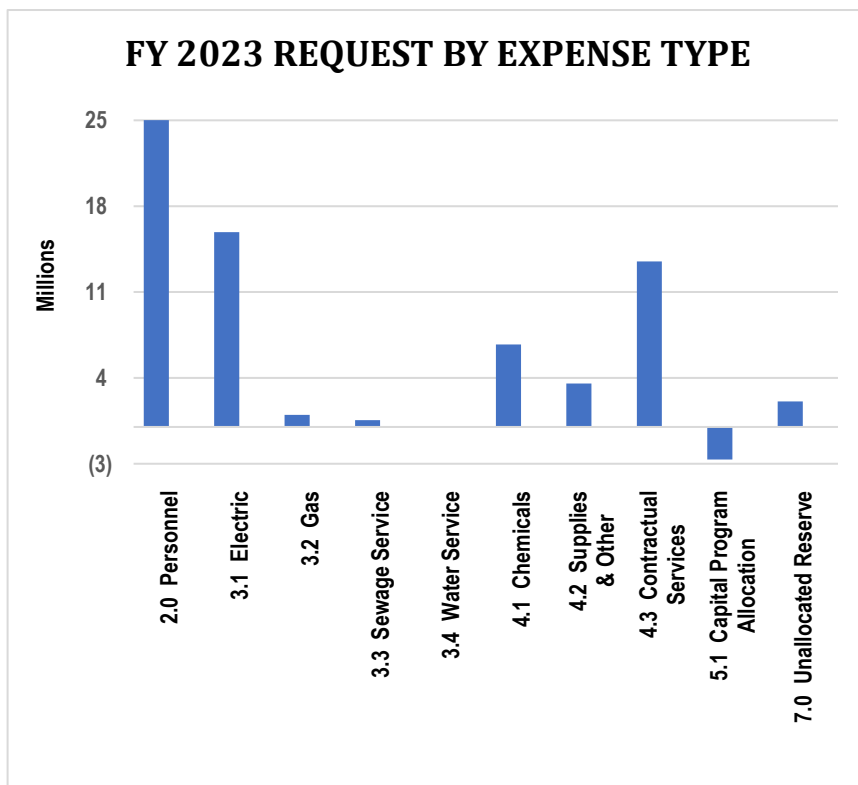
- ❖ Personnel Costs
- ❖ Electric Utilities
- ❖ Contractual Services

The Water Operations Area is required to obtain a consistent level of personnel in order to avoid staff fatigue, overtime cost, and to assure the highest level of water quality. Accordingly, personnel costs are the highest expense category.

The electric utilities are the second highest expense category for Water Operations. Water demand

leads to increased or decreased energy consumption in order to transport enough safe drinking water to the GLWA's communities. Energy consumption is dependent on flow rate, total pressure, climate (temperature extremes), and overall pump efficiency.

Contractual services are the third highest expense category for Water Operations. The level of contractual services includes HVAC maintenance, janitorial services, ovation support (a reliable and innovative control system that integrates data from remote sites into a single, unified system, reducing complexity and minimizing maintenance), alum sludge hauling and corrosion control optimization studies.



Biennial Budget Request

The biennial budget reflects an overall increase in FY 2023 of \$1.8 million, or 2.9%. Key factors that impact FY 2023 include the following.

- ❖ Personnel expenses increased due to the adjustment of benefits to reflect the current benefit costs and the staffing plan increase of 29 to accommodate the higher level of expertise required in order to efficiently maintain water operations (\$3.3 million, or 15.1%). It should be noted that the provision for future wage and benefit adjustments is included in the annual unallocated O&M reserve.
- ❖ Contractual services decreased due to the alum sludge removal, hauling and disposal project contract renewal for Springwells WTP, Northeast WTP and Southwest WTP (\$1.7 million, or 11.3%).

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 21,185,800	\$ 21,728,200	\$ 10,669,800	\$ 25,017,700	\$ 3,289,500	15.1%	\$ 26,069,600
3.1 Electric	17,010,200	15,620,000	8,218,000	15,880,000	260,000	1.7%	15,880,000
3.2 Gas	995,600	993,400	414,300	983,400	(10,000)	-1.0%	983,400
3.3 Sewage Service	423,200	575,000	502,600	550,000	(25,000)	-4.3%	550,000
3.4 Water Service	200	3,500	400	500	(3,000)	-85.7%	500
4.1 Chemicals	6,028,200	6,662,600	3,541,200	6,721,100	58,500	0.9%	6,719,900
4.2 Supplies & Other	3,220,200	3,430,900	1,629,100	3,536,300	105,400	3.1%	3,534,300
4.3 Contractual Services	10,970,300	15,212,300	8,693,200	13,492,000	(1,720,300)	-11.3%	13,486,700
5.1 Capital Program Allocation	(1,997,400)	(2,047,800)	(867,100)	(2,650,100)	(602,300)	29.4%	(3,401,000)
7.0 Unallocated Reserve	-	1,798,800	-	2,284,700	485,900	27.0%	3,489,000
Grand Total	\$ 57,836,300	\$ 63,976,900	\$ 32,801,500	\$ 65,815,600	\$ 1,838,700	2.9%	\$ 67,312,400

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Administration	\$ 2,174,200	\$ 2,329,400	\$ 1,257,000	\$ 2,817,400	\$ 488,000	20.9%	\$ 2,827,000
Water Treatment Plants	52,278,400	56,313,100	29,830,300	56,793,700	480,600	0.9%	56,881,700
Water Engineering	1,216,500	1,501,700	689,100	1,750,100	248,400	16.5%	1,940,800
Water Quality	2,167,200	2,033,900	1,025,100	2,169,700	135,800	6.7%	2,173,900
Water System Operations	-	1,798,800	-	2,284,700	485,900	27.0%	3,489,000
Grand Total	\$ 57,836,300	\$ 63,976,900	\$ 32,801,500	\$ 65,815,600	\$ 1,838,700	2.9%	\$ 67,312,400

Personnel Budget

Water system operations personnel consists of 264 positions and is largely comprised of staffing at the five water treatment plants at 192 positions for FY 2023. Water Engineering, at 30 positions, and Water Quality, at 26 positions, are the second and third largest categories for FY 2023, respectively. The staffing plan increase from FY 2022 to FY 2023 of 29 positions is a result of AECOM Great Lakes, Inc. capital improvement project delivery analysis recommendations and the new water technician apprenticeship program. Recruiting and developing talent is a high priority for GLWA. For this reason, twenty-five new positions are added to support the apprenticeship and training program. The investment in the apprenticeship program will enable the GLWA to develop a workforce for positions which have been challenging to recruit and fill.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Water System Operations	227.00	235.00	264.00	271.00	278.00	282.00	282.00
Chief Operating Officer - Water Operations & Field Services	3.00	3.00	4.00	4.00	4.00	4.00	4.00
Water Director	11.00	13.00	12.00	12.00	12.00	12.00	12.00
Water Engineering	23.00	23.00	30.00	37.00	44.00	48.00	48.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Subtotal Water Treatment Plants	164.00	170.00	192.00	192.00	192.00	192.00	192.00
Water Works Park	35.00	36.00	41.00	41.00	41.00	41.00	41.00
Springwells Water Plant	36.00	37.00	40.00	40.00	40.00	40.00	40.00
Northeast Water Plant	32.00	33.00	38.00	38.00	38.00	38.00	38.00
Southwest Water Plant	30.00	33.00	37.00	37.00	37.00	37.00	37.00
Lake Huron Water Plant	31.00	31.00	36.00	36.00	36.00	36.00	36.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Water System Operations	226.75	234.75	263.75	270.75	277.75	281.75	281.75
Chief Operating Officer - Water Operations & Field Services	2.75	2.75	3.75	3.75	3.75	3.75	3.75
Water Director	11.00	13.00	12.00	12.00	12.00	12.00	12.00
Water Engineering	23.00	23.00	30.00	37.00	44.00	48.00	48.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Subtotal Water Treatment Plants	164.00	170.00	192.00	192.00	192.00	192.00	192.00
Water Works Park	35.00	36.00	41.00	41.00	41.00	41.00	41.00
Springwells Water Plant	36.00	37.00	40.00	40.00	40.00	40.00	40.00
Northeast Water Plant	32.00	33.00	38.00	38.00	38.00	38.00	38.00
Southwest Water Plant	30.00	33.00	37.00	37.00	37.00	37.00	37.00
Lake Huron Water Plant	31.00	31.00	36.00	36.00	36.00	36.00	36.00

Personnel Budget - The table below presents the Water Operations personnel budget which consists of the following expense categories: Salaries & Wages, Salaries & Wages – Workforce Development, Overtime, and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in category 7.0 Unallocated Reserve as shown in the Five-Year Financial Plan on the following page.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Administration	\$ 1,675,800	\$ 1,946,200	\$ 971,500	\$ 2,045,400	\$ 99,200	5.1%	\$ 2,055,000
Water Treatment Plants	15,004,200	15,179,400	7,481,000	17,240,600	2,061,200	13.6%	17,330,500
Water Engineering	2,595,300	2,805,000	1,294,500	3,826,800	1,021,800	36.4%	4,768,000
Water Quality	1,910,500	1,797,600	922,800	1,904,900	107,300	6.0%	1,916,100
Grand Total	\$ 21,185,800	\$ 21,728,200	\$ 10,669,800	\$ 25,017,700	\$ 3,289,500	15.1%	\$ 26,069,600

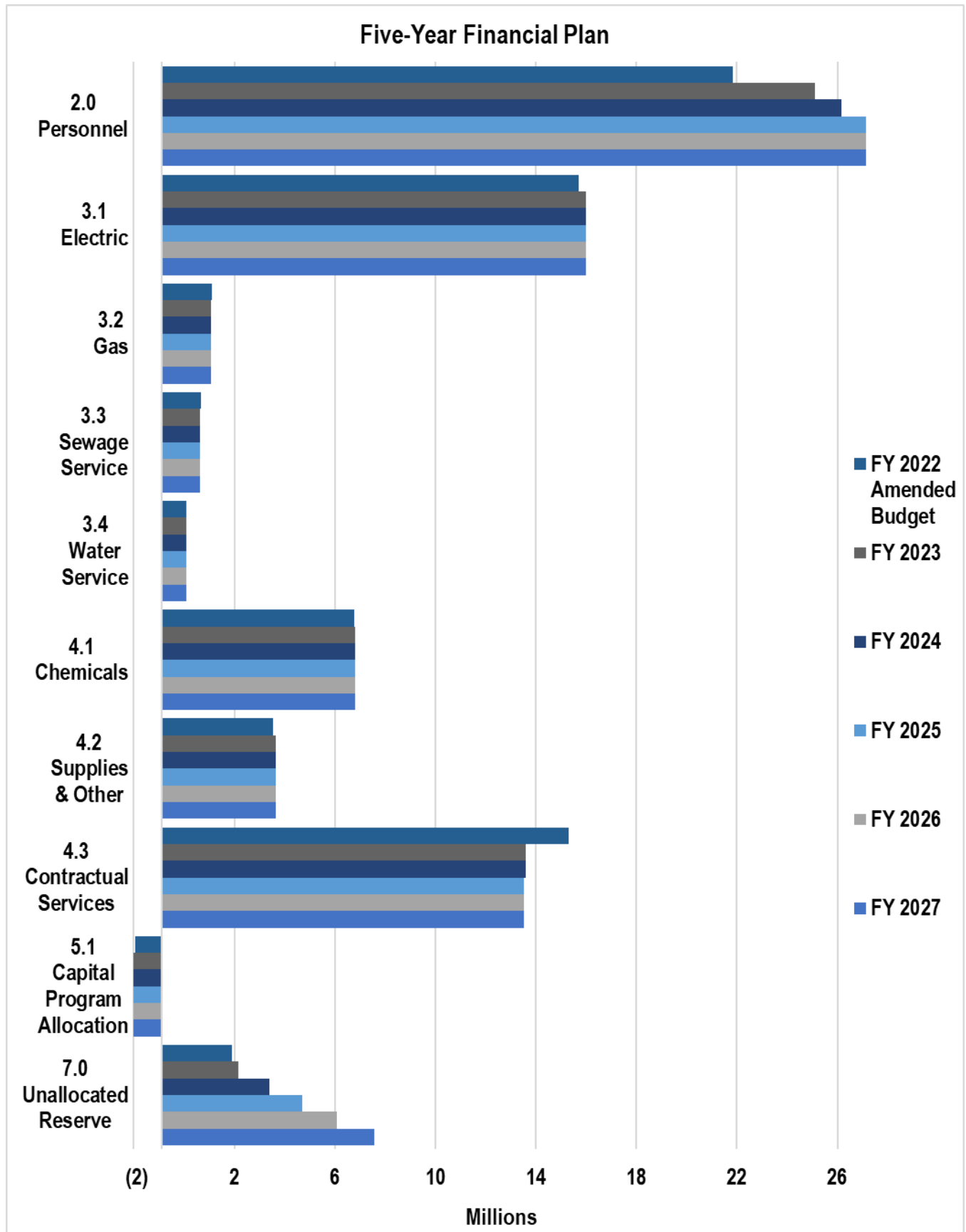
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water System Operations	\$ 21,185,800	\$ 21,728,200	\$ 25,017,700	\$ 26,069,600	\$ 27,130,300	\$ 27,800,000	\$ 27,938,700
Chief Operating Officer - Water Operations & Field Services	405,600	420,000	564,700	567,300	569,800	572,400	575,000
Water Director	1,270,200	1,526,200	1,480,700	1,487,700	1,494,700	1,501,700	1,507,700
Water Engineering	2,595,300	2,805,000	3,826,800	4,768,000	5,717,800	6,276,700	6,305,600
Water Quality	1,910,500	1,797,600	1,904,900	1,916,100	1,927,400	1,938,700	1,950,000
Subtotal Water Treatment Plants	15,004,200	15,179,400	17,240,600	17,330,500	17,420,600	17,510,500	17,600,400
Water Works Park	3,189,800	3,341,400	3,743,800	3,763,100	3,782,400	3,801,700	3,820,900
Springwells Water Plant	3,341,600	3,249,200	3,575,300	3,594,000	3,612,800	3,631,500	3,650,200
Northeast Water Plant	2,958,900	2,852,300	3,468,300	3,486,300	3,504,300	3,522,300	3,540,300
Southwest Water Plant	2,810,900	3,028,200	3,376,300	3,393,700	3,411,100	3,428,500	3,445,900
Lake Huron Water Plant	2,703,000	2,708,300	3,076,900	3,093,400	3,110,000	3,126,500	3,143,100

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 21,185,800	\$ 21,728,200	\$ 25,017,700	\$ 26,069,600	\$ 27,130,300	\$ 27,800,000	\$ 27,938,700
3.1 Electric	17,010,200	15,620,000	15,880,000	15,880,000	15,880,000	15,880,000	15,880,000
3.2 Gas	995,600	993,400	983,400	983,400	983,400	983,400	983,400
3.3 Sewage Service	423,200	575,000	550,000	550,000	550,000	550,000	550,000
3.4 Water Service	200	3,500	500	500	500	500	500
4.1 Chemicals	6,028,200	6,662,600	6,721,100	6,719,900	6,718,800	6,717,600	6,716,500
4.2 Supplies & Other	3,220,200	3,430,900	3,536,300	3,534,300	3,532,300	3,530,300	3,529,800
4.3 Contractual Services	10,970,300	15,212,300	13,492,000	13,486,700	13,436,700	13,441,700	13,436,700
5.1 Capital Program Allocation	(1,997,400)	(2,047,800)	(2,650,100)	(3,401,000)	(4,158,900)	(4,604,200)	(4,625,500)
7.0 Unallocated Reserve	-	1,798,800	2,284,700	3,489,000	4,872,200	6,186,700	7,635,200
Grand Total	\$ 57,836,300	63,976,900	\$ 65,815,600	\$ 67,312,400	\$ 68,945,300	\$ 70,486,000	\$ 72,045,300

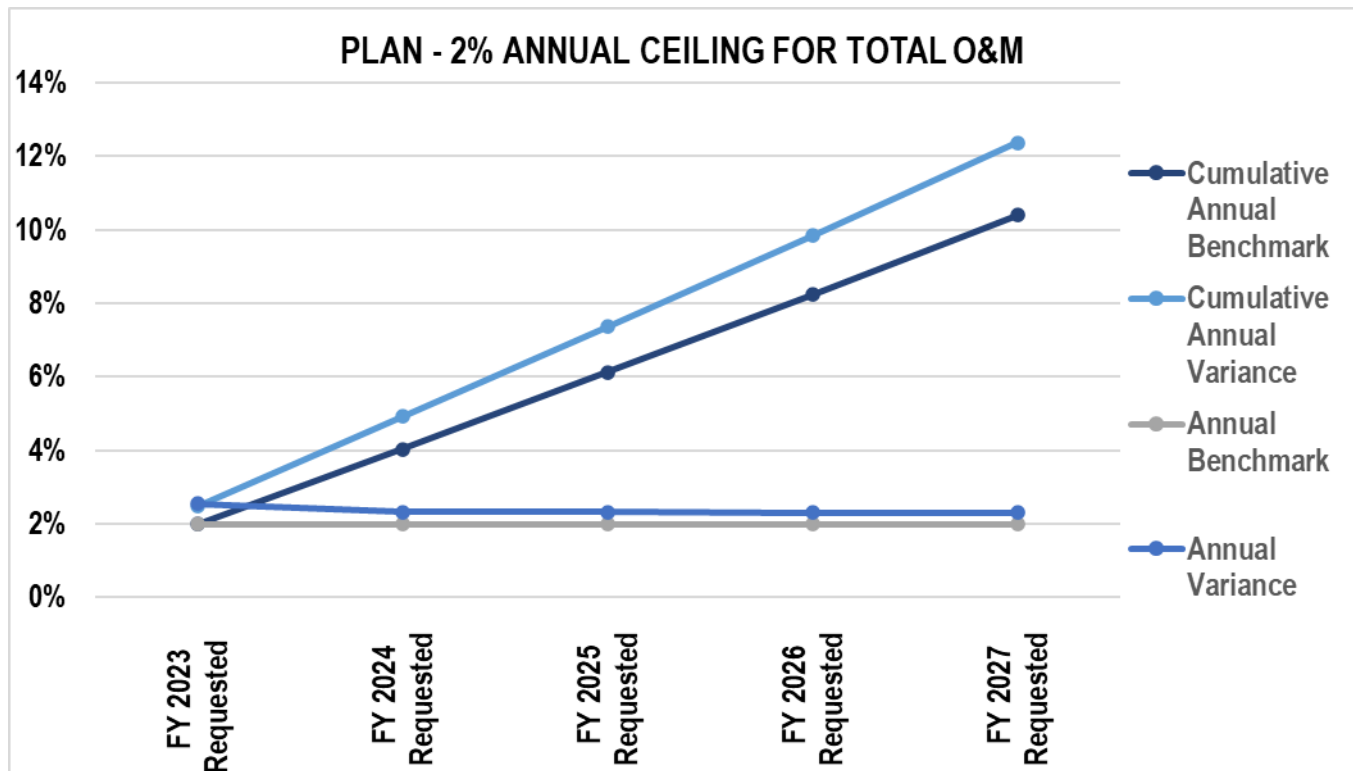


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Administration	\$ 2,174,200	\$ 2,329,400	\$ 2,817,400	\$ 2,827,000	\$ 2,836,500	\$ 2,846,100	\$ 2,854,700
Water Treatment Plants	52,278,400	56,313,100	56,793,700	56,881,700	56,970,200	57,058,400	57,146,600
Water Engineering	1,216,500	1,501,700	1,750,100	1,940,800	2,083,200	2,197,300	2,205,500
Water Quality	2,167,200	2,033,900	2,169,700	2,173,900	2,183,200	2,197,500	2,203,300
Water System Operations							
Unallocated	-	1,798,800	2,284,700	3,489,000	4,872,200	6,186,700	7,635,200
Grand Total	\$ 57,836,300	\$ 63,976,900	\$ 65,815,600	\$ 67,312,400	\$ 68,945,300	\$ 70,486,000	\$ 72,045,300

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Water Operations Group's financial plan reflects a five-year overall increase of 12.4% which is slightly above the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment). The largest yearly increase is for FY 2023 which has a 2.5% increase over FY 2022. Items causing this increase are described previously in the section above labeled "Biennial Budget Request".



Capital Outlay

Water Operations capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay Plan by Asset Category

In FY 2023, the Buildings/Structures asset category request of \$500,000 is driven by the need to replace the air quality improvement system in the maintenance shop at the Springwells WTP.

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 2,758,600	\$ 3,038,300	\$ 3,039,500	\$ 1,852,500	\$ 1,552,000	\$ 1,867,500
Information Technology	5,500	5,500	5,500	5,500	5,500	5,500
Software	5,500	5,500	5,500	5,500	5,500	5,500
Leasehold Improvements	-	-	-	158,000	-	-
Machinery & Equipment	2,691,100	2,525,800	2,972,000	1,682,000	1,484,500	1,815,000
Controls & Communication	25,000	139,000	35,000	52,000	120,000	120,000
Furniture & Fixtures	-	-	-	-	45,000	45,000
Heavy Equipment	500,000	150,000	105,000	57,000	30,000	-
Laboratory	328,000	330,700	280,000	254,000	199,500	229,000
Pipes, Gates & Valves	253,500	137,000	263,000	158,000	210,000	175,500
Process Equipment	452,000	449,000	377,000	305,000	445,000	892,000
Pumps & Motors	1,132,600	1,300,100	1,892,000	846,000	415,000	353,500
Tools, Shop & Warehouse	-	20,000	20,000	10,000	20,000	-
Vehicles	62,000	7,000	62,000	7,000	62,000	47,000
Trailer & Towable Equipment	40,000	-	40,000	-	40,000	40,000
Utility Vehicle	22,000	7,000	22,000	7,000	22,000	7,000
Building/Structures	-	500,000	-	-	-	-
Grand Total	\$ 2,758,600	\$ 3,038,300	\$ 3,039,500	\$ 1,852,500	\$ 1,552,000	\$ 1,867,500

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 3,427,900	\$ 2,758,600	\$ 3,038,300	\$ 3,039,500	\$ 1,852,500	\$ 1,552,000	\$ 1,867,500
Grand Total	\$ 3,427,900	\$ 2,758,600	\$ 3,038,300	\$ 3,039,500	\$ 1,852,500	\$ 1,552,000	\$ 1,867,500

Five-Year Capital Outlay Plan by Team

In FY 2023, the Springwells Water Plant request of \$1,276,000 is driven by the need to install surface wash booster pumps to meet AWOP requirements, perform air quality improvement updates in the maintenance shop and replace current equipment such as turbidimeters, flocculation drives and chlorinators.

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water Engineering	\$ 67,100	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500
Water Quality	145,800	20,000	51,000	18,000	30,000	17,500	19,000
Water Treatment Plants	3,215,000	2,733,100	2,981,800	3,016,000	1,817,000	1,529,000	1,843,000
Water Works Park	1,713,000	308,100	373,800	354,000	354,000	633,000	701,000
Springwells Water Plant	39,700	510,000	1,276,000	1,326,000	350,000	359,000	440,000
Northeast Water Plant	1,075,900	1,175,000	958,000	463,000	628,000	110,000	275,000
Southwest Water Plant	237,400	250,000	169,000	265,000	280,000	250,000	250,000
Lake Huron Water Plant	149,000	490,000	205,000	608,000	205,000	177,000	177,000
Grand Total	\$ 3,427,900	\$ 2,758,600	\$ 3,038,300	\$ 3,039,500	\$ 1,852,500	\$ 1,552,000	\$ 1,867,500

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives extend multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882001 - COO - Water Operations & Field Services	\$ 465,200	\$ 494,000	\$ 417,300	\$ 877,000	\$ 879,600	\$ 882,100	\$ 884,700	\$ 887,300
2.1 Salaries & Wages	328,700	326,400	213,800	433,400	433,400	433,400	433,400	433,400
2.4 Employee Benefits	76,900	93,600	62,200	131,300	133,900	136,400	139,000	141,600
4.2 Supplies & Other	59,600	69,000	141,300	312,300	312,300	312,300	312,300	312,300
Memberships, Licenses & Subscriptions	56,000	53,500	134,700	296,800	296,800	296,800	296,800	296,800
Office Supplies	100	500	100	500	500	500	500	500
Training and Internal Meetings	3,500	5,000	2,800	5,000	5,000	5,000	5,000	5,000
Travel	-	10,000	3,700	10,000	10,000	10,000	10,000	10,000
4.3 Contractual Services	-	5,000	-	-	-	-	-	-
Contractual Professional Services	-	5,000	-	-	-	-	-	-
882101 - Water Director	1,709,000	1,835,400	839,700	1,940,400	1,947,400	1,954,400	1,961,400	1,967,400
2.1 Salaries & Wages	963,200	1,128,900	525,000	1,083,500	1,083,500	1,083,500	1,083,500	1,083,500
2.3 Overtime	45,700	40,000	8,700	40,000	40,000	40,000	40,000	40,000
2.4 Employee Benefits	261,300	357,300	161,800	357,200	364,200	371,200	378,200	384,200
4.2 Supplies & Other	438,800	303,200	132,900	329,700	329,700	329,700	329,700	329,700
Damage Claims	105,600	-	-	-	-	-	-	-
Employee Uniform Expense	109,200	85,000	69,900	105,000	105,000	105,000	105,000	105,000
Inspection and Permit Fees	800	-	-	1,000	1,000	1,000	1,000	1,000
Memberships, Licenses & Subscriptions	6,400	1,000	300	1,000	1,000	1,000	1,000	1,000
Mileage and Parking	12,200	5,000	3,800	10,000	10,000	10,000	10,000	10,000
Office Supplies	30,000	7,200	2,100	7,200	7,200	7,200	7,200	7,200
Operating Supplies	-	-	100	-	-	-	-	-
Training and Internal Meetings	174,300	175,000	44,200	175,500	175,500	175,500	175,500	175,500
Travel	300	30,000	12,500	30,000	30,000	30,000	30,000	30,000
4.3 Contractual Services	-	6,000	11,300	130,000	130,000	130,000	130,000	130,000
Contractual Professional Services	-	6,000	11,300	130,000	130,000	130,000	130,000	130,000
882111 - Water Engineering	1,216,500	1,501,700	689,100	1,750,100	1,940,800	2,083,200	2,197,300	2,205,500
2.1 Salaries & Wages	1,935,100	2,041,300	942,900	2,796,200	3,496,200	4,196,200	4,596,200	4,596,200
2.3 Overtime	117,800	120,000	43,700	120,000	120,000	120,000	120,000	120,000
2.4 Employee Benefits	542,400	643,700	307,900	910,600	1,151,800	1,401,600	1,560,500	1,589,400
4.2 Supplies & Other	59,700	79,300	24,000	78,300	78,300	78,300	78,300	78,300
Capital Outlay less than \$5,000	-	5,000	-	5,000	5,000	5,000	5,000	5,000
Employee Uniform Expense	8,000	10,000	5,700	10,000	10,000	10,000	10,000	10,000
Memberships, Licenses & Subscriptions	12,700	6,700	800	10,700	10,700	10,700	10,700	10,700
Mileage and Parking	17,800	18,000	8,700	18,000	18,000	18,000	18,000	18,000
Office Supplies	1,800	13,000	100	6,000	6,000	6,000	6,000	6,000
Operating Supplies	100	3,500	2,200	3,500	3,500	3,500	3,500	3,500
Postage	-	100	-	100	100	100	100	100
Training and Internal Meetings	14,100	10,000	2,300	10,000	10,000	10,000	10,000	10,000
Travel	-	10,000	1,500	10,000	10,000	10,000	10,000	10,000
Tuition Refund	5,200	3,000	2,700	5,000	5,000	5,000	5,000	5,000
4.3 Contractual Services	467,000	550,000	192,500	395,000	395,000	345,000	345,000	345,000
Contractual Professional Services	467,000	550,000	192,500	395,000	395,000	345,000	345,000	345,000
5.1 Capital Program Allocation	(1,905,500)	(1,932,600)	(821,900)	(2,550,000)	(3,300,500)	(4,057,900)	(4,502,700)	(4,523,400)

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882121 - Water Quality	2,167,200	2,033,900	1,025,100	2,169,700	2,173,900	2,183,200	2,197,500	2,203,300
2.1 Salaries & Wages	1,222,200	1,221,100	619,300	1,279,100	1,279,100	1,279,100	1,279,100	1,279,100
2.3 Overtime	75,700	50,800	31,800	50,800	50,800	50,800	50,800	50,800
2.4 Employee Benefits	612,600	525,700	271,700	575,000	586,200	597,500	608,800	620,100
4.1 Chemicals	129,700	103,500	68,900	125,500	125,500	125,500	125,500	125,500
4.2 Supplies & Other	76,800	80,300	14,300	77,800	75,800	73,800	71,800	71,300
Capital Outlay less than \$5,000	5,000	-	-	5,000	5,000	5,000	5,000	5,000
Memberships, Licenses & Subscriptions	200	500	200	500	500	500	500	500
Mileage and Parking	100	200	-	200	200	200	200	200
Office Supplies	28,000	10,000	9,700	16,500	14,500	12,500	10,500	10,000
Operating Supplies	43,500	67,600	4,400	55,600	55,600	55,600	55,600	55,600
Printing	-	2,000	-	-	-	-	-	-
4.3 Contractual Services	50,200	52,500	19,100	61,500	56,500	56,500	61,500	56,500
Contractual Operating Services	50,200	52,000	19,100	61,500	56,500	56,500	61,500	56,500
Contractual Professional Services	-	500	-	-	-	-	-	-
882131 - Water Works Park	8,290,500	9,149,000	4,078,300	9,306,400	9,324,500	9,342,700	9,360,800	9,378,900
2.1 Salaries & Wages	1,850,000	1,974,600	866,800	2,032,600	2,032,600	2,032,600	2,032,600	2,032,600
2.2 Workforce Development	40,400	36,500	19,900	217,100	217,100	217,100	217,100	217,100
2.3 Overtime	492,300	511,100	233,200	511,100	511,100	511,100	511,100	511,100
2.4 Employee Benefits	807,100	819,200	386,200	983,000	1,002,300	1,021,600	1,040,900	1,060,100
3.1 Electric	1,893,700	2,050,000	960,200	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000
3.2 Gas	207,900	240,000	74,300	240,000	240,000	240,000	240,000	240,000
3.3 Sewage Service	160,600	25,000	26,500	50,000	50,000	50,000	50,000	50,000
4.1 Chemicals	945,300	1,165,700	610,100	1,016,600	1,015,400	1,014,300	1,013,100	1,012,000
4.2 Supplies & Other	426,600	655,000	293,600	598,500	598,500	598,500	598,500	598,500
Capital Outlay less than \$5,000	68,200	30,000	32,000	30,000	30,000	30,000	30,000	30,000
Inspection and Permit Fees	3,100	1,500	-	1,500	1,500	1,500	1,500	1,500
Memberships, Licenses & Subscriptions	1,300	1,000	800	1,000	1,000	1,000	1,000	1,000
Office Supplies	30,300	10,000	9,900	21,000	21,000	21,000	21,000	21,000
Operating Supplies	96,300	129,500	72,200	107,000	107,000	107,000	107,000	107,000
Operating Supplies-Janitorial	11,300	15,000	6,400	15,000	15,000	15,000	15,000	15,000
Rentals- Office Equipment	2,300	-	3,000	-	-	-	-	-
Repairs & Maintenance-Equipment	212,800	468,000	168,800	423,000	423,000	423,000	423,000	423,000
Supplies & Other - Covid19	1,000	-	100	-	-	-	-	-
Tuition Refund	-	-	400	-	-	-	-	-
4.3 Contractual Services	1,466,600	1,671,900	607,500	1,607,500	1,607,500	1,607,500	1,607,500	1,607,500
Contract Services-Information Technology	70,000	316,000	38,200	130,000	130,000	130,000	130,000	130,000
Contractual Buildings & Grounds Maint	350,100	585,100	132,400	467,000	467,000	467,000	467,000	467,000
Contractual Operating Services	606,200	468,800	265,200	593,500	593,500	593,500	593,500	593,500
Contractual Professional Services	440,300	295,000	171,700	410,000	410,000	410,000	410,000	410,000
Telecom, Managed Security & Network Svcs	-	7,000	-	7,000	7,000	7,000	7,000	7,000

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882141 - Springwells Water Plant	13,526,800	13,715,100	6,637,900	13,629,900	13,648,300	13,667,100	13,685,800	13,704,500
2.1 Salaries & Wages	1,935,300	1,891,200	950,900	1,959,300	1,959,300	1,959,300	1,959,300	1,959,300
2.2 Workforce Development	102,700	143,400	42,100	260,100	260,100	260,100	260,100	260,100
2.3 Overtime	458,200	388,900	206,400	400,000	400,000	400,000	400,000	400,000
2.4 Employee Benefits	845,400	825,700	420,100	955,900	974,600	993,400	1,012,100	1,030,800
3.1 Electric	3,726,700	3,000,000	1,873,900	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
3.2 Gas	324,900	280,300	137,300	280,300	280,300	280,300	280,300	280,300
4.1 Chemicals	1,715,400	1,981,000	1,144,000	2,028,000	2,028,000	2,028,000	2,028,000	2,028,000
4.2 Supplies & Other	386,600	478,400	291,300	442,900	442,900	442,900	442,900	442,900
Capital Outlay less than \$5,000	14,100	20,000	158,700	30,000	30,000	30,000	30,000	30,000
Inspection and Permit Fees	1,100	1,500	-	1,500	1,500	1,500	1,500	1,500
Memberships, Licenses & Subscriptions	1,000	500	-	500	500	500	500	500
Mileage and Parking	-	1,000	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	16,300	11,200	6,200	11,200	11,200	11,200	11,200	11,200
Operating Supplies	83,600	156,100	53,300	104,000	104,000	104,000	104,000	104,000
Operating Supplies-Janitorial	8,900	10,000	6,500	10,000	10,000	10,000	10,000	10,000
Repairs & Maintenance-Equipment	261,200	276,100	63,300	282,700	282,700	282,700	282,700	282,700
Supplies & Other - Covid19	200	-	800	-	-	-	-	-
Supplies & Other - Flood Events	-	-	2,500	-	-	-	-	-
Tuition Refund	200	2,000	-	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	4,031,600	4,726,200	1,571,900	4,303,400	4,303,100	4,303,100	4,303,100	4,303,100
Contract Services-Information Technology	98,900	120,000	29,200	87,000	87,000	87,000	87,000	87,000
Contractual Buildings & Grounds Maint	267,600	411,100	279,200	392,100	391,800	391,800	391,800	391,800
Contractual Operating Services	3,315,300	3,944,500	1,101,600	3,436,700	3,436,700	3,436,700	3,436,700	3,436,700
Contractual Professional Services	349,800	250,600	161,900	387,600	387,600	387,600	387,600	387,600
882151 - Northeast Water Plant	9,863,900	10,873,700	6,502,100	10,673,000	10,690,900	10,708,800	10,726,700	10,744,500
2.1 Salaries & Wages	1,694,100	1,794,000	882,100	1,933,800	1,933,800	1,933,800	1,933,800	1,933,800
2.2 Workforce Development	45,100	70,300	21,700	217,100	217,100	217,100	217,100	217,100
2.3 Overtime	501,100	250,000	256,000	400,000	400,000	400,000	400,000	400,000
2.4 Employee Benefits	718,600	738,000	382,900	917,400	935,400	953,400	971,400	989,400
3.1 Electric	3,232,600	2,800,000	1,195,500	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
3.2 Gas	152,600	153,100	71,700	153,100	153,100	153,100	153,100	153,100
3.3 Sewage Service	132,300	130,000	66,700	130,000	130,000	130,000	130,000	130,000
3.4 Water Service	-	2,000	-	-	-	-	-	-
4.1 Chemicals	1,225,000	1,518,500	534,900	1,384,600	1,384,600	1,384,600	1,384,600	1,384,600
4.2 Supplies & Other	457,200	364,100	152,700	364,100	364,100	364,100	364,100	364,100
Capital Outlay less than \$5,000	34,700	10,000	13,700	10,000	10,000	10,000	10,000	10,000
Inspection and Permit Fees	2,200	3,200	(400)	3,200	3,200	3,200	3,200	3,200
Memberships, Licenses & Subscriptions	400	1,500	5,600	1,500	1,500	1,500	1,500	1,500
Mileage and Parking	-	500	-	500	500	500	500	500
Office Supplies	16,200	5,200	8,600	5,200	5,200	5,200	5,200	5,200
Operating Supplies	143,800	116,000	102,200	116,000	116,000	116,000	116,000	116,000
Operating Supplies-Janitorial	13,800	12,000	7,600	12,000	12,000	12,000	12,000	12,000
Postage	-	100	-	100	100	100	100	100
Repairs & Maintenance-Equipment	243,700	215,600	15,200	215,600	215,600	215,600	215,600	215,600
Supplies & Other - Covid19	400	-	200	-	-	-	-	-
Tuition Refund	2,000	-	-	-	-	-	-	-
4.3 Contractual Services	1,720,900	3,078,100	2,948,200	2,394,900	2,394,900	2,394,900	2,394,900	2,394,900
Contract Services-Information Technology	10,200	86,600	-	60,000	60,000	60,000	60,000	60,000
Contractual Buildings & Grounds Maint	261,100	379,400	144,500	319,400	319,400	319,400	319,400	319,400
Contractual Operating Services	1,114,500	2,386,100	2,559,200	1,665,500	1,665,500	1,665,500	1,665,500	1,665,500
Contractual Professional Services	335,100	226,000	244,500	350,000	350,000	350,000	350,000	350,000
5.1 Capital Program Allocation	(15,600)	(24,400)	(10,300)	(22,000)	(22,100)	(22,200)	(22,300)	(22,500)

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882161 - Southwest Water Plant	7,728,800	9,898,600	6,080,400	9,897,000	9,914,100	9,931,100	9,948,100	9,965,100
2.1 Salaries & Wages	1,623,400	1,757,900	881,400	1,821,400	1,821,400	1,821,400	1,821,400	1,821,400
2.2 Workforce Development	49,800	73,000	22,200	217,100	217,100	217,100	217,100	217,100
2.3 Overtime	422,500	450,000	226,500	450,000	450,000	450,000	450,000	450,000
2.4 Employee Benefits	715,200	747,300	389,000	887,800	905,200	922,600	940,000	957,400
3.1 Electric	1,611,300	1,270,000	704,400	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000
3.2 Gas	171,000	140,000	62,300	150,000	150,000	150,000	150,000	150,000
3.3 Sewage Service	62,000	350,000	380,900	300,000	300,000	300,000	300,000	300,000
3.4 Water Service	200	500	400	500	500	500	500	500
4.1 Chemicals	778,100	693,600	435,900	896,100	896,100	896,100	896,100	896,100
4.2 Supplies & Other	588,000	724,400	405,500	577,500	577,500	577,500	577,500	577,500
Capital Outlay less than \$5,000	18,500	35,000	23,800	35,000	35,000	35,000	35,000	35,000
Inspection and Permit Fees	3,300	3,000	-	3,400	3,400	3,400	3,400	3,400
Memberships, Licenses & Subscriptions	300	800	200	300	300	300	300	300
Mileage and Parking	-	100	-	100	100	100	100	100
Office Supplies	12,100	9,000	6,700	12,500	12,500	12,500	12,500	12,500
Operating Supplies	49,800	129,300	54,000	83,000	83,000	83,000	83,000	83,000
Operating Supplies-Janitorial	11,100	10,000	4,000	10,000	10,000	10,000	10,000	10,000
Property Taxes	376,800	245,200	229,800	250,200	250,200	250,200	250,200	250,200
Rentals-Miscellaneous	-	3,000	-	-	-	-	-	-
Repairs & Maintenance-Equipment	112,400	289,000	87,000	183,000	183,000	183,000	183,000	183,000
Supplies & Other - Covid19	3,700	-	-	-	-	-	-	-
4.3 Contractual Services	1,783,600	3,782,700	2,606,800	3,144,700	3,144,700	3,144,700	3,144,700	3,144,700
Contract Services-Information Technology	35,100	107,000	-	80,000	80,000	80,000	80,000	80,000
Contractual Buildings & Grounds Maint	235,300	533,100	101,000	343,100	343,100	343,100	343,100	343,100
Contractual Operating Services	1,181,400	2,895,600	2,415,100	2,359,600	2,359,600	2,359,600	2,359,600	2,359,600
Contractual Professional Services	331,800	247,000	90,700	362,000	362,000	362,000	362,000	362,000
5.1 Capital Program Allocation	(76,300)	(90,800)	(34,900)	(78,100)	(78,400)	(78,800)	(79,200)	(79,600)

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882171 - Lake Huron Water Plant	12,868,400	12,676,700	6,531,600	13,287,400	13,303,900	13,320,500	13,337,000	13,353,600
2.1 Salaries & Wages	1,700,500	1,670,700	806,700	1,759,000	1,759,000	1,759,000	1,759,000	1,759,000
2.2 Workforce Development	-	-	-	174,100	174,100	174,100	174,100	174,100
2.3 Overtime	227,900	350,000	136,600	300,000	300,000	300,000	300,000	300,000
2.4 Employee Benefits	774,600	687,600	350,300	843,800	860,300	876,900	893,400	910,000
3.1 Electric	6,545,900	6,500,000	3,484,000	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000
3.2 Gas	139,200	180,000	68,700	160,000	160,000	160,000	160,000	160,000
3.3 Sewage Service	68,300	70,000	28,500	70,000	70,000	70,000	70,000	70,000
3.4 Water Service	-	1,000	-	-	-	-	-	-
4.1 Chemicals	1,234,700	1,200,300	747,400	1,270,300	1,270,300	1,270,300	1,270,300	1,270,300
4.2 Supplies & Other	726,900	677,200	173,500	755,200	755,200	755,200	755,200	755,200
Capital Outlay less than \$5,000	42,800	15,000	13,700	35,000	35,000	35,000	35,000	35,000
Inspection and Permit Fees	400	1,000	3,800	1,000	1,000	1,000	1,000	1,000
Memberships, Licenses & Subscriptions	700	1,000	300	1,000	1,000	1,000	1,000	1,000
Mileage and Parking	-	3,000	-	3,000	3,000	3,000	3,000	3,000
Office Supplies	17,600	9,000	4,500	13,500	13,500	13,500	13,500	13,500
Operating Supplies	164,700	211,500	97,000	186,500	186,500	186,500	186,500	186,500
Operating Supplies-Janitorial	7,300	6,500	3,700	7,000	7,000	7,000	7,000	7,000
Postage	100	200	-	200	200	200	200	200
Property Taxes	-	8,000	-	8,000	8,000	8,000	8,000	8,000
Repairs & Maintenance-Equipment	493,300	422,000	50,500	500,000	500,000	500,000	500,000	500,000
4.3 Contractual Services	1,450,400	1,339,900	735,900	1,455,000	1,455,000	1,455,000	1,455,000	1,455,000
Contract Services-Information Technology	13,000	88,000	-	45,000	45,000	45,000	45,000	45,000
Contractual Buildings & Grounds Maint	138,200	311,100	55,100	155,000	155,000	155,000	155,000	155,000
Contractual Operating Services	955,000	706,800	538,700	888,000	888,000	888,000	888,000	888,000
Contractual Professional Services	344,200	234,000	142,100	367,000	367,000	367,000	367,000	367,000
887601 - Water System Operations								
Unallocated	-	1,798,800	-	2,284,700	3,489,000	4,872,200	6,186,700	7,635,200
7.0 Unallocated Reserve	-	1,798,800	-	2,284,700	3,489,000	4,872,200	6,186,700	7,635,200
Grand Total	\$ 57,836,300	\$ 63,976,900	\$ 32,801,500	\$ 65,815,600	\$ 67,312,400	\$ 68,945,300	\$ 70,486,000	\$ 72,045,300

Water Operations Pumping Stations

The Water Operations Pumping (Booster) Stations are facilities located within the regional system that distribute water received from the water treatment facilities to communities and other stations to meet pressure and demand requirements. Some water is diverted to reservoirs at the stations until needed during times of high demand. There are nineteen (19) water booster pump stations and one decommissioned pump station (Roseville Pump Station) in the GLWA transmission system.

Strategic Initiatives

❖ Maximize pumping reliability (Ongoing)

Regularly scheduled preventive maintenance is necessary and required to maintain the condition of all pumping (booster) stations.

❖ Minimize energy usage (Ongoing)

Energy consumption is dependent on flow rate, total pressure, climate, and overall pump efficiency. Energy can be minimized through proper preventive maintenance in order to maintain the condition of all pumping (booster) stations.

The table below shows how the water operations area pumping (booster) stations strategic initiatives relate to the organizational strategic goals.

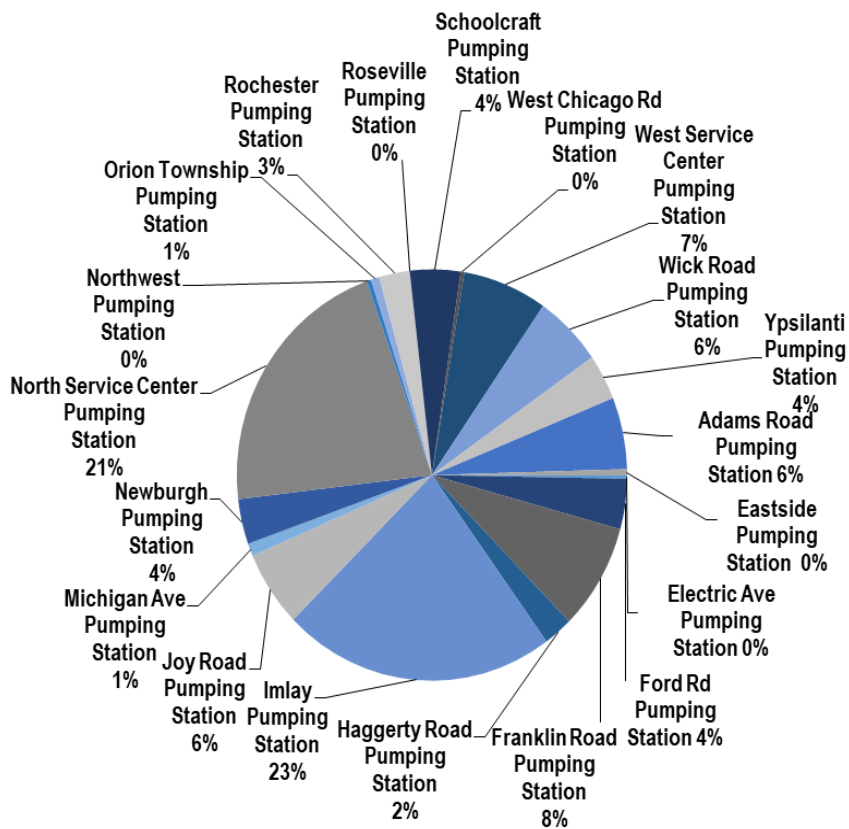
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Water Pump Stations Strategic Initiatives	Maximize pumping reliability				x	x		x				
	Minimize energy usage		x		x	x						

Organization

The Water Operations Pumping (Booster) Stations consist of (19) water booster pump stations and one decommissioned pump station (Roseville Pump Station) in the water transmission system.

- ❖ Adams Rd PS
- ❖ Eastside PS
- ❖ Electric Ave PS
- ❖ Ford Rd PS
- ❖ Franklin Rd PS
- ❖ Haggerty Rd PS
- ❖ Imlay PS
- ❖ Joy Rd PS
- ❖ Michigan Ave. PS
- ❖ Newburgh PS
- ❖ North Service Center PS
- ❖ Northwest PS
- ❖ Orion Township PS
- ❖ Rochester PS
- ❖ Roseville PS *
- ❖ Schoolcraft PS
- ❖ West Chicago Rd PS
- ❖ West Service Center PS
- ❖ Wick Rd PS
- ❖ Ypsilanti PS

FY 2023 REQUEST BY TEAM



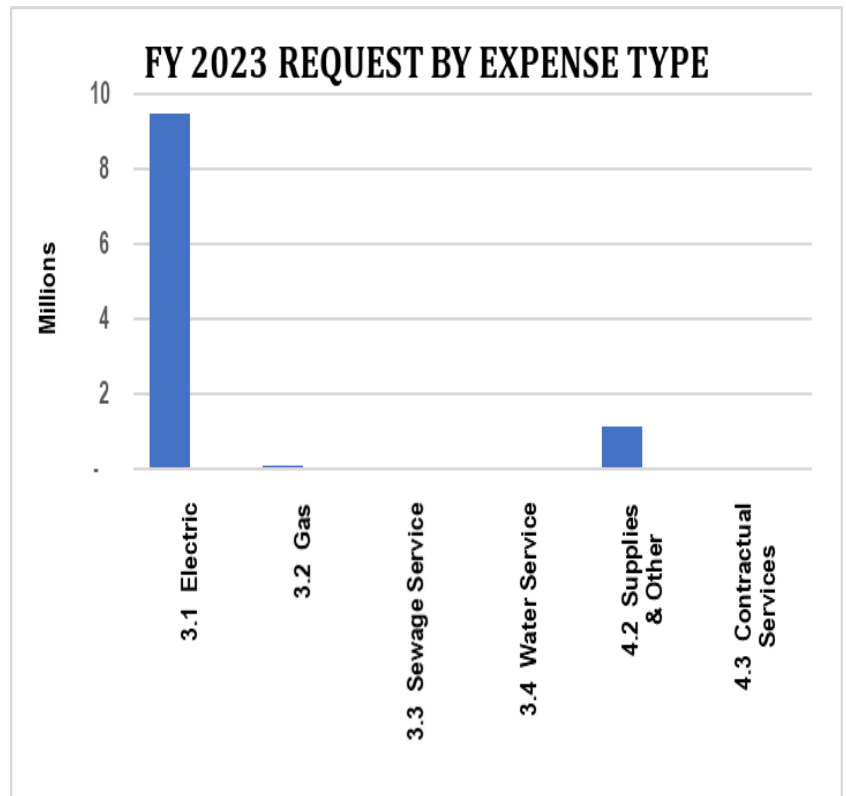
*Roseville PS decommissioned by DWSD prior to GLWA assuming operations. The only cost being incurred for this pump station are stormwater drainage costs.

Expense Categories

There is one major category of expense in the Water pumping stations operations and maintenance budget as listed below.

❖ Electric Utilities

Electric utilities are the highest expense category for Water operations pumping (booster) stations. Booster stations require a significant amount of power. Typically, power costs account for 85 to 95 percent of the total operations and maintenance costs and are directly proportional to the unit cost of power and the actual power used by the booster station pumps.



Biennial Budget Request

The biennial budget reflects an overall decrease in FY 2023 of \$133,500, or 1.2%. Key factors that impact the FY 2023 budget include the following.

- ❖ Energy consumption being directly proportional to the unit cost of power and the actual power used by the booster station pumps (increase of \$90,000).
- ❖ Annual maintenance costs vary, depending on the complexity of the equipment and instrumentation. New forecast in usage result in a decrease of \$223,500.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
3.1 Electric	10,239,600	9,401,000	5,419,100	9,491,000	90,000	1.0%	9,491,000
3.2 Gas	73,700	73,200	19,500	73,200	-	0.0%	73,200
3.3 Sewage Service	2,000	2,700	1,100	2,700	-	0.0%	2,700
3.4 Water Service	700	1,000	200	1,000	-	0.0%	1,000
4.2 Supplies & Other	1,121,700	1,348,200	332,700	1,124,700	(223,500)	-16.6%	1,124,700
4.3 Contractual Services	15,000	10,000	-	10,000	-	0.0%	10,000
Grand Total	\$ 11,452,700	\$ 10,836,100	\$ 5,772,600	\$ 10,702,600	\$ (133,500)	-1.2%	\$ 10,702,600

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Water Pumping Stations	\$ 11,452,700	\$ 10,836,100	\$ 5,772,600	\$ 10,702,600	\$ (133,500)	-1.2%	\$ 10,702,600
Adams Road Pumping Station	682,800	605,000	387,000	605,000	-	0.0%	605,000
Eastside Pumping Station	64,200	53,500	35,100	54,000	500	0.9%	54,000
Electric Ave Pumping Station	30,600	21,500	7,600	26,000	4,500	20.9%	26,000
Ford Rd Pumping Station	384,800	423,700	187,200	423,700	-	0.0%	423,700
Franklin Road Pumping Station	953,000	875,000	480,000	895,000	20,000	2.3%	895,000
Haggerty Road Pumping Station	345,300	257,500	182,900	257,500	-	0.0%	257,500
Imlay Pumping Station	2,340,600	2,405,000	1,305,500	2,415,000	10,000	0.4%	2,415,000
Joy Road Pumping Station	622,500	662,500	319,700	642,500	(20,000)	-3.0%	642,500
Michigan Ave Pumping Station	125,800	105,700	59,400	105,700	-	0.0%	105,700
Newburgh Pumping Station	399,100	380,000	222,400	380,000	-	0.0%	380,000
North Service Center Pumping Station	2,283,000	2,461,000	977,400	2,295,000	(166,000)	-6.7%	2,295,000
Northwest Pumping Station	61,300	35,700	30,900	40,700	5,000	14.0%	40,700
Orion Township Pumping Station	74,600	73,500	38,100	73,000	(500)	-0.7%	73,000
Rochester Pumping Station	407,100	218,000	203,700	272,000	54,000	24.8%	272,000
Roseville Pumping Station	100	300	-	300	-	0.0%	300
Schoolcraft Pumping Station	511,000	433,000	211,700	448,000	15,000	3.5%	448,000
West Chicago Rd Pumping Station	38,500	37,000	10,100	32,000	(5,000)	-13.5%	32,000
West Service Center Pumping Station	847,100	798,700	451,700	747,700	(51,000)	-6.4%	747,700
Wick Road Pumping Station	761,100	605,500	406,500	605,500	-	0.0%	605,500
Ypsilanti Pumping Station	520,200	384,000	255,700	384,000	-	0.0%	384,000
Grand Total	\$ 11,452,700	\$ 10,836,100	\$ 5,772,600	\$ 10,702,600	\$ (133,500)	-1.2%	\$ 10,702,600

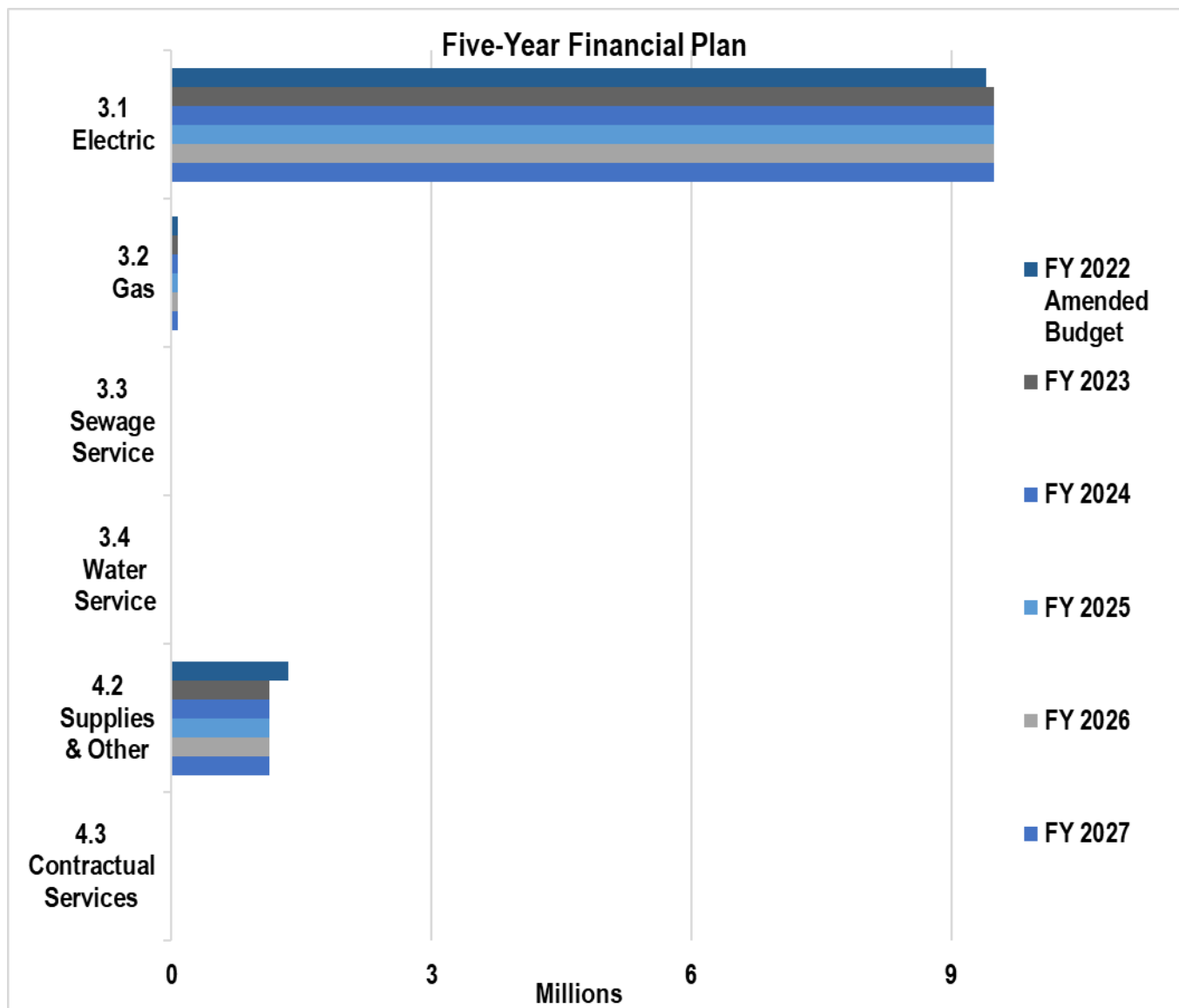
Personnel Budget

Personnel budget is not a component of the Water Operations Area Pumping (Booster) Stations. Labor to maintain these facilities is included in the Field Service Operations budget.

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
3.1 Electric	10,239,600	9,401,000	9,491,000	9,491,000	9,491,000	9,491,000	9,491,000
3.2 Gas	73,700	73,200	73,200	73,200	73,200	73,200	73,200
3.3 Sewage Service	2,000	2,700	2,700	2,700	2,700	2,700	2,700
3.4 Water Service	700	1,000	1,000	1,000	1,000	1,000	1,000
4.2 Supplies & Other	1,121,700	1,348,200	1,124,700	1,124,700	1,124,700	1,124,700	1,124,700
4.3 Contractual Services	15,000	10,000	10,000	10,000	10,000	10,000	10,000
Grand Total	\$ 11,452,700	10,836,100	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600

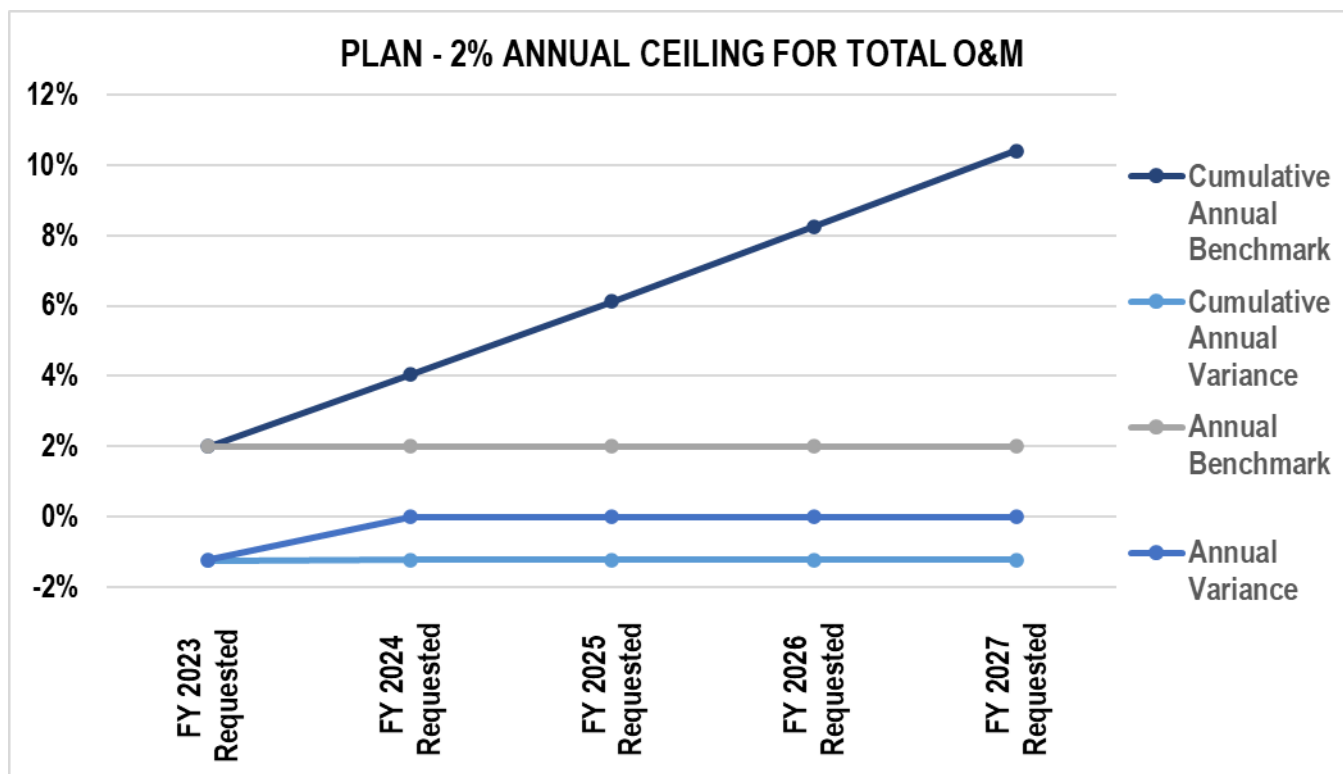


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water Pumping Stations	\$ 11,452,700	\$ 10,836,100	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600
Adams Road Pumping Station	682,800	605,000	605,000	605,000	605,000	605,000	605,000
Eastside Pumping Station	64,200	53,500	54,000	54,000	54,000	54,000	54,000
Electric Ave Pumping Station	30,600	21,500	26,000	26,000	26,000	26,000	26,000
Ford Rd Pumping Station	384,800	423,700	423,700	423,700	423,700	423,700	423,700
Franklin Road Pumping Station	953,000	875,000	895,000	895,000	895,000	895,000	895,000
Haggerty Road Pumping Station	345,300	257,500	257,500	257,500	257,500	257,500	257,500
Imlay Pumping Station	2,340,600	2,405,000	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000
Joy Road Pumping Station	622,500	662,500	642,500	642,500	642,500	642,500	642,500
Michigan Ave Pumping Station	125,800	105,700	105,700	105,700	105,700	105,700	105,700
Newburgh Pumping Station	399,100	380,000	380,000	380,000	380,000	380,000	380,000
North Service Center Pumping Station	2,283,000	2,461,000	2,295,000	2,295,000	2,295,000	2,295,000	2,295,000
Northwest Pumping Station	61,300	35,700	40,700	40,700	40,700	40,700	40,700
Orion Township Pumping Station	74,600	73,500	73,000	73,000	73,000	73,000	73,000
Rochester Pumping Station	407,100	218,000	272,000	272,000	272,000	272,000	272,000
Roseville Pumping Station	100	300	300	300	300	300	300
Schoolcraft Pumping Station	511,000	433,000	448,000	448,000	448,000	448,000	448,000
West Chicago Rd Pumping Station	38,500	37,000	32,000	32,000	32,000	32,000	32,000
West Service Center Pumping Station	847,100	798,700	747,700	747,700	747,700	747,700	747,700
Wick Road Pumping Station	761,100	605,500	605,500	605,500	605,500	605,500	605,500
Ypsilanti Pumping Station	520,200	384,000	384,000	384,000	384,000	384,000	384,000
Grand Total	\$ 11,452,700	\$ 10,836,100	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Water Operations pumping (booster) stations Group's financial plan reflects a five-year overall decrease of 1.2% which is well within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Capital Outlay is not a component of the Water Pumping (Booster) Stations' budget.

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is reflected on the following page. The expenses are listed for each cost center. Because many of GLWA's initiatives extend multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882321 - Ford Rd Pumping Station	\$ 384,800	\$ 423,700	\$ 187,200	\$ 423,700	\$ 423,700	\$ 423,700	\$ 423,700	\$ 423,700
3.1 Electric	358,800	400,000	175,000	400,000	400,000	400,000	400,000	400,000
3.2 Gas	4,300	3,700	1,700	3,700	3,700	3,700	3,700	3,700
4.2 Supplies & Other	21,700	20,000	10,500	20,000	20,000	20,000	20,000	20,000
Repairs & Maintenance-Equipment	21,700	20,000	10,500	20,000	20,000	20,000	20,000	20,000
882322 - Eastside Pumping Station	64,200	53,500	35,100	54,000	54,000	54,000	54,000	54,000
3.1 Electric	36,500	30,000	27,100	30,000	30,000	30,000	30,000	30,000
3.2 Gas	6,200	3,500	1,300	4,000	4,000	4,000	4,000	4,000
4.2 Supplies & Other	21,500	20,000	6,700	20,000	20,000	20,000	20,000	20,000
Repairs & Maintenance-Equipment	21,500	20,000	6,700	20,000	20,000	20,000	20,000	20,000
882323 - Northwest Pumping Station	61,300	35,700	30,900	40,700	40,700	40,700	40,700	40,700
3.1 Electric	42,100	25,000	22,200	30,000	30,000	30,000	30,000	30,000
3.3 Sewage Service	100	200	100	200	200	200	200	200
3.4 Water Service	500	500	200	500	500	500	500	500
4.2 Supplies & Other	18,600	10,000	8,400	10,000	10,000	10,000	10,000	10,000
Repairs & Maintenance-Equipment	18,600	10,000	8,400	10,000	10,000	10,000	10,000	10,000
882324 - West Service Center Pumping Station	847,100	798,700	451,700	747,700	747,700	747,700	747,700	747,700
3.1 Electric	757,200	650,000	443,600	650,000	650,000	650,000	650,000	650,000
3.2 Gas	5,300	7,000	1,400	7,000	7,000	7,000	7,000	7,000
4.2 Supplies & Other	84,600	141,700	6,700	90,700	90,700	90,700	90,700	90,700
Repairs & Maintenance-Equipment	84,600	141,700	6,700	90,700	90,700	90,700	90,700	90,700
882325 - Michigan Ave Pumping Station	125,800	105,700	59,400	105,700	105,700	105,700	105,700	105,700
3.1 Electric	102,300	90,000	58,600	90,000	90,000	90,000	90,000	90,000
3.3 Sewage Service	200	200	-	200	200	200	200	200
3.4 Water Service	200	500	-	500	500	500	500	500
4.2 Supplies & Other	23,100	15,000	800	15,000	15,000	15,000	15,000	15,000
Repairs & Maintenance-Equipment	23,100	15,000	800	15,000	15,000	15,000	15,000	15,000
882326 - West Chicago Rd Pumping Station	38,500	37,000	10,100	32,000	32,000	32,000	32,000	32,000
3.1 Electric	24,400	30,000	9,400	25,000	25,000	25,000	25,000	25,000
4.2 Supplies & Other	14,100	7,000	700	7,000	7,000	7,000	7,000	7,000
Repairs & Maintenance-Equipment	14,100	7,000	700	7,000	7,000	7,000	7,000	7,000
882327 - Electric Ave Pumping Station	30,600	21,500	7,600	26,000	26,000	26,000	26,000	26,000
3.1 Electric	16,200	16,000	6,600	16,000	16,000	16,000	16,000	16,000
4.2 Supplies & Other	14,400	5,500	1,000	10,000	10,000	10,000	10,000	10,000
Repairs & Maintenance-Equipment	14,400	5,500	1,000	10,000	10,000	10,000	10,000	10,000
882328 - Orion Township Pumping Station	74,600	73,500	38,100	73,000	73,000	73,000	73,000	73,000
3.1 Electric	66,600	70,000	37,300	70,000	70,000	70,000	70,000	70,000
3.2 Gas	300	1,000	200	500	500	500	500	500
4.2 Supplies & Other	7,700	2,500	600	2,500	2,500	2,500	2,500	2,500
Repairs & Maintenance-Equipment	7,700	2,500	600	2,500	2,500	2,500	2,500	2,500
882329 - North Service Center Pumping Station	2,283,000	2,461,000	977,400	2,295,000	2,295,000	2,295,000	2,295,000	2,295,000
3.1 Electric	2,115,500	2,000,000	937,200	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
3.2 Gas	24,300	25,000	3,500	25,000	25,000	25,000	25,000	25,000
4.2 Supplies & Other	143,200	436,000	36,700	270,000	270,000	270,000	270,000	270,000
Repairs & Maintenance-Equipment	143,200	436,000	36,700	270,000	270,000	270,000	270,000	270,000
882330 - Adams Road Pumping Station	682,800	605,000	387,000	605,000	605,000	605,000	605,000	605,000
3.1 Electric	594,700	500,000	371,200	500,000	500,000	500,000	500,000	500,000
4.2 Supplies & Other	88,100	105,000	15,800	105,000	105,000	105,000	105,000	105,000
Repairs & Maintenance-Equipment	88,100	105,000	15,800	105,000	105,000	105,000	105,000	105,000
882331 - Newburgh Pumping Station	399,100	380,000	222,400	380,000	380,000	380,000	380,000	380,000
3.1 Electric	382,400	365,000	215,800	365,000	365,000	365,000	365,000	365,000
4.2 Supplies & Other	16,700	15,000	6,600	15,000	15,000	15,000	15,000	15,000
Repairs & Maintenance-Equipment	16,700	15,000	6,600	15,000	15,000	15,000	15,000	15,000

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 10.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882332 - Franklin Road Pumping Station	953,000	875,000	480,000	895,000	895,000	895,000	895,000	895,000
3.1 Electric	869,400	750,000	451,600	800,000	800,000	800,000	800,000	800,000
4.2 Supplies & Other	83,600	125,000	28,400	95,000	95,000	95,000	95,000	95,000
Repairs & Maintenance-Equipment	83,600	125,000	28,400	95,000	95,000	95,000	95,000	95,000
882333 - Roseville Pumping Station	100	300	-	300	300	300	300	300
3.3 Sewage Service	100	300	-	300	300	300	300	300
882334 - Wick Road Pumping Station	761,100	605,500	406,500	605,500	605,500	605,500	605,500	605,500
3.1 Electric	629,900	500,000	296,100	500,000	500,000	500,000	500,000	500,000
3.2 Gas	9,100	5,000	1,000	5,000	5,000	5,000	5,000	5,000
3.3 Sewage Service	400	500	100	500	500	500	500	500
4.2 Supplies & Other	121,700	100,000	109,300	100,000	100,000	100,000	100,000	100,000
Repairs & Maintenance-Equipment	121,700	100,000	109,300	100,000	100,000	100,000	100,000	100,000
882335 - Joy Road Pumping Station	622,500	662,500	319,700	642,500	642,500	642,500	642,500	642,500
3.1 Electric	563,000	550,000	311,300	550,000	550,000	550,000	550,000	550,000
3.2 Gas	3,500	3,000	1,700	3,000	3,000	3,000	3,000	3,000
3.3 Sewage Service	400	500	200	500	500	500	500	500
4.2 Supplies & Other	55,600	109,000	6,500	89,000	89,000	89,000	89,000	89,000
Repairs & Maintenance-Equipment	55,600	109,000	6,500	89,000	89,000	89,000	89,000	89,000
882336 - Schoolcraft Pumping Station	511,000	433,000	211,700	448,000	448,000	448,000	448,000	448,000
3.1 Electric	425,500	380,000	200,000	380,000	380,000	380,000	380,000	380,000
3.2 Gas	4,500	3,000	1,700	3,000	3,000	3,000	3,000	3,000
4.2 Supplies & Other	76,000	50,000	10,000	65,000	65,000	65,000	65,000	65,000
Repairs & Maintenance-Equipment	76,000	50,000	10,000	65,000	65,000	65,000	65,000	65,000
4.3 Contractual Services	5,000	-	-	-	-	-	-	-
Contractual Operating Services	5,000	-	-	-	-	-	-	-
882337 - Ypsilanti Pumping Station	520,200	384,000	255,700	384,000	384,000	384,000	384,000	384,000
3.1 Electric	482,400	350,000	246,000	350,000	350,000	350,000	350,000	350,000
3.2 Gas	6,200	5,000	1,100	5,000	5,000	5,000	5,000	5,000
4.2 Supplies & Other	26,600	19,000	8,600	19,000	19,000	19,000	19,000	19,000
Repairs & Maintenance-Equipment	26,600	19,000	8,600	19,000	19,000	19,000	19,000	19,000
4.3 Contractual Services	5,000	10,000	-	10,000	10,000	10,000	10,000	10,000
Contractual Professional Services	5,000	10,000	-	10,000	10,000	10,000	10,000	10,000
882338 - Inlay Pumping Station	2,340,600	2,405,000	1,305,500	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000
3.1 Electric	2,172,500	2,300,000	1,257,100	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000
4.2 Supplies & Other	163,100	105,000	48,400	115,000	115,000	115,000	115,000	115,000
Repairs & Maintenance-Equipment	163,100	105,000	48,400	115,000	115,000	115,000	115,000	115,000
4.3 Contractual Services	5,000	-	-	-	-	-	-	-
Contractual Professional Services	5,000	-	-	-	-	-	-	-
882339 - Rochester Pumping Station	407,100	218,000	203,700	272,000	272,000	272,000	272,000	272,000
3.1 Electric	339,800	185,000	181,600	225,000	225,000	225,000	225,000	225,000
3.2 Gas	4,500	7,000	2,200	7,000	7,000	7,000	7,000	7,000
3.3 Sewage Service	200	500	400	500	500	500	500	500
4.2 Supplies & Other	62,600	25,500	19,500	39,500	39,500	39,500	39,500	39,500
Repairs & Maintenance-Equipment	62,600	25,500	19,500	39,500	39,500	39,500	39,500	39,500
882340 - Haggerty Road Pumping Station	345,300	257,500	182,900	257,500	257,500	257,500	257,500	257,500
3.1 Electric	260,400	210,000	171,400	210,000	210,000	210,000	210,000	210,000
3.2 Gas	5,500	10,000	3,700	10,000	10,000	10,000	10,000	10,000
3.3 Sewage Service	600	500	300	500	500	500	500	500
4.2 Supplies & Other	78,800	37,000	7,500	37,000	37,000	37,000	37,000	37,000
Repairs & Maintenance-Equipment	78,800	37,000	7,500	37,000	37,000	37,000	37,000	37,000
Grand Total	\$ 11,452,700	\$ 10,836,100	\$ 5,772,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600	\$ 10,702,600

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Section 5B

Wastewater (Sewer) System Operations

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Wastewater Operations Group

The Wastewater Operations Group treats the sanitary and combined sewage from 79 communities, or nearly 30% of the State of Michigan's population, protecting the receiving waters and safeguarding the public's health, by meeting or exceeding the requirements outlined under the National Pollutant Discharge Elimination System (NPDES).

Strategic Initiatives

❖ **Safeguarding the public's health and the environment (Ongoing)**

Through compliance with the NPDES permit and partnership with our co-permittee, the Detroit Water and Sewer Department (DWSD), and our member partners and others. This is measured through regular monitoring and reporting to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as well as a monthly KPI to the Board of the effluent phosphorous concentration in relation to the permitted limit.

❖ **Monitoring and improving the reliability of processing equipment (Ongoing)**

By focusing on our maintenance program and optimizing our resources in removing defects and stabilizing our maintenance measures. This is measured by monthly reporting of KPI's to the Board for preventative and corrective maintenance activity.

❖ **Continuing to build and retain a reliable workforce (Ongoing)**

In accordance with the EGLE staffing plan through the recruitment and retention of talented individuals and implementation of apprenticeship programs. Working with organizational development to build a sustainable employment model. This is monitored through staff training records and turn-over tracking.

❖ **Maximizing beneficial reuse of the solids produced through the Water Resource Recovery Facility (Completion by end of FY 2022)**

Close monitoring of the solids inventory, and reduction of the Central Offloading process for landfill disposal. This is monitored by a monthly KPI to the Board for solids inventory.

❖ **Upgrading Instrumentation and Control Systems (Over next three to five years)**

By establishing a calibration and replacement program for various instruments, including software updates and hardware for the wastewater controls system. The program will increase reliability and visibility for operations. This also advances the hardening of the system to protect our infrastructure from cybersecurity attacks.

❖ **Continuing the efforts towards optimization of our operations through innovation (Ongoing)**

By working with the Energy, Research and Innovation group to explore opportunities to partner with universities to conduct research at the WRRF. This will also be accomplished by involving the Energy, Research and Innovation group in the capital improvement process.

❖ **Revising and expanding the resources for Capital Improvement Program delivery. (Over the next Three years)**

By focusing on project management and lifecycle asset management. The addition of a Director of Engineering and the creation of subject matter expert teams, dedicated to the Capital Improvement Program, plus others dedicated to operational improvements.

The following table shows how the wastewater operations strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Wastewater Operations Strategic Initiatives	Safeguarding the publics' health and the environment			x	x	x		x	x			x
	Monitor and improve the reliability of processing equipment			x	x	x	x	x	x			
	Continue to build a reliable workforce		x	x		x	x				x	
	Optimizing the Biosolid Dryer Facility	x	x	x	x	x	x		x	x		x
	Upgrade of Instrumentation and Control Systems			x	x	x	x		x			
	Continue efforts towards innovation	x	x	x	x	x	x	x	x			x
	Revising and expanding the resources for Capital Improvement Program delivery			x	x	x	x		x			x

Wastewater Operations Contracts

The Wastewater Operations budget contains several contracts for commodities, services, and maintenance to ensure system reliability, safeguard public health and the environment in compliance with our NPDES permit. The following tables represent current contracts for the services listed. Expired contracts are not presented. Budgeted amounts beyond contract date are estimates based on past experience in addition to future program plans. These contracts would generally require a separate procurement process. It should be noted that several contracts are shared by multiple areas of GLWA. In the following tables are the key contracts for these services.

Significant Chemical Contracts

Project Description	Chlorine (90 Ton Tank Cars)	Flocculant, Organic Polymer	Ferric Chloride	Gaseous Oxygen Service	Sodium Bisulfite	Sulfur Dioxide	Sodium Hypochlorite	Total of Significant Chemical Contracts
Prime Consultant or Supplier	JCI Jones Chemicals Inc	Polydyne Inc	Kemira Water Solutions	Praxair Inc	Sulco Chemicals Limited	PVS Technologies Inc	PVS Nolwood Chemical Inc	
Contract #	0004302	1802179	PO 9172	2920576	PO 9857	PO 9172	PO 13974	
Contract Amount	\$ 2,046,816	\$ 7,875,000	\$ 3,999,550	\$ 14,091,663	\$ 1,336,152	\$ 3,003,000	\$ 5,469,000	
Contract End Date	12/21/21	01/31/24	05/27/22	08/31/21	04/30/22	05/27/22	03/31/22	
Cost Center Name	Wastewater Secondary Processing	Wastewater Incineration	Wastewater Primary Processing	Wastewater Secondary Processing	Wastewater Secondary Processing	Wastewater Secondary Processing	CSO Facilities and Wastewater Secondary Processing	
Expense Category	Chemicals	Chemicals	Chemicals	Chemicals	Chemicals	Chemicals	Chemicals	
Pre-FY 2021 Spend	\$ 13,033,007	\$ 1,317,600	\$ 3,830,800	\$ 13,069,700	\$ 388,200	\$ 525,301	\$ 3,103,200	\$ 35,267,808
FY 2021 Spend	476,600	944,943	1,990,300	2,514,200	120,100	477,671	980,900	\$ 7,504,714
FY 2022 Amended Budget	1,269,200	1,152,200	2,574,400	2,562,600	207,300	525,500	1,962,100	\$ 10,253,300
FY 2023 Requested	741,500	1,032,000	2,107,200	2,651,000	199,000	492,000	1,635,000	\$ 8,857,700
FY 2024 Requested	749,000	1,043,000	2,128,000	2,677,000	201,000	497,000	1,651,000	\$ 8,946,000
FY 2025 Requested	756,000	1,054,000	2,149,000	2,704,000	203,000	502,000	1,668,000	\$ 9,036,000
FY 2026 Requested	764,000	1,054,000	2,170,000	2,731,000	205,000	507,000	1,683,000	\$ 9,114,000
FY 2027 Requested	771,800	1,054,000	2,192,000	2,758,000	207,000	512,000	1,699,000	\$ 9,193,800
Total	\$ 18,561,107	\$ 8,651,743	\$ 19,141,700	\$ 31,667,500	\$ 1,730,600	\$ 4,038,472	\$ 14,382,200	\$ 98,173,322

Significant Other Contracts

Project Description	Landfill Service For Lime Stabilized Dewatered Sludge	Maintenance Service contract for Accusonic Flow Meters	Fire -Alarms, Sprinklers, Extinguishers- Maintenance & Repair	Refractory Inspection and Repairs	HVAC Services	Biosolids Dryer Facility	Facilities Maintenance Services	Total of Significant Other Contracts
Prime Consultant or Supplier	Waste Management Of Michigan Inc	HESCO Group Inc	Johnson Controls Fire Protection LP	Commercial Contracting Corporation	Multiple Vendors	New England Fertilizer Company	Lakeshore Global Corporation	
Contract #	PO 16507	PO 12613	2000284	2000917	Multiple	PC-792	CON-1901658	
Contract Amount	\$ 2,000,000	\$ 2,204,531	\$ 1,659,587	\$ 4,752,640	\$ 5,790,800	\$ 540,000,000	\$ 10,944,780	
Contract End Date	03/31/25	04/29/24	08/31/23	12/20/25	12/28/23	07/31/41	01/19/22	
Cost Center Name	Central Off Loading & Hauling	All CSO Facilities	Wastewater Operations & CSO Facilities	Wastewater Incineration	Wastewater Operations & CSO Facilities	Central Off Loading & Hauling	Various	
Expense Category	Contract Services	Contract Services	Supplies & Other	Supplies & Other	Supplies & Other	Contract Services	Personnel	
Pre-FY 2021 Spend	\$ 127,600	\$ 239,300	\$ -	\$ -	\$ -	\$ 55,849,700	\$ 3,826,200	\$ 60,042,800
FY 2021 Spend	48,600	149,000	153,000	-	275,000	14,248,100	8,019,100	\$ 22,892,800
FY 2022 Amended Budget	450,000	231,100	464,000	950,600	1,624,400	14,124,000	9,494,200	\$ 27,338,300
FY 2023 Requested	372,000	236,600	464,000	1,201,500	1,752,100	14,456,000	8,331,600	\$ 26,813,800
FY 2024 Requested	372,000	238,600	465,500	1,201,500	1,783,200	14,564,000	8,357,500	\$ 26,982,300
FY 2025 Requested	379,000	243,000	469,600	1,201,500	1,814,700	14,673,000	8,426,700	\$ 27,207,500
FY 2026 Requested	387,000	248,000	473,800	1,224,000	1,847,100	14,783,000	8,453,200	\$ 27,416,100
FY 2027 Requested	387,000	252,700	477,900	1,224,000	1,883,400	14,894,000	8,481,200	\$ 27,600,200
Total	\$ 2,523,200	\$ 1,838,300	\$ 2,967,800	\$ 7,003,100	\$ 10,979,900	\$ 157,591,800	\$ 63,389,700	\$ 246,293,800

Task Order Contracts

As a part of the delivery of services for Wastewater Operations, three multi-vendor contracts have been executed. Task order contracts are designed to reduce the time from design to execution by pre-qualifying vendors within each contract. These task-oriented contracts are grouped into three key segments: rehabilitation (JOC), engineering (TOE) and control systems (TIC). Each segment contains multiple vendors who have the opportunity to compete for projects within their segment. The expenditure for any project, or task, is controlled by budget for the area for which that task is requested.

Below is a table for each of these three segments.

Task Order Contract Segment	Contract End Date	Number of Participating Vendors	Overall Value of the contract	Total Awarded Contracts	Pre-FY 2021 Spend	FY 2021 Spend
Job Order Maintenance Contract (JOC)	06/30/23	6	\$ 24,000,000	\$ 14,254,700	\$ 1,245,800	\$ 7,007,200
Task Order Engineering (TOE)	02/02/23	6	30,000,000	4,477,000	5,200	1,298,400
Task Instrumentation and Control (TIC)	09/30/25	5	7,620,000	475,400	-	103,702

Organization

The GLWA Wastewater Operations Area consists of four teams.

❖ **Water Resource Recovery Facility (WRRF)**

Processing plant for the treatment of sewage for the greater metropolitan area.

❖ **Combined Sewer Overflow (CSO)**

Facilities utilized to control flow volumes for protecting the system and the receiving waters during increased system demand such as during rainstorms or snow melt. GLWA currently operates 6 CSO retention and treatment basins and 3 screening and disinfection facilities. The Belle Isle retention basin is owned by DWSD and operated by GLWA under a shared services agreement. See Shared Services under Section 6. Each CSO facility has its own cost center. Costs that are applicable to all CSO facilities are budgeted in cost center 892270 - Combined Sewer Overflow.

❖ **Wastewater Laboratories**

Monitoring of pollutants entering and exiting the GLWA sewage facilities

❖ **All Others (including)**

○ **Wastewater Engineering**

Provide study, design, and construction administration services for improvements to the WRRF and CSO facilities

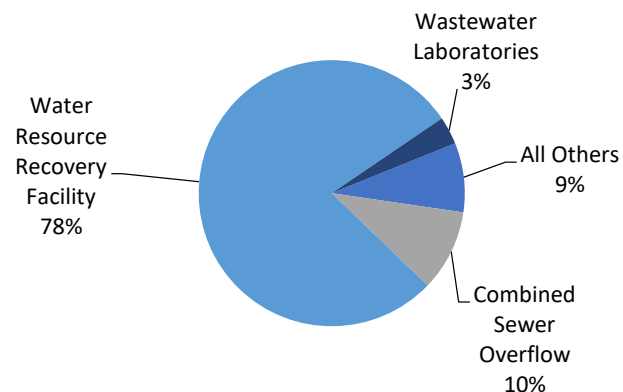
○ **Industrial Waste Control**

Identification and monitoring of industrial users for pollutants

○ **Wastewater Systems Unallocated**

Funds not apportioned for a specific purpose used for significant unexpected or unbudgeted expenditures

FY 2023 REQUEST BY TEAM

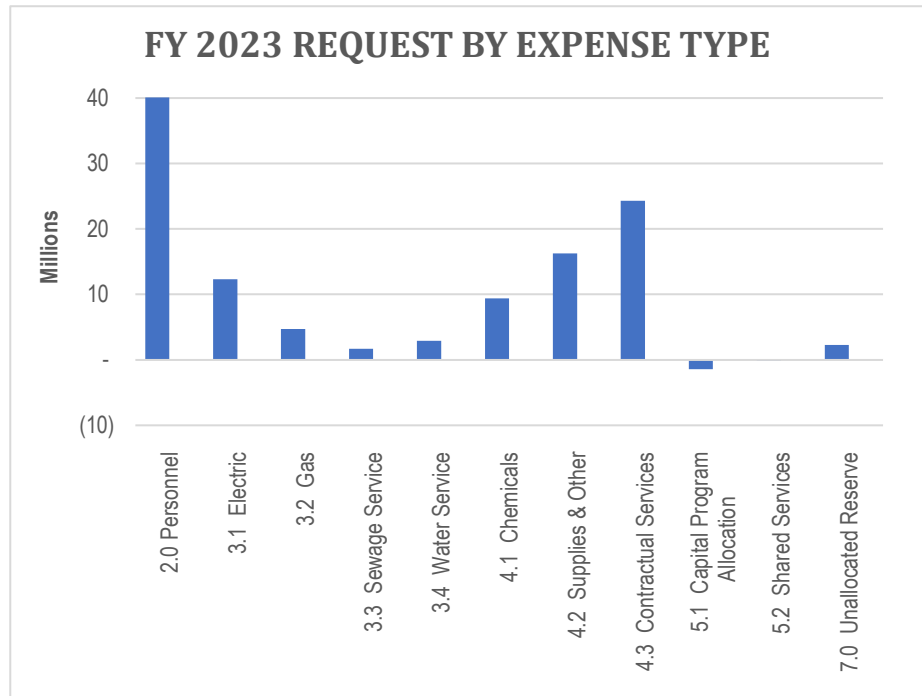


Expense Categories

There are two major categories for the Wastewater Operating Group. The expenses in the Operations and Maintenance Budget are listed below.

- ❖ Personnel Costs
- ❖ Contractual Services

As outlined in the strategic initiatives above, the Wastewater Operations Group is tasked with the handling and disposal of solids separated through the treatment process. The disposal of these materials makes up most of the contractual services expenditures.



The Biosolids Dryer Facility (BDF), operated by the New England Fertilizer Company, was commissioned in 2016. This facility has greatly reduced the volume of solid waste incinerated or sent to landfill by processing the product into a renewable resource (fertilizer). Over the past three years an effort has been made to maximize the volume of biological waste being processed by the BDF. The percentage of material processed ranges from approximately 66 to 74% of all biosolids.

Reliability of processing equipment is of primary concern for GLWA. As part of this effort the administration of the Wastewater Operating Group has continued to focus on reinforcing a proactive maintenance program.

Biennial Budget Request

The biennial budget reflects an increase in FY 2023, growing by \$1.3 million, or 1.2%. Key factors that impact this change include the following five areas.

The majority of the growth was impacted by three primary categories.

- ❖ Staffing, as noted in the *Personnel Budget* section below, increased by \$1.9 million, or 4.7%. This increase is due to a combination of factors: 1) positions that have proven more difficult to fill continue to be budgeted as transitional contractors, 2) use of updated salaries and benefits to reflect the current rate and 3) specific positions to assist in asset lifecycle and management were added.

- ❖ Contribution to the unallocated reserve was increased by \$1.7 million, or 76.1%. The unallocated reserve is set aside for unbudgeted expenditures needed in operations. An example of these unknown events would be the potential impact of historical wet weather events that effect Southeastern Michigan.
- ❖ The chemical budget was reduced by \$1.5 million or 15.5%. The forecast renewal cost of bulk chemical contracts in the primary, and secondary operational areas, and the combined sewer overflow facilities is unknown. If a price adjustment is needed for any contact, the unallocated reserve is used to accommodate this.

Additionally, the biennial budget was impacted by the following items.

- ❖ Supplies & Other were decreased by \$0.1 million, or 0.7%. Certain repair projects, that are not forecast to repeat will be concluding (-\$0.6 million). This project conclusion is offset by the increased Refractory Inspection and Repair contract (\$0.5 million) noted above.
- ❖ Contract Services was reduced by \$.9 million, or 3.9%. Several programs underway, covered by the Task Order Engineering (TOE), skilled labor, hauling and other similar services are expected to remain consistent. Changes to the use of these services would be covered by the unallocated reserve.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 36,648,700	\$ 38,210,700	\$ 18,810,100	\$ 40,062,900	\$ 1,852,200	4.7%	\$ 42,611,200
3.1 Electric	11,972,200	12,301,600	6,859,000	12,281,000	(20,600)	-0.2%	12,465,000
3.2 Gas	4,623,900	4,449,800	2,656,200	4,690,000	240,200	5.4%	4,760,000
3.3 Sewage Service	1,620,800	1,452,400	758,900	1,669,000	216,600	14.9%	1,695,000
3.4 Water Service	2,903,700	3,042,400	1,172,400	2,907,000	(135,400)	-4.5%	2,962,000
4.1 Chemicals	7,954,000	10,852,100	5,842,900	9,397,500	(1,454,600)	-15.5%	9,491,500
4.2 Supplies & Other	16,126,100	13,982,900	6,090,000	13,877,400	(105,500)	-0.7%	13,672,600
4.3 Contractual Services	22,557,700	25,175,400	12,749,100	24,268,400	(907,000)	-3.9%	24,435,400
5.1 Capital Program Allocation	(1,068,700)	(1,292,700)	(447,300)	(1,429,500)	(136,800)	10.6%	(1,722,400)
5.2 Shared Services	(157,400)	(191,800)	(80,100)	(163,200)	28,600	-17.8%	(165,700)
6.0 Capital Outlay	223,800	-	-	-	-	n/a	-
7.0 Unallocated Reserve	-	1,343,100	-	3,055,500	1,712,400	76.1%	3,082,300
Grand Total	\$ 103,404,800	\$ 109,325,900	\$ 54,411,200	\$ 110,616,000	\$ 1,290,100	1.2%	\$ 113,286,900

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Wastewater Administration	\$ 1,629,800	\$ 2,269,900	\$ 911,400	\$ 2,203,000	\$ (66,900)	-2.9%	\$ 1,819,600
Water Resource Recovery Facility	81,756,900	85,788,300	43,769,700	84,813,300	(975,000)	-1.1%	86,594,100
Wastewater Engineering	2,803,100	2,758,600	1,513,600	3,524,400	765,800	27.8%	3,593,600
Industrial Waste Control	2,499,300	2,473,600	1,170,500	2,539,200	65,600	2.7%	2,786,000
Wastewater Laboratories	4,000,800	3,885,700	1,621,900	3,840,300	(45,400)	-1.1%	4,404,000
Combined Sewer Overflow	10,714,900	10,806,700	5,424,100	10,640,300	(166,400)	-1.6%	11,007,300
Wastewater Operations Unallocated	-	1,343,100	-	3,055,500	1,712,400	76.1%	3,082,300
Grand Total	\$ 103,404,800	\$ 109,325,900	\$ 54,411,200	\$ 110,616,000	\$ 1,290,100	1.2%	\$ 113,286,900

Personnel Budget

Wastewater Operations Group personnel expense is largely comprised of wastewater operations and maintenance staffing of 450 positions. The staffing plan target is consistent with the agreed upon level with the Michigan Department of Environment, Great Lakes, and Energy. Included in the staffing plan are 8 workforce development positions for positions that have proven difficult to fill. These positions demonstrate GLWA's commitment to developing the talent necessary to accomplish its initiatives effectively. Two positions have been added for an Asset Life Cycle Project Manager and Technical Management Leader. These positions are intended to increase the wastewater commitment to reliability and proper asset management. Two additional positions for an Asset Life Cycle Project Manager and a Technical Management Leader were added in FY 2024 and again in FY 2025. The additional positions, being Capital Improvement Program (CIP) oriented, have an 80% allocation towards capital and 20% allocation towards operations and maintenance budget.

The tables on the following page provide three alternate views of the staffing plan.

Staffing Plan- Number of Positions – The following table presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is currently vacant.

Staffing Plan

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Wastewater System Operations	443.00	448.00	450.00	452.00	454.00	454.00	454.00
Wastewater Administration	14.00	14.00	13.00	13.00	13.00	13.00	13.00
Water Resource Recovery Facility	299.00	301.00	304.00	304.00	304.00	304.00	304.00
Wastewater Engineering	24.00	26.00	31.00	33.00	35.00	35.00	35.00
Wastewater Laboratories	40.00	41.00	40.00	40.00	40.00	40.00	40.00
Industrial Waste Control	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Combined Sewer Overflow	37.00	37.00	33.00	33.00	33.00	33.00	33.00

Full Time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted, based upon a standard of 2,080 hours per year.

Full Time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2026 FTEs
Wastewater System Operations	436.75	431.25	421.69	451.75	453.75	453.75	453.75
Wastewater Administration	14.00	14.00	13.00	13.00	13.00	13.00	13.00
Water Resource Recovery Facility	294.25	289.00	287.00	304.00	304.00	304.00	304.00
Wastewater Engineering	23.50	25.50	30.50	33.00	35.00	35.00	35.00
Wastewater Laboratories	40.00	39.75	34.00	40.00	40.00	40.00	40.00
Industrial Waste Control	28.50	28.25	27.75	29.00	29.00	29.00	29.00
Combined Sewer Overflow	36.50	34.75	29.44	32.75	32.75	32.75	32.75

Personnel Budget – The tables on the following page present the Wastewater Operations Group personnel budget which consists of the following expense categories: Salaries & Wages, Salaries & Wages – Workforce Development, Overtime, Employee Benefits and Contractual Transition Services. The values are based on the *Full Time Equivalents* above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in category 7.0 Unallocated Reserve as shown in the Five-Year Financial Plan below.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Wastewater System Operations	\$ 36,648,700	\$ 38,210,700	\$ 18,810,100	\$ 40,062,900	\$ 1,852,200	4.8%	\$ 42,611,200
Wastewater Administration	1,489,200	1,625,300	779,700	1,569,800	(55,500)	-3.4%	1,577,300
Water Resource Recovery Facility	24,176,900	25,184,700	12,925,500	26,903,200	1,718,500	6.8%	28,158,500
Wastewater Engineering	2,368,000	2,573,600	1,196,000	3,249,600	676,000	26.3%	3,622,400
Wastewater Laboratories	3,322,300	3,379,300	1,366,400	3,356,800	(22,500)	-0.7%	3,913,500
Industrial Waste Control	2,284,900	2,208,300	1,091,000	2,273,700	65,400	3.0%	2,351,700
Combined Sewer Overflow	3,007,400	3,239,500	1,451,500	2,709,800	(529,700)	-16.4%	2,987,800
Grand Total	\$ 36,648,700	\$ 38,210,700	\$ 18,810,100	\$ 40,062,900	\$ 1,852,200	4.8%	\$ 42,611,200

Personnel Budget – Five-Year Financial Plan

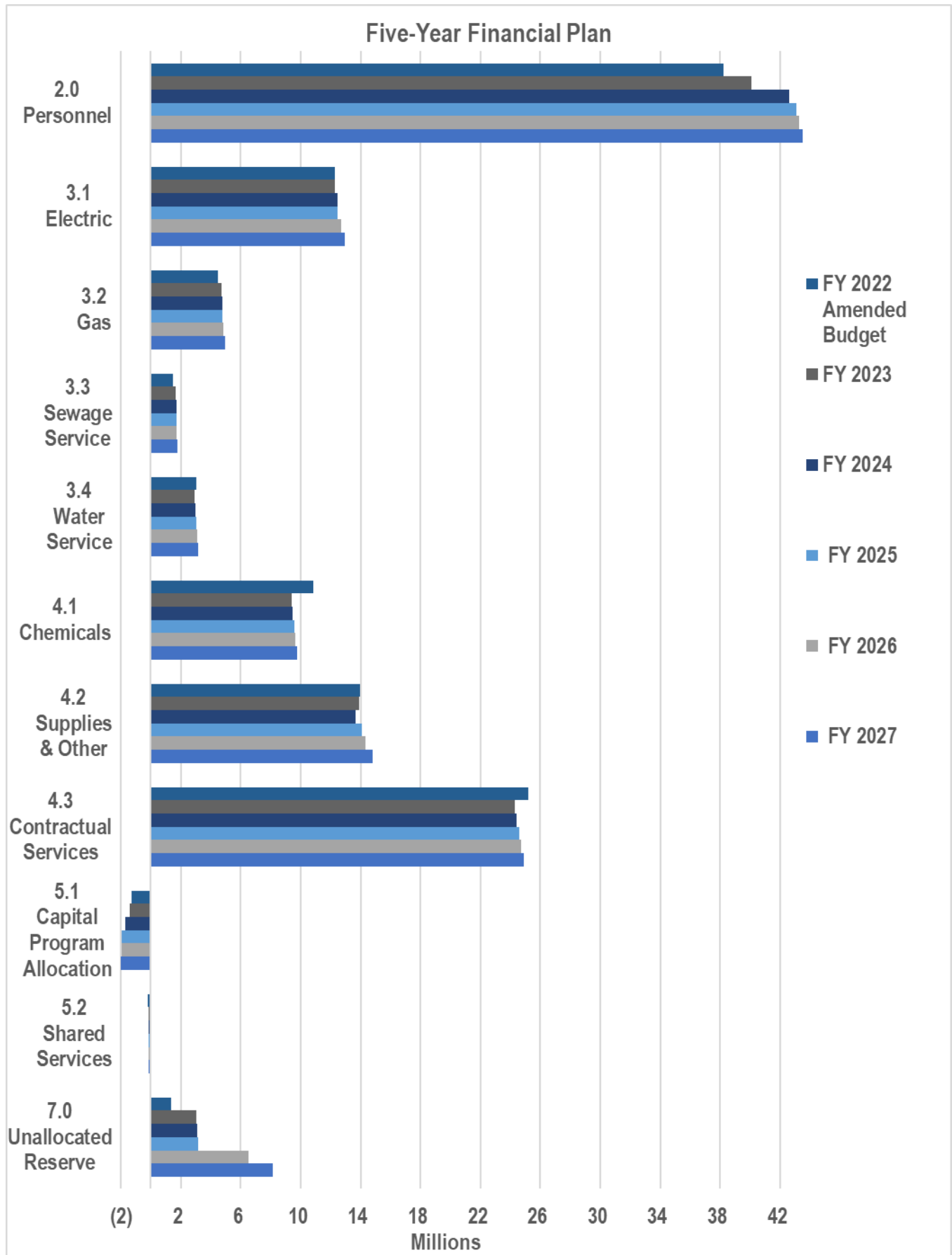
Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Wastewater System Operations	\$ 36,648,700	\$ 37,871,500	\$ 39,231,314	\$ 40,535,251	\$ 40,715,286	\$ 40,895,321	\$ 41,075,356
Wastewater Administration	1,489,200	1,625,300	1,569,800	1,577,300	1,584,900	1,592,400	1,600,000
Water Resource Recovery Facility	24,176,900	25,184,700	26,903,200	28,158,500	28,282,400	28,406,300	28,530,400
Wastewater Engineering	2,368,000	2,573,600	3,249,600	3,622,400	3,926,100	3,945,100	3,964,000
Wastewater Laboratories	3,322,300	3,379,300	3,356,800	3,913,500	3,933,500	3,953,500	3,973,500
Industrial Waste Control	2,284,900	2,208,300	2,273,700	2,351,700	2,364,900	2,378,200	2,391,500
Combined Sewer Overflow	3,007,400	3,239,500	2,709,800	2,987,800	3,001,100	3,014,300	3,027,500
Grand Total	\$ 36,648,700	\$ 38,210,700	\$ 40,062,900	\$ 42,611,200	\$ 43,092,900	\$ 43,289,800	\$ 43,486,900

Five-Year Financial Plan

The five-year financial plan presented aligns with the Wastewater Master Plan (WWMP). This plan takes into consideration the elements of the WWMP that are called for in the first five years, including continuation of condition assessments to ensure our current assets are in good working order and preparation by operations and maintenance for the future capital projects that are identified in Phase 1 of the WWMP.

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 36,648,700	\$ 38,210,700	\$ 40,062,900	\$ 42,611,200	\$ 43,092,900	\$ 43,289,800	\$ 43,486,900
3.1 Electric	11,972,200	12,301,600	12,281,000	12,465,000	12,465,000	12,715,000	12,970,000
3.2 Gas	4,623,900	4,449,800	4,690,000	4,760,000	4,760,000	4,854,000	4,950,000
3.3 Sewage Service	1,620,800	1,452,400	1,669,000	1,695,000	1,695,000	1,728,000	1,761,000
3.4 Water Service	2,903,700	3,042,400	2,907,000	2,962,000	3,009,000	3,069,000	3,130,000
4.1 Chemicals	7,954,000	10,852,100	9,397,500	9,491,500	9,587,300	9,669,500	9,754,700
4.2 Supplies & Other	16,126,100	13,982,900	13,877,400	13,672,600	14,072,400	14,326,100	14,820,600
4.3 Contractual Services	22,557,700	25,175,400	24,268,400	24,435,400	24,589,700	24,707,200	24,907,500
5.1 Capital Program Allocation	(1,068,700)	(1,292,700)	(1,429,500)	(1,722,400)	(1,959,500)	(1,968,600)	(1,977,700)
5.2 Shared Services	(157,400)	(191,800)	(163,200)	(165,700)	(168,200)	(170,600)	(173,500)
7.0 Unallocated Reserve	-	1,343,100	3,055,500	3,082,300	3,144,000	6,506,800	8,170,900
Grand Total	\$ 103,404,800	\$ 109,325,900	\$ 110,616,000	\$ 113,286,900	\$ 114,287,600	\$ 118,726,200	\$ 121,800,400

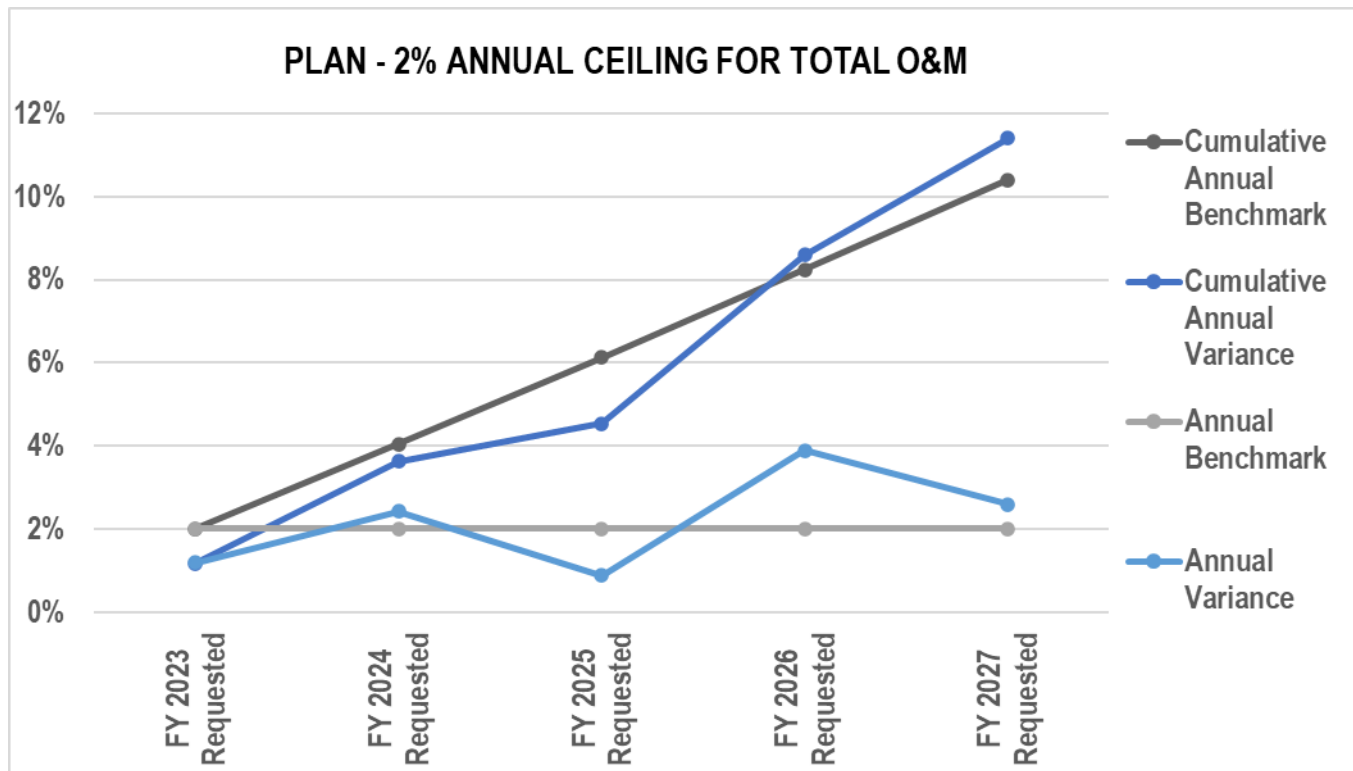


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Wastewater Administration	\$ 1,629,800	\$ 2,269,900	\$ 2,203,000	\$ 1,819,600	\$ 1,833,100	\$ 1,745,600	\$ 1,755,200
Water Resource Recovery Facility	81,756,900	85,788,300	84,813,300	86,594,100	87,253,500	88,305,900	89,259,300
Industrial Waste Control	2,803,100	2,758,600	3,524,400	3,593,600	3,559,800	3,474,500	3,499,200
Wastewater Engineering	2,499,300	2,473,600	2,539,200	2,786,000	2,805,300	2,825,300	2,671,200
Wastewater Laboratories	4,000,800	3,885,700	3,840,300	4,404,000	4,441,700	4,448,900	4,474,200
Combined Sewer Overflow	10,714,900	10,806,700	10,640,300	11,007,300	11,250,200	11,419,200	11,970,400
Wastewater Operations Unallocated	-	1,343,100	3,055,500	3,082,300	3,144,000	6,506,800	8,170,900
Grand Total	\$ 103,404,800	\$ 109,325,900	\$ 110,616,000	\$ 113,286,900	\$ 114,287,600	\$ 118,726,200	\$ 121,800,400

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Wastewater Operating Group's financial plan reflects a five-year overall increase of 11.4% which is slightly above the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Wastewater Operations Group capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay by Asset Category

Asset Type	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Building/Structures	\$ 357,500	\$ 362,800	\$ 368,100	\$ 373,500	\$ 379,000	\$ 384,600
Leasehold Improvements	880,000	550,200	250,000	-	-	-
Machinery & Equipment	5,168,500	8,560,800	4,106,200	3,684,600	4,846,800	6,176,700
Computers & IT	150,000	150,000	100,000	360,500	-	1,800,000
Controls & Communication	1,960,000	5,325,500	2,016,000	1,165,500	2,949,200	2,677,500
Flow Measuring & Meters	625,000	120,000	120,000	35,000	20,000	33,000
Furniture & Fixtures	-	-	-	2,000	7,000	-
Heavy Equipment & Misc	-	350,000	-	-	-	95,000
Laboratory	40,100	61,700	14,200	43,400	186,200	193,400
Pipes, Gates & Valves	261,500	175,000	179,500	181,000	205,500	30,000
Process Equipment/Treatment	439,000	530,000	311,600	530,700	422,900	289,700
Pumps & Motors	1,613,900	1,798,600	1,357,600	1,366,500	1,047,000	978,600
Tools, Shop & Warehouse	79,000	50,000	7,300	-	9,000	79,500
Site Improvements	-	23,000	-	-	-	-
Landscape	-	23,000	-	-	-	-
Vehicles	-	300,000	500,000	22,000	200,000	424,000
Heavy Truck	-	-	500,000	-	200,000	-
Light Truck	-	300,000	-	-	-	-
Utility Vehicle	-	-	-	22,000	-	424,000
Projects & Programs	800,000	-	-	-	-	-
Grand Total	\$ 7,206,000	\$ 9,796,800	\$ 5,224,300	\$ 4,080,100	\$ 5,425,800	\$ 6,985,300

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 6,489,500	\$ 7,206,000	\$ 9,796,800	\$ 5,224,300	\$ 4,080,100	\$ 5,425,800	\$ 6,985,300
Grand Total	\$ 6,489,500	\$ 7,206,000	\$ 9,796,800	\$ 5,224,300	\$ 4,080,100	\$ 5,425,800	\$ 6,985,300

Five-Year Capital Outlay by Team

Team	FY 2021 Activity	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Water Resource Recovery Facility	\$ 2,245,200	\$ 4,346,500	\$ 7,711,500	\$ 3,546,000	\$ 2,128,700	\$ 4,094,500	\$ 5,184,600
Wastewater Engineering	-	-	-	-	-	-	13,000
Industrial Waste Control	-	-	48,000	-	27,500	7,000	26,000
Wastewater Laboratories	18,500	40,100	36,700	14,200	17,900	186,200	167,400
Combined Sewer Overflow	4,225,800	2,819,400	2,000,600	1,664,100	1,906,000	1,138,100	1,594,300
Combined Sewer Overflow	2,560,200	800,000	-	-	-	-	-
Puritan Fenkell CSO	403,000	165,000	205,500	19,000	60,000	-	220,000
7 Mile CSO	244,200	131,000	35,000	68,000	750,600	14,000	-
Hubble Southfield CSO	222,600	200,000	287,000	400,800	138,800	189,700	595,700
Leib CSO	19,600	382,000	198,800	144,600	45,900	67,300	58,700
St Aubin CSO	336,800	229,400	45,000	178,000	73,000	18,500	19,100
Connor Creek CSO	269,700	515,000	791,500	324,700	489,700	397,500	367,500
Baby Creek CSO	141,000	302,000	324,800	434,000	234,000	451,100	248,300
Oakwood CSO	28,700	95,000	113,000	95,000	114,000	-	85,000
Grand Total	\$ 6,489,500	\$ 7,206,000	\$ 9,796,800	\$ 5,224,300	\$ 4,080,100	\$ 5,425,800	\$ 6,985,300

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives extend multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892001 - Chief Operating Officer Wastewater	1,629,800	2,269,900	911,400	2,203,000	1,819,600	1,833,100	1,745,600	1,755,200
2.1 Salaries & Wages	1,164,600	1,237,000	595,900	1,183,800	1,183,800	1,183,800	1,183,800	1,183,800
2.3 Overtime	200	2,800	-	500	500	500	500	500
2.4 Employee Benefits	324,400	385,500	183,800	385,500	393,000	400,600	408,100	415,700
4.2 Supplies & Other	110,100	170,900	72,700	160,800	168,000	174,100	174,300	176,500
Memberships, Licenses & Subscriptions	105,300	54,800	26,900	56,900	57,000	58,000	58,100	59,100
Mileage and Parking	200	1,600	100	1,200	1,200	1,200	1,200	1,200
Office Supplies	3,200	9,500	2,400	9,700	9,800	9,900	10,000	10,200
Training and Internal Meetings	1,800	75,000	35,300	75,000	75,000	75,000	75,000	75,000
Travel	(400)	30,000	8,000	18,000	25,000	30,000	30,000	31,000
4.3 Contractual Services	73,400	510,000	75,200	513,000	115,000	115,000	20,000	20,000
5.1 Capital Program Allocation	(42,900)	(36,300)	(16,200)	(40,600)	(40,700)	(40,900)	(41,100)	(41,300)
892201 - Wastewater Director	5,303,500	8,219,100	4,400,700	8,065,400	7,993,400	8,021,900	8,039,900	8,020,500
2.1 Salaries & Wages	1,868,500	1,939,600	1,023,800	2,254,600	2,349,900	2,349,900	2,349,900	2,349,900
2.2 Workforce Development	40,900	44,100	21,600	43,000	43,000	43,000	43,000	43,000
2.3 Overtime	457,700	463,000	225,000	485,900	467,000	467,000	467,000	467,000
2.4 Employee Benefits	805,000	803,400	427,900	954,300	1,012,400	1,031,900	1,051,400	1,070,800
2.5 Transition Services	1,407,200	1,993,500	1,091,300	1,869,600	1,869,600	1,869,600	1,869,600	1,869,600
4.2 Supplies & Other	387,300	239,000	179,900	642,200	432,900	397,000	385,600	392,500
Car Lease	58,600	30,000	41,700	65,000	52,000	10,000	-	-
Memberships, Licenses & Subscriptions	200	1,500	300	1,500	1,500	1,500	1,500	1,500
Office Supplies	2,200	3,500	800	3,000	3,000	3,000	3,000	3,000
Repairs & Maintenance-Equipment	296,500	155,000	136,400	341,500	344,800	350,300	358,900	365,500
Training and Internal Meetings	19,000	-	-	-	-	-	-	-
Tuition Refund	-	3,000	-	1,200	1,600	2,200	2,200	2,500
Capital Outlay less than \$5,000	10,800	46,000	700	230,000	30,000	30,000	20,000	20,000
4.3 Contractual Services	336,900	2,736,500	1,431,200	1,815,800	1,818,600	1,863,500	1,873,400	1,827,700

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892211 - Wastewater Engineering	2,803,100	2,758,600	1,513,600	3,524,400	3,593,600	3,559,800	3,474,500	3,499,200
2.1 Salaries & Wages	1,496,900	1,680,500	782,100	2,238,900	2,495,600	2,695,600	2,695,600	2,695,600
2.3 Overtime	166,400	156,300	55,800	190,400	208,000	227,500	227,500	227,500
2.4 Employee Benefits	508,700	604,800	277,100	820,300	918,800	1,003,000	1,022,000	1,040,900
2.5 Transition Services	196,000	132,000	81,000	-	-	-	-	-
4.2 Supplies & Other	47,400	44,000	14,600	45,500	45,900	46,300	46,800	47,300
Memberships, Licenses & Subscriptions	4,900	5,000	4,300	5,000	5,100	5,400	5,500	5,800
Mileage and Parking	21,600	18,000	8,100	22,000	22,200	22,200	22,400	22,400
Office Supplies	10,200	10,000	1,400	10,500	10,600	10,700	10,900	11,100
Operating Supplies	2,100	9,000	800	6,000	6,000	6,000	6,000	6,000
Training and Internal Meetings	7,700	-	-	-	-	-	-	-
Tuition Refund	900	2,000	-	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	1,359,500	1,339,200	698,600	1,618,200	1,607,000	1,506,000	1,410,100	1,424,300
5.1 Capital Program Allocation	(971,800)	(1,198,200)	(395,600)	(1,388,900)	(1,681,700)	(1,918,600)	(1,927,500)	(1,936,400)
892221 - Wastewater Operations	21,477,600	20,265,900	10,384,900	20,830,900	21,302,800	21,431,900	21,807,600	22,245,800
2.1 Salaries & Wages	702,100	713,700	407,200	863,200	963,500	963,500	963,500	963,500
2.3 Overtime	178,500	202,700	107,900	210,400	214,100	214,100	214,100	214,100
2.4 Employee Benefits	251,800	271,700	160,800	339,800	395,200	402,800	410,400	418,000
3.1 Electric	9,812,400	10,226,200	5,703,400	10,128,000	10,280,000	10,280,000	10,486,000	10,696,000
3.2 Gas	2,496,700	2,343,600	1,470,700	2,500,000	2,538,000	2,538,000	2,589,000	2,641,000
3.3 Sewage Service	579,500	497,600	275,600	584,000	593,000	593,000	605,000	617,000
3.4 Water Service	2,296,300	2,502,100	938,900	2,300,000	2,346,000	2,393,000	2,441,000	2,490,000
4.1 Chemicals	-	5,000	300	5,100	5,200	5,300	5,400	5,500
4.2 Supplies & Other	3,051,700	2,953,300	1,041,700	3,214,400	3,269,600	3,331,800	3,369,600	3,463,900
Inspection and Permit Fees	134,700	250,000	126,800	255,000	260,000	266,000	272,000	278,000
Memberships, Licenses & Subscriptions	300	1,200	1,800	1,200	1,200	1,200	1,200	1,200
Mileage and Parking	100	-	-	-	-	-	-	-
Office Supplies	24,100	30,000	10,300	30,600	31,200	31,800	32,400	33,100
Operating Supplies	73,900	105,000	35,300	82,200	84,400	86,600	88,900	91,200
Operating Supplies-Janitorial	40,600	55,000	21,700	42,200	43,100	43,900	44,800	45,700
Penalties	11,600	-	-	-	-	-	-	-
Repairs & Maintenance-Equipment	74,500	75,000	9,700	76,400	77,900	79,400	49,700	82,400
Repairs & Maintenance-Facilities	2,564,800	2,308,900	788,900	2,606,200	2,651,500	2,700,500	2,752,600	2,805,200
Supplies & Other - Covid19	8,500	-	5,800	-	-	-	-	-
Training and Internal Meetings	26,600	-	-	-	-	-	-	-
Tuition Refund	200	3,000	-	2,000	2,000	2,000	2,000	2,000
Uniforms, Laundry, Cleaning	86,800	115,200	40,700	105,600	108,300	110,400	112,700	114,900
Capital Outlay less than \$5,000	5,000	10,000	300	13,000	10,000	10,000	13,300	10,200
4.3 Contractual Services	2,108,600	550,000	278,400	686,000	698,200	710,400	723,600	736,800
892222 - Wastewater Process Control	3,449,400	4,140,000	1,454,000	3,758,200	4,107,200	4,018,200	4,123,500	4,365,400
2.1 Salaries & Wages	1,437,800	1,528,100	678,600	1,604,700	1,674,700	1,674,700	1,674,700	1,674,700
2.3 Overtime	125,300	110,200	63,300	122,300	107,900	107,900	107,900	107,900
2.4 Employee Benefits	536,700	563,600	253,600	614,500	651,700	664,200	676,700	689,300
2.5 Transition Services	81,000	-	35,600	-	-	-	-	-
4.1 Chemicals	500	-	-	-	-	-	-	-
4.2 Supplies & Other	534,800	932,600	32,000	648,800	715,800	685,300	783,200	851,900
Operating Supplies	3,800	10,800	4,200	9,800	9,900	10,100	10,300	10,600
Repairs & Maintenance-Equipment	195,400	275,800	(9,400)	212,600	214,000	215,500	216,900	219,000
Repairs & Maintenance-Hardware	269,800	414,000	35,800	382,000	403,200	389,700	433,600	571,200
Repairs & Maintenance-Software	63,600	172,000	-	30,400	73,700	53,000	104,400	33,100
Capital Outlay less than \$5,000	2,200	60,000	1,400	14,000	15,000	17,000	18,000	18,000
4.3 Contractual Services	794,900	1,068,300	422,300	832,000	1,022,500	952,800	949,000	1,111,000
5.2 Shared Services	(61,600)	(62,800)	(31,400)	(64,100)	(65,400)	(66,700)	(68,000)	(69,400)
892223 - Wastewater Primary Process	8,259,000	8,598,600	4,595,200	8,482,000	8,724,400	8,757,700	8,899,000	8,922,500
2.1 Salaries & Wages	1,826,000	2,012,100	849,200	2,309,000	2,387,000	2,387,000	2,387,000	2,387,000
2.2 Workforce Development	40,200	38,400	19,300	37,700	37,700	37,700	37,700	37,700
2.3 Overtime	401,300	494,200	182,100	402,000	399,700	399,700	399,700	399,700
2.4 Employee Benefits	1,028,600	923,100	409,300	1,073,100	1,131,700	1,153,400	1,175,200	1,197,000
2.5 Transition Services	895,900	822,600	704,900	670,000	670,000	670,000	670,000	670,000
4.1 Chemicals	1,976,700	2,574,400	1,537,900	2,107,200	2,128,000	2,149,000	2,170,000	2,192,000
4.2 Supplies & Other	1,979,000	1,302,800	716,800	1,433,300	1,511,900	1,492,700	1,582,400	1,552,300
Operating Supplies	65,500	60,000	27,200	61,200	62,400	63,600	64,800	66,100
Repairs & Maintenance-Equipment	1,882,000	1,190,000	678,900	1,369,100	1,396,300	1,425,700	1,454,000	1,482,400
Tuition Refund	1,200	-	-	-	-	-	-	-
Capital Outlay less than \$5,000	30,300	52,800	10,700	3,000	53,200	3,400	63,600	3,800
4.3 Contractual Services	111,300	431,000	175,700	449,700	458,400	468,200	477,000	486,800

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892224 - Wastewater Secondary Process	9,296,900	10,856,500	5,863,100	10,531,400	10,669,100	10,765,400	10,857,600	10,955,600
2.1 Salaries & Wages	2,058,500	2,061,700	963,700	2,269,900	2,303,300	2,303,300	2,303,300	2,303,300
2.2 Workforce Development	58,400	43,700	21,800	52,100	79,400	79,400	79,400	79,400
2.3 Overtime	268,700	292,200	119,300	266,000	222,000	222,000	222,000	222,000
2.4 Employee Benefits	961,900	884,800	418,700	983,700	1,030,600	1,050,400	1,070,200	1,090,000
2.5 Transition Services	755,700	750,100	599,500	763,200	763,200	763,200	763,200	763,200
4.1 Chemicals	3,972,200	5,310,000	2,653,400	4,801,700	4,850,000	4,899,000	4,948,000	4,997,000
4.2 Supplies & Other	1,024,000	1,320,000	996,500	1,191,000	1,212,000	1,234,700	1,254,300	1,279,700
Operating Supplies	47,900	40,000	44,400	40,800	41,600	42,500	43,400	44,300
Repairs & Maintenance-Equipment	941,300	1,275,000	946,400	1,145,100	1,165,200	1,185,400	1,205,600	1,225,900
Capital Outlay less than \$5,000	34,800	5,000	5,700	5,100	5,200	6,800	5,300	9,500
4.3 Contractual Services	197,500	194,000	90,200	203,800	208,600	213,400	217,200	221,000
892225 - Wastewater Dewatering Process	6,407,500	6,475,400	3,120,100	6,305,000	6,582,700	6,576,000	6,628,000	6,752,800
2.1 Salaries & Wages	1,480,400	1,834,400	679,600	1,902,600	2,086,100	2,086,100	2,086,100	2,086,100
2.2 Workforce Development	40,800	44,100	18,900	43,000	43,000	43,000	43,000	43,000
2.3 Overtime	265,800	307,800	126,900	269,800	238,600	238,600	238,600	238,600
2.4 Employee Benefits	942,600	863,400	356,700	901,900	997,600	1,016,800	1,036,000	1,055,200
2.5 Transition Services	1,102,100	519,500	592,700	526,300	526,300	526,300	526,300	526,300
4.1 Chemicals	1,025,000	1,152,200	625,000	1,032,000	1,043,000	1,054,000	1,054,000	1,054,000
4.2 Supplies & Other	1,395,500	1,662,000	603,100	1,509,600	1,526,400	1,487,100	1,518,000	1,621,100
Operating Supplies	39,000	60,000	16,100	46,200	47,400	49,600	51,800	54,000
Repairs & Maintenance-Equipment	1,350,100	1,600,000	586,500	1,378,400	1,406,800	1,435,400	1,464,000	1,492,700
Capital Outlay less than \$5,000	6,400	2,000	500	85,000	72,200	2,100	2,200	74,400
4.3 Contractual Services	155,300	92,000	117,200	119,800	121,700	124,100	126,000	128,500
892226 - Wastewater Incineration Process	5,251,600	6,117,400	2,974,200	6,335,200	6,334,000	6,640,900	6,667,900	6,469,300
2.1 Salaries & Wages	1,362,800	1,717,100	742,800	1,981,700	2,152,800	2,152,800	2,152,800	2,152,800
2.2 Workforce Development	40,900	34,100	18,800	43,000	43,000	43,000	43,000	43,000
2.3 Overtime	236,500	225,800	105,600	215,700	215,700	215,700	215,700	215,700
2.4 Employee Benefits	794,600	794,400	364,100	931,600	1,021,500	1,041,100	1,060,700	1,080,400
2.5 Transition Services	1,163,800	1,127,400	787,900	1,144,800	1,144,800	1,144,800	1,144,800	1,144,800
4.1 Chemicals	51,800	45,000	22,100	45,000	45,000	45,000	45,000	45,000
4.2 Supplies & Other	1,359,500	1,846,200	523,100	1,628,600	1,364,100	1,647,100	1,643,200	1,420,500
Operating Supplies	24,100	25,000	9,000	25,400	25,800	26,300	26,800	27,300
Repairs & Maintenance-Equipment	1,322,400	1,777,200	514,100	1,542,600	1,297,800	1,553,800	1,575,200	1,330,800
Capital Outlay less than \$5,000	13,000	44,000	-	60,600	40,500	67,000	41,200	62,400
4.3 Contractual Services	241,700	327,400	409,800	344,800	347,100	351,400	362,700	367,100
892227 - BDF, COF & Hauling	19,939,200	20,147,600	10,616,500	20,165,200	20,540,500	20,701,500	20,942,400	21,187,400
2.1 Salaries & Wages	270,100	322,900	132,800	336,100	436,400	436,400	436,400	436,400
2.3 Overtime	57,800	87,400	30,400	60,800	70,000	70,000	70,000	70,000
2.4 Employee Benefits	124,900	146,700	60,200	153,700	205,900	209,900	213,800	217,800
2.5 Transition Services	106,100	203,200	123,700	203,200	203,200	203,200	203,200	203,200
3.1 Electric	1,144,400	1,120,000	607,300	1,149,000	1,166,000	1,166,000	1,189,000	1,213,000
3.2 Gas	1,980,800	1,900,000	1,148,900	2,013,000	2,043,000	2,043,000	2,084,000	2,126,000
3.3 Sewage Service	500,000	350,400	233,800	500,000	508,000	508,000	518,000	528,000
3.4 Water Service	244,000	180,000	114,600	228,000	231,000	231,000	236,000	241,000
4.3 Contractual Services	15,511,100	15,837,000	8,164,800	15,521,400	15,677,000	15,834,000	15,992,000	16,152,000
892228 - Wastewater Fire Damage	372,200	627,800	361,000	-	-	-	-	-
4.2 Supplies & Other	372,200	627,800	361,000	-	-	-	-	-
Repairs & Maintenance-Damage Recovery	372,200	627,800	361,000	-	-	-	-	-

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892231 - Industrial Waste Control	2,499,300	2,473,600	1,170,500	2,539,200	2,786,000	2,805,300	2,825,300	2,671,200
2.1 Salaries & Wages	1,594,000	1,571,300	778,500	1,593,600	1,634,000	1,634,000	1,634,000	1,634,000
2.3 Overtime	25,300	24,200	12,700	26,600	27,300	27,300	27,300	27,300
2.4 Employee Benefits	665,600	612,800	299,800	653,500	690,400	703,600	716,900	730,200
4.1 Chemicals	200	-	-	-	-	-	-	-
4.2 Supplies & Other	110,000	148,300	59,900	138,500	129,500	138,200	141,800	152,400
Advertising	81,300	56,200	26,900	60,000	60,000	65,000	65,000	65,000
Memberships, Licenses & Subscriptions	-	2,900	200	2,500	2,900	2,500	2,900	2,500
Mileage and Parking	-	1,000	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	6,800	14,500	3,000	9,400	9,500	9,500	9,500	9,500
Operating Supplies	12,000	25,400	14,600	33,400	32,400	32,400	27,400	38,600
Operating Supplies-Janitorial	400	1,900	-	2,000	2,100	2,200	2,300	2,300
Postage	3,800	10,000	1,800	6,000	6,000	6,000	6,000	6,000
Repairs & Maintenance-Equipment	-	2,000	100	-	-	-	-	-
Training and Internal Meetings	700	7,500	1,400	7,500	7,600	7,600	7,600	7,500
Travel	-	4,000	-	4,000	4,000	4,000	4,000	4,000
Uniforms, Laundry, Cleaning	3,200	4,000	1,400	4,000	4,000	4,000	4,000	4,000
Capital Outlay less than \$5,000	1,800	18,900	10,500	8,700	-	4,000	12,100	12,000
4.3 Contractual Services	104,200	117,000	19,600	127,000	304,800	302,200	305,300	127,300
892235 - Wastewater Laboratories	4,000,800	3,885,700	1,621,900	3,840,300	4,404,000	4,441,700	4,448,900	4,474,200
2.1 Salaries & Wages	2,209,400	2,300,500	913,300	2,252,400	2,649,600	2,649,600	2,649,600	2,649,600
2.3 Overtime	246,100	209,000	95,100	233,100	222,800	222,800	222,800	222,800
2.4 Employee Benefits	866,800	869,800	358,000	871,300	1,041,100	1,061,100	1,081,100	1,101,100
4.1 Chemicals	157,300	184,700	88,500	157,200	158,500	160,600	160,700	162,800
4.2 Supplies & Other	422,000	170,200	98,700	155,700	159,700	174,000	159,900	161,300
Car Lease	7,500	10,000	4,900	5,500	-	-	-	-
Memberships, Licenses & Subscriptions	4,200	6,500	200	800	800	11,800	800	800
Office Supplies	14,800	5,900	5,300	6,000	6,000	6,000	6,000	6,000
Operating Supplies	127,200	127,900	80,000	127,600	130,400	132,600	133,400	134,800
Rentals-Buildings	229,900	-	-	-	-	-	-	-
Repairs & Maintenance-Equipment	11,200	7,800	7,400	12,000	12,000	12,000	12,000	12,000
Repairs & Maintenance-Facilities	12,100	-	-	-	-	-	-	-
Training and Internal Meetings	2,400	-	-	-	-	-	-	-
Tuition Refund	300	-	-	-	-	-	-	-
Uniforms, Laundry, Cleaning	2,900	3,500	900	3,500	3,500	3,700	3,700	3,700
Capital Outlay less than \$5,000	9,500	8,600	-	300	7,000	7,900	4,000	4,000
4.3 Contractual Services	99,200	151,500	68,300	170,600	172,300	173,600	174,800	176,600
892269 - Suburban Only Green Infrastructure Allocation	2,000,000	340,000	-	340,000	340,000	340,000	340,000	340,000
4.2 Supplies & Other	2,000,000	340,000	-	340,000	340,000	340,000	340,000	340,000
Inspection and Permit Fees	2,000,000	340,000	-	340,000	340,000	340,000	340,000	340,000
892270 - Combined Sewer Overflow	4,051,300	4,494,000	1,964,100	4,016,300	4,304,700	4,401,500	4,508,500	4,566,100
2.1 Salaries & Wages	1,324,000	1,502,700	609,700	1,195,400	1,319,000	1,319,000	1,319,000	1,319,000
2.2 Workforce Development	61,300	51,000	21,600	58,100	103,500	103,500	103,500	103,500
2.3 Overtime	372,400	497,000	240,400	347,300	367,700	367,700	367,700	367,700
2.4 Employee Benefits	701,900	690,400	325,400	599,100	687,700	701,000	714,200	727,400
2.5 Transition Services	547,800	498,400	254,400	509,900	509,900	509,900	509,900	509,900
4.2 Supplies & Other	24,300	82,000	9,200	31,600	32,100	32,600	33,400	33,800
Car Lease	5,500	49,800	-	-	-	-	-	-
Inspection and Permit Fees	700	700	-	700	700	700	700	700
Memberships, Licenses & Subscriptions	600	500	-	700	700	700	700	700
Mileage and Parking	-	2,800	-	2,900	3,000	3,000	3,100	3,100
Office Supplies	300	4,100	-	4,100	4,100	4,100	4,200	4,200
Operating Supplies	3,900	2,000	3,200	2,100	2,100	2,200	2,200	2,300
Training and Internal Meetings	6,300	9,600	3,100	9,600	9,800	10,000	10,100	10,200
Travel	-	4,500	500	3,000	3,000	3,200	3,200	3,400
Tuition Refund	1,500	1,000	-	1,500	1,500	1,500	2,000	2,000
Uniforms, Laundry, Cleaning	5,500	7,000	2,400	7,000	7,200	7,200	7,200	7,200
4.3 Contractual Services	1,093,000	1,250,400	548,700	1,295,000	1,305,300	1,388,700	1,482,200	1,526,600
5.1 Capital Program Allocation	(54,000)	(58,200)	(35,500)	-	-	-	-	-
5.2 Shared Services	(19,400)	(19,700)	(9,800)	(20,100)	(20,500)	(20,900)	(21,400)	(21,800)

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892271 - Puritan Fenkell Combined Sewer								
Overflow	227,100	306,500	90,400	295,800	299,600	300,700	304,700	307,500
3.1 Electric	49,200	52,000	26,100	50,000	51,000	51,000	52,000	53,000
3.2 Gas	14,000	20,000	4,300	17,000	17,000	17,000	17,000	17,000
3.3 Sewage Service	11,100	10,000	10,100	10,000	10,000	10,000	10,000	10,000
3.4 Water Service	9,600	10,000	6,900	10,000	10,000	10,000	10,000	10,000
4.1 Chemicals	3,500	9,800	4,000	9,800	10,000	10,000	10,000	10,000
4.2 Supplies & Other	115,100	159,800	35,600	153,500	155,800	156,500	158,700	160,000
Office Supplies	100	200	-	200	200	200	200	200
Operating Supplies	2,400	1,800	2,400	4,000	4,000	4,100	4,100	4,200
Repairs & Maintenance-Equipment	56,600	73,000	25,700	65,500	66,600	67,200	68,200	69,000
Repairs & Maintenance-Facilities	56,000	84,800	7,500	83,800	85,000	85,000	86,200	86,600
4.3 Contractual Services	24,600	44,900	3,400	45,500	45,800	46,200	47,000	47,500
892272 - 7 Mile Combined Sewer Overflow	178,900	164,100	43,200	186,400	188,300	192,200	195,200	199,900
3.1 Electric	32,700	26,000	17,800	33,000	33,000	33,000	34,000	35,000
3.2 Gas	4,400	12,000	1,000	10,000	10,000	10,000	10,000	10,000
3.3 Sewage Service	12,900	9,000	6,500	13,000	13,000	13,000	13,000	13,000
3.4 Water Service	8,600	12,000	5,300	10,000	10,000	10,000	10,000	10,000
4.1 Chemicals	-	1,900	-	1,900	2,000	2,000	2,000	2,000
4.2 Supplies & Other	106,400	59,900	9,500	74,400	75,800	79,000	80,500	83,700
Office Supplies	200	-	-	-	-	-	-	-
Operating Supplies	400	1,800	100	1,000	1,000	1,000	1,000	1,000
Repairs & Maintenance-Equipment	13,400	42,500	2,100	32,400	33,500	33,800	35,000	35,400
Repairs & Maintenance-Facilities	92,400	15,600	7,300	41,000	41,300	44,200	44,500	47,300
4.3 Contractual Services	13,900	43,300	3,100	44,100	44,500	45,200	45,700	46,200
892273 - Hubbell-Southfield CSO	631,200	585,300	329,100	601,300	611,200	616,200	602,800	632,800
3.1 Electric	61,300	63,000	29,900	64,000	65,000	65,000	66,000	67,000
3.2 Gas	20,500	18,500	2,500	19,000	19,000	19,000	19,000	19,000
3.3 Sewage Service	1,200	2,000	500	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	109,700	90,800	4,800	110,000	112,000	112,000	114,000	116,000
4.1 Chemicals	70,500	129,000	72,000	112,000	113,000	114,000	115,000	116,000
4.2 Supplies & Other	325,000	219,200	197,000	229,100	233,200	236,400	218,300	243,400
Office Supplies	-	600	-	100	100	100	100	100
Operating Supplies	1,100	16,000	5,400	6,300	6,600	7,000	7,000	7,000
Repairs & Maintenance-Equipment	232,700	157,700	145,500	160,300	163,800	166,500	168,200	172,700
Repairs & Maintenance-Facilities	91,200	44,900	46,100	62,400	62,700	62,800	43,000	63,600
4.3 Contractual Services	43,000	62,800	22,400	65,200	67,000	67,800	68,500	69,400
892274 - Leib Combined Sewer Overflow	638,100	335,000	209,500	325,300	371,300	373,500	377,000	382,300
3.1 Electric	51,000	27,000	37,500	51,000	52,000	52,000	53,000	54,000
3.2 Gas	5,900	16,000	2,200	10,000	10,000	10,000	10,000	10,000
3.3 Sewage Service	5,100	9,000	2,700	7,000	7,000	7,000	7,000	7,000
3.4 Water Service	3,200	5,000	1,700	4,000	4,000	4,000	4,000	4,000
4.1 Chemicals	27,400	47,000	36,500	17,800	18,000	18,000	18,000	18,000
4.2 Supplies & Other	523,100	164,200	102,400	167,400	211,300	212,400	214,000	217,300
Office Supplies	1,300	500	-	500	600	600	600	700
Operating Supplies	5,900	5,500	2,700	5,500	5,600	5,600	5,700	5,700
Repairs & Maintenance-Equipment	325,300	131,100	87,400	134,400	177,600	178,500	179,600	182,400
Repairs & Maintenance-Facilities	189,500	27,100	12,300	27,000	27,500	27,700	28,100	28,500
Capital Outlay less than \$5,000	1,100	-	-	-	-	-	-	-
4.3 Contractual Services	22,400	66,800	26,500	68,100	69,000	70,100	71,000	72,000

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892275 - St Aubin Combined Sewer Overflow	303,200	278,900	132,600	269,200	272,100	274,500	277,900	281,500
3.1 Electric	22,000	26,000	11,400	26,000	26,000	26,000	27,000	28,000
3.2 Gas	7,300	8,000	2,500	8,000	8,000	8,000	8,000	8,000
3.3 Sewage Service	1,300	2,300	500	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	2,900	3,000	1,400	3,000	3,000	3,000	3,000	3,000
4.1 Chemicals	-	21,600	7,400	17,400	17,400	17,800	17,800	17,800
4.2 Supplies & Other	234,000	173,500	79,400	167,500	169,600	171,000	172,600	174,500
Office Supplies	-	1,000	200	500	500	500	500	500
Operating Supplies	3,100	8,400	700	7,000	7,100	7,200	7,300	7,400
Repairs & Maintenance-Equipment	42,600	69,100	65,400	70,600	72,300	73,400	74,600	76,200
Repairs & Maintenance-Facilities	184,800	95,000	13,100	89,400	89,700	89,900	90,200	90,400
Capital Outlay less than \$5,000	3,500	-	-	-	-	-	-	-
4.3 Contractual Services	35,700	44,500	30,000	45,300	46,100	46,700	47,500	48,200
892276 - Conner Creek Combined Sewer Overflow	1,846,100	2,357,700	1,347,400	2,214,700	2,292,600	2,710,800	2,819,200	3,201,000
3.1 Electric	259,500	280,400	145,100	264,000	268,000	268,000	273,000	278,000
3.2 Gas	66,000	83,800	19,500	71,000	72,000	72,000	73,000	74,000
3.3 Sewage Service	39,300	150,100	-	102,000	104,000	104,000	106,000	108,000
3.4 Water Service	16,900	53,100	-	39,000	40,000	40,000	41,000	42,000
4.1 Chemicals	447,700	1,026,100	626,400	771,200	779,000	787,000	795,000	803,000
4.2 Supplies & Other	863,400	586,800	416,900	790,600	851,000	1,258,400	1,346,900	1,708,600
Office Supplies	4,400	6,600	4,500	7,200	7,400	7,500	7,600	7,700
Operating Supplies	25,500	35,000	7,400	35,700	36,400	36,800	37,200	37,600
Repairs & Maintenance-Equipment	679,100	427,800	65,600	583,800	590,200	944,400	928,100	1,284,100
Repairs & Maintenance-Facilities	141,800	117,400	339,400	163,900	217,000	269,700	374,000	379,200
Capital Outlay less than \$5,000	12,600	-	-	-	-	-	-	-
4.3 Contractual Services	153,300	177,400	139,500	176,900	178,600	181,400	184,300	187,400
892277 - Baby Creek Combined Sewer Overflow	998,900	960,300	590,600	1,217,700	1,303,600	983,200	941,800	951,400
3.1 Electric	113,400	132,000	70,100	131,000	133,000	133,000	136,000	139,000
3.2 Gas	27,900	45,400	4,400	41,000	42,000	42,000	43,000	44,000
4.1 Chemicals	115,600	200,100	81,400	212,600	215,000	217,000	219,000	221,000
4.2 Supplies & Other	702,900	497,200	419,400	746,200	826,300	503,100	455,000	457,700
Office Supplies	100	500	-	500	600	600	600	700
Operating Supplies	4,400	12,300	2,700	10,000	10,200	10,400	10,600	10,800
Repairs & Maintenance-Equipment	429,600	129,300	387,400	329,700	333,000	333,400	333,600	334,500
Repairs & Maintenance-Facilities	268,800	355,100	29,300	406,000	482,500	158,700	110,200	111,700
4.3 Contractual Services	39,100	85,600	15,300	86,900	87,300	88,100	88,800	89,700
892278 - Oakwood Combined Sewer Overflow	1,603,700	1,314,600	726,800	1,513,600	1,363,900	1,397,600	1,392,100	1,447,900
3.1 Electric	426,300	349,000	210,400	385,000	391,000	391,000	399,000	407,000
3.2 Gas	400	2,500	200	1,000	1,000	1,000	1,000	1,000
3.3 Sewage Service	470,400	422,000	229,200	449,000	456,000	456,000	465,000	474,000
3.4 Water Service	212,500	186,400	98,800	203,000	206,000	206,000	210,000	214,000
4.1 Chemicals	103,200	123,100	72,200	99,200	100,000	101,000	102,000	103,000
4.2 Supplies & Other	357,100	197,600	109,600	348,900	181,300	213,800	186,100	219,700
Office Supplies	300	1,000	-	500	500	500	500	500
Operating Supplies	6,600	13,500	1,300	10,000	10,200	10,400	10,600	10,800
Repairs & Maintenance-Equipment	81,000	97,700	71,900	130,400	102,200	134,100	105,800	137,800
Repairs & Maintenance-Facilities	268,900	85,400	36,400	208,000	68,400	68,800	69,200	70,600
Capital Outlay less than \$5,000	300	-	-	-	-	-	-	-
4.3 Contractual Services	33,800	34,000	6,400	27,500	28,600	28,800	29,000	29,200
892279 - Belle Isle Combined Sewer Overflow	236,400	10,300	(9,600)	-	-	-	-	-
4.1 Chemicals	2,400	22,200	15,800	7,400	7,400	7,600	7,600	7,600
4.2 Supplies & Other	81,300	85,600	11,000	59,800	60,400	60,900	61,500	62,500
Operating Supplies	1,000	1,900	400	1,000	1,100	1,100	1,200	1,200
Repairs & Maintenance-Equipment	58,400	28,700	3,000	28,800	29,100	29,600	30,100	30,500
Repairs & Maintenance-Facilities	21,900	55,000	7,600	30,000	30,200	30,200	30,200	30,800
4.3 Contractual Services	5,300	11,800	2,500	11,800	12,000	12,100	12,100	12,200
5.2 Shared Services	(76,400)	(109,300)	(38,900)	(79,000)	(79,800)	(80,600)	(81,200)	(82,300)
6.0 Capital Outlay	223,800	-	-	-	-	-	-	-

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
897600 - Wastewater System Operations								
Unallocated	-	1,343,100	-	3,055,500	3,082,300	3,144,000	6,506,800	8,170,900
7.0 Unallocated Reserve	-	1,343,100	-	3,055,500	3,082,300	3,144,000	6,506,800	8,170,900
Grand Total	\$ 103,404,800	\$ 109,325,900	\$ 54,411,200	\$ 110,616,000	\$ 113,286,900	\$ 114,287,600	\$ 118,726,200	\$ 121,800,400

Wastewater Operations Pumping Stations

The Wastewater Operations Pumping (Lift) Stations are facilities designed to move wastewater from lower to higher elevation, particularly where the elevation of the source is not sufficient for gravity flow and/or when the use of gravity conveyance will result in excessive excavation depths and high sewer construction costs.

Strategic Initiatives

❖ Maximize pumping reliability (Ongoing)

Regularly scheduled preventive maintenance is necessary and required to maintain the condition of all pumping (lift) stations.

❖ Minimize energy usage (Ongoing)

Energy consumption is dependent on flow rate, total head, climate, and overall pump efficiency. Energy can be minimized through proper preventive maintenance in order to maintain the condition of all pumping (lift) stations.

The table below shows how the wastewater operations area pumping (lift) stations strategic initiatives relate to the organizational strategic goals.

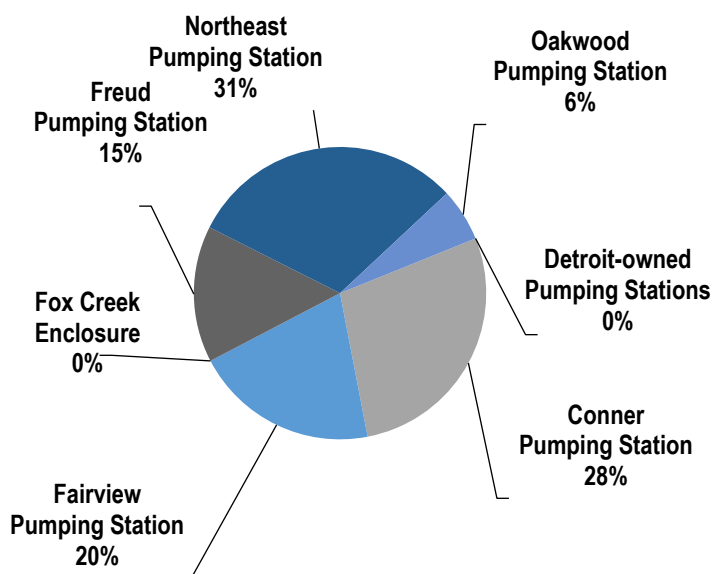
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Wastewater Pump Stations Strategic Initiatives	Maximize pumping reliability				x	x		x				
	Minimize energy usage		x		x	x						

Organization

The Wastewater Operations Pumping (Lift) Stations consist of (9) sewer lift station in the wastewater collections system. Wastewater stations pump wastewater, and when necessary excess storm water, to the Water Resource Recovery Facility.

- ❖ Conner Pumping Station
- ❖ Detroit-owned Pumping Stations
 - Belle Isle Pump Station
 - Bluehill Pump Station
 - Fischer Pump Station
 - Woodmere Pump Station
- ❖ Fairview Pumping Station
- ❖ Freud Pumping Station
- ❖ Northeast Pumping Station**
- ❖ Oakwood Pumping Station
- ❖ Fox Creek Enclosure*

FY 2023 REQUEST BY TEAM



* Fox Creek Enclosure is a gate operations site and not a pumping station. The only cost incurred for this location is electrical costs.

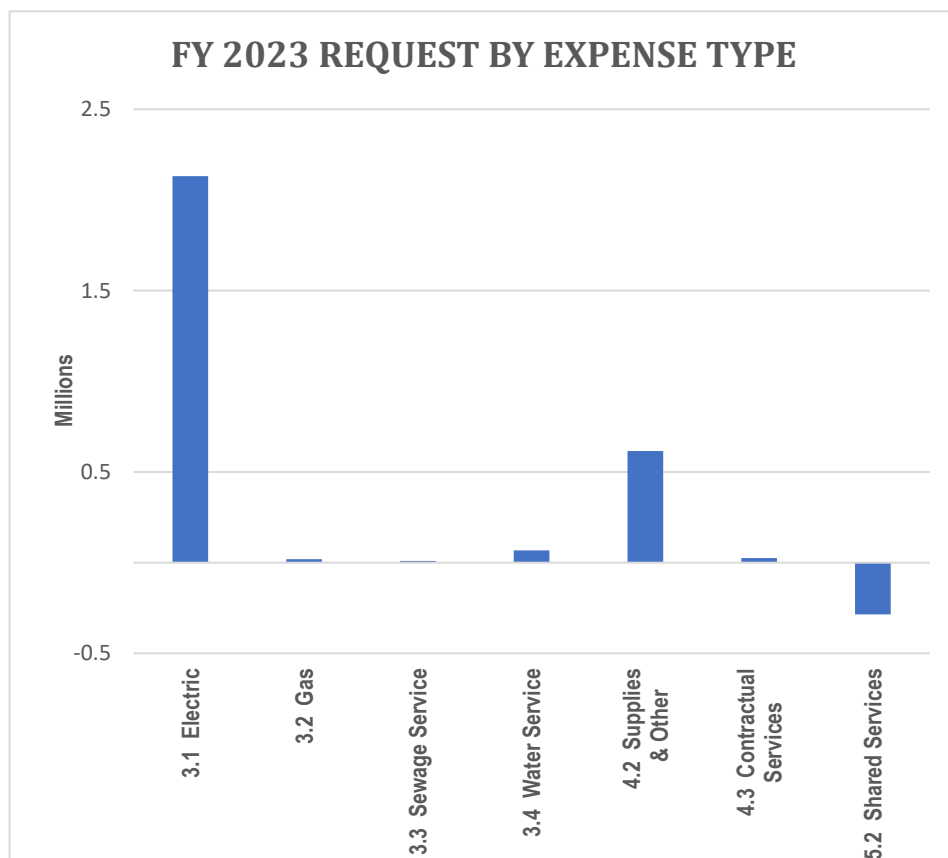
** A portion of the cost for Northeast Pumping Station is billed to OMID through an intergovernmental agreement.

Expense Categories

There is one major category of expense in the Wastewater pumping stations operations and maintenance budget as listed below.

❖ Electric Utilities

Electric utilities are the highest expense category for Wastewater operations pumping (lift) stations. Lift stations require a significant amount of power. Typically, power costs account for 85 to 95 percent of the total operations and maintenance costs and are directly proportional to the unit cost of power and the actual power used by the lift station pumps.



Biennial Budget Request

The biennial budget reflects an overall decrease in FY 2023 of \$64,000, or 2.4%. Key factors that impact the FY 2023 budget include the following.

- ❖ Shared Services contra account for Detroit-owned pumping stations is equivalent to the budget for those departments and is based solely on the entire actual expenses for these locations being billed back to Detroit Water and Sewerage Department (DWSD) (increase of \$21,000).
- ❖ Annual maintenance costs vary, depending on the complexity of the equipment and instrumentation. New forecast in usage resulted in a decrease of \$71,000.
- ❖ Decrease in budget for Electric, Gas, & Contractual Services to align with spending (\$14,000)

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
3.1 Electric	2,621,000	2,137,000	1,712,200	2,131,000	(6,000)	-0.3%	2,131,000
3.2 Gas	10,900	24,000	4,700	19,000	(5,000)	-20.8%	19,000
3.3 Sewage Service	9,500	9,000	4,700	9,000	-	0.0%	9,000
3.4 Water Service	82,300	67,500	38,000	67,500	-	0.0%	67,500
4.2 Supplies & Other	805,300	686,200	456,400	615,200	(71,000)	-10.3%	615,200
4.3 Contractual Services	15,900	28,200	3,700	25,200	(3,000)	-10.6%	25,200
5.2 Shared Services	(180,800)	(306,400)	(92,300)	(285,400)	21,000	-6.9%	(285,400)
6.0 Capital Outlay	-	-	277,700	-	-	0.0%	-
Grand Total	\$ 3,364,100	\$ 2,645,500	\$ 2,405,100	\$ 2,581,500	\$ (64,000)	-2.4%	\$ 2,581,500

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Detroit-owned							
Pumping Stations	\$ 7,600	\$ -	\$ 424,700	\$ -	\$ -	0.0%	\$ -
Belle Isle Pumping Station	(29,900)	-	21,700	-	-	0.0%	-
Blue Hill Pumping Station	8,600	-	267,100	-	-	0.0%	-
Fischer Pumping Station	7,900	-	1,500	-	-	0.0%	-
Woodmere Pumping Station	21,000	-	134,400	-	-	0.0%	-
Conner Pumping Station	648,500	725,000	799,600	725,000	-	0.0%	725,000
Fairview Pumping Station	914,300	555,000	337,000	525,000	(30,000)	-5.4%	525,000
Fox Creek Enclosure	700	1,000	300	1,000	-	0.0%	1,000
Freud Pumping Station	541,800	390,500	337,500	389,500	(1,000)	-0.3%	389,500
Northeast Pumping Station	1,116,000	796,000	404,100	790,000	(6,000)	-0.8%	790,000
Oakwood Pumping Station	135,200	178,000	101,900	151,000	(27,000)	-15.2%	151,000
Grand Total	\$ 3,364,100	\$ 2,645,500	\$ 2,405,100	\$ 2,581,500	\$ (64,000)	-2.4%	\$ 2,581,500

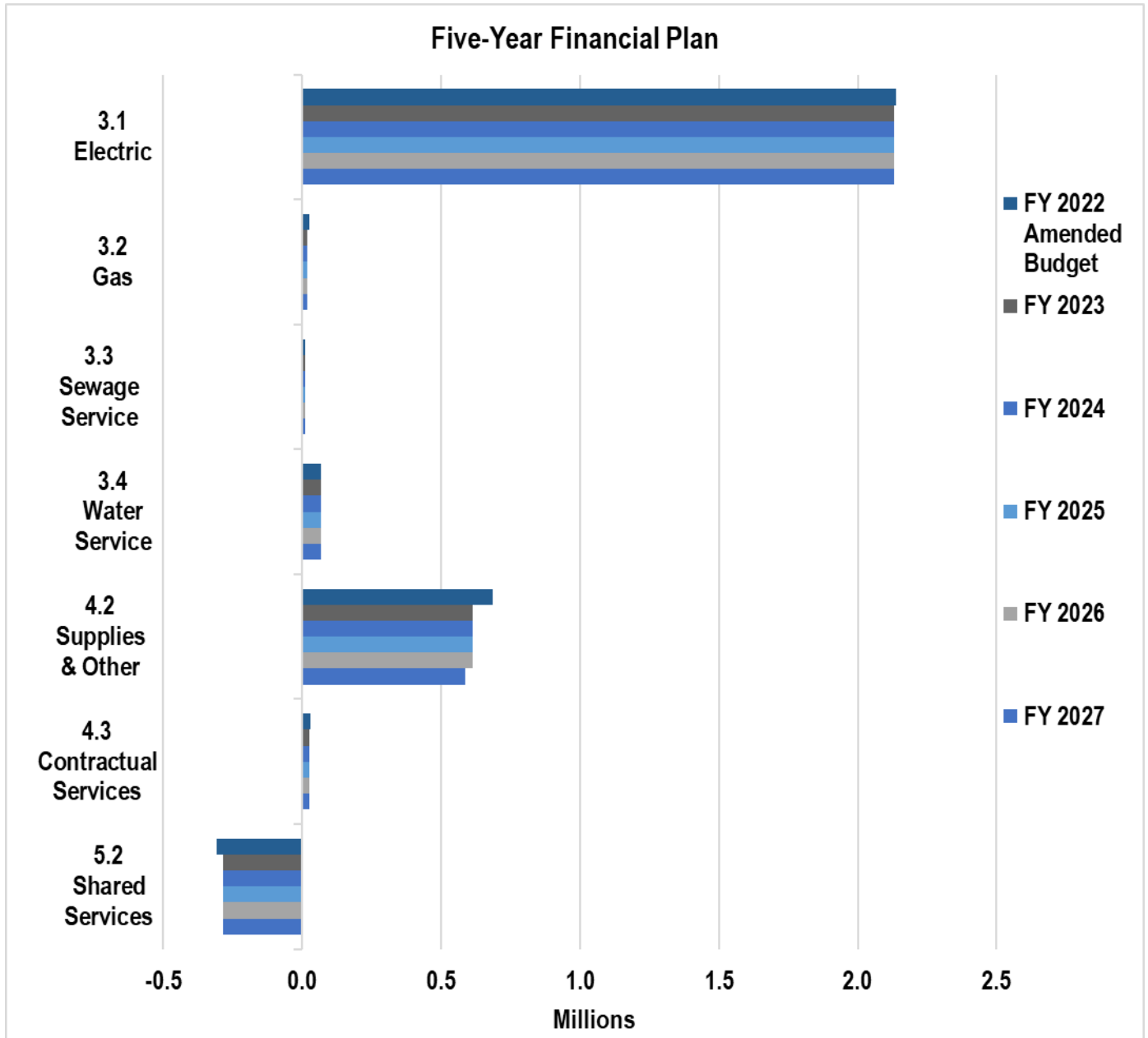
Personnel Budget

Personnel budget is not a component of the Wastewater Operations Area Pumping (Lift) Stations. Labor to maintain these facilities is included in the Field Service Operations budget.

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
3.1 Electric	2,621,000	2,137,000	2,131,000	2,131,000	2,131,000	2,131,000	2,131,000
3.2 Gas	10,900	24,000	19,000	19,000	19,000	19,000	19,000
3.3 Sewage Service	9,500	9,000	9,000	9,000	9,000	9,000	9,000
3.4 Water Service	82,300	67,500	67,500	67,500	67,500	67,500	67,500
4.2 Supplies & Other	805,300	686,200	615,200	615,200	615,200	615,200	585,200
4.3 Contractual Services	15,900	28,200	25,200	25,200	25,200	25,200	25,200
5.2 Shared Services	(180,800)	(306,400)	(285,400)	(285,400)	(285,400)	(285,400)	(285,400)
6.0 Capital Outlay	-	-	-	-	-	-	-
Grand Total	\$ 3,364,100	2,645,500	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,551,500

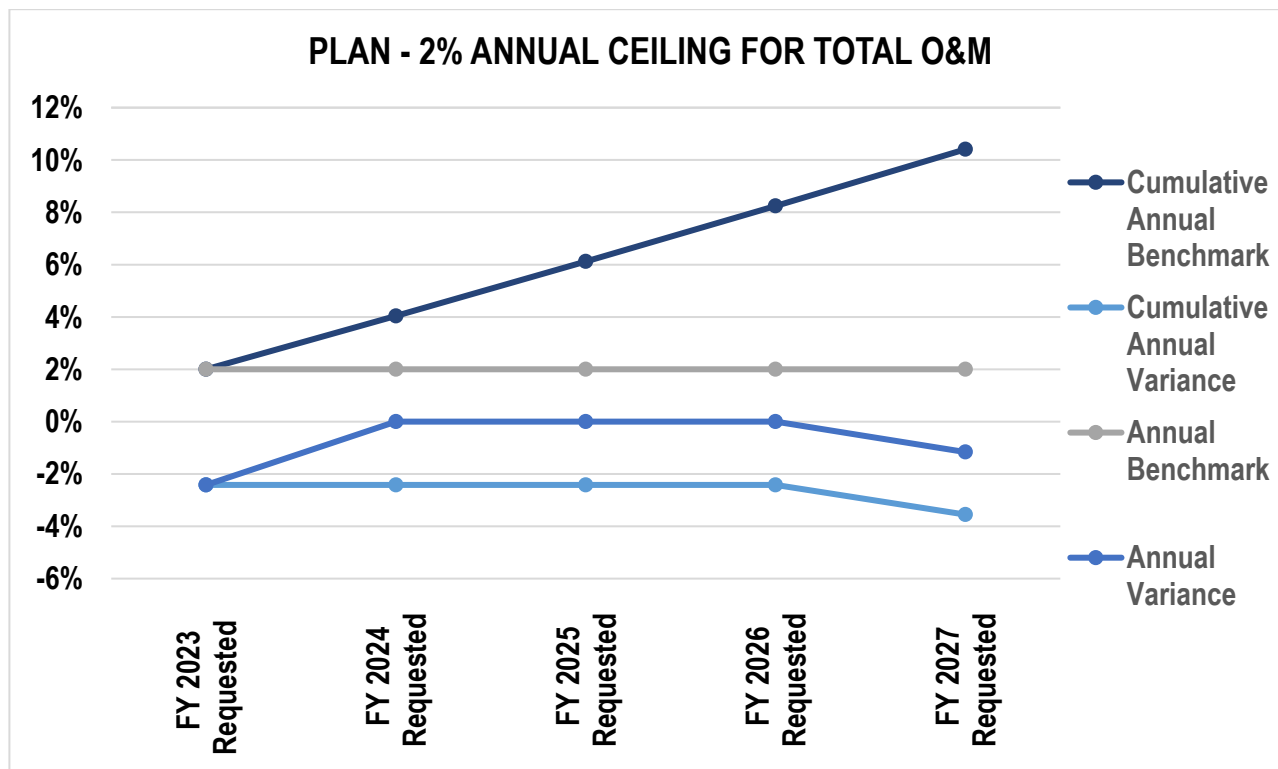


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Detroit-owned							
Pumping Stations	\$ 7,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Belle Isle Pumping Station	(29,900)	-	-	-	-	-	-
Blue Hill Pumping Station	8,600	-	-	-	-	-	-
Fischer Pumping Station	7,900	-	-	-	-	-	-
Woodmere Pumping Station	21,000	-	-	-	-	-	-
Conner Pumping Station	648,500	725,000	725,000	725,000	725,000	725,000	725,000
Fairview Pumping Station	914,300	555,000	525,000	525,000	525,000	525,000	495,000
Fox Creek Enclosure	700	1,000	1,000	1,000	1,000	1,000	1,000
Freud Pumping Station	541,800	390,500	389,500	389,500	389,500	389,500	389,500
Northeast Pumping Station	1,116,000	796,000	790,000	790,000	790,000	790,000	790,000
Oakwood Pumping Station	135,200	178,000	151,000	151,000	151,000	151,000	151,000
Grand Total	\$ 3,364,100	\$ 2,645,500	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,551,500

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Wastewater Operations pumping (lift) stations Group's financial plan reflects a five-year overall decrease of 3.6% which is well within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Capital Outlay is not a component of the Wastewater Pumping (Lift) Stations' budget for FY 2023 through FY 2027.

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is reflected on the following page. The expenses are listed for each cost center. Because many of GLWA's initiatives extend multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
892342 - Belle Isle Pumping Station	\$ (29,900)	\$ -	\$ 21,700	\$ -	\$ -	\$ -	\$ -	\$ -
4.2 Supplies & Other	25,200	45,000	50,000	45,000	45,000	45,000	45,000	45,000
Repairs & Maintenance-Equipment	25,200	45,000	50,000	45,000	45,000	45,000	45,000	45,000
4.3 Contractual Services	1,300	3,700	500	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	1,300	3,700	500	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(56,400)	(48,700)	(28,800)	(48,700)	(48,700)	(48,700)	(48,700)	(48,700)
Shared Services Reimbursement	(56,400)	(48,700)	(28,800)	(48,700)	(48,700)	(48,700)	(48,700)	(48,700)
892343 - Blue Hill Pumping Station	8,600	-	267,100	-	-	-	-	-
4.2 Supplies & Other	82,900	173,000	97,300	152,000	152,000	152,000	152,000	152,000
Repairs & Maintenance-Equipment	82,900	173,000	97,300	152,000	152,000	152,000	152,000	152,000
4.3 Contractual Services	1,200	3,200	400	3,200	3,200	3,200	3,200	3,200
Contractual Buildings & Grounds Maint	1,200	3,200	400	3,200	3,200	3,200	3,200	3,200
5.2 Shared Services	(75,500)	(176,200)	(38,500)	(155,200)	(155,200)	(155,200)	(155,200)	(155,200)
Shared Services Reimbursement	(75,500)	(176,200)	(38,500)	(155,200)	(155,200)	(155,200)	(155,200)	(155,200)
6.0 Capital Outlay	-	-	207,900	-	-	-	-	-
892345 - Conner Pumping Station	648,500	725,000	799,600	725,000	725,000	725,000	725,000	725,000
3.1 Electric	504,300	500,000	703,400	500,000	500,000	500,000	500,000	500,000
3.2 Gas	1,100	2,000	500	2,000	2,000	2,000	2,000	2,000
3.3 Sewage Service	9,500	9,000	4,700	9,000	9,000	9,000	9,000	9,000
3.4 Water Service	40,400	39,000	20,300	39,000	39,000	39,000	39,000	39,000
4.2 Supplies & Other	83,900	170,000	71,000	170,000	170,000	170,000	170,000	170,000
Repairs & Maintenance-Equipment	83,900	170,000	71,000	170,000	170,000	170,000	170,000	170,000
4.3 Contractual Services	9,300	5,000	(300)	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	9,300	5,000	(300)	5,000	5,000	5,000	5,000	5,000
892346 - Fairview Pumping Station	914,300	555,000	337,000	525,000	525,000	525,000	525,000	495,000
3.1 Electric	901,000	450,000	328,100	450,000	450,000	450,000	450,000	450,000
3.2 Gas	400	10,000	200	5,000	5,000	5,000	5,000	5,000
3.4 Water Service	6,000	20,000	5,200	20,000	20,000	20,000	20,000	20,000
4.2 Supplies & Other	6,900	75,000	3,500	50,000	50,000	50,000	50,000	20,000
Repairs & Maintenance-Equipment	6,900	75,000	3,500	50,000	50,000	50,000	50,000	20,000
892347 - Fischer Pumping Station	7,900	-	1,500	-	-	-	-	-
4.2 Supplies & Other	18,100	7,200	7,000	7,200	7,200	7,200	7,200	7,200
Repairs & Maintenance-Equipment	18,100	7,200	7,000	7,200	7,200	7,200	7,200	7,200
4.3 Contractual Services	2,000	5,600	700	5,600	5,600	5,600	5,600	5,600
Contractual Buildings & Grounds Maint	2,000	5,600	700	5,600	5,600	5,600	5,600	5,600
5.2 Shared Services	(12,200)	(12,800)	(6,200)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)
Shared Services Reimbursement	(12,200)	(12,800)	(6,200)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)
892348 - Fox Creek Enclosure	700	1,000	300	1,000	1,000	1,000	1,000	1,000
3.1 Electric	700	1,000	300	1,000	1,000	1,000	1,000	1,000
892349 - Freud Pumping Station	541,800	390,500	337,500	389,500	389,500	389,500	389,500	389,500
3.1 Electric	295,900	275,000	195,400	275,000	275,000	275,000	275,000	275,000
3.2 Gas	9,400	12,000	4,000	12,000	12,000	12,000	12,000	12,000
3.4 Water Service	35,900	8,500	12,500	8,500	8,500	8,500	8,500	8,500
4.2 Supplies & Other	199,900	90,000	123,600	90,000	90,000	90,000	90,000	90,000
Repairs & Maintenance-Equipment	199,900	90,000	123,600	90,000	90,000	90,000	90,000	90,000
4.3 Contractual Services	700	5,000	2,000	4,000	4,000	4,000	4,000	4,000
Contractual Professional Services	700	5,000	2,000	4,000	4,000	4,000	4,000	4,000
892350 - Northeast Pumping Station	1,116,000	796,000	404,100	790,000	790,000	790,000	790,000	790,000
3.1 Electric	790,000	796,000	404,100	790,000	790,000	790,000	790,000	790,000
4.2 Supplies & Other	326,000	-	-	-	-	-	-	-
Repairs & Maintenance-Equipment	326,000	-	-	-	-	-	-	-
892351 - Oakwood Pumping Station	135,200	178,000	101,900	151,000	151,000	151,000	151,000	151,000
3.1 Electric	129,100	115,000	80,900	115,000	115,000	115,000	115,000	115,000
4.2 Supplies & Other	6,100	61,000	21,000	36,000	36,000	36,000	36,000	36,000
Repairs & Maintenance-Equipment	6,100	61,000	21,000	36,000	36,000	36,000	36,000	36,000
4.3 Contractual Services	-	2,000	-	-	-	-	-	-
Contractual Professional Services	-	2,000	-	-	-	-	-	-
892352 - Woodmere Pumping Station	21,000	-	134,400	-	-	-	-	-
4.2 Supplies & Other	56,300	65,000	83,000	65,000	65,000	65,000	65,000	65,000
Repairs & Maintenance-Equipment	56,300	65,000	83,000	65,000	65,000	65,000	65,000	65,000
4.3 Contractual Services	1,400	3,700	400	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	1,400	3,700	400	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(36,700)	(68,700)	(18,800)	(68,700)	(68,700)	(68,700)	(68,700)	(68,700)
Shared Services Reimbursement	(36,700)	(68,700)	(18,800)	(68,700)	(68,700)	(68,700)	(68,700)	(68,700)
6.0 Capital Outlay	-	-	69,800	-	-	-	-	-
Grand Total	\$ 3,364,100	\$ 2,645,500	\$ 2,405,100	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,581,500	\$ 2,551,500

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Section 5C

Centralized Services

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Planning Services

Teaming with our member partners, the Planning Services area provides strategic guidance for major GLWA programs. With a focus on the areas of asset management, capital improvement planning, innovative system analytics and social and environmental policy, the Planning Services Organization provides strategic guidance to shape GLWA's future.

Strategic Initiatives

Water System Programs:

❖ **Linear System Integrity Program – (Ongoing)**

Assess the risk to the water delivery infrastructure through the physical inspection of the transmission system as well as assessing reliability to ensure stability of service delivery to member partners. In addition, this program will provide the framework to optimize the wastewater interceptor inspection, maintenance, and renewal. We have selected a vendor, HDR of Michigan as our strategic partner for this initiative and have started the program development in FY 2022.

❖ **Water Performance Monitoring – (Ongoing)**

This initiative ensures quality and efficiency at local levels. Using Aquasight software, individual communities will be able to monitor their water systems with customized real time system data.

❖ **Water Master Plan Update – (Completion Date – June 2025)**

An update to the regional plan ensuring GLWA continues to meet the needs of its members and strategic investment in assets. This project will be performed primarily by GLWA team members.

❖ **Units of Service for Non-Master Meter Members of Great Lakes Water Authority and System Water Audit – (Ongoing)**

An analytical review of data to quantify flow volumes for our member partners who do not have master meters and systemwide water audit including review of water treatment plant flows and transmission system.

Wastewater System Programs:

❖ **Wastewater Master Plan – (Ongoing)**

Maximizes the use of existing GLWA and member partner facilities through the review of collection and treatment facilities to produce affordable operating solutions. Implementation of components of this plan are ongoing with phase II scheduled to begin in 2024.

❖ **Good Sewer Metering Practice Analysis & Support – (Ongoing)**

This ongoing program in the Wastewater Analytics Task Force (WATF) consists of four core elements: metering, sewer shares analysis and review, collection system initiative and Water Resource Recovery Facility initiatives.

❖ **Meter Dye Testing – (Ongoing)**

This program ensures the accuracy of the sewer meters through review, repair, and calibration.

❖ **Professional and Technical Sewer Support Services – (Ongoing)**

This program is for the calibration, corrective maintenance, and emergency repair of sewer meters in the collection system. This program also covers the installation of new meters, control cabinets and programmable controllers at various locations throughout the collection system.

Both Systems (GLWA Wide) Initiatives:

❖ **Capital Improvement Plan – (Completion Date – June 2023)**

In May 2019 GLWA’s Board of Directors approved a partnership with consultants, AECOM to provide Capital Improvement Planning (CIP) services. This partnership will provide GLWA with tools and resources to manage a best-in-class CIP program at the end of this four-year contract. The CIP is broken into the following 10 tasks outlined in the chart below:

Capital Improvement Process (CIP) Task	Purpose
1. CIP Business Process Improvements 2. CIP Delivery Standard Operating Procedure Development	These initial tasks will focus on general GLWA business and process improvements.
3. CIP Delivery Resource Evaluation	This task will help GLWA identify and secure the human resources necessary to execute the CIP.
4. Development of Project Management Information System (PMIS)	This task will identify and select technology solutions necessary to support the new CIP business processes.
5A. Project Controls and Reporting Support (O&M) 5B. Project Controls and Reporting Support (Capital) 6. CIP Validation	These tasks will identify, validate, and implement project controls necessary for a well-managed CIP.
7A. Engineering & Construction Staff Augmentation (O&M) 7B. Engineering & Construction Staff Augmentation (Capital) 8. Other Staff Augmentation as Required	These tasks will provide staffing augmentation to execute the CIP and supplemental resources to meet the needs of the organization while existing internal processes are being re-engineered.
9. Advanced Facilities Planning (Capital) 10. Enterprise-Wide Energy Optimization & Sustainability Planning	These tasks will support the creation of reliable and sustainable projects.

The majority of the agreement will be funded as Capital as it targets specific, long-term projects. However, there is a significant Operations and Maintenance (O&M) component involving business improvement, process development and other O&M related support. As we continue into the final two years of the initial agreement, we are indeed observing this expected expenditure shift as presented in the schedules below. Staffing is being ramped up

throughout the organization to continue the work of AECOM consultants upon contract completion.

❖ **Oracle Work and Asset Management System (WAM) Support – (Completion Date – June 2024)**

Provides consulting services for support, training, and policy management of GLWA's Computerized Maintenance Management System. A recent renegotiation of this contract has resulted in reduced costs for FY 2021 and beyond.

The tables below present how Planning Services programs align with overall corporate strategic goals.

Water System Programs

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Planning Services Strategic Initiatives Water System Programs	Linear System Integrity Program				x		x					
	Water Performance Monitoring				x				x	x		x
	Water Master Plan Update				x	x	x			x		
	Units of Service for Non-Master Meter Members				x	x				x		

Wastewater System Programs

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Planning Services Strategic Initiatives Wastewater System Programs	Wastewater Master Plan				x	x	x		x	x		
	Good Sewer Metering Practice Analysis & Support				x	x				x		
	Meter Dye Testing				x					x		
	Professional and Technical Sewer Support Services				x					x		

Both Systems (GLWA Wide Initiatives)

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Planning Services Strategic Initiatives Both Systems	Capital Improvement Plan				x	x	x			x		
	Oracle Work and Asset Management System Support				x		x					

Planning Services Contracts

In the following tables budget values beyond contract end date are estimates for future study updates or subsequent implementation of a program. Expenditures that extend beyond contract completion assume contract renewal. These services would generally require a separate procurement process. The charts below delineate the key contracts for these services.

Water System

Water system programs provide infrastructure analysis, long term capital planning, real time data for quality and efficiency of product delivery and flow analysis for non-metered systems assuring outstanding product quality, system reliability and billing accuracy for our member partners.

Water System Programs

Project Description	Linear System Integrity Program (LSIP)	Water Performance Monitoring	Water Master Plan Update	Units of Service for Non-Master Meter Customers	Total of Significant Contracts
Prime Consultant or Supplier	HDR	Aquasight	TBD	Black & Veatch	
Contract #	1902659	1900949	TBD	GLWA-CS-039	
Contract Amount	29,012,900	\$ 850,000	TBD	\$ 1,824,800	
Contract End Date	08/31/27	04/25/22	TBD	In Renewal	
Cost Center Name	Asset Management	Systems Planning	Systems Planning	Systems Analytics	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2020 Spend	\$ -	\$ -	\$ -	\$ 1,300,700	\$ 1,300,700
FY 2020 Spend	-	-	-	336,700	336,700
FY 2021 Spend	-	378,600	-	252,700	631,300
FY 2022 Amended	2,770,400	350,000	-	300,000	3,420,400
FY 2023 Requested	1,312,900	450,000	100,000	309,000	2,171,900
FY 2024 Requested	1,585,400	450,000	-	318,300	2,353,700
FY 2025 Requested	5,475,100	500,000	-	327,800	6,302,900
FY 2026 Requested	4,143,600	500,000	-	337,700	4,981,300
FY 2027 Requested	5,219,700	500,000	130,000	347,800	6,197,500
Total	\$ 20,507,100	\$ 3,128,600	\$ 230,000	\$ 3,830,700	\$ 27,696,400

Wastewater System Programs

Wastewater system programs focus heavily on the preservation and improvement of system integrity and the efficiency of sewage flow. These programs benefit system operations today and many years into the future.

Wastewater System Programs

Project Description	Wastewater Master Plan & Update	Good Sewer Metering Practice Analysis & Support	Meter Dye Testing	Professional and Technical Sewer Support Services	Linear System Integrity Program (LSIP)	Total of Significant Contracts
Prime Consultant or Supplier	CDM Smith or Other	CDM Smith	Applied Science	PCI LLC	HDR	
Contract #	GLWA-CS-036	GLWA-CS-239	GLWA-CS-236	GLWA-CON-179	1902659	
Contract Amount	\$ 9,022,700	\$ 2,420,900	\$ 1,435,100	\$ 6,465,800	29,012,900	
Contract End Date	10/31/20	In Renewal	In Renewal	07/02/22	08/31/27	
Cost Center Name	Systems Planning	Systems Analytics	Systems Analytics	Systems Analytics	Asset Management	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2020 Spend	\$ 6,769,100	\$ 815,300	\$ 421,100	\$ 1,774,400		\$ 9,779,900
FY 2020 Spend	2,105,800	518,900	316,800	747,633		3,689,133
FY 2021 Spend	11,600	492,800	-	964,700		1,469,100
FY 2022 Amended	-	600,000	425,000	1,392,900	100,000	2,517,900
FY 2023 Requested	-	600,000	527,000	1,451,400	297,000	2,875,400
FY 2024 Requested	100,000	700,000	527,000	1,451,400	100,000	2,878,400
FY 2025 Requested	110,000	730,000	527,000	1,451,400	100,000	2,918,400
FY 2026 Requested	120,000	760,000	527,000	1,451,400	100,000	2,958,400
FY 2027 Requested		800,000	527,000	1,451,400	100,000	2,878,400
Total	\$ 9,216,500	\$ 6,017,000	\$ 3,797,900	\$ 12,136,633	\$ 797,000	\$ 31,965,033

Combined Water / Wastewater Programs

System wide programs supporting both Water and Wastewater include initiatives that benefit the management of GLWA's strategic assets, computer systems and will further support the development of a Capital Improvement Planning Office that will oversee the organization's long-term strategic goals.

Combined System (GLWA Wide) Programs

Project Description	Systems Planning	Asset Management Planning	Capital Improvement Planning	CMMS Support	Total of Significant Contracts
Prime Consultant or Supplier	Wade Trim	Jacobs Engineering or Other	AECOM or Other	Experis Financial or Other	
Contract #	1905080	GLWA-CS-198	GLWA-CS-272	PO 7279	
Contract Amount	\$ 921,800	\$ 4,113,300	\$ 15,519,000	Annual PO	
Contract End Date	02/01/22	In Renewal	05/27/23	In Renewal	
Cost Center Name	Systems Planning	Asset Management	Capital Improvement Planning	Asset Management	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2020 Spend	\$ -	\$ 1,900,400	\$ 558,500	\$ 552,400	\$ 3,011,300
FY 2020 Spend	92,000	792,900	7,107,300	282,400	8,274,600
FY 2021 Spend	632,300	569,900	4,239,300	226,000	5,667,500
FY 2022 Amended	600,000	500,000	510,000	250,000	1,860,000
FY 2023 Requested	200,000	100,000	1,900,000	200,000	2,400,000
FY 2024 Requested		100,000	1,500,000	100,000	1,700,000
FY 2025 Requested		300,000	250,000		550,000
FY 2026 Requested		300,000	250,000		550,000
FY 2027 Requested		100,000	250,000		350,000
Total	\$ 1,524,300	\$ 4,663,200	\$ 16,565,100	\$ 1,610,800	\$ 24,363,400

Note: The AECOM (CS-272) total contract award was \$58.6 million of which \$15.5 million is allocatable to the O&M budget and the remainder of \$43.1 million is allocatable to the capital improvement program over the life of the program.

Organization

The GLWA System Planning Area consists of five teams.

❖ Office of the Chief Planning Officer

Administration and oversight of GLWA's planning efforts with current and prospective Member-Partners.

❖ Systems Planning & Development

This new department led by a director will limit the reliance on external engineering and consulting firms related to creating and updating water and wastewater master plans/models and begin to develop an in-house group that can perform modeling, evaluate potential service extension to new customers and various other updates.

❖ Asset Management

Responsible for leading the enterprise-wide asset management strategy at GLWA.

❖ Systems Planning

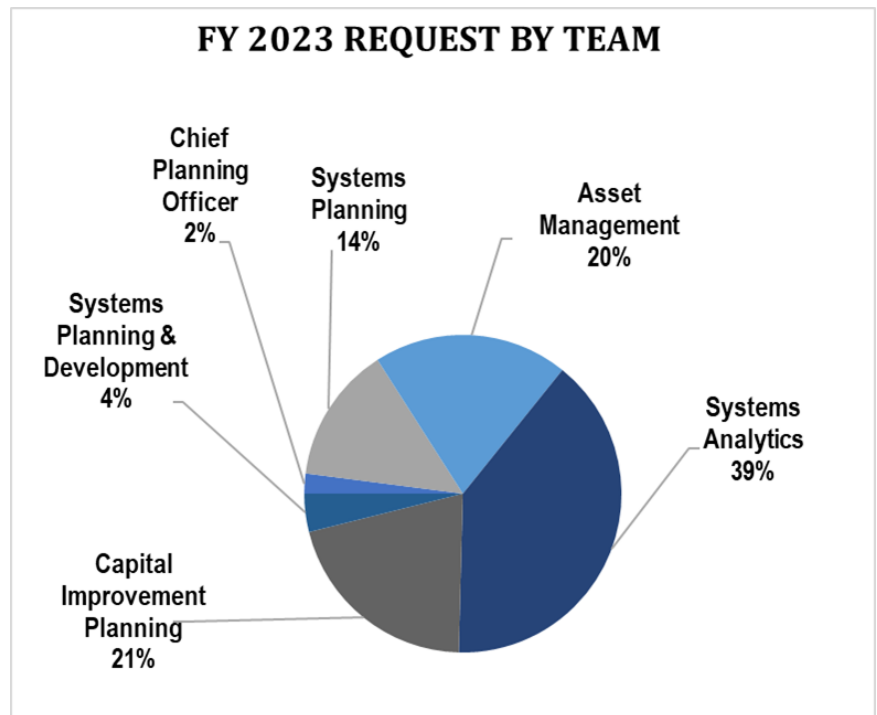
Responsible for internal and external strategic planning, outreach, and coordination with member partners.

❖ Capital Improvement Planning

Manages the planning and execution of the enterprise-wide capital improvement program including the development of a five-year Capital Improvement Plan which is updated annually.

❖ Systems Analytics

Responsible for maintaining meter operations and analyzing flow data for both water and wastewater, and for administering the Wholesale Automatic Meter Reading (WAMR) system.



Expense Categories

Contractual Services and Personnel costs are two major categories of Planning Services Area expenses in the operations and maintenance budgets listed below.

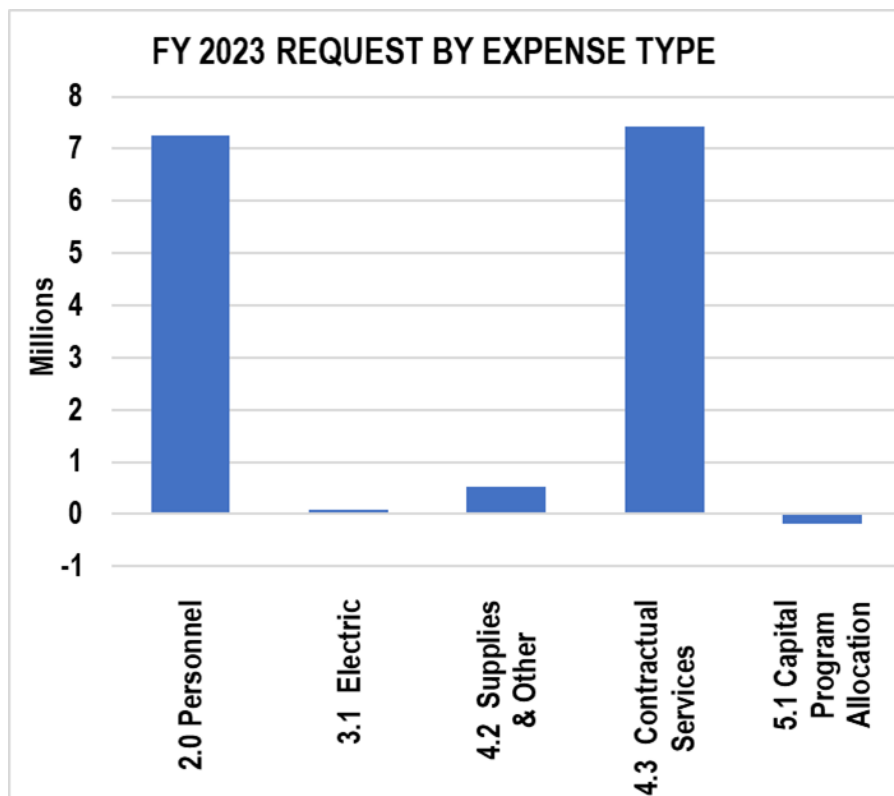
Contractual Services is the largest expense category with strategic initiatives spanning the entire organization. Significant efforts include the Linear System Pipe Integrity Program and the Capital Improvement Plan. Other efforts include significant contractual services supporting meter operations and customer/partner outreach. To optimize member engagement, the Planning

Services Team employs the services of The Bridgeport Consulting Group who specialize in efficient group facilitation assuring that GLWA Member Partners are fully engaged in making decisions that affect the region today and in the future.

The Planning Services Area has been in existence for six years. Given the breadth of assignments, recruiting and retaining top talent is a high priority. Accordingly, personnel costs are the second highest expense category. To help reduce the requirement for the contractual services support noted above, we are ramping up to support a more in-house approach to planning and modeling activities. A new department, Systems Planning and Development has been established to help oversee this transition. Additionally, staffing increases are projected for the Capital Improvement Planning group as they continue to transition operational responsibility from our existing vendor, AECOM.

It is possible that a portion of the daily activities of the Planning Services Area will have a direct impact on capital delivery. To the extent that occurs, an allocation of this Area's effort will be assigned directly to construction projects.

Smaller expenditures for utilities, supplies, training, and other miscellaneous expense round out the departmental budget request.



Biennial Budget Request

The biennial budget reflects a \$61,700 increase, or 0.4%, in FY 2023 due to changes in activity levels of several large consulting projects within the Planning Services Area.

- ❖ The Capital Improvement Planning team is ramping up their staffing to support an in-house operation with the expected completion of AECOM's support in June 2023. The forecast for AECOM's services has been increased to reflect a more accurate spend projection for the final year of the contract. Net departmental increase (\$1.8 million).
- ❖ The newly created Systems Planning and Development team lead by a director expected to be onboard by July 2023, will have the responsibility for updating the Water and Sewer Master Plans as well as other in-house planning and modeling activities. Support staff for this team will be three engineers drawn from the Systems Planning and Systems Analytics and Meter Operations teams. This new team is expected to significantly reduce the need for contracted engineering and other professional services going forward. Net departmental increase (\$0.6 million).
- ❖ Systems Planning completed phase one of the Wastewater Master Plan with vendor CDM Smith in FY 2020. As Phase II will be overseen by the Systems Planning and Development Team (as well as transitioning one engineer), we see an expected decrease in budget request in this department. Net department decrease (\$0.8 million).
- ❖ As noted earlier, the Asset Management Team has selected strategic vendor HDR of Michigan for the Linear System Integrity Program and has already begun work beginning in FY 2022. As we continue to develop the schedule for this project, major spending has been pushed back to 2025 resulting in significant budget request reductions in the current cycle. Net departmental decrease (\$1.6 million).

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 5,052,200	\$ 6,114,800	\$ 2,553,300	\$ 7,251,100	\$ 1,136,300	18.6%	\$ 8,353,100
3.1 Electric	77,800	81,700	31,700	82,000	300	0.4%	82,300
4.2 Supplies & Other	301,600	492,200	47,300	528,700	36,500	7.4%	623,600
4.3 Contractual Services	7,987,000	8,337,700	3,320,300	7,417,500	(920,200)	-11.0%	7,008,700
5.1 Capital Program Allocation	-	-	-	(191,200)	(191,200)	-100.0%	(192,200)
5.2 Shared Services	(83,200)	-	-	-	-	0.0%	-
Grand Total	\$ 13,335,400	\$ 15,026,400	\$ 5,952,600	\$ 15,088,100	\$ 61,700	0.4%	\$ 15,875,500

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY2023 Percent Variance	FY 2024 Department Requested
Chief Planning Officer	\$ 301,500	\$ 297,200	\$ 143,000	\$ 307,300	\$ 10,100	3.4%	\$ 309,600
Systems Planning & Development	-	-	-	585,900	585,900	100.0%	674,000
Systems Planning	2,045,700	2,870,100	549,000	2,099,500	(770,600)	-26.8%	2,186,500
Asset Management	1,589,000	4,591,000	811,100	2,993,900	(1,597,100)	-34.8%	3,358,600
Systems Analytics	4,644,700	5,939,500	2,380,700	5,978,000	38,500	0.6%	6,351,600
Capital Improvement Planning	4,754,500	1,328,600	2,068,800	3,123,500	1,794,900	135.1%	2,995,200
Grand Total	\$ 13,335,400	\$ 15,026,400	\$ 5,952,600	\$ 15,088,100	\$ 61,700	0.4%	\$ 15,875,500

Personnel Budget

The staffing plan provides for 68 positions for FY 2023. Three more positions will be filled in FY 2024 (Asset Management 1, Systems Analytics 2) bringing a steady state of 71 positions going forward.

Staffing Plan – Number of Positions - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a forecast of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Planning Services	73.00	57.00	68.00	71.00	71.00	71.00	71.00
Chief Planning Officer	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Systems Planning & Development	-	-	4.00	4.00	4.00	4.00	4.00
Systems Planning	7.00	5.00	4.00	4.00	4.00	4.00	4.00
Asset Management	11.00	8.00	10.00	11.00	11.00	11.00	11.00
Systems Analytics	44.00	36.00	35.00	37.00	37.00	37.00	37.00
Capital Improvement Planning	8.00	6.00	13.00	13.00	13.00	13.00	13.00

Full Time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled or budgeted, based upon a standard of 2,080 hours. For this budget area, the Staffing Plan and correlating FTEs project gradual, annual increases in staffing, leveling off to, “full” in FY 2024 and beyond.

Full Time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Planning Services	63.25	56.00	62.25	71.00	71.00	71.00	71.00
Chief Planning Officer	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Systems Planning & Development	-	-	3.25	4.00	4.00	4.00	4.00
Systems Planning	6.00	4.50	3.25	4.00	4.00	4.00	4.00
Asset Management	9.50	7.50	8.00	11.00	11.00	11.00	11.00
Systems Analytics	39.25	36.00	35.00	37.00	37.00	37.00	37.00
Capital Improvement Planning	5.50	6.00	10.75	13.00	13.00	13.00	13.00

Personnel Budget – The tables below present the Planning Services personnel budget which consists of the following expense categories: Salaries & Wages, Salaries & Wages – Workforce Development, Overtime, Employee Benefits and Contractual Transition Services. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Biennial Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Planning Officer	\$ 272,600	\$ 282,600	\$ 142,500	\$ 292,000	\$ 9,400	3.3%	\$ 293,400
Systems Planning & Development	-	-	-	474,600	474,600	100.0%	562,400
Systems Planning	352,900	497,000	178,300	402,400	(94,600)	-19.0%	498,800
Asset Management	744,000	928,300	311,900	1,044,400	116,100	12.5%	1,427,200
Systems Analytics	3,198,500	3,620,700	1,675,100	3,637,500	16,800	0.5%	3,898,700
Capital Improvement Planning	484,200	786,200	245,500	1,400,200	614,000	78.1%	1,672,600
Grand Total	\$ 5,052,200	\$ 6,114,800	\$ 2,553,300	\$ 7,251,100	\$ 1,136,300	18.6%	\$ 8,353,100

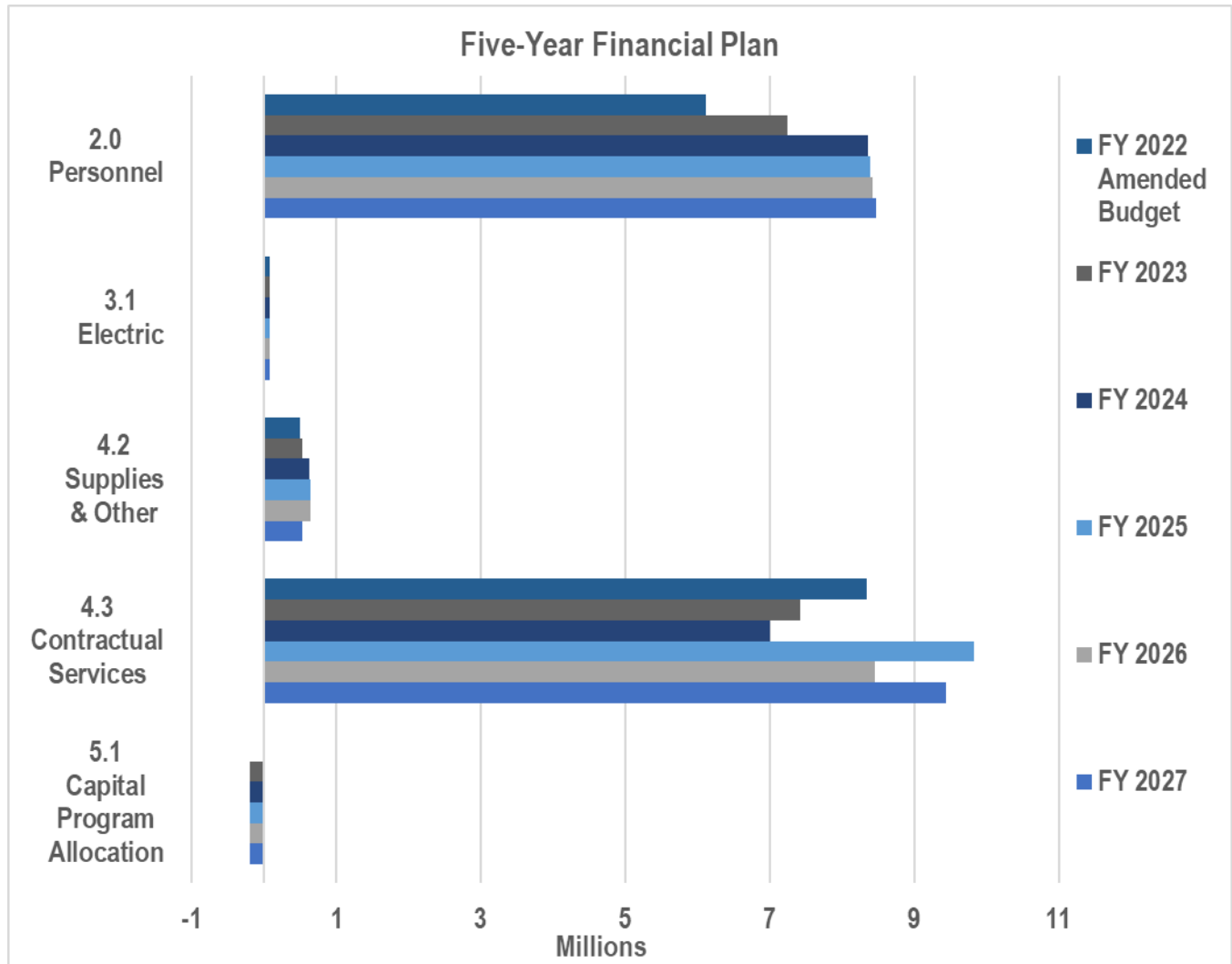
Five-Year Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Planning Officer	\$ 272,600	\$ 282,600	\$ 292,000	\$ 293,400	\$ 294,700	\$ 296,000	\$ 297,300
Systems Planning & Development	-	-	474,600	562,400	565,000	567,500	570,100
Systems Planning	352,900	497,000	402,400	498,800	501,100	503,500	505,900
Asset Management	744,000	928,300	1,044,400	1,427,200	1,433,900	1,440,500	1,447,200
Systems Analytics	3,198,500	3,620,700	3,637,500	3,898,700	3,915,000	3,931,300	3,947,600
Capital Improvement Planning	484,200	786,200	1,400,200	1,672,600	1,680,500	1,688,300	1,696,100
Grand Total	\$ 5,052,200	\$ 6,114,800	\$ 7,251,100	\$ 8,353,100	\$ 8,390,200	\$ 8,427,100	\$ 8,464,200

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 5,052,200	\$ 6,114,800	\$ 7,251,100	\$ 8,353,100	\$ 8,390,200	\$ 8,427,100	\$ 8,464,200
3.1 Electric	77,800	81,700	82,000	82,300	82,600	82,900	83,200
4.2 Supplies & Other	301,600	492,200	528,700	623,600	633,900	639,100	523,600
4.3 Contractual Services	7,987,000	8,337,700	7,417,500	7,008,700	9,829,500	8,449,300	9,437,100
5.1 Capital Program Allocation	-	-	(191,200)	(192,200)	(193,100)	(194,000)	(194,900)
5.2 Shared Services	(83,200)	-	-	-	-	-	-
Grand Total	\$ 13,335,400	\$ 15,026,400	\$ 15,088,100	\$ 15,875,500	\$ 18,743,100	\$ 17,404,400	\$ 18,313,200

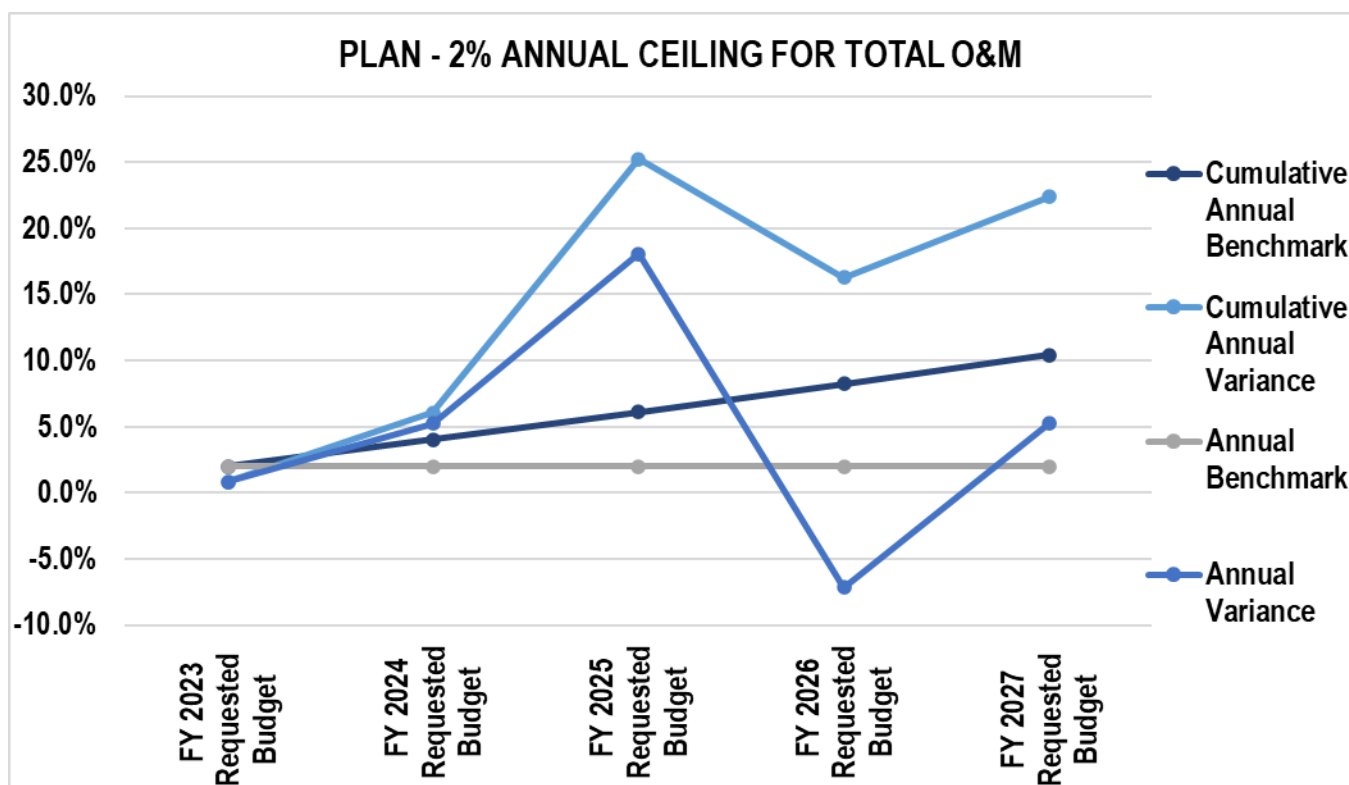


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Planning Officer	\$ 301,500	\$ 297,200	\$ 307,300	\$ 309,600	\$ 311,900	\$ 314,200	\$ 316,200
Systems Planning & Development	-	-	585,900	674,000	686,700	699,600	712,400
Systems Planning	2,045,700	2,870,100	2,099,500	2,186,500	2,219,100	2,121,700	2,054,100
Asset Management	1,589,000	4,591,000	2,993,900	3,358,600	7,362,400	6,039,900	6,925,100
Systems Analytics	4,644,700	5,939,500	5,978,000	6,351,600	6,410,500	6,469,700	6,539,200
Capital Improvement Planning	4,754,500	1,328,600	3,123,500	2,995,200	1,752,400	1,759,300	1,766,200
Grand Total	\$ 13,335,400	\$ 15,026,400	\$ 15,088,100	\$ 15,875,500	\$ 18,743,100	\$ 17,404,400	\$ 18,313,200

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Planning Services Area financial plan reflects a five-year overall increase of 22.3% while the entity-wide goal is a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment). This increase is primarily explained by the addition on the Linear System Pipe Integrity Program (LSIP) and the increase in staffing in the Systems Planning & Development team and the Capital Improvement Planning team as previously discussed under the Biennial Budget Request section. This is mitigated by a plan to bring more engineering and professional services in house hence reducing the requirement for contracted services particularly in the areas of planning and modeling.



Capital Outlay

Planning Services capital outlay is funded by the Improvement and Extension (I&E) Budget. Significant components of the FY 2023 I&E budget are as follows:

- ✓ Flow Metering & Meters – sewage meter design, installation, and replacement program.
- ✓ Furniture & Fixtures/Leasehold Improvements – improvements to 11th floor Water Board Building and Central Services Facility. This effort has been delayed due the FY 2021 Covid-19 building vacancy and related funding will not be used in this period. The completion of this effort will resume in future periods.
- ✓ Tools, Shop & Warehouse – purchase, maintenance, and repair of equipment necessary to repair meters.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 1,623,000	\$ 1,477,400	\$ 1,781,500	\$ 1,483,600	\$ 1,485,800	\$ 1,488,100
Tools, Shop & Warehouse	205,400	-	-	-	-	-
Flow Metering & Meters	1,401,600	975,400	977,500	979,600	981,800	984,100
Furniture & Fixtures	16,000	2,000	4,000	4,000	4,000	4,000
11th Floor Renovations NE Corner	-	-	300,000	-	-	-
CIP I&E	-	500,000	500,000	500,000	500,000	500,000
Grand Total	1,623,000	1,477,400	1,781,500	1,483,600	1,485,800	1,488,100

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
O&M	\$ 104,700	\$ 207,400	\$ 207,400	\$ 209,400	\$ 209,400	\$ 209,400	\$ 209,400
Improvement & Extension	3,809,500	1,415,600	1,270,000	1,572,100	1,274,200	1,276,400	1,278,700
Grand Total	\$ 3,914,200	\$ 1,623,000	\$ 1,477,400	\$ 1,781,500	\$ 1,483,600	\$ 1,485,800	\$ 1,488,100

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Planning Services Total	\$ -	\$ 1,623,000	\$ 1,477,400	\$ 1,781,500	\$ 1,483,600	\$ 1,485,800	\$ 1,488,100
Chief Planning Officer	-	2,000	2,000	2,000	2,000	2,000	2,000
Systems Planning	-	-	-	302,000	2,000	2,000	2,000
Asset Management	-	14,000	-	-	-	-	-
Systems Analytics	811,800	1,607,000	975,400	977,500	979,600	981,800	984,100
Capital Improvement Planning	3,102,400	-	500,000	500,000	500,000	500,000	500,000
Grand Total	\$ 3,914,200	\$ 1,623,000	\$ 1,477,400	\$ 1,781,500	\$ 1,483,600	\$ 1,485,800	\$ 1,488,100

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is presented on the following pages. The expenses are listed for each cost center. Because many of GLWA's initiatives extend multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
886001 - Chief Planning Officer	\$ 301,500	\$ 297,200	\$ 143,000	\$ 307,300	\$ 309,600	\$ 311,900	\$ 314,200	\$ 316,200
2.1 Salaries & Wages	222,600	219,800	113,200	224,900	224,900	224,900	224,900	224,900
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	50,000	62,800	29,300	67,100	68,500	69,800	71,100	72,400
4.2 Supplies & Other	3,800	14,000	400	14,700	15,600	16,600	17,600	18,300
Capital Outlay less than \$5000	-	2,000	-	2,000	2,000	2,000	2,000	2,000
Memberships, Licenses & Subscriptions	500	800	-	1,100	1,400	1,600	1,900	2,100
Mileage and Parking	-	-	-	-	-	-	-	-
Office Supplies	600	2,400	400	2,700	3,000	3,200	3,500	3,700
Training and Internal Meetings	2,700	3,600	-	3,600	3,700	3,800	3,900	4,000
Travel	-	5,200	-	5,300	5,500	6,000	6,300	6,500
Tuition Refund	-	-	-	-	-	-	-	-
4.3 Contractual Services	25,100	600	100	600	600	600	600	600
Contract Professional Services	100	600	100	600	600	600	600	600
Contract Professional Services - All Sewer	25,000	-	-	-	-	-	-	-
886100 - Systems Planning & Development	-	-	-	585,900	674,000	686,800	699,600	712,400
2.1 Salaries & Wages	-	-	-	365,500	429,300	429,300	429,300	429,300
2.4 Employee Benefits	-	-	-	109,100	133,100	135,600	138,200	140,800
4.2 Supplies & Other	-	-	-	11,300	11,600	11,800	12,100	12,300
Capital Outlay less than \$5000	-	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	-	-	-	600	600	600	600	600
Mileage and Parking	-	-	-	2,000	2,000	2,000	2,000	2,000
Office Supplies	-	-	-	2,700	3,000	3,200	3,500	3,700
Training and Internal Meetings	-	-	-	3,000	3,000	3,000	3,000	3,000
Travel	-	-	-	3,000	3,000	3,000	3,000	3,000
4.3 Contractual Services	-	-	-	100,000	100,000	110,000	120,000	130,000
Contractual Operating Services - All Sewer	-	-	-	-	100,000	110,000	120,000	-
Contractual Operating Services - All Water	-	-	-	100,000	-	-	-	130,000
886101 - Systems Planning	2,045,700	2,870,100	549,000	2,099,500	2,186,500	2,219,100	2,121,700	2,054,100
2.1 Salaries & Wages	278,000	376,900	135,900	304,500	375,700	375,700	375,700	375,700
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	74,900	120,100	42,400	97,900	123,100	125,400	127,800	130,200
4.2 Supplies & Other	1,900	83,500	900	102,100	187,700	188,000	188,200	68,200
Capital Outlay less than \$5000	-	-	-	-	2,000	2,000	2,000	2,000
Memberships, Licenses & Subscriptions	-	700	200	1,000	1,300	1,500	1,500	1,500
Mileage and Parking	-	1,200	-	1,200	1,300	1,300	1,300	1,300
Office Supplies	500	6,900	-	7,200	7,500	7,500	7,500	7,500
Operating Supplies	100	65,000	700	82,500	165,000	165,000	165,000	45,000
Training and Internal Meetings	1,000	500	-	800	1,000	1,000	1,000	1,000
Travel	300	9,200	-	9,400	9,600	9,700	9,900	9,900
4.3 Contractual Services	1,690,900	2,289,600	369,800	1,595,000	1,500,000	1,530,000	1,430,000	1,480,000
Contractual Professional Services	1,300,700	1,364,600	369,800	1,020,000	925,000	980,000	880,000	930,000
Contractual Professional Services - All Water	378,600	925,000	-	575,000	575,000	550,000	550,000	550,000
Contractual Professional Services - All Sewer	11,600	-	-	-	-	-	-	-

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
886201 - Asset Management	1,589,000	4,591,000	811,100	2,993,900	3,358,600	7,362,400	6,039,900	6,925,100
2.1 Salaries & Wages	598,300	712,900	233,100	795,000	1,080,000	1,080,000	1,080,000	1,080,000
2.4 Employee Benefits	145,700	215,400	78,800	249,400	347,200	353,900	360,500	367,200
4.2 Supplies & Other	49,100	42,300	5,900	39,600	46,000	53,400	55,800	58,200
Capital Outlay less than \$5000	-	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	2,000	1,500	-	2,000	2,200	2,400	2,600	2,800
Mileage and Parking	-	7,200	500	3,000	4,000	5,000	6,000	7,000
Office Supplies	1,900	18,900	4,000	16,600	17,800	20,000	21,200	22,400
Repairs & Maintenance	-	-	-	-	-	-	-	-
Software	41,800	-	-	-	-	-	-	-
Training and Internal Meetings	3,400	500	1,400	6,000	8,000	10,000	10,000	10,000
Travel	-	12,200	-	10,000	12,000	14,000	14,000	14,000
Tuition Refund	-	2,000	-	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	795,900	3,620,400	493,300	1,909,900	1,885,400	5,875,100	4,543,600	5,419,700
Contractual Professional Services	795,900	850,000	493,300	300,000	200,000	300,000	300,000	100,000
Contractual Professional Services - All Sewer	-	300,000	-	297,000	100,000	100,000	100,000	100,000
Contractual Professional Services - All Water	-	2,470,400	-	1,312,900	1,585,400	5,475,100	4,143,600	5,219,700
886401 - Systems Analytics	4,644,700	5,939,500	2,380,700	5,978,000	6,351,600	6,410,500	6,469,700	6,539,200
2.1 Salaries & Wages	1,779,100	1,883,600	944,000	1,753,700	1,938,700	1,938,700	1,938,700	1,938,700
2.2 Workforce Development	-	-	-	-	-	-	-	-
2.3 Overtime	124,000	136,300	63,200	137,700	139,100	140,500	141,900	143,300
2.4 Employee Benefits	686,000	697,900	349,800	694,700	769,500	784,400	799,300	814,200
2.5 Transition Services - All Sewer	609,400	902,900	318,100	1,051,400	1,051,400	1,051,400	1,051,400	1,051,400
3.1 Electric	77,800	81,700	31,700	82,000	82,300	82,600	82,900	83,200
4.2 Supplies & Other	246,800	345,000	39,700	346,500	347,900	349,100	350,400	351,600
Capital Outlay less than \$5000	104,700	205,400	-	205,400	205,400	205,400	205,400	205,400
Memberships, Licenses & Subscriptions	2,300	2,500	-	2,500	2,500	2,500	2,500	2,500
Mileage and Parking	700	2,700	700	2,700	2,700	2,700	2,700	2,700
Office Supplies	6,100	9,000	3,600	9,000	9,000	9,000	9,000	9,000
Operating Supplies	6,000	14,600	4,900	15,000	15,500	16,000	16,400	16,900
Repairs & Maintenance	-	-	-	-	-	-	-	-
Equipment	107,000	68,300	15,700	68,600	68,900	69,200	69,500	69,800
Repairs & Maintenance	-	-	-	-	-	-	-	-
Hardware	1,700	9,000	5,600	9,400	9,700	9,700	10,000	10,000
Repairs & Maintenance	-	-	-	-	-	-	-	-
Miscellaneous	3,400	10,000	5,300	10,000	10,000	10,000	10,000	10,000
Training and Internal Meetings	6,400	5,100	-	5,100	5,100	5,100	5,100	5,100
Travel	300	5,900	900	6,000	6,000	6,000	6,000	6,000
Tuition Refund	-	2,000	-	2,000	2,000	2,000	2,000	2,000
Uniforms, Laundry, Cleaning	8,200	10,500	3,000	10,800	11,100	11,500	11,800	12,200
4.3 Contractual Services	1,204,800	1,892,100	634,200	1,912,000	2,022,700	2,063,800	2,105,100	2,156,800
Contractual Services - Information Technology	104,000	77,100	-	76,000	77,400	79,000	80,400	82,000
Contractual Operating Services - All Sewer	848,100	1,515,000	556,600	1,527,000	1,627,000	1,657,000	1,687,000	1,727,000
Contractual Professional Services - All Water	252,700	300,000	77,600	309,000	318,300	327,800	337,700	347,800
5.2 Shared Services	(83,200)	-	-	-	-	-	-	-

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity thru 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
886601 - Capital Improvement Planning	4,754,500	1,328,600	2,068,800	3,123,500	2,995,200	1,752,400	1,759,300	1,766,200
2.1 Salaries & Wages	365,700	602,700	191,900	1,065,600	1,264,500	1,264,500	1,264,500	1,264,500
2.4 Employee Benefits	99,100	183,500	53,600	334,600	408,100	416,000	423,800	431,600
2.5 Transition Services	19,400	-	-	-	-	-	-	-
4.2 Supplies & Other	-	7,400	400	14,500	14,800	15,000	15,000	15,000
Memberships, Licenses &								
Subscriptions	-	700	100	2,000	2,300	2,500	2,500	2,500
Mileage and Parking	-	800	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	-	1,700	300	2,000	2,000	2,000	2,000	2,000
Training and Internal								
Meetings	-	1,000	-	2,000	2,000	2,000	2,000	2,000
Travel	-	3,200	-	7,500	7,500	7,500	7,500	7,500
4.3 Contractual Services	4,270,300	535,000	1,822,900	1,900,000	1,500,000	250,000	250,000	250,000
5.1 Capital Program Allocation	-	-	-	(191,200)	(192,200)	(193,100)	(194,000)	(194,900)
Grand Total	\$ 13,335,400	\$ 15,026,400	\$ 5,952,600	\$ 15,088,100	\$ 15,875,500	\$ 18,743,100	\$ 17,404,400	\$ 18,313,200

Systems Control

The Systems Control Area operates the water transmission system by controlling and monitoring the distribution of water throughout the Regional Water System. The treatment and distribution system is controlled by an award-winning state of the arts Supervisory Control and Data Acquisition (SCADA) system. Operators remotely control the pumps and valves that allow the system to deliver water to all communities. Access to real-time data from throughout the system allows quicker response, reaction, detection, and isolation of system leaks and rapidly changing conditions such as storm water inflow.

Strategic Initiatives

❖ Control Systems Enhancement (Ongoing)

Drive the use of Ovation (distributed control system) and OSIsoft PI (application software for real-time data infrastructure solutions called process information) systems for technology enhancement and analytics

❖ Operational Efficiency (Ongoing)

- Improve operational efficiency, maintain regulatory and environmental compliance, and accommodate future systems expansion.
- Implement real-time pump curves at all booster stations for pump efficiency monitoring.
- Pressure compliance is one of the metrics reported on by Systems Control to ELT monthly.
- Goal of inspecting the entire sewer system every 5 years, normally this takes 7 years.

The table below shows how the system control area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Systems Control Strategic Initiatives	Control System Enhancements		x		x	x	x					
	Operational Efficiency		x		x	x	x					

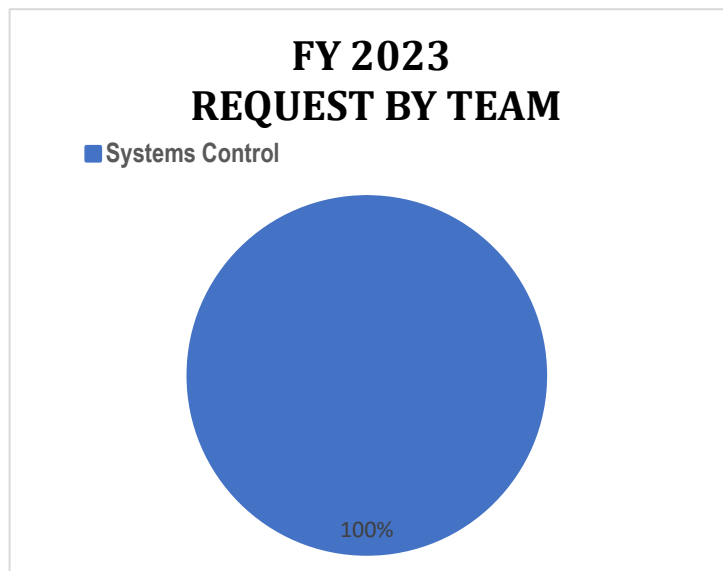
Systems Control Contracts

The Systems Control budget contains several contractual services related to VFD (variable frequency drive) maintenance and service and specialized services for engineering, instrumentation, and SCADA network. Budgeted amounts beyond contract date are estimates for future study updates, or subsequent implementation of a program. These services would generally require a separate procurement process. In the chart below are the key contracts for these services. It should be noted that contracts CON-158 is shared with other departments.

Project Description	Specialized Services (contract split w/ Field Service)	Professional Engineering Services for Instrumentation & SCADA	Low Voltage Electrical Wiring	(Wastewater) Regional River Water Quality Monitoring Program	Total of Significant Contracts
Prime Consultant or Supplier	Lakeshore Global Corp	PCI LLC	Lakeshore Global Corp	U.S. Geological Survey	
Contract #	GLWA-CON-158	CS-090A	2004773	2003901	
Contract Amount	\$ 25,827,805	\$ 10,302,139	\$ 5,639,560	\$ 1,365,000	
Contract End Date	07/17/22	02/14/22	07/18/24	09/30/25	
Cost Center Name	Systems Control	Systems Control	Systems Control	Systems Control	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ 7,402,121	\$ 6,798,365	\$ 5,019,444	\$ -	\$ 19,219,930
FY 2021 Actual	2,673,474	1,679,019	2,278,489	128,500	6,759,482
FY 2022 Budget	2,900,000	1,900,000	1,900,000	2,730,000	9,430,000
FY 2023 Requested	2,700,000	1,900,000	1,900,000	273,000	6,773,000
FY 2024 Requested	2,900,000	1,900,000	1,900,000	273,000	6,973,000
FY 2025 Requested	2,900,000	1,900,000	1,900,000	273,000	6,973,000
FY 2026 Requested	2,900,000	1,900,000	1,900,000	273,000	6,973,000
FY 2027 Requested	2,900,000	1,900,000	1,900,000	273,000	6,973,000
Total	\$ 27,275,595	\$ 19,877,384	\$ 18,697,933	\$ 4,223,500	\$ 70,074,412

Organization

The Systems Control area has one team.



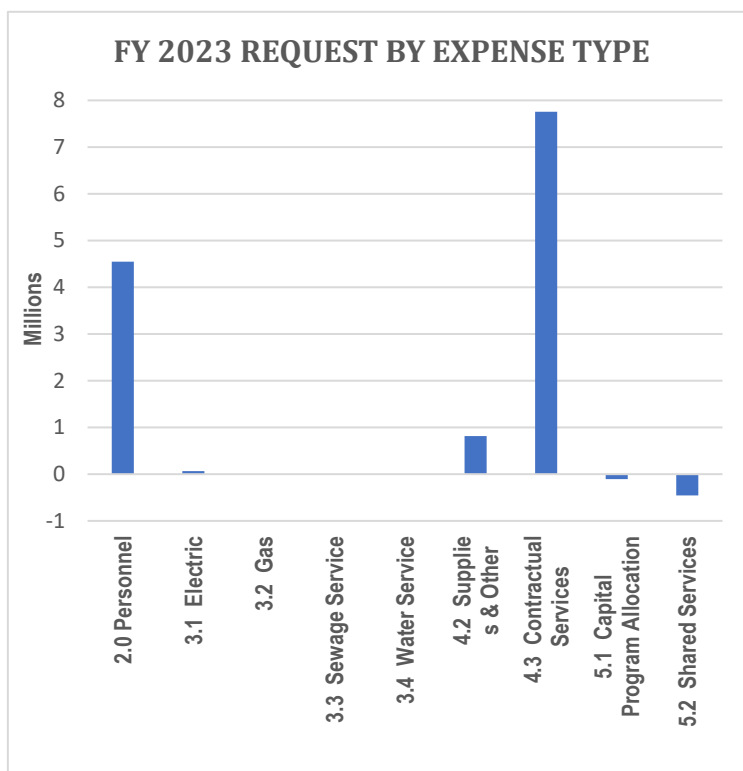
Expense Categories

There are two major categories of Systems Control expenses in the Operations and Maintenance Budget as listed below.

- ❖ Contractual Services
- ❖ Personnel Costs

Contractual Services are the highest expense category for Systems Control. Contractual services are heavily utilized in the Systems Control group to perform various maintenance, monitoring and evaluations of the distribution systems to maintain operational readiness.

Personnel costs are the second highest expense category.



Biennial Budget Request

The biennial budget reflects an increase of \$317,300, or 2.6%, in Operations & Maintenance for FY 2023. Key factors that impact the FY 2023 budget include the following:

- ❖ Contractual Services budget increased to account for support services contract (\$309,500).
- ❖ Personnel – Adjustment of FTE to align budget with anticipated time frame in which vacant positions will be filled (\$100,100)
- ❖ Increased budget based on spending for Repairs & Maintenance-Equipment & Operating Supplies (\$125,000).
- ❖ Reduction of Sewage Service budget based on historical spend (\$3,000).

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 4,841,400	\$ 4,647,600	\$ 2,500,400	\$ 4,547,500	\$ (100,100)	-2.2%	\$ 4,852,800
3.1 Electric	55,900	65,000	27,500	65,000	-	0.0%	65,000
3.2 Gas	200	300	100	200	(100)	-20.0%	200
3.3 Sewage Service	1,400	5,000	1,200	2,000	(3,000)	-60.0%	2,000
3.4 Water Service	500	600	100	600	-	0.0%	600
4.2 Supplies & Other	806,900	689,400	252,900	814,400	125,000	18.1%	814,400
4.3 Contractual Services	6,450,700	7,447,500	2,922,800	7,757,000	309,500	4.2%	7,957,000
5.1 Capital Program Allocation	(98,000)	(100,300)	(60,200)	(105,400)	(5,100)	5.1%	(103,800)
5.2 Shared Services	(437,800)	(446,600)	(223,300)	(455,500)	(8,900)	2.0%	(464,600)
Grand Total	\$ 11,621,200	\$ 12,308,500	\$ 5,421,500	\$ 12,625,800	\$ 317,300	2.6%	\$ 13,123,600

Biennial Budget Request by Team

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Systems Control	\$ 11,621,200	\$ 12,308,500	\$ 5,421,500	\$ 12,625,800	\$ 317,300	2.6%	\$ 13,123,600
Grand Total	\$ 11,621,200	\$ 12,308,500	\$ 5,421,500	\$ 12,625,800	\$ 317,300	2.6%	\$ 13,123,600

Personnel Budget

Systems Control personnel consists of 44 positions for FY 2023. Systems Control is largely comprised of technicians that operate and maintain instrumentation equipment in the water and wastewater operations, field services, pumping stations, electrical systems, computerized process controls, and equipment. This staffing plan includes 2 apprentice positions. The creation of these positions shows GLWA's commitment to developing its workforce and sustaining it for the future.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan – The following table presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Systems Control	43.00	44.00	44.00	44.00	44.00	44.00	44.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Systems Control	43.00	44.00	40.25	44.00	44.00	44.00	44.00

Personnel Budget - The table below presents the Systems Control personnel budget which consists of the following expense categories: Salaries & Wages, Salaries & Wages – Workforce Development, Overtime, Employee Benefits and Contractual Transition Services. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Systems Control	\$ 4,841,400	\$ 4,647,600	\$ 4,830,200	\$ 4,852,800	\$ 4,875,300	\$ 4,897,900	\$ 4,920,400
Grand Total	\$ 4,841,400	\$ 4,647,600	\$ 4,830,200	\$ 4,852,800	\$ 4,875,300	\$ 4,897,900	\$ 4,920,400

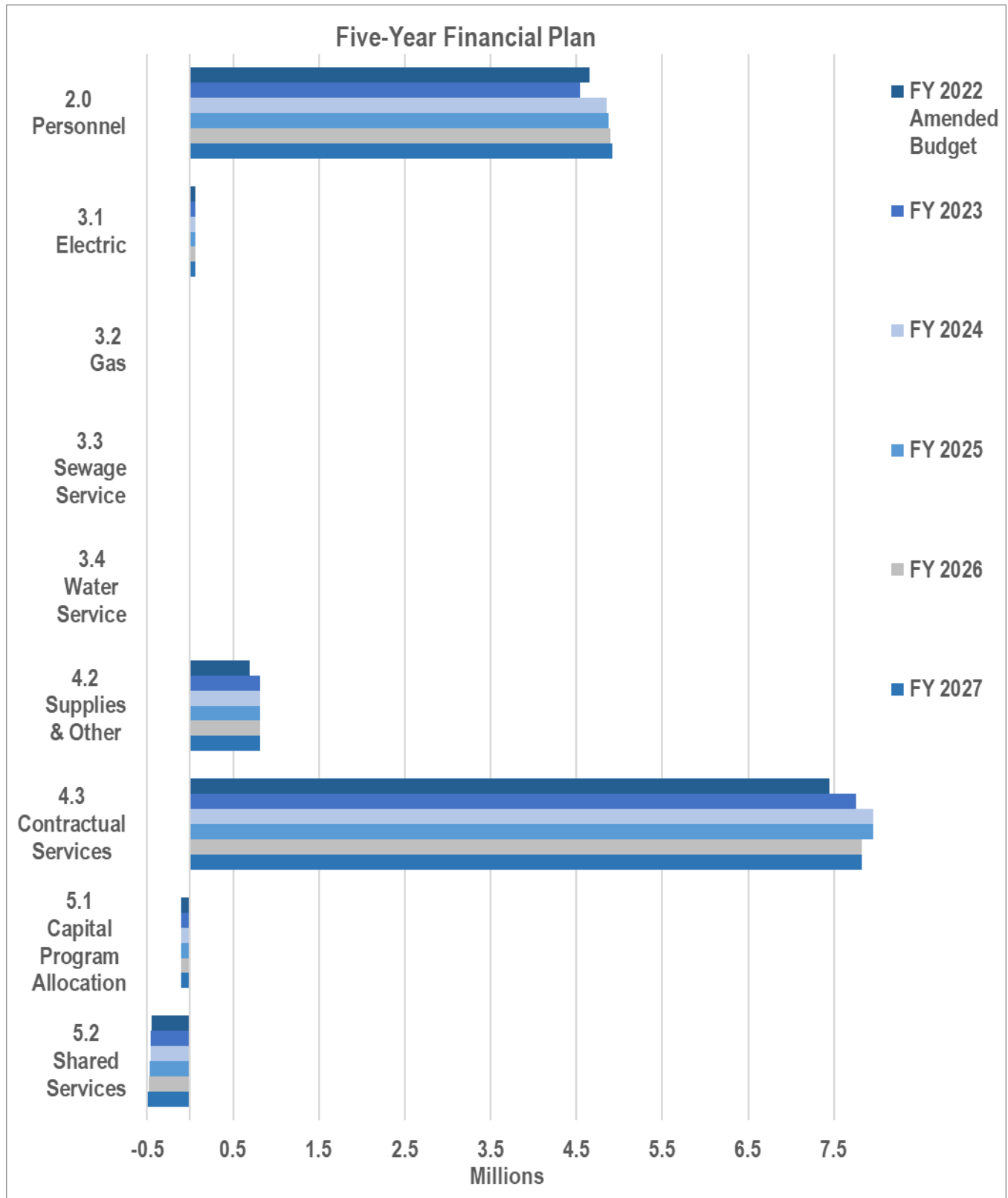
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Systems Control	\$ 4,841,400	\$ 4,647,600	\$ 4,830,200	\$ 4,852,800	\$ 4,875,300	\$ 4,897,900	\$ 4,920,400
Grand Total	\$ 4,841,400	\$ 4,647,600	\$ 4,830,200	\$ 4,852,800	\$ 4,875,300	\$ 4,897,900	\$ 4,920,400

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 4,841,400	\$ 4,647,600	\$ 4,547,500	\$ 4,852,800	\$ 4,875,300	\$ 4,897,900	\$ 4,920,400
3.1 Electric	55,900	65,000	65,000	65,000	65,000	65,000	65,000
3.2 Gas	200	300	200	200	200	200	200
3.3 Sewage Service	1,400	5,000	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	500	600	600	600	600	600	600
4.2 Supplies & Other	806,900	689,400	814,400	814,400	814,400	814,400	814,400
4.3 Contractual Services	6,450,700	7,447,500	7,757,000	7,957,000	7,957,000	7,820,500	7,820,500
5.1 Capital Program Allocation	(98,000)	(100,300)	(105,400)	(103,800)	(104,200)	(104,700)	(105,100)
5.2 Shared Services	(437,800)	(446,600)	(455,500)	(464,600)	(473,800)	(483,300)	(493,000)
Grand Total	\$ 11,621,200	\$ 12,308,500	\$ 12,625,800	\$ 13,123,600	\$ 13,136,500	\$ 13,012,600	\$ 13,025,000

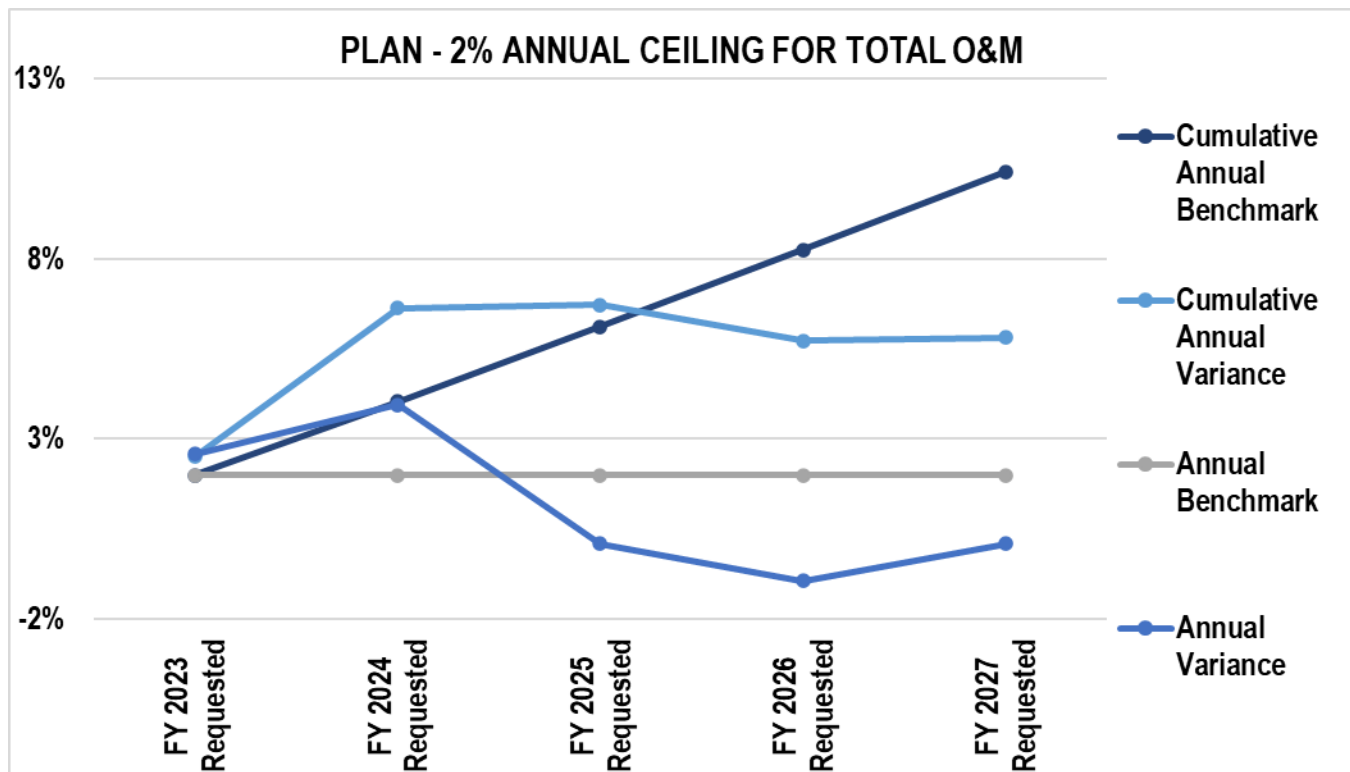


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Systems Control	\$ 11,621,200	\$ 12,308,500	\$ 12,625,800	\$ 13,123,600	\$ 13,136,500	\$ 13,012,600	\$ 13,025,000
Grand Total	\$ 11,621,200	12,308,500	\$ 12,625,800	\$ 13,123,600	\$ 13,136,500	\$ 13,012,600	\$ 13,025,000

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Systems Control Group's financial plan reflects a five-year overall increase of 5.8% which is well within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Systems Control five-year capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay Plan by Asset

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500
Information Technology	75,000	75,000	75,000	75,000	75,000	75,000
Software	75,000	75,000	75,000	75,000	75,000	75,000
Machinery & Equipment	2,737,500	2,900,000	2,700,000	3,325,000	3,675,000	2,737,500
Controls & Communication	375,000	375,000	375,000	625,000	500,000	375,000
Pipes, Gates & Valves	450,000	450,000	450,000	450,000	450,000	450,000
Process Equipment/Treatment	412,500	575,000	375,000	375,000	475,000	412,500
Pumps & Motors	1,500,000	1,500,000	1,500,000	1,875,000	2,250,000	1,500,000
Grand Total	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 53,900	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500
Grand Total	\$ 53,900	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Systems Control	\$ 53,900	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500
Grand Total	\$ 53,900	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000	\$ 2,812,500

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882301 - Systems Operations Control	\$ 11,621,200	\$ 12,308,500	\$ 5,421,500	\$ 12,625,800	\$ 13,123,600	\$ 13,136,500	\$ 13,012,600	\$ 13,025,000
2.1 Salaries & Wages	2,536,600	2,590,000	1,257,600	2,488,200	2,686,100	2,686,100	2,686,100	2,686,100
2.2 Workforce Development	4,100	94,500	-	94,500	94,500	94,500	94,500	94,500
2.3 Overtime	1,057,600	900,000	617,300	900,000	900,000	900,000	900,000	900,000
2.4 Employee Benefits	950,400	1,063,100	562,700	1,064,800	1,172,200	1,194,700	1,217,300	1,239,800
2.5 Transition Services	292,700	-	62,800	-	-	-	-	-
3.1 Electric	55,900	65,000	27,500	65,000	65,000	65,000	65,000	65,000
3.2 Gas	200	300	100	200	200	200	200	200
3.3 Sewage Service	1,400	5,000	1,200	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	500	600	100	600	600	600	600	600
4.2 Supplies & Other	806,900	689,400	252,900	814,400	814,400	814,400	814,400	814,400
Capital Outlay less than \$5,000	125,700	130,000	5,700	130,000	130,000	130,000	130,000	130,000
Employee Uniform Expense	28,600	20,000	12,500	30,000	30,000	30,000	30,000	30,000
Memberships, Licenses & Subscriptions	15,700	10,500	2,700	15,500	15,500	15,500	15,500	15,500
Mileage and Parking	700	4,000	-	4,000	4,000	4,000	4,000	4,000
Office Supplies	5,600	12,200	1,100	12,200	12,200	12,200	12,200	12,200
Operating Supplies	233,100	114,800	30,600	189,800	189,800	189,800	189,800	189,800
Operating Supplies-Janitorial	300	1,000	200	1,000	1,000	1,000	1,000	1,000
Property Taxes	-	-	-	-	-	-	-	-
Rentals-Buildings	22,100	38,100	7,500	38,100	38,100	38,100	38,100	38,100
Repairs & Maintenance-Equipment	219,700	150,000	84,700	200,000	200,000	200,000	200,000	200,000
Repairs & Maintenance-Hardware	67,200	119,000	10,400	104,000	104,000	104,000	104,000	104,000
Repairs & Maintenance-Software	84,400	50,300	97,500	50,300	50,300	50,300	50,300	50,300
Training and Internal Meetings	3,800	28,000	-	28,000	28,000	28,000	28,000	28,000
Travel	-	10,000	-	10,000	10,000	10,000	10,000	10,000
Tuition Refund	-	1,500	-	1,500	1,500	1,500	1,500	1,500
4.3 Contractual Services	6,450,700	7,447,500	2,922,800	7,757,000	7,957,000	7,957,000	7,820,500	7,820,500
Contract Services-Information Technology	19,000	100,000	21,400	100,000	100,000	100,000	100,000	100,000
Contractual Buildings & Grounds Maint	4,600	5,000	5,800	5,000	5,000	5,000	5,000	5,000
Contractual Operating Services	2,579,000	3,492,000	1,241,400	2,992,000	3,192,000	3,192,000	3,192,000	3,192,000
Contractual Professional Services	3,848,100	3,850,500	1,654,200	4,660,000	4,660,000	4,660,000	4,523,500	4,523,500
5.1 Capital Program Allocation	(98,000)	(100,300)	(60,200)	(105,400)	(103,800)	(104,200)	(104,700)	(105,100)
5.2 Shared Services	(437,800)	(446,600)	(223,300)	(455,500)	(464,600)	(473,800)	(483,300)	(493,000)
Shared Services : Salaries & Wages Reimb	(138,200)	(141,000)	(70,500)	(143,800)	(146,700)	(149,600)	(152,600)	(155,700)
Shared Services Reimbursement	(244,400)	(249,300)	(124,600)	(254,300)	(259,400)	(264,500)	(269,800)	(275,200)
Shared Services: Employee Benefit Reimb	(55,200)	(56,300)	(28,200)	(57,400)	(58,500)	(59,700)	(60,900)	(62,100)
Grand Total	\$ 11,621,200	\$ 12,308,500	\$ 5,421,500	\$ 12,625,800	\$ 13,123,600	\$ 13,136,500	\$ 13,012,600	\$ 13,025,000

Facility Operations

The Facility Operations Area is responsible for maintaining and managing all properties, such as the grounds and structures associated with the water and wastewater system. These activities include but are not limited to glass repairs, electrical work, painting and other maintenance.

Strategic Initiative

❖ Improving buildings and grounds efficiency (Ongoing)

Ensure facilities, buildings and grounds are properly maintained, secure, environmentally safe and upgraded to support GLWA's specific operations.

The table below shows how the facility operations area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Facility Operations Strategic Initiatives	Improving building & grounds efficiency		x		x	x						

Facility Operations Contracts

The Facility Operations budget contains several contractual services to provide maintenance and repairs for all GLWA facilities including but not limited to lawn care, snow removal, rubbish removal, elevator maintenance and extermination services. Budgeted amounts beyond contract date are estimates for future study updates or subsequent implementation of a program. These services would generally require a separate procurement process. In the following chart are the key contracts for these services. The GDI Services Commercial Janitorial Services budget is shared across multiple cost centers and only the Facility Operations share is represented in the table.

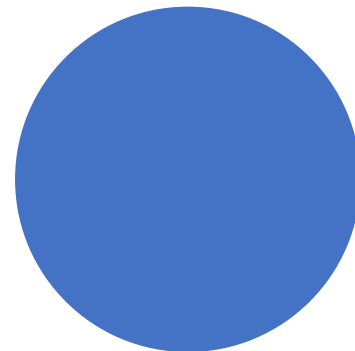
Project Description	Commerical Janitorial Services	Deicing/Snow Removal Services	Lawncare/ Grounds Maintenance	Elevators Preventative Maintenance & Repair Service	Refuse & Recycling Service	Shared Facilities Shared Cost	Total of Significant Contracts
Prime Consultant or Supplier	GDI Services	Premier Group Associates	Premier Group Associates	ThyssenKrupp Elevator Service	Waste Management	OPS-006 DWSD Shared Service	
Contract #	1904332	1901555	1900702	1703524	1902536	N/A	
Contract Amount	\$ 9,575,569	\$ 2,384,806	\$ 2,628,282	\$ 1,612,147	\$ 155,160		
Contract End Date	04/05/24	11/30/2021	7/14/2022	10/31/2022	12/14/2021		
Cost Center Name	Facility Operations	Facility Operations	Facility Operations	Facility Operations	Facility Operations	Facility Operations	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ 705,286	\$ 888,427	\$ 913,821	\$ 600,142	\$ 176,867	\$ 6,133,133	\$ 9,417,675
FY 2021 Actual	1,339,530	516,378	682,350	385,863	73,411	2,346,000	5,343,531
FY 2022 Budget	1,762,900	600,000	900,000	500,000	85,000	2,392,900	6,240,800
FY 2023 Requested	1,783,820	500,000	900,000	400,000	85,000	2,440,800	6,109,620
FY 2024 Requested	1,795,500	600,000	900,000	500,000	85,000	2,489,600	6,370,100
FY 2025 Requested	1,806,500	600,000	900,000	500,000	85,000	2,539,400	6,430,900
FY 2026 Requested	1,818,600	600,000	900,000	500,000	85,000	2,590,200	6,493,800
FY 2027 Requested	1,831,500	600,000	900,000	500,000	85,000	2,642,000	6,558,500
Total	\$ 12,843,636	\$ 4,904,804	\$ 6,996,171	\$ 3,886,005	\$ 760,278	\$ 23,574,033	\$ 52,964,926

Organization

The Facility Operations area has one team.

FY 2023 REQUEST BY TEAM

■ Facility Operations

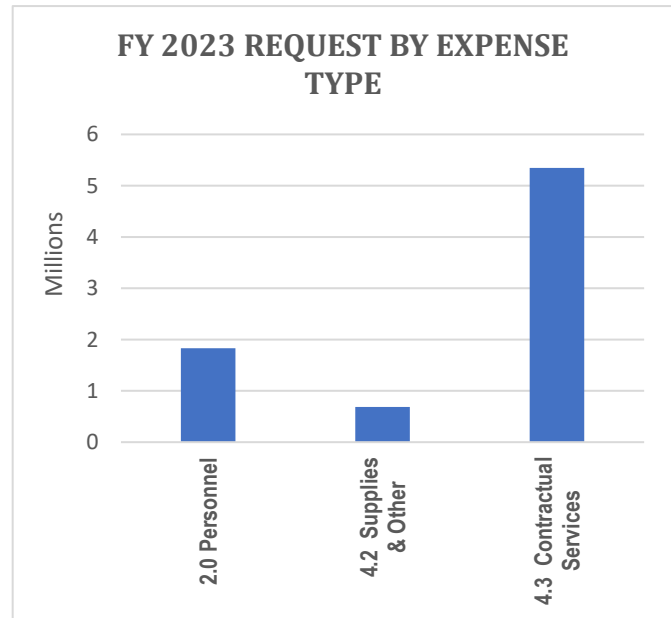


Expense Categories

There are two major categories of Facility Operations expenses in the Operations and Maintenance Budget as listed below.

- ❖ Contractual Services
- ❖ Personnel Costs

Contractual Services is the highest expense category for Facility Operations. The level of contractual services reflects the decision to contract for certain non-core services which includes lawn care maintenance, snow removal, rubbish removal, extermination services, elevator maintenance, preventative maintenance, Detroit Water & Sewerage Department (DWSD) shared services (OPS-006 – Shared Facilities Shared Cost) as well as the efficient management of peak workload activities.



Personnel costs is the second highest expense category.

Biennial Budget Request

The biennial budget reflects an increase of \$614,200, or 8.5%, in FY 2023.

- ❖ Personnel cost decrease due to FTE adjustment (\$216,800)
- ❖ Increase in Contractual Services due to repair of Hurlbut Memorial Gate (anticipated FY 2022-23) (\$500,000).
- ❖ FY 2023 Contractual service budget has been adjusted based on anticipated use of various contracts (\$359,300).
- ❖ Reduction of Rentals – Miscellaneous (Supplies & Other) because bleacher rentals are no longer necessary due to construction of permanent bleachers at WWP (\$28,300)

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 1,647,100	\$ 2,048,900	\$ 829,600	\$ 1,832,100	\$ (216,800)	-10.6%	\$ 2,153,200
4.2 Supplies & Other	504,900	714,100	428,900	685,800	(28,300)	-4.0%	685,800
4.3 Contractual Services	4,903,200	4,486,600	2,336,900	5,345,900	\$ 859,300	19.2%	5,094,700
5.5 Intergovernmental Agreement	(77,400)	-	(9,900)	-	-	0.0%	-
Grand Total	\$ 6,977,800	\$ 7,249,600	\$ 3,585,500	\$ 7,863,800	\$ 614,200	8.5%	\$ 7,933,700

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Facility Operations	\$ 6,977,800	\$ 7,249,600	\$ 3,585,500	\$ 7,863,800	\$ 614,200	8.5%	\$ 7,933,700
Grand Total	\$ 6,977,800	\$ 7,249,600	\$ 3,585,500	\$ 7,863,800	\$ 614,200	8.5%	\$ 7,933,700

Personnel Budget

Facility Operations personnel consists of 23 positions for FY 2023 and is largely comprised of operations staffing that perform a variety of skilled facility work relative to the operations and maintenance of water and wastewater facilities.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The following table presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Facility Operations	25.00	23.00	23.00	23.00	23.00	23.00	23.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Facility Operations	24.50	22.50	19.00	22.50	22.50	22.50	22.50

Personnel Budget - The table below presents the Facility Operations personnel budget which consists of the following expense categories: Salaries & Wages, Overtime and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area, which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Facility Operations	\$ 1,647,100	\$ 2,048,900	\$ 829,600	\$ 1,832,100	\$ (216,800)	-10.6%	\$ 2,153,200
Grand Total	\$ 1,647,100	\$ 2,048,900	\$ 829,600	\$ 1,832,100	\$ (216,800)	-10.6%	\$ 2,153,200

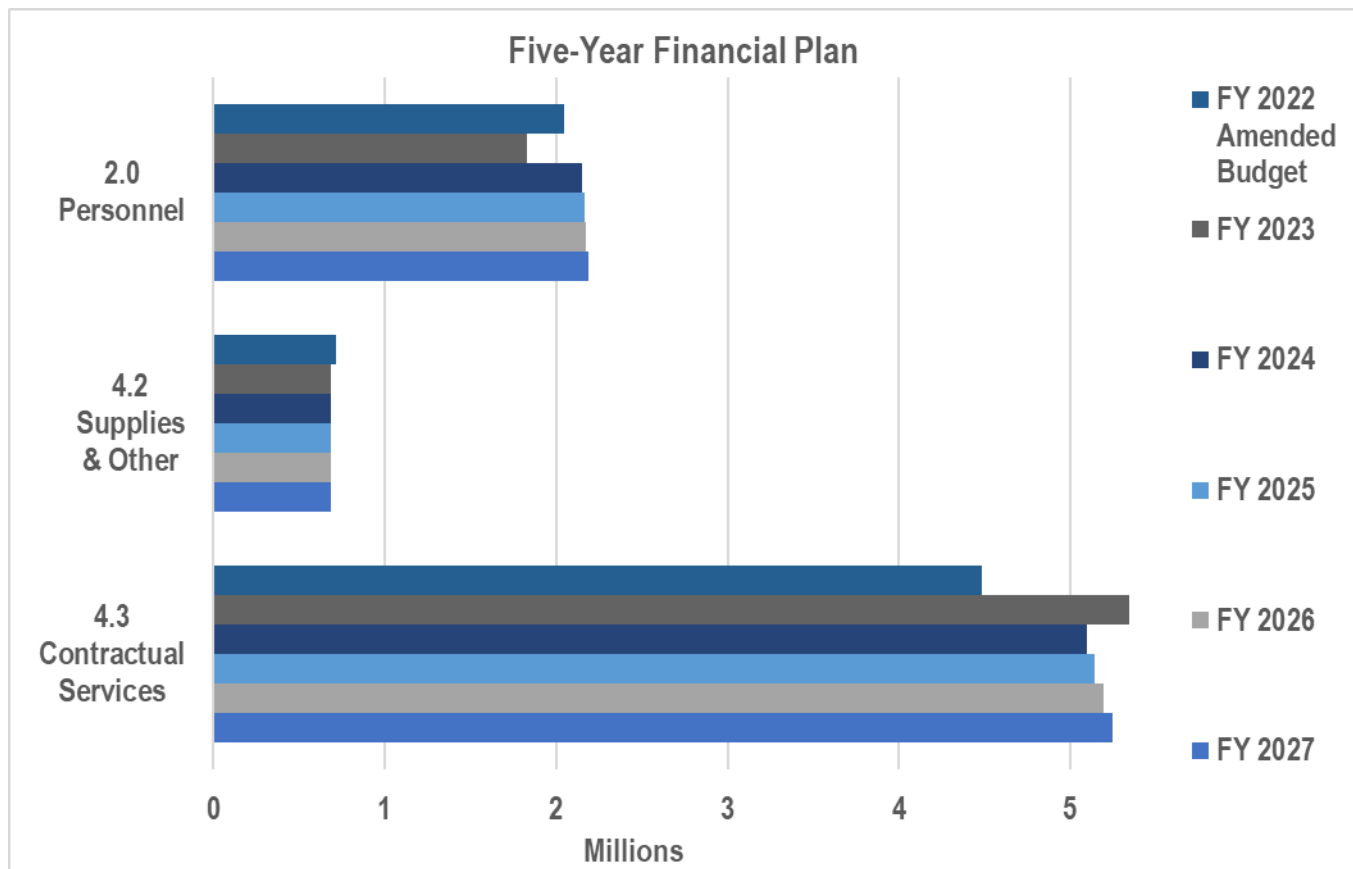
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Facility Operations	\$ 1,647,100	\$ 2,048,900	\$ 1,832,100	\$ 2,153,200	\$ 2,164,600	\$ 2,176,000	\$ 2,187,400
Grand Total	\$ 1,647,100	\$ 2,048,900	\$ 1,832,100	\$ 2,153,200	\$ 2,164,600	\$ 2,176,000	\$ 2,187,400

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 1,647,100	\$ 2,048,900	\$ 1,832,100	\$ 2,153,200	\$ 2,164,600	\$ 2,176,000	\$ 2,187,400
4.2 Supplies & Other	504,900	714,100	685,800	685,800	685,800	685,800	685,800
4.3 Contractual Services	4,903,200	4,486,600	5,345,900	5,094,700	5,144,500	5,195,300	5,247,100
5.5 Intergovernmental Agreement	(77,400)	-	-	-	-	-	-
Grand Total	\$ 6,977,800	\$ 7,249,600	\$ 7,863,800	\$ 7,933,700	\$ 7,994,900	\$ 8,057,100	\$ 8,120,300

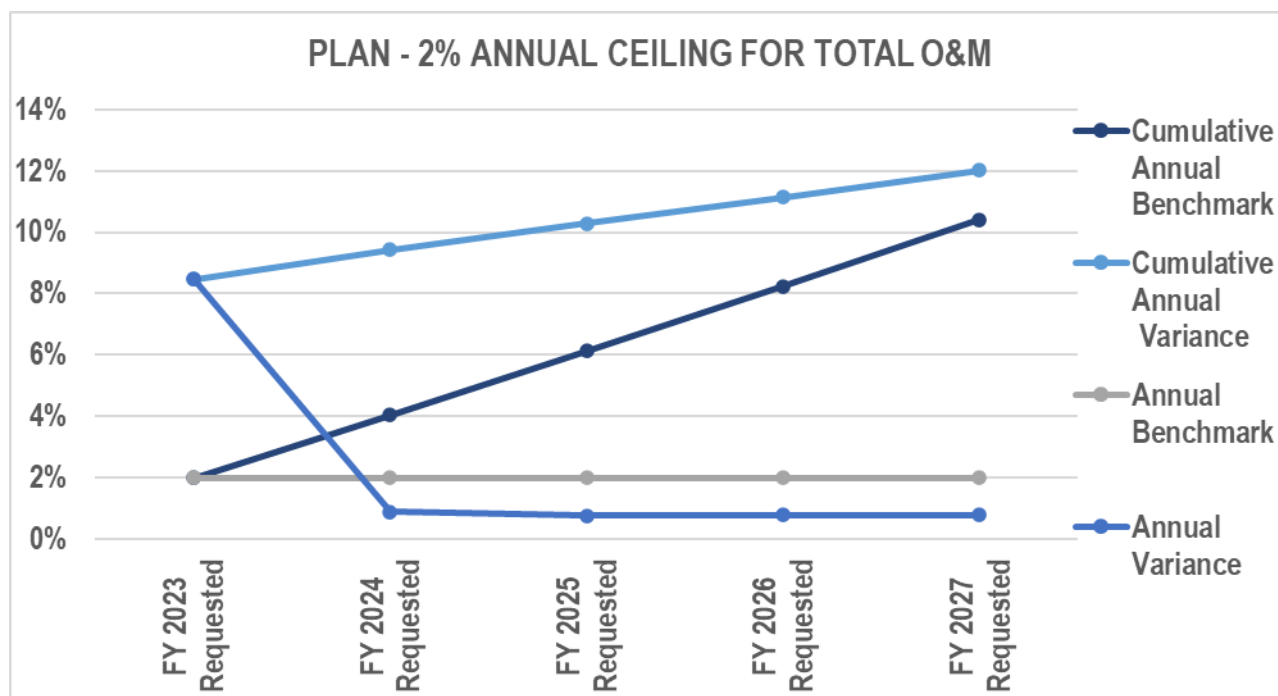


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Facility Operations	\$ 6,977,800	\$ 7,249,600	\$ 7,863,800	\$ 7,933,700	\$ 7,994,900	\$ 8,057,100	\$ 8,120,300
Grand Total	\$ 6,977,800	7,249,600	\$ 7,863,800	\$ 7,933,700	\$ 7,994,900	\$ 8,057,100	\$ 8,120,300

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Facility Operations Group's financial plan reflects a five-year overall increase of 12%. This is within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Facility Operations five-year capital outlay is funded by the Improvement & Extension (I&E) budget. Note that facility improvements are budgeted to align with cost centers requests for improvement.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Machinery & Equipment	125,000	125,000	125,000	125,000	125,000	125,000
Furniture & Fixtures	50,000	50,000	50,000	50,000	50,000	50,000
Heavy Equipment & Misc	15,000	15,000	15,000	15,000	15,000	15,000
Pumps & Motors	60,000	60,000	60,000	60,000	60,000	60,000
Grand Total	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 756,400	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Grand Total	\$ 756,400	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Facility Operations	\$ 756,400	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Grand Total	\$ 756,400	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882421 - Facility Operations	6,977,800	7,249,600	3,585,500	7,863,800	7,933,700	7,994,900	8,057,100	8,120,300
2.1 Salaries & Wages	1,180,400	1,491,700	602,600	1,321,200	1,540,100	1,540,100	1,540,100	1,540,100
2.3 Overtime	9,600	20,000	7,700	15,000	20,000	20,000	20,000	20,000
2.4 Employee Benefits	457,100	537,200	219,300	495,900	593,100	604,500	615,900	627,300
4.2 Supplies & Other	504,900	714,100	428,900	685,800	685,800	685,800	685,800	685,800
Capital Outlay less than \$5,000	-	125,000	-	125,000	125,000	125,000	125,000	125,000
Employee Uniform Expense	6,700	10,000	4,100	10,000	10,000	10,000	10,000	10,000
Inspection and Permit Fees	1,600	2,000	-	12,000	12,000	12,000	12,000	12,000
Memberships, Licenses & Subscriptions	9,400	16,000	-	2,000	2,000	2,000	2,000	2,000
Mileage and Parking	-	500	-	500	500	500	500	500
Office Supplies	1,300	8,000	2,000	8,000	8,000	8,000	8,000	8,000
Operating Supplies	191,200	231,000	105,700	225,000	225,000	225,000	225,000	225,000
Operating Supplies-Janitorial	8,400	5,000	7,500	5,000	5,000	5,000	5,000	5,000
Rentals-Miscellaneous	-	50,000	-	-	-	-	-	-
Repairs & Maintenance-Buildings & Ground	278,100	261,100	246,100	292,800	292,800	292,800	292,800	292,800
Repairs & Maintenance-Equipment	(2,900)	-	-	-	-	-	-	-
Supplies & Other - Covid19	11,100	-	63,500	-	-	-	-	-
Training and Internal Meetings	200	2,000	-	2,000	2,000	2,000	2,000	2,000
Travel	(200)	2,500	-	2,500	2,500	2,500	2,500	2,500
Tuition Refund	-	1,000	-	1,000	1,000	1,000	1,000	1,000
4.3 Contractual Services	4,903,200	4,486,600	2,336,900	5,345,900	5,094,700	5,144,500	5,195,300	5,247,100
Contract Bldg & Grounds Maint-All Water	-	-	-	500,000	-	-	-	-
Contractual Buildings & Grounds Maint	2,074,000	1,568,500	535,500	2,068,500	2,268,500	2,268,500	2,268,500	2,268,500
Contractual Operating Services	2,654,400	2,918,100	1,801,400	2,777,400	2,826,200	2,876,000	2,926,800	2,978,600
Contractual Services - Covid19	174,800	-	-	-	-	-	-	-
5.5 Intergovernmental Agreement	(77,400)	-	(9,900)	-	-	-	-	-
Grand Total	6,977,800	7,249,600	3,585,500	7,863,800	7,933,700	7,994,900	8,057,100	8,120,300

Fleet Operations

The Fleet Operations Area is responsible for maintaining and managing all vehicles, such as the cars, trucks, lifts, vacuum tanker, etc. associated with the water and wastewater system while ensuring vehicles and equipment are properly matched to the job requirements and functioning properly and safely.

Strategic Initiatives

❖ Improve vehicle efficiency (Ongoing)

Ensure vehicles are properly maintained, functioning properly and safely as well as matched to the job requirements to support GLWA's operational needs

❖ Increase Team member safety (Ongoing)

Utilizing metrics provided by the GEOTAB system we are able to work with our team members on safety factors such as seat belt usage, speed, hard cornering, and aggressive driving. These items are reported out to ELT on a monthly basis.

The table below shows how the fleet operations area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Fleet Operations Strategic Initiatives	Improve Vehicle Efficiency		x		x	x	x					
	Increase Team Member Safety		x				x				x	

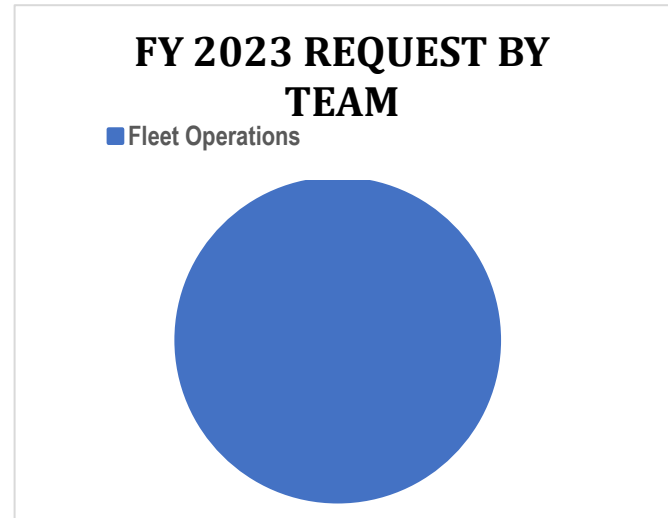
Fleet Operations Contracts

The Fleet Operations budget contains several contractual services to ensure the company vehicles are in safe, operable conditions while controlling costs, productivity, and fuel management. In the chart below are the key contracts for these services. Budgeted amounts beyond contract date are estimates for future study updates or subsequent implementation of a program. These services would generally require a separate procurement process.

Project Description	Fleet Maintenance	Furnish Fuel & Diesel Fuel	Rental of Fleet Vehicles	GPS/AVL Tracking	Total of Significant Contracts
Prime Consultant or Supplier	Enterprise Fleet Management	Crystal Flash	EAN Holdings / Hertz Corp	GEOTAB Inc.	
Contract #	1802710	2100144	2102560	1904862	
Contract Amount	\$ 1,553,000	\$ 400,000	\$ 200,000	\$ 375,000	
Contract End Date	11/04/24	09/30/22	09/15/24	06/30/22	
Cost Center Name	Fleet Operations	Fleet Operations	Fleet Operations	Fleet Operations	
Expense Category	Contractual Services	Supplies & Other	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ 22,076	\$ 965,206	\$ 250,409	\$ -	\$ 1,237,690
FY 2021 Actual	746,355	418,513	203,135	86,954	1,454,957
FY 2022 Budget	1,015,600	425,423	-	75,000	1,516,023
FY 2023 Requested	599,600	440,000	50,000	75,000	1,164,600
FY 2024 Requested	599,600	440,000	50,000	75,000	1,164,600
FY 2025 Requested	599,600	440,000	50,000	75,000	1,164,600
FY 2026 Requested	599,600	440,000	50,000	75,000	1,164,600
FY 2027 Requested	599,600	440,000	50,000	75,000	1,164,600
Total	\$ 4,782,031	\$ 4,009,141	\$ 703,544	\$ 536,954	\$ 10,031,671

Organization

The Fleet Operations area has one team.

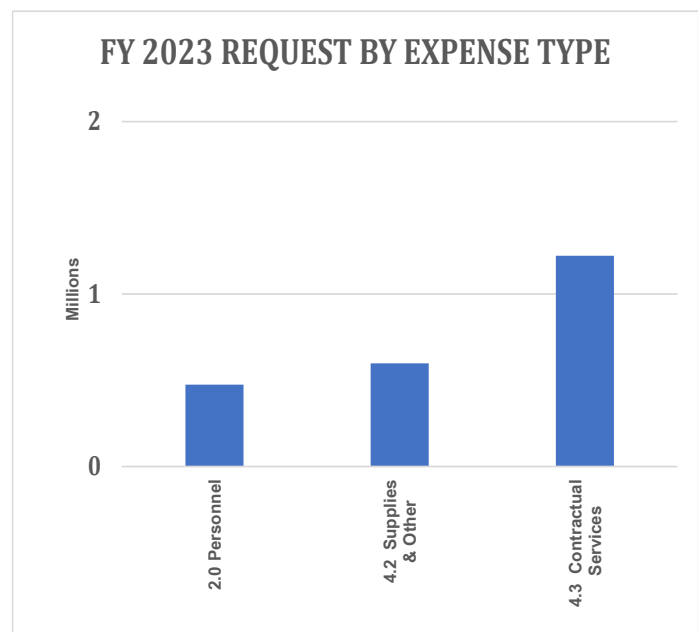


Expense Categories

There are three major categories of Fleet Operations expenses in the Operations and Maintenance Budget as listed below.

- Personnel
- Supplies & Other
- Contractual Services

Contractual Services is the highest expense category for Fleet Operations. The level of contractual services reflect the on-going contract with Enterprise Fleet Management, as well as various small contracts implemented over the past year to replace services once provided by DWSD through the Shared Services Agreement.



Biennial Budget Request

The biennial budget reflects a decrease of \$800, or 0.0%, in Operations & Maintenance for FY 2023. Key Factors that are impacting the decrease include the following:

- ❖ Personnel increase to account for the addition of a Professional Administrative Analyst position (\$99,200).
- ❖ Supplies & Other: The increase is due to the establishment of Operating Supplies and Office Supplies budgets to stand up the department in its separation from Facility Operations (\$43,500).
- ❖ Reduction of Contractual Services based on actual usage of contracts in FY 2021 (\$143,500).

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 291,100	\$ 375,300	\$ 207,700	\$ 474,500	\$ 99,200	26.4%	\$ 476,800
4.2 Supplies & Other	519,700	555,000	382,500	598,500	43,500	7.8%	598,500
4.3 Contractual Services	204,600	1,365,600	538,900	1,222,100	(143,500)	-10.5%	1,222,100
Grand Total	\$ 1,015,400	\$ 2,295,900	\$ 1,129,100	\$ 2,295,100	\$ (800)	0.0%	\$ 2,297,400

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Fleet Operations	\$ 1,015,400	\$ 2,295,900	\$ 1,129,100	\$ 2,295,100	\$ (800)	0.0%	\$ 2,297,400
Grand Total	\$ 1,015,400	\$ 2,295,900	\$ 1,129,100	\$ 2,295,100	\$ (800)	0.0%	\$ 2,297,400

Personnel Budget

Fleet Operations personnel consists of 4 positions for FY 2023. The department is requesting a Professional Administrative Analyst position to assist with administrative and clerical duties.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Fleet Operations	0.00	3.00	4.00	4.00	4.00	4.00	4.00

Full-time Equivalents - The following table presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Fleet Operations	0.00	3.00	4.00	4.00	4.00	4.00	4.00

Personnel Budget - The table below presents the Fleet Operations personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area, which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Fleet Operations	\$ 291,100	\$ 375,300	\$ 207,700	\$ 474,500	\$ 99,200	26.4%	\$ 476,800
Grand Total	\$ 291,100	\$ 375,300	\$ 207,700	\$ 474,500	\$ 99,200	26.4%	\$ 476,800

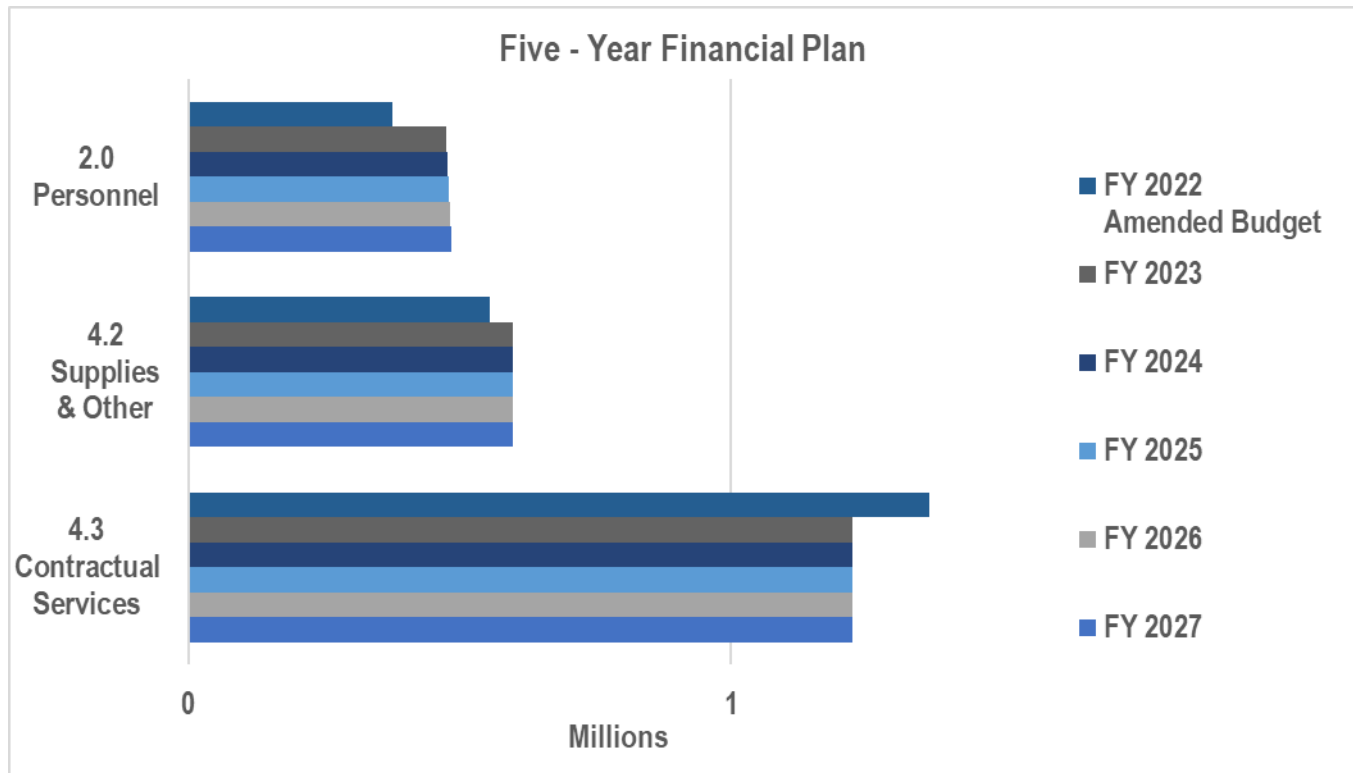
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Fleet Operations	\$ 291,100	\$ 375,300	\$ 474,500	\$ 476,800	\$ 479,100	\$ 481,400	\$ 483,700
Grand Total	\$ 291,100	\$ 375,300	\$ 474,500	\$ 476,800	\$ 479,100	\$ 481,400	\$ 483,700

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 291,100	\$ 375,300	\$ 474,500	\$ 476,800	\$ 479,100	\$ 481,400	\$ 483,700
4.2 Supplies & Other	519,700	555,000	598,500	598,500	598,500	598,500	598,500
4.3 Contractual Services	204,600	1,365,600	1,222,100	1,222,100	1,222,100	1,222,100	1,222,100
Grand Total	\$ 1,015,400	2,295,900	\$ 2,295,100	\$ 2,297,400	\$ 2,299,700	\$ 2,302,000	\$ 2,304,300

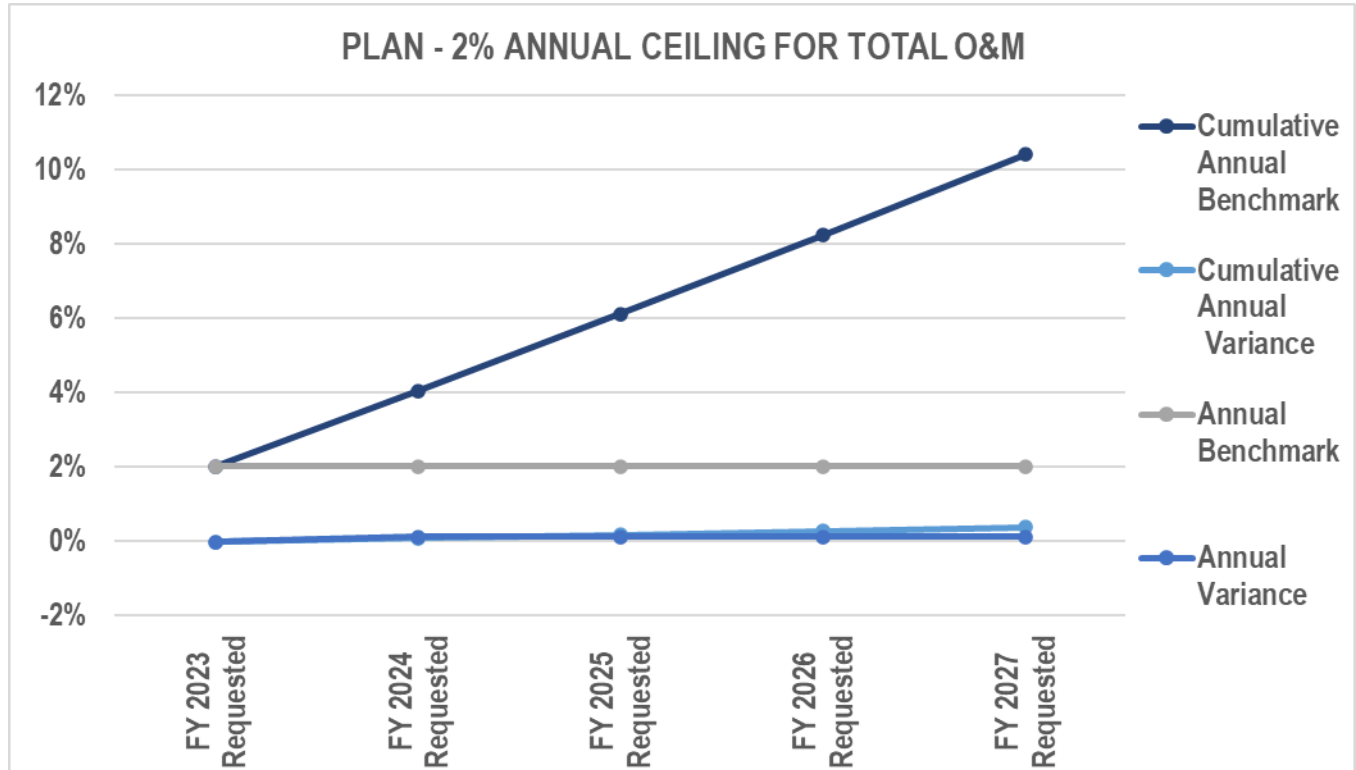


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Fleet Operations	\$ 1,015,400	\$ 2,295,900	\$ 2,295,100	\$ 2,297,400	\$ 2,299,700	\$ 2,302,000	\$ 2,304,300
Grand Total	\$ 1,015,400	2,295,900	\$ 2,295,100	\$ 2,297,400	\$ 2,299,700	\$ 2,302,000	\$ 2,304,300

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Fleet Operations Group's financial plan reflects a five-year overall increase of 0.4%, which is well within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Fleet Operations five-year capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000
Machinery & Equipment	470,000	-	-	-	-	-
Heavy Equipment & Misc	470,000	-	-	-	-	-
Vehicles	1,835,200	3,000,000	2,980,000	2,960,000	2,980,000	3,000,000
Heavy Truck	-	650,000	740,000	1,070,000	1,450,000	1,350,000
Light Truck	50,000	790,000	620,000	690,000	690,000	450,000
Passenger	892,600	-	-	-	-	-
Utility Vehicle	892,600	360,000	420,000	480,000	360,000	720,000
Van	-	1,200,000	1,200,000	720,000	480,000	480,000
Grand Total	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 3,837,600	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000
Grand Total	\$ 3,837,600	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Fleet Operations	\$ 3,837,600	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000
Grand Total	\$ 3,837,600	\$ 2,305,200	\$ 3,000,000	\$ 2,980,000	\$ 2,960,000	\$ 2,980,000	\$ 3,000,000

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882422 - Fleet Operations	1,015,400	2,295,900	1,129,100	2,295,100	2,297,400	2,299,700	2,302,000	2,304,300
2.1 Salaries & Wages	188,300	288,500	95,500	357,200	357,200	357,200	357,200	357,200
2.4 Employee Benefits	48,700	86,800	29,400	117,300	119,600	121,900	124,200	126,500
2.5 Transition Services	54,100	-	82,800	-	-	-	-	-
4.2 Supplies & Other	519,700	555,000	382,500	598,500	598,500	598,500	598,500	598,500
Capital Outlay less than \$5,000	3,800	-	-	-	-	-	-	-
Inspection and Permit Fees	600	1,000	200	1,000	1,000	1,000	1,000	1,000
Office Supplies	-	-	-	2,000	2,000	2,000	2,000	2,000
Operating Supplies	34,100	-	31,800	72,500	72,500	72,500	72,500	72,500
Operating Supplies – Fuel	472,700	500,000	349,900	500,000	500,000	500,000	500,000	500,000
Operating Supplies-Automotive	8,100	9,000	1,000	23,000	23,000	23,000	23,000	23,000
Repairs & Maintenance-Automotive	400	45,000	(400)	-	-	-	-	-
4.3 Contractual Services	204,600	1,365,600	538,900	1,222,100	1,222,100	1,222,100	1,222,100	1,222,100
Contractual Operating Services	(72,600)	1,270,600	478,600	1,077,100	1,077,100	1,077,100	1,077,100	1,077,100
Contractual Vehicle Services	277,200	95,000	60,300	145,000	145,000	145,000	145,000	145,000
Grand Total	\$ 1,015,400	\$ 2,295,900	\$ 1,129,100	\$ 2,295,100	\$ 2,297,400	\$ 2,299,700	\$ 2,302,000	\$ 2,304,300

Field Service Operations

The Field Service Operations Area is responsible for ensuring reliable transmission of water and collection of combined storm and wastewater. They maintain over 800 miles of transmission main, 19 booster pump stations, 180 miles of interceptor sewer, and seven sanitary lift stations, as well as all associated equipment, such as valves, gates, pumps, and siphons. In addition, Field Services Operations manages the MISS DIG utility location requirements for GLWA and clears all construction crossings of GLWA infrastructure.

Strategic Initiatives

❖ Sewer & Valve Condition Assessment Program (Ongoing)

Continue Sewer Condition Assessment Program for the conveyance system.

Continue Valve Assessment and replacement program to improve service reliability. KPI's are reported out monthly on number of valves exercised and functioning.

❖ Transmission Main Assessment & Rehabilitation (Ongoing)

Continue to develop and optimize assessment and decommissioning programs.

The table below shows how the field service operations area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Field Service Operations Strategic Initiatives	Sewer & Valve Condition Assesment Program			x	x	x	x	x	x			x
	Transmission Main Assesment & Rehabilitation			x	x	x	x	x	x	x		x

Field Service Operations Contracts

The Field Service Operations budget contains several contractual services to assess the current condition of water transmission mains, repair sewers, install, or maintain equipment and systems. In the chart below are the key contracts for these services. Budgeted amounts beyond contract date are estimates for future study updates or subsequent implementation of a program. These services would generally require a separate procurement process.

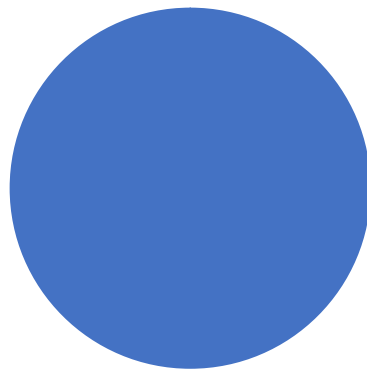
Project Description	Water Transmission Main Repair	Water Transmission Main Repair	Sewer Repair Contract	Gate Valve Inspection/ Exercising	Specialized Services (contract split w/ Systems Control)	As Needed Field Services	Total of Significant Contracts
Prime Consultant or Supplier	Ric-Man Construction Inc.	Lakeshore Global Corp	Inland Waters Pollution Control, Inc.	Hydromax USA LLC	Lakeshore Global Corp	OPS-003 Shared Service	
Contract #	1802745	2003730	CON-149	2000292	CON-158	N/A	
Contract Amount	\$ 15,000,000	\$ 15,000,000	\$ 67,000,000	\$ 5,601,663	\$ 25,827,805		
Contract End Date	08/26/22	10/08/26	12/30/22	08/10/23	07/17/22		
Cost Center Name	Field Service Operations	Field Service Operations	Field Service Operations	Field Service Operations	Field Service Operations	Field Service Operations	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ -	\$ 3,533,433	\$ 18,470,324	\$ -	\$ 5,529,140	\$ 190,547	\$ 27,723,444
FY 2021 Actual	1,128,967	889,399	5,892,076	1,177,738	2,006,928	102,000	11,197,108
FY 2022 Budget	1,250,000	1,250,000	4,918,400	1,866,667	3,200,000	104,000	12,589,067
FY 2023 Requested	1,150,000	1,150,000	4,918,400	1,350,000	3,000,000	106,100	11,674,500
FY 2024 Requested	1,250,000	1,250,000	4,918,400	1,500,000	3,200,000	108,200	12,226,600
FY 2025 Requested	1,250,000	1,250,000	4,918,400	1,500,000	3,200,000	110,400	12,228,800
FY 2026 Requested	1,250,000	1,250,000	4,918,400	1,500,000	3,200,000	112,600	12,231,000
FY 2027 Requested	1,250,000	1,250,000	4,918,400	1,500,000	3,200,000	114,900	12,233,300
Total	\$ 8,528,967	\$ 11,822,832	\$ 53,872,800	\$ 10,394,405	\$ 26,536,068	\$ 948,747	\$ 112,103,819

Organization

The Field Services Operations area has one team.

FY 2023 REQUEST BY TEAM

■ Field Service Operations



Expense Categories

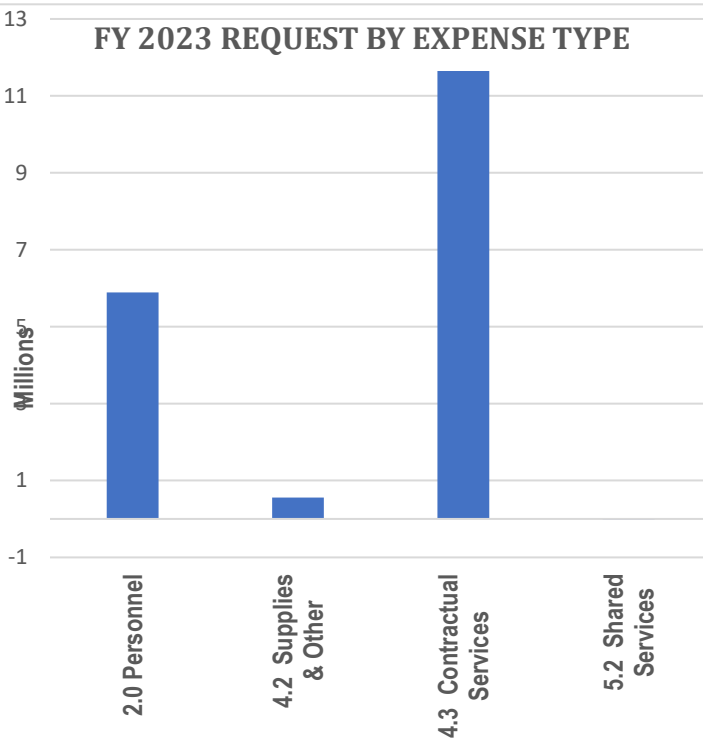
There are two major categories of Field Service Operations expenses in the Operations and Maintenance Budget as listed below.

- Contractual Services
- Personnel Costs

Contractual Services is the highest expense category for Field Service Operations. The level of contractual services supports the complex nature of the water transmission and wastewater collection system. The level also reflects the decision to contract for certain non-core services as well as the efficient management of peak workload activities.

Personnel costs are the second highest expense category.

FY 2023 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an overall increase of \$362,500, or 2.0%, for FY 2023. Key Factors impacting FY 2023 include the following:

- ❖ Personnel cost increase due to updated benefits calculations and increased overtime budget based on prior activity (\$313,300).
- ❖ Contractual Services reduced based on prior activity (\$49,600).
- ❖ Supplies & Other Explanations
 - Internal Meetings & Training (Supplies & Other) budget increased \$30,000 due to increased training initiatives.
 - Membership, Licenses & Subscription budget increased \$25,000 to put budget for MISS DIGG in line with actual cost.
 - Inspection & Permit Fees increased \$25,000 to account for City of Detroit Annual Utility Permit we began receiving in FY 2021.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 5,638,100	\$ 5,575,900	\$ 3,097,800	\$ 5,889,200	\$ 313,300	5.6%	\$ 6,119,100
4.2 Supplies & Other	570,400	456,700	164,000	555,700	99,000	21.7%	555,700
4.3 Contractual Services	11,314,800	11,694,600	6,189,800	11,645,000	(49,600)	-0.4%	12,197,100
5.2 Shared Services	(17,000)	(17,400)	(8,600)	(17,700)	(300)	1.7%	(18,000)
5.5 Intergovernmental Agreement	(103,200)	-	-	-	-	n/a	-
Grand Total	\$ 17,403,100	\$ 17,709,700	\$ 9,443,000	\$ 18,072,200	\$ 362,500	2.0%	\$ 18,853,900

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Field Service Operations	\$ 17,403,100	\$ 17,709,700	\$ 9,443,000	\$ 18,072,200	\$ 362,500	2.0%	\$ 18,853,900
Grand Total	\$ 17,403,100	\$ 17,709,700	\$ 9,443,000	\$ 18,072,200	\$ 362,500	2.0%	\$ 18,853,900

Personnel Budget

Field Service Operations personnel consists of 71 positions for FY 2023. Field Service Operations is largely comprised of operations staffing that perform a variety of skilled field work relative to the operations and maintenance of water and wastewater systems. This staffing plan includes 6 apprentice positions and additional support for the appropriate evaluation of decommissioning transmission mains. The creation of these positions shows GLWA's commitment to developing its workforce and sustaining it for the future.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Field Service Operations	65.00	71.00	71.00	71.00	71.00	71.00	71.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Field Service Operations	65.00	71.00	68.00	71.00	71.00	71.00	71.00

Personnel Budget - The table below presents the Field Service Operations personnel budget which consists of the following expense categories: Salaries & Wages, Salaries & Wages – Workforce Development, Overtime and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Field Service Operations	\$ 5,638,100	\$ 5,575,900	\$ 3,097,800	\$ 5,889,200	\$ 313,300	5.6%	\$ 6,119,100
Grand Total	\$ 5,638,100	\$ 5,575,900	\$ 3,097,800	\$ 5,889,200	\$ 313,300	5.6%	\$ 6,119,100

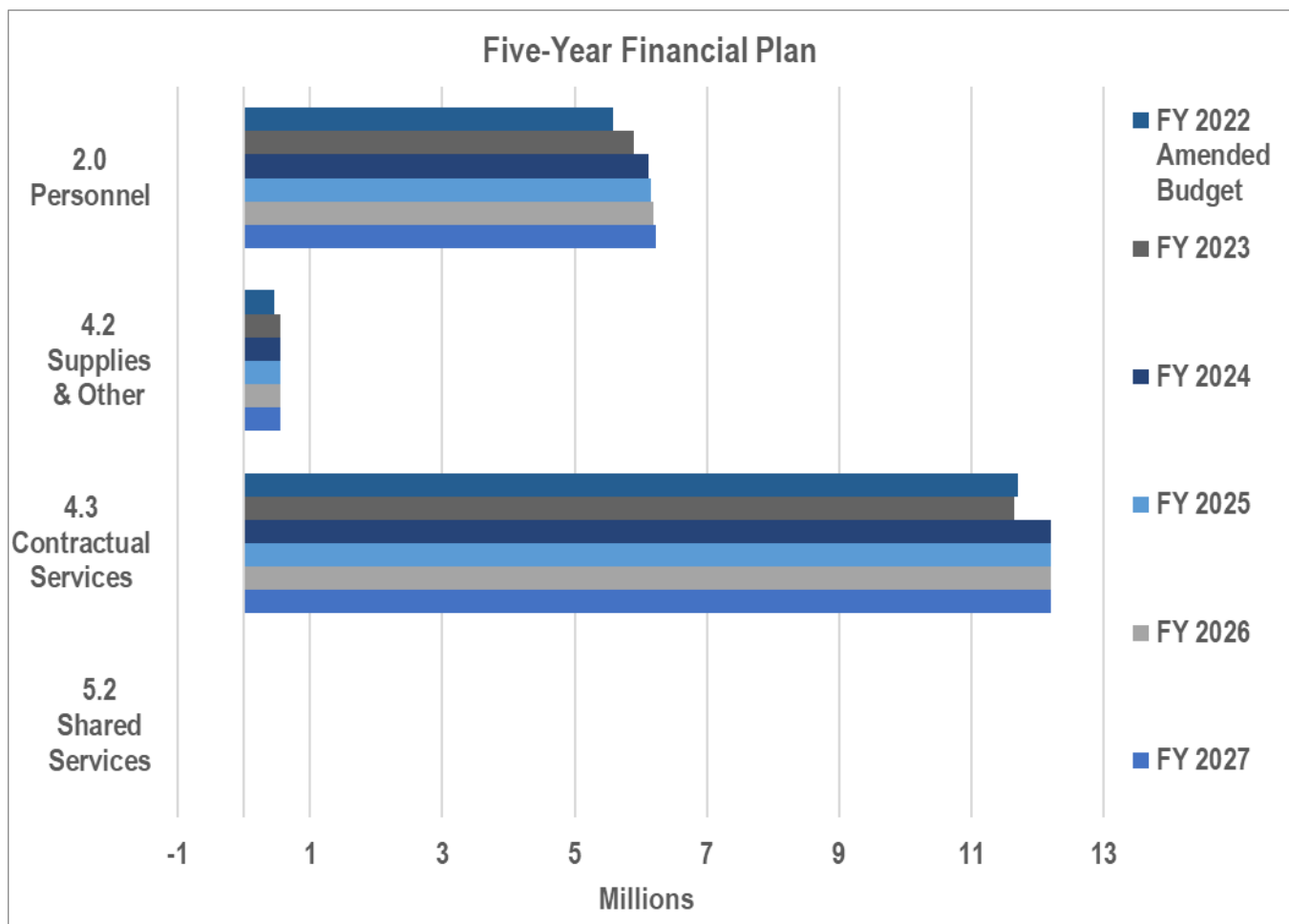
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Field Service Operations	\$ 5,638,100	\$ 5,575,900	\$ 5,889,200	\$ 6,119,100	\$ 6,152,100	\$ 6,185,200	\$ 6,218,200
Grand Total	\$ 5,638,100	\$ 5,575,900	\$ 5,889,200	\$ 6,119,100	\$ 6,152,100	\$ 6,185,200	\$ 6,218,200

Five Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 5,638,100	\$ 5,575,900	\$ 5,889,200	\$ 6,119,100	\$ 6,152,100	\$ 6,185,200	\$ 6,218,200
4.2 Supplies & Other	570,400	456,700	555,700	555,700	555,700	555,700	555,700
4.3 Contractual Services	11,314,800	11,694,600	11,645,000	12,197,100	12,199,300	12,201,500	12,203,800
5.2 Shared Services	(17,000)	(17,400)	(17,700)	(18,000)	(18,300)	(18,800)	(19,100)
5.5 Intergovernmental Agreement	(103,200)	-	-	-	-	-	-
Grand Total	\$ 17,403,100	\$ 17,709,700	\$ 18,072,200	\$ 18,853,900	\$ 18,888,800	\$ 18,923,600	\$ 18,958,600

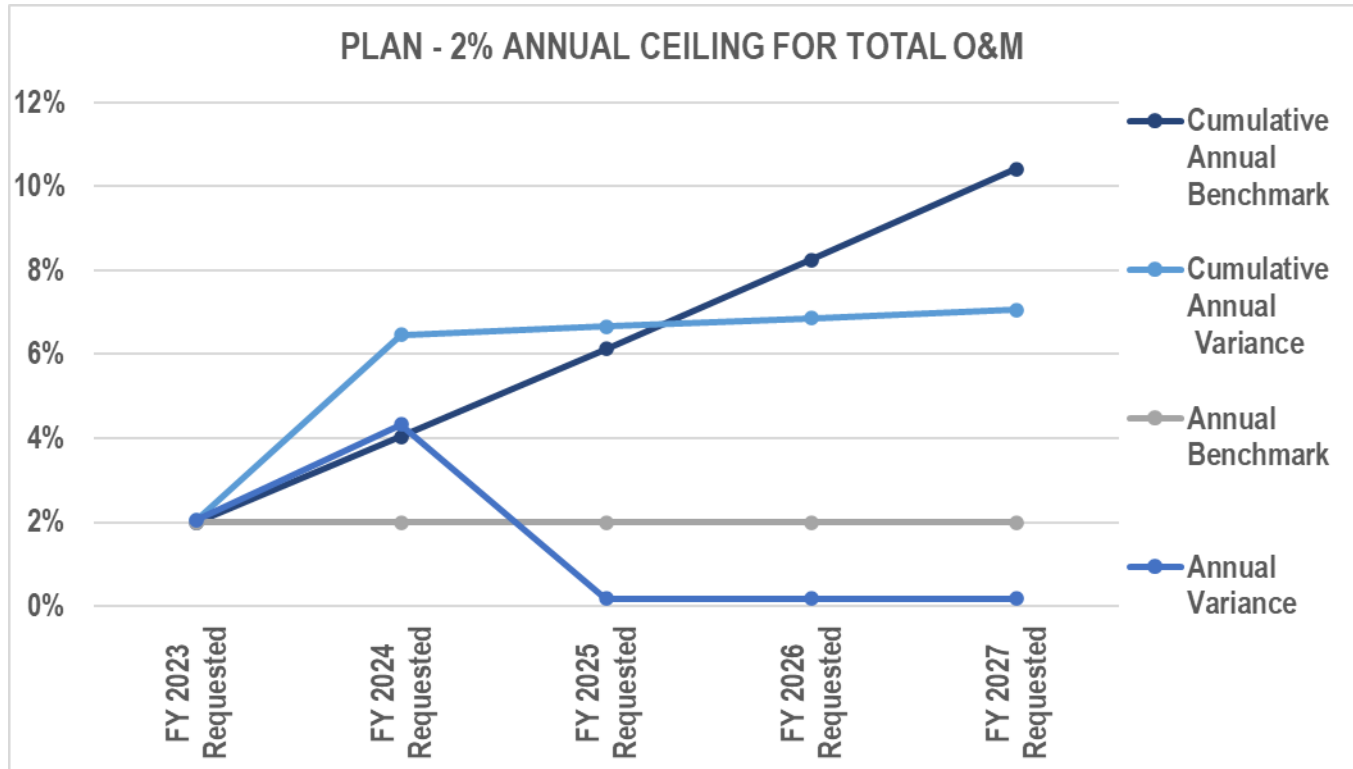


Five-Year Financial Plan by Team

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Field Service Operations	17,403,100	17,709,700	18,072,200	18,853,900	18,888,800	18,923,600	18,958,600
Grand Total	\$ 17,403,100	\$ 17,709,700	\$ 18,072,200	\$ 18,853,900	\$ 18,888,800	\$ 18,923,600	\$ 18,958,600

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Field Service Operations Group's financial plan reflects a five-year overall increase of 7.1% which is well within the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Field Service Operations five-year capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000
Machinery & Equipment	50,000	50,000	50,000	50,000	50,000	50,000
Furniture & Fixtures	50,000	50,000	50,000	50,000	50,000	50,000
Projects & Programs	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Projects & Programs	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Grand Total	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 49,200	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000
Grand Total	\$ 49,200	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Field Service Operations	\$ 49,200	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000
Grand Total	\$ 49,200	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882431 - Field Service Operations	17,403,100	17,709,700	9,443,000	18,072,200	18,853,900	18,888,800	18,923,600	18,958,600
2.1 Salaries & Wages	3,186,600	3,466,100	1,738,500	3,536,300	3,669,900	3,669,900	3,669,900	3,669,900
2.2 Workforce Development	304,800	290,800	151,300	332,200	332,200	332,200	332,200	332,200
2.3 Overtime	581,100	295,500	402,100	400,000	400,000	400,000	400,000	400,000
2.4 Employee Benefits	1,565,600	1,523,500	805,900	1,620,700	1,717,000	1,750,000	1,783,100	1,816,100
4.2 Supplies & Other	570,400	456,700	164,000	555,700	555,700	555,700	555,700	555,700
Capital Outlay less than \$5,000	85,900	50,000	48,000	65,000	65,000	65,000	65,000	65,000
Employee Uniform Expense	42,100	35,000	19,400	40,000	40,000	40,000	40,000	40,000
Inspection and Permit Fees	33,700	7,000	12,500	32,000	32,000	32,000	32,000	32,000
Memberships, Licenses & Subscriptions	74,900	30,100	100	54,100	54,100	54,100	54,100	54,100
Mileage and Parking	-	500	-	500	500	500	500	500
Office Supplies	17,800	17,000	7,400	17,000	17,000	17,000	17,000	17,000
Operating Supplies	249,900	273,500	72,100	273,500	273,500	273,500	273,500	273,500
Rentals-Buildings	4,800	5,100	2,400	5,100	5,100	5,100	5,100	5,100
Repairs & Maintenance-Equipment	(2,700)	2,000	-	2,000	2,000	2,000	2,000	2,000
Training and Internal Meetings	64,000	25,000	2,100	55,000	55,000	55,000	55,000	55,000
Travel	-	10,000	-	10,000	10,000	10,000	10,000	10,000
Tuition Refund	-	1,500	-	1,500	1,500	1,500	1,500	1,500
4.3 Contractual Services	11,314,800	11,694,600	6,189,800	11,645,000	12,197,100	12,199,300	12,201,500	12,203,800
Contractual Operating Services	1,331,800	9,894,600	1,408,500	2,726,600	2,978,700	2,980,900	2,983,100	2,985,400
Contractual Operating Services-All Sewer	6,074,900	-	2,430,000	4,918,400	4,918,400	4,918,400	4,918,400	4,918,400
Contractual Operating Services-All Water	1,950,100	-	1,586,600	2,300,000	2,500,000	2,500,000	2,500,000	2,500,000
Contractual Professional Services	1,958,000	1,800,000	764,700	1,700,000	1,800,000	1,800,000	1,800,000	1,800,000
5.2 Shared Services	(17,000)	(17,400)	(8,600)	(17,700)	(18,000)	(18,300)	(18,800)	(19,100)
Shared Services : Salaries & Wages Reimb	(10,800)	(11,000)	(5,500)	(11,200)	(11,400)	(11,600)	(11,900)	(12,100)
Shared Services Reimbursement	(1,800)	(1,900)	(900)	(1,900)	(1,900)	(2,000)	(2,000)	(2,000)
Shared Services: Employee Benefit Reimb	(4,400)	(4,500)	(2,200)	(4,600)	(4,700)	(4,700)	(4,900)	(5,000)
5.5 Intergovernmental Agreement	(103,200)	-	-	-	-	-	-	-
Grand Total	\$ 17,403,100	\$ 17,709,700	\$ 9,443,000	\$ 18,072,200	\$ 18,853,900	\$ 18,888,800	\$ 18,923,600	\$ 18,958,600

Energy, Research & Innovation

The mission of the Energy, Research, and Innovation (ERI) team is to help improve operations, optimize the value of our capital and operational investments, help identify and mitigate future risks, such as emerging contaminants, asset failure, and climate change.

The ERI team is involved with three different focus areas, energy, research, and innovation. Our energy-focused efforts address the technology and processes needed to assess, evaluate, and improve energy use and energy efficiency across our systems. Our research efforts involved small, but focused, projects helping to address thorny operational and engineering issues relevant to GLWA operations. Finally, our innovation related efforts address the assessment and piloting of new and emerging technologies, as well as improving the collaborative exchange of ideas between GLWA team members and between our team members and external utilities.

Strategic Initiatives

- ❖ **Advance the Energy Management Program (Ongoing)**
- ❖ **Pursue Research of Treatment & Monitoring (Ongoing)**
 - Treatment techniques for emerging contaminants of concern
 - Innovative monitoring tools

The table below shows how the energy, research and innovation area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Energy, Research & Innovation Strategic Initiatives	Advance Energy Management Program		x	x	x	x	x		x	x		
	Pursue Research of Treatment & Monitoring		x	x	x	x			x	x		x

Energy, Research & Innovation Contracts

The Energy, Research & Innovation budget contains several contractual services to assess the current innovation environment, create programs by tailoring them to the expectations, environment, and resources of GLWA and launching the programs by establishing urgency and funding resources. Budgeted amounts beyond contract date are estimates for future study updates or subsequent implementation of a program. These services would generally require a separate procurement process. The following charts show a limited number of contracts for these services.

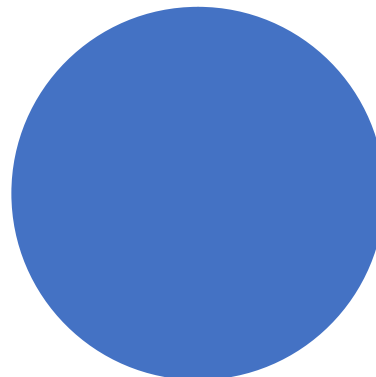
Project Description	PFAS Health & Ecological Impacts	Microplastics & Human Health	Evaluation of Real-Time Bacteria Monitoring Tools	COVID Study	Life Cycle Assessment	Transport & Fate of Nutrients in Biosolids	Smart Pipes	Biological Phosphorus Removal Pilot	Total of Significant Contracts
Prime Consultant or Supplier	Wayne State University	Wayne State University	OHM Advisors	Michigan State University	Regents of the University of Michigan	Michigan State University	Regents of the University of Michigan	Regents of the University of Michigan	
Contract #	1902151	1904710	2101423	2001402	2001595	1902059	1900902	1900169	
Contract Amount	\$ 192,153	\$ 195,000	\$ 159,000	\$ 267,458	\$ 23,680	\$ 227,498	\$ 356,591	\$ 250,000	
Contract End Date	06/15/22	08/31/22	11/09/22	08/15/22	10/31/22	06/30/23	12/08/21	10/02/21	
Cost Center Name	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	Energy, Research & Innovation	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,759	\$ 159,867	\$ 84,690	\$ 385,316
FY 2021 Actual	79,450	20,599	-	111,397	-	83,586	154,661	38,077	487,769
FY 2022 Budget	96,000	100,000	-	84,000	25,000	114,000	150,000	-	569,000
FY 2023 Requested	-	100,000	100,000	42,000	150,000	50,000	-	125,000	567,000
FY 2024 Requested	-	-	-	-	50,000	-	-	-	50,000
FY 2025 Requested	-	-	-	-	-	-	-	-	-
FY 2026 Requested	-	-	-	-	-	-	-	-	-
FY 2027 Requested	-	-	-	-	-	-	-	-	-
Total	\$ 175,450	\$ 220,599	\$ 100,000	\$ 237,397	\$ 225,000	\$ 388,345	\$ 464,528	\$ 247,767	\$ 2,059,085

Organization

The Energy, Research & Innovation area has one team.

FY 2023 REQUEST BY TEAM

■ Energy, Research & Innovation



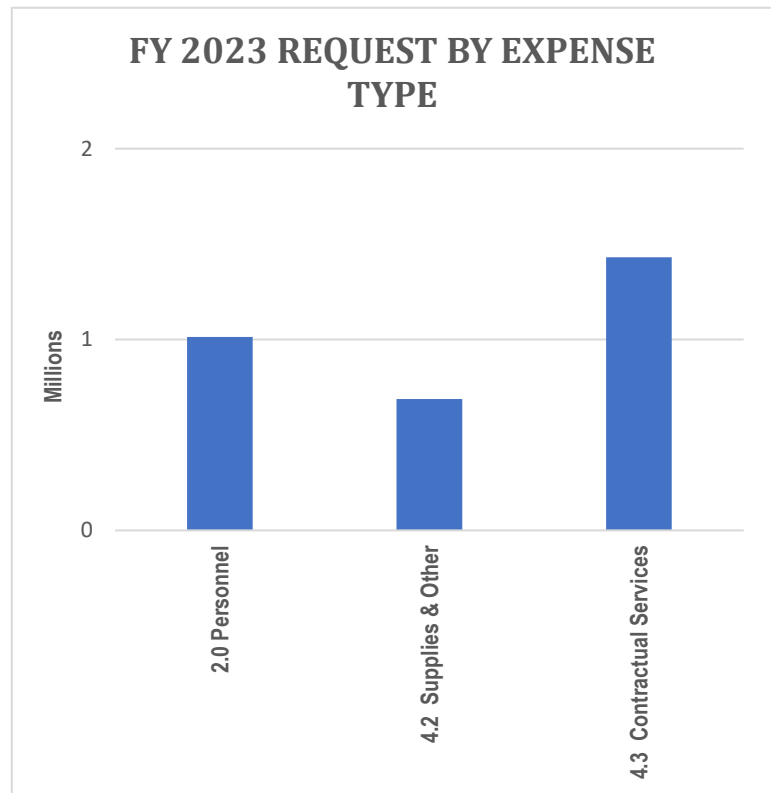
Expense Categories

There are two major categories of Energy, Research & Innovation and Maintenance Budget as listed below.

- ❖ Contractual Services
- ❖ Personnel Costs

Contractual Services are the highest expense category for Energy, Research & Innovation. The level of contractual services reflects the decision to contract for services that will help to accomplish the following:

- ❖ Implement conservation measures
- ❖ Monitor energy consumption
- ❖ Assess business decisions for sustainability
- ❖ Coordinate research efforts to provide cost savings
- ❖ Identify and implement the latest advancements in managing water quality



The Energy, Research & Innovation Area is reaching a steady state in staffing. As a result of progress in staff placement, there has been a restructuring of current positions in order to accommodate the higher level of expertise required, to support the day-to-day operational decision-making needs, and to reduce the utilization of contracts. Accordingly, personnel costs are the second highest expense category.

Biennial Budget Request

The biennial budget reflects an increase of \$17,100, or 0.6%, in Operations & Maintenance for FY 2023. This is a result of the key factors listed below.

- ❖ Addition of two Management Professionals – Power Quality positions and reduction of FTE count for Power Quality Manager position (\$81,100).
- ❖ Increase of \$30,000 in contractual services to allow for increased initiatives in energy management and research projects.
- ❖ Reduction of Capital Outlay less than \$5,000 (Supplies & Other) to bring in line with anticipated spending (\$120,000).
- ❖ Operating Supplies (Supplies & Other) budget increased in line with spend of ~\$45k last two years (\$25,000).

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 609,400	\$ 932,600	\$ 309,200	\$ 1,013,700	\$ 81,100	8.7%	\$ 1,126,300
4.2 Supplies & Other	469,300	782,200	223,200	688,200	(94,000)	-12.0%	704,200
4.3 Contractual Services	1,028,800	1,281,000	574,100	1,311,000	30,000	2.3%	1,349,600
Grand Total	\$ 2,107,500	\$ 2,995,800	\$ 1,106,500	\$ 3,012,900	\$ 17,100	0.6%	\$ 3,180,100

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Energy, Research & Innovation	\$ 2,107,500	\$ 2,995,800	\$ 1,106,500	\$ 3,012,900	\$ 17,100	0.6%	\$ 3,180,100
Grand Total	\$ 2,107,500	\$ 2,995,800	\$ 1,106,500	\$ 3,012,900	\$ 17,100	0.6%	\$ 3,180,100

Personnel Budget

Energy, Research & Innovation personnel consists of 9 positions for FY 2023 and is largely comprised of staffing that will provide ongoing monitoring of developments to allow new research priorities to be set and phase out topics that are no longer relevant. Research and innovation are essential pillars of a promising future strategy for shaping energy supplies of tomorrow. The staffing level is in the tables below. The increase in staffing includes the reassignment of the Power Quality Manager position from Water Engineering to Energy, Research, & Innovation. This move was performed since this position is directly related to energy management functions.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Energy, Research & Innovation	6.00	7.00	9.00	9.00	9.00	9.00	9.00

Full-time Equivalent - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalent

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Energy, Research & Innovation	6.00	7.00	8.25	9.00	9.00	9.00	9.00

Personnel Budget - The table below presents the Water Operations personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Central Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Energy, Research & Innovation	\$ 609,400	\$ 932,600	\$ 309,200	\$ 1,013,700	\$ 81,100	8.7%	\$ 1,126,300
Grand Total	\$ 609,400	\$ 932,600	\$ 309,200	\$ 1,013,700	\$ 81,100	8.7%	\$ 1,126,300

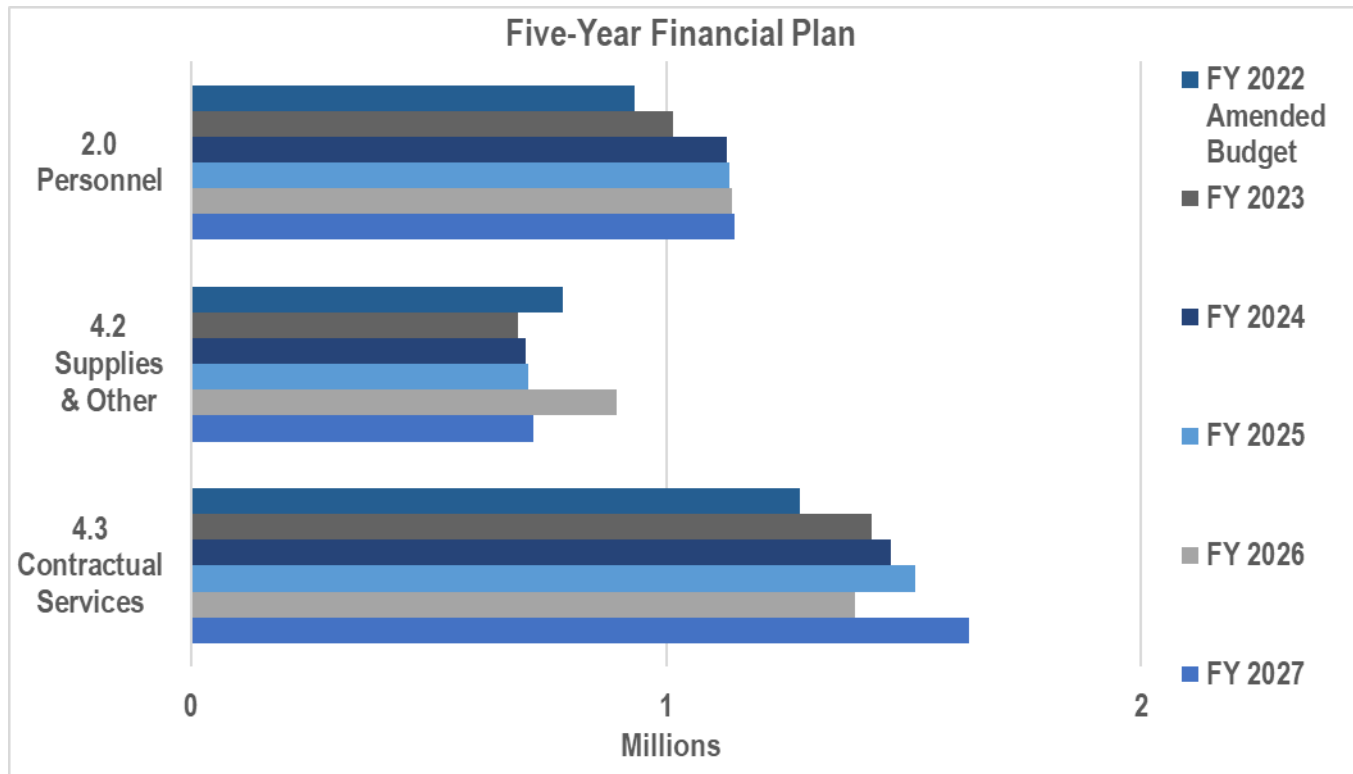
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Energy, Research & Innovation	\$ 609,400	\$ 932,600	\$ 1,013,700	\$ 1,126,300	\$ 1,131,700	\$ 1,137,000	\$ 1,142,400
Grand Total	\$ 609,400	\$ 932,600	\$ 1,013,700	\$ 1,126,300	\$ 1,131,700	\$ 1,137,000	\$ 1,142,400

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 609,400	\$ 932,600	\$ 1,013,700	\$ 1,126,300	\$ 1,131,700	\$ 1,137,000	\$ 1,142,400
4.2 Supplies & Other	469,300	782,200	688,200	704,200	710,200	896,200	721,200
4.3 Contractual Services	1,028,800	1,281,000	1,311,000	1,349,600	1,398,200	1,270,800	1,508,400
Grand Total	\$ 2,107,500	\$ 2,995,800	\$ 3,012,900	\$ 3,180,100	\$ 3,240,100	\$ 3,304,000	\$ 3,372,000

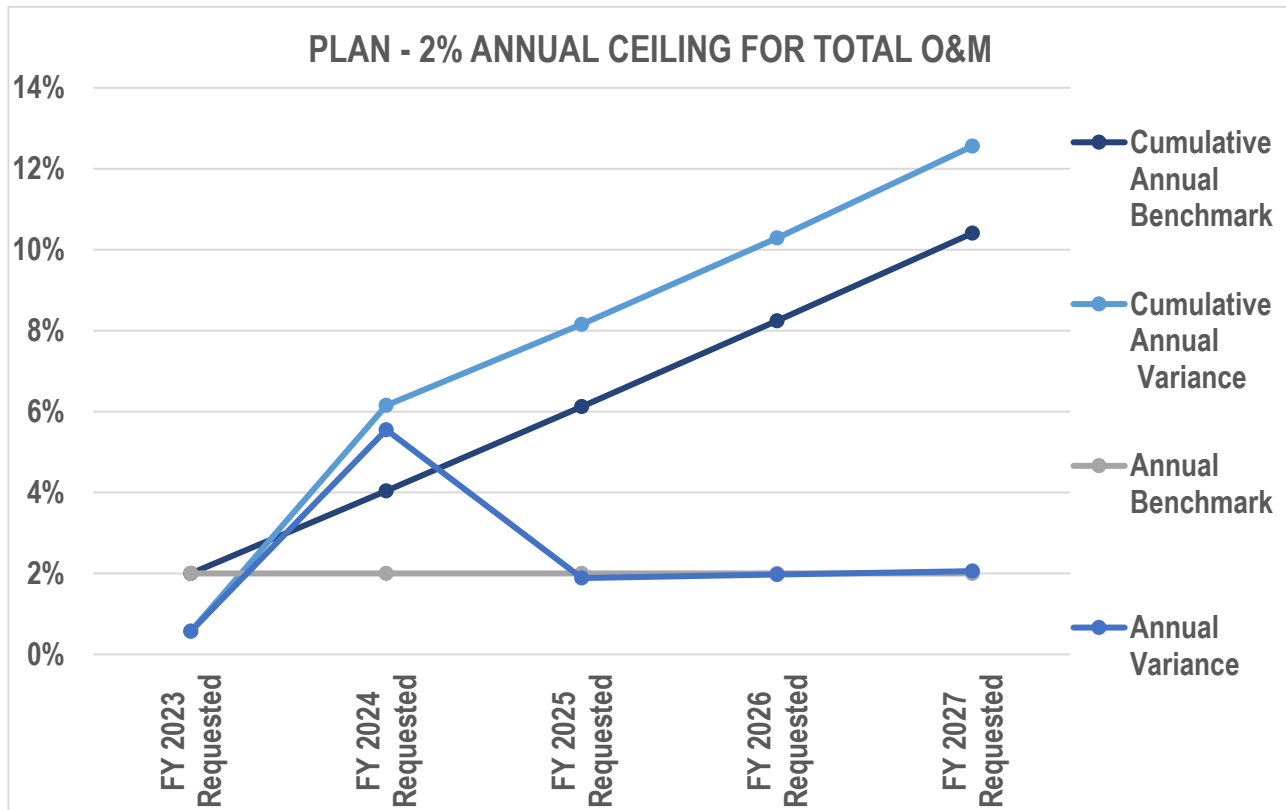


Five-Year Financial Plan by Team

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Energy, Research & Innovation	\$ 2,107,500	\$ 2,995,800	\$ 3,012,900	\$ 3,180,100	\$ 3,240,100	\$ 3,304,000	\$ 3,372,000
Grand Total	\$ 2,107,500	\$ 2,995,800	\$ 3,012,900	\$ 3,180,100	\$ 3,240,100	\$ 3,304,000	\$ 3,372,000

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Energy, Research & Innovation Group's financial plan reflects a five-year overall increase of 12.6%. This increase is a result of the ramp up of the contractual services and power quality staffing initiatives defined in the expense categories section which is above the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Energy, Research & Innovations five-year capital outlay plan is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000
Building/Structures	-	75,000	-	-	-	-
Building/Structures Improvement	-	75,000	-	-	-	-
Machinery & Equipment	170,000	155,000	155,000	155,000	35,000	35,000
Controls & Communication	170,000	155,000	155,000	155,000	35,000	35,000
Grand Total	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 24,300	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000
Grand Total	\$ 24,300	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Energy, Research, & Innovation	\$ 24,300	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000
Grand Total	\$ 24,300	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000	\$ 35,000

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is shown below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Adopted Budget	FY 2022 Activity as of 09.30.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882501 - Energy, Research & Innovation	2,107,500	2,995,800	1,106,500	3,012,900	3,180,100	3,240,100	3,304,000	3,372,000
2.1 Salaries & Wages	484,500	721,400	240,100	766,300	848,800	848,800	848,800	848,800
2.4 Employee Benefits	124,900	211,200	69,100	247,400	277,500	282,900	288,200	293,600
4.2 Supplies & Other	469,300	782,200	223,200	688,200	704,200	710,200	896,200	721,200
Capital Outlay less than \$5,000	29,200	290,000	1,000	170,000	180,000	180,000	360,000	180,000
Memberships, Licenses & Subscriptions	384,900	423,100	192,100	423,100	423,100	423,100	423,100	423,100
Mileage and Parking	400	2,000	500	2,000	2,000	2,000	2,000	2,000
Office Supplies	2,300	7,100	1,400	7,100	7,100	7,100	7,100	7,100
Operating Supplies	44,900	25,000	17,700	50,000	55,000	60,000	65,000	70,000
Postage	100	-	900	-	-	-	-	-
Training and Internal Meetings	7,100	20,000	5,800	20,000	20,000	20,000	20,000	20,000
Travel	-	15,000	3,800	16,000	17,000	18,000	19,000	19,000
Tuition Refund	400	-	-	-	-	-	-	-
4.3 Contractual Services	1,028,800	1,281,000	574,100	1,311,000	1,349,600	1,398,200	1,270,800	1,508,400
Grand Total	\$ 2,107,500	\$ 2,995,800	\$ 1,106,500	\$ 3,012,900	\$ 3,180,100	\$ 3,240,100	\$ 3,304,000	\$ 3,372,000

Transformation

The Transformation Team is a group of experts in Lean and Six Sigma methods and techniques. The Transformation Team partners with business leaders across GLWA to identify and execute process improvements and cost savings projects for safety, operations, management, planning and reporting functions.

- Lean – A systematic method for waste reduction or waste elimination within a system or process without sacrificing quality or productivity.
- Six Sigma – A disciplined, data driven methodology for identifying and eliminating variation and removing the causes of defects in any manufacturing or business process.

Mission: The mission of the Transformation Team is to develop a culture throughout the organization that cultivates the cycle of Continuous Improvement and Lean Six Sigma methodology by first respecting people, increasing understanding of our current state, providing meaningful training, and working to empower, engage, and inspire team members.

Vision: The vision of the Transformation Team is to create and maintain a safe working environment, be leaders who lead by example, and empower those we work alongside. Through internal partnerships within the organization, we will construct a framework that is built upon Lean Six Sigma structured tools that deliver financial and operational results, reduce risks, improve processes, and identify cost savings opportunities by reducing or eliminating waste.

Strategic Initiatives

❖ **5S Workplace Organization & Audit for Compliance Initiative (Ongoing)**

The goal of the Transformation Team is to partner with all areas and groups of the organization to make GLWA's work areas function better by making it an easier and safer place to work. This occurs by making spaces make sense; tools and materials are placed in logical locations based on who needs them, how frequently they're needed, etc. Over time, cleaning and organization become habits and processes become more efficient. Each area that has completed a 5S project begins an audit for compliance process to sustain all the gains made during the project.

❖ **Process Improvement/Kaizen (Ongoing)**

Small increments of good change across the organization will reap huge benefits and returns. The objective of Kaizen is to improve productivity, reduce waste, eliminate unnecessary hard work and refine the workplace, while boosting team member morale.

❖ **Root Cause Analysis/Practical Methods & Techniques for Solving Problems (Ongoing)**

The Transformation Team has been working with various areas, groups, and teams to identify the root cause(s) of many problems team members face on a regular basis. Transformation helps teams systematically find permanent solutions so that the possibility of future reoccurrence is eliminated or greatly reduced. Teaching Root Cause Analysis (RCA) tools and techniques helps develop a logical approach to solving problems. RCA also helps GLWA to

repeat successes learned through this analysis that can be shared across the organization creating a more effective and efficient work environment.

The table below shows how the Transformation Group's initiatives relate to the organizational strategic goals.

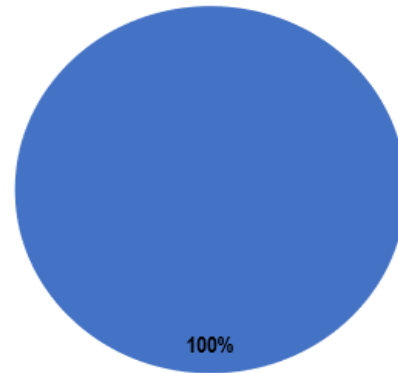
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
General Counsel Strategic Initiatives	5S Workplace Organization & Audit for Compliance Initiative (Enterprise Wide Initiative)		x	x	x	x	x	x		x		
	Process Improvement / Kaizen (Small Increments Of Good Change)		x	x		x	x	x				
	Root Cause Analysis/Practical Methods & Techniques for Solving Problems		x	x	x	x	x	x				

Organization

The Transformation area has one team.

FY 2023 REQUEST BY TEAM

Transformation



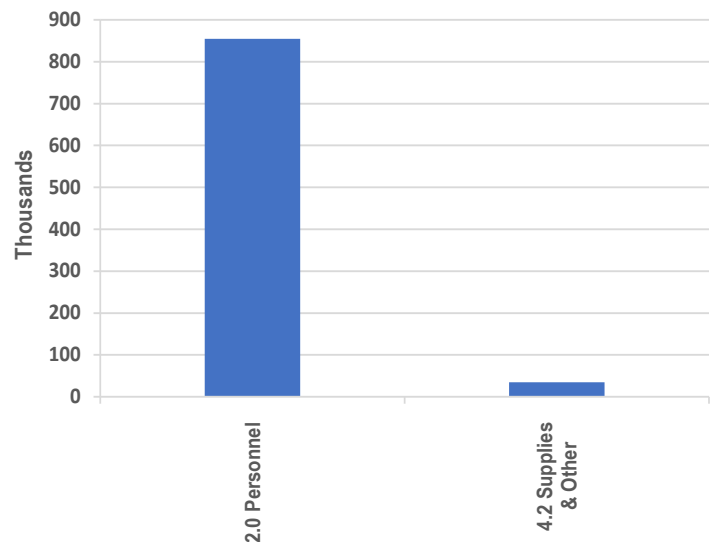
Expense Categories

The Transformation area consists of two major expense categories:

- ❖ Personnel
- ❖ Supplies & Other

Based upon the nature of this service area, the highest category of expense is salaries. The second highest, Supplies & Other, which provides for operating supplies and training.

FY 2023 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects a decrease of \$234,400, or 21.1%, in FY 2023.

- ❖ **Personnel** – FY 2023 includes a reduction of 2 positions. During FY 2022 this group, which was originally reported in the Financial Services Area (Administrative Services), transitioned to the Energy, Research, and Innovation Area (Centralized Services) to align its budget with their operational driven initiatives. As a result of this transition, 2 positions were reallocated with the Financial Services Area reorganization to continue specific objectives related to technology improvements.
- ❖ **Supplies & Other** – The primary driver of the reduction in this line item is training. This is due to the decrease in the number of positions for this group and the evaluation of the training needs for the remaining team members.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 650,300	\$ 1,067,800	\$ 243,200	\$ 854,400	\$ (213,400)	-20.0%	\$ 855,100
4.2 Supplies & Other	4,400	42,500	-	21,500	(21,000)	-49.4%	21,900
Grand Total	\$ 654,700	\$ 1,110,300	\$ 243,200	\$ 875,900	\$ (234,400)	-21.1%	\$ 877,000

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Transformation	\$ 654,700	\$ 1,110,300	\$ 243,200	\$ 875,900	\$ (234,400)	-21.1%	\$ 877,000
Grand Total	\$ 654,700	\$ 1,110,300	\$ 243,200	\$ 875,900	\$ (234,400)	-21.1%	\$ 877,000

Personnel Budget

The staffing plan provides for a reduction of 2 positions in FY 2023 and a steady state of 5 total positions beginning in FY 2023. The staffing level is shown in the tables on the following page. The staffing and FTE counts for FY 2021 and FY 2022, as shown in the tables on the following page, were approved when the Transformation group resided in Financial Services. During FY 2022 this group transitioned to the Energy, Research and Innovation Area (Centralized Services). As a result of this transition, 2 positions remained with the Financial Services Area.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan – The table on the following page presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Transformation	8.00	7.00	5.00	5.00	5.00	5.00	5.00

Full Time Equivalents – The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full Time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Transformation	8.00	6.25	5.00	5.00	5.00	5.00	5.00

Personnel Budget - The table below presents Transformation’s personnel budget which consists of the following expense categories: Salaries & Wages, Employee Benefits, and Contractual Transition Services. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Centralized Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Transformation	\$ 650,300	\$ 1,067,800	\$ 243,200	\$ 854,400	\$ (213,400)	-20.0%	\$ 855,100
Grand Total	\$ 650,300	\$ 1,067,800	\$ 243,200	\$ 854,400	\$ (213,400)	-20.0%	\$ 855,100

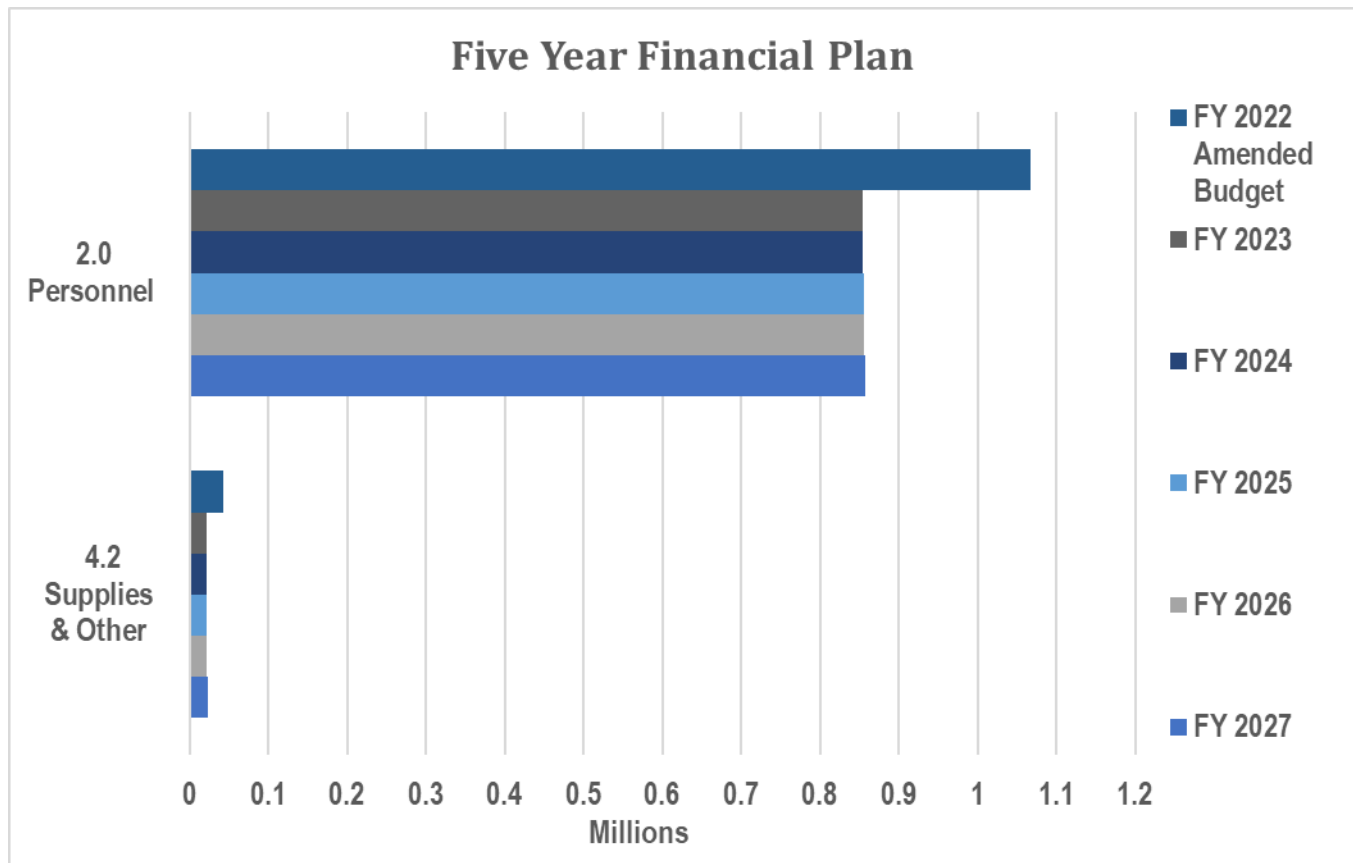
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Transformation	\$ 650,300	\$ 1,067,800	\$ 854,400	\$ 855,100	\$ 855,800	\$ 856,600	\$ 857,300
Grand Total	\$ 650,300	\$ 1,067,800	\$ 854,400	\$ 855,100	\$ 855,800	\$ 856,600	\$ 857,300

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 650,300	\$ 1,067,800	\$ 854,400	\$ 855,100	\$ 855,800	\$ 856,600	\$ 857,300
4.2 Supplies & Other	4,400	42,500	21,500	21,900	22,400	22,700	23,300
Grand Total	\$ 654,700	\$ 1,110,300	\$ 875,900	\$ 877,000	\$ 878,200	\$ 879,300	\$ 880,600

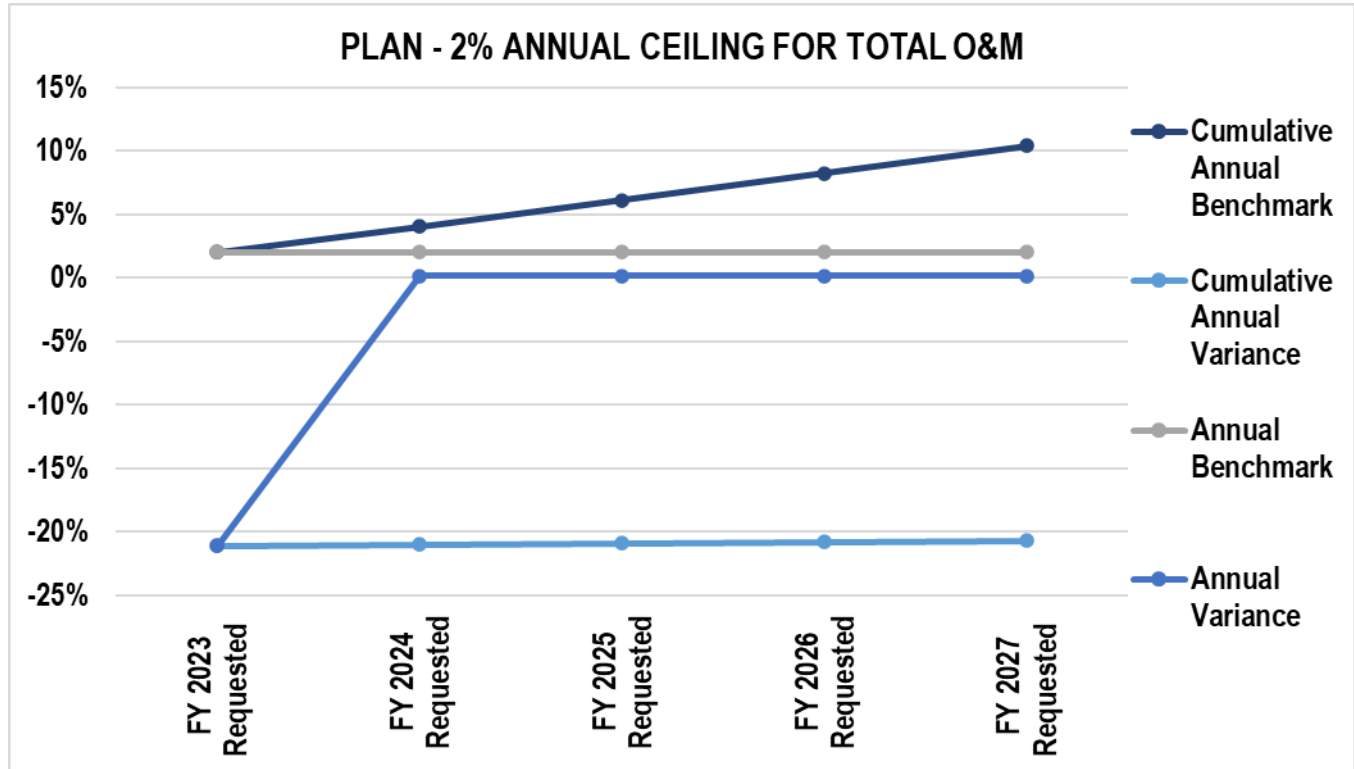


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Transformation	\$ 654,700	\$ 1,110,300	\$ 875,900	\$ 877,000	\$ 878,200	\$ 879,300	\$ 880,600
Grand Total	\$ 654,700	\$ 1,110,300	\$ 875,900	\$ 877,000	\$ 878,200	\$ 879,300	\$ 880,600

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Transformation Group's financial plan reflects a five-year overall decrease of 20.7% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Capital Outlay is not a component of the Transformation Area.

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is listed below. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
882511 - Transformation	\$ 654,700	\$ 1,110,300	\$ 243,200	\$ 875,900	\$ 877,000	\$ 878,200	\$ 879,300	\$ 880,600
2.1 Salaries & Wages	143,000	129,500	71,100	132,100	132,100	132,100	132,100	132,100
Salaries & Wages	143,000	129,500	71,100	132,100	132,100	132,100	132,100	132,100
2.4 Employee Benefits	25,000	34,900	18,200	37,200	37,900	38,600	39,400	40,100
Employee Benefits	25,000	34,900	18,200	37,200	37,900	38,600	39,400	40,100
2.5 Transition Services	482,300	903,400	153,900	685,100	685,100	685,100	685,100	685,100
Contractual Transition Services	482,300	903,400	153,900	685,100	685,100	685,100	685,100	685,100
4.2 Supplies & Other	4,400	42,500	-	21,500	21,900	22,400	22,700	23,300
Memberships, Licenses & Subscriptions	400	2,000	-	2,000	2,100	2,100	2,200	2,200
Office Supplies	-	1,000	-	1,000	1,000	1,100	1,100	1,100
Operating Supplies	2,600	15,000	-	10,000	10,200	10,400	10,600	10,900
Mileage and Parking	-	500	-	500	500	500	500	600
Supplies & Other - Covid19	1,400	-	-	-	-	-	-	-
Training and Internal Meetings	-	17,000	-	5,000	5,100	5,200	5,200	5,300
Travel	-	7,000	-	3,000	3,000	3,100	3,100	3,200
Grand Total	\$ 654,700	\$ 1,110,300	\$ 243,200	\$ 875,900	\$ 877,000	\$ 878,200	\$ 879,300	\$ 880,600

Information Technology

A center of excellence that provides reliable, contemporary, and integrated technology to support and facilitate teaching, learning, research, and service for GLWA.

Strategic Initiatives

❖ **Enterprise Asset Management (EAM) (Completion by end of FY 2024)**

The current EAM system (WAM) is on extended vendor support and no longer meets the growing needs of our organization. In FY 2022, GLWA selected a new EAM (NEXGEN) and initiated the discovery and planning phases of the project. In FY 2023, project activities will continue to prepare for the planned go-live in FY 2024. Also, a new Project Management Information System (PMIS), will be launched to support management of the Capital Improvement Program (CIP) projects. New GIS applications will continue to be developed to support CIP, engineering, and operations, as well as complete the Utility Network implementation.

❖ **Enterprise Resource Planning (ERP) (Completion by end of FY 2024)**

As the organization matures, the current Human Resources (HR) and Finance systems (Ceridian & BS&A, respectively) that were implemented during the stand-up of GLWA no longer meet our growing needs. A new ERP (Workday) has been selected to replace these systems and fully integrate HR, Finance, Procurement, and reporting functions across the enterprise. Workday will leverage best practices to increase efficiency and effectiveness in reporting and operations and ensure that proper controls and procedures are followed. In FY 2022, a contract will be negotiated and presented to the Board of Directors for approval. In FY 2023, core HR modules (Human Capital Management, Payroll, and Time Tracking) will be configured for the planned go-live in FY 2024.

❖ **Data Center Modernization Program (Completion by end of FY 2024)**

A four-year roadmap has been created to mitigate risks and provide infrastructure resiliency by building a sustainable, secure, compliant, robust, and reliable IT infrastructure as the foundation to support GLWA's core enterprise technology needs. In FY 2021, the data center systems and hardware were upgraded to a new technology that positions us to transition to a hybrid cloud environment. In FY 2022, Back Up as a Service (BUaaS) and Disaster Recovery as a Service (DRaaS) will be in place to protect GLWA's network and applications from natural disasters or cyber-attacks. In FY 2023, the implementation of a hybrid cloud environment will move certain applications from the on-premises data center to a secure cloud environment. Some components of the Data Center Modernization Program will be capitalized through the Improvement & Extension Fund budget as they are related to implementation, physical hardware, and software items. The remaining components are subscription related and other cloud services which will be funded from through IT's Operations & Maintenance budget. Details are shown in the Capital Outlay section of this document.

❖ Shared Services (Ongoing)

The dollar amount of shared services reimbursement from DWSD will remain consistent in FY 2023. There are three of nine shared services that continued in a reduced capacity after the original end date of June 2021. Four new shared services agreements were added to better reflect the IT services provided to DWSD.

The following table shows how the Information Technology Area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Information Technology Strategic Initiatives	Shared Services				x	x	x	x		x		x
	Data Center Modernization				x	x	x					
	Enterprise Resource Planning (ERP)		x		x	x	x				x	
	Enterprise Asset Management (EAM)		x		x	x	x		x			x

Information Technology Contracts

The Information Technology (IT) budget contains most IT-related costs used throughout GLWA. This includes software and hardware purchases, subscriptions for cloud-based solutions, hardware and software maintenance, and contracted services to support GLWA's IT platforms. The largest expense category is Telecom, Managed Security & Network Services, due to an annual contract with AT&T who operates, updates, and maintains the wide area network, local area network, phone services, internet, and managed network security. In the chart below are the key contracts for these services.

Project Description	Telecom, Managed Security & Networks 626700	Telecom, Managed Security & Networks 626700	Disaster Recovery Services 617900	Repairs & Maintenance - Software 62302	Professional Services 617400	Repairs & Maintenance - Software 62302	Professional Services 617400	Professional Services 617400	Total of Significant Contracts
Prime Consultant or Supplier	AT&T	Verizon	Disaster Recovery	ERP Subscription	Magnolia River GIS Strategic Services	EAM Subscription- NEXGEN	DXC - WAM	Ceridian Human Resources Information Systems (HRIS)	
Software Type	N/A	N/A	N/A	Subscription	N/A	Subscription	N/A	Subscription	
Contract #	CS-1689	1801674	TBD	TBD	1901592	1904219-2	CS-119	1803978	
Contract Amount	\$ 60,000,000	\$ 500,000	TBD	TBD	\$ 2,300,000	TBD	\$ 7,000,000	\$ 3,217,779	
Contract End Date	TBD	TBD	TBD	TBD	08/31/25	TBD	06/30/22	TBD	
Cost Center Name	Infrastructure	IT Service Delivery	Infrastructure	IT Business Applications	IT Enterprise Applications	IT Enterprise Applications	IT Business Applications	IT Business Applications	
Expense Category	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2021 Spend	\$ 22,272,962	\$ 923,800	\$ 400,000	\$ -	\$ 450,571	\$ -	\$ 4,316,258	\$ -	\$ 28,363,591
FY 2021 Spend	12,000,000	424,200	400,000	-	720,000	-	3,400,000	700,000	17,644,200
FY 2022 Budget	12,000,000	507,684	400,000	1,500,000	720,000	1,500,000	1,700,000	700,000	19,027,684
FY 2023 Requested	12,000,000	552,200	400,000	1,500,000	800,000	440,095	2,500,000	700,000	18,892,295
FY 2024 Requested	12,000,000	563,244	400,000	1,500,000	800,000	440,095	2,550,000	700,000	18,953,339
FY 2025 Requested	12,000,000	574,509	400,000	1,500,000	800,000	440,095	2,601,000	700,000	19,015,604
FY 2026 Requested	12,000,000	585,999	400,000	1,500,000	-	440,095	-	700,000	15,626,094
FY 2027 Requested	12,000,000	597,719	400,000	1,500,000	-	-	-	-	14,497,719
Total	\$ 106,272,962	\$ 4,729,355	\$ 3,200,000	\$ 9,000,000	\$ 4,290,571	\$ 3,260,380	\$ 17,067,258	\$ 4,200,000	\$ 152,020,526

Organization

The GLWA Information Technology (IT) Group consists of seven teams.

❖ Office of the Chief Information Officer

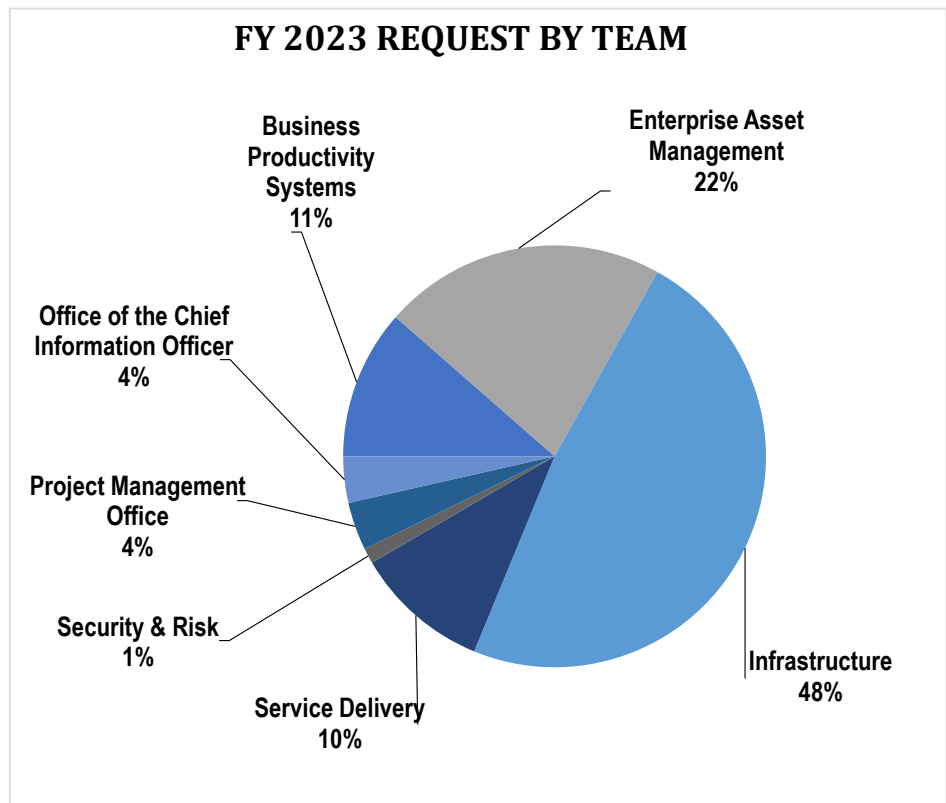
Provides strategic direction and administrative support for all IT functions.

❖ Project Management Office

Fosters collaboration, support and oversees the execution of technology initiatives.

❖ Security & Risk

Responsible for deploying security solutions and monitoring our network, systems, and



users to secure GLWA's systems and data from cyber threats.

❖ **Infrastructure**

Manages the information technology (IT) components that provide the technology backbone for the organization including data center operations, data storage, systems administration, telecommunications, network administration, backups, and disaster recovery.

❖ **Enterprise Asset Management Systems**

Supports all asset management-related software which facilitates operations, maintenance, and capital planning of GLWA's assets. These services include Business Intelligence (BI), Geographic Information System (GIS), and Enterprise Asset Management (EAM).

❖ **Business Productivity Systems**

Leads the development and support of all customer-facing "back office" applications common to all team members including financial and human resource systems, websites/portals, office productivity systems, and electronic document management.

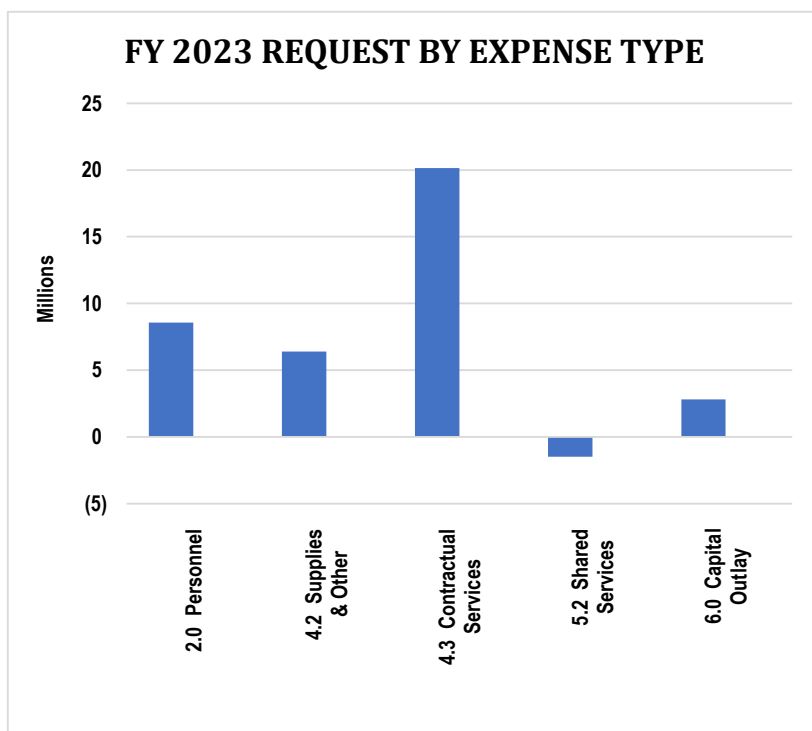
❖ **Service Delivery** – Provides frontline service and support to all team members and is responsible for deployment and support of all assigned computing and mobile devices and printers.

Expense Categories

There are five major categories of Information Technology expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel
- ❖ Supplies & Other
- ❖ Contractual Services
- ❖ Shared Services
- ❖ Capital Outlay

Contractual Services is the highest expense category for FY 2023. Included in this account are the budgets for Telecom Managed Security & Network Services, Data Center Modernization, and GIS Strategic Services and Support.



Biennial Budget Request

The biennial budget reflects an overall decrease of \$619,400, or a negative 1.7%, in FY 2023.

- ❖ The personnel account is increasing by \$289,300 in FY 2023 due to adding two Directors and one Management Professional to the Office of the CIO in the fourth quarter of FY 2023.
- ❖ The supplies & other account is decreasing by \$1,880,100 in FY 2023 due to the negotiated reduction of subscription cost for our new EAM solution.
- ❖ The contractual services account is increasing by \$1,185,000 in FY 2023 for contractual support staff. The largest portion of the increase is \$800,000 related to the need to continue to support WAM until the GO-Live of the new EAM system. The other factors include contractual support for the EAM and ERP enterprise projects in the amount of \$114,600, and an increase of \$270,400 for telecom services which reflects the usual 2% increase.
- ❖ The shared service reimbursements will decrease by \$29,300 due the combination of three shared services continuing in a reduced capacity and the addition of four new shared service agreements to better reflect the IT services GLWA provides to DWSD.
- ❖ The capital outlay account is decreasing by \$184,300 in FY 2023 due to a reduction of Oracle and SQL license requirements for DWSD.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 7,236,700	\$ 8,278,100	\$ 3,687,900	\$ 8,567,400	\$ 289,300	3.5%	\$ 9,085,700
4.2 Supplies & Other	3,902,300	8,278,700	\$ 2,115,500	6,398,600	(1,880,100)	-22.7%	6,492,800
4.3 Contractual Services	18,143,800	18,956,800	\$ 10,469,800	20,141,800	1,185,000	6.3%	20,651,000
5.2 Shared Services	(1,218,100)	(1,460,000)	\$ (729,900)	(1,489,300)	(29,300)	2.0%	(1,519,100)
6.0 Capital Outlay	1,570,200	2,998,800	\$ 739,200	2,814,500	(184,300)	-6.1%	2,972,500
Grand Total	\$ 29,634,900	\$ 37,052,400	\$ 16,282,500	\$ 36,433,000	\$ (619,400)	-1.7%	\$ 37,682,900

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Enterprise Asset Management							
Systems	\$ 6,555,600	\$ 7,835,600	\$ 2,820,600	\$ 7,880,200	\$ 44,600	0.6%	\$ 8,136,900
Business Productivity Systems	2,714,500	4,722,800	1,177,600	4,177,400	(545,400)	-11.5%	4,235,700
Infrastructure	15,195,700	17,797,500	9,647,700	17,529,900	(267,600)	-1.5%	17,810,900
Security & Risk	197,600	468,600	100,700	428,800	(39,800)	-8.5%	545,800
Service Delivery	2,944,700	3,716,100	1,418,900	3,779,100	63,000	1.7%	3,936,700
Project Management Office	1,224,400	1,328,200	660,700	1,344,400	16,200	1.2%	1,351,000
Office of the CIO	802,400	1,183,600	456,300	1,293,200	109,600	9.3%	1,665,900
Grand Total	\$ 29,634,900	\$ 37,052,400	\$ 16,282,500	\$ 36,433,000	\$ (619,400)	-1.7%	\$ 37,682,900

Personnel Budget

Information Technology personnel consists of 78 positions for FY 2023. The increase in positions is for two Directors and one Management Professional in the Office of the CIO. The addition of the two Directors and one Management Professional will enable IT to have the bandwidth necessary to drive

the implementation and ongoing modernization anticipated with the upgrades and replacements of our data center and major business applications. The new positions will also enhance collaboration between IT and all areas of the business and facilitate strategic business process improvement.

The Information Technology Group is currently exploring an apprenticeship program that may add up to 3 FTEs depending on the identified need. Because of the preliminary nature of this opportunity, this additional headcount has not been reflected in the staffing plan counts below.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Information Technology	71.00	75.00	78.00	78.00	78.00	78.00	78.00
Office of the CIO	4.00	4.00	7.00	7.00	7.00	7.00	7.00
Project Management Office	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Service Delivery	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Infrastructure	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Enterprise Asset Management Systems	16.00	17.00	17.00	17.00	17.00	17.00	17.00
Business Productivity Systems	10.00	13.00	13.00	13.00	13.00	13.00	13.00
Security & Risk	3.00	3.00	3.00	3.00	3.00	3.00	3.00

*Full-time Equivalent*s - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year.

*Full-time Equivalent*s

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Information Technology	71.00	74.50	74.50	77.50	77.50	77.50	77.50
Office of the CIO	4.00	4.00	4.75	7.00	7.00	7.00	7.00
Project Management Office	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Service Delivery	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Infrastructure	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Enterprise Asset Management Systems	16.00	16.50	16.25	16.50	16.50	16.50	16.50
Business Productivity Systems	10.00	13.00	13.00	13.00	13.00	13.00	13.00
Security & Risk	3.00	3.00	2.50	3.00	3.00	3.00	3.00

Personnel Budget - The following tables present the Information Technology personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Office of the CIO	\$ 519,400	\$ 522,000	\$ 203,500	\$ 658,100	\$ 136,100	26.1%	\$ 1,013,600
Project Management Office	1,207,200	1,311,800	443,700	1,315,300	3,500	0.3%	1,321,400
Service Delivery	1,262,900	1,265,200	408,200	1,340,000	74,800	5.9%	1,347,300
Infrastructure	1,347,500	1,462,900	459,400	1,520,900	58,000	4.0%	1,528,300
Enterprise Asset Management Systems	1,648,700	1,774,400	596,600	1,775,500	1,100	0.1%	1,794,600
Business Productivity Systems	1,045,200	1,540,300	360,200	1,597,400	57,100	3.7%	1,604,500
Security & Risk	205,800	401,400	41,500	360,200	(41,200)	-10.3%	476,000
Grand Total	\$ 7,236,700	\$ 8,278,000	\$ 2,513,100	\$ 8,567,400	\$ 289,400	3.5%	\$ 9,085,700

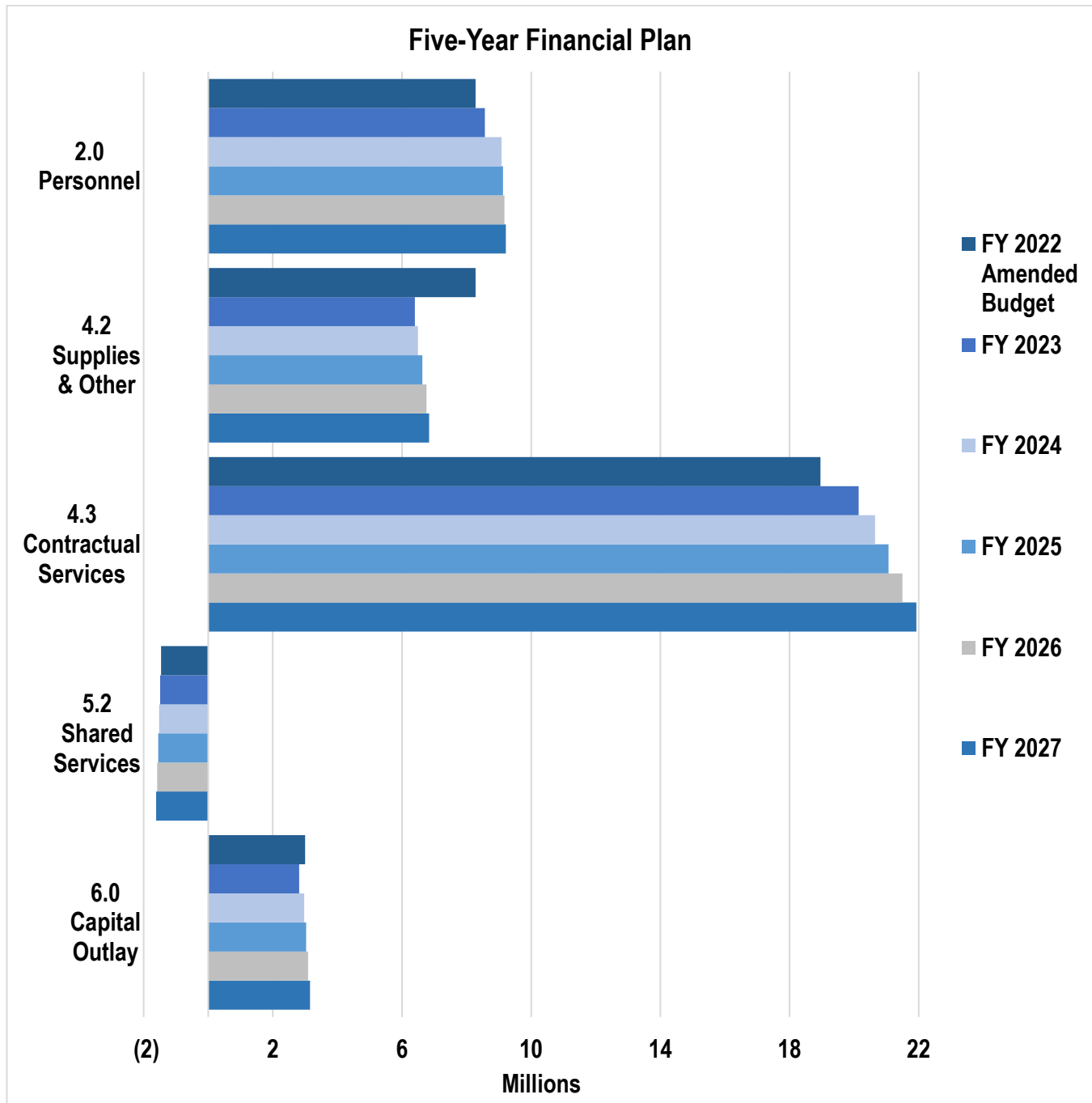
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Office of the CIO	\$ 519,400	\$ 522,000	\$ 658,100	\$ 1,013,600	\$ 1,018,100	\$ 1,022,700	\$ 1,027,300
Project Management Office	1,207,200	1,311,800	1,315,300	1,321,400	1,327,500	1,333,700	1,339,800
Service Delivery	1,262,900	1,265,200	1,340,000	1,347,300	1,354,600	1,361,900	1,369,200
Infrastructure	1,347,500	1,462,900	1,520,900	1,528,300	1,535,800	1,543,200	1,550,600
Enterprise Asset Management Systems	1,648,700	1,774,400	1,775,500	1,794,600	1,803,300	1,812,100	1,820,800
Business Productivity Systems	1,045,200	1,540,300	1,597,400	1,604,500	1,611,700	1,618,900	1,626,000
Security & Risk	205,800	401,400	360,200	476,000	478,000	480,100	482,200
Grand Total	\$ 7,236,700	\$ 8,278,000	\$ 8,567,400	\$ 9,085,700	\$ 9,129,000	\$ 9,172,600	\$ 9,215,900

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 7,236,700	\$ 8,278,100	\$ 8,567,400	\$ 9,085,700	\$ 9,129,000	\$ 9,172,600	\$ 9,215,900
4.2 Supplies & Other	3,902,300	8,278,700	6,398,600	6,492,800	6,629,200	6,760,200	6,838,500
4.3 Contractual Services	18,143,800	18,956,800	20,141,800	20,651,000	21,068,600	21,494,800	21,929,900
5.2 Shared Services	(1,218,100)	(1,460,000)	(1,489,300)	(1,519,100)	(1,549,400)	(1,580,300)	(1,611,800)
6.0 Capital Outlay	1,570,200	2,998,800	2,814,500	2,972,500	3,031,900	3,092,400	3,154,200
Grand Total	\$ 29,634,900	\$ 37,052,400	\$ 36,433,000	\$ 37,682,900	\$ 38,309,300	\$ 38,939,700	\$ 39,526,700

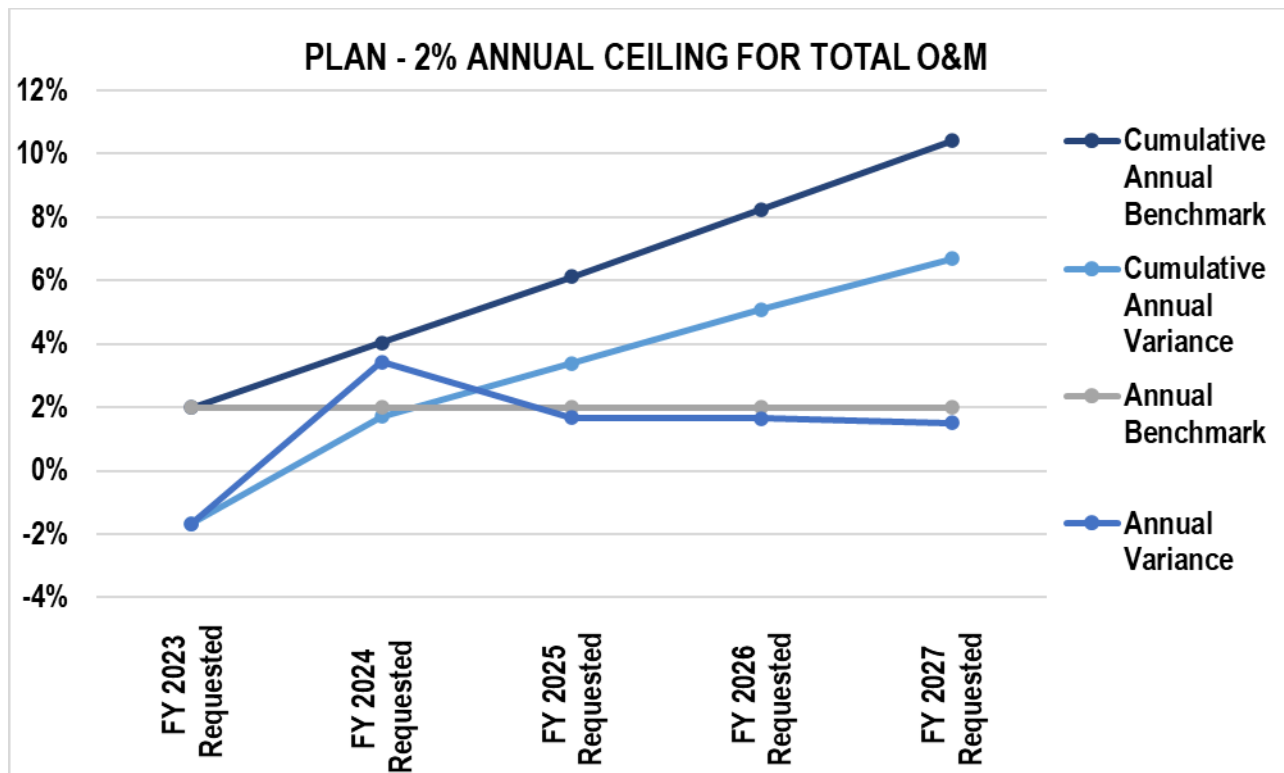


Five-Year Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Enterprise Asset Management							
Systems	\$ 6,555,600	\$ 7,835,600	7,880,200	8,136,900	8,240,400	8,371,400	8,500,300
Business Productivity Systems	2,714,500	4,722,800	4,177,400	4,235,700	4,295,100	4,355,900	4,418,000
Infrastructure	15,195,700	17,797,500	17,529,900	17,810,900	18,144,000	18,528,600	18,829,700
Security & Risk	197,600	468,600	428,800	545,800	549,200	552,700	556,200
Service Delivery	2,944,700	3,716,100	3,779,100	3,936,700	3,995,900	4,055,800	4,117,300
Project Management Office	1,224,400	1,328,200	1,344,400	1,351,000	1,357,700	1,364,200	1,370,600
Office of the CIO	802,400	1,183,600	1,293,200	1,665,900	1,727,000	1,711,100	1,734,600
Grand Total	\$ 29,634,900	\$ 37,052,400	\$ 36,433,000	\$ 37,682,900	\$ 38,309,300	\$ 38,939,700	\$ 39,526,700

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The IT financial plan reflects a five-year overall increase of 6.7% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Information Technology five-year capital outlay plan is funded by both the Improvements & Extension budget and the Operations & Maintenance budget.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Operations & Maintenance	\$ 2,998,800	\$ 2,814,500	\$ 2,972,500	\$ 3,031,900	\$ 3,092,400	\$ 3,154,200
Hardware	1,718,546	1,612,928	1,703,474	1,737,515	1,772,186	1,807,602
Software	1,280,254	1,201,572	1,269,026	1,294,385	1,320,214	1,346,598
Improvement & Extension	10,000,000	9,500,000	6,000,000	1,500,000	-	-
Leasehold Improvements, Computers & IT, Furniture & Fixtures	1,000,000	1,000,000	500,000	500,000	-	-
Software	9,000,000	8,500,000	5,500,000	1,000,000	-	-
Grand Total	\$ 12,998,800	\$ 12,314,500	\$ 8,972,500	\$ 4,531,900	\$ 3,092,400	\$ 3,154,200

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Operations & Maintenance	\$ 1,570,200	\$ 2,998,800	\$ 2,814,500	\$ 2,972,500	\$ 3,031,900	\$ 3,092,400	\$ 3,154,200
Improvement & Extension	-	10,000,000	9,500,000	6,000,000	1,500,000	-	-
Grand Total	\$ 1,570,200	\$ 12,998,800	\$ 12,314,500	\$ 8,972,500	\$ 4,531,900	\$ 3,092,400	\$ 3,154,200

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Service Delivery	\$ 202,300	\$ 1,047,200	\$ 1,259,800	\$ 1,387,000	\$ 1,414,700	\$ 1,443,000	\$ 1,471,900
Technology Infrastructure	598,800	2,191,900	1,718,900	1,733,100	1,747,800	762,700	777,900
Business Productivity Systems	-	4,000,000	4,000,000	4,000,000	500,000	-	-
Enterprise Asset Management Systems	762,700	5,696,200	5,271,000	1,786,400	802,100	818,100	834,500
Security & Risks	6,400	63,500	64,800	66,000	67,300	68,600	69,900
Grand Total	\$ 1,570,200	\$ 12,998,800	\$ 12,314,500	\$ 8,972,500	\$ 4,531,900	\$ 3,092,400	\$ 3,154,200

As overall improvements and enhancements to the backbone of the IT infrastructure are completed under the Data Center Modernization Program, certain items will be capitalized through the Improvement & Extension budget as they are related to implementation, physical hardware, and software items. The remaining components are related subscription and other cloud services which will be funded from through IT's Operations & Maintenance budget.

The tables below contain the budget details by fiscal year.

Project Description	FY 2021 Improvement & Extension Fund	FY 2022 Improvement & Extension Fund	FY 2023 Improvement & Extension Fund	FY 2024 Improvement & Extension Fund	Total Improvement & Extension Fund
VSAN Integration	\$ 500,000	\$ -	\$ -	\$ -	\$ 500,000
Hard Drives (VSAN Integration)	64,000	-	-	-	64,000
Veeam Licensing (Back Up)	260,876	-	-	260,876	521,752
BUaaS (Professional Services)	15,000	-	-	-	15,000
Isilon Replacement including professional services and migration	-	500,000	-	-	500,000
DRaaS - Professional Sevices (Access Interactive)	-	78,540	-	-	78,540
Forcepoint (Barracude Replacement)	-	-	300,000	-	300,000
Hybrid Cloud Migration Professional Services	-	-	173,250	-	173,250
Network Cisco Switch Replacement/ Upgrade	-	-	-	500,000	500,000
AD Migration	-	-	-	150,000	150,000
Total	\$ 839,876	\$ 578,540	\$ 473,250	\$ 910,876	\$ 2,802,542

Project Description	FY 2021 Operations & Maintenance Fund	FY 2022 Operations & Maintenance Fund	FY 2023 Operations & Maintenance Fund	FY 2024 Operations & Maintenance Fund	Total Operations & Maintenance Fund
Endpoint Protection (Sentinel One)	90,000	90,000	90,000	90,000	360,000
DRaaS Subscription Services	-	426,739	426,739	426,739	1,280,217
Amazon Web Services (Storage and Server Costs)	-	100,000	100,000	100,000	300,000
Cybersecurity Monitoring Solution	-	-	225,000	225,000	450,000
Hybrid Cloud Migration/NSX-T	-	-	515,871	515,871	1,031,742
Total	\$ 90,000	\$ 616,739	\$ 1,357,610	\$ 1,357,610	\$ 3,421,959

Line-Item Budget and Plan

The five-year plan by line-item expense is shown below. The expenses are for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883301 - Office of the CIO	\$ 802,400	\$ 1,183,600	\$ 456,300	\$ 1,293,200	\$ 1,665,900	\$ 1,727,000	\$ 1,711,100	\$ 1,734,600
2.1 Salaries & Wages	419,500	403,000	227,300	504,100	776,000	776,000	776,000	776,000
2.4 Employee Benefits	99,900	119,000	62,100	154,000	237,600	242,100	246,700	251,300
4.2 Supplies & Other	98,700	96,100	36,400	118,100	120,100	161,200	124,900	127,600
Memberships, Licenses & Subscriptions	64,100	51,700	24,300	83,200	84,700	125,100	88,100	89,900
Office Supplies	33,600	24,300	10,600	14,600	14,800	15,100	15,400	15,800
Operating Supplies	-	100	100	-	-	-	-	-
Mileage and Parking	-	100	-	-	-	-	-	-
Training and Internal Meetings	1,000	9,000	1,100	9,200	9,300	9,500	9,700	9,900
Travel	-	10,900	300	11,100	11,300	11,500	11,700	12,000
4.3 Contractual Services	184,300	565,500	130,500	517,000	532,200	547,700	563,500	579,700
Contract Services-Information Technology	184,300	565,500	130,500	517,000	532,200	547,700	563,500	579,700
883311 Project Management Office	1,224,400	1,328,200	660,700	1,344,400	1,351,000	1,357,700	1,364,200	1,370,600
2.1 Salaries & Wages	972,400	1,013,300	507,700	1,002,000	1,002,000	1,002,000	1,002,000	1,002,000
2.4 Employee Benefits	234,800	298,500	152,100	313,300	319,400	325,500	331,700	337,800
4.2 Supplies & Other	16,800	16,400	800	29,100	29,600	30,200	30,500	30,800
Memberships, Licenses & Subscriptions	1,600	1,600	800	14,100	14,300	14,600	14,600	14,600
Training and Internal Meetings	13,800	14,000	-	14,100	14,400	14,700	15,000	15,300
Travel	-	800	-	900	900	900	900	900
Tuition Refund	1,400	-	-	-	-	-	-	-
4.3 Contractual Services	400	-	100	-	-	-	-	-
Contractual Operating Services	400	-	100	-	-	-	-	-
883321 - Service Delivery	2,944,700	3,716,100	1,418,900	3,779,100	3,936,700	3,995,900	4,055,800	4,117,300
2.1 Salaries & Wages	912,800	924,600	445,000	968,300	968,300	968,300	968,300	968,300
2.3 Overtime	300	100	100	-	-	-	-	-
2.4 Employee Benefits	349,800	340,600	159,100	371,700	379,000	386,300	393,600	400,900
4.2 Supplies & Other	894,500	939,900	375,200	780,100	795,300	811,300	827,400	844,100
Capital Outlay less than \$5,000	120,200	100,000	40,000	102,000	104,000	106,100	108,200	110,400
Office Supplies	600	-	100	-	-	-	-	-
Memberships, Licenses & Subscriptions	15,300	5,300	2,300	5,400	5,500	5,600	5,700	5,800
Printing	-	-	-	306,000	312,000	318,200	324,600	331,100
Repairs & Maintenance-Equipment	2,700	30,000	27,900	-	-	-	-	-
Repairs & Maintenance-Hardware	(100)	45,500	400	46,400	47,300	48,200	49,200	50,200
Repairs & Maintenance-Miscellaneous	-	26,400	-	26,900	27,400	27,900	28,500	29,100
Repairs & Maintenance-Software	752,800	653,300	304,500	212,400	216,600	221,100	225,400	229,900
Training and Internal Meetings	1,700	63,500	-	64,800	66,000	67,400	68,700	70,100
Travel	-	15,900	-	16,200	16,500	16,800	17,100	17,500
Tuition Refund	1,300	-	-	-	-	-	-	-
4.3 Contractual Services	751,600	507,700	207,600	552,200	563,200	574,500	585,900	597,700
Contract Services-Information Technology	159,600	-	-	-	-	-	-	-
Telecom, Managed Security & Network Svcs	592,000	507,700	207,600	552,200	563,200	574,500	585,900	597,700
5.2 Shared Services	(166,600)	(150,000)	(74,900)	(153,000)	(156,100)	(159,200)	(162,400)	(165,600)
Shared Services : Salaries & Wages								
Reimbursement	(119,000)	(51,500)	(25,700)	(52,500)	(53,600)	(54,700)	(55,800)	(56,900)
Shared Services Reimbursement		(78,000)	(39,000)	(79,600)	(81,200)	(82,800)	(84,500)	(86,200)
Shared Services: Employee Benefit								
Reimbursement	(47,600)	(20,500)	(10,200)	(20,900)	(21,300)	(21,700)	(22,100)	(22,500)
6.0 Capital Outlay	202,300	1,153,200	306,800	1,259,800	1,387,000	1,414,700	1,443,000	1,471,900
Capital Outlay over \$5k(O&M-Capitalized)	202,300	1,153,200	306,800	1,259,800	1,387,000	1,414,700	1,443,000	1,471,900

Line-Item Budget and Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883331 - Infrastructure	15,195,700	17,797,500	9,647,700	17,529,900	17,810,900	18,144,000	18,528,600	18,829,700
2.1 Salaries & Wages	1,047,700	1,111,800	521,000	1,143,000	1,143,000	1,143,000	1,143,000	1,143,000
2.4 Employee Benefits	299,800	351,100	168,400	377,900	385,300	392,800	400,200	407,600
4.2 Supplies & Other	1,117,700	1,956,000	615,200	1,680,600	1,668,000	1,701,300	1,780,300	1,769,900
Capital Outlay less than \$5,000	246,800	156,000	78,100	-	-	-	-	-
Repairs & Maintenance-Equipment	-	400	200	-	-	-	-	-
Repairs & Maintenance-Hardware	693,500	1,664,900	314,100	1,498,100	1,527,800	1,558,300	1,589,400	1,621,200
Repairs & Maintenance-Software	166,600	93,900	220,500	140,600	97,500	99,500	146,500	103,500
Memberships, Licenses & Subscriptions	7,100	5,000	2,300	-	-	-	-	-
Training and Internal Meetings	3,700	21,200	-	21,600	22,000	22,400	22,900	23,300
Travel	-	14,600	-	20,300	20,700	21,100	21,500	21,900
4.3 Contractual Services	13,868,300	14,167,700	8,567,700	14,451,000	14,739,800	15,034,500	15,335,300	15,642,000
Contract Services-Information Technology	8,100	92,500	8,800	94,300	96,100	98,000	100,000	102,000
Contractual Operating Services	156,000	556,100	78,000	567,200	578,500	590,000	601,800	613,900
Telecom, Managed Security & Network Svcs	13,697,800	13,519,100	8,480,900	13,789,500	14,065,200	14,346,500	14,633,500	14,926,100
Telecommunications-Data Com Equip	6,400	-	-	-	-	-	-	-
5.2 Shared Services	(1,736,600)	(825,000)	(412,500)	(841,500)	(858,300)	(875,400)	(892,900)	(910,700)
Shared Services : Salaries & Wages								
Reimbursement	(92,200)	(150,000)	(75,000)	(153,000)	(156,100)	(159,200)	(162,400)	(165,600)
Shared Services Reimbursement	(1,607,600)	(615,000)	(307,500)	(627,300)	(639,800)	(652,600)	(665,600)	(678,900)
Shared Services: Employee Benefit								
Reimbursement	(36,800)	(60,000)	(30,000)	(61,200)	(62,400)	(63,600)	(64,900)	(66,200)
6.0 Capital Outlay	598,800	1,035,900	187,900	718,900	733,100	747,800	762,700	777,900
Capital Outlay over \$5k(O&M-Capitalized)	598,800	1,035,900	187,900	718,900	733,100	747,800	762,700	777,900
883341 - Business Productivity Systems	2,714,500	4,722,800	1,177,600	4,177,400	4,235,700	4,295,100	4,355,900	4,418,000
2.1 Salaries & Wages	828,700	1,110,900	376,300	1,142,300	1,142,300	1,142,300	1,142,300	1,142,300
2.4 Employee Benefits	216,500	339,300	118,700	364,900	372,000	379,200	386,400	393,500
2.5 Transition Services	-	90,100	-	90,200	90,200	90,200	90,200	90,200
4.2 Supplies & Other	936,000	2,557,400	452,300	1,942,400	1,981,000	2,020,300	2,060,600	2,101,900
Memberships, Licenses & Subscriptions	800	16,000	8,100	-	-	-	-	-
Repairs & Maintenance-Software	931,700	2,499,200	440,800	1,883,100	1,920,600	1,958,700	1,997,800	2,037,800
Training and Internal Meetings	3,500	36,100	3,400	36,800	37,500	38,200	39,000	39,800
Travel	-	6,100	-	22,500	22,900	23,400	23,800	24,300
4.3 Contractual Services	733,300	625,100	230,300	637,600	650,200	663,100	676,400	690,100
Contract Services-Information Technology	576,700	469,000	152,300	478,400	487,800	497,500	507,500	517,800
Contractual Operating Services	156,600	156,100	78,000	159,200	162,400	165,600	168,900	172,300
883351 - Enterprise Asset Management								
Systems	6,555,600	7,835,600	2,820,600	7,880,200	8,136,900	8,240,400	8,371,400	8,500,300
2.1 Salaries & Wages	1,299,300	1,286,900	675,200	1,333,500	1,339,500	1,339,500	1,339,500	1,339,500
2.4 Employee Benefits	349,400	417,500	212,700	442,000	455,100	463,800	472,600	481,300
2.5 Transition Services	-	70,000	-	-	-	-	-	-
4.2 Supplies & Other	816,800	2,709,200	635,600	1,844,500	1,895,000	1,901,000	1,932,500	1,960,100
Memberships, Licenses & Subscriptions	300	500	-	500	500	500	500	500
Capital Outlay less than \$5,000	59,100	-	-	-	-	-	-	-
Repairs & Maintenance-Software	757,900	2,670,000	634,500	1,804,400	1,854,200	1,859,400	1,890,100	1,916,900
Training and Internal Meetings	2,200	20,000	300	20,400	20,800	21,200	21,600	22,000
Mileage and Parking	-	700	-	800	800	800	800	800
Travel	(2,700)	18,000	800	18,400	18,700	19,100	19,500	19,900
4.3 Contractual Services	2,605,900	3,090,800	1,333,600	3,984,000	4,165,600	4,248,800	4,333,700	4,420,400
Contract Services-Information Technology	2,226,600	2,845,000	1,232,400	3,937,300	4,118,000	4,200,200	4,284,100	4,369,800
Contractual Operating Services	379,300	245,800	101,200	46,700	47,600	48,600	49,600	50,600
5.2 Shared Services	721,500	(485,000)	(242,500)	(494,800)	(504,700)	(514,800)	(525,000)	(535,500)
Shared Services : Salaries & Wages								
Reimbursement	20,500	(41,600)	(20,800)	(42,500)	(43,400)	(44,300)	(45,200)	(46,100)
Shared Services Reimbursement	692,500	(428,700)	(214,300)	(437,300)	(446,000)	(454,900)	(463,900)	(473,200)
Shared Services: Employee Benefit								
Reimbursement	8,500	(14,700)	(7,400)	(15,000)	(15,300)	(15,600)	(15,900)	(16,200)
6.0 Capital Outlay	762,700	746,200	206,000	771,000	786,400	802,100	818,100	834,500
Capital Outlay over \$5k(O&M-Capitalized)	762,700	746,200	206,000	771,000	786,400	802,100	818,100	834,500

Line-Item Budget and Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883361 - Security & Risk	197,600	468,600	100,700	428,800	545,800	549,200	552,700	556,200
2.1 Salaries & Wages	155,800	310,600	47,800	277,000	367,600	367,600	367,600	367,600
2.4 Employee Benefits	50,000	90,800	14,400	83,200	108,400	110,400	112,500	114,600
4.2 Supplies & Other	21,800	3,700	-	3,800	3,800	3,900	4,000	4,100
Capital Outlay less than \$5,000	21,800	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	-	3,700	-	3,800	3,800	3,900	4,000	4,100
5.2 Shared Services	(36,400)	-	-	-	-	-	-	-
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(26,000)	-	-	-	-	-	-	-
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(10,400)	-	-	-	-	-	-	-
6.0 Capital Outlay	6,400	63,500	38,500	64,800	66,000	67,300	68,600	69,900
Capital Outlay over \$5k(O&M-Capitalized)	6,400	63,500	38,500	64,800	66,000	67,300	68,600	69,900
Grand Total	\$ 29,634,900	\$ 37,052,400	\$ 16,282,500	\$ 36,433,000	\$ 37,682,900	\$ 38,309,300	\$ 38,939,700	\$ 39,526,700

Security & Integrity

Provide high quality, professional security operations and technical intelligence for the organization and its valued customers throughout Michigan.

Strategic Initiatives**❖ Water Act 2018 Threat and Vulnerability Assessments (Ongoing)**

Re-assess all GLWA facilities for threats and vulnerabilities to meet the five-year requirements of the Water Act of 2018. The progress will be tracked by the Chief of Security and Integrity who will confirm each threat is addressed and vulnerabilities are eliminated.

❖ Report Management System (Completion in FY 2023)

Transition to a modernized record and reporting system. This system will be maintained by the Information Technology Team.

❖ Online Training Program (Ongoing)

Expand annual training and re-training of certification courses for the Security and Integrity Area team members. The online training program will begin in FY 2022 and be tracked by the completion of certifications of each Security and Integrity Area team member.

❖ Plan, design & implement a joint “Disaster Response Unit” (Completion in FY 2024)

The Security and Integrity Group will be working on a concept to Plan, Design, and Implement a Disaster Response Unit. This concept consists of several distinct phases:

- **Phase One** – Identify scope of response and type of equipment necessary to support and sustain responders to include vehicles. This phase was started in FY 2020 with the initial purchase of a truck and a trailer and was completed in FY 2021.
- **Phase Two** - Coordinate with State of Michigan and Federal Emergency Management Agency (FEMA) to research requirements and certify GLWA as a Disaster Response team. This phase will start in FY 2021 with the research of requirements and will be completed in FY 2022.
- **Phase Three** – Identify training requirements and train members to standards. This phase will be completed in FY 2022.
- **Phase Four** – Identify team makeup to include total numbers on team and minimum number to be deployed. This phase will be completed in FY 2022.
- **Phase Five** - Identify policies and standard operating guidelines. This phase will be completed in FY 2023 and will require a review with General Counsel.
- **Phase Six** - Recurring training to ensure competencies and maintain disciplines. This phase will be completed in FY 2024.

❖ Secondary Fusion Center at Water Works Park (Completion in FY 2023)

The Security and Integrity Group will be working on a concept to plan, design, and build a secondary Fusion Center at Water Works Park.

The following table shows how the Security & Integrity Area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Security & Integrity Strategic Initiatives	Water Act 2018 Threat and Vulnerability Assessments			x	x	x	x		x			
	Report Management System			x		x						
	Online Training Program										x	
	Plan, design & implement a joint "Disaster Response Unit"				x	x	x	x	x	x	x	x
	Secondary Fusion Center at Water Works Park			x	x	x	x		x			

Organization

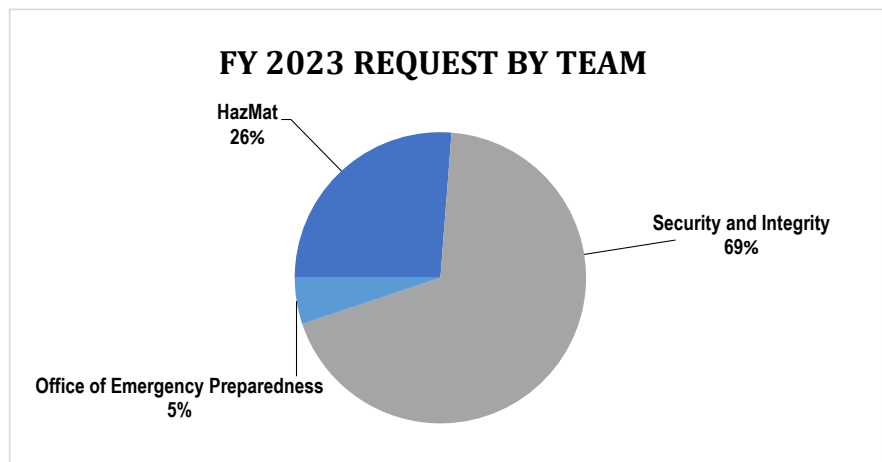
The Security and Integrity Area consists of two teams.

❖ Security and Integrity

Provide high quality, professional security operations and technical intelligence for the organization and its valued customers throughout Michigan.

❖ HazMat

An in-house delivery service within the Security & Integrity Group who perform immediate response to all Level (1) Hazmat calls on the property of Water Resource Recovery Facility (WRRF). This team provides three main services: immediate response to all HazMat discharges at the WRRF, professional security operations for the Detroit Marine Terminal and confined space rescue standby for GLWA employees at WRRF.



❖ **Office of Emergency Preparedness**

An in-house emergency preparedness team that works with GLWA Operational Areas, Groups and Teams to provide enhanced focus and preparation to address emergency situations, mitigate potential emergencies and threats to the utility, and assess vulnerabilities for the utility.

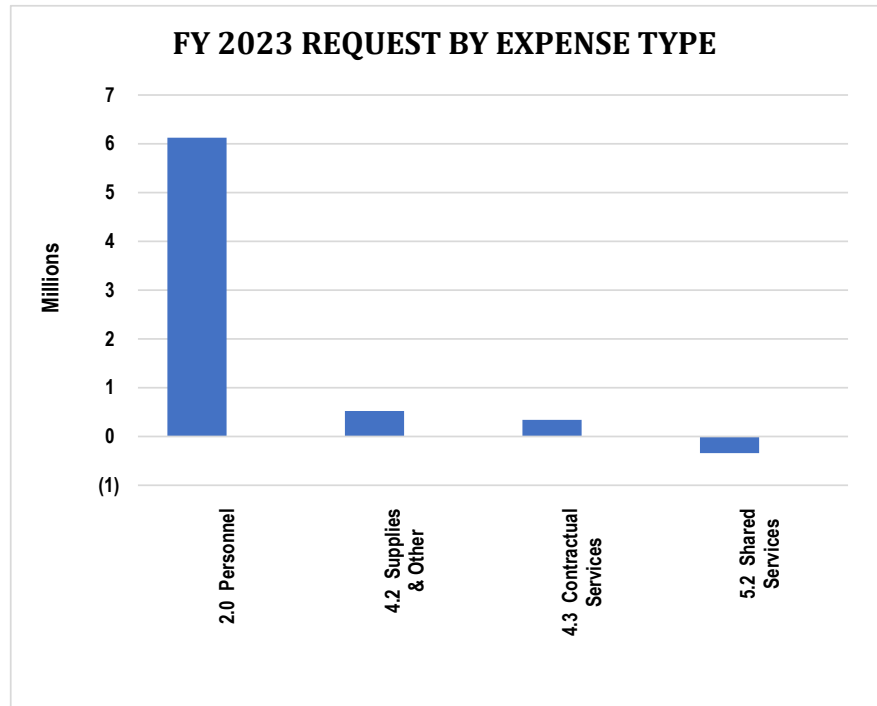
Expense Categories

There are four major categories of Security and Integrity expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel Costs
- ❖ Supplies & Other
- ❖ Contractual Services
- ❖ Shared Services

Personnel is the highest expense category for the Security and Integrity Area. In FY 2022, after the budget was approved by the Board of Directors a need for an Office of Emergency Preparedness presented itself and the cost center was created with three vacant security officer positions.

In the FY 2023 Budget, three security officer positions will be added in first quarter for expanded coverage.



Biennial Budget Request

The biennial budget reflects an overall \$437,600 increase, or 7.1%, in FY 2023.

- ❖ The personnel account is increasing by \$432,100 due to adding three security officers in the first quarter of FY 2023 for expanded coverage.
- ❖ The \$15,100 increase in supplies & other is for new employee bullet proof vests, tasers with holders and uniforms.
- ❖ The contractual services account is decreasing by \$2,900 due to the Report Management System being transferred to the Information Technology budget because it is software that will need to be maintained on GLWA's main server.

Biennial Budget Request by Expense Category

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 5,922,200	\$ 5,688,700	\$ 2,920,700	\$ 6,120,800	\$ 432,100	7.6%	\$ 6,334,000
4.2 Supplies & Other	227,900	506,100	109,200	521,200	15,100	3.0%	531,200
4.3 Contractual Services	215,600	341,800	63,400	338,900	(2,900)	-0.8%	345,600
5.1 Capital Program Allocation	(8,500)	-	-	-	-	0.0%	-
5.2 Shared Services	(323,500)	(338,100)	(169,000)	(344,800)	(6,700)	2.0%	(351,800)
5.5 Intergovernmental Agreement	(300)	-	(300)	-	-	0.0%	-
Grand Total	\$ 6,033,400	\$ 6,198,500	\$ 2,924,000	\$ 6,636,100	\$ 437,600	7.1%	\$ 6,859,000

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
HazMat	\$ 1,512,500	\$ 1,717,200	\$ 756,900	\$ 1,740,200	23,000	1.3%	\$ 1,929,300
Security and Integrity	4,520,900	4,310,700	2,167,100	4,554,700	244,000	5.7%	4,585,500
Office of Emergency Preparedness	-	170,600	-	341,200	170,600	100.0%	344,200
Grand Total	\$ 6,033,400	\$ 6,198,500	\$ 2,924,000	\$ 6,636,100	\$ 437,600	7.1%	\$ 6,859,000

Personnel Budget

The Security and Integrity Area consists of 82 positions in FY 2023. Three security officers will be added in the first quarter of FY 2023 for expanded coverage. The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Security and Integrity Area	79.00	79.00	82.00	85.00	85.00	86.00	86.00
Security and Integrity	60.00	57.00	60.00	61.00	61.00	62.00	62.00
HazMat	19.00	19.00	19.00	21.00	21.00	21.00	21.00
Office of Emergency Preparedness	0.00	3.00	3.00	3.00	3.00	3.00	3.00

Full-time Equivalents - The following table presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Security and Integrity Area	79.00	79.00	82.00	84.00	85.00	86.00	86.00
Security and Integrity	60.00	57.00	60.00	60.00	61.00	62.00	62.00
HazMat	19.00	19.00	19.00	21.00	21.00	21.00	21.00
Office of Emergency Preparedness	0.00	3.00	3.00	3.00	3.00	3.00	3.00

Personnel Budget – The following table presents the Security & Integrity personnel budget which consists of the following expense categories: Salaries & Wages, Overtime and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Security and Integrity	\$ 4,449,300	\$ 4,032,500	\$ 2,179,900	\$ 4,265,400	\$ 232,900	5.8%	\$ 4,290,900
HazMat	1,472,900	1,525,600	740,800	1,594,200	68,600	4.5%	1,780,500
Office of Emergency Preparedness	-	130,600	-	261,200	130,600	100.0%	262,600
Grand Total	\$ 5,922,200	\$ 5,688,700	\$ 2,920,700	\$ 6,120,800	\$ 432,100	7.6%	\$ 6,334,000

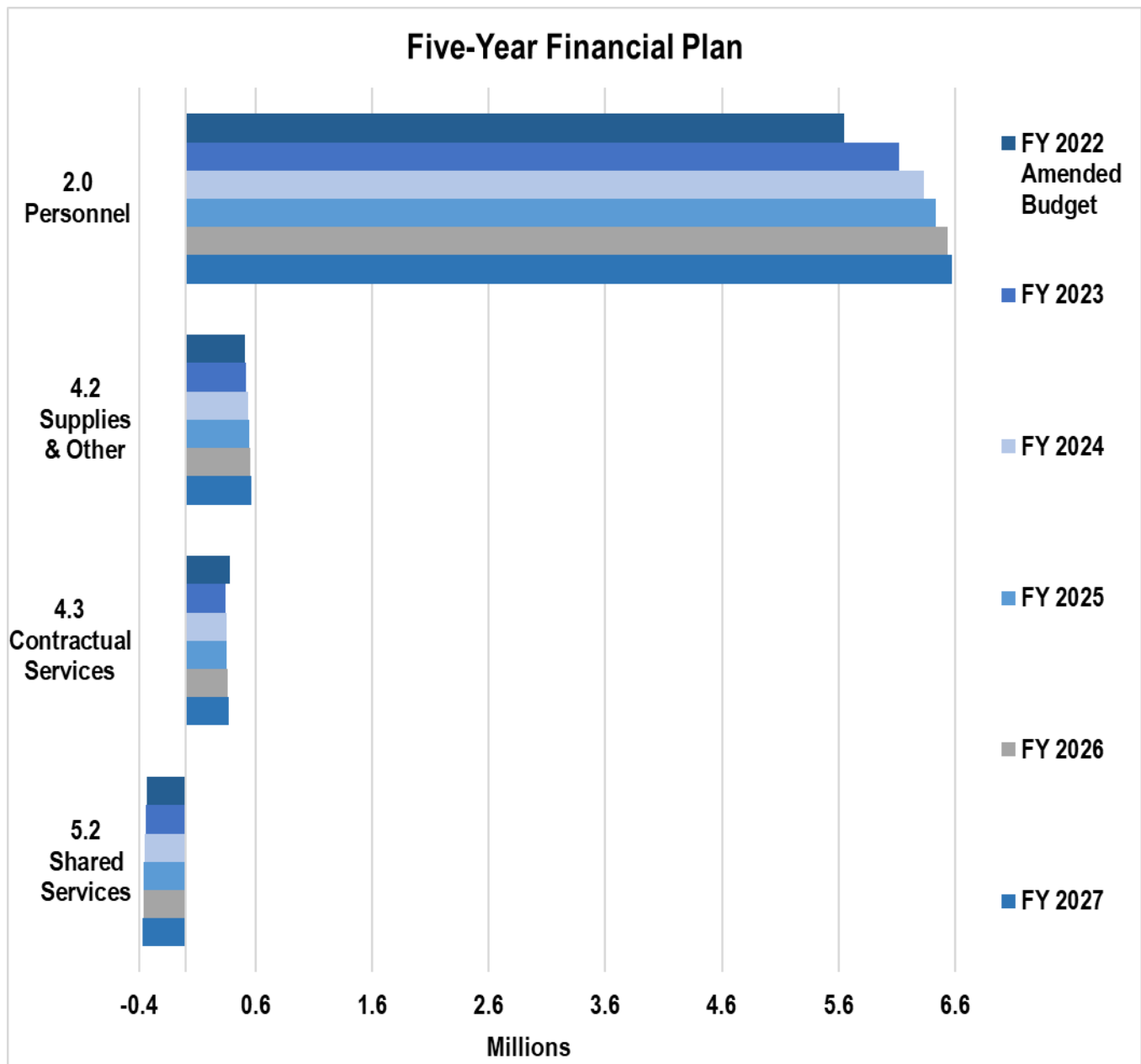
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Security and Integrity	\$ 4,449,300	\$ 4,032,500	\$ 4,265,400	\$ 4,290,900	\$ 4,378,200	\$ 4,466,500	\$ 4,492,800
HazMat	1,472,900	1,525,600	1,594,200	1,780,500	1,790,200	1,799,900	1,809,600
Office of Emergency Preparedness	-	130,600	261,200	262,600	264,100	265,500	266,900
Grand Total	\$ 5,922,200	\$ 5,688,700	\$ 6,120,800	\$ 6,334,000	\$ 6,432,500	\$ 6,531,900	\$ 6,569,300

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 5,922,200	\$ 5,688,700	\$ 6,120,800	\$ 6,334,000	\$ 6,432,500	\$ 6,531,900	\$ 6,569,300
4.2 Supplies & Other	227,900	506,100	521,200	531,200	541,200	551,800	562,500
4.3 Contractual Services	215,600	341,800	338,900	345,600	352,500	359,500	366,700
5.1 Capital Program Allocation	(8,500)	-	-	-	-	-	-
5.2 Shared Services	(323,500)	(338,100)	(344,800)	(351,800)	(358,900)	(366,000)	(373,300)
5.5 Intergovernmental Agreement	(300)	-	-	-	-	-	-
Grand Total	\$ 6,033,400	\$ 6,198,500	\$ 6,636,100	\$ 6,859,000	\$ 6,967,300	\$ 7,077,200	\$ 7,125,200

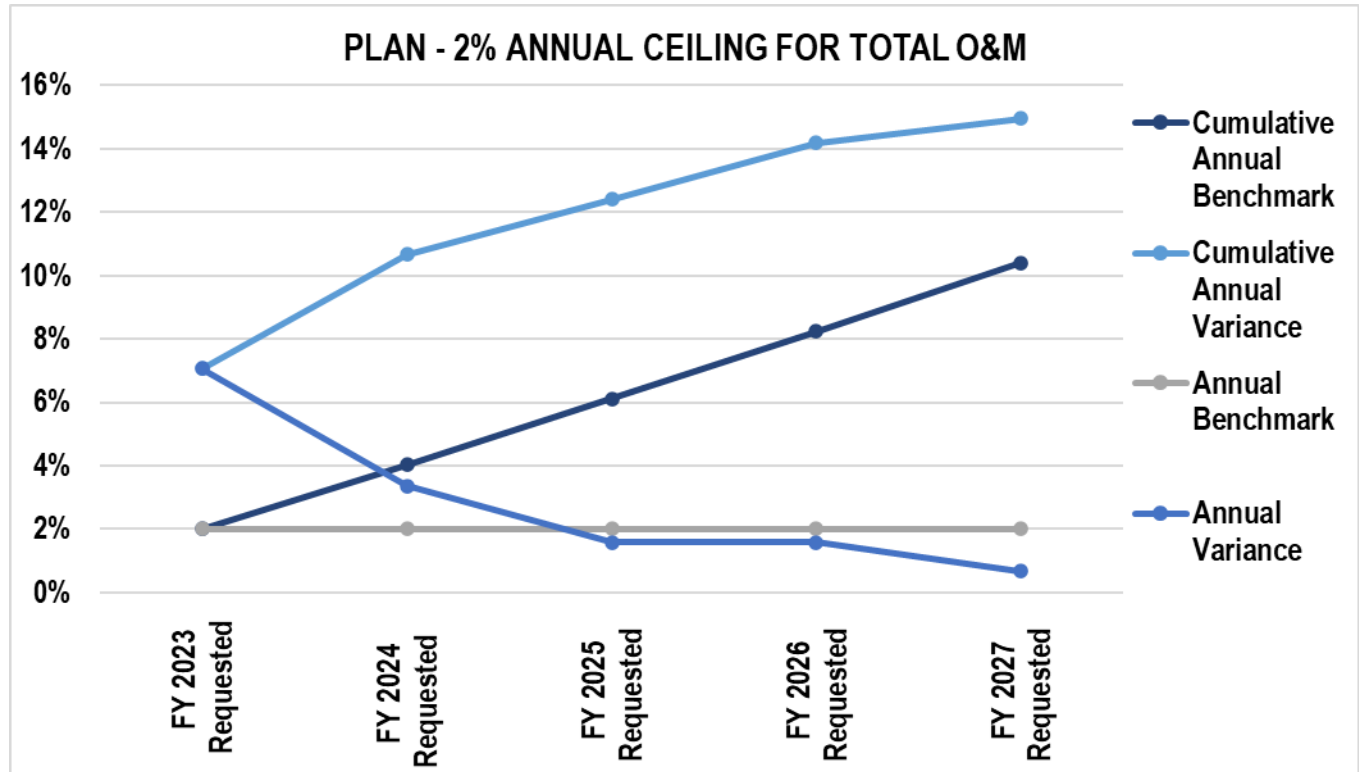


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
HazMat	\$ 1,512,500	\$ 1,717,200	\$ 1,740,200	\$ 1,929,300	\$ 1,941,400	\$ 1,954,100	\$ 1,967,200
Security and Integrity	4,520,900	4,310,700	4,554,700	4,585,500	4,678,600	4,772,700	4,804,500
Office of Emergency Preparedness	-	170,600	341,200	344,200	347,300	350,400	353,500
Grand Total	\$ 6,033,400	\$ 6,198,500	\$ 6,636,100	\$ 6,859,000	\$ 6,967,300	\$ 7,077,200	\$ 7,125,200

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Security and Integrity Area financial plan reflects a five-year overall increase of 15.0%, which is higher than the entity-wide goal of a cumulative ceiling of no more than 10.4% for planning purposes (based upon an annual 2% adjustment). The main reason for the increase is due to the addition of three security officers for expanded coverage.



Capital Outlay

The Security and Integrity Area capital outlay is funded by the Improvement & Extension (I&E) budget.

Five-Year Capital Outlay by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 80,000	\$ 192,600	\$ 83,200	\$ 84,800	\$ 86,400	\$ 88,200
Access Control, Surveillance	80,000	192,600	83,200	84,800	86,400	88,200
Grand Total	\$ 80,000	\$ 192,600	\$ 83,200	\$ 84,800	\$ 86,400	\$ 88,200

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 80,000	\$ 192,600	\$ 83,200	\$ 84,800	\$ 86,400	\$ 88,200
Grand Total	\$ 80,000	\$ 192,600	\$ 83,200	\$ 84,800	\$ 86,400	\$ 88,200

Five-Year Capital Outlay by Team

Team	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Security and Integrity	80,000	131,600	83,200	84,800	86,400	88,200
HazMat	-	61,000	-	-	-	-
Grand Total	\$ 80,000	\$ 192,600	\$ 83,200	\$ 84,800	\$ 86,400	\$ 88,200

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
881201 - Security and Integrity	\$ 4,520,900	\$ 4,310,700	\$ 2,167,100	\$ 4,554,700	\$ 4,585,500	\$ 4,678,600	\$ 4,772,700	\$ 4,804,500
2.1 Salaries & Wages	2,757,600	2,658,700	1,374,400	2,794,800	2,794,800	2,832,900	2,871,000	2,871,000
2.3 Overtime	275,800	168,500	187,100	168,500	168,500	171,300	174,200	174,200
Overtime	239,800	168,500	187,100	168,500	168,500	171,300	174,200	174,200
Personnel – Overtime Covid-19	36,000	-	-	-	-	-	-	-
2.4 Employee Benefits	1,415,900	1,205,300	618,400	1,302,100	1,327,600	1,374,000	1,421,300	1,447,600
4.2 Supplies & Other	181,900	312,000	93,100	370,200	377,300	384,800	392,300	399,500
Memberships, Licenses & Subscriptions	24,800	32,000	9,200	34,500	35,200	35,900	36,500	37,300
Mileage and Parking	-	200	-	200	200	200	200	200
Office Supplies	10,200	15,000	5,800	13,300	13,600	13,800	14,100	14,300
Supplies & Other - Covid19	100	-	-	-	-	-	-	-
Operating Supplies	94,200	114,100	41,200	130,800	133,200	135,800	138,400	141,200
Training and Internal Meetings	7,700	71,000	1,800	100,300	102,300	104,400	106,500	108,000
Travel	-	16,100	-	16,400	16,700	17,000	17,400	17,700
Tuition Refund	2,500	10,000	1,600	10,000	10,200	10,400	10,600	10,800
Uniforms, Laundry, Cleaning	-	-	-	10,000	10,200	10,400	10,600	10,800
Employee Uniform Expense	42,400	53,600	33,500	54,700	55,700	56,900	58,000	59,200
4.3 Contractual Services	215,600	304,300	63,400	263,900	269,100	274,500	279,900	285,500
Contractual Operating Services	215,600	293,700	63,400	253,100	258,100	263,300	268,500	273,900
Contractual Security Services	-	10,600	-	10,800	11,000	11,200	11,400	11,600
5.1 Capital Program Allocation	(2,100)	-	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	(1,500)	-	-	-	-	-	-	-
Capital Program: Employee Benefits	(600)	-	-	-	-	-	-	-
5.2 Shared Services	(323,500)	(338,100)	(169,000)	(344,800)	(351,800)	(358,900)	(366,000)	(373,300)
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(195,700)	(204,400)	(102,200)	(208,500)	(212,700)	(217,000)	(221,300)	(225,700)
Shared Services Reimbursement	(49,600)	(52,000)	(26,000)	(53,000)	(54,100)	(55,200)	(56,300)	(57,400)
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(78,200)	(81,700)	(40,800)	(83,300)	(85,000)	(86,700)	(88,400)	(90,200)
5.5 Intergovernmental Agreement	(300)	-	(300)	-	-	-	-	-
Intergovernmental Agreement	(300)	-	(300)	-	-	-	-	-
881202 - HazMat	1,512,500	1,717,200	756,900	1,740,200	1,929,300	1,941,400	1,954,100	1,967,200
2.1 Salaries & Wages	935,300	1,016,700	480,500	1,050,400	1,167,900	1,167,900	1,167,900	1,167,900
2.3 Overtime	80,600	97,700	53,200	97,700	108,500	108,500	108,500	108,500
2.4 Employee Benefits	457,000	411,200	207,100	446,100	504,100	513,800	523,500	533,200
4.2 Supplies & Other	46,000	191,600	16,100	146,000	148,800	151,200	154,200	157,600
Memberships, Licenses & Subscriptions	1,100	1,600	-	1,500	1,500	1,500	1,500	1,500
Office Supplies	1,800	18,500	-	18,800	19,100	19,500	19,900	20,300
Supplies & Other - Covid19	400	-	-	-	-	-	-	-
Operating Supplies	33,800	35,000	10,700	35,700	36,400	37,100	37,800	38,600
Repairs & Maintenance-Equipment	1,500	15,500	2,600	17,200	17,500	17,800	18,100	18,400
Training and Internal Meetings	2,900	19,300	-	20,600	21,200	21,300	21,900	22,500
Travel	-	4,000	-	4,000	4,000	4,000	4,000	4,200
Tuition Refund	-	1,200	600	-	-	-	-	-
Capital Outlay less than \$5,000	-	79,800	-	31,300	31,900	32,600	33,200	33,900
Uniforms, Laundry, Cleaning	-	7,200	-	7,300	7,400	7,500	7,700	7,900
Employee Uniform Expense	4,500	9,500	2,200	9,600	9,800	9,900	10,100	10,300
5.1 Capital Program Allocation	(6,400)	-	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	(4,600)	-	-	-	-	-	-	-
Capital Program: Employee Benefits	(1,800)	-	-	-	-	-	-	-
881203 - Office of Emergency Preparedness	-	170,600	-	341,200	344,200	347,300	350,400	353,500
2.1 Salaries & Wages	-	94,300	-	188,700	188,700	188,700	188,700	188,700
2.4 Employee Benefits	-	36,300	-	72,500	73,900	75,400	76,800	78,200
4.2 Supplies & Other	-	2,500	-	5,000	5,100	5,200	5,300	5,400
Office Supplies	-	1,000	-	2,000	2,000	2,100	2,100	2,200
Training and Internal Meetings	-	1,500	-	3,000	3,100	3,100	3,200	3,200
4.3 Contractual Services	-	37,500	-	75,000	76,500	78,000	79,600	81,200
Grand Total	\$ 6,033,400	\$ 6,198,500	\$ 2,924,000	\$ 6,636,100	\$ 6,859,000	\$ 6,967,300	\$ 7,077,200	\$ 7,125,200

Section 5D

Administrative Services

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Board of Directors

A governing body that brings together representatives from the surrounding counties to set policies that help GLWA execute its mission and vision in the long-term to ensure GLWA is a provider of choice for water and wastewater services in Southeast Michigan.

Organization

The Board of Directors is composed of six voting members. Two members are residents of the City of Detroit and are appointed by the Mayor of the city. The counties of Wayne, Oakland, and Macomb each appoint one member who is a resident of the county from which appointed. The Governor of the State of Michigan appoints one member who is a resident of an area served by GLWA that is outside of the three counties.

Expense Categories

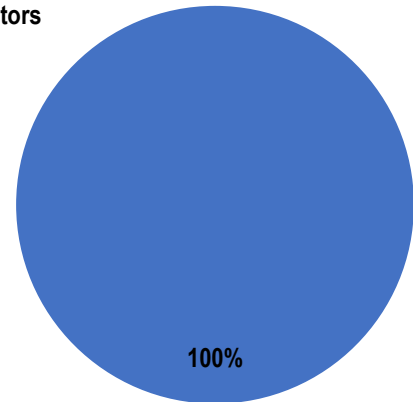
The primary cost driver in the Board of Directors' area is Salaries, Wages and Benefits. This is the category in which the Board's stipends are recorded. A budget to actual variance is recognized when a Board member opts out of receiving the monthly stipend.

Supplies & Other is the other expenditure category which includes the following expenses:

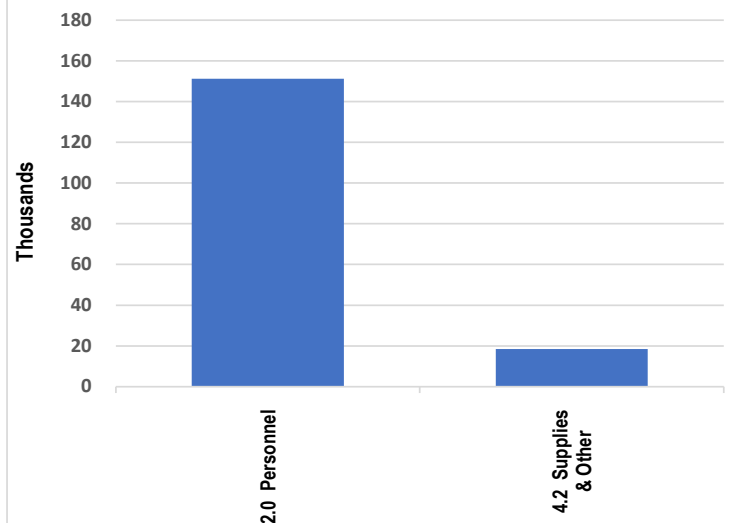
- ❖ Memberships, Licenses & Subscriptions
- ❖ Travel
- ❖ Training & Internal Meetings

FY 2023 REQUEST BY TEAM

■ Board of Directors



FY 2023 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects a decrease of \$1,450,000, or 89.5%, in FY 2023. There is no change in the Personnel and Supplies & Other categories.

- ❖ Personnel - FY 2023 assumes 100% participation in the stipend for Board members. The budget is amended during the current year if Board members opt out of receiving the monthly stipend.
- ❖ Contractual Services – The FY 2022 Amended Budget includes three contracts for the independent investigation into the June 25th-26th, 2021, and July 16th, 2021, rain events. These contracts should conclude prior to the end of FY 2022.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 157,500	\$ 151,200	\$ 75,600	\$ 151,200	\$ -	0.0%	\$ 151,200
4.2 Supplies & Other	-	18,400	2,400	18,400	-	0.0%	18,400
4.3 Contractual Services	-	1,450,000	157,500	-	(1,450,000)	-100.0%	-
Grand Total	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ (1,450,000)	-89.5%	\$ 169,600

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Board of Directors	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ (1,450,000)	-89.5%	\$ 169,600
Grand Total	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ (1,450,000)	-89.5%	\$ 169,600

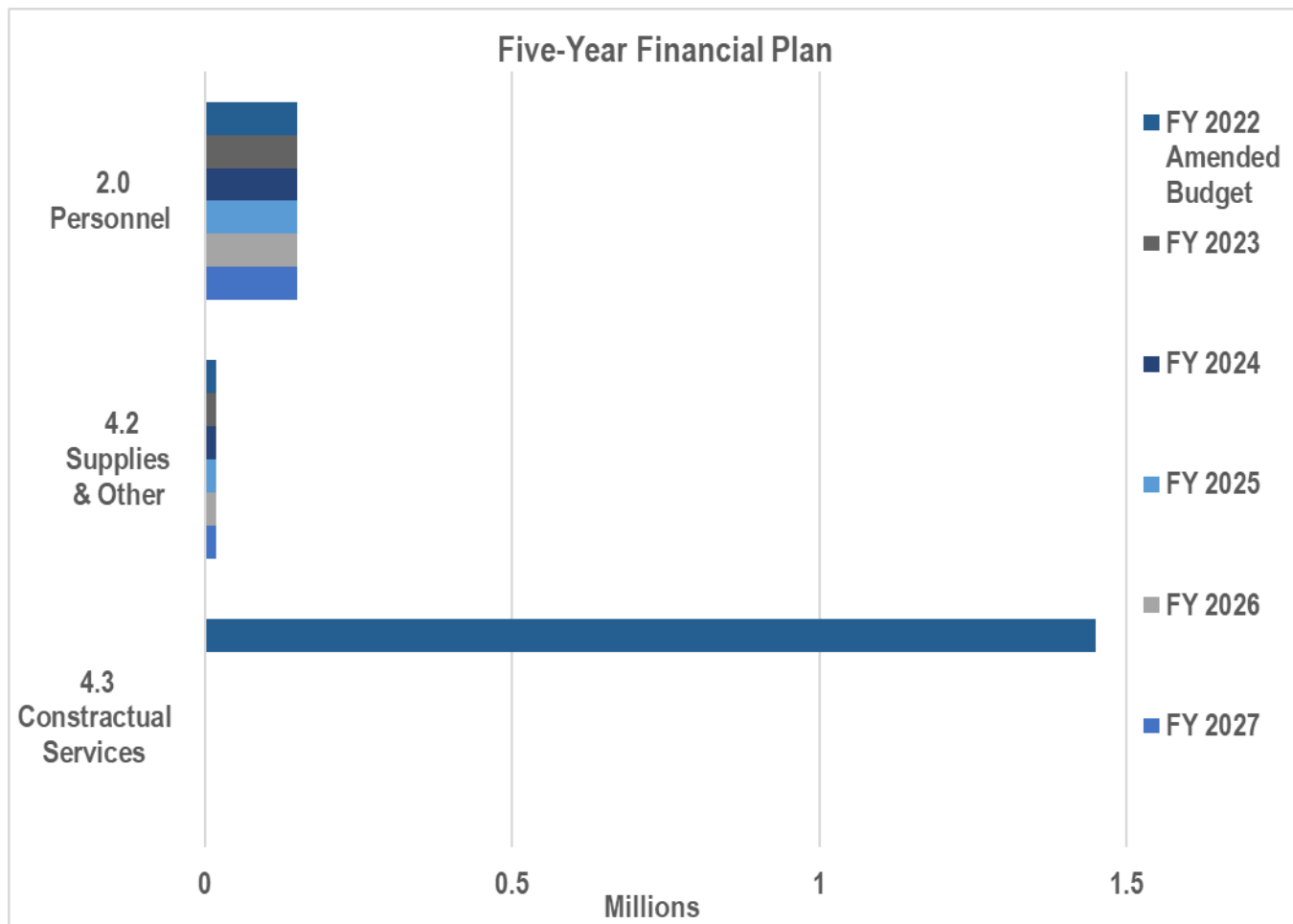
Personnel Budget

The Board of Directors' Area is not reported in the GLWA Staffing Plan and Full-time Equivalents tables.

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 157,500	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200
4.2 Supplies & Other	-	18,400	18,400	18,400	18,400	18,400	18,400
4.3 Contractual Services	-	1,450,000	-	-	-	-	-
Grand Total	\$ 157,500	\$ 1,619,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600

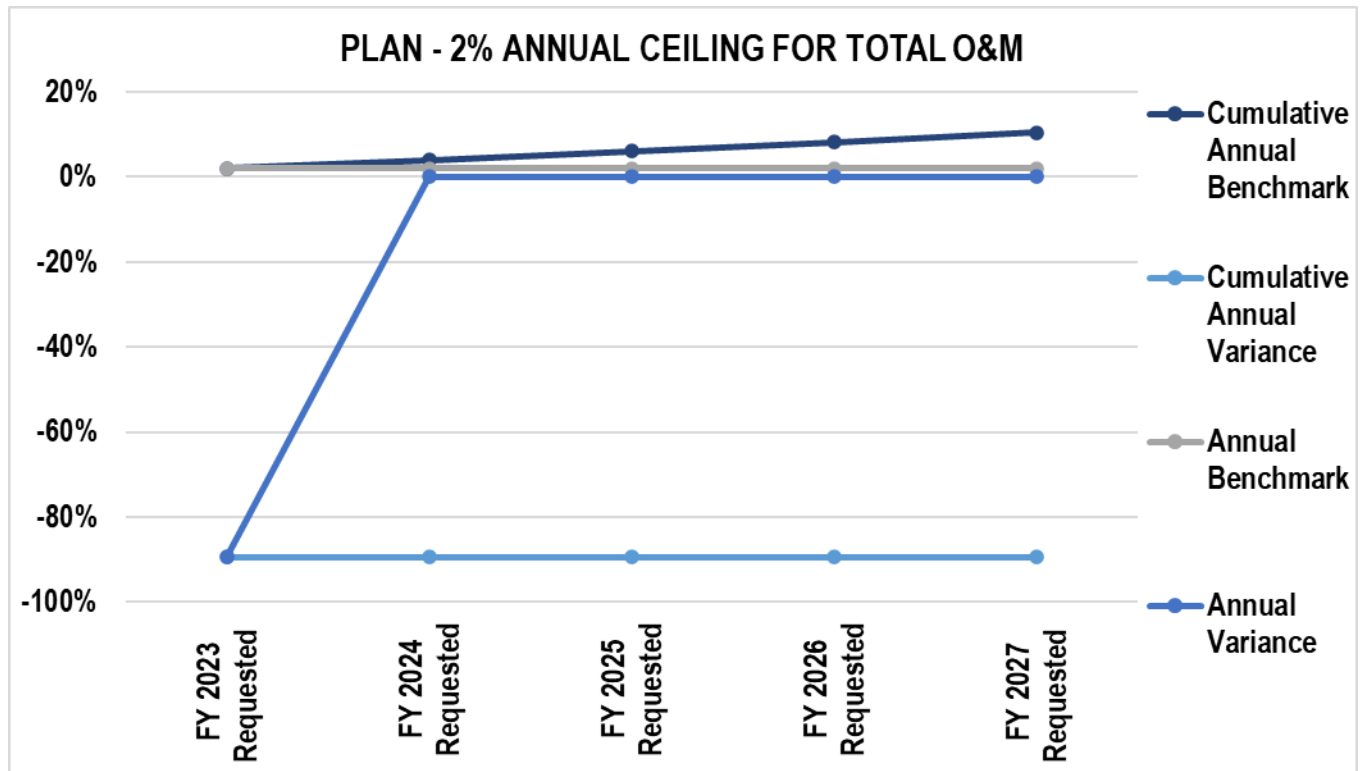


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Board of Directors	\$ 157,500	\$ 1,619,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600
Grand Total	\$ 157,500	\$ 1,619,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Board of Directors' financial plan reflects a five-year overall decrease of 89.5% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment. The five-year overall increase without the FY 2022 independent investigation contracts is 0.0%.



Capital Outlay

Capital Outlay is not a component of the Board of Directors' Area.

Line-Item Budget and Financial Plan

The Board of Directors five-year plan by line-item expense is listed below. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
881151 - Board of Directors	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600
2.1 Salaries & Wages	157,500	151,200	75,600	151,200	151,200	151,200	151,200	151,200
4.2 Supplies & Other	-	18,400	2,400	18,400	18,400	18,400	18,400	18,400
Memberships, Licenses & Subscriptions	-	5,300	-	5,300	5,300	5,300	5,300	5,300
Office Supplies	-	2,600	-	2,600	2,600	2,600	2,600	2,600
Training and Internal Meetings	-	5,300	2,400	5,300	5,300	5,300	5,300	5,300
Travel	-	5,200	-	5,200	5,200	5,200	5,200	5,200
4.3 Contractual Services	-	1,450,000	157,500	-	-	-	-	-
Contractual Svcs-Flood Events -All Sewer	-	1,450,000	157,500	-	-	-	-	-
Grand Total	\$ 157,500	\$ 1,619,600	\$ 235,500	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600	\$ 169,600

Chief Executive Officer

The Chief Executive Officer is responsible for the day-to-day supervision and management of the affairs of the utility, including establishing and delineating organizational goals and objectives which further GLWA's mission and vision.

Strategic Initiatives

In conjunction with the GLWA Board, the Chief Executive Officer's initiatives are established and span multiple years. These initiatives speak to the values that are foundational to the establishment of GLWA.

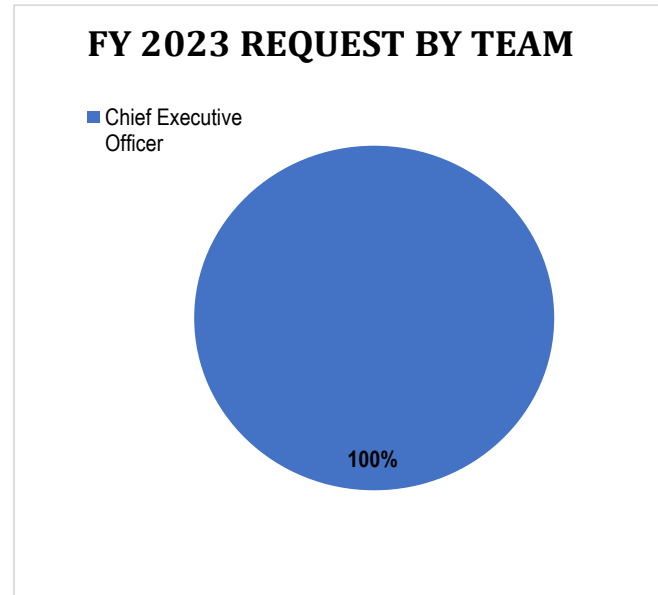
- ❖ Environmental Regulatory Compliance (Ongoing)
- ❖ Financial Resiliency and Charge Equity and Stability (Ongoing)
- ❖ Capital and Operational Utility Optimization (Ongoing)
- ❖ Member Partner Engagement and Satisfaction (Ongoing)
- ❖ GLWA Team Member Support and Retention (Ongoing)
- ❖ GLWA 4% Promise to contain revenue requirement (Ongoing)
- ❖ Commitment to Affordability, Equity, and Inclusion (Ongoing)
- ❖ Application of principles of Effective Utility Management (EUM) (Ongoing)

The following table shows how the Chief Executive Officer's initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Chief Executive Officer Strategic Initiatives	Environmental Regulatory Compliance	x	x	x				x	x			x
	Financial Resiliency and Charge Equity and Stability	x	x					x	x	x		x
	Capital and Operational Utility Optimization	x	x	x	x	x	x	x	x			x
	Member Partner Engagement and Satisfaction						x	x	x	x		x
	GLWA Team Member Support and Retention		x	x	x	x	x	x	x	x	x	x
	GLWA 4% Promise to contain revenue requirement							x		x		
	Commitment to Affordability, Equity, and Inclusion	x	x				x	x	x			x
	Application of principles of Effective Utility Management (EUM)	x	x	x	x	x	x	x	x	x	x	x

Organization

The Chief Executive Officer's area has one team.

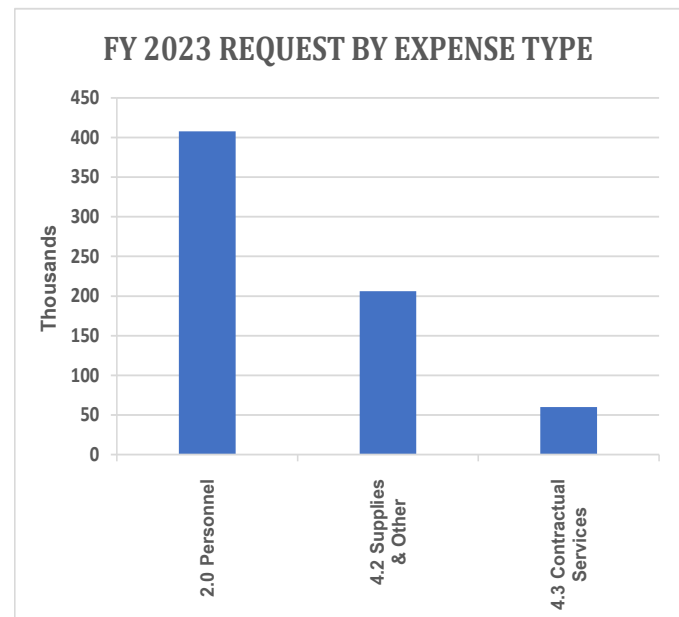


Expense Categories

The Chief Executive Officer's area consists of three major expense categories:

- ❖ Personnel
- ❖ Supplies & Other
- ❖ Contractual Services

Based upon the nature of this service area, the highest category of expense is salaries. The second highest, Supplies & Other, provides for training, organizational memberships, and includes the contract with Park Rite for parking spaces.



Biennial Budget Request

The biennial budget reflects a decrease of \$86,300, or 11.3%, in FY 2023.

- ❖ Personnel – FY 2022 amended budget includes the transition of the CEO, who retired in July 2021, to the Interim CEO as a national search is being conducted for the authority's new CEO.
- ❖ Contractual Services – The FY 2022 amended budget has been increased to cover the additional costs anticipated for the transition of the new CEO.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 403,100	\$ 451,100	\$ 302,100	\$ 407,900	\$ (43,200)	-9.6%	\$ 409,600
4.2 Supplies & Other	166,700	205,400	92,500	206,300	900	0.4%	210,300
4.3 Contractual Services	-	104,000	-	60,000	(44,000)	0.0%	61,200
Grand Total	\$ 569,800	\$ 760,500	\$ 394,600	\$ 674,200	\$ (86,300)	-11.3%	\$ 681,100

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Executive Officer	\$ 569,800	\$ 760,500	\$ 394,600	\$ 674,200	\$ (86,300)	-11.3%	\$ 681,100
Grand Total	\$ 569,800	\$ 760,500	\$ 394,600	\$ 674,200	\$ (86,300)	-11.3%	\$ 681,100

Personnel Budget

The staffing plan provides for the Chief Executive Officer and administrative support. This is consistent with the staffing plans of prior years.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan – The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Full Time Equivalents – The following table presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full Time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Personnel Budget - The table below presents the Chief Executive Officer's personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above using current pay levels. Wage and benefit adjustments are based on merit increases and are accounted for in the Unallocated Reserve line item for the Administrative Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

The FY 2022 amended budget shows an increase due to the overlap of the CEO and the Interim CEO who assumed the role prior to the CEO's retirement in September 2021.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Executive Officer	\$ 403,100	\$ 451,100	\$ 302,100	\$ 407,900	\$ (43,200)	-9.6%	\$ 409,600
Grand Total	\$ 403,100	\$ 451,100	\$ 302,100	\$ 407,900	\$ (43,200)	-9.6%	\$ 409,600

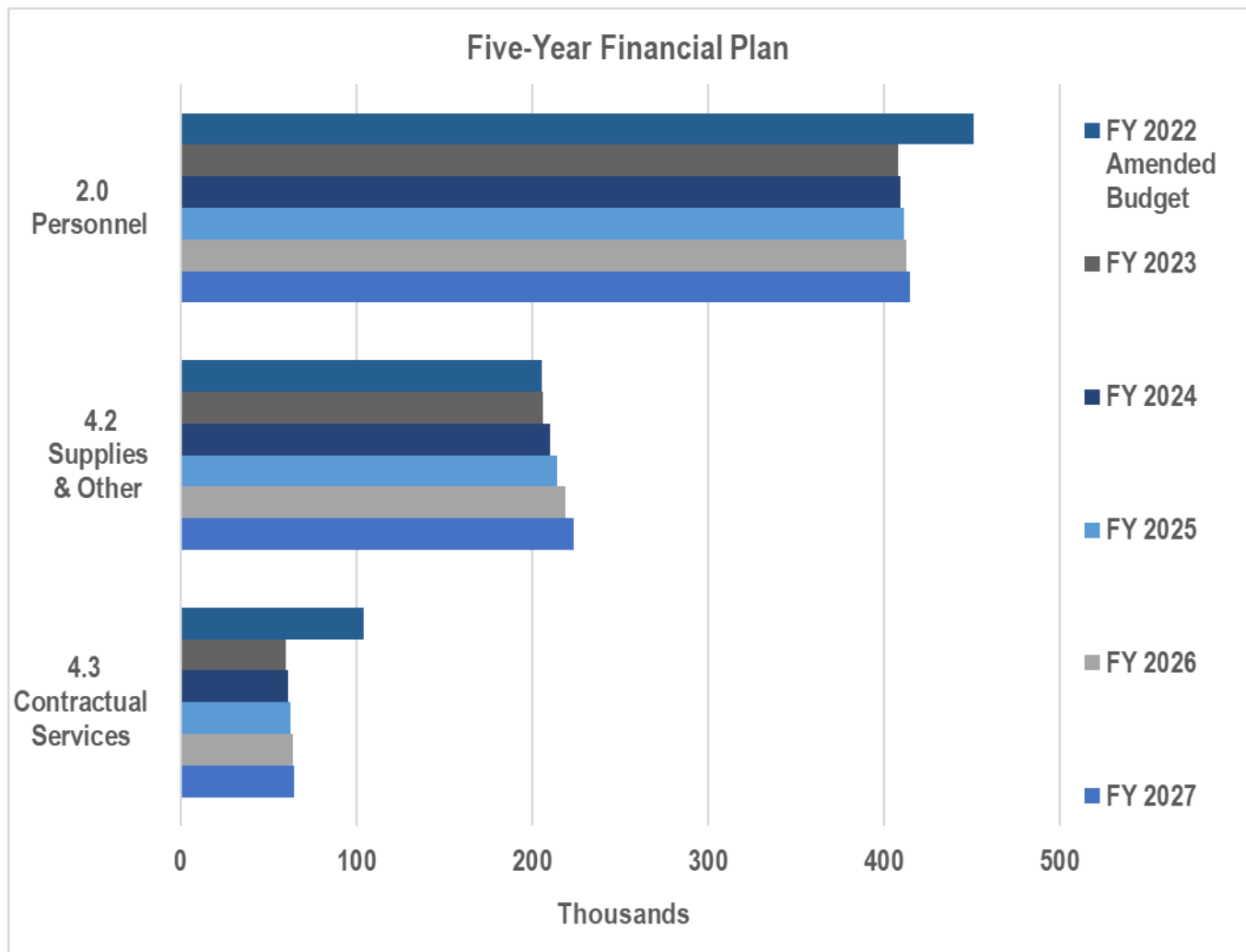
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Executive Officer	\$ 403,100	\$ 451,100	\$ 407,900	\$ 409,600	\$ 411,300	\$ 412,900	\$ 414,600
Grand Total	\$ 403,100	\$ 451,100	\$ 407,900	\$ 409,600	\$ 411,300	\$ 412,900	\$ 414,600

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 403,100	\$ 451,100	\$ 407,900	\$ 409,600	\$ 411,300	\$ 412,900	\$ 414,600
4.2 Supplies & Other	166,700	205,400	206,300	210,300	214,500	219,100	223,300
4.3 Contractual Services	-	104,000	60,000	61,200	62,400	63,700	64,900
Grand Total	\$ 569,800	\$ 760,500	\$ 674,200	\$ 681,100	\$ 688,200	\$ 695,700	\$ 702,800

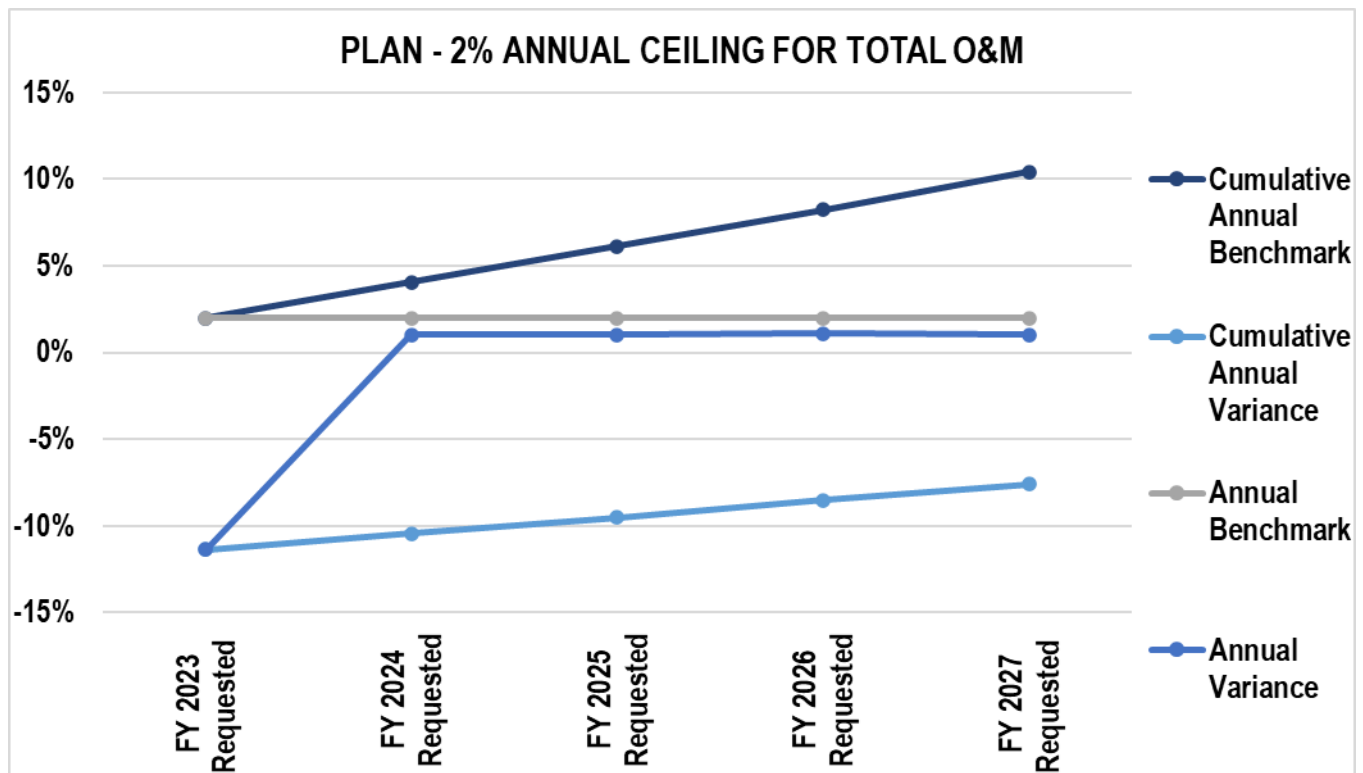


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Executive Officer	\$ 569,800	\$ 760,500	\$ 674,200	\$ 681,100	\$ 688,200	\$ 695,700	\$ 702,800
Grand Total	\$ 569,800	\$ 760,500	\$ 674,200	\$ 681,100	\$ 688,200	\$ 695,700	\$ 702,800

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Chief Executive Officer's financial plan reflects a five-year overall decrease of 7.6% while the entity-wide goal is a cumulative 10.4% ceiling for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Capital Outlay is not a component of the Chief Executive Officer Area.

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is listed below. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
881001 - Chief Executive Officer	\$ 569,800	\$ 760,500	\$ 394,600	\$ 674,200	\$ 681,100	\$ 688,200	\$ 695,700	\$ 702,800
2.1 Salaries & Wages	353,100	370,200	241,000	322,800	322,800	322,800	322,800	322,800
Salaries & Wages	353,100	370,200	241,000	322,800	322,800	322,800	322,800	322,800
2.4 Employee Benefits	50,000	80,900	61,100	85,100	86,800	88,500	90,100	91,800
Employee Benefits	50,000	80,900	61,100	85,100	86,800	88,500	90,100	91,800
4.2 Supplies & Other	166,700	205,400	92,500	206,300	210,300	214,500	219,100	223,300
Memberships, Licenses & Subscriptions	103,400	107,300	52,300	107,300	109,400	111,600	113,900	116,100
Office Supplies	800	10,600	800	10,600	10,800	11,000	11,300	11,500
Postage	-	100	-	100	100	100	100	100
Mileage and Parking	62,400	69,000	39,400	69,900	71,300	72,700	74,200	75,700
Training and Internal Meetings	100	7,400	-	7,400	7,500	7,700	7,900	8,000
Travel	-	11,000	-	11,000	11,200	11,400	11,700	11,900
4.3 Contractual Services	-	104,000	-	60,000	61,200	62,400	63,700	64,900
Contractual Professional Services	-	104,000	-	60,000	61,200	62,400	63,700	64,900
Grand Total	\$ 569,800	\$ 760,500	\$ 394,600	\$ 674,200	\$ 681,100	\$ 688,200	\$ 695,700	\$ 702,800

Chief Administrative and Compliance Officer

The Chief Administrative and Compliance Officer Area support the ongoing labor negotiations throughout GLWA.

Strategic Initiatives

❖ Support GLWA's Cooperative Labor-Management Relationship (Ongoing)

Focus on expansion of safety teams; identify and acknowledge safe work performance. This strategic initiative is measured by the success of negotiation and implementation of the Collective Bargaining Agreement along with quick resolution of any unfair labor practices complaints.

❖ Continue Build Out of Legislative Relations team (Ongoing)

Establish annual legislative agenda for the utility.

❖ Support multi-area change management throughout the utility (Ongoing)

Provide leadership support for large multi-area initiatives.

The following table shows how the Chief Administrative and Compliance Officer Area strategic initiatives relate to the organizational strategic goals.

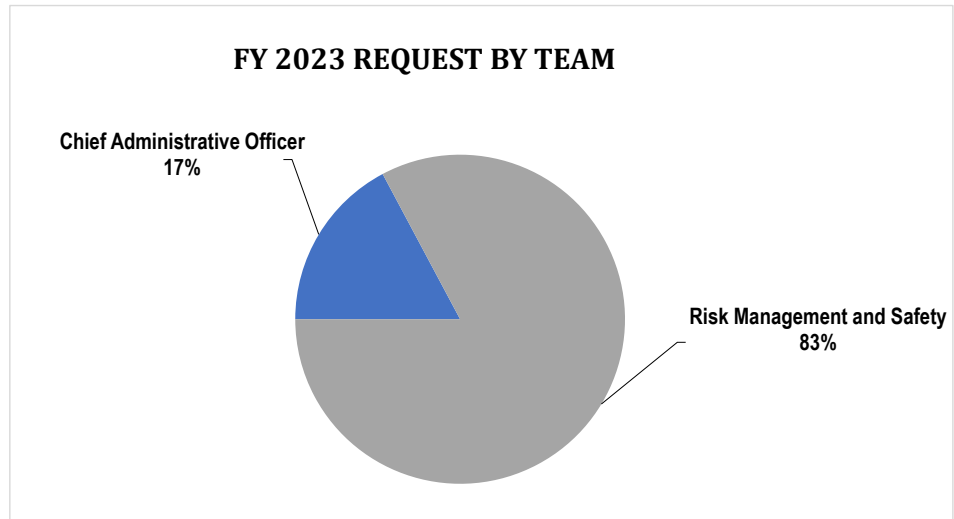
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Chief Administrative Officer Strategic Initiatives	Support GLWA's Cooperative Labor-Management Relationship						x					
	Continue Build Out of Legislative Relations Team						x		x	x		x
	Support Multi-Area Change Management Throughout The Utility				x			x	x		x	x

Organization

The Chief Administrative and Compliance Officer (CACO) Area consists of two teams.

❖ Chief Administrative Officer

Provides support to the Board of Directors and the Chief Executive Officer. The Office provides coordinative services and administrative support to Enterprise Risk Management, Organizational Development, General Counsel and Information Technology.



❖ Risk Management and Safety

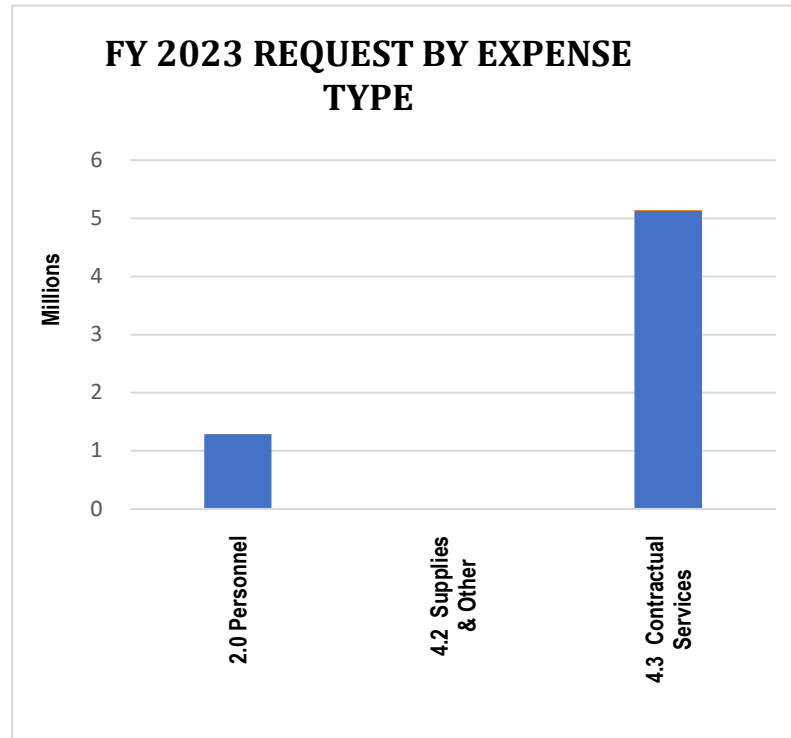
Responsible for a process, effected by GLWA's board of directors and management, which is designed to identify potential events that may affect the Authority, and to manage risk within its risk appetite to provide reasonable assurance regarding the achievement of GLWA's objectives.

Expense Categories

There are three major categories of Chief Administrative and Compliance Officer area expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel
- ❖ Supplies & Other
- ❖ Contractual Services

Contractual Services is the highest expense category and for FY 2023. The contractual services account encompasses two major contracts; Government Relation Services and NTH Engineering contract (#2002946) which replaces an earlier NTH Engineering contract (CS-213) for environmental health and safety compliance services



Biennial Budget Request

The biennial budget reflects an overall increase of \$82,600, or 1.3% in FY 2023.

- ❖ The personnel account is decreasing by \$117,500 due to the decision to delay filling the four vacant positions until fourth quarter of FY 2023. There is one vacant position in the Chief Administrator Officer personnel budget and three vacant positions in Risk Management and Safety personnel budget.
- ❖ The supplies and other account is increasing by \$2,900 to invest in employee training and development.
- ❖ The contractual services account is increasing by \$197,200 to reflect the estimated annual premium rate increase within the Enterprise Risk Management Fund associated with the placement of insurance policies.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 1,138,200	\$ 1,421,400	\$ 605,400	\$ 1,303,900	\$ (117,500)	-8.3%	\$ 1,638,800
4.2 Supplies & Other	13,900	28,900	5,400	31,800	2,900	10.0%	32,300
4.3 Contractual Services	3,905,000	4,963,600	1,976,000	5,160,800	197,200	4.0%	5,263,900
Grand Total	\$ 5,057,100	\$ 6,413,900	\$ 2,586,800	\$ 6,496,500	\$ 82,600	1.3%	\$ 6,935,000

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Administrative Officer	\$ 719,100	\$ 1,174,100	\$ 420,000	\$ 1,118,400	\$ (55,700)	-4.7%	\$ 1,219,300
Risk Management and Safety	4,338,000	5,239,800	2,166,800	5,378,100	138,300	2.6%	5,715,700
Grand Total	\$ 5,057,100	\$ 6,413,900	\$ 2,586,800	\$ 6,496,500	\$ 82,600	1.3%	\$ 6,935,000

Personnel Budget

The Chief Administrative and Compliance Officer Area consists of 13 positions for FY 2023, which is staying consistent with the FY 2022 staffing level.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan – The following table presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Chief Administrative and Compliance Officer Area	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Chief Administrative Officer	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Risk Management and Safety	8.00	8.00	8.00	8.00	8.00	8.00	8.00

Full-time Equivalent - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year.

Full-time Equivalent

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Chief Administrative and Compliance Officer Area	13.00	11.50	10.00	13.00	13.00	13.00	13.00
Chief Administrative Officer	5.00	5.00	4.25	5.00	5.00	5.00	5.00
Risk Management and Safety	8.00	6.50	5.75	8.00	8.00	8.00	8.00

Personnel Budget - The table below presents the Chief Administrative and Compliance Officer Area personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Administrative Officer	\$ 590,200	\$ 707,600	\$ 320,900	\$ 640,200	\$ (67,400)	-9.5%	\$ 731,700
Risk Management and Safety	548,000	713,800	284,500	663,700	(50,100)	-7.0%	907,100
Grand Total	\$ 1,138,200	\$ 1,421,400	\$ 605,400	\$ 1,303,900	\$ (117,500)	-8.3%	\$ 1,638,800

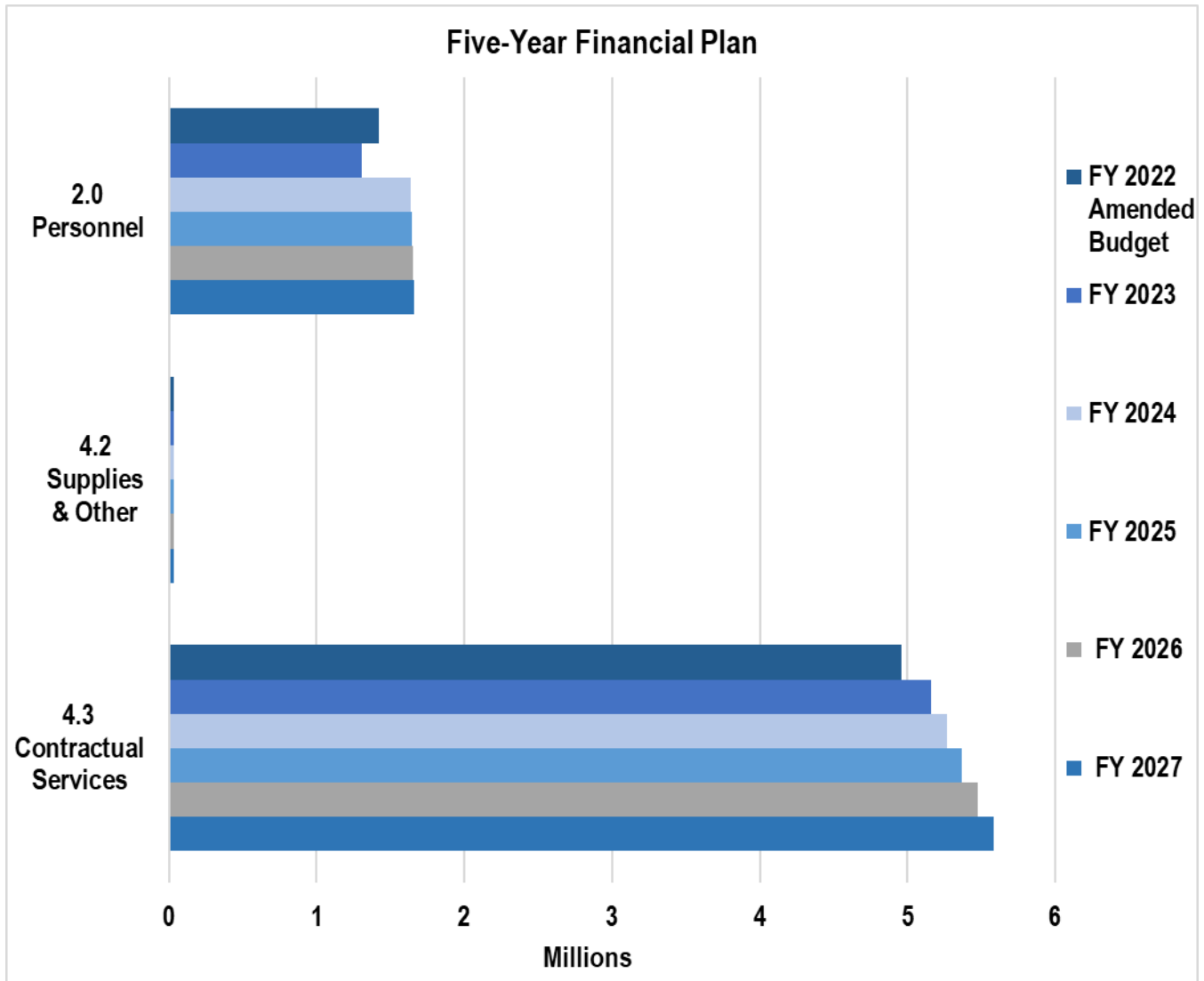
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Administrative Officer	\$ 590,200	\$ 707,600	\$ 640,200	\$ 731,700	\$ 735,000	\$ 738,300	\$ 741,600
Risk Management and Safety	548,000	713,800	663,700	907,100	911,500	916,000	920,400
Grand Total	\$ 1,138,200	\$ 1,421,400	\$ 1,303,900	\$ 1,638,800	\$ 1,646,500	\$ 1,654,300	\$ 1,662,000

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 1,138,200	\$ 1,421,400	\$ 1,303,900	\$ 1,638,800	\$ 1,646,500	\$ 1,654,300	\$ 1,662,000
4.2 Supplies & Other	13,900	28,900	31,800	32,300	32,800	33,500	34,000
4.3 Contractual Services	3,905,000	4,963,600	5,160,800	5,263,900	5,369,200	5,476,500	5,586,000
Grand Total	\$ 5,057,100	\$ 6,413,900	\$ 6,496,500	\$ 6,935,000	\$ 7,048,500	\$ 7,164,300	\$ 7,282,000

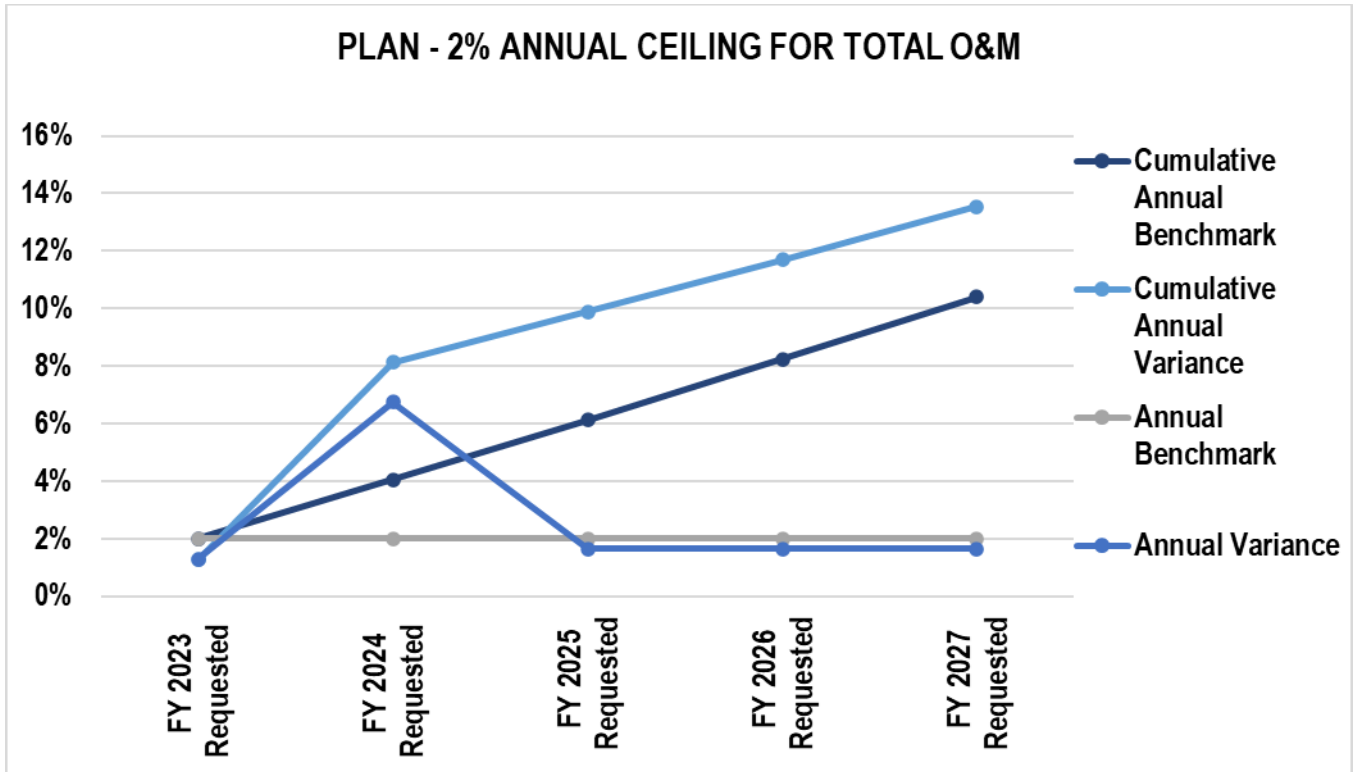


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Administrative Officer	\$ 719,100	\$ 1,174,100	\$ 1,118,400	\$ 1,219,300	\$ 1,232,300	\$ 1,245,500	\$ 1,258,900
Risk Management and Safety	4,338,000	5,239,800	5,378,100	5,715,700	5,816,200	5,918,800	6,023,100
Grand Total	\$ 5,057,100	\$ 6,413,900	6,496,500	\$ 6,935,000	\$ 7,048,500	\$ 7,164,300	\$ 7,282,000

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Chief Administrative and Compliance Officer Area financial plan reflects a five-year overall increase of 13.5% while the entity-wide goal is a cumulative 10.4% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Capital Outlay is not a component of the Chief Administrative and Compliance Officer Area.

Line-Item Budget and Financial Plan

The Chief Administrative and Compliance Officer area five-year plan by line-item expense is listed below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883001 - Chief Administrative Officer	\$ 719,100	\$ 1,174,100	\$ 420,000	\$ 1,118,400	\$ 1,219,300	\$ 1,232,300	\$ 1,245,500	\$ 1,258,900
2.1 Salaries & Wages	490,300	550,400	253,500	494,500	560,800	560,800	560,800	560,800
2.4 Employee Benefits	99,900	157,200	67,400	145,700	170,900	174,200	177,500	180,800
4.2 Supplies & Other	8,900	6,900	3,100	9,400	9,500	9,600	9,800	9,900
Memberships, Licenses & Subscriptions	3,600	700	-	900	900	900	900	900
Office Supplies	400	-	600	-	-	-	-	-
Supplies & Other - Covid19	500	-	-	-	-	-	-	-
Training and Internal Meetings	4,400	2,100	2,500	3,300	3,300	3,300	3,400	3,400
Travel	-	4,100	-	5,200	5,300	5,400	5,500	5,600
4.3 Contractual Services	120,000	459,600	96,000	468,800	478,100	487,700	497,400	507,400
883401 - Risk Management and Safety	4,338,000	5,239,800	2,166,800	5,378,100	5,715,700	5,816,200	5,918,800	6,023,100
2.1 Salaries & Wages	425,200	540,900	214,100	497,900	675,200	675,200	675,200	675,200
2.4 Employee Benefits	122,800	172,900	70,400	165,800	231,900	236,300	240,800	245,200
4.2 Supplies & Other	5,000	22,000	2,300	22,400	22,800	23,200	23,700	24,100
Operating Supplies	4,400	7,000	2,300	7,100	7,200	7,300	7,500	7,600
Training and Internal Meetings	600	15,000	-	15,300	15,600	15,900	16,200	16,500
4.3 Contractual Services	3,785,000	4,504,000	1,880,000	4,692,000	4,785,800	4,881,500	4,979,100	5,078,600
Grand Total	\$ 5,057,100	\$ 6,413,900	\$ 2,586,800	\$ 6,496,500	\$ 6,935,000	\$ 7,048,500	\$ 7,164,300	\$ 7,282,000

General Counsel

Provides legal representation, strategic guidance, counseling, advice, and support to the Great Lakes Water Authority so that it will make sound decisions and use appropriate legal processes to better provide its customers with quality compliant water.

Strategic Initiatives

- ❖ **Work collaboratively with GLWA water member partners to reopen their water usage demands (Ongoing)**
 Ensure that all member partners with direct water service contracts have an opportunity to determine whether they want to adjust their water usage demands. The Board becomes aware of those contracts reopened as all member partner contract amendments are approved by the Board.
- ❖ **Create a Best Practices Manual (Ongoing)**
 Ensure consistent representation of the Authority in contractual, real estate, employment, and litigation matters.
- ❖ **Incorporate a bill review software for Contractual Services (Completion in FY 2023)**
 Use a third-party service to review legal bills budgeted in Contractual Services, which should garner savings in contractual services costs.
- ❖ **Defend litigation related to the summer 2021 rain events.**
 Manage multiple class action lawsuits.

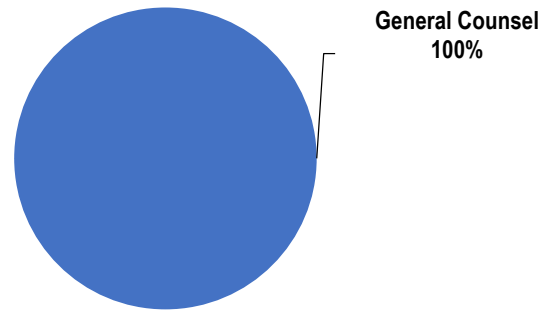
The following table shows how the General Counsel Area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
General Counsel Strategic Initiatives	Work collaboratively with GLWA water member partners to reopen their water usage demands						x	x		x		x
	Create a Best Practices Manual				x	x	x	x		x	x	
	Incorporate a bill review software for Contractual Services				x	x	x	x				
	Defend litigation related to the summer 2021 rain events						x					

Organization

The General Counsel area has one team.

FY 2023 REQUEST BY TEAM



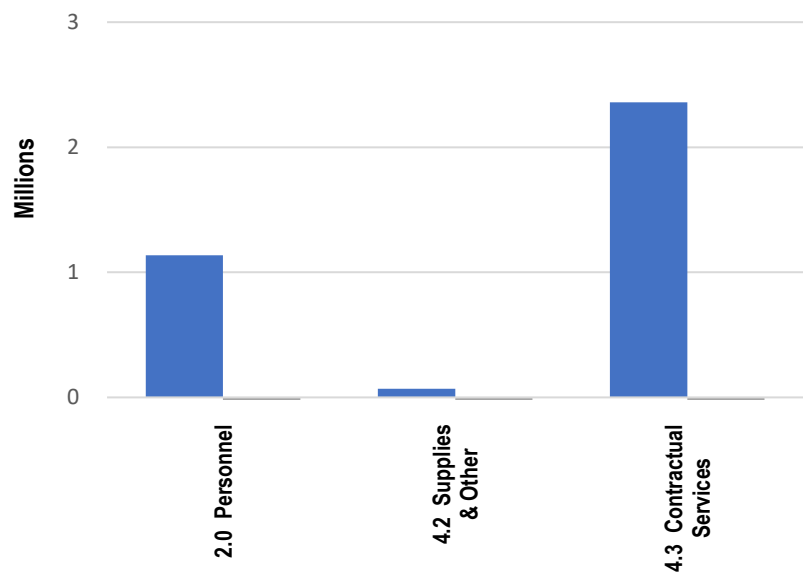
Expense Categories

There are three major categories of General Counsel expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel Costs
- ❖ Supplies & Other
- ❖ Contractual Services

Contractual Services is the highest expense category and for FY 2023 and it is consistent with prior and future budget years. This account contains the outside counsel for a wide range of matters, including expert witnesses, environmental, labor, contract review, land matters, non-transactional bond counsel and other matters.

FY 2023 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an overall decrease of \$88,800 or 2.6% in FY 2023.

- ❖ The personnel account is decreasing by \$105,500 due to the decision to delay filling the vacant Director of Strategic Workplace Relations until fourth quarter of FY 2023.
- ❖ The supplies and other account is increasing by \$48,000. In this budget, \$35,900 is allocated to invest in employee training and development and \$12,100 is for the incremental increase for supplies.
- ❖ The contractual services account is decreasing by \$31,300 due to the additional legal fees in FY 2022 for the flood event are not budgeted to continue into FY 2023.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 958,500	\$ 1,147,400	\$ 535,000	\$ 1,041,900	\$ (105,500)	-9.2%	\$ 1,178,700
4.2 Supplies & Other	9,000	35,300	5,800	83,300	48,000	136.0%	84,800
4.3 Contractual Services	1,031,800	2,173,800	2,023,500	2,142,500	(31,300)	-1.4%	2,185,300
Grand Total	\$ 1,999,300	\$ 3,356,500	\$ 2,564,300	\$ 3,267,700	\$ (88,800)	-2.6%	\$ 3,448,800

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
General Counsel	\$ 1,999,300	\$ 3,356,500	\$ 2,564,300	\$ 3,267,700	\$ (88,800)	-2.6%	\$ 3,448,800
Grand Total	\$ 1,999,300	\$ 3,356,500	\$ 2,564,300	\$ 3,267,700	\$ (88,800)	-2.6%	\$ 3,448,800

Personnel Budget

General Counsel consists of 8 positions for FY 2023, which is staying consistent with the FY 2022 staffing level. The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
General Counsel	7.00	8.00	8.00	8.00	8.00	8.00	8.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
General Counsel	7.00	8.00	7.25	8.00	8.00	8.00	8.00

Personnel Budget - The table below presents the General Counsel personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2024 Department Requested
General Counsel	\$ 958,500	\$ 1,147,400	\$ 535,000	\$ 1,041,900	\$ (105,500)	-9.2%	\$ 1,178,700
Grand Total	\$ 958,500	\$ 1,147,400	\$ 535,000	\$ 1,041,900	\$ (105,500)	-9.2%	\$ 1,178,700

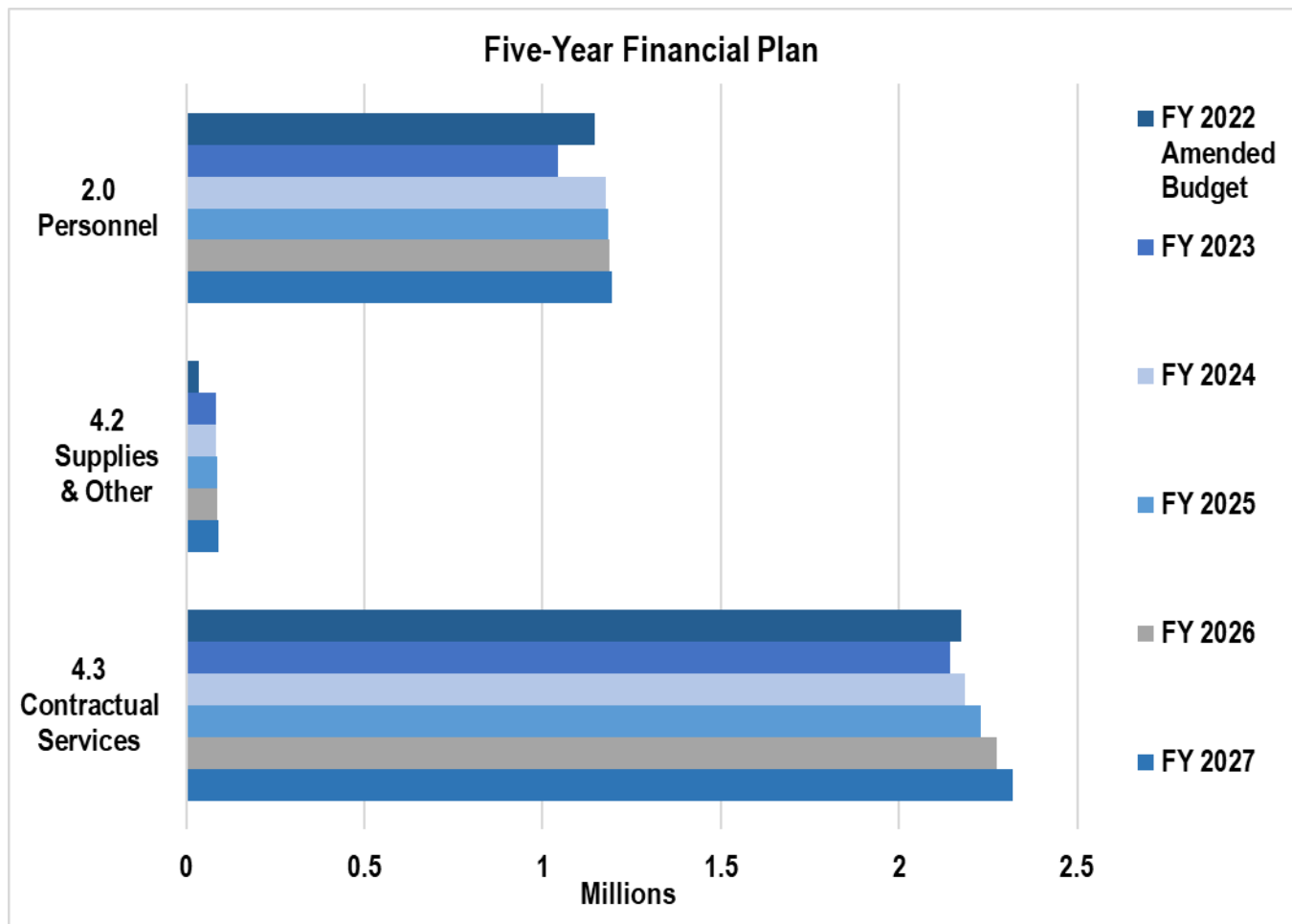
Personnel Budget – Five Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
General Counsel	\$ 958,500	\$ 1,147,400	\$ 1,041,900	\$ 1,178,700	\$ 1,184,000	\$ 1,189,300	\$ 1,194,500
Grand Total	\$ 958,500	\$ 1,147,400	\$ 1,041,900	\$ 1,178,700	\$ 1,184,000	\$ 1,189,300	\$ 1,194,500

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 958,500	\$ 1,147,400	\$ 1,041,900	\$ 1,178,700	\$ 1,184,000	\$ 1,189,300	\$ 1,194,500
4.2 Supplies & Other	9,000	35,300	83,300	84,800	86,400	88,000	89,700
4.3 Contractual Services	1,031,800	2,173,800	2,142,500	2,185,300	2,229,000	2,273,600	2,319,100
Grand Total	\$ 1,999,300	\$ 3,356,500	\$ 3,267,700	\$ 3,448,800	\$ 3,499,400	\$ 3,550,900	\$ 3,603,300

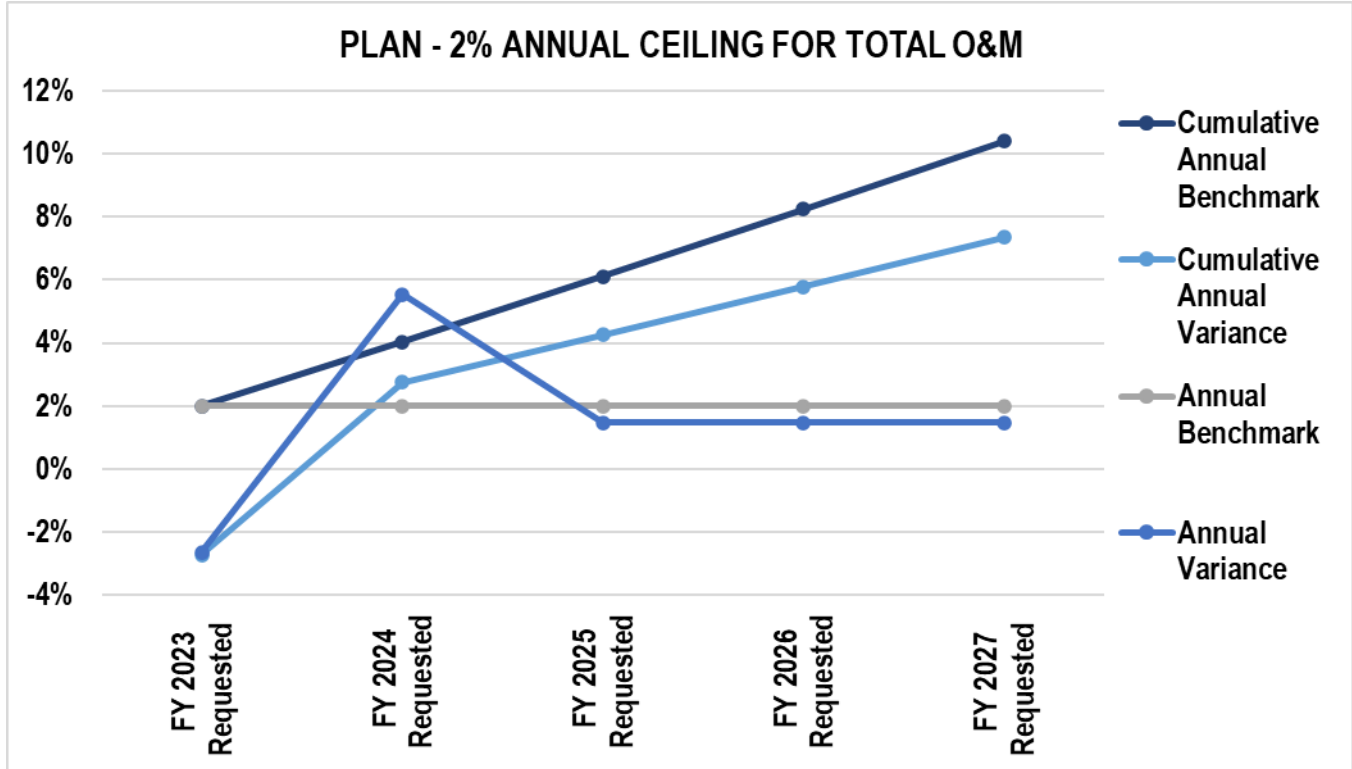


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
General Counsel	\$ 1,999,300	\$ 3,356,500	\$ 3,267,700	\$ 3,448,800	\$ 3,499,400	\$ 3,550,900	\$ 3,603,300
Grand Total	\$ 1,999,300	\$ 3,356,500	\$ 3,267,700	\$ 3,448,800	\$ 3,499,400	\$ 3,550,900	\$ 3,603,300

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The General Counsel Area financial plan reflects a five-year overall increase of 7.4% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Capital Outlay is not a component of the General Counsel Area.

Line-Item Budget and Financial Plan

The General Counsel five-year plan by line-item expense is listed below. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883101 - General Counsel	\$ 1,999,300	\$ 3,356,500	\$ 2,564,300	\$ 3,267,700	\$ 3,448,800	\$ 3,499,400	\$ 3,550,900	\$ 3,603,300
2.1 Salaries & Wages	787,200	893,600	422,500	801,100	904,000	904,000	904,000	904,000
2.4 Employee Benefits	171,300	253,800	112,500	240,800	274,700	280,000	285,300	290,500
4.2 Supplies & Other	9,000	35,300	5,800	83,300	84,800	86,400	88,000	89,700
Memberships, Licenses & Subscriptions	6,500	9,500	4,100	13,000	13,200	13,400	13,600	13,900
Office Supplies	1,200	5,300	200	5,400	5,500	5,600	5,700	5,800
Postage	100	100	100	2,900	2,900	3,000	3,000	3,000
Mileage and Parking	-	-	-	-	-	-	-	-
Training and Internal Meetings	1,200	10,800	1,400	46,700	47,600	48,500	49,500	50,500
Travel	-	9,600	-	15,300	15,600	15,900	16,200	16,500
4.3 Contractual Services	1,031,800	2,173,800	2,023,500	2,142,500	2,185,300	2,229,000	2,273,600	2,319,100
Contractual Operating Services	100	300	100	-	-	-	-	-
Contractual Svcs-Flood Events -All Sewer	-	153,000	-	-	-	-	-	-
Contractual Professional Services	-	-	186,300	-	-	-	-	-
Legal	1,031,700	2,020,500	1,837,100	2,142,500	2,185,300	2,229,000	2,273,600	2,319,100
Grand Total	\$ 1,999,300	\$ 3,356,500	\$ 2,564,300	\$ 3,267,700	\$ 3,448,800	\$ 3,499,400	\$ 3,550,900	\$ 3,603,300

Public Affairs

The Public Affairs Group is responsible for building knowledge of the Authority's mission, vision, and values, as well as sharing its accomplishments with stakeholders – both internal and external.

Strategic Initiatives

❖ **Build/Rebuild Public Trust in GLWA (Ongoing)**

Implement a comprehensive, proactive, and transparent communications campaign to heighten knowledge of GLWA system operations and efforts to improve overall system resiliency. This initiative is tracked through a message pull through in the monthly KPI report under the stakeholder understanding category.

❖ **Provide a Communications Resource to GLWA Member Partners (Ongoing)**

Leverage the resources and capacity of the Public Affairs Team to produce relevant, informative materials/campaigns for use by GLWA and its member partner communities in educating their elected officials, residents, and other stakeholders about important water/wastewater-related issues.

❖ **Refine GLWA's Internal Communications Outreach (Ongoing)**

Continue to refine and implement an internal communications strategy that engages GLWA team members and helps to grow overall team member morale and satisfaction. This initiative will be measured through an internal communication survey to be conducted annually in the first quarter of each calendar year, to help identify what information team members want and how to improve the ways we communicate that information.

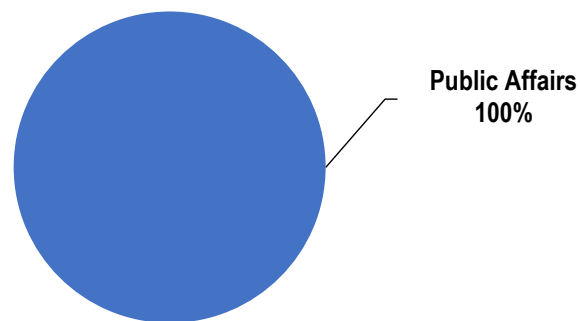
The following table shows how the Public Affairs Area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Public Affairs Strategic Initiatives	Build/Rebuild Public Trust in GLWA	x					x	x		x	x	x
	Provide a Communications Resource to GLWA Member Partners						x	x		x		x
	Refine GLWA's Internal Communications Outreach						x	x		x	x	x

Organization

The Public Affairs area has one team.

FY 2023 REQUEST BY TEAM



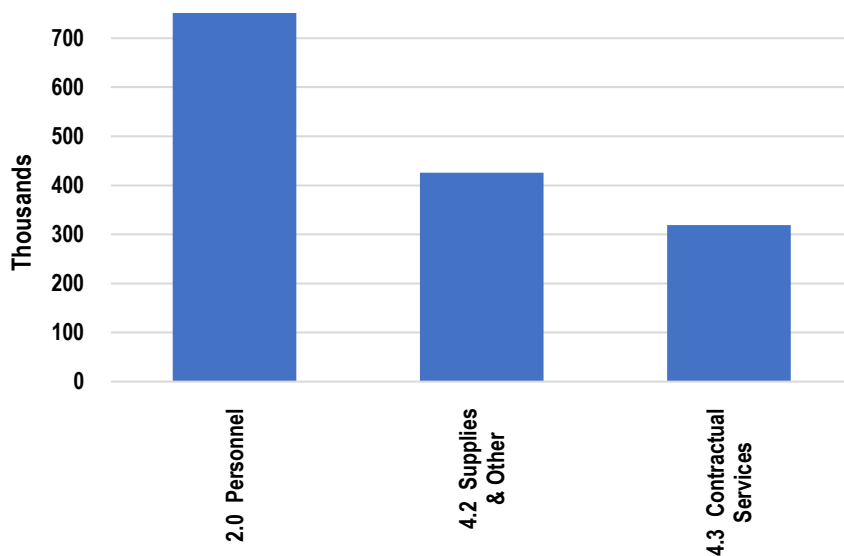
Expense Categories

There are three major categories of Public Affairs expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel
- ❖ Supplies & Other
- ❖ Contractual Services

Personnel is the highest expense category for Public Affairs. In FY 2023, two Public Affairs Specialists will be added to expand the capacity to create a broad base of public education materials and campaigns for GLWA and its member partners and begin to bring external Public Relations (PR) and Marketing services in-house.

FY 2023 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an overall \$57,800 increase, or 3.7% in FY 2023.

- ❖ The personnel account is increasing by \$41,900 due to adding two Public Affairs Specialists. One will be added in first quarter of FY 2023 and the second will be added in the fourth quarter of FY 2023.
- ❖ The supplies & other account is increasing by \$9,700 due to the incremental increase in supplies.
- ❖ The contractual services account is increasing by \$6,200 due to incremental increases in several marketing/communications services.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 635,500	\$ 815,300	\$ 352,800	\$ 857,200	\$ 41,900	5.1%	\$ 1,037,500
4.2 Supplies & Other	102,600	416,200	83,700	425,900	9,700	2.3%	434,200
4.3 Contractual Services	267,800	312,900	155,400	319,100	6,200	2.0%	325,400
Grand Total	\$ 1,005,900	\$ 1,544,400	\$ 591,900	\$ 1,602,200	\$ 57,800	3.7%	\$ 1,797,100

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Public Affairs	\$ 1,005,900	\$ 1,544,400	\$ 588,400	\$ 1,602,200	\$ 57,800	3.7%	\$ 1,797,100
Grand Total	\$ 1,005,900	\$ 1,544,400	\$ 588,400	\$ 1,602,200	\$ 57,800	3.7%	\$ 1,797,100

Personnel Budget

Public Affairs personnel consists of 9 positions for FY 2023, which is an increase of two staffing position from FY 2022. Two Public Affairs Specialists will be added in FY 2023, one in the first quarter and the second in the fourth quarter of FY 2023. The position scheduled to be hired in fourth quarter of FY 2023 will provide sufficient in-house support and capacity to negotiate a lower contract amount when the marketing & communication contract is rebid.

Staffing Plan - The table below presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Public Affairs	8.00	7.00	9.00	9.00	9.00	9.00	9.00

Full-time Equivalents – The following table presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Public Affairs	7.25	7.00	7.50	9.00	9.00	9.00	9.00

Personnel Budget - The table below presents the Public Affairs personnel budget which consists of the following expense categories: Salaries & Wages and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Public Affairs	\$ 635,500	\$ 815,300	\$ 352,800	\$ 857,200	\$ 41,900	5.1%	\$ 1,037,500
Grand Total	\$ 635,500	\$ 815,300	\$ 352,800	\$ 857,200	\$ 41,900	5.1%	\$ 1,037,500

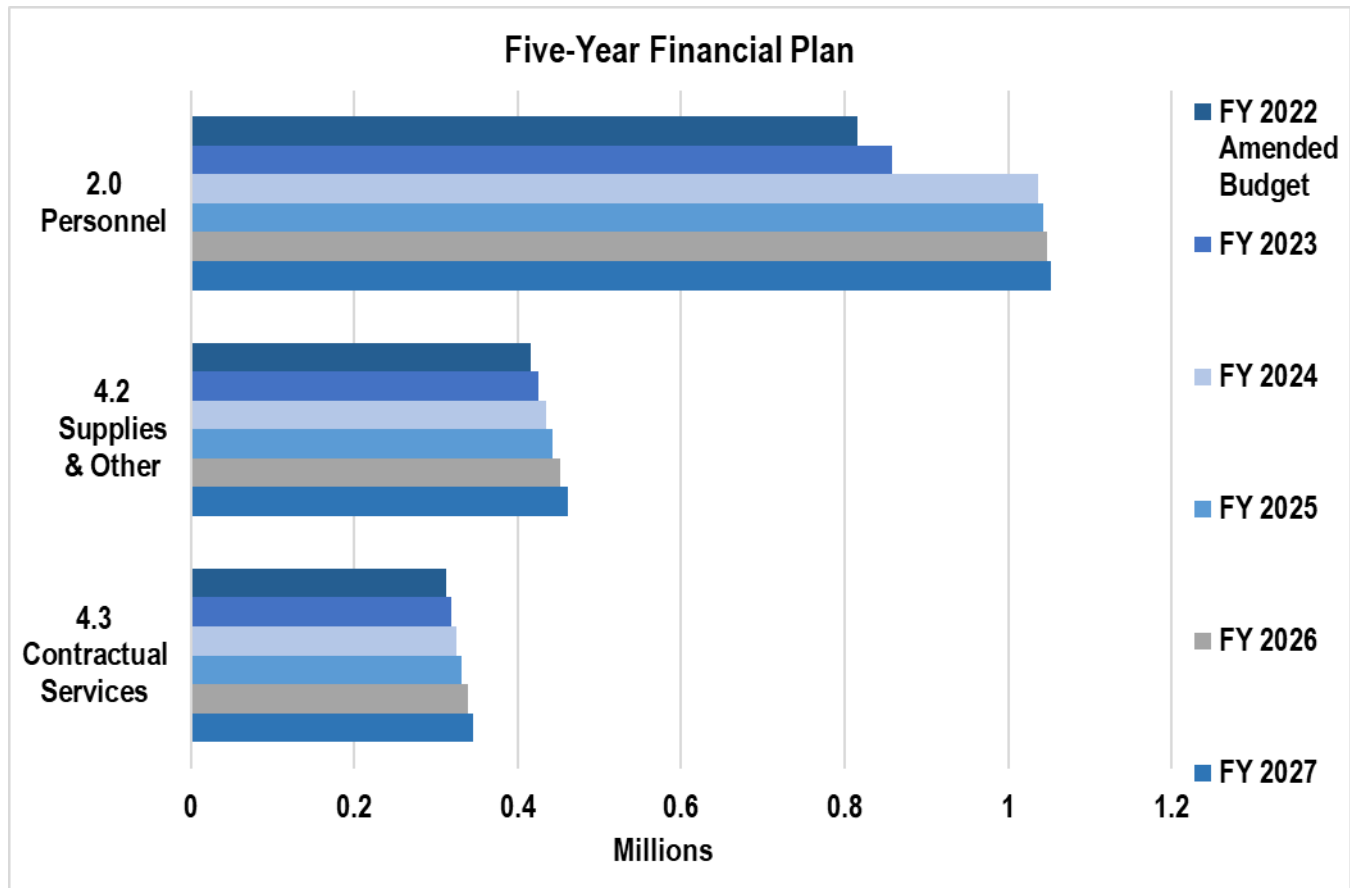
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Public Affairs	\$ 635,500	\$ 815,300	\$ 857,200	\$ 1,037,500	\$ 1,042,600	\$ 1,047,700	\$ 1,052,700
Grand Total	\$ 635,500	\$ 815,300	\$ 857,200	\$ 1,037,500	\$ 1,042,600	\$ 1,047,700	\$ 1,052,700

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 635,500	\$ 815,300	\$ 857,200	\$ 1,037,500	\$ 1,042,600	\$ 1,047,700	\$ 1,052,700
4.2 Supplies & Other	102,600	416,200	425,900	434,200	442,900	451,700	460,800
4.3 Contractual Services	267,800	312,900	319,100	325,400	331,800	338,400	345,200
Grand Total	\$ 1,005,900	\$ 1,544,400	\$ 1,602,200	\$ 1,797,100	\$ 1,817,300	\$ 1,837,800	\$ 1,858,700

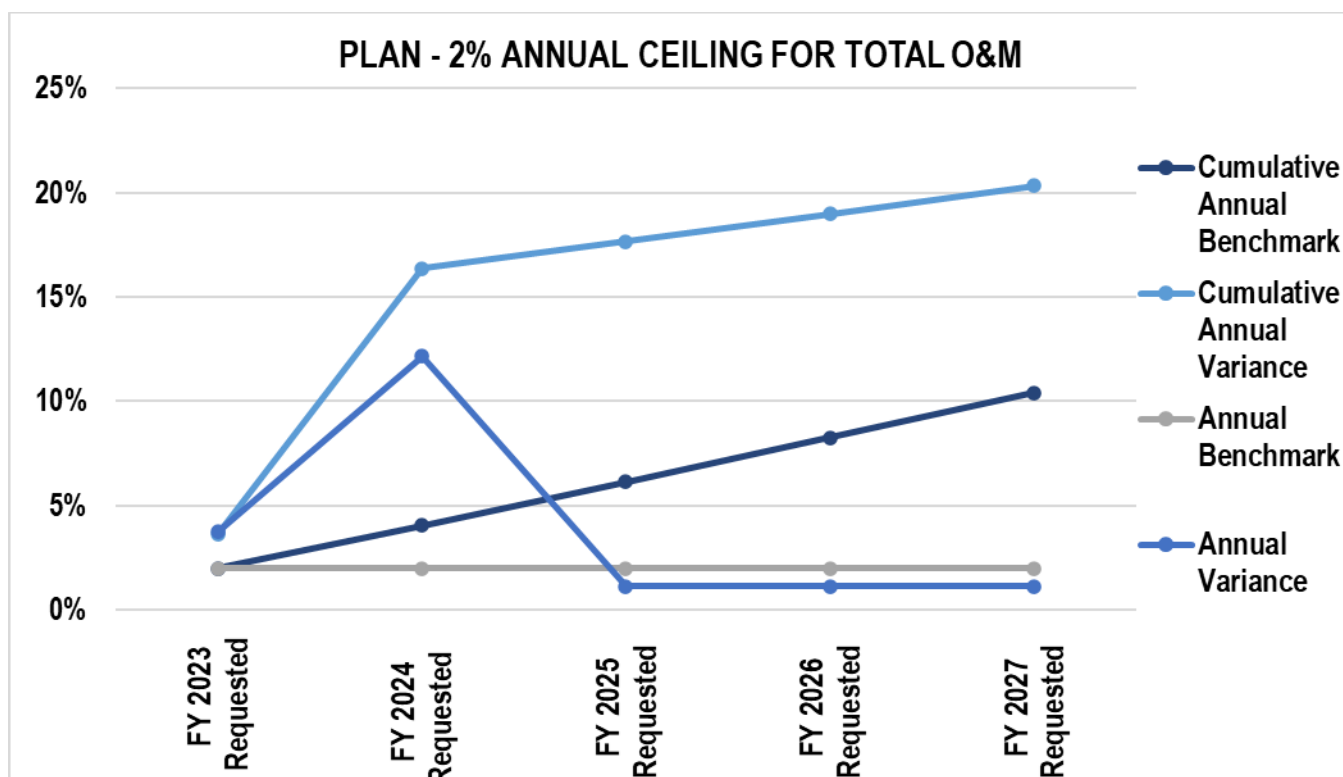


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Public Affairs	\$ 1,005,900	\$ 1,544,400	\$ 1,602,200	\$ 1,797,100	\$ 1,817,300	\$ 1,837,800	\$ 1,858,700
Grand Total	\$ 1,005,900	\$ 1,544,400	\$ 1,602,200	\$ 1,797,100	\$ 1,817,300	\$ 1,837,800	\$ 1,858,700

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Public Affairs Group's financial plan reflects a five-year overall increase of 20.4% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment. The main reason for the increase is due to the addition of two Public Affairs Specialists to expand the capacity to create a broad base of public education materials and campaigns for GLWA and its member partners and begin to bring external Public Relations/Marketing services in-house.



Capital Outlay

Public Affairs capital outlay is funded by the Improvement & Extension budget.

Five-Year Capital Outlay by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000	\$ 22,000
Computers & IT	18,000	22,000	10,000	5,000	18,000	22,000
Grand Total	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000	\$ 22,000

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 18,000	\$ 22,000	\$ 10,000	5,000	\$ 18,000	\$ 22,000
Grand Total	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000	\$ 22,000

Five-Year Capital Outlay by Team

Team	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Public Affairs	\$ 18,000	\$ 22,000	\$ 10,000	5,000	\$ 18,000	\$ 22,000
Grand Total	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000	\$ 22,000

Line-Item Budget and Financial Plan

The five-year plan by line-item expense begins below. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
881101 - Public Affairs	\$ 1,005,900	\$ 1,544,400	\$ 591,900	\$ 1,602,200	\$ 1,797,100	\$ 1,817,300	\$ 1,837,800	\$ 1,858,700
2.1 Salaries & Wages	485,600	583,900	266,000	642,300	774,000	774,000	774,000	774,000
2.4 Employee Benefits	149,900	186,400	83,300	214,900	263,500	268,600	273,700	278,700
2.5 Transition Services	-	45,000	3,500	-	-	-	-	-
4.2 Supplies & Other	102,600	416,200	83,700	425,900	434,200	442,900	451,700	460,800
Mileage and Parking	-	1,300	100	1,200	1,300	1,300	1,300	1,400
Memberships, Licenses & Subscriptions	100	2,000	1,400	-	-	-	-	-
Office Supplies	300	6,500	200	6,600	6,700	6,800	7,000	7,100
Operating Supplies	60,200	105,200	52,800	157,100	160,200	163,300	166,700	170,000
Printing	9,900	42,400	3,100	43,200	44,100	45,000	45,900	46,800
Training and Internal Meetings	(200)	12,300	3,000	12,500	12,700	13,000	13,200	13,500
Travel	-	12,500	3,300	12,700	12,900	13,200	13,400	13,700
Advertising	28,100	234,000	19,800	192,600	196,300	200,300	204,200	208,300
Capital Outlay less than \$5,000	4,200	-	-	-	-	-	-	-
4.3 Contractual Services	267,800	312,900	155,400	319,100	325,400	331,800	338,400	345,200
Grand Total	\$ 1,005,900	\$ 1,544,400	\$ 591,900	\$ 1,602,200	\$ 1,797,100	\$ 1,817,300	\$ 1,837,800	\$ 1,858,700

Organizational Development

Provides GLWA team members with effective and efficient support needed to ensure the best possible work experience, engagement, and personal development, in a collaborative manner, that also provides the best water treatment and service to our customers.

Strategic Initiatives**❖ Apprentices Program (Ongoing)**

GLWA has established a robust apprenticeship program. In FY 2023, GLWA will continue to expand the use of apprenticeships throughout the organization by adding new classes of apprentices and titles to the program. KPI's are reported for apprentices' classes that have started and completed.

❖ Enterprise Resource Management System (ERM) (Ongoing)

Organizational Development provides managed services for GLWA's current Ceridian (ERM) system. Organizational Development is actively participating and supporting GLWA's Enterprise Resource Management System led by Information Technology who maintains the strategic KPI's for this initiative.

❖ Compensation Equity Team (Ongoing)

Organizational Development will initiate a compensation benchmarking study and review of job classifications, job duties and compensation.

❖ One Water Institute (Ongoing)

GLWA's training and development program has provided extensive health and safety course offerings to team members and Member Partners. In FY 2023 GLWA will expand access to the One Water Institute with the rollout of the Leadership Development and Leader-in-Me academies. In FY 2023 the One Water Institute will continue to build out its evening in-person course offerings for GLWA team members.

The following table shows how the Organizational Development Area strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Organizational Development Strategic Initiatives	Apprentice Program			x	x	x	x		x		x	x
	Enterprise Resource Management System (ERM)		x	x	x	x	x					
	Compensation Equity Team		x				x				x	
	One Water Institute			x	x	x	x	x	x		x	x

Organization

The Organizational Development Area consists of three teams.

❖ Administration

Provides coordination and support to the Organizational Development Group and strategic direction for the utility relative to human relations as well as team support and development.

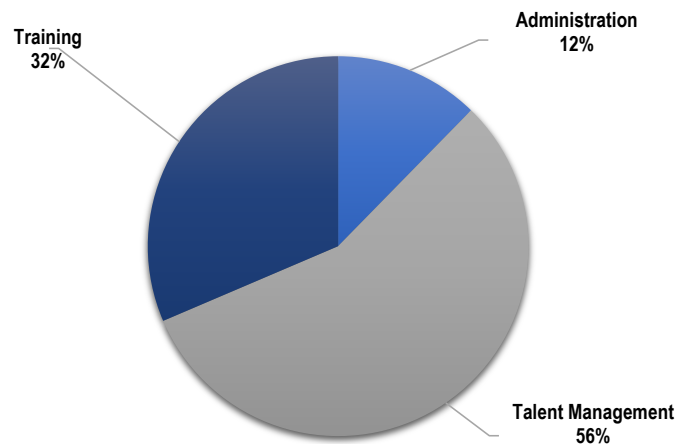
❖ Talent Management

From recruitment to retirement talent management is responsible for supporting all aspects of the employment relationship.

❖ Training

Ensures new GLWA team members receive essential orientation and mandatory health and safety training. The Training Team is also responsible for planning, coordinating, and delivering ongoing health and safety and leadership development training to all GLWA team members. The Training Team provides training opportunities to GLWA's member partners through the One Water Institute.

FY 2023 REQUESTED BY TEAM

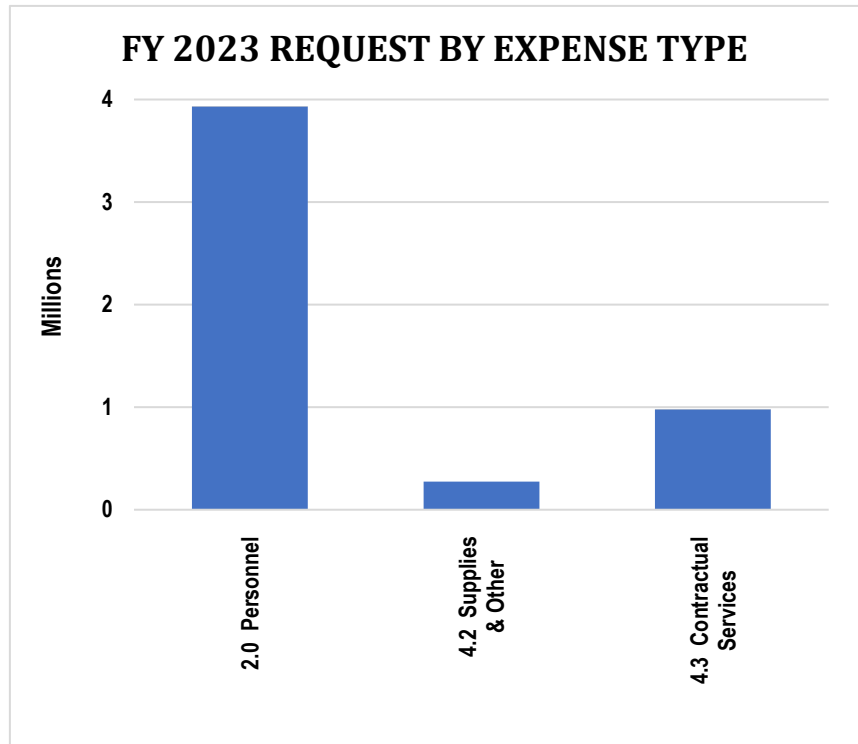


Expense Categories

There are three major categories of Organizational Development (OD) expenses in the Operations and Maintenance Budget as listed below.

- ❖ Personnel Costs
- ❖ Supplies & Other
- ❖ Contractual Services

Personnel Costs is the highest expense category for OD. In FY 2023, two staffing positions will be added in the first quarter to support the Talent Management Team; one Professional Administrative Analyst and one Human Resource Generalist. In the first quarter of FY 2023, the Training Team will be adding one Training Specialist.



Biennial Budget Request

The biennial budget reflects a net \$362,300 increase, or 7.5% in FY 2023.

- ❖ The Personnel account is increasing by \$506,000 due to adding three staffing positions in the first quarter of FY 2023 and a premium increase in employee benefits. The addition of three staffing position is \$304,571 and the remaining \$201,429 is for the employee benefits premium.
- ❖ The supplies & other account is decreasing by \$154,500 in FY 2023, due to the Training Team adjusting their budget to align with actual expenses for the operating supplies account.
- ❖ The contractual services account is increasing by \$10,800 due to incremental increases in other contractual services.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 2,985,200	\$ 3,424,600	\$ 1,521,700	\$ 3,930,600	\$ 506,000	14.8%	\$ 3,951,000
4.2 Supplies & Other	183,300	426,400	56,600	271,900	(154,500)	-36.2%	275,600
4.3 Contractual Services	1,030,900	966,300	457,100	977,100	10,800	1.1%	1,000,000
Grand Total	\$ 4,199,400	\$ 4,817,300	\$ 2,035,400	\$ 5,179,600	\$ 362,300	7.5%	\$ 5,226,600

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Administration	\$ 908,100	\$ 654,000	\$ 433,500	\$ 664,700	\$ 10,700	1.6%	\$ 669,400
Talent Management	1,948,200	2,577,100	953,200	2,815,900	238,800	9.3%	2,844,000
Training	1,343,100	1,586,200	648,700	1,699,000	112,800	7.1%	1,713,200
Grand Total	\$ 4,199,400	\$ 4,817,300	\$ 2,035,400	\$ 5,179,600	\$ 362,300	7.5%	\$ 5,226,600

Personnel Budget

Organizational Development personnel consists of 40 positions for FY 2023, which is an increase of five staffing positions from FY 2022. The increase in staffing is to support Talent Management by adding one Manager, one Professional Administrative Analyst, and two Human Resource Generalists. A Training Specialist is also being added to support the Training Team.

The following tables provide three alternate views of the staffing plans and budget.

Staffing Plan - The following table presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Organizational Development	33.00	35.00	40.00	40.00	40.00	40.00	40.00
Administration	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Talent Management	17.00	18.00	22.00	22.00	22.00	22.00	22.00
Training	12.00	12.00	13.00	13.00	13.00	13.00	13.00

Full-time Equivalents - The table below presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 20267 FTEs
Organizational Development	33.00	35.00	39.00	39.00	39.00	39.00	39.00
Administration	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Talent Management	17.00	18.00	21.00	21.00	21.00	21.00	21.00
Training	12.00	12.00	13.00	13.00	13.00	13.00	13.00

Personnel Budget - The table below presents the Organizational Development personnel budget which consists of the following expense categories: Salaries & Wages, Overtime and Employee Benefits. The values for the personnel budget are based on the full-time equivalents table above.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Administration	\$ 254,100	\$ 553,200	\$ 103,600	\$ 563,800	\$ 10,600	1.9%	\$ 566,600
Talent Management	1,603,200	1,653,100	460,800	2,061,100	408,000	24.7%	2,072,000
Training	1,127,900	1,147,600	406,900	1,305,700	158,100	13.8%	1,312,400
Grand Total	\$ 2,985,200	\$ 3,353,900	\$ 971,300	3,930,600	576,700	17.2%	\$ 3,951,000

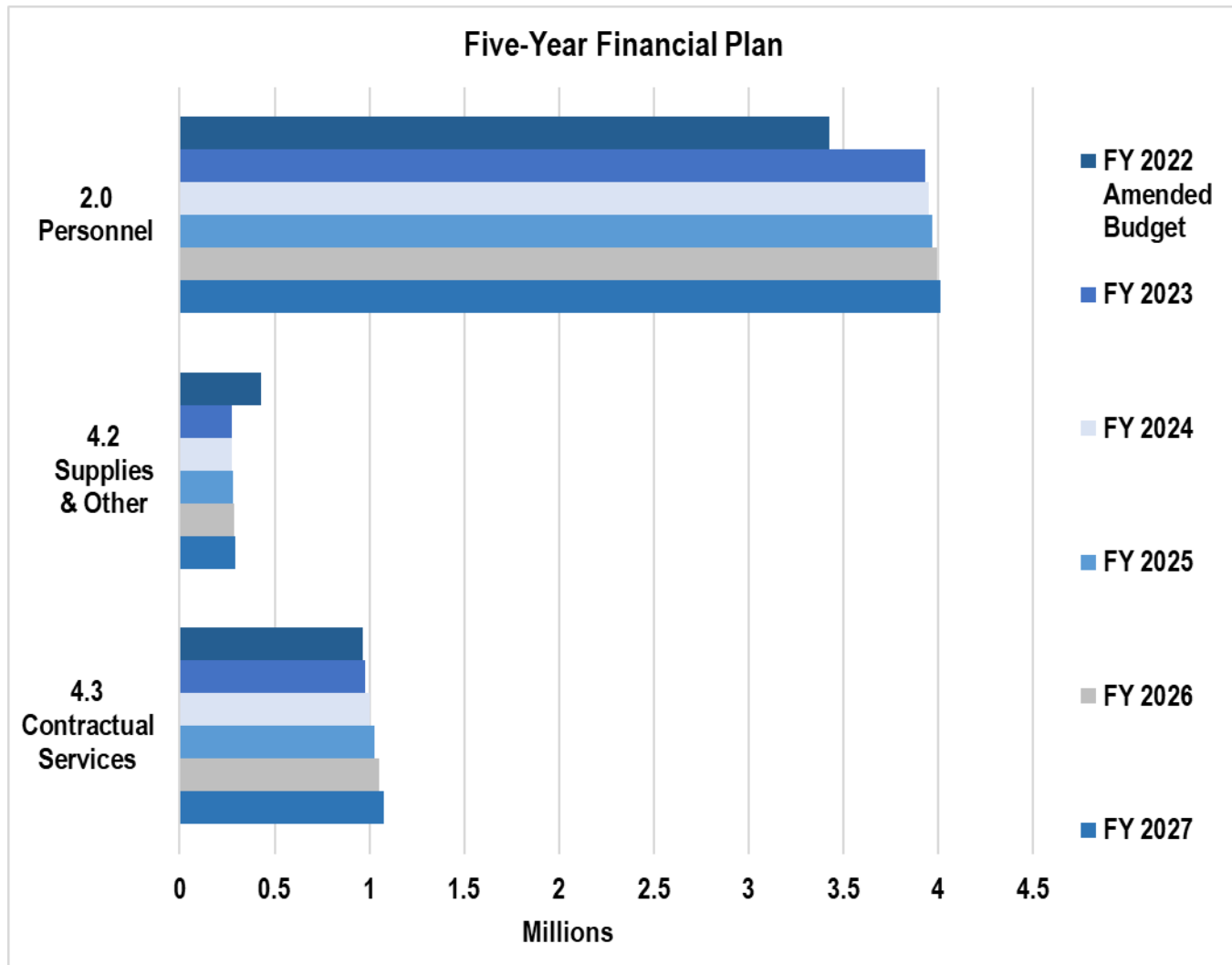
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Administration	\$ 254,100	\$ 553,200	\$ 563,800	\$ 566,600	\$ 569,300	\$ 572,100	\$ 574,900
Talent Management	1,603,200	1,723,800	2,061,100	2,072,000	2,082,900	2,093,700	2,104,600
Training	1,127,900	1,147,600	1,305,700	1,312,400	1,319,200	1,325,900	1,332,700
Grand Total	\$ 2,985,200	\$ 3,424,600	\$ 3,930,600	\$ 3,951,000	\$ 3,971,400	\$ 3,991,700	\$ 4,012,200

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 2,985,200	\$ 3,424,600	\$ 3,930,600	\$ 3,951,000	\$ 3,971,400	\$ 3,991,700	\$ 4,012,200
4.2 Supplies & Other	183,300	426,400	271,900	275,600	281,400	286,600	292,200
4.3 Contractual Services	1,030,900	966,300	977,100	1,000,000	1,024,200	1,049,000	1,074,200
Grand Total	\$ 4,199,400	\$ 4,817,300	\$ 5,179,600	\$ 5,226,600	\$ 5,277,000	\$ 5,327,300	\$ 5,378,600

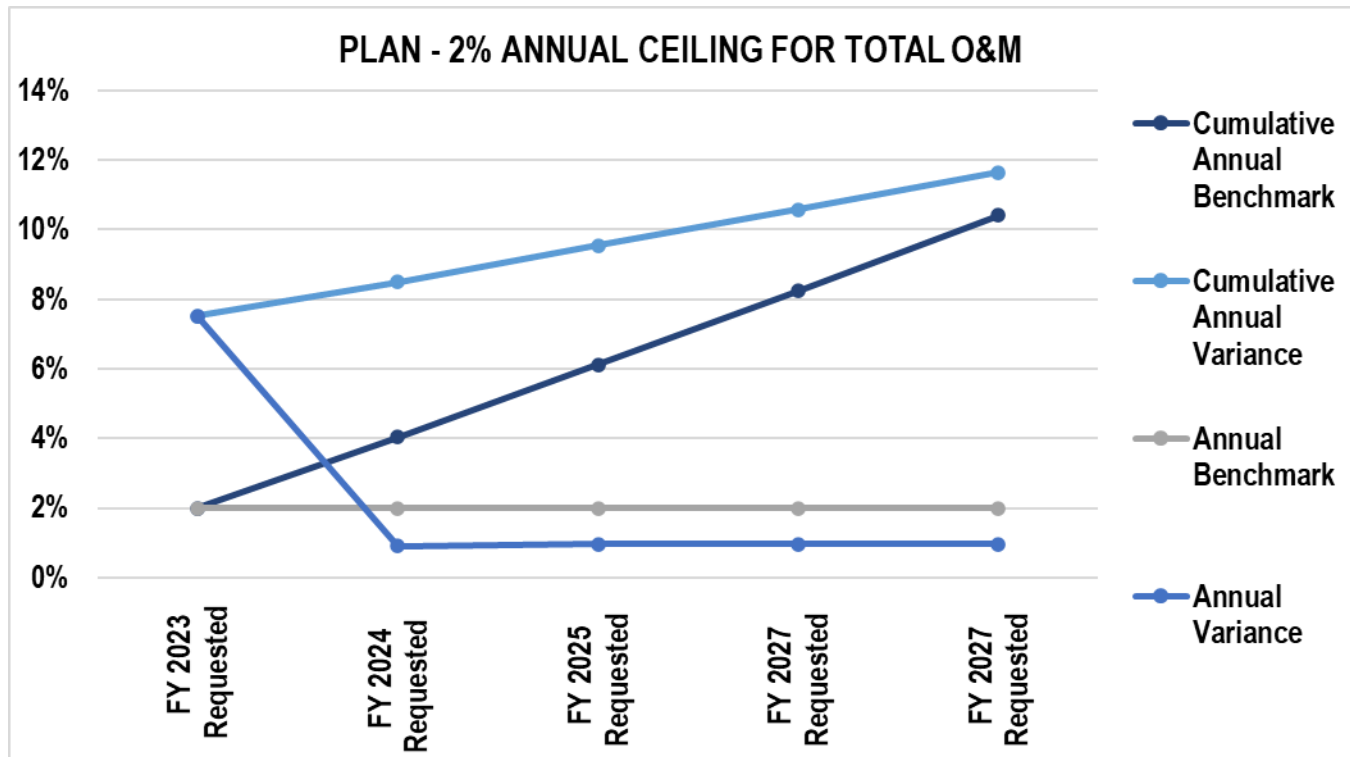


Five-Year Financial Plan by Team

Team	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Administration	\$ 908,100	\$ 433,500	\$ 669,400	\$ 674,200	\$ 679,000	\$ 683,900
Talent Management	1,948,200	953,200	2,844,000	2,874,900	2,905,500	2,936,800
Training	1,343,100	648,700	1,713,200	1,727,900	1,742,800	1,757,900
Grand Total	\$ 4,199,400	\$ 2,035,400	\$ 5,226,600	\$ 5,277,000	\$ 5,327,300	\$ 5,378,600

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Organizational Development Group's financial plan reflects a five-year overall increase of 11.7% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment. The increase over the entity-wide goal is anticipated with the addition of staffing positions as discussed previously and the launch of new Apprenticeship Program and training courses.



Capital Outlay

Organizational Development capital outlay is funded by the Improvement & Extension budget.

Five-Year Capital Outlay by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
Building/Structures	-	700,000	-	-	-	-
Grand Total	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -

Five-Year Capital Outlay by Team

Team	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Organizational Development	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -

Line-Item Budget and Financial Plan

The Organizational Development five-year plan by line-item expense is listed below. The expenses are listed for each cost center. Because many of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
883201 - Administration	\$ 908,100	\$ 654,000	\$ 433,500	\$ 664,700	\$ 669,400	\$ 674,200	\$ 679,000	\$ 683,900
2.1 Salaries & Wages	157,200	419,600	109,400	421,700	421,700	421,700	421,700	421,700
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	99,900	133,600	44,200	142,100	144,900	147,600	150,400	153,200
2.5 Transition Services	(3,000)	-	-	-	-	-	-	-
4.2 Supplies & Other	15,100	46,100	4,700	45,000	45,900	46,800	47,700	48,600
Memberships, Licenses & Subscriptions	3,300	300	-	400	400	400	400	400
Office Supplies	2,700	20,000	4,300	20,400	20,800	21,200	21,600	22,000
Supplies & Other - Covid19	3,800	-	-	-	-	-	-	-
Operating Supplies	3,900	100	200	100	100	100	100	100
Mileage and Parking	-	-	-	-	-	-	-	-
Training and Internal Meetings	2,600	10,000	200	10,200	10,400	10,600	10,800	11,000
Travel	(500)	10,000	-	10,200	10,400	10,600	10,800	11,000
Tuition Refund	-	3,700	-	3,700	3,800	3,900	4,000	4,100
Advertising	(700)	2,000	-	-	-	-	-	-
4.3 Contractual Services	638,900	54,700	275,200	55,900	56,900	58,100	59,200	60,400
Contractual Operating Services	(13,600)	54,700	8,000	55,900	56,900	58,100	59,200	60,400
Contractual Professional Services	-	-	-	-	-	-	-	-
Contractual Services - Covid19	652,500	-	267,200	-	-	-	-	-
883211 - Talent Management	1,948,200	2,577,100	953,200	2,815,900	2,844,000	2,874,900	2,905,500	2,936,800
2.1 Salaries & Wages	1,096,100	1,221,000	522,000	1,503,800	1,503,800	1,503,800	1,503,800	1,503,800
2.3 Overtime	4,600	3,000	2,400	3,000	3,000	3,000	3,000	3,000
2.4 Employee Benefits	389,800	429,100	176,800	554,300	565,200	576,100	586,900	597,800
2.5 Transition Services	112,700	70,700	65,100	-	-	-	-	-
4.2 Supplies & Other	22,500	95,500	50,600	85,500	85,600	87,700	89,100	90,900
Office Supplies	200	1,000	500	-	-	-	-	-
Operating Supplies	-	1,300	-	1,300	1,300	1,300	1,300	1,300
Advertising	3,600	65,500	29,800	43,000	43,100	44,500	45,400	46,200
Printing	-	2,000	1,600	2,800	2,800	2,900	2,900	3,000
Memberships, Licenses & Subscriptions	14,900	22,200	17,700	8,400	8,300	8,400	8,500	8,800
Mileage and Parking	100	500	400	2,900	2,900	2,900	2,900	3,000
Travel	-	-	-	13,500	13,600	13,800	14,000	14,300
Training and Internal Meetings	-	3,000	600	4,000	4,000	4,000	4,000	4,100
Tuition Refund	3,700	-	-	9,600	9,600	9,900	10,100	10,200
4.3 Contractual Services	322,500	757,800	136,300	669,300	686,400	704,300	722,700	741,300
Contractual Operating Services	322,500	757,800	136,300	669,300	686,400	704,300	722,700	741,300
883231 - Training	1,343,100	1,586,200	648,700	1,699,000	1,713,200	1,727,900	1,742,800	1,757,900
2.1 Salaries & Wages	853,100	853,500	447,800	960,200	960,200	960,200	960,200	960,200
2.3 Overtime	-	1,000	-	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	274,800	293,100	154,000	344,500	351,200	358,000	364,700	371,500
4.2 Supplies & Other	145,700	284,800	1,300	141,400	144,100	146,900	149,800	152,700
Office Supplies	1,800	15,000	-	15,300	15,600	15,900	16,200	16,500
Operating Supplies	1,200	54,000	100	10,000	10,200	10,400	10,600	10,600
Memberships, Licenses & Subscriptions	2,800	11,800	(11,900)	12,000	12,200	12,400	12,600	13,000
Travel	-	4,000	-	4,100	4,100	4,200	4,300	4,400
Training and Internal Meetings	139,900	200,000	13,100	100,000	102,000	104,000	106,100	108,200
4.3 Contractual Services	69,500	153,800	45,600	251,900	256,700	261,800	267,100	272,500
Contractual Operating Services	69,500	153,800	45,600	251,900	256,700	261,800	267,100	272,500
Grand Total	\$ 4,199,400	\$ 4,817,300	\$ 2,035,400	\$ 5,179,600	\$ 5,226,600	\$ 5,277,000	\$ 5,327,300	\$ 5,378,600

Financial Services

The Financial Services Area consists of three groups. The *CFO Services* group plans and directs all strategic financial planning, compliance, internal audit, and intergovernmental activities. The *Operations Support Services* group is responsible for procurement and inventory management. The *Financial Reporting & Accounting* group is responsible for construction, general ledger, accounts payable, payroll, asset management and related activities.

Strategic Initiatives

❖ Financial operations (Ongoing)

Continued rollout of technology to reduce the inefficiencies of processing times and to expand analytical capacity – as well as to improve the data available for management decisions.

❖ Business support (Ongoing)

Rollout the expanded Business Inclusion & Diversity program, explore utility cooperative procurement sponsorship, and vendor quality management.

❖ Cross-functional collaboration in key initiatives (Ongoing)

Support transformational efforts across GLWA including asset management, capital program management, operations, and recent movement toward enterprise-wide contractual services management.

❖ Member Partner Engagement (Ongoing)

Support short-and long-term efforts related to the charges' equity and stability program.

❖ Affordability (Ongoing)

Carryout recommendations to improve and expand constituent service including implementation of the water residential assistance program.

The following table shows how the financial services strategic initiatives relate to the organizational strategic goals.

		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership Development	Community Sustainability
Financial Services Strategic Initiatives	Financial operations	x	x			x	x					
	Business support		x	x		x	x					x
	Cross-functional collaboration in key initiatives	x	x	x	x	x	x	x	x	x		x
	Member Partner Engagement	x	x				x	x	x			x
	Affordability		x				x	x	x			x

Organization

The Financial Services Area has eleven teams that fall within the three group classifications.

❖ CFO Services

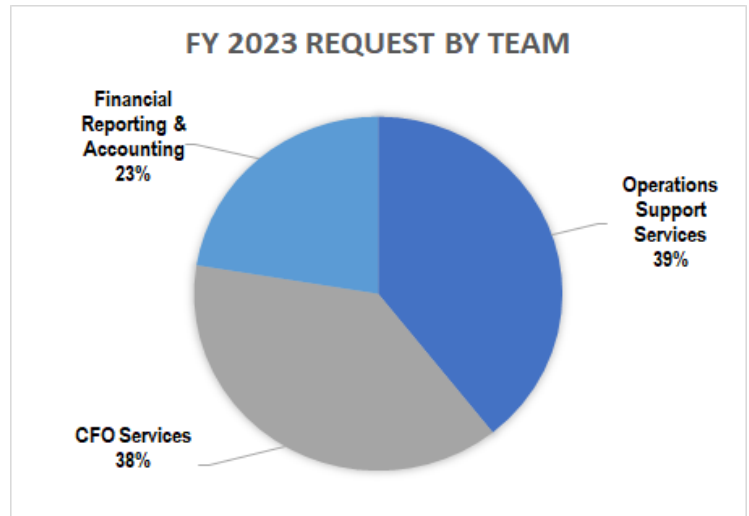
Chief Financial Officer
Financial Management & Planning
CFO Services
Treasury

❖ Operations Support Services

Procurement Director
Logistics and Materials

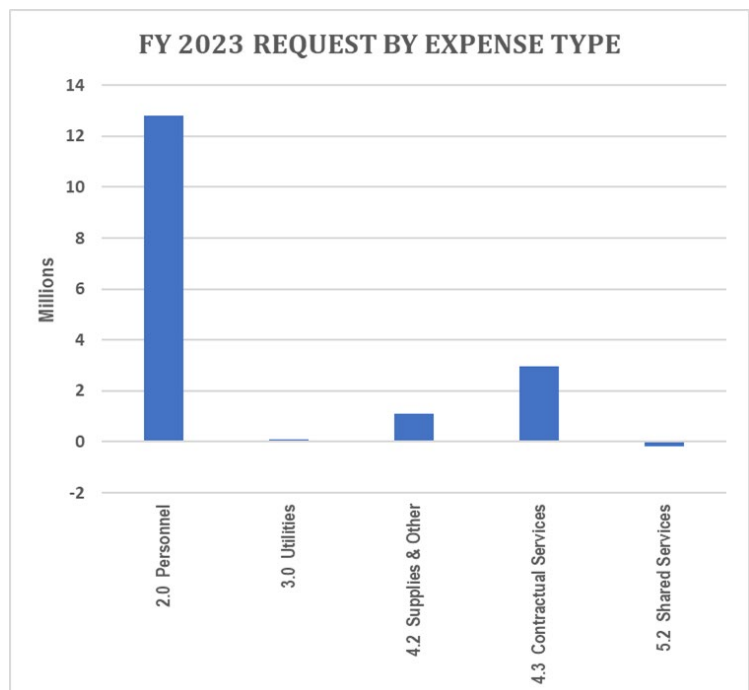
❖ Financial Reporting & Accounting

Financial Reporting & Accounting is reported under one team, and it includes construction, general ledger, accounts payable, payroll and asset management.



Expense Categories

The primary expense category in the Financial Services area is Personnel Services. The second largest category is Contractual Services for project management support, and other special projects, studies, and audits.



Biennial Budget Request

The biennial budget reflects an overall increase of \$1.6 million, or 10.2%. The primary reasons for this increase are highlighted below.

- ❖ **Personnel** – In FY 2022 the Financial Services Area was reorganized to better align resources to the needs of the maturing authority. The result is a decrease of 9.75 FTEs (9 Staffing positions; 4 positions were transferred to Planning Services and 5 positions were transferred to Innovation). While the number of FTEs has decreased for FY 2023, the budget for Personnel has increased \$991,900, or 8.4%. The primary driver for the increase is the addition of positions requiring higher skill sets to in-source technical financial management needs. In addition, the budget for benefits was increased based on the current benefit cost information as the result of rising healthcare costs.
- ❖ **Utilities** – The FY 2023 budget was developed based on historical trends of the McKinstry warehouse. The transition from the McKinstry warehouse to the Rialto warehouse began towards the end of FY 2021 and continued into FY 2022. The FY 2022 budget has been amended to record the increase in electrical usage at the new warehouse. Based on current forecasts, the utility budget will need to be amended to reflect the increased usage going forward.
- ❖ **Supplies & Other** – The primary reasons for the increase in this category are for employee training and development and supplies for vendor outreach events.
- ❖ **Contractual Services** – The primary reasons for the increases in this category are for implementation support for the new ERP system and for auditing services (both internal and external).
- ❖ **Capital Program Allocation** – The amount in this account is shown as negative as this is a “contra” account which represents an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget. A decrease in this account results in an increase to the O&M expense. The budget for the Capital Program Allocation account, shown in the tables below, was based on an estimate of the number of hours that the Owners’ Representative team would be working directly on capital projects. The responsibilities of this team were transferred to the Planning Services team in FY 2022.
- ❖ **Shared Services** – The GLWA and DWSD leverage economies of scale, assets, technology, and expertise by sharing services. The shared services agreement referenced in the tables below is for the bank fees that the GLWA incurs as a result of managing the cash receipts for both entities. The budget for this category was increased slightly in FY 2023 in anticipation of an increase in bank fees.

Biennial Budget Request by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
2.0 Personnel	\$ 11,593,900	\$ 11,828,400	\$ 5,457,500	\$ 12,820,300	\$ 991,900	8.4%	\$ 13,068,200
3.0 Utilities	24,100	135,000	57,700	102,300	(32,700)	-24.2%	104,300
4.2 Supplies & Other	369,700	984,500	624,500	1,093,500	109,000	11.1%	1,115,200
4.3 Contractual Services	2,157,900	2,488,900	1,006,100	2,944,900	456,000	18.3%	2,983,200
5.1 Capital Program Allocation	(19,000)	(30,200)	(14,100)	-	30,200	-100.0%	-
5.2 Shared Services	(149,000)	(168,700)	(65,600)	(169,100)	(400)	0.2%	(172,500)
Grand Total	\$ 13,977,600	\$ 15,237,900	\$ 7,066,100	\$ 16,791,900	\$ 1,554,000	10.2%	\$ 17,098,400

Biennial Budget Request by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
CFO Services	\$ 4,660,600	\$ 5,142,600	\$ 2,180,400	\$ 6,425,700	\$ 1,283,100	25.0%	\$ 6,471,500
Chief Financial Officer	761,800	1,147,100	412,000	1,080,800	(66,300)	-5.8%	1,091,500
CFO Services	1,637,200	1,615,500	705,100	2,432,600	817,100	50.6%	2,450,600
Data Analytics & Internal Audit	208,200	30,900	30,900	-	(30,900)	-100.0%	-
Financial Management & Planning	1,386,300	1,495,400	732,600	2,032,600	537,200	35.9%	2,045,700
Treasury	667,100	853,700	299,800	879,700	26,000	3.0%	883,700
Operations Support Services	6,500,400	6,562,000	3,375,000	6,601,900	39,900	0.6%	6,836,400
Procurement Director	3,402,200	3,481,100	1,637,800	3,928,100	447,000	12.8%	4,136,000
Logistics and Materials	2,037,800	2,899,900	1,558,200	2,673,800	(226,100)	-7.8%	2,700,400
Owners' Representative	405,700	181,000	179,000	-	(181,000)	-100.0%	-
Transformation	654,700	-	-	-	-	0.0%	-
Financial Reporting & Accounting	2,816,600	3,533,300	1,510,700	3,764,300	231,000	6.5%	3,790,500
Grand Total	\$ 13,977,600	\$ 15,237,900	\$ 7,066,100	\$ 16,791,900	\$ 1,554,000	10.2%	\$ 17,098,400

Personnel Budget

As a result of the FY 2022 Financial Services Area reorganization, the staffing plan will be reduced in FY 2023 by 9 positions (4 positions were transferred to Planning Services and 5 positions were transferred to Innovation). The staffing plan remains at a steady state of 123 total positions through FY 2027. The staffing level is shown in the tables below.

Staffing Plan - The table on the following page presents the number of positions in the plan. Each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant.

Staffing Plan – Number of Positions

Team	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Financial Services Area	124.00	132.00	123.00	123.00	123.00	123.00	123.00
CFO Services	30.00	33.00	35.00	35.00	35.00	35.00	35.00
Chief Financial Officer	5.00	6.00	5.00	5.00	5.00	5.00	5.00
CFO Services	10.00	11.00	15.00	15.00	15.00	15.00	15.00
Data Analytics & Internal Audit	3.00	3.00	0.00	0.00	0.00	0.00	0.00
Financial Management & Planning	9.00	10.00	12.00	12.00	12.00	12.00	12.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Operations Support Services	68.00	68.00	59.00	59.00	59.00	59.00	59.00
Procurement Director	31.00	32.00	35.00	35.00	35.00	35.00	35.00
Logistics and Materials	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	5.00	5.00	0.00	0.00	0.00	0.00	0.00
Transformation	8.00	7.00	0.00	0.00	0.00	0.00	0.00
Financial Reporting & Accounting	26.00	31.00	29.00	29.00	29.00	29.00	29.00

Full Time Equivalent - The following table presents “full-time equivalent” (FTE) staffing. FTE is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year. For this budget area, the Staffing Plan and the FTEs project an increase over the next five years.

Full Time Equivalent

Team	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Financial Services Area	122.00	129.75	120.00	121.50	121.50	121.50	121.50
CFO Services	29.50	32.50	34.50	34.50	34.50	34.50	34.50
Chief Financial Officer	4.50	5.50	4.50	4.50	4.50	4.50	4.50
CFO Services	10.00	11.00	15.00	15.00	15.00	15.00	15.00
Data Analytics & Internal Audit	3.00	3.00	0.00	0.00	0.00	0.00	0.00
Financial Management & Planning	9.00	10.00	12.00	12.00	12.00	12.00	12.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Operations Support Services	67.50	67.25	57.50	59.00	59.00	59.00	59.00
Procurement Director	30.50	32.00	33.50	35.00	35.00	35.00	35.00
Logistics and Materials	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	5.00	5.00	0.00	0.00	0.00	0.00	0.00
Transformation	8.00	6.25	0.00	0.00	0.00	0.00	0.00
Financial Reporting & Accounting	25.00	30.00	28.00	28.00	28.00	28.00	28.00

Personnel Budget – The following table presents the Financial Services personnel budget which consists of the following expense categories: Salaries & Wages, Overtime, Employee Benefits and Contractual Transition Services. These values are based on the *Full Time Equivalents* in table 2 using current pay levels. Wage and benefit adjustments are based on merit increases and are included in the Unallocated Reserve line item for the Administrative Services Operating Area which is shown in detail in the Operating Financial Plan Introduction section.

Personnel Budget

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
CFO Services	\$ 3,175,100	\$ 3,548,200	\$ 1,620,700	\$ 4,350,500	\$ 802,300	22.6%	\$ 4,371,200
Chief Financial Officer	656,700	853,900	337,300	719,300	(134,600)	-15.8%	722,600
CFO Services	1,058,800	1,206,800	528,000	1,761,100	554,300	45.9%	1,769,700
Data Analytics & Internal Audit	207,900	30,900	30,900	-	(30,900)	-100.0%	-
Financial Management & Planning	952,300	1,173,400	567,600	1,560,700	387,300	33.0%	1,568,000
Treasury	299,400	283,200	156,900	309,400	26,200	9.3%	310,900
Operations Support Services	5,897,300	5,363,500	2,539,900	5,475,700	112,200	2.1%	5,688,100
Procurement Director	3,090,500	3,343,700	1,506,900	3,603,800	260,100	7.8%	3,805,400
Logistics and Materials	1,743,100	1,823,000	839,900	1,871,900	48,900	2.7%	1,882,700
Owners' Representative	413,400	196,800	193,100	-	(196,800)	-100.0%	-
Transformation	650,300	-	-	-	-	0.0%	-
Financial Reporting & Accounting	2,521,500	2,916,700	1,296,900	2,994,100	77,400	2.7%	3,008,900
Grand Total	\$ 11,593,900	\$ 11,828,400	\$ 5,457,500	\$ 12,820,300	\$ 991,900	8.4%	\$ 13,068,200

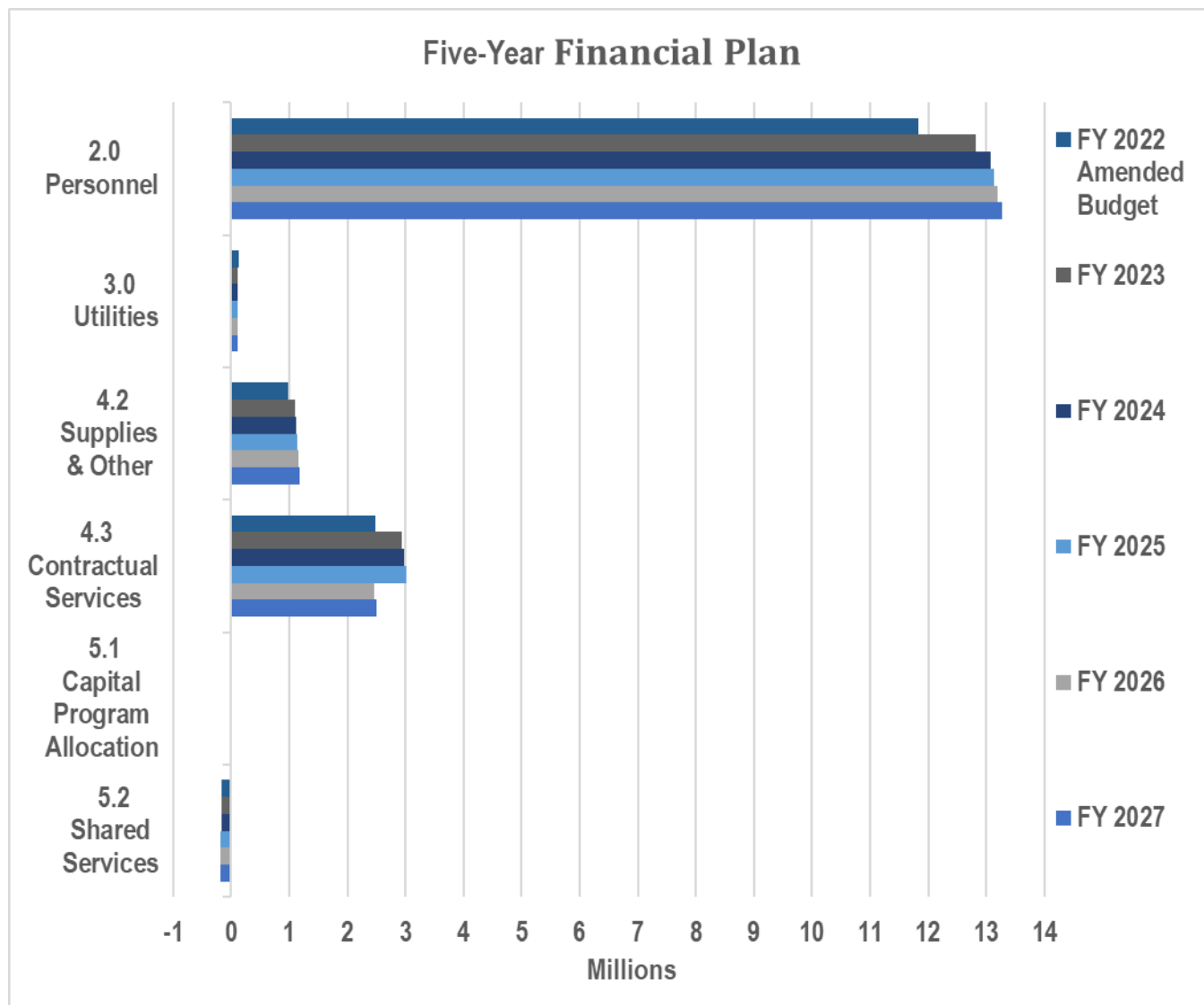
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
CFO Services	\$ 3,175,100	\$ 3,548,200	\$ 4,350,500	\$ 4,371,200	\$ 4,391,900	\$ 4,412,700	\$ 4,433,300
Chief Financial Officer	656,700	853,900	719,300	722,600	725,800	729,100	732,300
CFO Services	1,058,800	1,206,800	1,761,100	1,769,700	1,778,300	1,786,900	1,795,400
Data Analytics & Internal Audit	207,900	30,900	-	-	-	-	-
Financial Management & Planning	952,300	1,173,400	1,560,700	1,568,000	1,575,300	1,582,600	1,589,900
Treasury	299,400	283,200	309,400	310,900	312,500	314,100	315,700
Operations Support Services	5,897,300	5,363,500	5,475,700	5,688,100	5,717,900	5,747,600	5,777,300
Procurement Director	3,090,500	3,343,700	3,603,800	3,805,400	3,824,300	3,843,200	3,862,100
Logistics and Materials	1,743,100	1,823,000	1,871,900	1,882,700	1,893,600	1,904,400	1,915,200
Owners' Representative	413,400	196,800	-	-	-	-	-
Transformation	650,300	-	-	-	-	-	-
Financial Reporting & Accounting	2,521,500	2,916,700	2,994,100	3,008,900	3,023,700	3,038,500	3,053,400
Grand Total	\$ 11,593,900	\$ 11,828,400	\$ 12,820,300	\$ 13,068,200	\$ 13,133,500	\$ 13,198,800	\$ 13,264,000

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
2.0 Personnel	\$ 11,593,900	\$ 11,828,400	\$ 12,820,300	\$ 13,068,200	\$ 13,133,500	\$ 13,198,800	\$ 13,264,000
3.0 Utilities	24,100	135,000	102,300	104,300	106,300	108,400	110,600
4.2 Supplies & Other	369,700	984,500	1,093,500	1,115,200	1,136,800	1,159,900	1,181,600
4.3 Contractual Services	2,157,900	2,488,900	2,944,900	2,983,200	3,022,000	2,467,800	2,508,300
5.1 Capital Program Allocation	(19,000)	(30,200)	-	-	-	-	-
5.2 Shared Services	(149,000)	(168,700)	(169,100)	(172,500)	(175,900)	(179,400)	(183,000)
Grand Total	\$ 13,977,600	\$ 15,237,900	\$ 16,791,900	\$ 17,098,400	\$ 17,222,700	\$ 16,755,500	\$ 16,881,500

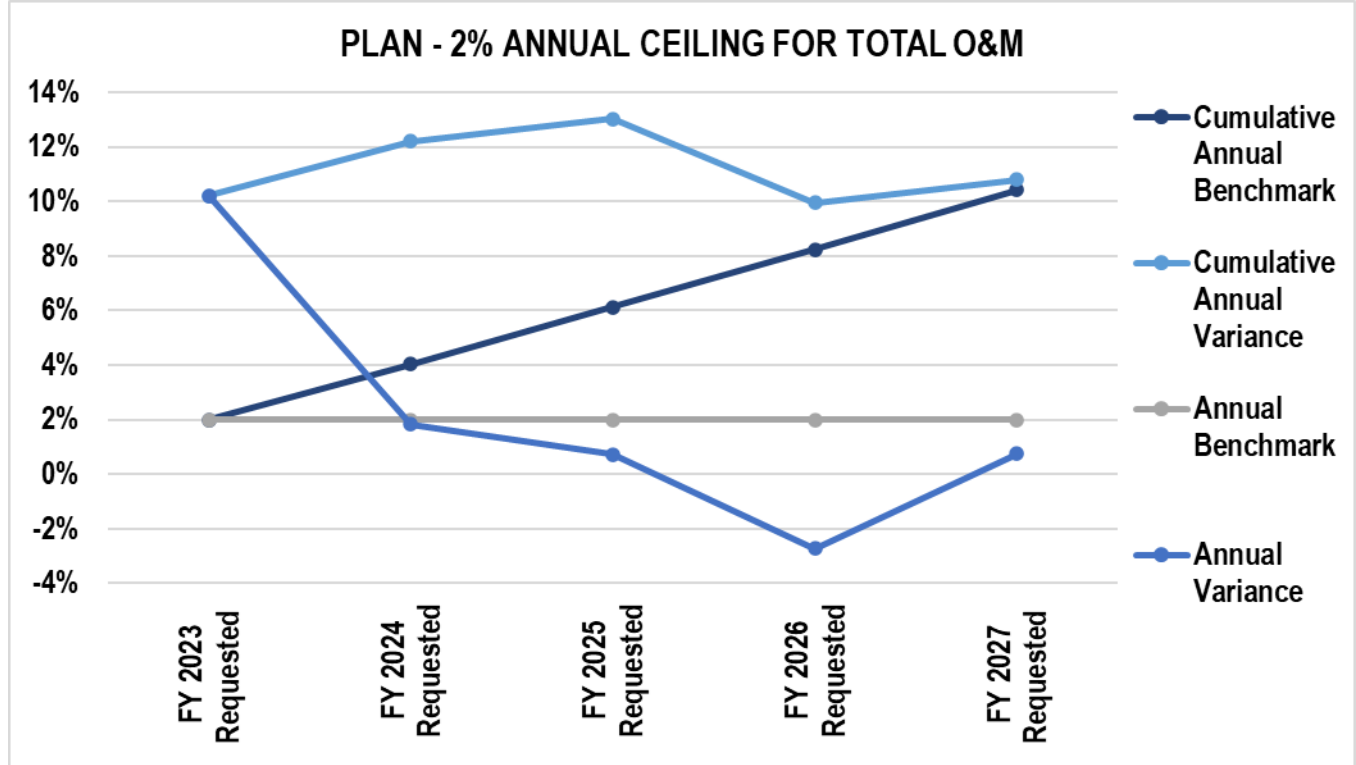


Five-Year Financial Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
CFO Services	\$ 4,660,600	\$ 5,142,600	\$ 6,425,700	\$ 6,471,500	\$ 6,517,100	\$ 6,168,000	\$ 6,214,400
Chief Financial Officer	761,800	1,147,100	1,080,800	1,091,500	1,101,900	1,113,000	1,123,800
CFO Services	1,637,200	1,615,500	2,432,600	2,450,600	2,469,000	2,289,500	2,307,900
Data Analytics & Internal Audit	208,200	30,900	-	-	-	-	-
Financial Management & Planning	1,386,300	1,495,400	2,032,600	2,045,700	2,058,400	1,873,500	1,886,400
Treasury	667,100	853,700	879,700	883,700	887,800	892,000	896,300
Operations Support Services	6,500,400	6,562,000	6,601,900	6,836,400	6,888,700	6,941,700	6,994,500
Procurement Director	3,402,200	3,481,100	3,928,100	4,136,000	4,161,300	4,187,000	4,212,700
Logistics and Materials	2,037,800	2,899,900	2,673,800	2,700,400	2,727,400	2,754,700	2,781,800
Owners' Representative	405,700	181,000	-	-	-	-	-
Transformation	654,700	-	-	-	-	-	-
Financial Reporting & Accounting	2,816,600	3,533,300	3,764,300	3,790,500	3,816,900	3,645,800	3,672,600
Grand Total	\$ 13,977,600	\$ 15,237,900	\$ 16,791,900	\$ 17,098,400	\$ 17,222,700	\$ 16,755,500	\$ 16,881,500

Alignment with Entity-wide Annual O&M Ceiling Goal of 2%

The Financial Services area financial plan reflects a five-year overall increase of 10.8% while the entity-wide goal is a cumulative 10.4% for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Financial Services capital outlay is funded by the Improvement & Extension (I&E) budget.

The renovation of a new warehouse is taking place in FY 2022. This warehouse replaced the McKinstry warehouse.

In addition to the warehouse renovations, forklifts are scheduled to be purchased in FY 2022 to transport materials and other items among GLWA's facility locations.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -
Machinery & Equipment	75,000	-	-	-	-	-
Projects & Programs	1,305,800	-	-	-	-	-
Grand Total	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Improvement & Extension	\$ 146,400	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ 146,400	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Logistics & Material	\$ 146,400	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ 146,400	\$ 1,380,800	\$ -	\$ -	\$ -	\$ -	\$ -

Line-Item Budget and Financial Plan

The five-year plan by line-item expense is presented on the following pages. The expenses are listed in order by cost center. Because of GLWA's initiatives expand multiple years, this planning document provides the information to smooth out expenses over time and/or plan for annual fluctuations.

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
884001 - Chief Financial Officer	761,800	1,147,100	412,000	1,080,800	1,091,500	1,101,900	1,113,000	1,123,800
2.1 Salaries & Wages	545,900	664,600	267,100	553,100	553,100	553,100	553,100	553,100
2.4 Employee Benefits	110,800	189,300	70,200	166,200	169,500	172,700	176,000	179,200
4.2 Supplies & Other	7,700	47,400	7,600	48,200	49,300	50,200	51,400	52,300
Memberships, Licenses & Subscriptions	3,700	10,600	2,700	10,800	11,000	11,200	11,500	11,700
Mileage and Parking	-	2,000	500	2,000	2,100	2,100	2,200	2,200
Office Supplies	1,700	12,400	2,400	12,600	12,900	13,200	13,400	13,700
Training and Internal Meetings	1,700	10,600	2,000	10,800	11,000	11,200	11,500	11,700
Travel	600	11,600	-	11,800	12,100	12,300	12,600	12,800
Postage	-	200	-	200	200	200	200	200
4.3 Contractual Services	97,400	245,800	67,100	313,300	319,600	325,900	332,500	339,200
Contractual Operating Services	100	800	100	800	800	800	900	900
Contractual Professional Services	97,300	245,000	67,000	312,500	318,800	325,100	331,600	338,300
884113 - Financial Management & Planning	1,386,300	1,495,400	732,600	2,032,600	2,045,700	2,058,400	1,873,500	1,886,400
2.1 Salaries & Wages	734,000	825,500	381,300	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
2.4 Employee Benefits	199,900	277,400	115,800	373,200	380,500	387,800	395,100	402,400
2.5 Transition Services	18,400	70,500	70,500	-	-	-	-	-
4.2 Supplies & Other	2,200	12,000	1,600	16,900	17,500	17,700	18,100	18,300
Memberships, Licenses & Subscriptions	1,200	2,300	1,600	3,000	3,100	3,100	3,200	3,200
Mileage and Parking	-	300	-	300	400	400	400	400
Office Supplies	900	2,000	-	2,000	2,100	2,100	2,200	2,200
Training and Internal Meetings	100	4,200	-	6,300	6,500	6,600	6,700	6,800
Travel	-	3,200	-	5,300	5,400	5,500	5,600	5,700
4.3 Contractual Services	431,800	310,000	163,400	455,000	460,200	465,400	272,800	278,200
884131 - Treasury	667,100	853,700	299,800	879,700	883,700	887,800	892,000	896,300
2.1 Salaries & Wages	224,100	210,400	117,200	228,600	228,600	228,600	228,600	228,600
2.3 Overtime	400	100	-	-	-	-	-	-
2.4 Employee Benefits	74,900	72,700	39,700	80,800	82,300	83,900	85,500	87,100
4.2 Supplies & Other	8,200	23,400	2,000	19,500	19,800	20,100	20,400	20,700
Memberships, Licenses & Subscriptions	900	2,600	300	2,500	2,600	2,600	2,700	2,700
Mileage and Parking	3,600	3,000	1,000	4,000	4,000	4,000	4,000	4,000
Office Supplies	1,100	2,000	100	2,000	2,000	2,100	2,100	2,200
Training and Internal Meetings	2,100	5,100	300	5,000	5,100	5,200	5,300	5,400
Travel	-	10,200	-	5,000	5,100	5,200	5,300	5,400
Postage	500	500	300	1,000	1,000	1,000	1,000	1,000
4.3 Contractual Services	502,600	697,100	197,200	700,800	706,000	711,300	716,700	722,300
Contractual Operating Services	502,600	697,100	197,200	700,800	706,000	711,300	716,700	722,300
5.2 Shared Services	(143,100)	(150,000)	(56,300)	(150,000)	(153,000)	(156,100)	(159,200)	(162,400)

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
884141 - CFO Services	1,637,200	1,615,500	705,100	2,432,600	2,450,600	2,469,000	2,289,500	2,307,900
2.1 Salaries & Wages	732,200	831,500	378,900	1,324,100	1,324,100	1,324,100	1,324,100	1,324,100
2.3 Overtime	3,200	6,000	1,900	-	-	-	-	-
2.4 Employee Benefits	221,300	266,300	120,100	437,000	445,600	454,200	462,800	471,300
2.5 Transition Services	102,100	103,000	27,100	-	-	-	-	-
4.2 Supplies & Other	7,000	28,700	3,800	30,900	31,500	32,100	32,800	33,300
Memberships, Licenses & Subscriptions	2,600	4,500	2,000	5,000	5,100	5,200	5,300	5,400
Mileage and Parking	-	1,800	-	1,800	1,800	1,900	1,900	1,900
Office Supplies	2,300	3,000	500	3,000	3,100	3,100	3,200	3,200
Training and Internal Meetings	1,000	4,500	300	6,000	6,100	6,200	6,400	6,500
Travel	200	13,400	800	13,600	13,900	14,100	14,400	14,700
Postage	900	1,500	200	1,500	1,500	1,600	1,600	1,600
4.3 Contractual Services	577,300	398,700	182,600	659,700	668,900	678,400	490,000	499,800
Contractual Operating Services	34,700	48,700	22,100	51,700	52,700	53,800	54,900	56,000
Contractual Professional Services	542,600	350,000	160,500	608,000	616,200	624,600	435,100	443,800
5.2 Shared Services	(5,900)	(18,700)	(9,300)	(19,100)	(19,500)	(19,800)	(20,200)	(20,600)
Shared Services : Salaries & Wages Reimb	(21,200)	(13,300)	(6,600)	(13,600)	(13,900)	(14,100)	(14,400)	(14,700)
Shared Services: Employee Benefit Reimb	(8,500)	(5,400)	(2,700)	(5,500)	(5,600)	(5,700)	(5,800)	(5,900)
884151 - Data Analytics & Internal Audit	208,200	30,900	30,900	-	-	-	-	-
2.1 Salaries & Wages	118,600	22,700	22,700	-	-	-	-	-
2.4 Employee Benefits	25,000	8,200	8,200	-	-	-	-	-
2.5 Transition Services	64,300	-	-	-	-	-	-	-
4.2 Supplies & Other	300	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	300	-	-	-	-	-	-	-
884161 - Transformation	654,700	-	-	-	-	-	-	-
2.1 Salaries & Wages	143,000	-	-	-	-	-	-	-
2.4 Employee Benefits	25,000	-	-	-	-	-	-	-
2.5 Transition Services	482,300	-	-	-	-	-	-	-
4.2 Supplies & Other	4,400	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	400	-	-	-	-	-	-	-
Operating Supplies	4,000	-	-	-	-	-	-	-
884121 - Procurement Director	3,402,200	3,481,100	1,637,800	3,928,100	4,136,000	4,161,300	4,187,000	4,212,700
2.1 Salaries & Wages	1,982,100	2,307,400	1,078,700	2,633,300	2,771,200	2,771,200	2,771,200	2,771,200
2.3 Overtime	77,700	35,000	13,400	50,000	50,000	50,000	50,000	50,000
2.4 Employee Benefits	646,500	831,300	363,400	920,500	984,200	1,003,100	1,022,000	1,040,900
2.5 Transition Services	384,200	170,000	51,400	-	-	-	-	-
4.2 Supplies & Other	74,600	56,800	87,600	203,400	207,300	211,300	215,600	219,900
Memberships, Licenses & Subscriptions	13,600	28,200	27,600	28,800	29,400	29,900	30,600	31,200
Mileage and Parking	-	700	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	8,600	10,100	5,500	61,300	62,500	63,700	65,000	66,300
Office Supplies - Covid19	48,100	-	19,700	-	-	-	-	-
Operating Supplies	2,500	3,000	26,900	25,500	26,000	26,500	27,000	27,600
Training and Internal Meetings	1,100	3,100	1,700	78,000	79,500	81,100	82,700	84,300
Travel	300	7,700	4,200	8,500	8,600	8,800	9,000	9,200
Postage	-	-	-	100	100	100	100	100
Tuition Refund	-	4,000	2,000	200	200	200	200	200
Advertising	400	-	-	-	-	-	-	-
4.3 Contractual Services	237,100	95,000	43,300	120,900	123,300	125,700	128,200	130,700
Contractual Operating Services	40,800	20,000	300	20,400	20,800	21,200	21,600	22,000
Contractual Professional Services	196,300	75,000	43,000	100,500	102,500	104,500	106,600	108,700
5.1 Capital Program Allocation	-	(14,400)	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	(11,900)	-	-	-	-	-	-
Capital Program: Employee Benefits	-	(2,500)	-	-	-	-	-	-

Line-Item Budget and Financial Plan (continued)

Cost Center & Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
884124 - Logistics and Materials	2,037,800	2,899,900	1,558,200	2,673,800	2,700,400	2,727,400	2,754,700	2,781,800
2.1 Salaries & Wages	1,195,300	1,303,600	589,200	1,313,900	1,313,900	1,313,900	1,313,900	1,313,900
2.3 Overtime	5,700	6,000	3,100	6,000	6,000	6,000	6,000	6,000
2.4 Employee Benefits	542,100	513,400	247,600	552,000	562,800	573,700	584,500	595,300
3.1 Electric	5,200	70,000	34,500	36,000	36,700	37,400	38,200	38,900
3.2 Gas	1,300	25,000	12,500	25,500	26,000	26,500	27,000	27,600
3.3 Sewage Service	17,600	35,000	10,100	35,700	36,400	37,100	37,800	38,600
3.4 Water Service	-	5,000	600	5,100	5,200	5,300	5,400	5,500
4.2 Supplies & Other	232,000	748,900	516,100	674,600	687,900	701,500	715,400	729,000
Capital Outlay less than \$5,000	-	5,200	5,100	5,000	5,100	5,200	5,300	5,400
Memberships, Licenses & Subscriptions	-	1,000	93,700	-	-	-	-	-
Mileage and Parking	-	-	-	500	500	500	500	500
Office Supplies	29,700	25,000	15,800	25,500	26,000	26,500	27,000	27,100
Operating Supplies	63,400	55,700	34,700	56,800	57,900	59,000	60,200	61,400
Training and Internal Meetings	-	-	-	1,000	1,000	1,000	1,000	1,000
Travel	-	-	-	1,000	1,000	1,000	1,000	1,000
Employee Uniform Expense	800	-	-	15,000	15,300	15,600	15,900	16,000
Uniforms, Laundry, Cleaning	9,500	10,000	5,000	10,000	10,200	10,400	10,600	10,800
Inspection and Permit Fees-All Sewer	-	500	-	-	-	-	-	-
Property Taxes-All Sewer	-	94,000	-	-	-	-	-	-
Repairs & Maintenance-Buildings & Ground	200	11,000	203,000	1,000	1,000	1,000	1,000	1,000
Repairs & Maintenance-Equipment	9,600	6,500	500	8,000	8,100	8,300	8,400	8,600
Rentals-Buildings-All Sewer	118,800	540,000	158,300	550,800	561,800	573,000	584,500	596,200
4.3 Contractual Services	38,600	193,000	144,500	25,000	25,500	26,000	26,500	27,000
Contractual Operating Services	-	93,000	92,200	10,000	10,000	10,000	10,000	10,000
Contractual Professional Services	38,600	100,000	52,300	15,000	15,500	16,000	16,500	17,000
884126 - Owners' Representative	405,700	181,000	179,000	-	-	-	-	-
2.1 Salaries & Wages	328,000	147,700	149,200	-	-	-	-	-
2.4 Employee Benefits	85,400	49,100	43,900	-	-	-	-	-
4.2 Supplies & Other	9,600	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	6,800	-	-	-	-	-	-	-
Mileage and Parking	-	-	-	-	-	-	-	-
Operating Supplies	-	-	-	-	-	-	-	-
Training and Internal Meetings	2,800	-	-	-	-	-	-	-
Travel	-	-	-	-	-	-	-	-
4.3 Contractual Services	1,700	-	-	-	-	-	-	-
5.1 Capital Program Allocation	(19,000)	(15,800)	(14,100)	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	(13,600)	(11,300)	(10,100)	-	-	-	-	-
Capital Program: Employee Benefits	(5,400)	(4,500)	(4,000)	-	-	-	-	-
884111 - Financial Reporting & Accounting	2,816,600	3,533,300	1,510,700	3,764,300	3,790,500	3,816,900	3,645,800	3,672,600
2.1 Salaries & Wages	1,905,000	2,025,000	981,100	2,134,000	2,134,000	2,134,000	2,134,000	2,134,000
2.2 Workforce Development	-	12,800	-	12,800	12,800	12,800	12,800	12,800
2.3 Overtime	900	1,000	-	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	615,600	697,900	315,800	756,300	771,100	785,900	800,700	815,600
2.5 Transition Services	-	180,000	-	90,000	90,000	90,000	90,000	90,000
4.2 Supplies & Other	23,700	67,300	5,800	100,000	101,900	103,900	106,200	108,100
Memberships, Licenses & Subscriptions	5,500	7,000	2,200	7,100	7,300	7,400	7,600	7,700
Mileage and Parking	900	3,100	400	3,200	3,200	3,300	3,400	3,400
Office Supplies	3,600	14,000	500	35,400	36,100	36,800	37,600	38,300
Training and Internal Meetings	7,700	15,000	2,100	18,300	18,700	19,000	19,400	19,800
Travel	-	10,600	1,000	10,800	11,000	11,200	11,500	11,700
Postage	6,000	13,500	(400)	24,000	24,400	24,900	25,400	25,900
Tuition Refund	-	4,100	-	1,200	1,200	1,300	1,300	1,300
4.3 Contractual Services	271,400	549,300	208,000	670,200	679,700	689,300	501,100	511,100
Contractual Operating Services	2,400	4,800	2,100	4,900	5,000	5,100	5,200	5,300
Contractual Professional Services	72,400	243,300	28,400	358,100	361,300	364,600	169,900	173,300
Auditing	196,600	301,200	177,500	307,200	313,400	319,600	326,000	332,500
Grand Total	\$ 13,977,600	\$ 15,237,900	\$ 7,066,100	\$ 16,791,900	\$ 17,098,400	\$ 17,222,700	\$ 16,755,500	\$ 16,881,500

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Section 6

Supplemental Analysis

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The Budget and Five-Year Plan is the compilation of significant effort at the cost center level. This section provides additional information that has an entity-wide impact and are significant elements of the financial plan. The supplemental schedules and analysis include the following categories.

- ❖ Personnel Costs
- ❖ Utilities
- ❖ Shared Services
- ❖ Centralized & Administrative Services
- ❖ Legacy Commitments

Personnel Costs

Achieving the GLWA's initiatives is dependent on the ability to attract, retain, and develop highly qualified and effective team members. The entity-wide personnel budget increased \$8.2 million, or 7.2%, between FY 2022 and FY 2023 as shown on the table on the next page. While specific reasons for the variances in the personnel budget are addressed Section 5 of this document, the following highlights some of the key factors.

Salaries & Wages – The increase in budget is due to several components.

- An increase in number of Staffing positions of 54 in total, which translates to 18.19, full-time equivalents (FTEs), to support key initiatives and demands. The budget is based on the FTE staffing which is the number of hours that a position is filled per year. Since a number of the positions are budgeted to be filled late in FY 2023, the FTE count is less than the number of Staffing positions.
 - New Water Technician Apprenticeship Program (25 positions)
 - Capital Improvement Planning
 - Continual Improvement Process
 - Security for expanded coverage
- The filling of contracted and vacant positions with GLWA staff.
- A change in the classification and compensation of team members who attain a higher level of knowledge, skills, and abilities.

Salaries & Wages – Workforce Development – The workforce development classification represents the salaries and wages for workers that have been hired into the apprenticeship program. There was an increase in budget of \$825,200 or 84.5%. This is primarily due the new Water Technician apprenticeship program for Water operations that has been implemented consisting of 25 positions. It is anticipated that the apprentices will begin by March 2022. More detail is provided in the respective operating sections in Section 5 of this document.

Overtime – Overall, there was slight decrease to overtime in the amount of \$21,000, or 0.3%.

- ✓ Wastewater Operations decreased by \$242,000 due to improved monitoring and controls of its cost centers.
- ✓ Water Operations increased by \$211,000 due to the expected challenges and related delay in filling vacant positions thereby increasing the need for others to work overtime. The increases were mainly in the Northeast Water Plant and Field Service Operations cost centers.

Employee Benefits – Increased by \$3.3 million, or 12.2%, between FY 2022 and FY 2023. This is mainly due to an increase in medical premiums charged by the health insurance vendors, and the increase in the FTE plan of 18.19 positions. The annual plan renewals and related carrier rates are based on a calendar year.

Contractual Transition Services – There was an overall decrease of \$1,048,600, or 12.1%, in the Contractual Transition Services. The decrease in the Contractual Transition Services budget in the areas of *Chief Operating Water Operations, Chief Operating Officer Wastewater Operations, Chief Administrative & Compliance Officer, and Chief Financial Officer* is the result of transitioning positions previously filled by individuals on a contract basis to GLWA team members.

The increase in Public Affairs (Chief Executive Officer area) and Systems Analytics (Chief Planning Officer area) is due to the need to fill specialized positions in the staffing plan. These specialized positions were previously budgeted in Salaries & Wages. It is taking longer to hire for these positions than originally projected when the FY 2022 budget was developed. There has been a need to temporarily fill these positions on a contractual basis until they can be permanently filled.

Personnel Biennial Budget by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Salaries & Wages	64,910,300	70,564,300	32,642,100	75,768,800	5,204,500	7.4%	80,657,500
Salaries & Wages - Workforce Development	829,400	976,700	379,200	1,801,900	825,200	84.5%	1,874,600
Overtime	7,364,700	6,903,600	3,858,900	6,882,600	(21,000)	-0.3%	6,830,300
Employee Benefits	25,448,000	26,811,100	12,693,400	30,087,300	3,276,200	12.2%	32,505,800
Contractual Transition Services	8,392,200	8,652,300	5,106,200	7,603,700	(1,048,600)	-12.1%	7,603,700
Grand Total	\$ 106,944,600	\$ 113,908,000	\$ 54,679,800	\$ 122,144,300	\$ 8,236,400	7.2%	\$ 129,471,900

Personnel Biennial Budget by Operating Area and Expense Category

Operating Area and Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Operating Officer Water Operations	\$ 34,212,900	\$ 36,376,300	\$ 17,857,700	\$ 39,629,100	\$ 3,252,800	8.9%	\$ 41,652,900
Salaries & Wages	20,828,900	22,493,300	10,694,300	23,699,600	1,206,300	5.4%	25,032,500
Salaries & Wages - Workforce Development	546,900	708,500	257,200	1,512,200	803,700	113.4%	1,512,200
Overtime	3,989,500	3,376,300	2,170,000	3,586,900	210,600	6.2%	3,591,900
Employee Benefits	8,500,800	8,894,800	4,436,700	10,145,300	1,250,500	14.1%	10,831,200
Contractual Transition Services	346,800	903,400	299,500	685,100	(218,300)	-24.2%	685,100
Chief Operating Officer Wastewater Operations	36,648,700	38,210,700	18,810,100	40,062,900	1,852,200	4.8%	42,611,200
Salaries & Wages	18,795,100	20,421,600	9,157,200	21,985,900	1,564,300	7.7%	23,635,700
Salaries & Wages - Workforce Development	282,500	255,400	122,000	276,900	21,500	8.4%	349,600
Overtime	2,802,000	3,072,600	1,364,500	2,830,800	(241,800)	-7.9%	2,761,300
Employee Benefits	8,513,500	8,414,400	3,895,400	9,282,300	867,900	10.3%	10,177,600
Contractual Transition Services	6,255,600	6,046,700	4,271,000	5,687,000	(359,700)	-5.9%	5,687,000
Chief Planning Officer	5,052,200	6,114,800	2,553,300	7,251,100	1,136,300	18.6%	8,353,100
Salaries & Wages	3,243,700	3,795,900	1,618,100	4,509,200	713,300	18.8%	5,313,100
Salaries & Wages - Workforce Development	-	-	-	-	-	-	-
Overtime	124,000	136,300	63,200	137,700	1,400	1.0%	139,100
Employee Benefits	1,055,700	1,279,700	553,900	1,552,800	273,100	21.3%	1,849,500
Contractual Transition Services	628,800	902,900	318,100	1,051,400	148,500	16.4%	1,051,400
Chief Administrative & Compliance Officer	12,318,600	14,271,500	6,350,000	14,843,800	572,400	4.0%	15,854,200
Salaries & Wages	9,445,300	10,640,100	4,769,600	11,049,400	409,300	3.8%	11,764,400
Overtime	4,900	4,100	2,500	4,000	-	0.0%	4,000
Employee Benefits	2,758,700	3,396,500	1,512,800	3,700,200	303,700	8.9%	3,995,600
Contractual Transition Services	109,700	230,800	65,100	90,200	(140,600)	0.0%	90,200
Chief Financial Officer	11,593,900	11,828,400	5,457,500	12,820,300	991,900	8.4%	13,068,200
Salaries & Wages	7,908,200	8,338,400	3,965,400	9,374,500	1,036,100	12.4%	9,512,400
Salaries & Wages - Workforce Development	-	12,800	-	12,800	-	0.0%	12,800
Overtime	87,900	48,100	18,400	57,000	8,900	18.5%	57,000
Employee Benefits	2,546,500	2,905,600	1,324,700	3,286,000	380,400	13.1%	3,396,000
Contractual Transition Services	1,051,300	523,500	149,000	90,000	(433,500)	-82.8%	90,000
Chief Executive Officer	7,118,300	7,106,300	3,651,200	7,537,100	430,800	6.1%	7,932,300
Salaries & Wages	4,689,100	4,875,000	2,437,500	5,150,200	275,200	5.6%	5,399,400
Overtime	356,400	266,200	240,300	266,200	-	0.0%	277,000
Employee Benefits	2,072,800	1,920,100	969,900	2,120,700	200,600	10.4%	2,255,900
Contractual Transition Services	-	45,000	3,500	-	(45,000)	-100.0%	-
Grand Total	\$ 106,944,600	\$ 113,908,000	\$ 54,679,800	\$ 122,144,300	\$ 8,236,400	7.2%	\$ 129,471,900

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Salaries & Wages	64,910,300	70,564,300	75,768,800	80,657,500	81,595,600	82,033,700	82,033,700
Salaries & Wages - Workforce Development	829,400	976,700	1,801,900	1,874,600	1,874,600	1,874,600	1,874,600
Overtime	7,364,700	6,903,600	6,882,600	6,830,300	6,854,000	6,858,300	6,859,700
Employee Benefits	25,448,000	26,811,100	30,087,300	32,505,800	33,446,100	34,231,100	34,863,900
Contractual Transition Services	8,392,200	8,652,300	7,603,700	7,603,700	7,603,700	7,603,700	7,603,700
Grand Total	\$ 106,944,600	\$ 113,908,000	\$ 122,144,300	\$ 129,471,900	\$ 131,374,000	\$ 132,601,400	\$ 133,235,600

Five-Year Financial Plan by Operating Area and Expense Category

Operating Area and Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Operating Officer Water Operations	\$ 34,212,900	\$ 36,376,300	\$ 39,629,100	\$ 41,652,900	\$ 42,788,900	\$ 43,534,100	\$ 43,748,100
Salaries & Wages	20,828,900	22,493,300	23,699,600	25,032,500	25,732,500	26,132,500	26,132,500
Salaries & Wages - Workforce Development	546,900	708,500	1,512,200	1,512,200	1,512,200	1,512,200	1,512,200
Overtime	3,989,500	3,376,300	3,586,900	3,591,900	3,591,900	3,591,900	3,591,900
Employee Benefits	8,500,800	8,894,800	10,145,300	10,831,200	11,267,200	11,612,400	11,826,400
Contractual Transition Services	346,800	903,400	685,100	685,100	685,100	685,100	685,100
Chief Operating Officer Wastewater Operations	36,648,700	38,210,700	40,062,900	42,611,200	43,092,900	43,289,800	43,486,900
Salaries & Wages	18,795,100	20,421,600	21,985,900	23,635,700	23,835,700	23,835,700	23,835,700
Salaries & Wages - Workforce Development	282,500	255,400	276,900	349,600	349,600	349,600	349,600
Overtime	2,802,000	3,072,600	2,830,800	2,761,300	2,780,800	2,780,800	2,780,800
Employee Benefits	8,513,500	8,414,400	9,282,300	10,177,600	10,439,800	10,636,700	10,833,800
Contractual Transition Services	6,255,600	6,046,700	5,687,000	5,687,000	5,687,000	5,687,000	5,687,000
Chief Planning Officer	5,052,200	6,114,800	7,251,100	8,353,100	8,390,200	8,427,100	8,464,200
Salaries & Wages	3,243,700	3,795,900	4,509,200	5,313,100	5,313,100	5,313,100	5,313,100
Salaries & Wages - Workforce Development	-	-	-	-	-	-	-
Overtime	124,000	136,300	137,700	139,100	140,500	141,900	143,300
Employee Benefits	1,055,700	1,279,700	1,552,800	1,849,500	1,885,200	1,920,700	1,956,400
Contractual Transition Services	628,800	902,900	1,051,400	1,051,400	1,051,400	1,051,400	1,051,400
Chief Administrative & Compliance Officer	12,318,600	14,271,500	14,843,800	15,854,200	15,930,900	16,007,900	16,084,600
Salaries & Wages	9,445,300	10,640,100	11,049,400	11,764,400	11,764,400	11,764,400	11,764,400
Overtime	4,900	4,100	4,000	4,000	4,000	4,000	4,000
Employee Benefits	2,758,700	3,396,500	3,700,200	3,995,600	4,072,300	4,149,300	4,226,000
Contractual Transition Services	109,700	230,800	90,200	90,200	90,200	90,200	90,200
Chief Financial Officer	11,593,900	11,828,400	12,820,300	13,068,200	13,133,500	13,198,800	13,264,000
Salaries & Wages	7,908,200	8,338,400	9,374,500	9,512,400	9,512,400	9,512,400	9,512,400
Salaries & Wages - Workforce Development	-	12,800	12,800	12,800	12,800	12,800	12,800
Overtime	87,900	48,100	57,000	57,000	57,000	57,000	57,000
Employee Benefits	2,546,500	2,905,600	3,286,000	3,396,000	3,461,300	3,526,600	3,591,800
Contractual Transition Services	1,051,300	523,500	90,000	90,000	90,000	90,000	90,000
Chief Executive Officer	7,118,300	7,106,300	7,537,100	7,932,300	8,037,600	8,143,700	8,187,800
Salaries & Wages	4,689,100	4,875,000	5,150,200	5,399,400	5,437,500	5,475,600	5,475,600
Overtime	356,400	266,200	266,200	277,000	279,800	282,700	282,700
Employee Benefits	2,072,800	1,920,100	2,120,700	2,255,900	2,320,300	2,385,400	2,429,500
Contractual Transition Services	-	45,000	-	-	-	-	-
Grand Total	\$ 106,944,600	\$ 113,908,000	\$ 122,144,300	\$ 129,471,900	\$ 131,374,000	\$ 132,601,400	\$ 133,235,600

Capital Program Allocation

The amounts in the following Capital Program Allocation tables are shown as negative amounts because they are “contra” accounts which represent an offset to the Personnel Costs section of the Operations & Maintenance (O&M) budget. The Capital Program Allocation activity reflects staff time to support project delivery of the Capital Improvement Plan (CIP). The majority of the 26.1% increase represents an overall greater level of activity within the Water and Wastewater Operations due to Life Cycle Engineering positions newly budgeted for FY 2023. In the Chief Planning Officer Area, Capital Improvement Planning increased due to newly budgeted positions for FY 2023 consistent with the long-term strategy to rollout a capital program management group.

Time charged to capital projects is recorded by GLWA team members in a time tracking software called BigTime. This software was implemented and rolled out towards the end of FY 2018.

Capital Program Allocation Biennial Budget

Operating Area and Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Chief Operating Officer Water Operations	\$ (2,095,400)	\$ (2,148,100)	\$ (927,300)	\$ (2,755,500)	\$ (607,400)	28.3%	\$ (3,504,800)
Capital Program: Employee Benefits	(594,500)	(485,600)	(263,100)	(652,200)	(166,600)	34.3%	(843,400)
Capital Program: Salaries & Wages-Direct	(1,500,900)	(1,632,500)	(664,200)	(2,103,300)	(470,800)	28.8%	(2,661,400)
Capital Program: Salaries & Wages-Indire	-	(30,000)	-	-	30,000	-100.0%	-
Chief Operating Officer Wastewater Operations	(1,068,700)	(1,292,700)	(447,300)	(1,429,500)	(136,800)	10.6%	(1,722,400)
Capital Program: Employee Benefits	(304,600)	(308,000)	(126,900)	(382,400)	(74,400)	24.2%	(515,300)
Capital Program: Salaries & Wages-Direct	(764,100)	(984,700)	(320,400)	(1,047,100)	(62,400)	6.3%	(1,207,100)
Chief Planning Officer	-	-	-	(191,200)	(191,200)	0.0%	(192,200)
Capital Program: Employee Benefits	-	-	-	(47,100)	(47,100)	0.0%	(48,100)
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	-	-	-	(144,100)	(144,100)	0.0%	(144,100)
Chief Administrative & Compliance Officer	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	0.0%	-
Chief Financial Officer	(19,000)	(30,200)	(14,100)	-	30,200	-100.0%	-
Capital Program: Employee Benefits	(5,400)	(7,000)	(4,000)	-	7,000	-100.0%	-
Capital Program: Salaries & Wages-Direct	(13,600)	(23,200)	(10,100)	-	23,200	-100.0%	-
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	0.0%	-
Chief Executive Officer	(8,500)	-	-	-	-	0.0%	-
Capital Program: Employee Benefits	(2,400)	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	(6,100)	-	-	-	-	0.0%	-
Grand Total	\$ (3,191,600)	\$ (3,471,000)	\$ (1,388,700)	\$ (4,376,200)	\$ (905,200)	26.1%	\$ (5,419,400)

Capital Program Allocation Five-Year Financial Plan

Operating Area and Expense Category	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Chief Operating Officer Water Operations	\$ (2,095,400)	\$ (2,148,100)	\$ (2,755,500)	\$ (3,504,800)	\$ (4,263,100)	\$ (4,708,900)	\$ (4,730,600)
Capital Program: Employee Benefits	(594,500)	(485,600)	(652,200)	(843,400)	(1,041,700)	(1,167,500)	(1,189,200)
Capital Program: Salaries & Wages-Direct	(1,500,900)	(1,632,500)	(2,103,300)	(2,661,400)	(3,221,400)	(3,541,400)	(3,541,400)
Capital Program: Salaries & Wages-Indire	-	(30,000)	-	-	-	-	-
Chief Operating Officer Wastewater Operations	(1,068,700)	(1,292,700)	(1,429,500)	(1,722,400)	(1,959,500)	(1,968,600)	(1,977,700)
Capital Program: Employee Benefits	(304,600)	(308,000)	(382,400)	(515,300)	(592,400)	(601,500)	(610,600)
Capital Program: Salaries & Wages-Direct	(764,100)	(984,700)	(1,047,100)	(1,207,100)	(1,367,100)	(1,367,100)	(1,367,100)
Chief Planning Officer	-	-	(191,200)	(192,200)	(193,100)	(194,000)	(194,900)
Capital Program: Employee Benefits	-	-	(47,100)	(48,100)	(49,000)	(49,900)	(50,800)
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	-	(144,100)	(144,100)	(144,100)	(144,100)	(144,100)
Chief Administrative & Compliance Officer	-	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	-	-
Chief Financial Officer	(19,000)	(30,200)	-	-	-	-	-
Capital Program: Employee Benefits	(5,400)	(7,000)	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	(13,600)	(23,200)	-	-	-	-	-
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	-	-
Chief Executive Officer	(8,500)	-	-	-	-	-	-
Capital Program: Employee Benefits	(2,400)	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	(6,100)	-	-	-	-	-	-
Grand Total	\$ (3,191,600)	\$ (3,471,000)	\$ (4,376,200)	\$ (5,419,400)	\$ (6,415,700)	\$ (6,871,500)	\$ (6,903,200)

Staffing Plan

The increase in the staffing plan of 54 positions from 1,239 to 1,293 positions are presented in the following table. For comparison, the increase in FTEs of 18.19 is also presented. The FTE staffing is based on the number of hours that a position is filled, or budgeted for, based upon a standard of 2,080 hours per year.

Operating Area	+Increase, -Decrease Staffing Plan from FY 2022 to FY 2023	+Increase, -Decrease in FTEs from FY 2022 to FY 2023
Water Operations	+37.00	+26.00
Financial Services	-9.00	-9.75
Administration & Compliance Officer	+8.00	+1.75
Wastewater Operations	+2.00	-9.56
Planning Services	+11.00	+6.25
Chief Executive Officer	+5.00	+3.50
Total	54.00	18.19

The Staffing Plan and FTE counts level out beginning in FY 2026 as the organization reaches an optimal staffing level and vacancies are filled. The goal of the staffing plan is to provide the organization with an appropriate level of personnel to achieve operational reliability, to ensure a safe environment, maintain compliance and efficient capital delivery, and to provide reliable and quality services to our customer communities.

The following tables present both a “Staffing Plan” reflecting the *number* of positions and a “Staffing Budget” based on *full-time equivalents* (FTEs). In the Staffing Plan each position has a value of one. The position count does not distinguish between a position that is filled 100% (2,080 hours per year), filled for a number of hours less than 2,080 per year, or one that is vacant. The FTE staffing is based on the number of hours that the position is filled, or budgeted for, based upon a standard of 2,080 hours per year.

Staffing Plan

Operating Area and Team	Cost Center	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Chief Operating Officer Water Operations		366.00	383.00	420.00	427.00	434.00	438.00	438.00
COO - Water Operations & Field Services	882001	3.00	3.00	4.00	4.00	4.00	4.00	4.00
Energy, Research & Innovation	882501	6.00	7.00	9.00	9.00	9.00	9.00	9.00
Transformation	882511	0.00	0.00	5.00	5.00	5.00	5.00	5.00
Facility Operations	882421	25.00	23.00	23.00	23.00	23.00	23.00	23.00
Fleet Operations	882422	0.00	3.00	4.00	4.00	4.00	4.00	4.00
Field Service Operations	882431	65.00	71.00	71.00	71.00	71.00	71.00	71.00
Lake Huron Water Plant	882171	31.00	31.00	36.00	36.00	36.00	36.00	36.00
Northeast Water Plant	882151	32.00	33.00	38.00	38.00	38.00	38.00	38.00
Southwest Water Plant	882161	30.00	33.00	37.00	37.00	37.00	37.00	37.00
Springwells Water Plant	882141	36.00	37.00	40.00	40.00	40.00	40.00	40.00
Systems Operations Control	882301	43.00	44.00	44.00	44.00	44.00	44.00	44.00
Water Director	882101	11.00	13.00	12.00	12.00	12.00	12.00	12.00
Water Engineering	882111	23.00	23.00	30.00	37.00	44.00	48.00	48.00
Water Quality	882121	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Water Works Park	882131	35.00	36.00	41.00	41.00	41.00	41.00	41.00
Chief Operating Officer Wastewater Operations		443.00	448.00	450.00	452.00	454.00	454.00	454.00
BDF, COF & Hauling	892227	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Chief Operating Officer Wastewater	892001	14.00	14.00	13.00	13.00	13.00	13.00	13.00
Combined Sewer Overflow	892270	37.00	37.00	33.00	33.00	33.00	33.00	33.00
Industrial Waste Control	892231	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Wastewater Dewatering Process	892225	51.00	50.00	48.00	48.00	48.00	48.00	48.00
Wastewater Director	892201	47.00	49.00	51.00	51.00	51.00	51.00	51.00
Wastewater Engineering	892211	24.00	26.00	31.00	33.00	35.00	35.00	35.00
Wastewater Incineration Process	892226	51.00	53.00	53.00	53.00	53.00	53.00	53.00
Wastewater Laboratories	892235	40.00	41.00	40.00	40.00	40.00	40.00	40.00
Wastewater Operations	892221	15.00	14.00	15.00	15.00	15.00	15.00	15.00
Wastewater Primary Process	892223	55.00	52.00	53.00	53.00	53.00	53.00	53.00
Wastewater Process Control	892222	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Wastewater Secondary Process	892224	44.00	47.00	48.00	48.00	48.00	48.00	48.00
Chief Planning Officer		73.00	57.00	68.00	71.00	71.00	71.00	71.00
Asset Management	886201	11.00	8.00	10.00	11.00	11.00	11.00	11.00
Capital Improvement Planning	886601	8.00	6.00	13.00	13.00	13.00	13.00	13.00
Chief Planning Officer	886001	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Systems Analytics	886401	44.00	36.00	35.00	37.00	37.00	37.00	37.00
Systems Planning & Development	886100	0.00	0.00	4.00	4.00	4.00	4.00	4.00
Systems Planning	886101	7.00	5.00	4.00	4.00	4.00	4.00	4.00
Chief Administration & Compliance Officer		124.00	131.00	139.00	139.00	139.00	139.00	139.00
Chief Administrative Officer	883001	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Enterprise Risk Management and Safety	883401	8.00	8.00	8.00	8.00	8.00	8.00	8.00
General Counsel	883101	7.00	8.00	8.00	8.00	8.00	8.00	8.00
Info Technology Business Productivity Systems	883341	10.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Enterprise Asset Mgmt Systems	883351	16.00	17.00	17.00	17.00	17.00	17.00	17.00
Info Technology Infrastructure	883331	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Security & Risk	883361	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Info Technology Service Delivery	883321	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Info Technology Project Management Office	883311	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Office of the CIO	883301	4.00	4.00	7.00	7.00	7.00	7.00	7.00
Organizational Development Administration	883201	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Organizational Development Talent Management	883211	17.00	18.00	22.00	22.00	22.00	22.00	22.00
Organizational Development Training	883231	12.00	12.00	13.00	13.00	13.00	13.00	13.00

Staffing Plan (continued)

Operating Area and Team	Cost Center	Prior Year FY 2021 Staffing Plan	Current Year FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan	FY 2027 Staffing Plan
Chief Financial Officer		124.00	132.00	123.00	123.00	123.00	123.00	123.00
Chief Financial Officer	884001	5.00	6.00	5.00	5.00	5.00	5.00	5.00
Data Analytics & Internal Audit	884151	3.00	3.00	0.00	0.00	0.00	0.00	0.00
Financial Management & Planning	884113	9.00	10.00	12.00	12.00	12.00	12.00	12.00
Financial Reporting & Accounting	884111	26.00	31.00	29.00	29.00	29.00	29.00	29.00
Logistics and Materials	884124	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	884126	5.00	5.00	0.00	0.00	0.00	0.00	0.00
Procurement Director	884121	31.00	32.00	35.00	35.00	35.00	35.00	35.00
CFO Services	884141	5.00	11.00	15.00	15.00	15.00	15.00	15.00
Reporting and Compliance	884135	5.00	0.00	0.00	0.00	0.00	0.00	0.00
Transformation	884161	8.00	7.00	0.00	0.00	0.00	0.00	0.00
Treasury	884131	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Chief Executive Officer		89.00	88.00	93.00	95.00	96.00	97.00	97.00
Chief Executive Officer	881001	2.00	2.00	2.00	2.00	2.00	2.00	2.00
HazMat	881202	19.00	19.00	19.00	21.00	21.00	21.00	21.00
Office of Emergency Preparedness	881203	0.00	3.00	3.00	3.00	3.00	3.00	3.00
Public Affairs	881101	8.00	7.00	9.00	9.00	9.00	9.00	9.00
Security and Integrity	881201	60.00	57.00	60.00	60.00	61.00	62.00	62.00
Grand Total		1,219.00	1,239.00	1,293.00	1,307.00	1,317.00	1,322.00	1,322.00

Full-time Equivalents

Operating Area and Team	Cost Center	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Chief Operating Officer Water Operations		365.25	382.25	408.25	426.25	433.25	437.25	437.25
COO - Water Operations & Field Services	882001	2.75	2.75	3.75	3.75	3.75	3.75	3.75
Energy, Research & Innovation	882501	6.00	7.00	8.25	9.00	9.00	9.00	9.00
Transformation	882511	0.00	0.00	5.00	5.00	5.00	5.00	5.00
Facility Operations	882421	24.50	22.50	19.00	22.50	22.50	22.50	22.50
Fleet Operations	882422	0.00	3.00	4.00	4.00	4.00	4.00	4.00
Field Service Operations	882431	65.00	71.00	68.00	71.00	71.00	71.00	71.00
Lake Huron Water Plant	882171	31.00	31.00	36.00	36.00	36.00	36.00	36.00
Northeast Water Plant	882151	32.00	33.00	38.00	38.00	38.00	38.00	38.00
Southwest Water Plant	882161	30.00	33.00	37.00	37.00	37.00	37.00	37.00
Springwells Water Plant	882141	36.00	37.00	40.00	40.00	40.00	40.00	40.00
Systems Operations Control	882301	43.00	44.00	40.25	44.00	44.00	44.00	44.00
Water Director	882101	11.00	13.00	12.00	12.00	12.00	12.00	12.00
Water Engineering	882111	23.00	23.00	30.00	37.00	44.00	48.00	48.00
Water Quality	882121	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Water Works Park	882131	35.00	36.00	41.00	41.00	41.00	41.00	41.00
Chief Operating Officer Wastewater Operations		436.75	431.25	421.69	451.75	453.75	453.75	453.75
BDF, COF & Hauling	892227	11.00	9.50	8.75	11.00	11.00	11.00	11.00
Chief Operating Officer Wastewater	892001	14.00	14.00	13.00	13.00	13.00	13.00	13.00
Combined Sewer Overflow	892270	36.50	34.75	29.44	32.75	32.75	32.75	32.75
Industrial Waste Control	892231	28.50	28.25	27.75	29.00	29.00	29.00	29.00
Wastewater Dewatering Process	892225	51.00	48.75	44.50	48.00	48.00	48.00	48.00
Wastewater Director	892201	46.00	47.50	49.25	51.00	51.00	51.00	51.00
Wastewater Engineering	892211	23.50	25.50	30.50	33.00	35.00	35.00	35.00
Wastewater Incineration Process	892226	49.75	49.25	50.00	53.00	53.00	53.00	53.00
Wastewater Laboratories	892235	40.00	39.75	34.00	40.00	40.00	40.00	40.00
Wastewater Operations	892221	13.50	11.00	12.75	15.00	15.00	15.00	15.00
Wastewater Primary Process	892223	54.50	51.00	51.25	53.00	53.00	53.00	53.00
Wastewater Process Control	892222	24.50	25.00	24.00	25.00	25.00	25.00	25.00
Wastewater Secondary Process	892224	44.00	47.00	46.50	48.00	48.00	48.00	48.00
Chief Planning Officer		63.25	56.00	62.25	71.00	71.00	71.00	71.00
Asset Management	886201	9.50	7.50	8.00	11.00	11.00	11.00	11.00
Capital Improvement Planning	886601	5.50	6.00	10.75	13.00	13.00	13.00	13.00
Chief Planning Officer	886001	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Systems Analytics	886401	39.25	36.00	35.00	37.00	37.00	37.00	37.00
Systems Planning & Development	886100	0.00	0.00	3.25	4.00	4.00	4.00	4.00
Systems Planning	886101	6.00	4.50	3.25	4.00	4.00	4.00	4.00
Chief Administration & Compliance Officer		124.00	129.00	130.75	137.50	137.50	137.50	137.50
Chief Administrative Officer	883001	5.00	5.00	4.25	5.00	5.00	5.00	5.00
Enterprise Risk Management and Safety	883401	8.00	6.50	5.75	8.00	8.00	8.00	8.00
General Counsel	883101	7.00	8.00	7.25	8.00	8.00	8.00	8.00
Info Technology Business Productivity Systems	883341	10.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Enterprise Asset Mgmt Systems	883351	16.00	16.50	16.25	16.50	16.50	16.50	16.50
Info Technology Infrastructure	883331	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Security & Risk	883361	3.00	3.00	2.50	3.00	3.00	3.00	3.00
Info Technology Service Delivery	883321	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Info Technology Project Management Office	883311	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Office of the CIO	883301	4.00	4.00	4.75	7.00	7.00	7.00	7.00
Organizational Development Administration	883201	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Organizational Development Talent Management	883211	17.00	18.00	21.00	21.00	21.00	21.00	21.00
Organizational Development Training	883231	12.00	12.00	13.00	13.00	13.00	13.00	13.00

Full-time Equivalents (continued)

Operating Area and Team	Cost Center	Prior Year FY 2021 FTEs	Current Year FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs	FY 2027 FTEs
Chief Financial Officer		122.00	129.75	120.00	121.50	121.50	121.50	121.50
Chief Financial Officer	884001	4.50	5.50	4.50	4.50	4.50	4.50	4.50
Data Analytics & Internal Audit	884151	3.00	3.00	0.00	0.00	0.00	0.00	0.00
Financial Management & Planning	884113	9.00	10.00	12.00	12.00	12.00	12.00	12.00
Financial Reporting & Accounting	884111	25.00	30.00	28.00	28.00	28.00	28.00	28.00
Logistics and Materials	884124	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	884126	5.00	5.00	0.00	0.00	0.00	0.00	0.00
Procurement Director	884121	30.50	32.00	33.50	35.00	35.00	35.00	35.00
CFO Services	884141	5.00	11.00	15.00	15.00	15.00	15.00	15.00
Reporting and Compliance	884135	5.00	0.00	0.00	0.00	0.00	0.00	0.00
Transformation	884161	8.00	6.25	0.00	0.00	0.00	0.00	0.00
Treasury	884131	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Chief Executive Officer		88.25	88.00	91.50	95.00	96.00	97.00	97.00
Chief Executive Officer	881001	2.00	2.00	2.00	2.00	2.00	2.00	2.00
HazMat	881202	19.00	19.00	19.00	21.00	21.00	21.00	21.00
Office of Emergency Preparedness	881203	0.00	3.00	3.00	3.00	3.00	3.00	3.00
Public Affairs	881101	7.25	7.00	7.50	9.00	9.00	9.00	9.00
Security and Integrity	881201	60.00	57.00	60.00	60.00	61.00	62.00	62.00
Grand Total		1,199.50	1,216.25	1,234.44	1,303.00	1,313.00	1,318.00	1,318.00

Utilities

GLWA has utilized Capturis, a multi-site utility information management system, that has been in place for three years. There are a total of 84 trained users. The system allows team members to easily view invoices, run reports, and access any utility data information that may be needed. Capturis continues to allow us to monitor our utility usage and billing more accurately and efficiently.

The tables below provide an overall look at the utility costs that are included in the details of the budgets by operating area in Section 5 – Operating Financial Plans.

Biennial Budget Request (tables 1 through 4)

Table 1 – Electric

The proposed electric expense budget has an increase of \$332,700, or 0.8%. Key variances include the following.

- ✓ Southwest Water Plant increase of \$260,000 in order to right size budget based on actual usage and spend.
- ✓ Water pumping stations increase of \$90,000 due to energy consumption being directly proportional to the unit cost of power and the actual power used by the booster station pumps.
- ✓ Wastewater operations decrease of \$98,200 due to changes in operations resulting in a shift in usage.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Biosolids Dryer Facility	\$ 1,144,400	\$ 1,120,000	\$ 607,300	\$ 1,149,000	\$ 29,000	2.6%	\$ 1,166,000
Combined Sewer Overflow Facilities	1,015,400	955,400	548,300	1,004,000	48,600	5.1%	1,019,000
Lake Huron Water Plant	6,545,900	6,500,000	3,484,000	6,500,000	-	0.0%	6,500,000
Logistics & Materials Warehouses	5,200	27,000	34,500	36,000	9,000	33.3%	36,700
Northeast Water Plant	3,232,600	2,800,000	1,195,500	2,800,000	-	0.0%	2,800,000
Southwest Water Plant	1,611,300	1,270,000	704,400	1,530,000	260,000	20.5%	1,530,000
Springwells Water Plant	3,726,700	3,000,000	1,873,900	3,000,000	-	0.0%	3,000,000
System Analytics	77,800	81,700	31,700	82,000	300	0.4%	82,300
Systems Operations Control	55,900	65,000	27,500	65,000	-	0.0%	65,000
Wastewater Operations	9,812,400	10,226,200	5,703,400	10,128,000	(98,200)	-1.0%	10,280,000
Wastewater Operations Pumping (Lift) Stations	2,621,000	2,137,000	1,712,200	2,131,000	(6,000)	-0.3%	2,131,000
Water Pumping Stations	10,239,600	9,401,000	5,419,100	9,491,000	90,000	1.0%	9,491,000
Water Works Park	1,893,700	2,050,000	960,200	2,050,000	-	0.0%	2,050,000
Grand Total	\$ 41,981,900	\$ 39,633,300	\$ 22,302,000	\$ 39,966,000	\$ 332,700	0.8%	\$ 40,151,000

Table 2 – Gas

The proposed natural gas expense budget has an increase of \$225,700, or 4.1%. This increase is almost entirely driven by an increase in usage in Wastewater Operations at the Water Resource Recovery Facility (\$156,400) and at the Biosolids Dryer Facility (113,000).

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Biosolids Dryer Facility	\$ 1,980,800	\$ 1,900,000	\$ 1,148,900	\$ 2,013,000	\$ 113,000	5.9%	\$ 2,043,000
Combined Sewer Overflow Facilities	146,400	206,200	36,600	177,000	(29,200)	-14.2%	179,000
Lake Huron Water Plant	139,200	180,000	68,700	160,000	(20,000)	-11.1%	160,000
Logistics & Materials Warehouses	1,300	25,000	12,500	25,500	500	2.0%	26,000
Northeast Water Plant	152,600	153,100	71,700	153,100	-	0.0%	153,100
Southwest Water Plant	171,000	140,000	62,300	150,000	10,000	7.1%	150,000
Springwells Water Plant	324,900	280,300	137,300	280,300	-	0.0%	280,300
Systems Operations Control	200	200	100	200	-	0.0%	200
Wastewater Operations	2,496,700	2,343,600	1,470,700	2,500,000	156,400	6.7%	2,538,000
Wastewater Operations Pumping (Lift) Stations	10,900	24,000	4,700	19,000	(5,000)	-20.8%	19,000
Water Pumping Stations	73,700	73,200	19,500	73,200	-	0.0%	73,200
Water Works Park	207,900	240,000	74,300	240,000	-	0.0%	240,000
Grand Total	\$ 5,705,600	\$ 5,565,600	\$ 3,107,300	\$ 5,791,300	\$ 225,700	4.1%	\$ 5,861,800

Table 3 – Water

The proposed water expense budget reflects a decrease of \$138,300, or 4.4%. This decrease is driven by a reduction of budget for Water Resource Recovery Facility.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Biosolids Dryer Facility	\$ 244,000	\$ 180,000	\$ 114,600	\$ 228,000	\$ 48,000	26.7%	\$ 231,000
Combined Sewer Overflow Facilities	363,400	360,300	118,900	379,000	18,700	5.2%	385,000
Lake Huron Water Plant		1,000	-		(1,000)	-100.0%	
Logistics & Materials Warehouses		5,000	600	5,100	100	2.0%	5,200
Northeast Water Plant		2,000	-		(2,000)	-100.0%	
Southwest Water Plant	200	500	400	500	-	0.0%	500
Systems Operations Control	500	600	100	600	-	0.0%	600
Wastewater Operations	2,296,300	2,502,100	938,900	2,300,000	(202,100)	-8.1%	2,346,000
Wastewater Operations Pumping (Lift) Stations	82,300	67,500	38,000	67,500	-	0.0%	67,500
Water Pumping Stations	700	1,000	200	1,000	-	0.0%	1,000
Grand Total	\$ 2,987,400	\$ 3,120,000	\$ 1,211,700	\$ 2,981,700	\$ (138,300)	-4.4%	\$ 3,036,800

Table 4 – Sewer

The proposed sewer expense budget reflects an increase in cost of \$189,300, or 9.1%. The sewer charges billed to GLWA represent sewer usage as well as stormwater drainage charges. The largest driving factor is an increase in budget of \$149,600 at the Biosolids Dryer Facility due to increased sewer discharge that started in FY 2021. Therefore, the budget adjustment is catching up with the increased discharge from that period.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Biosolids Dryer Facility	\$ 500,000	\$ 350,400	\$ 233,800	\$ 500,000	\$ 149,600	42.7%	\$ 508,000
Combined Sewer Overflow Facilities	541,300	604,400	249,500	585,000	(19,400)	-3.2%	594,000
Lake Huron Water Plant	68,300	70,000	28,500	70,000	-	0.0%	70,000
Logistics & Materials Warehouses	17,600	35,000	10,100	35,700	700	2.0%	36,400
Northeast Water Plant	132,300	130,000	66,700	130,000	-	0.0%	130,000
Southwest Water Plant	62,000	350,000	380,900	300,000	(50,000)	-14.3%	300,000
Systems Operations Control	1,400	5,000	1,200	2,000	(3,000)	-60.0%	2,000
Wastewater Operations	579,500	497,600	275,600	584,000	86,400	17.4%	593,000
Wastewater Operations Pumping (Lift) Stations	9,500	9,000	4,700	9,000	-	0.0%	9,000
Water Pumping Stations	2,000	2,700	1,100	2,700	-	0.0%	2,700
Water Works Park	160,600	25,000	26,500	50,000	25,000	100.0%	50,000
Grand Total	\$ 2,074,500	\$ 2,079,100	\$ 1,278,600	\$ 2,268,400	\$ 189,300	9.1%	\$ 2,295,100

Five-Year Financial Plan (tables 5 through 8)
Table 5 – Electric

The increase in the amount requested for electric through FY 2027 is less than 1% per year, representing the assumed increase in surcharges and electric cost each year from DTE.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Biosolids Dryer Facility	\$ 1,144,400	\$ 1,120,000	\$ 1,149,000	\$ 1,166,000	\$ 1,166,000	\$ 1,189,000	\$ 1,213,000
Combined Sewer Overflow Facilities	1,015,400	955,400	1,004,000	1,019,000	1,019,000	1,040,000	1,061,000
Lake Huron Water Plant	6,545,900	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000
Logistics & Materials Warehouse	5,200	27,000	36,000	36,700	37,400	38,200	38,900
Northeast Water Plant	3,232,600	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
Southwest Water Plant	1,611,300	1,270,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000
Springwells Water Plant	3,726,700	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
System Analytics	77,800	81,700	82,000	82,300	82,600	82,900	83,200
Systems Operations Control	55,900	65,000	65,000	65,000	65,000	65,000	65,000
Wastewater Operations	9,812,400	10,226,200	10,128,000	10,280,000	10,280,000	10,486,000	10,696,000
Wastewater Operations Pumping (Lift) Stations	2,621,000	2,137,000	2,131,000	2,131,000	2,131,000	2,131,000	2,131,000
Water Pumping Stations	10,239,600	9,401,000	9,491,000	9,491,000	9,491,000	9,491,000	9,491,000
Water Works Park	1,893,700	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000
Grand Total	\$ 41,981,900	\$ 39,633,300	\$ 39,966,000	\$ 40,151,000	\$ 40,152,000	\$ 40,403,100	\$ 40,659,100

Table 6 – Gas

The average increase for FY 2024 through FY 2027 in the amount requested for gas each year is less than 1.8% per year. This is based on the assumed increase in natural gas cost & transportation cost from DTE. The Authority purchases natural gas as a MiDeal member through the Michigan Natural Gas Customer Choice Program.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Biosolids Dryer Facility	\$ 1,980,800	\$ 1,900,000	\$ 2,013,000	\$ 2,043,000	\$ 2,043,000	\$ 2,084,000	\$ 2,126,000
Combined Sewer Overflow							
Facilities	146,400	206,200	177,000	179,000	179,000	181,000	183,000
Lake Huron Water Plant	139,200	180,000	160,000	160,000	160,000	160,000	160,000
Logistics & Materials							
Warehouse	1,300	25,000	25,500	26,000	26,500	27,000	27,600
Northeast Water Plant	152,600	153,100	153,100	153,100	153,100	153,100	153,100
Southwest Water Plant	171,000	140,000	150,000	150,000	150,000	150,000	150,000
Springwells Water Plant	324,900	280,300	280,300	280,300	280,300	280,300	280,300
Systems Operations Control	200	200	200	200	200	200	200
Wastewater Operations	2,496,700	2,343,600	2,500,000	2,538,000	2,538,000	2,589,000	2,641,000
Wastewater Operations							
Pumping (Lift) Stations	10,900	24,000	19,000	19,000	19,000	19,000	19,000
Water Pumping Stations	73,700	73,200	73,200	73,200	73,200	73,200	73,200
Water Works Park	207,900	240,000	240,000	240,000	240,000	240,000	240,000
Grand Total	\$ 5,705,600	\$ 5,565,600	\$ 5,791,300	\$ 5,861,800	\$ 5,862,300	\$ 5,956,800	\$ 6,053,400

Table 7 – Water

We have budgeted less than an annual 2% increase for water for FY 2024 through FY 2027 to compensate for the increase in water charges from DWSD and other municipalities.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Biosolids Dryer Facility	\$ 244,000	\$ 180,000	\$ 228,000	\$ 231,000	\$ 231,000	\$ 236,000	\$ 241,000
Combined Sewer Overflow							
Facilities	363,400	360,300	379,000	385,000	385,000	392,000	399,000
Lake Huron Water Plant		1,000					
Logistics & Materials							
Warehouse		5,000	5,100	5,200	5,300	5,400	5,500
Northeast Water Plant		2,000					
Southwest Water Plant	200	500	500	500	500	500	500
Systems Operations Control	500	600	600	600	600	600	600
Wastewater Operations	2,296,300	2,502,100	2,300,000	2,346,000	2,393,000	2,441,000	2,490,000
Wastewater Operations							
Pumping (Lift) Stations	82,300	67,500	67,500	67,500	67,500	67,500	67,500
Water Pumping Stations	700	1,000	1,000	1,000	1,000	1,000	1,000
Grand Total	\$ 2,987,400	\$ 3,120,000	\$ 2,981,700	\$ 3,036,800	\$ 3,083,900	\$ 3,144,000	\$ 3,205,100

Table 8 – Sewer

The increase for FY 2023 is discussed in Table 4. The Budget Request increase assumption for FY 2024 through FY 2027 is less than 2% per year.

Cost Center	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Biosolids Dryer Facility	\$ 500,000	\$ 350,400	\$ 500,000	\$ 508,000	\$ 508,000	\$ 518,000	\$ 528,000
Combined Sewer Overflow Facilities	541,300	604,400	585,000	594,000	594,000	605,000	616,000
Lake Huron Water Plant	68,300	70,000	70,000	70,000	70,000	70,000	70,000
Logistics & Materials Warehouse	17,600	35,000	35,700	36,400	37,100	37,800	38,600
Northeast Water Plant	132,300	130,000	130,000	130,000	130,000	130,000	130,000
Southwest Water Plant	62,000	350,000	300,000	300,000	300,000	300,000	300,000
Systems Operations Control	1,400	5,000	2,000	2,000	2,000	2,000	2,000
Wastewater Operations	579,500	497,600	584,000	593,000	593,000	605,000	617,000
Wastewater Operations Pumping (Lift) Stations	9,500	9,000	9,000	9,000	9,000	9,000	9,000
Water Pumping Stations	2,000	2,700	2,700	2,700	2,700	2,700	2,700
Water Works Park	160,600	25,000	50,000	50,000	50,000	50,000	50,000
Grand Total	\$ 2,074,500	\$ 2,079,100	\$ 2,268,400	\$ 2,295,100	\$ 2,295,800	\$ 2,329,500	\$ 2,363,300

Shared Services

The GLWA and DWSD leverage economies of scale, assets, technology, and expertise by sharing services. The shared services agreement, dated December 1, 2015, is available at <https://www.glwater.org/investor-relations/>.

The shared services billing process began in FY 2016 and was new to both entities. To best facilitate the tracking of expenses, the GLWA has designed its general ledger system to manage the budget and accumulate costs via a “contra” account in each cost center that matches the source of the expense (hence the contra amounts are shown as negative amounts). The net effect on the cost center expense is zero which preserves the basis for appropriate cost allocation. Amounts charged by DWSD for services are recorded in a manner consistent with other vendor expenses.

The tables below provide an overall look of the shared services that are included in the details of the budgets by operating area in Section 5 – Operating Financial Plans.

Biennial Budget Request

The biennial budget reflects an overall decrease in FY 2023 of \$4,000, or a negative 0.1%. This decrease is primarily due to an adjustment in the maintenance plan for the OPS-008 Systems Control Center Shared Service at the Blue Hill and Woodmere Pumping Stations.

Biennial Budget by Area - Shared Services - GLWA as Provider

Cost Center & Description	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Wastewater System Operations	(338,200)	(498,200)	(172,400)	(448,600)	49,600	-10.0%	(451,100)
892222 - Wastewater Process Control	(61,600)	(62,800)	(31,400)	(64,100)	(1,300)	2.1%	(65,400)
892270 - Combined Sewer Overflow	(19,400)	(19,700)	(9,800)	(20,100)	(400)	2.0%	(20,500)
892279 - Belle Isle Combined Sewer Overflow	(76,400)	(109,300)	(38,900)	(79,000)	30,300	-27.7%	(79,800)
892342 - Belle Isle Pumping Station	(56,400)	(48,700)	(28,800)	(48,700)	-	0.0%	(48,700)
892343 - Blue Hill Pumping Station	(75,500)	(176,200)	(38,500)	(155,200)	21,000	-11.9%	(155,200)
892347 - Fischer Pumping Station	(12,200)	(12,800)	(6,200)	(12,800)	-	0.0%	(12,800)
892352 - Woodmere Pumping Station	(36,700)	(68,700)	(18,800)	(68,700)	-	0.0%	(68,700)
Centralized Services	(2,079,600)	(2,262,100)	(1,130,800)	(2,307,300)	(45,200)	2.0%	(2,353,500)
881201 - Security and Integrity	(323,500)	(338,100)	(169,000)	(344,800)	(6,700)	2.0%	(351,800)
882301 - Systems Operations Control	(437,800)	(446,600)	(223,300)	(455,500)	(8,900)	2.0%	(464,600)
882431 - Field Service Operations	(17,000)	(17,400)	(8,600)	(17,700)	(300)	1.7%	(18,000)
883321 - IT Service Delivery	(166,600)	(150,000)	(74,900)	(153,000)	(3,000)	2.0%	(156,100)
883331 - IT Infrastructure	(1,736,600)	(825,000)	(412,500)	(841,500)	(16,500)	2.0%	(858,300)
883351 - IT Enterprise Asset Management Systems	721,500	(485,000)	(242,500)	(494,800)	(9,800)	2.0%	(504,700)
883361 - IT Security & Risk	(36,400)	-	-	-	-	0.0%	-
886401 - Systems Analytics	(83,200)	-	-	-	-	0.0%	-
Administrative & Other Services	(149,000)	(168,700)	(65,600)	(169,100)	(400)	0.2%	(172,500)
884131 - Treasury	(143,100)	(150,000)	(56,300)	(150,000)	-	0.0%	(153,000)
884141 - CFO Services	(5,900)	(18,700)	(9,300)	(19,100)	(400)	2.1%	(19,500)
Grand Total	\$ (2,566,800)	\$ (2,929,000)	\$ (1,368,800)	\$ (2,925,000)	\$ 4,000	-0.1%	\$ (2,977,100)

Biennial Budget by Area - Shared Services - GLWA as Subscriber

Cost Center & Description	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Centralized Services	\$ 1,692,000	\$ 2,854,900	\$ 1,427,450	\$ 2,912,000	\$ 57,100	2.0%	\$ 2,970,200
882421 - Facility Operations	1,650,000	2,392,900	1,196,450	2,440,800	47,900	2.0%	2,489,600
882431 - Field Service Operations	24,000	104,000	52,000	106,100	2,100	2.0%	108,200
883331 - IT Infrastructure	-	156,100	78,050	159,200	3,100	2.0%	162,400
883341 - Info Tech Business Productivity Systems	-	156,100	78,050	159,200	3,100	2.0%	162,400
883351 - IT Enterprise Asset Management Systems	18,000	45,800	22,900	46,700	900	2.0%	47,600
Grand Total	\$ 1,692,000	\$ 2,854,900	\$ 1,427,450	\$ 2,912,000	\$ 57,100	2.0%	\$ 2,970,200

Five-Year Financial Plan
Five-Year Financial Plan by Area - Shared Services - GLWA as Provider

Cost Center & Description	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Wastewater System Operations	(338,200)	(498,200)	(172,400)	(448,600)	(451,100)	(453,600)	(456,000)	(458,900)
892222 - Wastewater Process Control	(61,600)	(62,800)	(31,400)	(64,100)	(65,400)	(66,700)	(68,000)	(69,400)
892270 - Combined Sewer Overflow	(19,400)	(19,700)	(9,800)	(20,100)	(20,500)	(20,900)	(21,400)	(21,800)
892279 - Belle Isle Combined Sewer Overflow	(76,400)	(109,300)	(38,900)	(79,000)	(79,800)	(80,600)	(81,200)	(82,300)
892342 - Belle Isle Pumping Station	(56,400)	(48,700)	(28,800)	(48,700)	(48,700)	(48,700)	(48,700)	(48,700)
892343 - Blue Hill Pumping Station	(75,500)	(176,200)	(38,500)	(155,200)	(155,200)	(155,200)	(155,200)	(155,200)
892347 - Fischer Pumping Station	(12,200)	(12,800)	(6,200)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)
892352 - Woodmere Pumping Station	(36,700)	(68,700)	(18,800)	(68,700)	(68,700)	(68,700)	(68,700)	(68,700)
Centralized Services	(2,079,600)	(2,262,100)	(1,130,800)	(2,307,300)	(2,353,500)	(2,400,400)	(2,448,400)	(2,497,200)
881201 - Security and Integrity	(323,500)	(338,100)	(169,000)	(344,800)	(351,800)	(358,900)	(366,000)	(373,300)
882301 - Systems Operations Control	(437,800)	(446,600)	(223,300)	(455,500)	(464,600)	(473,800)	(483,300)	(493,000)
882431 - Field Service Operations	(17,000)	(17,400)	(8,600)	(17,700)	(18,000)	(18,300)	(18,800)	(19,100)
883321 - IT Service Delivery	(166,600)	(150,000)	(74,900)	(153,000)	(156,100)	(159,200)	(162,400)	(165,600)
883331 - IT Infrastructure	(1,736,600)	(825,000)	(412,500)	(841,500)	(858,300)	(875,400)	(892,900)	(910,700)
883351 - IT Enterprise Asset Management Systems	721,500	(485,000)	(242,500)	(494,800)	(504,700)	(514,800)	(525,000)	(535,500)
883361 - Info Technology Security & Risk	(36,400)	-	-	-	-	-	-	-
886401 - Systems Analytics	(83,200)	-	-	-	-	-	-	-
Administrative & Other Services	(149,000)	(168,700)	(65,600)	(169,100)	(172,500)	(175,900)	(179,400)	(183,000)
884131 - Treasury	(143,100)	(150,000)	(56,300)	(150,000)	(153,000)	(156,100)	(159,200)	(162,400)
884141 - CFO Services	(5,900)	(18,700)	(9,300)	(19,100)	(19,500)	(19,800)	(20,200)	(20,600)
Grand Total	\$ (2,566,800)	\$ (2,929,000)	\$ (1,368,800)	\$ (2,925,000)	\$ (2,977,100)	\$ (3,029,900)	\$ (3,083,800)	\$ (3,139,100)

Five-Year Financial Plan by Area - Shared Services - GLWA as Subscriber

Cost Center & Description	FY 2021 Actuals	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Centralized Services	\$ 1,692,000	\$ 2,854,900	\$ 1,427,450	\$ 2,912,000	\$ 2,970,200	\$ 3,029,600	\$ 3,090,200	\$ 3,152,100
882421 - Facility Operations	1,650,000	2,392,900	1,196,450	2,440,800	2,489,600	2,539,400	2,590,200	2,642,000
882431 - Field Service Operations	24,000	104,000	52,000	106,100	108,200	110,400	112,600	114,900
883331 - IT Infrastructure	-	156,100	78,050	159,200	162,400	165,600	168,900	172,300
883341 - Info Tech Business Productivity Systems	-	156,100	78,050	159,200	162,400	165,600	168,900	172,300
883351 - IT Enterprise Asset Management Systems	18,000	45,800	22,900	46,700	47,600	48,600	49,600	50,600
Grand Total	\$ 1,692,000	\$ 2,854,900	\$ 1,427,450	\$ 2,912,000	\$ 2,970,200	\$ 3,029,600	\$ 3,090,200	\$ 3,152,100

Five-Year Financial Plan by Shared Services Number - GLWA as Provider & Subscriber

Both activities by the GLWA as service “provider” and services received by the GLWA as the service “subscriber” are shown in the table below.

Shared Services Number and Description	Cost Center - Description	FY 2021 Actuals	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
DoIT-001 Financial Information System	883341 - Info Tech Business Productivity Systems	\$ -	\$ 156,100	\$ 159,200	\$ 162,400	\$ 165,600	\$ 168,900	\$ 172,300
DoIT-002 Radios	883331 - IT Infrastructure	-	156,100	159,200	162,400	165,600	168,900	172,300
DoIT-003 Customer Service Technology Suite	883331 - IT Infrastructure	18,000	45,800	46,700	47,600	48,600	49,600	50,600
	883351 - IT Enterprise Asset Management Systems	701,000	(400,000)	(408,100)	(416,300)	(424,700)	(433,200)	(441,900)
ITS-004A WAM	886401 - Systems Analytics	(83,200)	-	-	-	-	-	-
ITS-005	883351 - IT Enterprise Asset Management Systems	20,500	(40,000)	(40,800)	(41,600)	(42,400)	(43,200)	(44,100)
ITS-008A TIBCO	883361 - Info Technology Security & Risk	(36,400)	-	-	-	-	-	-
ITS-009 IT Infrastructure	883331 - IT Infrastructure	(1,736,600)	(800,000)	(816,000)	(832,300)	(848,900)	(865,900)	(883,200)
ITS-009A IT Infrastructure	883321 - Info Technology Service Delivery	(166,600)	(150,000)	(153,000)	(156,100)	(159,200)	(162,400)	(165,600)
ITS-011 Print Shop	883351 - Info Tech Enterprise Asset Mgmt Systems	-	(45,000)	(45,900)	(46,800)	(47,700)	(48,600)	(49,500)
ITS-012 Oracle Database Licensing	883331 - Info Technology Infrastructure	-	(25,000)	(25,500)	(26,000)	(26,500)	(27,000)	(27,500)
ITS-014 Security Network	884131 - Treasury	(143,100)	(150,000)	(150,000)	(153,000)	(156,100)	(159,200)	(162,400)
DWSD - Bank Fees	884141 - CFO Services	(5,900)	(18,700)	(19,100)	(19,500)	(19,800)	(20,200)	(20,600)
DWSD - Public Finance								
OPS-003 As Needed Field Services	882431 - Field Service Operations	24,000	104,000	106,100	108,200	110,400	112,600	114,900
OPS-005 Security and Integrity	881201 - Security and Integrity	(323,500)	(338,100)	(344,800)	(351,800)	(358,900)	(366,000)	(373,300)
OPS-006 Shared Facilities Shared	882421 - Facility Operations	1,650,000	2,392,900	2,440,800	2,489,600	2,539,400	2,590,200	2,642,000
OPS-008 Systems Control Center: Detroit Only Pump Stations/CSO	882301 - Systems Operations Control	(437,800)	(446,600)	(455,500)	(464,600)	(473,800)	(483,300)	(493,000)
	882431 - Field Service Operations	(17,000)	(17,400)	(17,700)	(18,000)	(18,300)	(18,800)	(19,100)
	892222 - Wastewater Process Control	(61,600)	(62,800)	(64,100)	(65,400)	(66,700)	(68,000)	(69,400)
	892270 - Combined Sewer Overflow	(19,400)	(19,700)	(20,100)	(20,500)	(20,900)	(21,400)	(21,800)
	892279 - Belle Isle Combined Sewer Overflow	(76,400)	(109,300)	(79,000)	(79,800)	(80,600)	(81,200)	(82,300)
	892342 - Belle Isle Pumping Station	(56,400)	(48,700)	(48,700)	(48,700)	(48,700)	(48,700)	(48,700)
	892343 - Blue Hill Pumping Station	(75,500)	(176,200)	(155,200)	(155,200)	(155,200)	(155,200)	(155,200)
	892347 - Fischer Pumping Station	(12,200)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)
	892352 - Woodmere Pumping Station	(36,700)	(68,700)	(68,700)	(68,700)	(68,700)	(68,700)	(68,700)
Grand Total		\$ (874,800)	\$ (74,100)	\$ (13,000)	\$ (6,900)	\$ (300)	\$ 6,400	\$ 13,000

Centralized and Administrative Services

Centralized and Administrative Services include operational functions that serve both water and wastewater operations. The following functional areas are included in this cost center group.

Centralized Services

- ✓ Planning Services (Office of the Chief Planning Officer, Systems Planning & Development, Asset Management, Systems Planning, Capital Improvement Planning, and Systems Analytics)
- ✓ Systems Control
- ✓ Facility Operations
- ✓ Fleet Operations
- ✓ Field Service Operations
- ✓ Energy, Research & Innovation
- ✓ Transformation
- ✓ Information Technology (Office of the Chief Information Officer, Project Management Office, Security & Risk, Infrastructure, Enterprise Asset Management Systems, Business Productivity Systems and Service Delivery)
- ✓ Security & Integrity (includes HazMat and Office of Emergency Preparedness)

Administrative Services

- ✓ Board of Directors
- ✓ Chief Executive Officer
- ✓ Chief Administrative and Compliance Officer (includes Risk Management & Safety)
- ✓ General Counsel
- ✓ Public Affairs
- ✓ Organizational Development
- ✓ Financial Services Group (Chief Financial Officer, Financial Reporting & Accounting, Financial Management & Planning, CFO Services, Treasury, Procurement Director, and Logistics and Materials)

Cost Allocation for the functional areas above distributes operational expenses to GLWA's water and wastewater systems using a defined methodology. Cost allocation for both Centralized Services and Administrative Services are allocated based upon a two-step approach.

- ✓ Step One: Specifically, identifiable costs to either water or wastewater are isolated for allocation directly to the appropriate system.
- ✓ Step Two: The remaining costs, net of those specifically identified in Step One, are allocated using a percentage basis that considers department operations as a whole. The allocation percentage between water and wastewater (sewer) is reviewed annually. That effort includes a detailed review of both the budget and actual activity for each of the functional areas. Members of the finance and operations teams work together to determine the percentage

allocation of support provided to the water and wastewater (sewer) systems. In addition to the annual reviews, mid-year reviews are conducted when changes in operations occurs.

The tables below present the budgets for the Administrative and Centralized Services cost centers and their projected allocation to GLWA's water and wastewater systems. Data is presented in biennial and five-year budget formats.

Tables 1 and 2 – Costs Allocated to Water and Wastewater (Summary) presents the dollar amount allocated to each system based on the analysis of expenses by cost center for both the biennial and five-year budget periods.

Table 1a – Biennial Cost Allocation Summary

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Wastewater	\$ 63,793,400	\$ 69,328,400	\$ 33,094,500	\$ 70,855,100	\$ 1,526,700	2.2%	\$ 73,489,400
Administrative Services	12,667,800	17,509,300	8,377,400	17,616,200	106,900	0.6%	18,214,200
Centralized Services	51,125,600	51,819,100	24,717,100	53,238,900	1,419,800	2.7%	55,275,200
Water	49,552,200	69,120,800	28,468,100	68,329,500	(791,300)	-1.1%	70,692,300
Administrative Services	12,549,000	17,094,000	7,340,500	17,065,500	(28,500)	-0.2%	17,652,400
Centralized Services	37,003,200	52,026,800	21,127,600	51,264,000	(762,800)	-1.5%	53,039,900
Grand Total	\$ 113,345,600	\$ 138,449,200	\$ 61,562,600	\$ 139,184,600	\$ 735,400	0.5%	\$ 144,181,700

Table 1b – Biennial Cost Allocation Summary

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Administrative	25,216,800	34,603,300	15,717,900	34,681,700	78,400	0.2%	35,866,600
Centralized Services	88,128,800	103,845,900	45,844,700	104,502,900	657,000	0.6%	108,315,100
Grand Total	\$ 113,345,600	\$ 138,449,200	\$ 61,562,600	\$ 139,184,600	\$ 735,400	0.5%	\$ 144,181,700

Table 2a – Five Year Cost Allocation Summary

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Wastewater	\$ 63,793,400	\$ 69,328,400	\$ 70,855,100	\$ 73,489,400	\$ 73,675,100	\$ 74,681,200	\$ 75,367,900
Administrative Services	12,667,800	17,509,300	17,616,200	18,214,200	18,407,900	18,558,100	18,906,900
Centralized Services	51,125,600	51,819,100	53,238,900	55,275,200	55,267,200	56,123,100	56,461,000
Water	49,552,200	69,120,800	68,329,500	70,692,300	74,690,300	74,448,300	76,407,600
Administrative Services	12,549,000	17,094,000	17,065,500	17,652,400	17,835,000	17,973,600	18,310,800
Centralized Services	37,003,200	52,026,800	51,264,000	53,039,900	56,855,300	56,474,700	58,096,800
Grand Total	\$ 113,345,600	\$ 138,449,200	\$ 139,184,600	\$ 144,181,700	\$ 148,365,400	\$ 149,129,500	\$ 151,775,500

Table 2b – Five Year Cost Allocation Summary

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Administrative	25,216,800	34,603,300	34,681,700	35,866,600	36,242,900	36,531,700	37,217,700
Centralized Services	88,128,800	103,845,900	104,502,900	108,315,100	112,122,500	112,597,800	114,557,800
Grand Total	\$ 113,345,600	\$ 138,449,200	\$ 139,184,600	\$ 144,181,700	\$ 148,365,400	\$ 149,129,500	\$ 151,775,500

Tables 3 and 4 – Allocated costs by expense category summarizes the financial plan by expense category subject to allocation to the water and wastewater systems for both the biennial and five-year budget periods.

Table 3 – Biennial Costs Subject to Allocation by Expense Category

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2022 Activity as of 12.31.2021	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested
Centralized Services	\$ 88,128,700	\$ 103,845,900	\$ 45,844,700	\$ 104,502,900	\$ 657,000	0.6%	\$ 108,315,100
2.1 Salaries & Wages	20,149,200	22,413,900	10,207,600	23,514,600	1,100,700	4.9%	25,437,400
2.2 Workforce Development	308,900	385,300	151,300	426,700	41,400	10.7%	426,700
2.3 Overtime	2,129,000	1,618,100	1,330,700	1,718,900	100,800	6.2%	1,736,100
2.4 Employee Benefits	7,675,500	8,346,000	3,953,300	9,063,800	717,800	8.6%	9,929,200
2.5 Transition Services	975,600	1,966,400	463,700	1,826,700	(139,700)	-7.1%	1,826,700
3.1 Electric	133,700	146,700	59,200	147,000	300	0.2%	147,300
3.2 Gas	200	200	100	200	-	0.0%	200
3.3 Sewage Service	1,400	5,000	1,200	2,000	(3,000)	-60.0%	2,000
3.4 Water Service	500	600	100	600	-	0.0%	600
4.2 Supplies & Other	7,303,000	12,516,900	3,723,500	10,812,600	(1,704,300)	-13.6%	11,028,100
4.3 Contractual Services	50,248,500	53,911,600	26,416,000	55,179,200	1,267,600	2.4%	55,825,800
5.1 Capital Program Allocation	(106,500)	(100,300)	(60,200)	(296,600)	(196,300)	195.7%	(296,000)
5.2 Shared Services	(2,079,600)	(2,262,100)	(1,130,800)	(2,307,300)	(45,200)	2.0%	(2,353,500)
5.5 Intergovernmental Agreement	(180,900)	-	(10,200)	-	-	0.0%	-
6.0 Capital Outlay	1,570,200	2,998,800	739,200	2,814,500	(184,300)	-6.1%	2,972,500
7.0 Unallocated Reserve	-	1,898,800	-	1,600,000	(298,800)	-15.7%	1,632,000
Administrative Services	25,216,600	34,603,300	15,717,800	34,681,700	78,400	0.2%	35,866,600
2.1 Salaries & Wages	12,713,500	13,922,700	6,588,400	15,170,000	1,247,300	9.0%	15,786,100
2.2 Workforce Development	-	12,800	-	12,800	-	0.0%	12,800
2.3 Overtime	92,500	52,100	20,800	61,000	8,900	17.1%	61,000
2.4 Employee Benefits	3,904,900	4,612,600	2,112,600	5,179,200	566,600	12.3%	5,485,100
2.5 Transition Services	1,161,000	639,200	371,500	90,000	(549,200)	-85.9%	90,000
3.1 Electric	5,200	69,900	34,500	36,000	(33,900)	-48.5%	36,700
3.2 Gas	1,300	25,000	12,500	25,500	500	2.0%	26,000
3.3 Sewage Service	17,600	35,000	10,100	35,700	700	2.0%	36,400
3.4 Water Service	-	5,000	600	5,100	100	2.0%	5,200
4.2 Supplies & Other	845,200	2,118,800	870,900	2,131,100	12,300	0.6%	2,170,800
4.3 Contractual Services	6,643,400	12,455,800	5,775,600	11,604,400	(851,400)	-6.8%	11,819,000
5.1 Capital Program Allocation	(19,000)	(30,200)	(14,100)	-	30,200	-100.0%	-
5.2 Shared Services	(149,000)	(168,700)	(65,600)	(169,100)	(400)	0.2%	(172,500)
7.0 Unallocated Reserve	-	853,300	-	500,000	(353,300)	-41.4%	510,000
Grand Total	\$ 113,345,600	\$ 138,449,200	\$ 61,562,600	139,184,600	735,400	0.5%	\$ 144,181,700

Table 4 – Five Year Costs Subject to Allocation by Expense Category

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Centralized Services	\$ 88,128,700	\$ 103,845,900	\$ 104,502,900	\$ 108,315,100	\$ 112,122,500	\$ 112,597,800	\$ 114,557,800
2.1 Salaries & Wages	20,149,200	22,413,900	23,514,600	25,437,400	25,475,500	25,513,600	25,513,600
2.2 Workforce Development	308,900	385,300	426,700	426,700	426,700	426,700	426,700
2.3 Overtime	2,129,000	1,618,100	1,718,900	1,736,100	1,740,300	1,744,600	1,746,000
2.4 Employee Benefits	7,675,500	8,346,000	9,063,800	9,929,200	10,141,100	10,354,100	10,545,800
2.5 Transition Services	975,600	1,966,400	1,826,700	1,826,700	1,826,700	1,826,700	1,826,700
3.1 Electric	133,700	146,700	147,000	147,300	147,600	147,900	148,200
3.2 Gas	200	200	200	200	200	200	200
3.3 Sewage Service	1,400	5,000	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	500	600	600	600	600	600	600
4.2 Supplies & Other	7,303,000	12,516,900	10,812,600	11,028,100	11,191,300	11,524,400	11,323,500
4.3 Contractual Services	50,248,500	53,911,600	55,179,200	55,825,800	59,171,700	58,013,800	59,735,600
5.1 Capital Program Allocation	(106,500)	(100,300)	(296,600)	(296,000)	(297,300)	(298,700)	(300,000)
5.2 Shared Services	(2,079,600)	(2,262,100)	(2,307,300)	(2,353,500)	(2,400,400)	(2,448,400)	(2,497,200)
5.5 Intergovernmental Agreement	(180,900)	-	-	-	-	-	-
6.0 Capital Outlay	1,570,200	2,998,800	2,814,500	2,972,500	3,031,900	3,092,400	3,154,200
7.0 Unallocated Reserve	-	1,898,800	1,600,000	1,632,000	1,664,600	2,697,900	2,931,900
Administrative Services	25,216,600	34,603,300	34,681,700	35,866,600	36,242,900	36,531,700	37,217,700
2.1 Salaries & Wages	12,713,500	13,922,700	15,170,000	15,786,100	15,786,100	15,786,100	15,786,100
2.2 Workforce Development	-	12,800	12,800	12,800	12,800	12,800	12,800
2.3 Overtime	92,500	52,100	61,000	61,000	61,000	61,000	61,000
2.4 Employee Benefits	3,904,900	4,612,600	5,179,200	5,485,100	5,590,600	5,696,000	5,801,300
2.5 Transition Services	1,161,000	639,200	90,000	90,000	90,000	90,000	90,000
3.1 Electric	5,200	69,900	36,000	36,700	37,400	38,200	38,900
3.2 Gas	1,300	25,000	25,500	26,000	26,500	27,000	27,600
3.3 Sewage Service	17,600	35,000	35,700	36,400	37,100	37,800	38,600
3.4 Water Service	-	5,000	5,100	5,200	5,300	5,400	5,500
4.2 Supplies & Other	845,200	2,118,800	2,131,100	2,170,800	2,213,200	2,257,200	2,300,000
4.3 Contractual Services	6,643,400	12,455,800	11,604,400	11,819,000	12,038,600	11,669,000	11,897,700
5.1 Capital Program Allocation	(19,000)	(30,200)	-	-	-	-	-
5.2 Shared Services	(149,000)	(168,700)	(169,100)	(172,500)	(175,900)	(179,400)	(183,000)
7.0 Unallocated Reserve	-	853,300	500,000	510,000	520,200	1,030,600	1,341,200
Grand Total	\$ 113,345,600	\$ 138,449,200	139,184,600	\$ 144,181,700	\$ 148,365,400	\$ 149,129,500	\$ 151,775,500

Table 5 Cost Allocation - Water and Wastewater Percentages presents the projected aggregate allocation percentages for the five-year period 2023 through 2027. The percentages are based off the data presented in tables 1 and 2 above and forecasted expenditures for periods 2023-2027.

Table 5 – Five Year Projected Cost Allocated Percentages

Expense Categories	FY 2021 Actual	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Centralized Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	42.0%	50.1%	49.1%	49.0%	50.7%	50.2%	50.7%
Wastewater	58.0%	49.9%	50.9%	51.0%	49.3%	49.8%	49.3%
Administrative Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	49.8%	49.4%	49.2%	49.2%	49.2%	49.2%	49.2%
Wastewater	50.2%	50.6%	50.8%	50.8%	50.8%	50.8%	50.8%
Total Allocated Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	43.7%	49.9%	49.1%	49.0%	50.3%	49.9%	50.3%
Wastewater	56.3%	50.1%	50.9%	51.0%	49.7%	50.1%	49.7%

Tables 6 through 9 list the Administrative and Centralized Services contracts and cost centers that receive specific water and/or sewer accounting treatment as noted above.

Table 6 – Administrative Services Water/Sewer Specific Contracts – up to 90% allocated to Sewer

Cost Center	Contract	Vendor	Description of Service	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Logistics & Materials	2100822	Family Associates, LLC	Melvindale Warehouse Rental	550,800	561,800	573,000	584,500	596,200
Total				550,800	561,800	573,000	584,500	596,200

Table 7 – Centralized Services Water Specific Contracts – 100% allocation to Water

Cost Center	Contract	Vendor	Description of Service	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Planning Services								
Director	Pending	TBD	Water Master Plan Update	100,000	-	-	-	130,000
Systems Planning	Pending	TBD	Water Contract Negotiations	125,000	125,000	50,000	50,000	50,000
Systems Planning	12772	Aquasight	Water Performance Monitoring	450,000	450,000	500,000	500,000	500,000
		HDR Water Resource						
Asset Management	1902659	Management	Linear System Integrity Program	1,312,900	1,585,400	5,475,100	4,143,600	5,219,700
Systems Analytics	CS-039	Black & Veatch	Units of Service D+ Region	309,000	318,300	327,800	337,700	347,800
Field Service								
Operations	CON-181	Lakeshore Global	Water Transmission Main Repair	2,300,000	2,500,000	2,500,000	2,500,000	2,500,000
Facility Operations	Pending	TBD	Hurlbut Gate Repair	500,000	-	-	-	-
Field Service								
Operations	WS-695C	Hydromax	Transmission Main Exercising	1,866,700	1,866,700	1,866,700	1,866,700	1,866,700
Total				6,963,600	6,845,400	10,719,600	9,398,000	10,614,200

Table 8 – Centralized Services Sewer Specific Contracts – 100% allocation to Sewer

Cost Center	Contract	Vendor	Description of Service	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Planning Services	Pending	TBD	Waste Water Master Plan	-	100,000	110,000	120,000	-
Director								
Field Service								
Operations	CON-149	Inland Waters	Emergency Sewer Repair	4,918,400	4,918,400	4,918,400	4,918,400	4,918,400
		HDR Water Resource						
Asset Management	1902659	Management	Linear System Integrity Program	297,000	100,000	100,000	100,000	100,000
Systems Analytics	CON-179	PCI	Staffing Augmentation	1,051,400	1,051,400	1,051,400	1,051,400	1,051,400
Systems Analytics	CON-179	PCI	Sewer Meter Support	400,000	400,000	400,000	400,000	400,000
Systems Analytics	CS-236	Applied Science	Meter Dye Testing	527,000	527,000	527,000	527,000	527,000
Systems Analytics	CS-239	CDM Michigan	Good Sewer Metering	600,000	700,000	730,000	760,000	800,000
Systems Operational Control	USGS River Survey	USGS	Detroit River Survey	273,000	273,000	273,000	136,500	136,500
			Hazardous Materials					
Hazmat	Entire Center	N/A	Management	1,740,200	1,929,300	1,941,400	1,954,100	1,967,200
Total				9,807,000	9,999,100	10,051,200	9,967,400	9,900,500

Table 9 – Centralized Services Water/Sewer Specific Contracts – allocated 55% Water/45% Sewer

Cost Center	Contract	Vendor	Description of Service	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	FY 2027 Department Requested
Systems Operational Control (Net)	Entire Center	N/A	Water Transmission Control	12,352,800	12,850,600	12,863,500	12,876,100	12,888,500
Total				12,352,800	12,850,600	12,863,500	12,876,100	12,888,500

Legacy Commitments

In municipal finance, the term “legacy obligations” represents unfunded liabilities accrued over prior decades. In the context of the GLWA, legacy obligations represent an allocable portion of the DWSD’s closed defined benefit pension and restructured retiree healthcare liability obligation. The terms of that obligation were established in the City of Detroit’s Chapter 9 bankruptcy plan of adjustment (POA) approved on December 10, 2014. With the standup of the GLWA on January 1, 2016, those legacy obligations were bifurcated between GLWA and DWSD. That allocation was based upon a review of wholesale and retail data in cost of service studies at intervals throughout the prior three decades.

Background – Prior to January 1, 2016, Bifurcation

The City of Detroit’s Chapter 9 bankruptcy POA, approved on December 10, 2014, materially restructured the City’s pension and retiree healthcare plan (otherwise referenced as other post-employment benefits or OPEB). Under the POA, the City of Detroit General Retirement System (GRS) defined benefit plan was frozen as of July 1, 2014, and closed to new participants; however, the City retained the responsibility to fund amounts necessary to provide adjusted (reduced) pension benefits to employees and retirees who accrued benefits under the GRS Plan. Claims relating to the City’s pension obligation certificates and post-retirement health benefits were funded by the City’s Financial Recovery Bonds, Series 2014-B(1), Series 2014-B(2) and Series 2014-C. DWSD was assigned an allocable share of those bonds.

The plan of adjustment required the following of DWSD as it related to the GRS Component II frozen, closed pension plan.

1. Annual payments by the DWSD to fully fund its portion of the closed defined benefit pension liability due to the GRS over nine years beginning in fiscal year 2015. Under the POA, an assumed investment rate of 6.75% and then-available mortality tables were utilized in calculating the potential size of the Systems’ remaining liability.
2. The water and sewer systems (the Systems’) are required to contribute \$42.9 million annually to the GRS, plus \$2.5 million per year in administrative expenses, for a total of \$45.4 million for the nine fiscal years beginning on July 1, 2014 and ending on June 30, 2023. The required funding under the POA represents a substantial reduction in the Systems’ overall funding obligation from the pre-bankruptcy liability.
3. The Systems remain responsible for the remaining allocable share of the unfunded accrued actuarial liability (UAAL) of the GRS after the initial nine-year period. The amount of the unknown tail pension liability payable to GRS in year ten (FY 2024) was represented as minimal at the time of the POA.

It is important to note that the annual payment represents both a normal expense plus an advance payment of a liability that would otherwise be amortized over a period up to 30 years. For that reason, a portion of the payment is treated as an operations & maintenance expense as a proxy for normal cost under the MBO flow of funds including the administrative fee. This is referred to as the “General Retirement System Legacy Pension” in the core financial plan schedules in Section 2. The remaining

non-operating portion is treated as a long-term debt payment subordinate to bonded debt in the MBO flow of funds. This is referred to as the “General Retirement System Accelerated Pension” in the core financial plan schedules in Section 2. The split between operating and nonoperating is shown in Table 1. For financial reporting purposes, the expenses and amortization related to the pension payments are reported in the nonoperating section of the statement of revenue, expenses, and changes in fund net position.

The POA required the following of DWSD as it related to the Financial Recovery Bonds (BC Notes) for pension obligation certificates and post-retirement health benefits.

1. The DWSD is responsible for an allocable share of the portion of the City of Detroit 30-year B Notes relating to settlement of OPEB claims and 10-year C Notes related to the Systems’ prior allocable share of the City’s pension obligation certificates.
2. Payments are based on the allocable share of the B and C notes payment schedules. The payments for the next 5 years are included in Table 1 below. The B note payments end in fiscal year 2044. The C note payments end in fiscal year 2027.

January 1, 2016 – Operational Effective Date of Bifurcated Legacy Obligations

With the stand-up of the Authority on January 1, 2016, the legacy obligations for the GRS Pension and BC Notes obligation were allocated between the local and regional systems. Cost of service studies at intervals throughout the prior three decades were reviewed to establish the allocation between the water and sewer systems as well as wholesale and retail customer cost pools. Based upon the review of that information, the Chief Executive Officer for the GLWA and Director for DWSD authorized the GRS to begin accounting for pension cost pool activity with the GLWA allocated 70.3% of the pension activity and the DWSD allocated 29.7% of the pension activity. This was formalized in a letter dated January 24, 2017. The BC Notes are allocated 71.42% to GLWA and 28.58% to DWSD. The costs were further allocated between the water and sewer funds as shown below:

	Water	Sewer	Total
Pension Obligation			
GLWA Regional System	25.20%	45.10%	70.30%
DWSD Local System	17.80%	11.90%	29.70%
Total	43.00%	57.00%	100.00%
BC Notes			
GLWA Regional System	21.98%	49.44%	71.42%
DWSD Local System	15.52%	13.06%	28.58%
Total	37.50%	62.50%	100.00%

Leading up to the operational effective date, one of the required tasks was development of an agreement among the GRS, the City of Detroit and the GLWA regarding the GRS Defined Benefit Plan (the “pension agreement”). This agreement, dated December 1, 2015, establishes certain disclosures, calculations, and other recordkeeping by the GRS, its auditors, and its actuaries.

The pension agreement also requires the GRS to provide the GLWA with a determination of the UAAL for the Authority Pension Pool using the market value of assets for the Authority Pension Pool and whether the Authority Pension Pool is funded at 100%. If the Authority Pension Pool is less than 100% funded, then the Authority is required to make such level annual contributions to the GRS as necessary to amortize such shortfall over five years (as provided in the leases or such greater period not to exceed ten years as agreed upon by GRS and the Authority) at an interest rate equal to the then current GRS investment return assumption.

The pension agreement further establishes a requirement for reporting of the annual funded administrative expenses (which is set at \$2.5 million annually) compared to actual in the annual GRS audit report. During FY 2024 the City and the Authority shall mutually determine and resolve whether the aggregate excess or shortfall shall have any effect on the payments to GRS. The amount paid in excess of administrative expenses as of June 30, 2021, is approximately \$8 million and is recorded as a prepaid expense by each entity for their respective allocation.

Future Planning

The sufficiency of the funding plan for the GRS in limiting the tail liability is a growing concern. The GRS Legacy Plan fiduciary net position as a percent of the total pension liability was 67.25% as reported in the June 30, 2021, GRS GASB Statement Nos. 67 and 68 Accounting and Financial Reporting for the Pension Plans of Component II. The pension payments in Table 1 below for FY 2023 are based on an agreed upon payment schedule. For budget purposes, the FY 2024 through FY 2027 contributions were estimated at \$11 million. The actuarial valuation dated June 30, 2020, estimates the FY 2024 contribution to be between \$9.5 million and \$12.2 million which was the latest valuation available at the time of the budget preparation. The June 30, 2021 actuarial valuation was issued March 11, 2022, which indicates the liability will be fully funded by the end of FY 2023. This significant reduction is a result of improved investment returns for the plan during the year ending June 30, 2021.

The administrative fee for FY 2024 through FY2027 is expected to be covered by the anticipated excess payments made in previous fiscal years.

GLWA management continues to have ongoing conversations with the City of Detroit, the DWSD and the GRS personnel regarding the outstanding liability with the goal of establishing a long-term plan that will limit the budget impact of future fluctuations.

Table 1 – Legacy Obligation Allocation – The blue and green highlighted amounts are included in the budget revenue requirements in Section 2 – Core Financial Plan Schedules.

Description	Allocation Percentage	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Operations & Maintenance (O&M) Portion of Legacy Payments-Component II						
O&M Admin Fee (a)						
GLWA-Water	25.20%	\$ 630,000	\$ -	\$ -	\$ -	\$ -
GLWA-Sewer	45.10%	1,127,500	-	-	-	-
DWSD-R-Water	17.80%	445,000	-	-	-	-
DWSD-R-Sewer	11.90%	297,500	-	-	-	-
Subtotal - Admin Fee in O&M		2,500,000	-	-	-	-
O&M Legacy Pension (b)						
GLWA-Water	25.20%	5,418,000	-	-	-	-
GLWA-Sewer	45.10%	9,696,500	-	-	-	-
DWSD-R-Water	17.80%	3,827,000	-	-	-	-
DWSD-R-Sewer	11.90%	2,558,500	-	-	-	-
Subtotal - O&M Legacy Pension		21,500,000	-	-	-	-
Total O&M Legacy Pension Payment (c) (Admin Fee (a) plus Pension Contribution (b))						
GLWA-Water	25.20%	6,048,000	-	-	-	-
GLWA-Sewer	45.10%	10,824,000	-	-	-	-
DWSD-R-Water	17.80%	4,272,000	-	-	-	-
DWSD-R-Sewer	11.90%	2,856,000	-	-	-	-
Total O&M Legacy Pension Payment		24,000,000	-	-	-	-
Nonoperating Portion of Legacy Payments-Component II (d)						
GLWA-Water	25.20%	5,392,800	2,772,000	2,772,000	2,772,000	2,772,000
GLWA-Sewer	45.10%	9,651,400	4,961,000	4,961,000	4,961,000	4,961,000
DWSD-R-Water	17.80%	3,809,200	1,958,000	1,958,000	1,958,000	1,958,000
DWSD-R-Sewer	11.90%	2,546,600	1,309,000	1,309,000	1,309,000	1,309,000
Total Nonoperating Legacy Pension Payment		21,400,000	11,000,000	11,000,000	11,000,000	11,000,000
Total Combined Legacy Pension O&M and Nonoperating Payment-Component II (c plus d)						
GLWA-Water	25.20%	11,440,800	2,772,000	2,772,000	2,772,000	2,772,000
GLWA-Sewer	45.10%	20,475,400	4,961,000	4,961,000	4,961,000	4,961,000
DWSD-R-Water	17.80%	8,081,200	1,958,000	1,958,000	1,958,000	1,958,000
DWSD-R-Sewer	11.90%	5,402,600	1,309,000	1,309,000	1,309,000	1,309,000
Total Legacy Pension Payment-Component II		\$ 45,400,000	\$ 11,000,000	\$ 11,000,000	\$ 11,000,000	\$ 11,000,000
BC Notes (Nonoperating) (e)						
GLWA-Water	21.98%	\$ 875,500	\$ 875,500	\$ 1,653,300	\$ 1,622,200	\$ 1,450,400
GLWA-Sewer	49.44%	1,969,300	1,969,300	3,718,800	3,648,800	3,262,400
DWSD-R-Water	15.52%	618,200	618,200	1,167,400	1,145,400	1,024,100
DWSD-R-Sewer	13.06%	520,200	520,200	982,400	963,900	861,800
Total BC Notes (Nonoperating)		\$ 3,983,200	\$ 3,983,200	\$ 7,521,900	\$ 7,380,300	\$ 6,598,700
Total Accelerated Pension Payments (Nonoperating Pension (d) + BC Notes (e))						
GLWA-Water		\$ 6,268,300	\$ 3,647,500	\$ 4,425,300	\$ 4,394,200	\$ 4,222,400 (1)
GLWA-Sewer		11,620,700	6,930,300	8,679,800	8,609,800	8,223,400 (1)
DWSD-R-Water		4,427,400	2,576,200	3,125,400	3,103,400	2,982,100
DWSD-R-Sewer		3,066,800	1,829,200	2,291,400	2,272,900	2,170,800
Total Accelerated Pension Payments		\$ 25,383,200	\$ 14,983,200	\$ 18,521,900	\$ 18,380,300	\$ 17,598,700

(1) The amounts included in this schedule for FY 2027 do not match the Schedule 2 Core Financial Plan schedules by a minor amount. The FY 2027 amounts will be updated in the Core Financial Plan schedules for the FY 2024 budget document.

Section 7

Authorizing Resolutions

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Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Great Lakes Water Authority Board of Directors

General Certification

The undersigned hereby certifies that (i) the Resolution **2022-071** regarding **"Resolution Adopting the FY 2023 & FY 2024 Biennial Budget"** attached hereto is a true and complete copy of the Resolution duly passed by the Great Lakes Water Authority Board of Directors at a meeting held on February 23, 2022 at which meeting a quorum was present and remained throughout, (ii) the original thereof is on file in the records of the Great Lakes Water Authority Board of Directors, (iii) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended) and (iv) Minutes of such meeting were kept and will be or have been made available as required thereby.

YES: Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown,
Beverly Walker-Griffea, and John J. Zech

NO: None

ABSTAIN: None

EXCUSED: None

Dated: February 23, 2022



By: Rechanda L. Willis
Title: Executive Board Assistant



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Resolution Adopting the FY 2023 & FY 2024 Biennial Budget

Agenda of: February 23, 2022

Item No.: **2022-071**

Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Interim Chief Executive Officer
Great Lakes Water Authority

DATE: February 23, 2022

RE: Resolution Adopting the FY 2023 & FY 2024 Biennial Budget

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA):

- 1) Concludes the Public Hearing related to the FY 2023 and FY 2024 Biennial Budget held on February 23, 2022;
- 2) Pending public comment, adopts the attached resolution, 2022-021, adopting the FY 2023 and FY 2024 Biennial Budget for the GLWA;
- 3) Notes that the GLWA By-Laws Article X, Section 5, requires a super-majority affirmative vote of at least five (5) members of the Board is necessary for the approval of the operating budget; and
- 4) Authorizes the Interim Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Great Lakes Water Authority ("GLWA" or the "Authority") assumed the operation of the Regional Water and Sewer systems on January 1, 2016 (the "Effective Date") pursuant to the Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015. Section 5.6 of the Lease Agreements require the Authority to adopt a two-year budget for the Regional Water and Sewer Systems that sets forth budgeted revenues and expenses for each such Fiscal Year.

JUSTIFICATION

The Board has received a proposed Budget for FY 2023 and FY 2024 which was reviewed at Audit Committee meetings on December 17, 2021, January 21, 2022, and February 11, 2022; Board meetings of January 26, 2022 and February 23, 2022; and Member Partner meetings on January 6, 2022, as it relates to the proposed Schedule of Charges, and January 20, 2022.

At the Audit Committee meeting on February 11, 2022, the administration presented a revised budget and charges proposal which achieved the following.

1. \$5.9 million reduction in the FY 2023 Sewer System Revenue Requirements Budget. This results in a sewer system revenue requirement increase of 1.25% rather than 2.5%.
2. The corresponding impact on FY 2023 charges is a reduction from a 3.7% systemwide increase to a 2.4% systemwide increase.

BUDGET IMPACT

This action establishes a budget for FY 2023 and FY 2024.

COMMITTEE REVIEW

The GLWA Audit Committee reviewed the proposed budget and supplemental analysis at the meetings noted above. On February 11, 2022, the Audit Committee unanimously recommended that the Board of Directors adopts the FY 2023 and FY 2024 Biennial Budget and related FY 2023 Schedule of Charges reflecting the revisions presented on February 11, 2022, subject to public comment at the public hearing to be held on February 23, 2022.

Great Lakes Water Authority

Resolution 2022-071

Resolution Adopting the Biennial FY 2023 & FY 2024 Budget

By Board Member: Brian Baker

WHEREAS The Great Lakes Water Authority (“GLWA” or the “Authority”) assumed the operation of the regional water and sewer systems on January 1, 2016 (the “Effective Date”) pursuant to Water System and Sewer System Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015; and

WHEREAS In accordance with the by-laws of the GLWA, the Board shall adopt a two-year (Biennial) operating budget for the Regional Water and Sewer Systems; and

WHEREAS The Authority, through the terms of the Leases, committed to an annual increase in revenue requirement budget of no more than 4% through the fiscal year ending June 30, 2025; and

WHEREAS The GLWA Board is now adopting its seventh fiscal year budget demonstrating its ability to achieve and excel in meeting that commitment with a Regional Water System annual revenue requirement budget increase of 3.5% which equates to an average 3.5% increase in revenues from Water Service Charges and a Regional Sewer System annual revenue requirements budget increase of 1.3% which equates to an average 1.2% increase in revenues from Sewer Service Charges; and

WHEREAS The budgeted expenses for each such Fiscal Year shall equal the sum of the projected expenses and revenue requirements for the Regional Water System and the Regional Sewer System for each such Fiscal Year; and

WHEREAS The budgeted annual revenue requirements for the Regional Water System for FY 2023 is \$356,071,600 and for FY 2024 is \$368,534,100 as shown on “Schedule 1A – Water System Revenue Requirements” of the budget document; and

- WHEREAS** The budgeted annual revenue requirements for the Regional Sewer System for FY 2023 is \$481,372,100 and for FY 2024 is \$493,406,400 as shown on “Schedule 1B – Sewer System Revenue Requirements” of the budget document; and
- WHEREAS** The operations and maintenance budget for the Regional Water System for FY 2023 is \$144,847,700 and for FY 2024 is \$148,707,300 as shown on “Schedule 1A – Water System Revenue Requirements” of the budget document; and
- WHEREAS** The operations and maintenance budget for the Regional Sewer System for FY 2023 is \$184,052,600 and for FY 2024 is \$189,357,800 as shown on Schedule 1B – Sewer System Revenue Requirements” of the budget document; and
- WHEREAS** The amounts necessary to pay the principal of and interest on all Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$193,201,600 for FY 2023 and \$204,286,200 for FY 2024 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and
- WHEREAS** The amounts necessary to pay the principal of and interest on all Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$237,603,800 for FY 2023 and \$252,905,800 for FY 2024 as shown on “Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance” of the budget document; and
- WHEREAS** The amounts necessary to fund the annual water system capital expenditures of \$15,452,600 in FY 2023 and \$13,403,600 in FY 2024 for capital outlay in accordance with the 5A – Water Capital Financing Plan: Water Improvement and Extension Fund budget; and
- WHEREAS** The amounts necessary to fund the annual water system capital expenditures of \$155,501,000 in FY 2023 and \$180,349,000 in FY 2024 for the capital improvement plan in accordance with the Schedule 5A – Water Capital Financing Plan: Water Construction Fund budget with those capital amounts reflecting an 80% Capital Spending Ratio applied to FY 2023 and FY 2024 as shown in the proposed FY 2023 through FY 2027 Capital Improvement Plan; and
- WHEREAS** The amounts necessary to fund the annual sewer system capital expenditures of \$18,447,100 in FY 2023 and \$11,610,500 in FY 2024 for the capital outlay in accordance with the 5B – Sewer Capital Financing Plan: Sewer Improvement and Extension Fund budget; and

WHEREAS The amounts necessary to fund the annual sewer system capital expenditures of \$94,449,000 in FY 2023 and \$121,735,000 in FY 2024 for the capital improvement plan in accordance with Schedule 5B – Sewer Capital Financing Plan: Sewer Construction Fund budget with those capital amounts reflecting a 75% Capital Spending Ratio applied to FY 2023 and FY 2024 as shown in the proposed FY 2023 through FY 2027 Capital Improvement Plan; and

WHEREAS The GLWA Audit Committee began review of the budget and five-year financial plan document developed for FY 2023 through FY 2027 at its meeting on December 17, 2021; with updates at its meeting on January 21, 2022, and February 11, 2022; and

WHEREAS The GLWA Board conducted a public hearing on the proposed budget in accordance with the provisions of Public Act No. 43 of the Acts of the State Legislature of 1963 (“Budget Hearings of Local Governments”); and

WHEREAS A notice for the public hearing on the proposed budget scheduled for February 23, 2022 at 2:00 p.m. either in person or via a telephonic Zoom meeting was published in The Detroit Legal News announcing a public hearing on the budget in addition to posting the notice and proposed budget on glwater.org/financials; and

WHEREAS An affirmative vote of 5 Board Members is necessary for the adoption of this Resolution,

NOW THEREFORE BE IT:

RESOLVED That the GLWA Board conducted a public hearing on February 23, 2022 to receive public comment regarding the proposed budget for the Fiscal Years 2023 and 2024; and be it further

RESOLVED That the GLWA Board approves the budget for Fiscal Years 2023 and 2024; and be it finally

RESOLVED That the Interim Chief Executive Officer, and the Chief Financial Officer/Treasurer are authorized to take such other action as may be necessary to accomplish the intent of this resolution.

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 1A – Water System Revenue Requirements Biennial Budget

	Current Year		Biennial Budget					
	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Water System Revenue Requirements								
Revenues								
Revenues from Charges	\$342,808,200	\$340,408,200	\$354,947,900	\$ 12,139,700	3.5%	\$366,527,400	\$ 11,579,500	3.3%
Other Operating Revenue	175,000	175,000	175,000	-	0.0%	175,000	-	0.0%
Non-Operating Revenue	1,047,300	1,547,300	948,700	(98,600)	-9.4%	1,831,700	883,000	93.1%
Total Revenues	344,030,500	342,130,500	356,071,600	12,041,100	3.5%	368,534,100	12,462,500	3.5%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$143,933,800	\$143,933,800	\$144,847,700	\$ 913,900	0.6%	\$148,707,300	\$ 3,859,600	2.7%
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	-	0.0%	-	(6,048,000)	-100.0%
Debt Service	135,481,000	135,121,000	150,337,100	14,856,100	11.0%	159,237,000	8,899,900	5.9%
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	-	0.0%	3,647,500	(2,620,800)	-41.8%
Water Residential Assistance Program Contribution	1,705,500	1,705,500	1,770,500	65,000	3.8%	1,842,700	72,200	4.1%
Regional System Lease	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Improvement & Extension Fund Transfer Pending	28,093,900	26,553,900	24,300,000	(3,793,900)	-13.5%	32,599,600	8,299,600	34.2%
Annual Water System Revenue Requirements	\$344,030,500	\$342,130,500	\$356,071,600	\$ 12,041,100	3.5%	\$368,534,100	\$ 12,462,500	3.5%

Budget Document Note (not included in Resolution): Revenues from Charges for FY 2023 above is comprised of the following

Regional System Wholesale Revenues – Suburban Wholesale Customers	\$331,962,000
Regional System Wholesale Revenues – Detroit Customers	22,985,900
Total Revenues from Charges	\$354,947,900

Schedule 1B – Sewer System Revenue Requirements Biennial Budget

	Current Year		Biennial Budget					
	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Sewer System Revenue Requirements								
Revenues								
Revenues from Charges	\$474,005,900	\$471,005,900	\$479,816,500	\$ 5,810,600	1.2%	\$490,695,900	\$ 10,879,400	2.3%
Other Operating Revenue	400,000	400,000	400,000	-	0.0%	400,000	-	0.0%
Non-Operating Revenue	1,023,300	1,523,300	1,155,600	132,300	12.9%	2,310,500	1,154,900	99.9%
Total Revenues	475,429,200	472,929,200	481,372,100	5,942,900	1.3%	493,406,400	12,034,300	2.5%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$181,299,800	\$181,299,800	\$184,052,600	\$ 2,752,800	1.5%	\$189,357,800	\$ 5,305,200	2.9%
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	-	0.0%	-	(10,824,000)	-100.0%
Debt Service	207,209,500	204,984,500	205,638,100	(1,571,400)	-0.8%	220,662,100	15,024,000	7.3%
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	-	0.0%	6,930,300	(4,690,400)	-40.4%
Water Residential Assistance Program Contribution	2,358,300	2,358,300	2,394,200	35,900	1.5%	2,467,000	72,800	3.0%
Regional System Lease	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Improvement & Extension Fund Transfer Pending	34,616,900	34,341,900	39,342,500	4,725,600	13.7%	46,489,200	7,146,700	18.2%
Annual Sewer System Revenue Requirements	\$475,429,200	\$472,929,200	\$481,372,100	\$ 5,942,900	1.3%	\$493,406,400	\$ 12,034,300	2.5%

Budget Document Note (not included in Resolution): Revenues from Charges for FY 2022 above is comprised of the following

Regional System Wholesale Revenues – Suburban Wholesale Customers	\$288,774,300
Regional System Wholesale Revenues – Detroit Customers	191,042,200
Total Revenues from Charges	\$479,816,500

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 1C – Combined Water and Sewer System Revenue Requirements Budget

	Current Year		Biennial Budget					
	FY 2022 Adopted Budget	FY 2022 Amended Budget	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance	FY 2024 Department Requested	FY 2024 Dollar Variance	FY 2024 Percent Variance
Combined System Revenue Requirements								
Revenues								
Revenues from Charges	\$816,814,100	\$811,414,100	\$834,764,400	\$ 17,950,300	2.2%	\$857,223,300	\$ 22,458,900	2.7%
Other Operating Revenue	575,000	575,000	575,000	-	0.0%	575,000	-	0.0%
Non-Operating Revenue	2,070,600	3,070,600	2,104,300	33,700	1.6%	4,142,200	2,037,900	96.8%
Total Revenues	819,459,700	815,059,700	837,443,700	17,984,000	2.2%	861,940,500	24,496,800	2.9%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$325,233,600	\$325,233,600	\$328,900,300	\$ 3,666,700	1.1%	\$338,065,100	\$ 9,164,800	2.8%
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	-	0.0%	-	(16,872,000)	-100.0%
Debt Service	342,690,500	340,105,500	355,975,200	13,284,700	3.9%	379,899,100	23,923,900	6.7%
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	-	0.0%	10,577,800	(7,311,200)	-40.9%
Water Residential Assistance Program Contribution	4,063,800	4,063,800	4,164,700	100,900	2.5%	4,309,700	145,000	3.5%
Regional System Lease	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Improvement & Extension Fund Transfer Pending	62,710,800	60,895,800	63,642,500	931,700	1.5%	79,088,800	15,446,300	24.3%
Annual Revenue Requirements	819,459,700	815,059,700	837,443,700	17,984,000	2.2%	861,940,500	24,496,800	2.9%

There is no Schedule 3 for purposes of the Budget Resolution.

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 4 – Debt Service Coverage Calculations Consistent with the Master Bond Ordinance

Debt Service Coverage Calculation Flow of Funds Basis	FY 2023 Water Fund	FY 2023 Sewer Fund	FY 2023 Combined (Informational Only)	FY 2024 Water Fund	FY 2024 Sewer Fund	FY 2024 Combined (Informational Only)
Revenues						
1 Regional System Wholesale Revenues	\$ 354,947,900	\$ 479,816,500	\$ 834,764,400	\$ 366,527,400	\$ 490,695,900	\$ 857,223,300
2 Local System Revenues	70,104,100	96,467,800	166,571,900	70,435,100	95,338,300	165,773,400
3 Miscellaneous Revenue (Local System)	3,900,000	7,640,000	11,540,000	3,980,000	7,790,000	11,770,000
4 Non-Operating Revenue (Regional System)	1,123,700	1,555,600	2,679,300	2,006,700	2,710,500	4,717,200
5 Total Revenues	\$ 430,075,700	\$ 585,479,900	\$ 1,015,555,600	\$ 442,949,200	\$ 596,534,700	\$ 1,039,483,900
Revenue Requirements						
Operations & Maintenance Expense						
6 Regional System Wholesale Expenses	\$ 144,847,700	\$ 184,052,600	\$ 328,900,300	\$ 148,707,300	\$ 189,357,800	\$ 338,065,100
7 Local System Expenses	30,490,000	63,390,000	93,880,000	31,100,000	64,660,000	95,760,000
8 GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	0	0	0
9 GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	0	0	0
10 Total Operations & Maintenance Expense	185,657,700	261,122,600	446,780,300	179,807,300	254,017,800	433,825,100
11 Net Revenues after Operations & Maintenance Expense	\$ 244,418,000	\$ 324,357,300	\$ 568,775,300	\$ 263,141,900	\$ 342,516,900	\$ 605,658,800
Debt Service by Lien						
12 Senior Lien Bonds	135,939,700	149,780,900	285,720,600	140,130,000	150,299,000	290,429,000
13 Second Lien Bonds	47,200,100	36,738,500	83,938,600	48,108,100	49,387,700	97,495,800
14 SRF Junior Lien Bonds	10,061,800	51,084,400	61,146,200	16,048,100	53,219,100	69,267,200
15 Total Debt Service	\$ 193,201,600	\$ 237,603,800	\$ 430,805,400	\$ 204,286,200	\$ 252,905,800	\$ 457,192,000
Debt Service Coverage						
16 Senior Lien Bonds (11)/(12)	1.80	2.17		1.88	2.28	
17 Second Lien Bonds (11)/[(12)+(13)]	1.33	1.74		1.40	1.72	
18 SRF Junior Lien Bonds (11)/(15)	1.27	1.37		1.29	1.35	

***Rows highlighted in light grey in the above table are designed to align with the Local System information provided from Detroit Water & Sewerage Department (DWSD) as of January 19, 2022.*

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 5A – Water Capital Financing Plan

Water Improvement & Extension (I&E) Fund

	Current Year	Biennial Budget	
		FY 2023	FY 2024
Water Improvement & Extension Fund Inflows & Outflows	FY 2022 Estimated	Department Requested	Department Requested
Water Improvement & Extension Fund			
Water System Revenue Transfers In	\$ 26,553,900	\$ 24,300,000	\$ 32,599,600
Receipt of DWSD Shortfall Loan Interest	-	-	-
Capital Outlay	(17,006,600)	(15,452,600)	(13,403,600)
Transfer to Construction Fund	(106,836,800)	(28,735,400)	(18,221,400)
Increase (Decrease) in I&E Reserves	\$ (97,289,500)	\$ (19,888,000)	\$ 974,600
Beginning Year Net Position	207,475,000	110,185,500	90,297,500
Projected Ending Net Position	\$110,185,500	\$ 90,297,500	\$ 91,272,100

Water Construction Fund

	Current Year	Biennial Budget	
		FY 2023	FY 2024
Water Construction Fund Inflows & Outflows	FY 2022 Estimated	Department Requested	Department Requested
Water Construction Fund			
Bond Proceeds	\$175,750,000	\$ -	\$ -
Bond Fund Earnings on Investments	67,500	128,800	365,900
Grant Revenues (SRF Loans)	36,527,000	54,992,000	59,446,000
Transfers from I&E Fund	106,836,800	28,735,400	18,221,400
Project Expenditures (a)	(143,368,000)	(155,501,000)	(180,349,000)
Increase (Decrease) in Construction Funds	\$175,813,300	\$ (71,644,800)	\$ (102,315,700)
Beginning Year Net Position	12,438,000	188,251,300	116,606,500
Projected Ending Net Position	\$188,251,300	\$116,606,500	\$ 14,290,800
(a) Capital Improvement Plan	\$ 179,210,000	\$ 194,376,000	\$ 225,436,000
(a) Capital Spend Rate Adjustment	(35,842,000)	(38,875,000)	(45,087,000)
(a) Total CIP Expenditures	\$ 143,368,000	\$ 155,501,000	\$ 180,349,000

Note: Amounts highlighted in yellow in the following tables are presented in the Biennial Budget Authorizing Resolution.

Schedule 5B – Sewer Capital Financing Plan

Sewer Improvement & Extension (I&E) Fund

	Current Year	Biennial Budget	
		FY 2023	FY 2024
Sewer Improvement & Extension Fund Inflows & Outflows	FY 2022 Estimated	Department Requested	Department Requested
Sewer Improvement & Extension Fund			
Sewer System Revenue Transfers In	\$ 34,341,900	\$ 39,342,500	\$ 46,489,200
Receipt of DWSD Shortfall Loan Interest	406,400	-	-
Capital Outlay	(15,965,100)	(18,447,100)	(11,610,500)
Transfer to Construction Fund	(47,953,800)	(26,444,900)	(32,173,500)
Increase (Decrease) in I&E Reserves	\$ (29,170,600)	\$ (5,549,500)	\$ 2,705,200
Beginning Year Net Position	122,385,000	93,214,400	87,664,900
Projected Ending Net Position	\$ 93,214,400	\$ 87,664,900	\$ 90,370,100

Sewer Construction Fund

	Current Year	Biennial Budget	
		FY 2023	FY 2024
Sewer Construction Fund Inflows & Outflows	FY 2022 Estimated	Department Requested	Department Requested
Sewer Construction Fund			
Bond Proceeds	\$137,750,000	\$ -	\$ -
Bond Fund Earnings on Investments	96,000	86,200	277,600
Grant Revenues (SRF Loans)	14,149,000	18,720,000	10,247,000
Transfers from I&E Fund	47,953,800	26,444,900	32,173,500
Project Expenditures (a)	(79,538,000)	(94,449,000)	(121,735,000)
Increase (Decrease) in Construction Funds	\$120,410,800	\$ (49,197,900)	\$ (79,036,900)
Beginning Year Net Position	11,473,000	131,883,800	82,685,900
Projected Ending Net Position	\$131,883,800	\$ 82,685,900	\$ 3,649,000
(a) Capital Improvement Plan	\$ 106,050,000	\$ 125,932,000	\$ 162,313,000
(a) Capital Spend Rate Adjustment	(26,512,000)	(31,483,000)	(40,578,000)
(a) Total CIP Expenditures	\$ 79,538,000	\$ 94,449,000	\$ 121,735,000



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Great Lakes Water Authority Board of Directors

General Certification

The undersigned hereby certifies that (i) the Resolution **2022-072** regarding **“Resolution Regarding Approval of FY 2023 Schedule of Service Charges”** attached hereto is a true and complete copy of the Resolution duly passed by the Great Lakes Water Authority Board of Directors at a meeting held on February 23, 2022 at which meeting a quorum was present and remained throughout, (ii) the original thereof is on file in the records of the Great Lakes Water Authority Board of Directors, (iii) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended) and (iv) Minutes of such meeting were kept and will be or have been made available as required thereby.

YES: Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown,
Beverly Walker-Griffea, and John J. Zech

NO: None

ABSTAIN: None

EXCUSED: None

Dated: February 23, 2022



By: Rechanda L. Willis
Title: Executive Board Assistant



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Resolution Regarding Approval of FY 2023 Schedule of Service Charges

Agenda of: February 23, 2022
Item No.: **2022-072**
Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Interim Chief Executive Officer
Great Lakes Water Authority

DATE: February 23, 2022

RE: **Resolution Regarding Approval of FY 2023 Schedule of Service Charges**

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, the Board of Directors (Board) of the Great Lakes Water Authority, **approves the following actions, which require a supermajority affirmative vote of at least five (5) members of the Board, and the attached Resolution 2022-022** with an effective date of July 1, 2022:

- 1) FY 2023 wholesale water service schedule of charges;
- 2) FY 2023 wholesale sewer service schedule of charges;
- 3) FY 2023 City of Detroit allocated wholesale water revenue requirement of \$22,985,900, which is the net of \$43,685,900 gross revenue requirement less the Ownership Equity Credit of \$20,700,000 pursuant to the terms of the Water and Sewer Services Agreement (WSSA);
- 4) FY 2023 City of Detroit allocated wholesale sewer revenue requirement of \$191,042,200 which is the net of \$196,558,200 gross revenue requirement less the Ownership Equity Credit of \$5,516,000 in accordance with the WSSA;

- 5) FY 2023 City of Detroit allocated indirect water revenue requirement of \$52,205,100, in accordance with the Regional Water Supply System Lease;
- 6) FY 2023 City of Detroit allocated indirect sewer revenue requirement of \$39,357,300, in accordance with the Regional Sewage Disposal System Lease;
- 8) authorizes the Interim Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Pursuant to the water system and sewer system leases signed between the Great Lakes Water Authority (GLWA/Authority) and the City of Detroit, the GLWA began operations of the regional water supply and sewage disposal system on January 1, 2016. Consistent with the terms of those leases, the Authority shall, for each fiscal year fix and approve rates and charges to its customers in an amount that is expected to produce revenues sufficient to satisfy the Authority revenue requirement. The attached, proposed schedule of charges meets that requirement.

Leading up to this charge recommendation, staff presented the proposed FY 2023 and 2024 Biennial Budget and five-year financial plan for FY 2023 through 2027 and an analysis of proposed water and sewer system charges at its January 26, 2022 Board meeting. A Public Hearing was opened for the FY 2023 Water Service Charges and Sewer Service Charges on February 23, 2022.

JUSTIFICATION

Great Lakes Water Authority ("GLWA") management and its consultant, The Foster Group, developed a Schedule of Water Service Charges and Sewer Service Charges for FY 2023 including the City of Detroit Revenue Requirement for the water and sewer systems. These charges support the proposed FY 2023 water system revenue requirements budget and the proposed FY 2023 sewer system revenue requirements, respectively. The FY 2023 water and sewer revenue requirements reflect GLWA's commitment to not only work within, but perform beyond, the four percent revenue requirement budget limitation outlined in the September 9, 2014 Memorandum of Understanding that resulted in the establishment of the Great Lakes Water Authority. The proposed wholesale customer charges and revenue requirements for the City of Detroit are the result of significant customer engagement in the charge setting process to evaluate the appropriate allocation of revenue requirements.

Proposed FY 2023 Water Charges

The proposed FY 2023 water service charges reflect a proposed Water budget increase of 3.5 percent along with reduced investment earnings and decreased estimated sales volumes. Therefore, the proposed average water system charges increase will be 3.7 percent.

Proposed FY 2023 Sewer Charges

The proposed FY 2023 sewer service charges reflect a proposed FY 2023 Sewer budget increase of 1.3 percent along with the reinstitution of the Highland Park Bad Debt adjustment and reduced investment earnings. Therefore, the proposed average sewer system charges increase will be 2.4 percent.

BUDGET IMPACT

The recommended FY 2023 Schedule of Water Service Charges and Sewer Service Charges as presented produces the necessary revenues to fund the FY 2023 Water System and Sewer System Budget.

COMMITTEE REVIEW

The Audit Committee has reviewed the FY 2023 financial plan, including charge setting matters, at its meetings on December 17, 2021, January 21, 2022, and February 11, 2022, and as noted above in the Justification section.

At the Audit Committee meeting on February 11, 2022, the administration presented a revised budget and charges proposal which achieved the following.

1. \$5.9 million reduction in the FY 2023 Sewer System Revenue Requirements Budget. This results in a sewer system revenue requirement increase of 1.25% rather than 2.5%.
2. The corresponding impact on FY 2023 charges is a reduction from a 3.7% systemwide increase to a 2.4% systemwide increase.

The GLWA Audit Committee reviewed the revised, proposed charges along with the budget and supplemental analysis at the meetings noted above. On February 11, 2022, the Audit Committee unanimously recommended that the Board of Directors adopts the FY 2023 Schedule of Charges reflecting the revisions presented on February 11, 2022, subject to public comment at the public hearing to be held on February 23, 2022.

Coordination with DWSD's Budget

Under the terms of the lease agreements and related financial commitments, key inputs are required from DWSD. An analysis of the DWSD budget inputs and related reconciliation based upon some of the changes above is reflected in the attached schedules.

SHARED SERVICES IMPACT

This item does not impact the Shared Services Agreement between the GLWA and the City of Detroit.

Great Lakes Water Authority**Resolution 2022-072****RE: Approval of FY 2023 Schedule of Water and Sewer Service Charges**

By Board Member: John J. Zech

Whereas The Great Lakes Water Authority ("GLWA") management and its consultant, The Foster Group, have developed the attached Schedule of Water Service Charges and Sewer Service Charges for FY 2023, including the direct and indirect City of Detroit Revenue Requirements for the water and sewer systems, to support the FY 2023 water system and sewer system revenue requirements budget with an effective date of July 1, 2022; and

Whereas The FY 2023 water and sewer revenue requirements reflect GLWA's commitment to work within the four percent limitation outlined in the Memorandum of Understanding; and

Whereas A Public Hearing was held for the Water Service Charges and Sewer Service Charges proposed by the GLWA for FY 2023 on February 23, 2022 at 2:00 p.m.; and

NOW THEREFORE BE IT:

RESOLVED The Great Lakes Water Authority Board approves the proposed:

- 1) FY 2023 wholesale water service schedule of charges;
- 2) FY 2023 wholesale sewer service schedule of charges;
- 3) FY 2023 City of Detroit allocated wholesale water revenue requirement of \$22,985,900, which is the net of \$43,685,900 gross revenue requirement less the Ownership Equity Credit of \$20,700,000 pursuant to the terms of the Water and Sewer Services Agreement (WSSA);
- 4) FY 2023 City of Detroit allocated wholesale sewer revenue requirement of \$191,042,200 which is the net of \$196,558,200 gross revenue requirement less the Ownership Equity Credit of \$5,516,000 in accordance with the WSSA;

- 5) FY 2023 City of Detroit allocated indirect water revenue requirement of \$52,205,100, in accordance with the Regional Water Supply System Lease;
- 6) FY 2023 City of Detroit allocated indirect sewer revenue requirement of \$39,357,300, in accordance with the Regional Sewage Disposal System Lease; and

RESOLVED That the Interim Chief Executive Officer, and the Chief Financial Officer/Treasurer are authorized to take such other action as may be necessary to accomplish the intent of this vote.

Great Lakes Water Authority
 Approved FY 2023 Water Supply System Service Charges and Allocated Revenue Requirements
 Effective Date: July 1, 2022

Line No.	Member Partner	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Projected Revenue from Charges \$
1	Allen Park	137,300	7.54	2,745,400
2	Almont Village	13,100	10.81	261,000
3	Ash Township	45,300	8.57	905,300
4	Belleville	18,000	9.41	360,000
5	Berlin Township	40,000	11.80	799,800
6	Brownstown Township	196,400	11.52	3,927,000
7	Bruce Twp	18,700	56.74	374,200
8	Burtchville Twp	18,900	17.95	377,600
9	Canton Township	564,900	12.56	11,299,100
10	Center Line	25,700	6.39	514,200
11	Chesterfield Township	233,800	10.60	4,676,500
12	Clinton Township	410,900	8.23	8,217,000
13	Commerce Township	195,900	15.01	3,917,800
14	Dearborn	550,600	7.48	11,009,200
15	Dearborn Heights	199,900	8.10	3,996,900
16	Eastpointe	84,900	6.51	1,697,800
17	Ecorse	78,600	4.96	1,572,100
18	Farmington	54,800	9.84	1,096,500
19	Farmington Hills	479,800	10.98	9,595,100
20	Ferndale	56,500	6.31	1,131,100
21	Flat Rock	69,800	10.69	1,395,600
22	Flint (b)	579,200	9.88	11,586,100
23	Fraser	66,100	9.09	1,321,300
24	Garden City	89,900	9.19	1,798,400
25	Gibraltar	18,200	8.83	363,200
26	Grosse Ile Township	59,700	12.53	1,193,800
27	Grosse Pt. Park	73,000	10.64	1,460,100
28	Grosse Pt. Shores	35,200	14.70	704,600
29	Grosse Pt. Woods	68,900	7.95	1,378,500
30	Hamtramck	43,700	5.59	873,800
31	Harper Woods	43,700	7.42	874,600
32	Harrison Township	88,400	7.40	1,766,800
33	Hazel Park	40,000	6.38	800,300
34	Highland Park	62,900	4.76	1,257,000
35	Huron Township	81,100	10.46	1,621,700
36	Imlay City	80,100	13.88	1,602,500
37	Imlay Twp	800	46.00	16,500
38	Inkster	69,500	5.49	1,390,100
39	Keego Harbor	16,300	13.10	326,600
40	Lapeer	83,900	12.68	1,677,600
41	Lenox Township	15,800	8.98	315,300
42	Lincoln Park	126,700	6.13	2,533,700
43	Livonia	622,800	10.58	12,456,800
44	Macomb Township	684,400	17.06	13,685,600
45	Madison Heights	100,700	7.67	2,014,500
46	Mayfield Twp	2,200	34.31	43,900
47	Melvindale	35,100	6.68	702,400
48	New Haven, Village of	20,400	8.84	407,500
49	N O C W A	1,196,100	10.92	23,920,200
50	Northville	42,000	10.82	840,500
51	Northville Township	307,100	17.78	6,142,400
52	Novi	492,500	13.46	9,848,400
53	Oak Park	75,600	6.36	1,510,800
54	Oakland Co. Drain Comm.	4,400	3.67	88,400
55	Plymouth	59,200	10.62	1,184,100
56	Plymouth Township	241,500	12.00	4,828,800
57	Redford Township	171,900	8.67	3,437,900
58	River Rouge	37,100	7.84	742,300
59	Riverview	48,300	8.04	965,500
60	Rockwood	15,100	12.31	301,800
61	Romeo	14,100	18.48	281,900
62	Romulus	233,900	8.38	4,679,700
63	Roseville	146,000	6.26	2,919,500

APPROVED FY 2023 CHARGES

2/23/2022

Great Lakes Water Authority
 Approved FY 2023 Water Supply System Service Charges and Allocated Revenue Requirements
 Effective Date: July 1, 2022

Line No.	Member Partner	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Projected Revenue from Charges \$
64	Royal Oak Township	10,500	8.20	210,500
65	S O C W A	1,246,900	8.11	24,942,200
66	Shelby Township	783,700	15.19	15,673,300
67	South Rockwood	6,200	10.83	124,200
68	Southgate	119,000	8.53	2,380,800
69	St. Clair County Board of Public Works	71,700	22.82	1,433,200
70	St. Clair Shores	168,700	6.94	3,373,500
71	Sterling Heights	839,500	11.36	16,788,900
72	Sumpter Township	37,200	9.84	744,600
73	Sylvan Lake	12,800	15.86	255,100
74	Taylor	251,600	7.78	5,033,400
75	Trenton	91,900	8.50	1,837,200
76	Troy	741,300	12.75	14,824,400
77	Utica	30,200	10.48	604,500
78	Van Buren Township	191,700	11.32	3,834,300
79	Walled Lake	43,100	11.56	862,800
80	Warren	560,000	7.25	11,201,200
81	Washington Township	127,800	12.50	2,556,100
82	Wayne	175,300	13.30	3,505,400
83	West Bloomfield Township	569,500	17.09	11,390,200
84	Westland	336,200	8.35	6,723,100
85	Wixom	135,200	14.38	2,705,200
86	Woodhaven	91,200	12.61	1,824,500
87	Ypsilanti Comm Util Auth	565,300	9.37	11,307,400
88	Total Wholesale Contract Member Partners			339,870,600
89	Adjustment to Flint Revenue Requirement for KWA Debt Service (b)			(6,651,600)
90	Adjustment for Highland Park Bad Debt			(1,257,000)
91	Revenue from Wholesale Charges (agrees with "GLWA Budget Schedule 3")			331,962,000
Detroit Customer Class - \$				
92	Wholesale Revenue Requirement (c)			43,685,900
93	less: Ownership Benefit per Lease			(20,700,000)
94	Net Wholesale Revenue Requirement			22,985,900
95	Indirect Retail Revenue Requirements (d)			52,205,100
96	less: Use of Lease Payment for Debt Service			(8,691,000)
97	Net Indirect Retail Revenue Requirements (d)			43,514,100
98	Subtotal Subject to GLWA Board Approval (94) + (97)			66,500,000
99	Direct Retail Revenue Requirements (e)			30,490,000
100	Total Local System Revenue Requirement (97) + (99)			74,004,100
101	Total Requirement from Detroit Customer Class (agrees with "GLWA Budget Schedule 3")			96,990,000
102	Lead and Copper Rule Sample Testing Fee - \$/Sample			60.00
(a) Proposed effective date of July 1, 2022. Effective on all bills issued on or after August 1, 2022.				
(b) Net fixed monthly charge will include \$554,300 monthly credits for KWA debt service.				
(c) Wholesale revenue requirements for the Detroit Customer Class.				
(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)				
(e) Local System operating expenses (net of shared services reimbursement) and I&E deposit. Not Subject to GLWA Board approval.				
(d)&(e) Local System information provided from Detroit Water & Sewerage Department as of January 19, 2022.				

Great Lakes Water Authority
Approved FY 2023 Sewage Disposal System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2022

Line No.		Fixed Monthly Charge \$/mo	Projected Revenue from Charges \$
	<u>Suburban Wholesale</u>		
1	OMID	6,057,000	72,684,000
2	Rouge Valley	4,753,300	57,039,600
3	Oakland GWK	3,941,500	47,298,000
4	Evergreen Farmington	3,076,100	36,913,200
5	SE Macomb San Dist	2,130,600	25,567,200
6	Dearborn	1,725,100	20,701,200
7	Grosse Pointe Farms	233,600	2,803,200
8	Grosse Pointe Park	161,900	1,942,800
9	Melvindale	133,700	1,604,400
10	Farmington	101,900	1,222,800
11	Center Line	88,600	1,063,200
12	Allen Park	72,100	865,200
13	Highland Park	460,700	5,528,400
14	Hamtramck	343,500	4,122,000
15	Grosse Pointe	76,500	918,000
16	Harper Woods	18,500	222,000
17	Redford Township	23,000	276,000
18	Wayne County #3	4,400	52,800
19	Subtotal "Regional Wholesale Revenues from Charges"		280,824,000
20	Industrial Specific Revenues		13,370,800
21	Subtotal "Regional Wholesale Revenues from Charges"		294,194,800
22	less: Highland Park Bad Debt		(5,420,500)
23	Total "Regional Wholesale Revenues" (a)		288,774,300
	<i>* Wholesale charges will be effective July 1, 2022</i>		
	Detroit Customer Class - \$		
24	<u>Wholesale</u> Revenue Requirement (c)		196,558,200
25	less: Ownership Benefit per Lease		(5,516,000)
26	<u>Net Wholesale</u> Revenue Requirement		191,042,200
27	<u>Indirect Retail</u> Revenue Requirements (d)		39,357,300
28	less: Use of Lease Payment for Debt Service		0
29	<u>Net Indirect Retail</u> Revenue Requirements (d)		39,357,300
30	Subtotal Subject to GLWA Board Approval (26) + (29)		230,399,500
31	<u>Direct Retail</u> Revenue Requirements (e)		64,750,500
32	Total Local System Revenue Requirement (29) + (31)		104,107,800
33	Total Requirement from Detroit Customer Class (a)		295,150,000
	(a) Agrees with "GLWA Budget Schedule 3"		
	(b) Reserved		
	(c) Wholesale revenue requirements for the Detroit Customer Class.		
	(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)		
	(e) Local System operating expenses (net of shared services reimbursement) and I&E deposit. Not Subject to GLWA Board approval.		
	(d)&(e) Local System information provided from Detroit Water & Sewerage Department as of January 19, 2022.		

APPROVED FY 2023 CHARGES

2/23/2022

Great Lakes Water Authority
Approved FY 2023 Sewage Disposal System
Industrial Specific Retail Charges
Effective Date: July 1, 2022

Industrial Waste Control Charges		
Meter Size <i>inches</i>	Full Charge <i>\$/mo</i>	Admin Only Charge <i>\$/mo</i>
5/8	3.58	0.90
3/4	5.37	1.34
1	8.95	2.24
1-1/2	19.69	4.92
2	28.64	7.16
3	51.91	12.98
4	71.60	17.90
6	107.40	26.85
8	179.00	44.75
10	250.60	62.65
12	286.40	71.60
14	358.00	89.50
16	429.60	107.40
18	501.20	125.30
20	572.80	143.20
24	644.40	161.10
30	716.00	179.00
36	787.60	196.90
48	859.20	214.80

Pollutant Surcharges	
Pollutant	Charge <i>\$/lb</i>
BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.351
TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.482
PHOSPHORUS (P) for concentrations > 12 mg/l	6.448
FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.112
SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	36.00



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Great Lakes Water Authority Board of Directors

General Certification

The undersigned hereby certifies that (i) the Resolution 2022-061 regarding "Resolution Regarding Approval of FY 2023 through FY 2027 Capital Improvement Plan" attached hereto is a true and complete copy of the Resolution duly passed by the Great Lakes Water Authority Board of Directors at a meeting held on February 23, 2022 at which meeting a quorum was present and remained throughout, (ii) the original thereof is on file in the records of the Great Lakes Water Authority Board of Directors, (iii) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended) and (iv) Minutes of such meeting were kept and will be or have been made available as required thereby.

YES: Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown,
Beverly Walker-Griffiea, and John J. Zech

NO: None

ABSTAIN: None

EXCUSED: None

Dated: February 23, 2022



By: Rechanda L. Willis
Title: Executive Board Assistant



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Resolution Regarding Approval of FY 2023 through FY 2027 Capital Improvement Plan

Agenda of: February 23, 2022
Item No.: **2022-061**

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Interim Chief Executive Officer
Great Lakes Water Authority

DATE: February 9, 2022

RE: Resolution Regarding Approval of FY 2023 through FY 2027
Capital Improvement Plan

MOTION

Upon recommendation of Jody Caldwell, Interim Chief Planning Officer, The Board of Directors for the Great Lakes Water Authority (GLWA), **adopts the resolution supporting the Capital Improvement Plan (CIP) for Fiscal Years 2023 through 2027, and authorizes the Chief Executive Officer to approve the five year Capital Improvement Plan (CIP) for Fiscal Years 2023 through 2027, including the ten year outlook, noting an affirmative vote of at least five (5) Board Members is necessary for approval of this Motion;** and also authorizes the Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote.

JUSTIFICATION

A capital improvement plan addresses the following objectives.

1. Identifies an organization's priorities within available resources over a multiple year period.

2. Communicates the scope, funding, and timing to stakeholders, coordinating agencies, investors, and the public.
3. Encompasses stakeholder engagement in its development.
4. Aligns with strategic objectives of the organization, including effective capital delivery and regulatory compliance at the lowest cost of capital investment.

BUDGET IMPACT

The FY 2023 through FY 2027 Capital Improvement Plan identifies \$965.6 Million of water system capital improvements and \$761.8 Million of sewer system improvements. Giving that GLWA adopts a two-year budget, it is recommended that FY 2023 and FY 2024 be designated as a two-year capital budget for purposes of carrying out the CIP that coincides with GLWA adopted biennial operating budget (also referenced as the revenue requirement budget).

COMMITTEE REVIEW

The Capital Planning Committee reviewed Preliminary Drafts of the CIP on October 19, 2021 and December 14, 2021. The full Board of Directors reviewed the Final Proposed CIP on January 26, 2022 and referred the CIP back to the Capital Planning Committee.

The Final Proposed CIP was presented to the Capital Planning Committee at its meeting on February 15, 2022. The Capital Planning Committee unanimously recommended that the GLWA Board adopt the Resolution and approves the FY 2023 through FY 2027 Capital Improvement Plan.

APPROVAL REQUIRED

The Articles of Incorporation of the Great Lakes Water Authority requires an affirmative vote of at least five (5) members to approve the 5-year Capital Improvement Plan.

**Great Lakes Water Authority
Resolution 2022-061
Resolution Adopting the FY 2023 through FY 2027 Capital Improvement Plan**

By Board Member: John J. Zech

- Whereas** The Great Lakes Water Authority ("GLWA" or the "Authority") assumed the operation of the regional water and sewer systems on January 1, 2016 (the Effective Date") pursuant to the Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015; and
- Whereas** During the term of the Lease Agreements, the Authority shall be entitled to make such rehabilitation of and replacements and improvements to the Leased Water and Sewer Facilities as it determines to be necessary to keep the Leased Facilities in compliance with performance standards; and
- Whereas** In connection with the terms of the Lease Agreements, the Authority shall for each Fiscal Year prepare and approve a Capital Improvement Plan, which shall set forth the improvements to the Leased Sewer Facilities that the Authority proposes to undertake during the next five (5) Fiscal Years; and
- Whereas** The GLWA Planning Services staff facilitated the preparation of the FY 2023 through FY 2027 Capital Improvement Plan which encompassed engineering and operating unit personnel, business case evaluation preparation, scoring by the Capital Improvement Plan Development Review Committee members for each system, customer engagement, and review by the GLWA Board Capital Planning Committee on October 19, 2021, December 14, 2021 and February 15, 2022; and
- Whereas** The FY 2023 through FY 2027 Capital Improvement Plan and related financial plan has been prepared within the boundaries established by the GLWA's long-term financial strategy emphasizing effective capital delivery at the lowest cost of capital; and
- Whereas** The FY 2023 through FY 2027 Capital Improvement Plan identifies \$965.6 Million of water system capital improvements and \$761.8 Million of sewer system improvements; and
- Whereas** An affirmative vote of 5 Board Members is necessary for the adoption of this Resolution

Section 8

Acronyms & Glossary

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Acronyms

ACFR	– Annual Comprehensive Financial Report
AMP	– Asset Management Plan
AMR	- Automatic Meter Reading
AMSO	– Asset Management Strategic Organization
BCE	– Business Case Evaluation
BDF	- Biosolids Dryer Facility
BI	– Business Intelligence
BID	– Business Inclusion & Diversity
CACO	– Chief Administrative and Compliance Officer
CAP	– Contract Alignment Process
CFO	– Chief Financial Officer
CIP	- Capital Improvement Plan
CMMS	– Computerized Maintenance Management System
COD	- City of Detroit
COF	- Central Offloading Facility
COOP	– Continuity of Operations Planning
CSO	- Combined Sewer Overflow
CSR	– Capital Spend Ratio
CWSRF	– Clean Water State Revolving Fund
DMT	– Detroit Marine Terminal
DWSRF	- Drinking Water State Revolving Fund
DWSD	- Detroit Water & Sewerage Department
EAM	– Enterprise Asset Management
EGLE	– Michigan Department of Environment, Great Lakes, and Energy
ELT	– Executive Leadership Team
ERI	– Energy, Research & Innovation

Acronyms *(continued)*

ERP – Enterprise Resource Planning
EUM – Effective Utility Management
FSA – Financial Services Area
FTE - Full-time equivalent
FY - Fiscal Year
GFOA – Government Finance Officers Association
GIS – Geographic Information System
GLWA - Great Lakes Water Authority
GRS – City of Detroit General Retirement System
HR – Human Resources
HVAC - Heating, ventilation, and air conditioning
I&E Fund - Improvement & Extension Fund
IPP – Industrial Pretreatment Program
IWC – Industrial Waste Control
IT - Information Technology
KPI's – Key Performance Indicators
MBO - GLWA Master Bond Ordinance
MDEQ - Michigan Department of Environmental Quality (see EGLE)
MOU - Memorandum of Understanding
NESPS - Northeast Sewer Pump Station
NPDES - National Pollutant Discharge Elimination System
O&M - Operations & Maintenance
OD – Organizational Development
OMID - Oakland Macomb Interceptor Drain Drainage District
OPEB - Other post-employment benefits
OWI – One Water Institute

Acronyms *(continued)*

PA94 – Michigan Public Act 94

PAYGO – Pay as you go

PM – Preventative Maintenance

POA – Plan of adjustment (bankruptcy)

SAMP – Strategic Asset Management Plan

SAW - Stormwater, Asset Management, and Wastewater

SCADA - Supervisory Control and Data Acquisition system

SRA – Spend Rate Assumption

SRF - State Revolving Fund

TSIP – Transmission System Pipe Integrity Program

UAAL - Unfunded Accrued Actuarial Liability

USS – Units of Service Study

VFD – Variable Frequency Drive

WATF – Wastewater Analytics Task Force

WAM – Work Order and Asset Management software

WAMP – Water Asset Management Plan

WAMR – Wholesale Automatic Meter Reading

WRAP - Water Residential Assistance Program

WRRF - Wastewater Resource Recovery Facility

WSSA – Water and Sewer Services Agreement

WwAMP – Wastewater Asset Management Plan

WWTP – Wastewater Treatment Plant

Glossary

Accrual Basis - Method of accounting that recognizes the financial effect of transactions, events and inter-fund activities when they occur, regardless of the timing of related cash flows.

Amortization - Gradual reduction, redemption, or liquidation of the balance of an account according to a specified schedule of times and amounts. Also, provision for the extinguishment of a debt.

Audit – A formal examination of an organization’s or individual’s accounts or financial situation.

Balanced Budget – A budget in which the revenue equals the revenue requirements.

BC Notes – Financial Recovery Bonds issued by the City of Detroit to fund pension obligation certificates and post-retirement health benefits.

Biennial Budget – The practice of preparing and adopting a budget for two-year periods.

BigTime – A custom-built PSA software for accountants, architects, engineers, and other professional services firms.

Biosolids Dryer Facility (BDF) - Facility converting wastewater sludge into marketable pelletized biosolids product, which is beneficially reused as sustainable fertilizer.

Bond & Interest Redemption Fund – A requirement of the Master Bond Ordinance to set up bank accounts to provide for payment of principal and interest on bonded debt. Monthly deposits to the bank accounts are made to reflect 1/12th of the annual debt service requirement.

Budget - A plan of financial operation which includes an estimate of proposed expenditures for a given period and the proposed means of financing them.

BS&A – Financial accounting software designed specifically for municipalities currently being used by GLWA.

Capital Improvement Program (CIP) - A short-range plan, usually four to ten years, which identifies capital projects and equipment purchases, provides a planning schedule and identifies options for financing the plan.

Capital Outlay Plan - Assets that are purchased and are either above the dollar threshold for capitalizing on the financial statements (i.e., over \$5,000) or are an asset that should be tagged and tracked for internal control purposes. In both instances, they have an estimated useful life of more than a year.

Capital Program Allocation - Portion of operations and maintenance expenses that are properly allocable to capital program management overhead.

Capturis – A multi-site utility information management system.

Centralized Services - Functions that support all Great Lakes Water Authority.

Ceridian – Human resources software currently used by GLWA for payroll processing and benefits

Glossary (continued)

Clean Water State Revolving Fund (CWSRF) – Michigan’s Water Pollution Control Revolving fund, better known as the State Revolving Fund (SRF) is a low-interest loan financing program that assists qualified local municipalities with the construction of needed water pollution control facilities. Interest rates are usually between 2% and 2.5% and are repaid over 20-30 years.

Construction Bond Fund – Used to account for funds generated from proceeds of revenue bond issues and reserved for capital improvements. These are not part of the regular flow of funds and cannot be used for any purposes other than capital improvements.

Contract Alignment Process (CAP) - As part of strategy to achieve water charge stability member partners asked for alignment of the model contract reopener to a common schedule to minimize the annual charge volatility created by changing contract demands as model contract amendments were made. Previously there were staggered contract re-openers. The effect of the CAP on the units of service was first utilized for the FY 2020 water charges. As part of the 2017 and 2018 reopener meetings, the model contract reopener schedule within each member partner’s contract was amended to change the next regularly scheduled reopener date to 2022 and every 4 years thereafter. The 2022 reopener will affect the units of service starting with the FY 2024 water charges.

Contractual Transition Services - Staff positions which are filled with outside contractors until they can be permanently filled.

Customers – Those member partners we provide services to. See “Member Partners”.

Depreciation - The portion of the cost of a fixed asset which is charged as an expense during a particular period.

Drinking Water State Revolving Fund (DWSRF) - A program designed to assist water suppliers in satisfying the requirements of the Safe Drinking Water Act by offering low-interest to eligible water suppliers to finance qualified water supply system projects. Interest rates are usually between 2% and 2.5% and are repaid over 20-30 years.

DTE – DTE Energy is a utility providing electric and gas service to GLWA.

Enterprise Fund - A fund established to finance and account for the acquisition, operation, and maintenance of governmental facilities and services, which are entirely or predominantly self-supporting by user charges. This type of fund uses the accrual basis of accounting. The Authority reports two enterprise funds: Water Fund and Sewage Disposal Fund.

Enterprise Resource Planning (ERP) – A suite of integrated software applications that is used to collect store, manage, and interpret data from many different business activities.

Extraordinary Repair and Replacement Reserve Fund - Serves as a contingency fund for unanticipated capital improvements in excess of \$1 million. Must be maintained at 15% of annual operating expense.

Fiscal Year - A twelve-month period that an organization uses for budgeting, forecasting and reporting. The Authority fiscal year begins on July 1st and ends the following June 30th.

Glossary (continued)

Full-Time Equivalent (FTE) – A unit of measure used for staff positions. An FTE of 1.0 is equivalent to 2,080 working hours per year.

General Retirement System (GRS) – The City of Detroit pension plan that provides retirement, disability, and survivor benefits to the plan members. Plan members include the City of Detroit active employees, retirees, and beneficiaries. A Board of Trustees administers the General Retirement System. The Board of Trustees consists of five elected active employees, one elected retiree, a non-member individual, and three ex-officio trustees.

Improvement & Extension Fund (I&E) - Used to account for funds for revenue finance capital improvements, extensions or betterment of the Water and Wastewater Systems.

Innovyze – A software vendor that provides hydraulic modeling and asset management analysis software for water and wastewater systems.

Local Sewer System - That portion of the Sewer System that provides sewer service directly to Retail Sewer Customers, which consists of the Detroit Local Sewer Facilities and is serviced by the Detroit Water Sewerage Department per the Water and Sewer Services Agreement.

Local Water System - That portion of the Water System that provides water service directly to the Retail Water Customers, which consists of the Detroit Local Water Facilities and is serviced by the Detroit Water Sewerage Department per the Water and Sewer Services Agreement.

Major Fund - Are funds whose revenues, expenditures, assets, or liabilities (excluding extraordinary items) are at least 10 percent of corresponding totals for all governmental or enterprise funds and at least 5 percent of the aggregate amount for all governmental and enterprise funds. The Authority has two major enterprise funds.

Master Bond Ordinance (MBO) – An ordinance which provided for the assumption of the outstanding bonds issued for the water and sewer systems of the City of Detroit, for the issuance of revenue bonds to improve the leased water and sewer systems, to provide for the collection of revenues for the operation and maintenance, debt services and other matters related to the leased water and sewer systems.

Member Partners – Includes GLWA team members, board members, water and wastewater partners, associated stakeholders, elected officials, consultants, and regulatory agencies.

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - An agency of the state of Michigan. Formally known as the Michigan Department of Environmental Quality (MDEQ) until April 22, 2019, the department was created in 1995. Its mission statement says that it "promotes wise management of Michigan's air, land, and water resources to support a sustainable environment, healthy communities, and vibrant economy."

Michigan Department of Environmental Quality (MDEQ) – See Michigan Department of Environment, Great Lakes, and Energy (EGLE).

Glossary (continued)

MiDEAL – Is the State of Michigan’s extended purchasing program that allows Michigan cities, townships, villages, counties, school districts, universities, colleges and nonprofit hospitals to buy goods and services from state contracts. Local governments benefit directly from the reduced cost of goods and services and indirectly by eliminating the time needed to process bids.

Model Contract – The GLWA water services contract and the wastewater disposal services contract templates, as collaboratively drafted and agreed upon by and between GLWA and/or its predecessor, the Detroit Water and Sewerage Department, and their member partners, which provide consistent contract terms and conditions between all GLWA member partners.

National Pollutant Discharge Elimination System (NPDES) – Created in 1972 by the Clean Water Act the agency addresses water pollutants to waters of United States through its permit program.

Northeast Sewer Pump Station (NESPS) – A GLWA wastewater pump station that exclusively handles flows from the Oakland Macomb Interceptor Drain Drainage District (OMID). Per the 2019 contract amendment, GLWA will continue to operate the NESPS but OMID will maintain and finance improvements to the NESPS starting in FY2020.

Oakland Macomb Interceptor Drain Drainage District (OMID) – A wholesale member partner of the sewer system.

One Water Institute (OWI) – A GLWA training program that provides quality education, training, and leadership development to GLWA Member Partners to facilitate the creation of a highly-skilled water sector workforce able to provide quality service to customers throughout Southeastern Michigan, using a common language, skills, and knowledge base.

Operation and Maintenance (O&M) Fund - Accounts for the day-to-day operating expenses of the Department.

Other post-employment benefits (OPEB) - The benefits, other than pensions, that a state or local government employee receives as part of his or her package of retirement benefits.

Ovation – A reliable and innovative control system that integrates data from monitoring devices for equipment and instrumentation into a single, unified system, reducing complexity and minimizing maintenance.

PAYGO – Pay as you go is a term indicating that we pay for projects from other available funds that are not from bond issues.

Regional Sewer System - That portion of the Sewer System that provides sewer service to the wholesale customers thereof and Retail Sewer Customers up to the point of connection to the Local Sewer System, which includes the Leased Sewer Facilities.

Regional Water System - That portion of the Water System that provides water service to the wholesale customers thereof and Retail Customers up to the point of connection to the Local Water System, which includes the Leased Water Facilities.

Glossary (*continued*)

Revenue Financed Capital – Capital improvements that are funded with current revenues instead of issuing bonds or obtaining SRF loans.

Revenue Requirement – The funding requirements defined in the Master Bond Ordinance. These include funds for operation and maintenance, debt service, debt reserves, pension obligation, WRAP, budget stabilization, lease payment, ER&R fund, I&E fund and the surplus fund.

Shared Services - Recoverable operations and maintenance costs pursuant to a shared services agreement.

SHAREs – The simplified methodology used for assigning costs in the regional wastewater system which was implemented in FY 2022.

State Revolving Fund (SRF) - A State Revolving Fund (SRF) is a fund administered by a U.S. state for the purpose of providing low-interest loans for investments in water and sanitation infrastructure (e.g., sewage treatment, stormwater management facilities, drinking water treatment), as well as for the implementation of nonpoint source pollution. Loans issued may be Drinking Water State Revolving Fund (DWSRF) or Clean Water State Revolving Fund (CWSRF). These funds are a combination of federal and state funds.

Stormwater, Asset Management, and Wastewater (SAW) Program – Grants or loans issued by the State of Michigan for qualifying wastewater and stormwater related expenditures.

Trustee – A trust company or bank, currently U.S. Bank, who shall hold all sums received by it designated as trust funds by the MBO and all funds shall be used only for the purposes and in the manner set forth in the MBO.

Unfunded Accrued Actuarial Liability (UAAL) – An actuarial term for pension plans that refers to the difference between the actuarial values of assets owned by the plan and the total benefits due to be paid.

Units of Service Study (USS) - A multi-phase study performed by Black and Veatch to determine the water units of service for GLWA's non-master metered member partners: Detroit, Dearborn and Highland Park.

Water Residential Assistance Program (WRAP) – Established by the MOU and funded by charges to the customers to provide assistance to indigent residential customers throughout the communities served by GLWA and is independently administered on behalf of the Authority. The WRAP was designed to provide monthly bill assistance, arrearage assistance and minor plumbing repairs to qualified applicants that have income at or below 150% of the federal poverty threshold.

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Great Lakes Water Authority

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