

FY 2022 and FY 2023 Biennial Budget & Five-Year Financial Plan FY 2022 through FY 2026

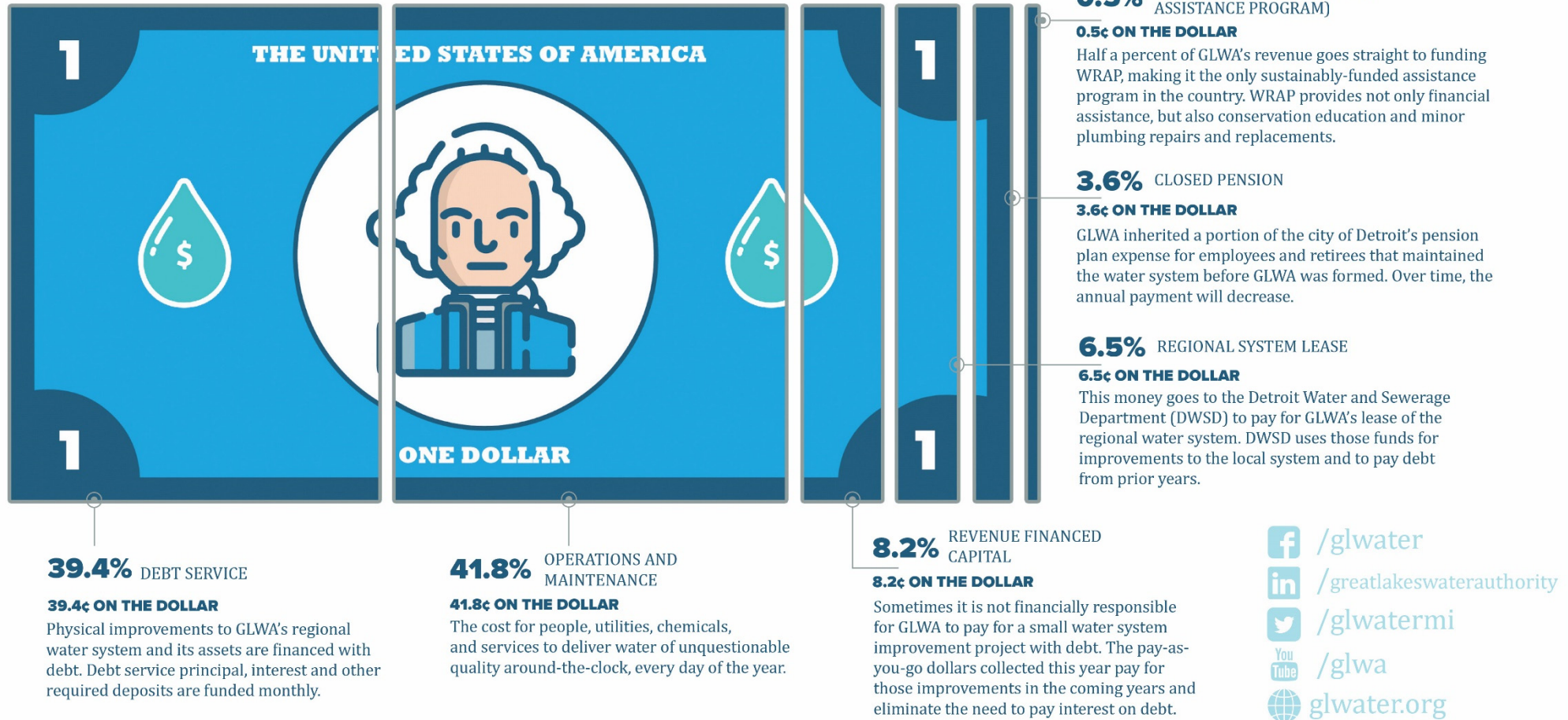


Conner Creek CSO Facility

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MAKING SENSE OF YOUR DOLLARS

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



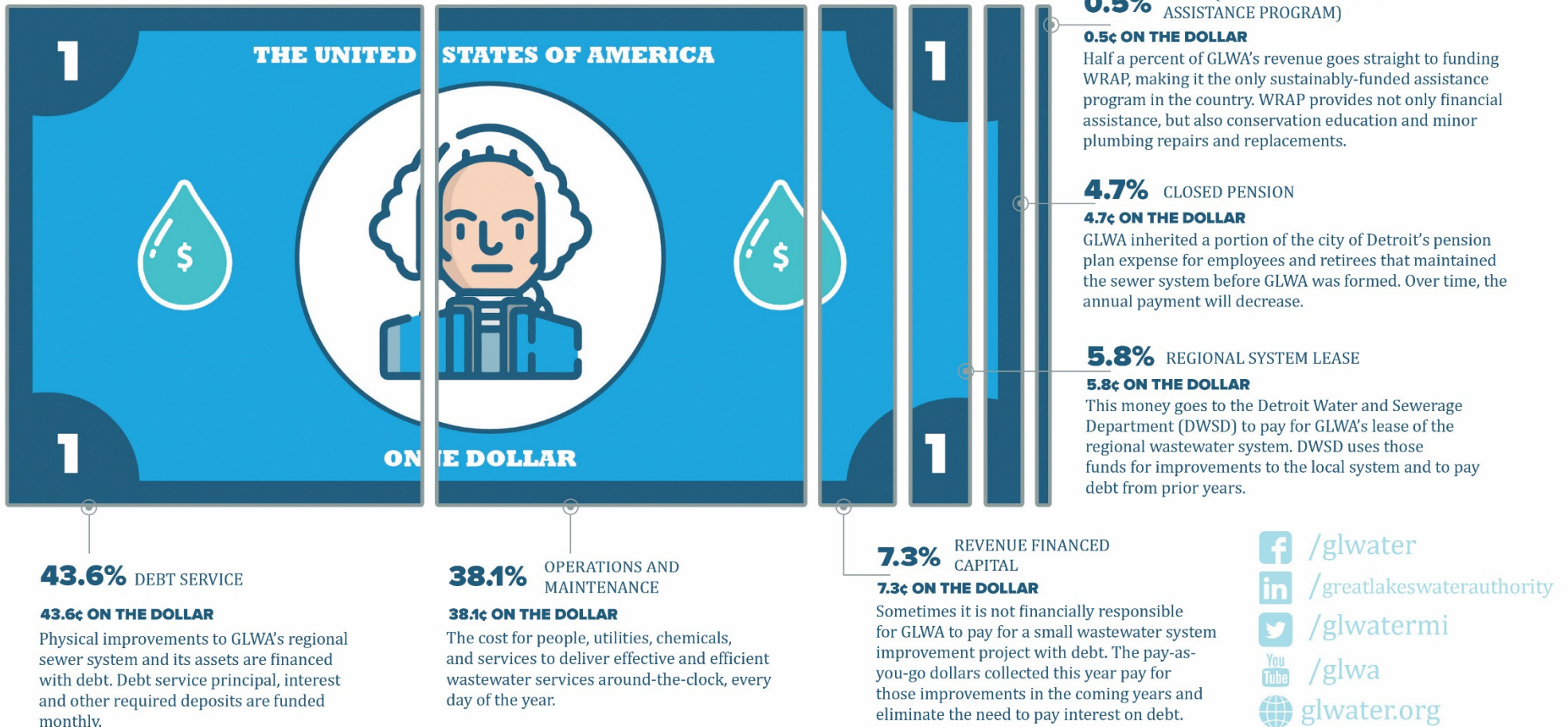
Note: Percentages based on FY 2022 approved budget.

WE ARE ONE WATER

FY 2022 Water System Budget Infographic

MAKING SENSE OF YOUR DOLLARS

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



WE ARE ONE WATER

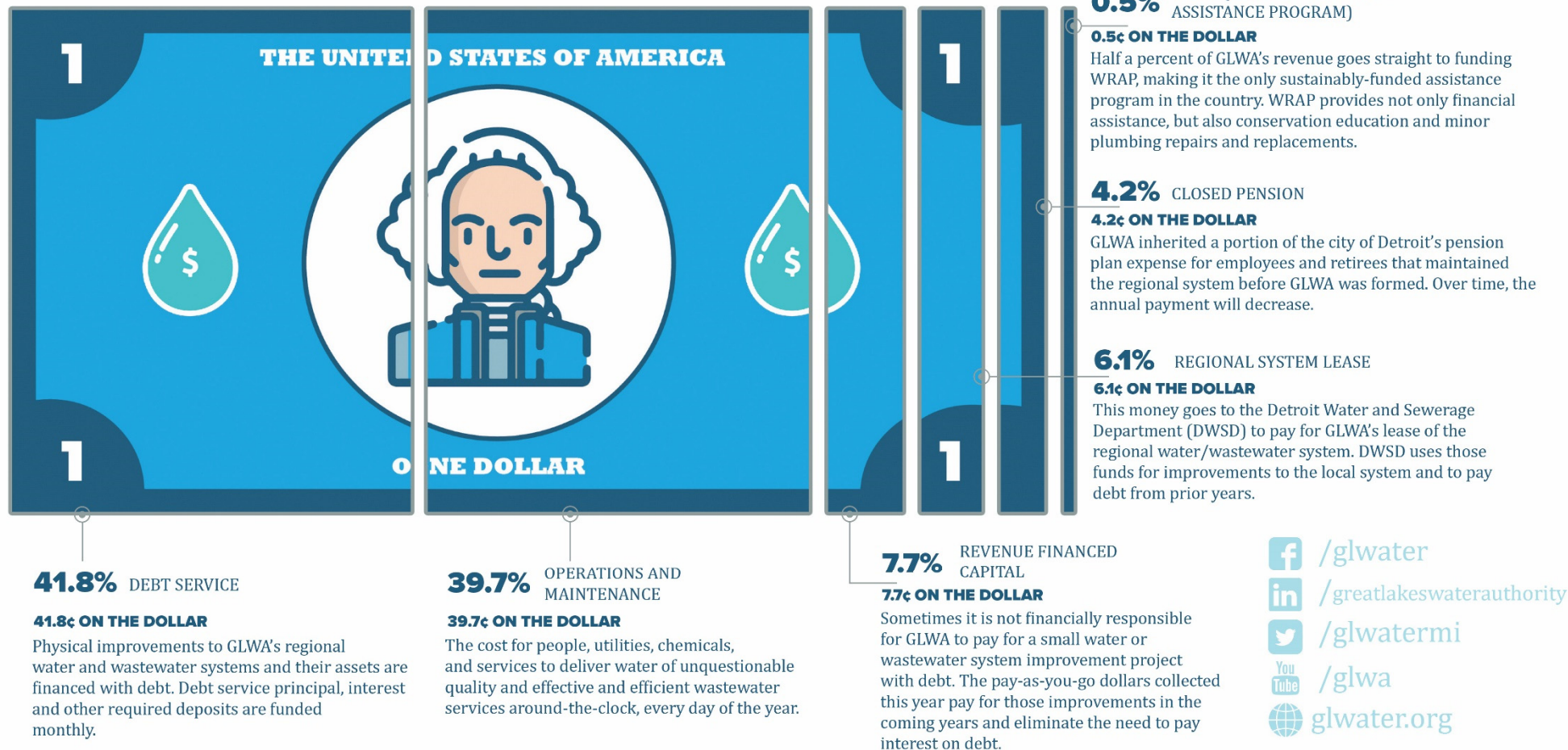
Note: Percentages based on FY 2022 approved budget.



FY 2022 Wastewater System Budget Infographic

MAKING SENSE OF YOUR DOLLARS

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



WE ARE ONE WATER

Note: Percentages based on FY 2022 approved budget.



FY 2022 Water and Wastewater Combined Budget Infographic

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A Message from Chief Executive Officer Sue F. McCormick

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. As we enter our sixth full fiscal year on July 1, 2021, we see an organization that has embraced seeking best-in-class commitments to address long-term service sector challenges. The budget and five-year financial plan are designed to demonstrate our stewardship of the regional system's assets and commitment to cost control, transparency, and strong financial management.

FY 2022 Budget Highlights

The FY 2022 Budget delivers on accomplishing our financial plan objectives and reaching our organizational strategic goals. Five key priorities shape budget development decisions:

- 1) *4 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 charges 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;
- 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 suburban wholesale member partners increased an average of 1.9 percent and the local system charge to the Detroit customer class decreased by 2.0 percent, for a system-wide adjustment of 1.5 percent. Those goals and related actions include:

- 1) *4 Percent Promise*: limiting the water system revenue requirement (budget) to a 0.7 percent increase from the prior year; well under the 4 percent promise. The average overall charges increase to all member partners is 1.5 percent, which is attributed to projected decreases in investment income (1 percent) offset by a moderate increase in sales volume (-0.2 percent), which adds approximately 0.8 percent to reconcile the 0.7 percent budget increase and the average charge increase of 1.5 percent;
- 2) *Long-term Financial Sustainability*: budgeted debt service coverage of 1.89 on Senior Lien Bonds and 1.32 on all bonds, and a \$28 million deposit to the Improvement & Extension fund to lower the cost of future borrowing;
- 3) *Controlled O&M*: water O&M increase controlled at 5.0 percent – overall water and sewer O&M increase of 1.0 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 Contract Alignment Process (CAP) resulted in changes in the FY 2022 Units of Service for 11 member partners and their FY 2022 water charges were calculated based on their new units of service. For the 77 member partners that did not have changes in contractual demands, the FY 2022 water charges reflect a uniform charge adjustment.

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 suburban wholesale member partners will decrease by an average of 0.1 percent and a local system charge decrease of 0.7 percent, for a system-wide decrease of 0.6 percent. Those goals and related actions include:

1. *4 Percent Promise:* reducing the sewer system revenue requirement (budget) to a 2.3 percent decrease from the prior year; well under the 4 percent promise. The average overall charges decrease to all member partners is 0.6 percent. The difference between the two figures is attributed to a decrease in projected investment income (0.9 percent) and change in sales revenue (0.9 percent) due to the elimination of a one-time OMI charge in the prior year;
2. *Long-term Financial Sustainability:* budgeted debt service coverage of 2.42 on Senior Lien Bonds and 1.35 on all bonds, and a \$34.6 million deposit to the Improvement & Extension fund to lower the cost of future borrowing;
3. *Controlled O&M:* sewer O&M decrease of 2.0 percent – overall water and sewer O&M increase of 1.0 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 2022 sewer service charges calculation used a new SHARES methodology that embraces simplicity and replaces the strength of flow notion with an appropriate weighting on sanitary volumes, and as noted, the overall charge adjustment was actually a decrease. Highland Park is continuing to make partial payments which has stabilized the bad debt charge to wholesale member partners.

COVID-19 Pandemic

While Michigan has seen positive results from its efforts to slow the spread of the coronavirus (COVID-19), the ultimate duration and impact of the virus continue to remain unclear. Similarly, the duration and effects of the pandemic on the national economy, Michigan economy, and local economies within the GLWA service area remains unknown.

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 the Board of Directors, team members, member partner communities, vendors, and other stakeholders on a steady cadence to successfully navigate through this challenging time.

During this time, GLWA expanded a research partnership with Michigan State University's (MSU) College of Engineering and the city of Detroit to include a project focusing on the use of the wastewater system to help detect viruses in untreated sewage to better understand how wastewater could play an important role in protecting public health during the pandemic. This research has been published in the Journal of Environmental Engineering.

GLWA has applied for federal grants from Federal Emergency Management Agency (FEMA) for reimbursement 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

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 the GLWA. The program administration began in March 2016. It has been modified by the 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 2022 budget, this amounts to \$4.0 million from GLWA revenues and \$2.2 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. In October 2020, the GLWA Board of Directors approved a temporary change to allow participants to remain in the program who are unable to make monthly on time payments due to COVID-19 until December 31, 2020. In April 2021 an extension of that temporary change was approved through June 30, 2021. WRAP is administered by Wayne Metro Community Action Agency. More information is online at www.waynemetro.org/WRAP/.

Looking Ahead: FY 2022 through FY 2026 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 4 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*.



Sue F. McCormick
Chief Executive Officer

The GLWA “revenue requirement budget” is the basis for establishing the annual charges for services. Just under 53% of the FY 2022 budget of \$819 million are legal commitments such as debt service (42%), lease payment (6%), Water Residential Assistance Program (WRAP) (0.5%) and legacy liabilities (4%). Capital funding reserve for replacement is 7.7% of the total budget. The Operations & Maintenance (O&M) expense represents \$325 million, almost 40% of the total requirement and is the focus of this One Pager. O&M represents an increase of \$3.2 million, or 1.0%, over FY 2021. Highlights for the upcoming year include a comparison to the FY 2021 Amended Budget:

Water Operations – increase of \$4 million

Factors increasing the budget include Personnel Costs (\$0.9 million) due to the addition of eight positions with the largest number being in the job classification of apprenticeship as well as increases in medical plan fringe benefits; Chemicals (\$1.6 million) due to increased pricing since the last 3 year contract renewal; Contractual Services (\$1.0 million mainly due to preventative maintenance contracts and Utilities (\$0.5 million) based on historical trends.

Wastewater Operations – decrease \$3.0 million

Factors increasing the budget were mainly in the Wastewater Operations group (\$2.8 million) which includes Personnel Costs (\$1.3 million) due to the addition of five positions in the apprenticeship program to support workforce development as well as increased medical benefit costs; Chemicals for water treatment was (\$1.0 million) based on expected pricing increase as contracts are renewed; and, Supplies & Other (\$0.4 million) for equipment and facilities maintenance.

Factors decreasing the budget include utilities for Gas & Water (\$2.1 million) due to operational changes and equipment maintenance; decreased reliance on contractors (\$3.4 million) for skilled labor positions (focusing on direct hire) as well as

the GLWA team assuming responsibility for an instrumentation maintenance contract thereby allowing the contract to be eliminated.

Centralized Services¹ – increase \$3.5 million

Factors increasing the budget include Information Technology (\$2.7 million) which is mostly attributed to a loss of \$2.6 million in Shared Service reimbursements and 4 FTEs to manage increasing technology needs. Facility Operations (\$1.3 million) for Contractual Services which fluctuate depending on equipment repair needs.

Factors decreasing the budget is in the Planning Services Area decreased (\$0.9 million) mainly due to a decrease in Contractual Services as projects are moving to next phases and the consolidating of sewer modeling and monitoring initiatives.

Administrative Services² – increase \$4.3 million

Factors increasing are the Financial Services area (\$2.1 million) mainly due to Personnel Costs (\$1.7 million) with 7.75 FTEs for the Business Inclusion and Diversity (B.I.D.) program, expanded WRAP oversight, and expanded needs for a contract management team. The Chief Administration & Compliance Officer area (\$1.3 million) mainly due to Contractual Services for the projected increase in business insurance rates.

Staffing & Personnel – The staffing plan (number of positions) is at 1,239, an increase of 20 and full-time equivalents (FTEs) at 1,216.25, an increase of 16.75.

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; 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 2022 Service Charges Highlights

On February 24, 2021, the GLWA Board of Directors held a Public Hearing for the proposed schedule of charges for the fiscal year beginning July 1, 2021. The Board deliberation approved the FY 2022 water and sewer charges at its meeting on March 24, 2021, after receiving public input.

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 2022 Water System Charges

The average system charge adjustment for water is a 1.5 percent increase. This is the result of 1) a proposed Water budget increase of 0.7 percent; 2) reduced investment earnings, creating the need for a 1.1 percent increase; and 3) an offset of 0.2 percent from increased estimated sales volumes. As a result of the 2018 Contract Alignment Process (CAP), the FY 2022 Units of Service changed for only 11 member partners. This has significantly improved charge stability among member partner communities. The proposed water charges reflect a uniform increase in common to all revenue requirements of 2.18 percent, with an average charge increase of 2.07 percent for the 77 member partners that did not have changes in contractual demand.

Approved FY 2022 Sewer System Charges

The recently updated Sewer Shares, which were collaboratively established through the Sewer Charges Workgroup, were included in the calculations for all member partners for the proposed FY 2022 charges. The average wholesale sewer charges reflect a reduction of 0.1 percent from the existing charges, with the entire system charge adjustment being a 0.6 percent decrease. This outcome is the result of a proposed FY 2022 Sewer budget decrease of 2.3 percent which was offset by 1) the loss of a one-time revenue source in the prior year and 2) reduced investment earnings.

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%
Five Year Average	1.8%	0.3%

Charge Adjustments						
	2018	2019	2020	2021	2022	Projected 2023
Water System						
Budgeted revenue requirement [1]	\$ 328,119,300	\$ 331,400,500	\$ 339,664,200	\$ 341,642,000	\$ 344,030,500	\$ 354,351,400
Percent change in budgeted revenue requirement	-0.9%	1.0%	2.5%	0.6%	0.7%	3.0%
Average annual charge adjustment [2]						
Total regional system	1.8%	1.8%	0.6%	3.2%	1.5%	N/A [5]
Suburban wholesale	2.0%	0.2%	0.3%	3.1%	1.9%	N/A [5]
Local system charge [3]	-1.0%	14.1%	2.7%	3.0%	-2.0%	N/A [5]
Number of wholesale water contracts [4]	87	87	87	87	87	87
Sewage Disposal System						
Budgeted revenue requirement [1]	\$ 465,500,100	\$ 470,156,000	\$ 480,605,300	\$ 486,751,300	\$ 475,429,200	\$ 489,692,100
Percent change in budgeted revenue requirement	0.3%	1.0%	2.2%	1.3%	-2.3%	3.0%
Average annual charge adjustment [2]						
Total regional system	-0.7%	0.1%	0.8%	2.0%	-0.6%	N/A [5]
Suburban wholesale	1.8%	1.3%	-0.1%	1.7%	-0.1%	N/A [5]
Local system charge [3]	-4.2%	1.2%	2.5%	2.3%	-0.7%	N/A [5]
Number of wholesale sewer contracts [4]	18	18	18	18	18	18

[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.

[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. For the sewage disposal system, this also includes the bad debt adjustment.

[3] Represents the annual change in the local system charges to the Detroit customer class before the annual credit of \$20.7 million for water and \$5.516 million for sewer. Does not include any lookback charges in the percentage increase/decrease calculation. 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.

[4] Does not include the City of Detroit. The water system includes one emergency basis contract.

[5] Not applicable as charges have not been approved by the Board for that time period.

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

Water Fund Revenues and Revenue Requirements [8]						
	Actual 2018	Actual 2019	Actual 2020	Estimated 2021	Budget 2022	Budget 2023
Revenues (Budget Basis) [1]						
Wholesale customer charges	\$ 323,117,344	\$ 311,399,136	\$ 312,701,777	\$ 319,787,200	\$ 327,763,700	\$ 336,806,000
Charge credits (Flint-KWA) [2]	(3,176,073)	(6,979,503)	(6,652,348)	(6,652,200)	(6,652,800)	(6,652,800)
Net wholesale charges	319,941,271	304,419,633	306,049,429	313,135,000	321,110,900	330,153,200
Local system charges	15,130,600	20,181,400	21,295,500	21,925,200	21,697,300	22,973,400
Other revenue [3]	115,086	361,384	2,659,660	175,000	175,000	175,000
Investment earnings [4]	4,489,397	11,818,203	9,115,115	1,276,500	1,047,300	1,049,800
Total Revenues	\$ 339,676,354	\$ 336,780,620	\$ 339,119,704	\$ 336,511,700	\$ 344,030,500	\$ 354,351,400
Revenue Requirements						
O&M expense [5]	\$ 108,530,383	\$ 117,714,203	\$ 131,840,040	\$ 134,127,300	\$ 143,933,800	\$ 148,117,300
O&M legacy pension	6,058,800	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000
Debt service requirement	136,288,157	131,178,181	132,835,624	137,436,100	135,481,000	146,520,400
Accelerated legacy pension	6,489,754	6,268,296	6,268,300	6,268,300	6,268,300	6,268,300
WRAP	1,711,200	1,673,400	1,698,300	1,669,400	1,705,500	1,756,700
Local system shortfall [6]	-	-	937,400	-	-	-
Regional system lease	20,625,000	18,527,800	18,952,000	14,243,700	15,809,400	14,421,300
Regional system lease payment applied to DWSD debt	1,875,000	3,972,200	3,548,000	8,256,300	6,690,600	8,078,700
ER&R	645,700	-	-	-	-	-
Improvement & extension fund	46,739,700	47,695,000	29,456,300	28,462,600	28,093,900	23,140,700
Operating reserve deposit	1,097,900	-	-	-	-	-
Total Revenue Requirements	\$ 330,061,594	\$ 333,077,080	\$ 331,583,964	\$ 336,511,700	\$ 344,030,500	\$ 354,351,400
Revenue Requirement Variance [7]	\$ 9,614,760	\$ 3,703,540	\$ 7,535,740	\$ -	\$ -	\$ -

[1] Revenues as presented in this schedule are those revenues used to meet the revenue requirements. Revenues are on the accrual basis as reported in the Annual Comprehensive Financial Report. Any variations from the Annual Report are noted for the specific line item.

[2] Credits applied reduce cash available to meet revenue requirements, therefore they are removed for this presentation.

[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.

[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.

[8] This presentation has been changed from the presentation in the prior year budget document. The current presentation is based on the Schedule of Revenue Requirements-Budget to Actual as reported in the FY 2020 Comprehensive Annual Financial Report. FY 2018 and FY 2019 have been revised for the current presentation.

Sewage Disposal Fund Revenues and Revenue Requirements [8]						
	Actual 2018	Actual 2019	Actual 2020	Estimated 2021	Budget 2022	Budget 2023
Revenues (Budget Basis) [1]						
Wholesale customer charges	\$ 268,978,831	\$ 272,772,460	\$ 266,003,286	\$ 268,093,500	\$ 272,130,000	\$ 280,045,000
Local system charges	178,969,200	181,159,300	185,807,300	187,959,700	188,662,200	194,426,800
Industrial waste and surcharges	21,243,383	15,038,824	14,303,101	13,890,900	13,213,700	13,606,000
Wholesale customer other [2]	-	-	5,960,000	5,960,000	-	-
Other revenue [3]	4,391,145	1,216,351	1,276,352	400,000	400,000	400,000
Investment earnings [4]	4,022,582	9,592,270	7,775,080	1,046,100	1,023,300	1,214,300
Total Revenues	\$ 477,605,141	\$ 479,779,205	\$ 481,125,119	\$ 477,350,200	\$ 475,429,200	\$ 489,692,100
Revenue Requirements						
O&M expense [5]	\$ 176,379,404	\$ 174,019,805	\$ 174,514,562	\$ 182,296,000	\$ 181,299,800	\$ 183,783,000
O&M legacy pension	10,809,600	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000
Debt service requirement	204,288,935	210,008,452	211,331,439	201,780,500	207,209,500	204,566,500
Accelerated legacy pension	12,118,599	11,620,692	11,620,700	11,620,700	11,620,700	11,620,700
WRAP	2,391,804	2,374,092	2,403,000	2,415,100	2,358,300	2,429,000
Local system shortfall [6]	24,113,034	-	10,817,800	-	-	-
Regional system lease	18,333,336	23,085,004	22,467,300	25,480,900	27,500,000	26,605,000
Regional system lease payment applied to DWSD debt	9,166,668	4,415,000	5,032,700	2,019,100	-	895,000
ER&R	813,600	-	-	-	-	-
Improvement & extension fund	22,698,100	22,547,700	20,797,600	40,913,900	34,616,900	48,968,900
Operating reserve deposit	1,733,000	-	-	-	-	-
Total Revenue Requirements	\$ 482,846,080	\$ 458,894,745	\$ 469,809,101	\$ 477,350,200	\$ 475,429,200	\$ 489,692,100
Revenue Requirement Variance [7]	\$ (5,240,939)	\$ 20,884,460	\$ 11,316,018	\$ -	\$ -	\$ -

[1] Revenues as presented in this schedule are those revenues used to meet the revenue requirements. Revenues are on the accrual basis as reported in the Annual Comprehensive Financial Report. Any variations from the Annual Report are noted for the specific line item.

[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.

[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. The negative variance for FY 2018 was caused by the local system budget shortfall. During FY 2018 the parties were working on determining how to handle the local system shortfalls. This was resolved in the 2018 Memorandum of Understanding.

[8] This presentation has been changed from the presentation in the prior year budget document. The current presentation is based on the Schedule of Revenue Requirements-Budget to Actual as reported in the FY 2020 Comprehensive Annual Financial Report. FY 2018 and FY 2019 have been revised for the current presentation.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

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Great Lakes Water Authority**Michigan**

For the Biennium Beginning

July 1, 2020A 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, 2020. 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 2nd year of receiving the award.



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 COD 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 March 24, 2021

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

Executive Leadership Team as of March 24, 2021

Sue F. McCormick * Chief Executive Officer
William M. Wolfson Chief Administrative and Compliance Officer
Nicolette N. Bateson, CPA Chief Financial Officer/Treasurer - Financial Services
Cheryl D. Porter Chief Operating Officer – Water Operating Services
Navid Mehran, PE Chief Operating Officer – Wastewater Operating Services
Suzanne R. Coffey, PE * Chief Planning Officer
Jeffrey E. Small Chief Information Officer
Terri Tabor Conerway Chief Organizational Development Officer
W. Barnett Jones Chief Security and Integrity Officer
Randal M. Brown General Counsel
Michelle A. Zdrodowski Chief Public Affairs Officer

* Sue F. McCormick is retiring from GLWA and formally submitted her resignation to the GLWA Board of Directors on July 28, 2021. On August 11, 2021, the Board of Directors appointed Suzanne R. Coffee as Interim Chief Executive Officer. Jody Caldwell, Asset Management Director has been named Interim Chief Planning Officer and will become a member of the Executive Leadership Team. This role will coincide with Suzanne's position as Interim CEO.

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

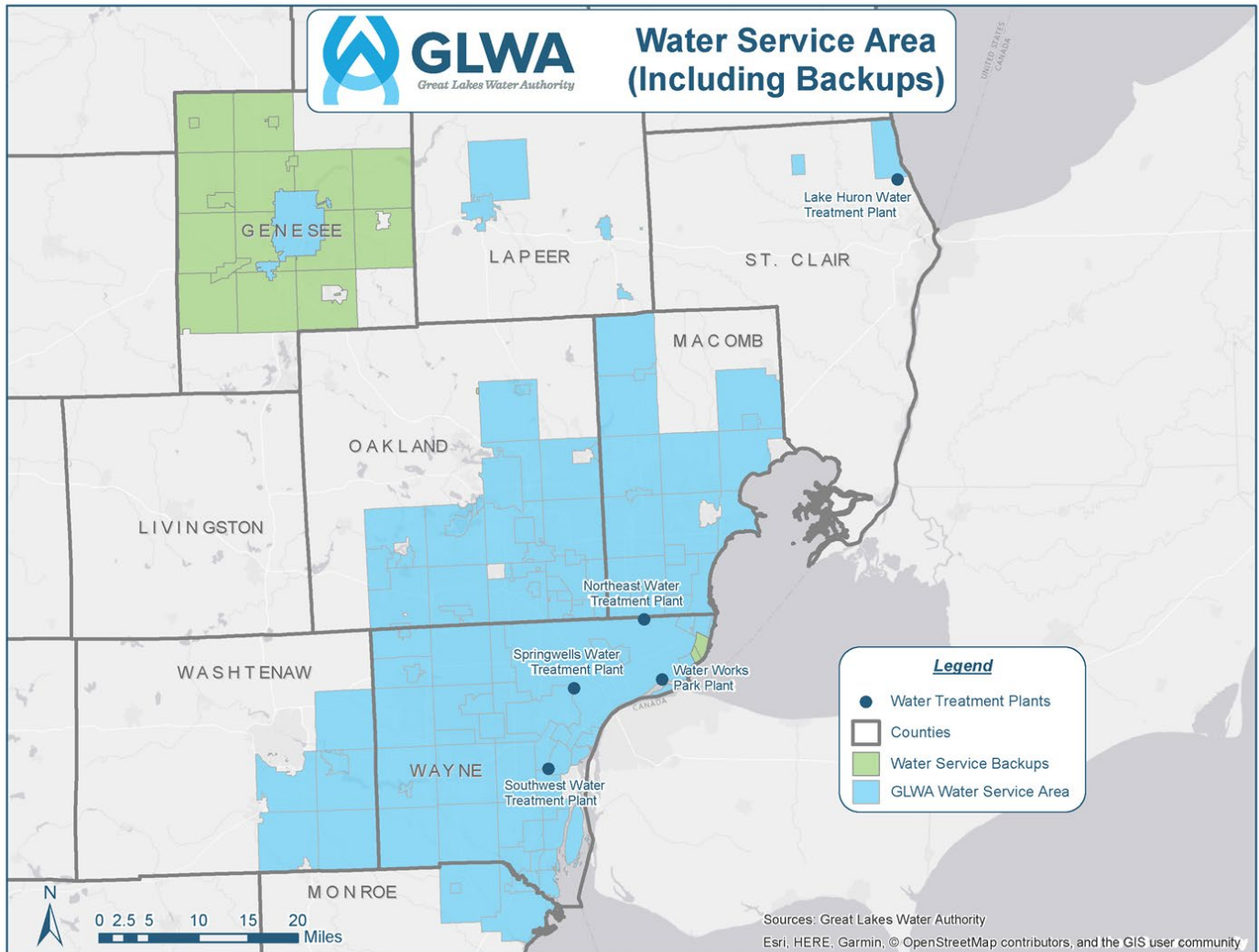
roughly one billion gallons of biosolids into environmentally friendly fertilizer. This alternative to burning or dumping in a landfill will significantly decrease emissions year-over-year.

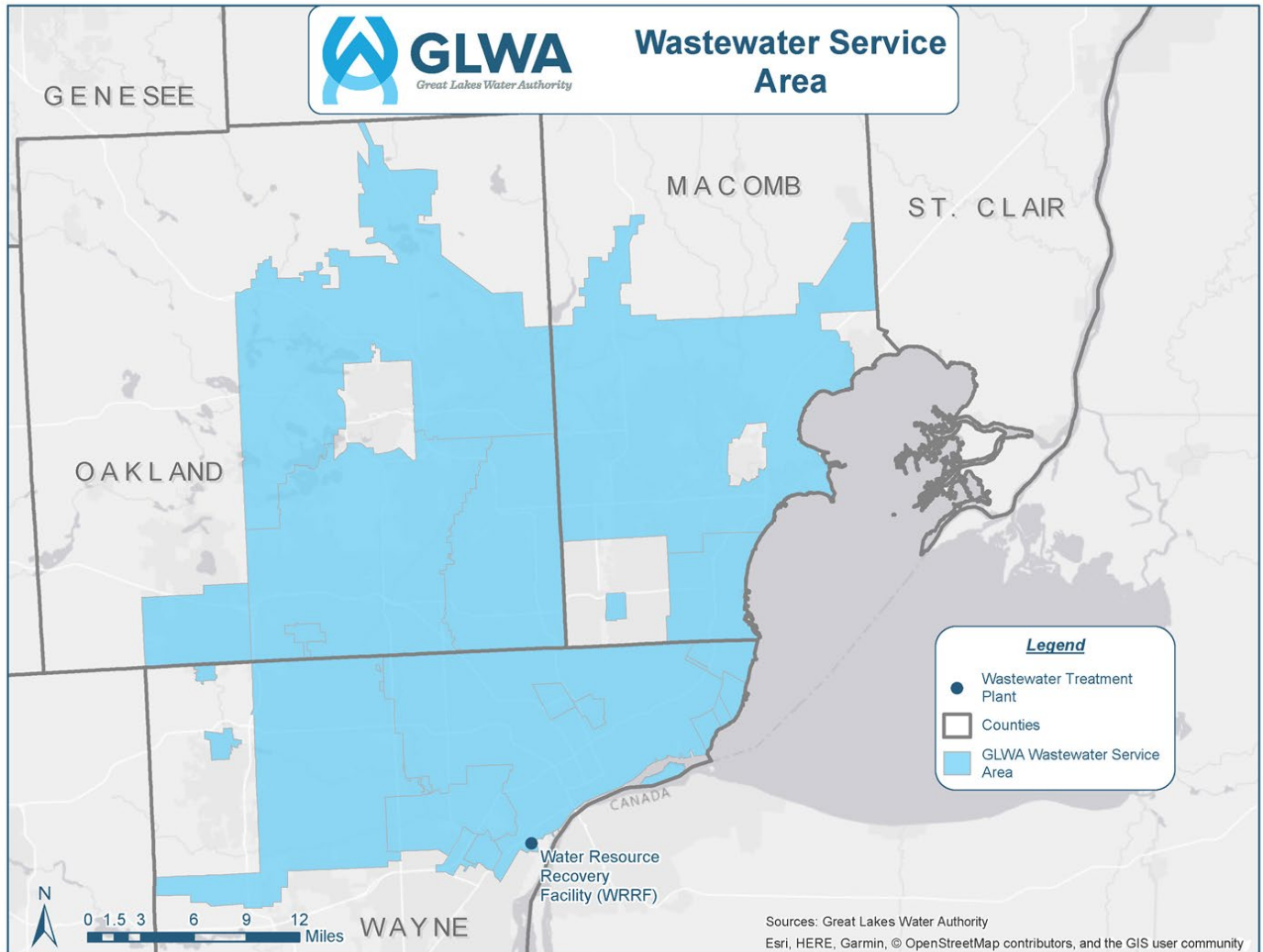
Facilities

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.

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 82 of the 87 current wholesale member partners. Of the 5 current wholesale member partners not under model contracts, 4 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 table sets forth certain information on total employment by industry group for the Detroit MSA and that of the United States. 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 2017		June 2018		Sept 2019		Sept 2020	
Mining, logging & construction	76.7	3.8%	80.2	3.9%	80.7	4.0%	76.1	4.1%
Manufacturing	257.0	12.6%	257.2	12.5%	257.6	12.6%	232.3	12.6%
Trade, transportation & utilities	370.4	18.2%	373.9	18.2%	379.1	18.6%	355.7	19.3%
Information	27.7	1.4%	26.7	1.3%	26.4	1.3%	25.1	1.4%
Financial activities	117.2	5.8%	118.0	5.8%	121.8	6.0%	116.6	6.3%
Professional and business services	398.7	19.6%	396.1	19.3%	391.7	19.2%	364.7	19.8%
Education and health services	313.7	15.4%	313.9	15.3%	316.9	15.5%	279.0	15.2%
Leisure & hospitality	207.8	10.2%	219.7	10.7%	201.4	9.9%	141.3	7.7%
Other services	77.2	3.8%	77	3.8%	74.9	3.7%	70.4	3.8%
Government	<u>188.2</u>	<u>9.2%</u>	<u>188.7</u>	<u>9.2%</u>	<u>191.1</u>	<u>9.4%</u>	<u>180.0</u>	<u>9.8%</u>
Total	<u>2,034.6</u>	<u>100.0%</u>	<u>2,051.4</u>	<u>100.0%</u>	<u>2,041.6</u>	<u>100.0%</u>	<u>1,841.2</u>	<u>100.0%</u>

U.S.								
	June 2017		June 2018		Sept 2019		Sept 2020	
Mining & logging	684	0.5%	742	0.5%	738	0.5%	619	0.4%
Construction	7157	4.8%	7439	5.0%	7,700	5.1%	7,415	5.2%
Manufacturing	12,508	8.5%	12,795	8.5%	12,880	8.5%	12,224	8.6%
Trade, transportation & utilities	27,498	18.6%	27,804	18.5%	27,575	18.2%	26,591	18.7%
Information	2,809	1.9%	2,781	1.9%	2,860	1.9%	2,607	1.8%
Financial activities	8,510	5.8%	8,637	5.8%	8,775	5.8%	8,682	6.1%
Professional and business services	20,600	14.0%	21,134	14.1%	21,479	14.2%	20,239	14.3%
Education and health services	22,966	15.6%	23,417	15.6%	24,257	16.0%	23,125	16.3%
Leisure & hospitality	16,759	11.4%	17,027	11.4%	16,759	11.1%	13,124	9.3%
Other services	5,849	4.0%	5,956	4.0%	5,894	3.9%	5,433	3.8%
Government	<u>22,238</u>	<u>15.1%</u>	<u>22,248</u>	<u>14.8%</u>	<u>22,639</u>	<u>14.9%</u>	<u>21,796</u>	<u>15.4%</u>
Total	<u>147,578</u>	<u>100.0%</u>	<u>149,980</u>	<u>100.0%</u>	<u>151,556</u>	<u>100.0%</u>	<u>141,855</u>	<u>100.0%</u>

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

Demographics-Population, Unemployment, per Capita Income, Authority's Debt Service

The following table provides the service area demographics for the last ten years.

Service Area Demographics (Last Ten Years)						
Year	Total Population (1)	Unemployment (2)	Per Capita Income (3 & 4)	Total Debt Service (5)	Debt Per Capita	Debt Service as a Percentage of Income
Water Fund						
2020	3,800,000	17.8%	\$56,043	\$169,059,344	\$44.49	0.08%
2019	3,800,000	4.5%	\$53,748	\$162,377,261	\$42.73	0.08%
2018	3,800,000	4.3%	\$51,493	\$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%
2011 *	3,800,000	11.4%	\$40,607	\$164,435,900	\$43.27	0.11%
Sewage Disposal Fund						
2020	2,800,000	17.8%	\$56,043	\$245,641,464	\$87.73	0.16%
2019	2,800,000	4.5%	\$53,748	\$235,381,235	\$84.06	0.16%
2018	2,800,000	4.3%	\$51,493	\$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%
2011 *	2,807,000	11.4%	\$40,607	\$209,063,900	\$74.48	0.18%

(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 2020 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 (2011-2018)

(4) Source: Michigan State University Center for Economic Analysis (2019-2020)

(5) Debt service is based on set aside debt service requirements for the fiscal year which includes the subsequent year July 1st debt payment.

* GLWA assumed operations on January 1, 2016. The information in this table from 2011-2015 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 provided information about the operating revenues by wholesale charges and local charges including the ten largest wholesale member partners for the water system and sewage disposal system for the last three years.

Water Fund Operating Revenues/Largest Member Partners

	2018	2019	2020
Operating Revenues			
Regional system charges (1)	\$ 323,117,344	\$ 311,399,136	\$ 312,701,777
Local system charges	15,130,600	20,181,400	21,295,500
Other revenue	64,200	21,340	256,300
Total Operating Revenues	\$ 338,312,144	\$ 331,601,876	\$ 334,253,577
Regional system charges % of total operating revenue	95.51%	93.91%	93.55%
Local system charges % of total operating revenue	4.47%	6.09%	6.37%

Ten Largest Regional System Member Partners

Southeast Oakland County Water Authority	\$ 23,118,160	\$ 23,311,743	\$ 23,089,967
North Oakland County Water Authority	23,365,866	23,464,096	22,293,795
Sterling Heights	15,571,146	14,644,368	15,242,912
Shelby Township	13,554,398	13,719,053	14,482,451
Troy	13,842,135	13,700,093	13,607,770
Macomb Township	11,167,739	11,063,225	12,870,377
Livonia	13,669,376	14,001,058	11,553,730
Flint [2]	12,235,483	11,604,504	11,052,425
Canton Township	13,334,615	-	10,491,407
Ypsilanti Community Utilities Authority	11,038,134	-	10,450,861
West Bloomfield Township	-	10,733,617	-
Warren	-	10,648,162	-
Total Revenue Ten Largest Regional System Member Partners	\$ 150,897,052	\$ 146,889,919	\$ 145,135,695
Ten largest regional system member partners % of total operating revenues	44.60%	44.30%	43.42%

(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/Largest Member Partners

	2018	2019	2020
Operating Revenues			
Regional system charges (1)	\$ 268,978,831	\$ 272,772,460	\$ 266,003,286
Local system charges	178,969,200	181,159,300	185,807,300
Industrial waste and surcharges	21,243,383	15,038,824	14,303,101
Other revenue	4,391,145	506,323	521,957
Total Operating Revenues	\$ 473,582,559	\$ 469,476,907	\$ 466,635,644
Regional system charges % of total operating revenue	56.80%	58.10%	57.00%
Local system charges % of total operating revenue	37.79%	38.59%	39.82%
Ten Largest Regional System Member Partners			
Oakland Macomb Interceptor Drainage District	\$ 72,816,000	\$ 77,533,200	\$ 69,046,600
Wayne County - Rouge Valley	55,022,400	53,761,200	54,162,000
Oakland County-George W Kuhn Drainage District	45,751,200	44,972,400	45,264,000
Evergreen Farmington	33,733,200	34,578,000	34,839,600
NE Wayne County	24,637,200	24,672,000	24,837,600
Dearborn	19,628,400	19,372,800	19,502,400
Highland Park	5,642,400	5,614,800	5,670,000
Hamtramck	3,958,800	3,962,400	3,994,800
Grosse Pointe Farms	2,696,400	2,727,600	2,750,400
Grosse Pointe Park	1,740,000	1,801,200	1,812,000
Total Revenue Ten Largest Regional System Member Partners	\$ 265,626,000	\$ 268,995,600	\$ 261,879,400
Ten largest regional system member partners % of total operating revenues	56.09%	57.30%	56.12%

(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 2020 Statistics

	Detroit MSA	State of Michigan	United States
Homeownership Rates	72.0%	73.3%	65.8%
Rental Vacancy	5.4%	5.4%	6.5%
Homeownership Vacancy	1.3%	1.1%	1.0%

SOURCE: U.S. Department of Commerce, Bureau of Census.

Largest Employers

The table below provides information about the largest employers in the service area.

Largest Employers (Current Year and 5 Years Ago)

Employer	Type of Business	Fiscal Year 2020		Fiscal Year 2015	
		Full-time Employees	Rank	Full-time Employees	Rank
Ford Motor Co.	Automobile manufacturer	46,000	1	44,598	1
University of Michigan	Public university and health system	36,323	2	30,852	4
FCA US LLC	Automobile manufacturer	34,833	3	33,657	2
General Motors Co.	Automobile manufacturer	32,320	4	32,353	3
Beaumont Health	Health care system	27,128	5	27,387	5
Henry Ford Health System	Health care system	26,929	6	17,332	7
U.S. Government	Federal government	18,893	7	18,701	6
Rock Ventures	Umbrella entity (investment and real estate)	18,096	8	13,445	10
Trinity Health	Health care system	14,575	9	14,231	9
Ascension Michigan	Health care system	12,830	10	n/a	n/a
Illitch Companies	Food, sports, and entertainment	n/a	n/a	16,567	8

Source: Crain's Detroit Business, Largest Southeast Michigan Employers - Ranked by full-time employees as of January 2020 and July 2015.

Detroit/Wayne County Port Authority

The Detroit/Wayne County Port Authority is a public agency responsible for promoting trade and freight transportation through the Port of Detroit, (the “Port”) which provides direct water service to world markets via the Great Lakes/St. Lawrence Seaway. The Port has five privately-owned and operated full-service terminals, a liquid bulk terminal and bulk facility, and a single dock facility with capacity for 14 oceangoing vessels. In addition, more than 30 industries located on the Detroit and

Rouge Rivers have their own port facilities. A variety of ship repair services are available. The Detroit area, which is the largest foreign trade zone in the United States, provides financial advantages related to federal taxes and customs duties at subzones throughout the City and region. The Port is a principal port of entry for trade with Canada by means of bridge, vehicular tunnel, rail tunnel and barge service. Steel and scrap steel are the principal export products of the Port, handled for the three local steel mills. General cargo constitutes a minor portion of total tonnage due to the lack of regularly scheduled shipping service.

Transportation Network

Five major rail lines provide direct service to the Detroit area by railroad companies such as Conrail, Norfolk Southern, Grand Trunk Western, Canadian Pacific and CSX Transportation. Major cargo handled by the rail lines in the Detroit area include automobiles, auto parts, steel, chemicals, and food products.

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), the eighteenth busiest airport in the United States and the thirty-fourth busiest airport in the world (by operations as of 2019). Delta Airlines is the predominant airline servicing the DTW.

The Detroit area has an extensive toll-free highway system, which includes the I-94, I-74, I-96 and I-696 interstate highways and Canadian Highway 401, which provides one-day access, based on a 500-mile day, to 48% (by population) of the U.S. market and to the Province of Ontario, Canada.

Budget Process

For the preparation of the fiscal years 2022 and 2023 biennial budget and five-year (fiscal years 2022 through 2026) financial plan, 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 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 August 30, 2020. During the months of September and October 2020 the budgets for each cost center were reviewed and finalized by the Financial Planning & Analysis (FP&A) team and management. The preliminary budget was presented to the Audit Committee in December 2020 and to the full Board during the month of January 2021. A final budget was submitted to the board during a Public Hearing on February 24, 2021, and final approval was received on March 24, 2021. Upon receiving approval from the GLWA Board to adopt the budget, the FP&A team and other members of Financial Services 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, 2021.

The 2022 Capital Improvement Plan development and approval process began in the summer of 2020. 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 2020. In September 2020, 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 2020. With projects vetted internally, a first draft CIP was created and presented to the Asset Management & CIP Member Partner Outreach Work Group, the GLWA Capital Improvement Planning Committee and the Authority's Member Partner communities. Based upon member partner and Board feedback received in November 2020, the CIP was modified, and a second version of the plan was released in December 2020 with roll-out to member partners and the Board through similar avenues. On January 27, 2021, the CIP was presented to the full Board of Directors and the final approval from this body was received on February 24, 2021. Once approved, the Capital Improvement Planning group distributed and published the final CIP plan which is effective July 1, 2021.

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 O&M, I&E and Construction funds are combined and reported under the respective Water Fund and Sewage Disposal Fund which are the major funds in the Authority's CAFR. Combining schedules are provided in the supplementary information of the CAFR. The terms wastewater and sewer are also used when referring to the Sewage Disposal Fund throughout this document.

- *Water Operations Fund (O&M)* – All water revenues are credited to this fund. All expenses for the operations and maintenance 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 (O&M)* – 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 used besides those that are budgeted. This fund is used for water system 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 used besides those that are budgeted. This fund is used for wastewater system 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. 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. 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
- 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

Besides the revenue requirements as defined in the MBO, the FY 2021 budget also included a line item for an Operating Reserve Deposit. This line item represents planned additional working capital for the O&M account. This revenue requirement will no longer be used in this and future budgets.

Once the revenue requirements amount is determined, customer charges are calculated to meet the revenue requirements. Water charges are based on a 60% fixed cost recovery and 40% volume charges. Sewer charges are based on a 100% fixed cost recovery based on each customer's historical use of the system.

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 CAFR 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 (principal and interest) recorded under GASB 87 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.
- 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 Amendments

The Authority's Board of Directors adopted a two-year budget on March 24, 2021, for the fiscal years 2022 and 2023. See Board Resolution 2021-056. 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.

Budget Calendar

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

1. FY 2022 and 2023 Biennial Budget
2. FY 2022 through FY 2026 Five-Year Financial Plan
3. FY 2022 through FY 2026 Five-Year Capital Improvement Plan
4. FY 2022 Schedule of Revenues and Charges

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

Date	Activity
Friday, August 28, 2020	Internal – Deadline for Cost Center Budget Request
Thursday, October 29, 2020	Analytical Work Group – Exceedances (exceedances to notified to communities by October 1st, meet by November 1st and AWG by December 1st)
Tuesday, November 10, 2020	Charges Rollout Meeting #1 – Water & Sewer Capital Improvement Plan Update
Thursday, November 19, 2020	Charges Rollout Meeting #2 – Units of Service Update
Tuesday, December 1, 2020	GLWA and DWSD (City) - Exchange shared services to be provided and related costs (Shared Services Agreement 5.4)
Friday, December 18, 2020	GLWA Audit Committee Meeting – Revenue Requirement & Charges Status Report
Friday, January 1, 2021	DWSD – Preliminary two-year budget forecast Including key assumptions and impact statement due to GLWA (Water and Sewer Services Agreement 5.3a)
Thursday, January 7, 2021	Charges Rollout Meeting #3 – Proposed FY 2022 Revenue Requirement and Charges
Wednesday, January 13, 2021	GLWA Regular Board Workshop (Canceled)
Friday, January 15, 2021	GLWA Audit Committee Meeting – Regular Meeting
Thursday, January 21, 2021	Charges Rollout Meeting #4 – Feedback on Service Charges and Review of Proposed FY 2022 Revenue Requirements
Friday, January 22, 2021	GLWA Special Audit Committee Meeting – Discussion of FY 2022 & FY 2023 Biennial Budget and Five-Year Plan & Update on Proposed FY 2022 Water and Sewer Service Charges
Friday, January 22, 2021	Mail Notice to Member Partners of Public Hearing to be held on February 24, 2021 (minimum 30 days prior to Act 279 Public Hearing) (D)
Wednesday, January 27, 2021	GLWA Board Meeting – Presentation: Proposed FY 2022 and 2023 Biennial Budget (Revenue Requirement) and Five-Year Financial Plan & Proposed FY 2022 Charges
Monday, February 1, 2020	DWSD – Current capital improvement plan due to GLWA (Water and Sewer Services Agreement 5.3d(i))

Friday, February 5, 2021	Publish notice of the hearing by publication in a newspaper of general circulation (B)
Wednesday, February 24, 2021	GLWA Board Meeting – Public Hearing FY 2022 & FY 2023 Biennial Budget (A)
Wednesday, February 24, 2021	GLWA Board Meeting – Public Hearing FY 2022 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date) (C)
Wednesday, February 24, 2021	GLWA Board Meeting – Proposed Approval of the FY 2022 & FY 2023 Biennial Budget (A)
Wednesday, February 24, 2021	GLWA Board Meeting – Proposed Approval of FY 2022–2026 Capital Improvement Plan
Wednesday, February 24, 2021	GLWA Board Meeting – Public Hearing & Proposed Approval of FY 2022 Schedule of Revenues and Charges (Act 279, minimum 120 days before effective date) (C)
Monday, March 1, 2021	Mail Notice to Member Partners of Approved Charges
Tuesday, March 23, 2021	DWSD – Local system adopted biennial budget due to GLWA (Water and Sewer Services Agreement 5.3b)
Saturday, May 1, 2021	DWSD – Local system provides direction to GLWA on how to apply lease payment (Water and Sewer Services Agreement 4.3)
Thursday, July 1, 2021	GLWA – Effective date of FY 2022 and 2023 Biennial Budget, FY 2022 Schedule of Charges, and FY 2022–2026 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.” (Emphasis added)

It should be noted that the Home Rule City Act does not apply to GLWA. It is relevant to GLWA's planning cycle, however, as it is referenced in the *Wholesale Customer Model Water Contract* 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.” (Emphasis added; Act 279 is the Home Rule City Act noted above.)

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, 2023 (FY 2022 and FY 2023)**

Notice is hereby given that the Great Lakes Water Authority Board of Directors will hold a Public Hearing on the proposed FY 2022 and FY 2023 biennial budget.

DATE: Wednesday, February 24, 2021

TIME: 2:00 p.m.

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

Meeting ID: 896 0276 4695

The proposed biennial budget is scheduled to take effect on July 1, 2021.

The proposed biennial budget is available for public inspection online at <https://www.glwwater.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 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.

On October 14, 2020, the State of Michigan enacted certain amendments to Michigan's Open Meetings Act (SB1108), allowing remote telephonic and electronic participation in public meetings and hearings for public bodies subject to the Open Meetings Act during certain state or local emergencies. 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.

Notice of Public Hearing Proposed Biennial Budget (continued)

The Public Hearing on the FY 2022 and FY 2023 biennial budget proposed by the Great Lakes Water Authority scheduled for February 24, 2021 at 2:00 p.m. will be held via Zoom and its telephonic capabilities. Members of the public who wish to attend this Public Hearing by telephone can do so in the following manner:

Public Call-In Number: 877 853 5247 US Toll-Free; or
888 788 0099 US Toll-Free
Meeting ID: 896 0276 4695

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

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 23, 2021 and should reference "February 24, 2021 Public Hearing on proposed FY 2022 and FY 2023 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:

Sue F. McCormick, Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Written comments by U.S. mail should reference "February 24, 2021 Public Hearing on proposed FY 2022 and FY 2023 biennial budget" in the letter. The opportunity to submit written comments by e-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 2022 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 2022.

DATE: Wednesday, February 24, 2021

TIME: 2:00 p.m.

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

Meeting ID: 896 0276 4695

The proposed service charges are scheduled to take effect on July 1, 2021.

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 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.

On October 14, 2020, the State of Michigan enacted certain amendments to Michigan's Open Meetings Act (SB1108), allowing remote telephonic and electronic participation in public meetings and hearings for public bodies subject to the Open Meetings Act during certain state or local emergencies. 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.

Notice of Public Hearing Proposed Service Charges (continued)

The Public Hearing on Water and Sewerage service charges proposed by the Great Lakes Water Authority for Fiscal Year 2022 scheduled for February 24, 2021 at 2:00 p.m. will be held via Zoom and its telephonic capabilities. Members of the public who wish to attend this Public Hearing by telephone can do so in the following manner:

Public Call-In Number: 877 853 5247 US Toll-Free; or
888 788 0099 US Toll-Free
Meeting ID: 896 0276 4695

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

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 23, 2021 and should reference "February 24, 2021 Public Hearing on service charges proposed for Fiscal Year 2022" 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:

Sue F. McCormick, Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Written comments by U.S. mail should reference "February 24, 2021 Public Hearing on service charges proposed for Fiscal Year 2022" in the letter. The opportunity to submit written comments by e-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 Plan & Organization Strategic Goals

- I. Financial Plan Objectives
- II. Organization Strategic Goals
 - A. Bond Credit Rating of AA
 - B. Positive Key Performance Indicators
- III. Long-Range Operating Financial Plan
 - A. Budget Basis
 - B. Net Position
- IV. Strategic Capital Management
 - A. Asset Management
 - B. Capital Program Delivery

I. 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 limit the annual basis increase to 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 2022 through FY 2026 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 was used. Water sales volume projections were 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. To recognize the continued decrease in volume trend, the 36-month average of the base month volume was decreased by five percent for each customer. The 36-month peak month volume for each customer was not adjusted. Revenue stability has proven successful with revenues at or near 100% for fiscal years 2016-2020.

- Effective with FY 2015, the wholesale sewer rate simplification methodology became effective with the objective of achieving sewer system revenue stability and efficiency. Under this revenue-setting methodology, costs are allocated based on each customer's historical use of the system known as a "share" and is revisited every three years. 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%.

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 current multiple year cycle that varies 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 while holding the other two components, specific volumes and contractual demands, constant.
- 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 for the calculation of 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 2022 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 these 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). A challenge for all parties will be the growing tail liability in year ten. To manage the risk of that liability, an agreement was made between the City, GLWA, and the GRS to extend the additional contributions over five-to-ten years.

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 and BC note 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. See further information in the Legacy Commitments under Section 4 – Supplemental Analysis.

II. 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 3 of this budget document includes a table showing how each department's initiatives contribute towards achieving the organizational goals.

A. 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.

The table below provides a summary of the current debt ratings for the Authority as of 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 both 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. Most recently, 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 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 as item III of this section, provides the data for the forecasted metrics presented below. 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

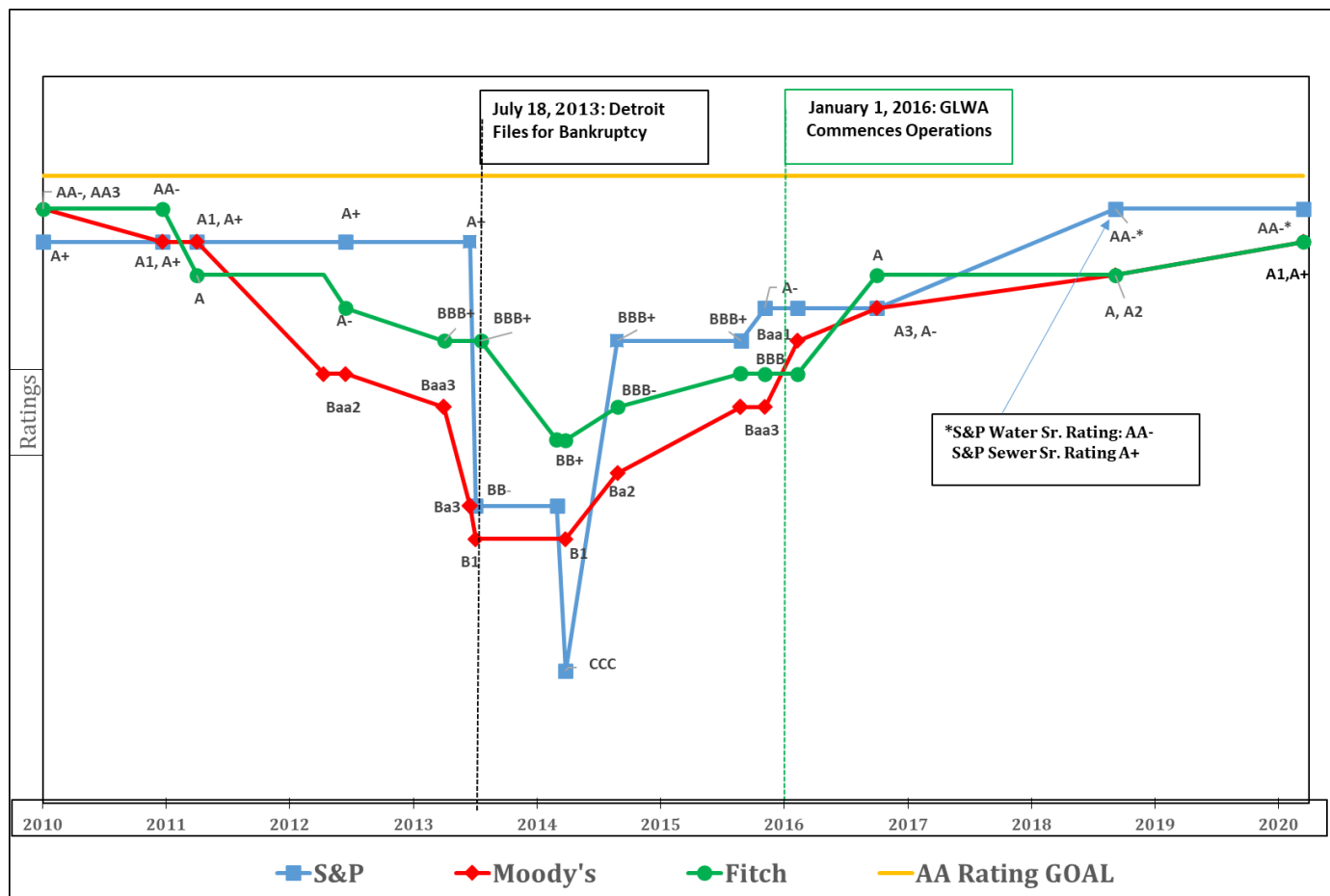
GLWA Forecast Executive Summary															
Water Supply System - \$ millions															
Metric Calculations	Metric Target			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Min A	Min AA	Min AAA												
Operating Margin															
Depreciation Expense				130.7	126.0	128.9	133.3	133.2	95.1	96.0	96.3	94.8	96.4	97.5	92.6
Total Operating Expenses				263.3	260.2	272.9	281.4	283.3	248.4	252.0	255.5	257.1	262.0	266.4	264.8
Operating Margin				71.0	75.1	70.1	71.9	80.3	125.9	132.9	139.7	150.0	157.5	165.6	180.3
Operating Margin %	25%	40%	50%	21.2%	22.4%	20.5%	20.4%	22.1%	33.7%	34.5%	35.4%	36.9%	37.6%	38.4%	40.5%
Regional Revenue Allocation															
O&M				39.8%	41.7%	43.6%	43.5%	41.2%	40.8%	40.3%	39.9%	39.5%	39.1%	38.7%	38.4%
Debt Service	40%	33%	25%	38.2%	40.8%	39.4%	41.3%	43.5%	43.4%	44.0%	44.1%	45.5%	45.4%	47.0%	46.7%
Non-Operating Expense				9.0%	9.0%	8.9%	8.6%	7.6%	7.6%	7.4%	7.1%	6.9%	6.7%	6.5%	6.3%
Capital Financing				13.0%	8.5%	8.2%	6.5%	7.7%	8.3%	8.3%	8.9%	8.0%	8.7%	7.8%	8.6%
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				42.0	42.0	42.4	43.4	45.5	45.6	45.6	45.6	45.6	45.6	45.5	45.6
Total Net Revenues				251.5	238.4	236.4	243.6	260.3	268.2	276.8	285.3	294.0	303.1	312.5	322.2
Debt Service Coverage	1.25	1.70	2.00	1.49	1.33	1.32	1.27	1.24	1.25	1.25	1.25	1.23	1.24	1.22	1.23
Sr. Lien Debt Service Coverage	1.50	2.00	2.25	2.06	1.93	1.89	1.81	1.77	1.77	1.74	1.72	1.66	1.66	1.63	1.64
Debt to Operating Revenue															
Outstanding Debt Balance				2,492.8	2,374.0	2,424.3	2,556.4	2,465.8	2,564.2	2,460.1	2,656.5	2,539.0	2,666.8	2,534.8	2,629.0
Estimated Premium/Discount				0.0	212.1	195.3	178.6	162.4	146.6	131.3	116.6	102.5	89.4	77.1	64.8
Outstanding Indebtedness				2,492.8	2,586.1	2,619.6	2,735.0	2,628.2	2,710.8	2,591.4	2,773.1	2,641.5	2,756.1	2,611.8	2,693.7
Debt to Operating Revenue	7.0	4.00	2.0	5.84	6.22	6.15	6.26	5.84	5.86	5.42	5.65	5.24	5.32	4.91	4.94
Free Cash as a % of Depreciation	65%	105%	145%	52.7%	50.4%	49.2%	43.9%	40.8%	60.8%	60.6%	62.4%	60.7%	63.7%	59.8%	68.1%
Net Position	-	250	500	(96.4)	(113.5)	(129.7)	(147.2)	(157.0)	(122.2)	(80.1)	(32.4)	23.7	85.0	154.0	236.0
Debt / Asset Ratio	1.00	0.90	0.75	1.05	1.14	1.23	1.38	1.43	1.58	1.62	1.87	1.94	2.21	2.33	2.68

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

GLWA Forecast Executive Summary Sewage Disposal System - \$ millions															
Metric Calculations	Metric Target			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Min A	Min AA	Min AAA												
Operating Margin															
Depreciation Expense				152.9	146.2	146.8	146.5	146.1	128.3	130.7	132.0	132.3	131.5	131.1	119.8
Total Operating Expenses				329.9	328.5	328.1	330.3	334.5	320.4	327.1	332.3	336.6	339.9	343.6	336.5
Operating Margin				136.8	147.8	146.3	158.2	168.2	197.1	205.3	214.5	226.8	240.5	253.9	278.4
Operating Margin %	25%	40%	50%	29.3%	31.1%	30.9%	32.4%	33.5%	38.1%	38.6%	39.3%	40.3%	41.5%	42.5%	45.3%
Regional Revenue Allocation															
O&M				39.3%	40.5%	40.4%	39.7%	37.4%	37.0%	36.7%	36.3%	36.0%	35.6%	35.3%	34.9%
Debt Service	40%	33%	25%	44.2%	42.3%	43.6%	41.8%	43.2%	40.4%	39.6%	39.5%	39.5%	38.3%	36.2%	34.6%
Non-Operating Expense				10.9%	8.7%	8.7%	8.5%	7.2%	7.4%	7.2%	6.9%	6.7%	6.5%	6.3%	6.1%
Capital Financing				5.6%	8.6%	7.3%	10.0%	12.2%	15.2%	16.6%	17.3%	17.9%	19.6%	22.2%	24.3%
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				31.7	31.7	31.8	32.5	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
Total Net Revenues				322.2	315.9	315.1	327.6	348.6	360.0	371.4	383.5	396.1	409.0	422.4	436.2
Debt Service Coverage	1.25	1.70	2.00	1.90	1.35	1.32	1.38	1.39	1.48	1.52	1.53	1.54	1.59	1.68	1.76
Sr. Lien Debt Service Coverage	1.50	2.00													
Service Coverage	1.50	2.00	2.25	2.63	2.58	2.36	2.19	2.29	2.34	2.32	2.35	2.33	2.30	2.51	2.59
Debt to Operating Revenue															
Outstanding Debt Balance				2,492.8	3,012.7	2,928.0	2,929.7	2,800.6	2,773.1	2,633.7	2,586.1	2,432.9	2,270.9	2,102.9	1,934.2
Additional Principal															
Estimated Premium/Discount				0.0	(6.9)	(14.2)	(21.8)	(29.7)	(37.6)	(45.2)	(53.4)	(62.2)	(70.9)	(79.6)	(88.4)
Outstanding Indebtedness				2,492.8	3,005.7	2,913.8	2,907.9	2,770.9	2,735.5	2,588.5	2,532.7	2,370.7	2,200.0	2,023.2	1,845.8
Debt to Operating Revenue	7.0	4.0	2.0	4.87	5.15	4.96	4.81	4.49	4.31	3.96	3.77	3.43	3.10	2.77	2.54
Free Cash as a % of Depreciation															
Free Cash as a % of Depreciation	65%	105%	145%	51.2%	62.8%	58.2%	68.1%	65.6%	89.7%	94.8%	97.4%	101.6%	112.4%	127.0%	152.6%
Net Position															
Net Position	-	250	500	(125.2)	(112.7)	(99.1)	(72.3)	(33.3)	37.4	120.0	216.0	327.2	457.8	607.9	788.9
Debt / Asset Ratio															
Debt / Asset Ratio	1.00	0.90	0.75	0.83	1.05	1.08	1.14	1.16	1.22	1.24	1.31	1.33	1.34	1.36	1.37

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

Senior Lien Rating Actions 2010-2020



B. 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 framework's 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. 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 then uses this information to create the "Red Yellow Green Report" and a written report to explain unfavorable variances. The table below is in the format of the Red Yellow Green report, with KPI key metrics data added, showing the status as reported in the last month of each fiscal year since 2018 and the status as of December 2020. The table identifies the KPI (EUM Attribute), operating area responsible for reporting, goals to attain that attribute and the criteria used to measure the attainment of the goal. These KPIs are an element of GLWA's performance measurement. If the KPIs are positive (status of green) then the financial health and long-term sustainability of the organization for its stakeholders and the environment is achieved.

CEO KPI Report Summary								
EUM Attribute	Operating Area Reporting	Measure	Significance	Criteria	Report Date			
					Jun-18	Jun-19	Jun-20	Dec-20
Financial Viability	Financial Services	Operations & Maintenance cash balance exceeds 30 days of budget requirements	Resources consumed for operations and maintenance activities are less than budgeted amounts	Green = 100% Yellow = 90-99% Red = <90%	W 336% S 254%	W 237% S 382%	W 213% S 320%	
		Water system wholesale monthly billed revenues will meet or exceed budgeted amount	Method for establishing revenue projections are reliable	Green=100% Yellow= 85-99% Red = <85%	104.2%	103.1%	98.03%	104.24%
		Days to Pay an Invoice	Timely vendor payments support health supplier relationships	Green = 43 days or less Yellow = >43 to <48 days Red = >48days		23	30	31
Product Quality	Wastewater Operations	Effluent phosphorus concentration will be at least 20% below Permit levels	Wastewater regulatory compliance	Green= below 80% of Permit Levels Yellow = between 80 and 100% of Permit levels Red = exceeds Permit levels				
	Water Operations	GLWA will maintain 100% compliance with Safe Drinking Water Act	Water services compliance	Green= 100% compliance Red = <100% compliance	100%	100%	100%	100%
Infrastructure Strategy and Performance	Water Operations & Field Services	Water - Preventative maintenance projects completed as planned	Reduced risk of unplanned downtime or inefficiencies	Green = 80-100% Yellow = 60-, 80% Red = >60%	92%	89%	90%	86%
		Water - Preventative maintenance projects completed as a percentage of total projects	Reduced risk of unplanned downtime or inefficiencies	Green = 75-85% Yellow = >85% Red = <75%		76%	83%	85%
		Water - 25 or more valves exercised per month	Reduced risk of unplanned downtime or emergency repairs	Green = 25 or more per month Yellow= 21 -24 per month Red = 20 or less per month		27	Paused awaiting RFB results	183
		Water - 100% of GLWA valves assessed are operational.	Reduced risk of unplanned downtime and service interruption	Green = 90-100% Yellow = 80 -, 90% Red = <80%		79.5%	Paused awaiting RFB results	87.2%
	Wastewater Operations & Field Services	Wastewater - Preventative maintenance projects completed as planned	Reduced risk of unplanned downtime or inefficiencies	Green = 80-100% Yellow = 60-, 80% Red = >60%	87%	89%	89%	82%
		Wastewater - Preventative maintenance projects completed as a percentage of total projects	Reduced risk of unplanned downtime or inefficiencies	Green = 75-85% Yellow = >85% Red = <75%	80%	82%	84%	84%
	Wastewater Operations	WWTP staffing levels meet ACO Targets	Wastewater regulatory compliance	Green= 95 - 100% Yellow = 91 -94% Red = <90%				
Operational Optimization		Monthly Average Solids Inventory Below 750 Dry Tons	Wastewater regulatory compliance	Green= Average below 725 Dry Tons Yellow = Average between 725 and 750 Dry Tons Red = Average above 750 Dry Tons		<700	<600	<400

CEO KPI Report Summary								
EUM Attribute	Operating Area Reporting	Measure	Significance	Criteria	Report Date			
					Indicates not measured			
					Jun-18	Jun-19	Jun-20	Dec-20
Enterprise Resiliency	Security & Integrity	The number of Security and Integrity patrols each month will meet or exceed baseline target of an average of 65 per day	Risk prevention	Green = 2,350 or more patrols Yellow = 2,000 - 2,350 patrols Red = <2,000 patrols	5,544	5,218	6,322	6,492
		The number of investigative security reports will decrease each month	Risk prevention	Green = Decrease Yellow = Same as previous month Red = increase				
		GLWA security patrols will produce an average of 2 security reports (incident and facility inspection) per patrol.	Risk prevention	Green = 1.9 - 2.7 average reports per patrol Yellow = 1.5 - <1.9 or >2.7 - 2.9 average reports per patrol Red = <1.5 or >2.9 average reports per patrol	2.1%	1.5%	2.0%	2.6%
	General Counsel	General Counsel will receive 15 or less information requests each month	Employee safety and risk mitigation	Green = Lower Yellow = Benchmark Red = Higher	10	9	7	1
	Organizational Development	Workers compensation quarterly claims frequency will be at or below Bureau of Labor Standards Benchmark of 6.1 incidents per 100 FTEs	Employee safety and risk mitigation	Green = Lower Yellow = Benchmark Red = Higher	5			
	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	Green = 78- 100% Yellow = 68% to <78% Red = <68 %	78.6%	84.9%	78.2%	74.6%
		GLWA will exceed the 68% service sector standard by resolving at least 78% of service requests reported to the Service Desk within 5 days of receipt.	Rapid Service Request response promotes Employee Productivity	Green = 78- 100% Yellow = 68% to <78% Red = <68 %	70.0%	82.8%	83.0%	87.0%
		All GLWA sites (59) with Wide Area Network (WAN) connections will have 100% availability excluding schedule down time for maintenance.	Network Connectivity promotes Employee Productivity	Green = 99.98 - 100% Yellow >=99.50% and <99.98% Red <99.50%	99.76%	99.97%	99.99%	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	Green = 95 -100% first attempt success Yellow =90 - <95% first attempt success Red <90% first attempt success	99%	92%	97%	99%
		At least 85% of GLWA team members will complete the most recent monthly cyber-security training within one month of issuance.	Cyber risk prevention	Green = 85 -100% completion Yellow = 75 - <85% completion Red <75% completion	75%	94%	98%	95%
	Financial Services	FY Total CIP Spend	Method for establishing spending is aligned with budgeted revenue	Green= >80% Yellow= 70-80% Red = < 70%		W 94% S 75%	W 45.4% S 44.4%	W 80.7% S 61.1%

CEO KPI Report Summary								
EUM Attribute	Operating Area Reporting	Measure	Significance	Criteria	Report Date			
					Jun-18	Jun-19	Jun-20	Dec-20
Customer Satisfaction	Water Operations	GLWA will maintain pressure variance within 98% of required contract amounts	System reliability	Green = 95-100% Yellow = 95 - 90% Red = <90%	98%	98%	98%	98%
Water Resource Sustainability	Wastewater Operations	No more than 10% of GLWA solids will be disposed of through landfilling.	Community sustainability and watershed health	Green = 10% or less sent to landfills Red = >10% sent to landfill				
Stakeholder Understanding and Support	Public Affairs	At least 75% percent of Articles mentioning GLWA will express a positive or neutral sentiment.	Effective media interaction	Green = >75% Yellow = <76% and <60 Red = <60% of coverage				
		GLWA Materials will be used or GLWA Sources quoted in at least 75% of online and print articles mentioning the GLWA.	Effective media interaction	Green = Pull through >75% Yellow = Pull through > 50% band < 75% Red = Pull through<50%	60%	100%	78%	92%
Employee and Leadership Development	Organizational Development	GLWA's employee retention rate will exceed the 94.9% industry average rate	Organizational development employee retention	Green = higher retention rate Yellow = industry average retention rate Red = lower retention rate	97.5%	97.1%	97.8%	97.80%
Community Sustainability	Wastewater Operations	Watershed Health-Reduce phosphorus loading	Community sustainability and watershed health	State and federal regulators goal of 40% reduction in phosphorus loading in the Western Lake Erie Basin	below permitted level	below permitted level	below permitted level	below permitted level

III. Long-Range Operating Financial Plan

The organization uses a long-term financial forecast 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 forecast provides a path forward to eliminate the net deficit while continuing to invest in infrastructure asset upgrades and replacement. This forecast is updated at least annually, and more often as significant financial events occur, such as bond refundings.

A. Budget Basis

An updated forecast was presented to the audit committee on December 18, 2020. That forecast has been updated to reflect the current state at the time of the FY 2022 Budget adoption. The two key assumptions that drive both the water and sewer system FY 2031 financial forecast models include a three (3) percent annual increase in total revenues and an annual increase in the Operation & Maintenance expenses of two (2) percent.

The budget basis presentation of the Water System, Sewage Disposal System and Combined Water and Sewage Disposal Systems ten-year forecasts is below:

GLWA Forecast Water System (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenues											
Revenues from Charges	\$ 335.1	\$ 342.8	\$ 353.1	\$ 363.5	\$ 374.1	\$ 384.7	\$ 395.0	\$ 406.9	\$ 419.2	\$ 431.9	\$ 444.9
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	1.3	1.0	1.0	1.3	1.6	2.3	3.6	3.7	3.7	3.8	3.8
Total Revenues	\$ 336.5	\$ 344.0	\$ 354.4	\$ 365.0	\$ 375.9	\$ 387.2	\$ 398.8	\$ 410.8	\$ 423.1	\$ 435.8	\$ 448.9
Revenue Requirements											
Operations & Maintenance	\$ 134.1	\$ 143.9	\$ 148.1	\$ 150.2	\$ 153.3	\$ 156.0	\$ 159.1	\$ 162.3	\$ 165.5	\$ 168.9	\$ 172.2
GRS Legacy Pension	6.0	6.0	6.0	-	-	-	-	-	-	-	-
Debt Service	137.4	135.5	146.5	158.9	163.0	170.5	175.8	187.0	192.3	204.6	209.6
GRS Accelerated Pension	6.3	6.3	6.3	3.4	4.2	4.1	4.0	3.8	1.3	1.2	1.2
WRAP	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	4.6	4.7	4.8
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	28.5	28.1	23.1	28.2	31.1	32.1	35.5	33.1	36.9	33.9	38.5
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 336.5	\$ 344.0	\$ 354.4	\$ 365.0	\$ 375.9	\$ 387.2	\$ 398.8	\$ 410.8	\$ 423.1	\$ 435.8	\$ 448.9

GLWA Forecast Sewage Disposal System (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenues											
Revenues from Charges	\$ 475.9	\$ 474.0	\$ 488.1	\$ 502.3	\$ 517.2	\$ 532.0	\$ 546.4	\$ 562.9	\$ 580.0	\$ 597.2	\$ 614.5
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	1.0	1.0	1.2	1.6	2.0	2.7	4.4	4.4	4.4	4.7	5.4
Total Revenues	\$ 477.4	\$ 475.4	\$ 489.7	\$ 504.4	\$ 519.5	\$ 535.1	\$ 551.2	\$ 567.7	\$ 584.7	\$ 602.3	\$ 620.3
Revenue Requirements											
Operations & Maintenance	\$ 182.3	\$ 181.3	\$ 183.8	\$ 188.5	\$ 192.1	\$ 196.3	\$ 200.3	\$ 204.3	\$ 208.4	\$ 212.5	\$ 216.8
GRS Legacy Pension	10.8	10.8	10.8	-	-	-	-	-	-	-	-
Debt Service	201.8	207.2	204.6	218.0	209.9	211.8	217.6	224.2	223.8	218.1	214.9
GRS Accelerated Pension	11.6	11.6	11.6	6.5	8.2	8.2	7.8	7.4	2.9	2.8	2.7
WRAP	2.4	2.4	2.4	2.5	2.6	2.7	2.8	2.8	7.4	7.5	7.6
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	40.9	34.6	49.0	61.4	79.2	88.6	95.3	101.4	114.7	133.8	150.8
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 477.4	\$ 475.4	\$ 489.7	\$ 504.4	\$ 519.5	\$ 535.1	\$ 551.2	\$ 567.7	\$ 584.7	\$ 602.3	\$ 620.3

GLWA Forecast											
Combined Water and Sewage Disposal System (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenues											
Revenues from Charges	\$ 811.0	\$ 816.8	\$ 841.2	\$ 865.8	\$ 891.3	\$ 916.8	\$ 941.4	\$ 969.9	\$ 999.2	\$ 1,029.0	\$ 1,059.4
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	2.3	2.1	2.3	3.0	3.6	5.0	8.0	8.1	8.0	8.5	9.2
Total Revenues	\$ 813.9	\$ 819.5	\$ 844.0	\$ 869.4	\$ 895.4	\$ 922.3	\$ 950.0	\$ 978.5	\$ 1,007.8	\$ 1,038.1	\$ 1,069.2
Revenue Requirements											
Operations & Maintenance	\$ 316.4	\$ 325.2	\$ 331.9	\$ 338.6	\$ 345.4	\$ 352.3	\$ 359.4	\$ 366.6	\$ 373.9	\$ 381.4	\$ 389.0
GRS Legacy Pension	16.9	16.9	16.9	-	-	-	-	-	-	-	-
Debt Service	339.2	342.7	351.1	376.9	372.9	382.3	393.3	411.2	416.1	422.8	424.6
GRS Accelerated Pension	17.9	17.9	17.9	9.9	12.4	12.3	11.7	11.3	4.1	4.0	3.9
WRAP	4.1	4.1	4.2	4.3	4.4	4.6	4.8	4.9	12.1	12.2	12.4
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	69.4	62.7	72.1	89.6	110.3	120.8	130.8	134.5	151.6	167.6	189.3
ER&R	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Requirements	\$ 813.9	\$ 819.5	\$ 844.0	\$ 869.4	\$ 895.4	\$ 922.3	\$ 950.0	\$ 978.5	\$ 1,007.8	\$ 1,038.1	\$ 1,069.2

B. Net Position

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 2031 is presented below for the Water Fund, Sewage Disposal Fund and combined.

Water Fund Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Operating revenues	\$ 335.2	\$ 343.0	\$ 353.3	\$ 363.7	\$ 374.3	\$ 384.9	\$ 395.2	\$ 407.1	\$ 419.4	\$ 432.0	\$ 445.1
Operating expenses	(134.1)	(143.9)	(148.1)	(150.2)	(153.3)	(156.0)	(159.1)	(162.3)	(165.5)	(168.9)	(172.2)
Depreciation & amortization	(126.0)	(128.9)	(133.3)	(133.2)	(95.1)	(96.0)	(96.3)	(94.8)	(96.4)	(97.5)	(92.6)
Operating income	75.1	70.1	71.9	80.3	125.9	132.9	139.7	150.0	157.5	165.6	180.3
Nonoperating expenses	(92.1)	(86.3)	(89.4)	(90.1)	(91.1)	(90.8)	(92.0)	(93.9)	(96.1)	(96.7)	(98.3)
Change in net position	(17.0)	(16.2)	(17.5)	(9.8)	34.8	42.1	47.7	56.1	61.3	69.0	82.0
Beginning net position	(96.4)	(113.5)	(129.7)	(147.2)	(157.0)	(122.2)	(80.1)	(32.4)	23.7	85.0	154.0
Ending Net Position	\$ (113.5)	\$ (129.7)	\$ (147.2)	\$ (157.0)	\$ (122.2)	\$ (80.1)	\$ (32.4)	\$ 23.7	\$ 85.0	\$ 154.0	\$ 236.0

Sewage Disposal Fund Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Operating revenues	\$ 476.3	\$ 474.4	\$ 488.5	\$ 502.7	\$ 517.6	\$ 532.4	\$ 546.8	\$ 563.3	\$ 580.4	\$ 597.6	\$ 614.9
Operating expenses	(182.3)	(181.3)	(183.8)	(188.5)	(192.1)	(196.3)	(200.3)	(204.3)	(208.4)	(212.5)	(216.8)
Depreciation & amortization	(146.2)	(146.8)	(146.5)	(146.1)	(128.3)	(130.7)	(132.0)	(132.3)	(131.5)	(131.1)	(119.8)
Operating income	147.8	146.3	158.2	168.2	197.1	205.3	214.5	226.8	240.5	253.9	278.4
Nonoperating expenses	(141.3)	(133.6)	(132.4)	(130.2)	(127.4)	(123.7)	(119.5)	(116.5)	(110.9)	(104.8)	(98.4)
Capital contribution	6.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Change in net position	12.5	13.6	26.8	39.0	70.7	82.6	96.0	111.2	130.6	150.1	180.9
Beginning net position	(125.2)	(112.7)	(99.1)	(72.3)	(33.3)	37.4	120.0	216.0	327.2	457.8	607.9
Ending Net Position	\$ (112.7)	\$ (99.1)	\$ (72.3)	\$ (33.3)	\$ 37.4	\$ 120.0	\$ 216.0	\$ 327.2	\$ 457.8	\$ 607.9	\$ 788.9

Combined Net Position (\$ millions)											
	Current Year	Biennial Budget		Forecast							
	Estimated FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Operating revenues	\$ 811.5	\$ 817.4	\$ 841.8	\$ 866.4	\$ 891.8	\$ 917.3	\$ 942.0	\$ 970.4	\$ 999.8	\$ 1,029.6	\$ 1,060.0
Operating expenses	(316.4)	(325.2)	(331.9)	(338.6)	(345.4)	(352.3)	(359.4)	(366.6)	(373.9)	(381.4)	(389.0)
Depreciation & amortization	(272.2)	(275.8)	(279.8)	(279.2)	(223.4)	(226.8)	(228.4)	(227.1)	(227.9)	(228.7)	(212.3)
Operating income	222.9	216.4	230.1	248.5	323.0	338.2	354.2	376.7	398.0	419.6	458.7
Nonoperating expenses	(233.5)	(220.0)	(221.8)	(220.3)	(218.5)	(214.5)	(211.5)	(210.4)	(207.1)	(201.5)	(196.7)
Capital contribution	6.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Change in net position	(4.6)	(2.6)	9.3	29.2	105.5	124.7	143.7	167.3	191.9	219.1	263.0
Beginning net position	(221.6)	(226.1)	(228.7)	(219.5)	(190.3)	(84.8)	39.9	183.6	350.9	542.9	761.9
Ending Net Position	\$ (226.1)	\$ (228.7)	\$ (219.5)	\$ (190.3)	\$ (84.8)	\$ 39.9	\$ 183.6	\$ 350.9	\$ 542.9	\$ 761.9	\$ 1,024.9

IV. 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.

A. 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. 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.

The Figure below illustrates how these elements align to form a line of sight from the organizational strategy to the on-the-ground activities that incorporate asset lifecycle strategies.



Our Asset Management Vision is to be a leader in infrastructure management by making decisions informed by risk, regional needs and lifecycle considerations.

Our Asset Management Policy provides the framework and principles by which the GLWA 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.

The table below illustrates the alignment of the Asset Management Policy and its principles to GLWA's organizational strategy (i.e., GLWA's vision, mission, brand house pillars, and strategic objectives).

		ASSET MANAGEMENT POLICY									
		Policy Statement	Policy Purpose	PRINCIPLES							
				Member-Focused	Safety	Lifecycle Approach	Forward Looking	Managed Risk	Data-Driven	Transparent	Innovative
Organizational Mission		✓		✓	✓		✓				
Organizational Vision			✓	✓		✓	✓				
Brand House Pillars	Quality	✓	✓	✓	✓						✓
	Fiscal Responsibility	✓	✓			✓	✓			✓	
	Service	✓	✓	✓				✓		✓	
	Innovation			✓			✓		✓	✓	✓
Organizational Strategic Objectives	High quality water	✓	✓				✓				
	Regulatory compliance	✓	✓				✓		✓		
	Maximize credit rating	✓				✓	✓	✓		✓	
	Sound financial management	✓				✓	✓		✓	✓	
	Equity and stability in customer charges			✓		✓					
	Annual revenue requirement increase ≤4%			✓		✓					
	Optimize for cost-effectiveness					✓		✓	✓		
	Customer outreach and engagement			✓						✓	
	Achieve member partner satisfaction of at least 90%		✓	✓	✓					✓	
	Team member engagement and retention	✓		✓	✓						✓

Our Asset Management Objectives identify the key outcomes desired from the adoption of asset management practices in compliance with the Asset Management Policy and its principles. Progress toward the objectives will be periodically monitored and reported. While it is preferable for objectives to be quantifiable, it is not necessary as long as the objectives can be measured through descriptions. As with the Asset Management Policy, asset management objectives provide a link between the organizational strategy to asset management strategy and activities. The following table illustrates the alignment of the asset management objectives to GLWA's organizational strategy (i.e.,

GLWA's vision, mission, brand house pillars, and strategic objectives). Improvement initiatives developed as part of the Asset Management Implementation Plan are prioritized and tracked partly based on how well they help to achieve asset management objectives.

		ASSET MANAGEMENT OBJECTIVES (Note 1)					
		Continuously deliver established service levels at the lowest lifecycle cost while maintaining an acceptable risk profile.	Make safety a forethought; anticipate and eliminate hazards or mitigate risk throughout all phases of the asset lifecycle.	Improve reliability by increasing proactive maintenance and reducing the need for unplanned reactive maintenance.	Make informed and defensible decisions on investments to achieve org. objectives consideration of long-term costs vs benefits.	Have timely access to trusted and relevant data and information.	Develop and retain a competent and highly skilled workforce through continual learning opportunities.
Organizational Mission		✓		✓	✓		
Organizational Vision		✓		✓	✓		
Brand House Pillars	Quality	✓	✓	✓	✓	✓	
	Fiscal Responsibility	✓		✓	✓	✓	
	Service	✓		✓	✓		
	Innovation			✓	✓		✓
Organizational Strategic Objectives	High quality water	✓	✓	✓			
	Regulatory compliance	✓		✓	✓	✓	
	Maximize credit rating	✓		✓	✓		
	Sound financial management	✓		✓	✓	✓	
	Equity and stability in customer charges	✓		✓	✓		
	Annual revenue requirement increase ≤4%	✓		✓	✓		
	Optimize for cost-effectiveness	✓		✓	✓	✓	
	Customer outreach and engagement	✓			✓		
	Achieve member partner satisfaction of at least 90%		✓				
	Team member engagement and retention		✓				✓

Note 1: Some objective statements in the table are truncated for spacing purposes. See text for complete objective statements.

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.

B. 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 CSR assumption 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 CSR assumption for budgetary purposes, despite the prioritization established.

The Board has adopted a Capital Spend Ratio of 75 percent. As part of reinventing the capital delivery process, the goal has been to exceed the 75% by up to 100%. See Section 6 for more information on the Capital Improvement Plan.

Improved capital delivery management allows GLWA to better predict use of financial resources. In particular, 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 including an allowance to provide flexibility in the timing of future bond issues.



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 2022 and FY 2023 within the context of a five-year financial plan for FY 2022 through FY 2026. Those schedules are listed below.

Variance columns in Section 2 are based on a comparison to the original Adopted FY 2021 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 3 – 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. Outflows are for the costs of constructing capital assets.

Schedule 1 – Revenue Requirements

The approved FY 2022 water revenue requirements of \$344.0 million represents a budget (annual revenue requirements) increase of 0.7% from the prior year. The approved FY 2022 sewer revenue requirements of \$475.4 million represents a budget (annual revenue requirements) decrease of 2.3% from the prior year. The approved FY 2022 budget for both systems is presented with a ceiling of a 4% budget increase. The annual revenue requirement reflects the total budget for operating the system and is the base amount for which the GLWA management team has pledged to increase by no more than 4% on an annual basis. This commitment was further memorialized for the first ten years in the Memorandum of Understanding that established the regional authority.

Schedule 1A – Water System Revenue Requirements Biennial Budget

	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
Water System Revenue Requirements									
Revenues									
Revenues from Charges	\$ 327,345,000	\$ 336,807,600	\$335,059,100	\$ 342,808,200	\$ 6,000,600	1.8%	\$ 353,126,600	\$ 10,318,400	3.0%
Other Operating Revenue	1,003,300	-	229,000	175,000	175,000	0.0%	175,000	-	0.0%
Non-Operating Revenue	9,188,400	4,834,400	3,955,700	1,047,300	(3,787,100)	-78.3%	1,049,800	2,500	0.2%
Total Revenues	337,536,700	341,642,000	339,243,800	\$ 344,030,500	\$ 2,388,500	0.7%	\$ 354,351,400	\$ 10,320,900	3.0%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$ 131,840,000	\$ 137,127,300	\$134,127,300	\$ 143,933,800	\$ 6,806,500	5.0%	\$ 148,117,300	\$ 4,183,500	2.9%
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	6,048,000	-	0.0%	6,048,000	-	0.0%
Debt Service	132,835,600	143,189,900	137,436,000	135,481,000	(7,708,900)	-5.4%	146,520,400	11,039,400	8.1%
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	6,268,300	-	0.0%	6,268,300	-	0.0%
Water Residential Assistance Program Contribution	1,698,300	1,669,400	1,669,400	1,705,500	36,100	2.2%	1,756,700	51,200	3.0%
Regional System Lease	22,500,000	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Operating Reserve Deposit	-	876,600	-	-	(876,600)	-100.0%	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending	937,400	-	-	-	-	0.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	29,456,300	23,962,500	31,194,800	28,093,900	4,131,400	17.2%	23,140,700	(4,953,200)	-17.6%
Annual Water System Revenue Requirements	\$ 331,583,900	\$ 341,642,000	\$339,243,800	\$ 344,030,500	\$ 2,388,500	0.7%	\$ 354,351,400	\$ 10,320,900	3.0%

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

	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water System Revenue Requirements								
Revenues								
Revenues from Charges	\$ 327,345,000	\$ 336,807,600	\$335,059,100	\$ 342,808,200	\$ 353,126,600	\$ 363,483,600	\$ 374,114,500	\$ 384,734,800
Other Operating Revenue	1,003,300	-	229,000	175,000	175,000	175,000	175,000	175,000
Non-Operating Revenue	9,188,400	4,834,400	3,955,700	1,047,300	1,049,800	1,323,300	1,641,900	2,299,500
Total Revenues	337,536,700	341,642,000	339,243,800	\$ 344,030,500	\$ 354,351,400	\$ 364,981,900	\$375,931,400	\$ 387,209,300
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$ 131,840,000	\$ 137,127,300	\$134,127,300	\$ 143,933,800	\$ 148,117,300	\$ 150,190,900	\$ 153,269,800	\$ 155,998,000
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	6,048,000	6,048,000	-	-	-
Debt Service	132,835,600	143,189,900	137,436,000	135,481,000	146,520,400	158,907,300	163,033,800	170,520,200
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	6,268,300	6,268,300	3,395,500	4,173,300	4,142,200
Water Residential Assistance Program Contribution	1,698,300	1,669,400	1,669,400	1,705,500	1,756,700	1,809,400	1,863,700	1,919,600
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
Operating Reserve Deposit	-	876,600	-	-	-	-	-	-
DWSD Budget Shortfall/(Surplus) Pending	937,400	-	-	-	-	-	-	-
Improvement & Extension Fund Transfer Pending	29,456,300	23,962,500	31,194,800	28,093,900	23,140,700	28,178,800	31,090,800	32,129,300
Annual Water System Revenue Requirements	\$ 331,583,900	\$ 341,642,000	\$339,243,800	\$ 344,030,500	\$ 354,351,400	\$ 364,981,900	\$375,931,400	\$ 387,209,300

Schedule 1C – Sewer System Revenue Requirements Biennial Budget

	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
Sewer System Revenue Requirements									
Revenues									
Revenues from Charges	\$ 466,113,700	\$ 481,162,100	\$475,904,100	\$ 474,005,900	\$ (7,156,200)	-1.5%	\$ 488,077,800	\$14,071,900	3.0%
Other Operating Revenue	1,266,600	-	574,000	400,000	400,000	0.0%	400,000	-	0.0%
Non-Operating Revenue	7,877,100	5,589,200	2,778,100	1,023,300	(4,565,900)	-81.7%	1,214,300	191,000	18.7%
Total Revenues	475,257,400	486,751,300	479,256,200	\$ 475,429,200	\$ (11,322,100)	-2.3%	\$489,692,100	\$14,262,900	3.0%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$ 174,514,600	\$ 184,946,100	\$182,296,000	\$ 181,299,800	\$ (3,646,300)	-2.0%	\$ 183,783,000	\$ 2,483,200	1.4%
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	10,824,000	-	0.0%	10,824,000	-	0.0%
Debt Service	211,331,100	209,739,900	201,780,400	207,209,500	(2,530,400)	-1.2%	204,566,500	(2,643,000)	-1.3%
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	11,620,700	-	0.0%	11,620,700	-	0.0%
Water Residential Assistance Program Contribution	2,403,000	2,415,100	2,415,100	2,358,300	(56,800)	-2.4%	2,429,000	70,700	3.0%
Regional System Lease	27,500,000	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Operating Reserve Deposit	-	-	-	-	-	0.0%	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending	10,817,800	-	-	-	-	0.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	20,797,600	39,705,500	42,820,000	34,616,900	(5,088,600)	-12.8%	48,968,900	14,352,000	41.5%
Annual Sewer System Revenue Requirements	\$ 469,808,800	\$ 486,751,300	\$479,256,200	\$ 475,429,200	\$ (11,322,100)	-2.3%	\$ 489,692,100	\$14,262,900	3.0%

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

	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Sewer System Revenue Requirements								
Revenues								
Revenues from Charges	\$ 466,113,700	\$ 481,162,100	\$475,904,100	\$ 474,005,900	\$ 488,077,800	\$502,334,300	\$ 517,154,200	\$ 532,023,200
Other Operating Revenue	1,266,600	-	574,000	400,000	400,000	400,000	400,000	400,000
Non-Operating Revenue	7,877,100	5,589,200	2,778,100	1,023,300	1,214,300	1,648,600	1,960,200	2,676,600
Total Revenues	475,257,400	486,751,300	479,256,200	\$ 475,429,200	\$ 489,692,100	\$504,382,900	\$519,514,400	\$ 535,099,800
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$ 174,514,600	\$ 184,946,100	\$182,296,000	\$ 181,299,800	\$ 183,783,000	\$188,451,100	\$ 192,144,700	\$ 196,333,500
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	10,824,000	10,824,000	-	-	-
Debt Service	211,331,100	209,739,900	201,780,400	207,209,500	204,566,500	218,008,000	209,894,000	211,809,200
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	11,620,700	11,620,700	6,479,300	8,228,800	8,158,800
Water Residential Assistance Program Contribution	2,403,000	2,415,100	2,415,100	2,358,300	2,429,000	2,501,900	2,577,000	2,654,300
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
Operating Reserve Deposit	-	-	-	-	-	-	-	-
DWSD Budget Shortfall/(Surplus) Pending	10,817,800	-	-	-	-	-	-	-
Improvement & Extension Fund Transfer Pending	20,797,600	39,705,500	42,820,000	34,616,900	48,968,900	61,442,600	79,169,900	88,644,000
Annual Sewer System Revenue Requirements	\$ 469,808,800	\$ 486,751,300	\$479,256,200	\$ 475,429,200	\$ 489,692,100	\$504,382,900	\$ 519,514,400	\$ 535,099,800

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

Combined Water & Sewer System Revenue Requirements	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
Revenues									
Revenues from Charges	\$ 654,690,000	\$ 817,969,700	\$810,963,200	\$816,814,100	\$ (1,155,600)	-0.1%	\$ 841,204,400	\$ 24,390,300	3.0%
Other Operating Revenue	2,269,900	-	803,000	575,000	575,000	0.0%	575,000	-	0.0%
Non-Operating Revenue	17,065,500	10,423,600	6,733,800	2,070,600	(8,353,000)	-80.1%	2,264,100	193,500	9.3%
Total Revenues	674,025,400	828,393,300	\$818,500,000	\$819,459,700	\$ (8,933,600)	-1.1%	\$844,043,500	\$ 24,583,800	3.0%
Revenue Requirements									
Operations & Maintenance (O&M) Expense	\$ 306,354,600	\$ 322,073,400	\$316,423,300	\$325,233,600	\$ 3,160,200	1.0%	\$ 331,900,300	\$ 6,666,700	2.0%
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	16,872,000	-	0.0%	16,872,000	-	0.0%
Debt Service	344,166,700	352,929,800	339,216,400	342,690,500	(10,239,300)	-2.9%	351,086,900	8,396,400	2.5%
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	17,889,000	-	0.0%	17,889,000	-	0.0%
Water Residential Assistance Program Contribution	4,101,300	4,084,500	4,084,500	4,063,800	(20,700)	-0.5%	4,185,700	121,900	3.0%
Regional System Leases	50,000,000	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Operating Reserve Deposit	-	876,600	-	-	(876,600)	-100.0%	-	-	0.0%
DWSD Budget Shortfall/(Surplus) Pending	11,755,200	-	-	-	-	0.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	50,253,900	63,668,000	74,014,800	62,710,800	(957,200)	-1.5%	72,109,600	9,398,800	15.0%
Annual Revenue Requirements	\$ 801,392,700	\$ 828,393,300	\$818,500,000	\$819,459,700	\$ (8,933,600)	-1.1%	\$ 844,043,500	\$ 24,583,800	3.0%

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

Combined Water & Sewer System Revenue Requirements	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Revenues								
Revenues from Charges	\$ 654,690,000	\$ 817,969,700	\$810,963,200	\$816,814,100	\$841,204,400	\$ 865,817,900	\$ 891,268,700	\$916,758,000
Other Operating Revenue	2,269,900	-	803,000	575,000	575,000	575,000	575,000	575,000
Non-Operating Revenue	17,065,500	10,423,600	6,733,800	2,070,600	2,264,100	2,971,900	3,602,100	4,976,100
Total Revenues	674,025,400	828,393,300	\$818,500,000	\$819,459,700	\$844,043,500	\$ 869,364,800	\$895,445,800	\$922,309,100
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$ 306,354,600	\$ 322,073,400	\$316,423,300	\$325,233,600	\$331,900,300	\$ 338,642,000	\$ 345,414,500	\$352,331,500
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	16,872,000	16,872,000	-	-	-
Debt Service	344,166,700	352,929,800	339,216,400	342,690,500	351,086,900	376,915,300	372,927,800	382,329,400
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	17,889,000	17,889,000	9,874,800	12,402,100	12,301,000
Water Residential Assistance Program Contribution	4,101,300	4,084,500	4,084,500	4,063,800	4,185,700	4,311,300	4,440,700	4,573,900
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
Operating Reserve Deposit	-	876,600	-	-	-	-	-	-
DWSD Budget Shortfall/(Surplus) Pending	-	-	-	-	-	-	-	-
Improvement & Extension Fund Transfer Pending	50,253,900	63,668,000	74,014,800	62,710,800	72,109,600	89,621,400	110,260,700	120,773,300
Annual Revenue Requirements	\$ 789,637,500	\$ 828,393,300	\$818,500,000	\$819,459,700	\$844,043,500	\$ 869,364,800	\$ 895,445,800	\$922,309,100

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 3 – Operating Financial Plans** and **Section 4 – 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 2022 and FY 2023. A commentary of the major categories follows the table on the next page.

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

Operations & Maintenance Expense	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
2.1 Salaries & Wages	\$ 64,189,300	\$ 70,761,000	\$ 69,829,100	\$ 71,970,000	\$ 1,209,000	1.7%	\$ 73,216,100	\$ 1,246,100	1.2%
2.2 Workforce Development	1,251,900	948,400	948,400	976,900	28,500	3.0%	976,900	-	0.0%
2.3 Overtime	7,493,800	6,988,000	7,063,000	6,954,700	(33,300)	-0.5%	6,954,800	100	0.2%
2.4 Employee Benefits	25,001,100	24,475,400	24,181,500	27,134,500	2,659,100	10.9%	28,172,300	1,037,800	3.0%
2.5 Transition Services	6,330,300	7,160,300	6,660,300	8,401,700	1,241,400	17.3%	8,562,600	160,900	2.9%
Total Personnel Costs	104,266,400	110,333,100	108,682,300	115,437,800	5,104,700	4.6%	117,882,700	2,444,900	2.1%
3.1 Electric	40,669,200	39,240,000	39,240,000	39,633,200	393,200	1.0%	39,958,600	325,400	0.7%
3.2 Gas	5,195,600	6,629,000	6,629,000	5,565,700	(1,063,300)	-16.0%	5,733,900	168,200	1.6%
3.3 Sewage Service	2,109,300	2,119,800	2,119,800	2,079,100	(40,700)	-1.9%	2,107,400	28,300	1.2%
3.4 Water Service	3,178,600	3,948,200	3,948,200	3,120,000	(828,200)	-21.0%	3,177,200	57,200	1.9%
Total Utilities Costs	51,152,700	51,937,000	51,937,000	50,398,000	(1,539,000)	-3.0%	50,977,100	579,100	1.1%
4.1 Chemicals	14,241,800	13,419,800	13,419,800	16,044,200	2,624,400	19.6%	16,172,600	128,400	1.0%
4.2 Supplies & Other	29,605,400	33,117,500	34,346,100	35,025,600	1,908,100	5.8%	35,012,400	(13,200)	-2.5%
4.3 Contractual Services	106,372,400	106,154,600	106,787,400	103,374,600	(2,780,000)	-2.6%	106,122,500	2,747,900	2.7%
5.1 Capital Program Allocation	(3,347,400)	(3,447,700)	(3,320,200)	(3,471,000)	(23,300)	0.7%	(3,501,100)	(30,100)	0.4%
5.2 Shared Services	(1,733,700)	(3,412,900)	(4,530,000)	(1,892,500)	1,520,400	-44.5%	(1,927,300)	(34,800)	-47.9%
6.0 Capital Outlay	5,797,000	5,503,300	3,153,200	3,534,900	(1,968,400)	-35.8%	2,904,800	(630,100)	-17.8%
7.0 Unallocated Reserve	-	8,468,700	5,947,500	6,782,000	(1,686,700)	-19.9%	8,256,600	1,474,600	30.7%
Total Other Categories	150,935,500	159,803,300	155,803,800	159,397,800	(405,500)	-0.3%	163,040,500	3,642,700	2.3%
Grand Total	\$306,354,600	\$322,073,400	\$316,423,100	\$325,233,600	\$ 3,160,200	1.0%	\$331,900,300	\$ 6,666,700	2.0%

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

Operations & Maintenance Expense	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.1 Salaries & Wages	\$ 64,189,300	\$ 70,761,000	\$ 69,829,100	\$ 71,970,000	\$ 73,216,100	\$ 73,876,300	\$ 73,911,300	\$ 73,946,300
2.2 Workforce Development	1,251,900	948,400	948,400	976,900	976,900	976,900	976,900	976,900
2.3 Overtime	7,493,800	6,988,000	7,063,000	6,954,700	6,954,800	6,975,900	6,980,200	6,999,100
2.4 Employee Benefits	25,001,100	24,475,400	24,181,500	27,134,500	28,172,300	28,953,100	29,528,800	30,106,800
2.5 Transition Services	6,330,300	7,160,300	6,660,300	8,401,700	8,562,600	8,626,900	8,626,900	8,626,900
Total Personnel Costs	104,266,400	110,333,100	108,682,300	115,437,800	117,882,700	119,409,100	120,024,100	120,656,000
3.1 Electric	40,669,200	39,240,000	39,240,000	39,633,200	39,958,600	40,331,900	40,669,300	40,929,700
3.2 Gas	5,195,600	6,629,000	6,629,000	5,565,700	5,733,900	5,914,700	5,970,700	6,026,300
3.3 Sewage Service	2,109,300	2,119,800	2,119,800	2,079,100	2,107,400	2,132,100	2,144,500	2,160,100
3.4 Water Service	3,178,600	3,948,200	3,948,200	3,120,000	3,177,200	3,271,000	3,352,700	3,409,100
Total Utilities Costs	51,152,700	51,937,000	51,937,000	50,398,000	50,977,100	51,649,700	52,137,200	52,525,200
4.1 Chemicals	14,241,800	13,419,800	13,419,800	16,044,200	16,172,600	16,292,000	16,357,600	16,453,900
4.2 Supplies & Other	29,605,400	33,117,500	34,346,100	35,025,600	35,012,400	34,512,300	34,680,800	35,323,200
4.3 Contractual Services	106,372,400	106,154,600	106,787,400	103,374,600	106,122,500	105,320,700	105,487,900	106,335,900
5.1 Capital Program Allocation	(3,347,400)	(3,447,700)	(3,320,200)	(3,471,000)	(3,501,100)	(3,517,200)	(3,533,300)	(3,549,400)
5.2 Shared Services	(1,733,700)	(3,412,900)	(4,530,000)	(1,892,500)	(1,927,300)	(1,963,000)	(1,999,200)	(2,036,000)
6.0 Capital Outlay	5,797,000	5,503,300	3,153,200	3,534,900	2,904,800	3,433,100	3,501,700	3,571,600
7.0 Unallocated Reserve	-	8,468,700	5,947,500	6,782,000	8,256,600	13,505,300	18,757,700	23,051,100
Total Other Categories	150,935,500	159,803,300	155,803,800	159,397,800	163,040,500	167,583,200	173,253,200	179,150,300
Grand Total	\$306,354,600	\$322,073,400	\$316,423,100	\$325,233,600	\$331,900,300	\$338,642,000	\$345,414,500	\$352,331,500

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 4 – 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 4 – 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 6 – Capital Investment**.

Unallocated Reserve reflects a reserve for unforeseen operational needs. This allows for the removal of contingencies which were previously budgeted within individual cost center line items and provides assurance to operators that sufficient funds exist if emergencies arise such as emergency repairs and costs of new initiatives and items not known at the time of the budgeting process. The provision for wage and benefit adjustments, which are based on merit increases, are also included in 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 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, six pumping stations, and management of those facilities. In addition, GLWA maintains four pumping stations and one CSO 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, Systems Analytics, Asset Management, and Capital Improvement Planning); Systems Control; Facility and Fleet Operations; Field Service Operations; Energy, Research & Innovation; 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/HazMat.
- 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 Planning & Analysis, Reporting & Compliance, Treasury, Public Finance, Procurement, Logistics & Materials, Owners' Representative, Data Analytics & Internal Audit, and Transformation).

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 4 – Supplemental Analysis (Centralized & Admin Services Allocation)**, explains the cost allocation methodology. A review of the cost allocation methodology is conducted annually.

Schedules 2C and 2D, below, 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 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
A Water System Operations	\$ 68,916,700	\$ 71,966,400	\$ 70,819,800	\$ 74,813,000	\$ 2,846,600	4.0%	\$ 77,370,200	\$ 2,557,200	3.4%
B Sewer System Operations	105,782,900	115,676,400	114,975,000	111,971,400	(3,705,000)	-3.2%	114,279,500	2,308,100	2.1%
C Centralized Services	102,699,400	102,721,300	100,338,300	103,845,900	1,124,600	1.1%	104,523,100	677,200	0.7%
D Administrative Services	28,955,600	31,709,300	30,290,000	34,603,300	2,894,000	9.1%	35,727,500	1,124,200	3.2%
Grand Total	\$ 306,354,600	\$ 322,073,400	\$ 316,423,100	\$ 325,233,600	\$ 3,160,200	1.0%	\$ 331,900,300	\$ 6,666,700	2.0%

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

Operating Area	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
A Water System Operations	\$ 68,916,700	\$ 71,966,400	\$ 70,819,800	\$ 74,813,000	\$ 77,370,200	\$ 78,249,100	\$ 81,427,600	\$ 83,499,800
B Sewer System Operations	105,782,900	115,676,400	114,975,000	111,971,400	114,279,500	117,259,600	120,517,300	124,040,100
C Centralized Services	102,699,400	102,721,300	100,338,300	103,845,900	104,523,100	106,845,900	106,987,500	107,673,000
D Administrative Services	28,955,600	31,709,300	30,290,000	34,603,300	35,727,500	36,287,400	36,482,100	37,118,600
Grand Total	\$ 306,354,600	\$ 322,073,400	\$ 316,423,100	\$ 325,233,600	\$ 331,900,300	\$ 338,642,000	\$ 345,414,500	\$ 352,331,500

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 **Schedule 1C – 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 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2023 Dollar Variance	FY 2023 Percent Variance
Water	\$ 131,840,600	\$ 137,127,300	\$ 134,127,100	\$ 143,933,800	\$ 6,806,500	5.0%	\$ 148,117,300	\$ 4,183,500	2.9%
Wastewater	174,514,000	184,946,100	182,296,000	181,299,800	(3,646,300)	-2.0%	183,783,000	2,483,200	1.4%
Grand Total	\$ 306,354,600	\$ 322,073,400	\$ 316,423,100	\$ 325,233,600	\$ 3,160,200	1.0%	\$ 331,900,300	\$ 6,666,700	2.0%

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

System	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water	\$ 131,840,600	\$ 137,127,300	\$ 134,127,100	\$ 143,933,800	\$ 148,117,300	\$ 150,190,900	\$ 153,269,800	\$ 155,998,000
Wastewater	174,514,000	184,946,100	182,296,000	181,299,800	183,783,000	188,451,100	192,144,700	196,333,500
Grand Total	\$ 306,354,600	\$ 322,073,400	\$ 316,423,100	\$ 325,233,600	\$ 331,900,300	\$ 338,642,000	\$ 345,414,500	\$ 352,331,500

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 2022 & FY 2023 (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 4 – 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 2022 and FY 2023 Biennial Budget (**Section 7 – Authorizing Resolutions**) affirms the annual debt service funding. See additional debt analysis in **Section 4 – Supplemental Analysis (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 2022 Water Fund Requested	FY 2022 Sewer Fund Requested	FY 2022 Combined (Informational Only)	FY 2023 Water Fund Requested	FY 2023 Sewer Fund Requested	FY 2023 Combined (Informational Only)
Revenues						
Regional System Wholesale Revenues - Suburban Wholesale Customer	\$ 321,110,900	\$ 285,343,700	\$ 606,454,600	\$ 330,153,200	\$ 293,651,000	\$ 623,804,200
Regional System Wholesale Revenues - Detroit Customers	21,697,300	188,662,200	210,359,500	22,973,400	194,426,800	217,400,200
Total Regional System Wholesale Revenues	342,808,200	474,005,900	816,814,100	353,126,600	488,077,800	841,204,400
DWSD Local System Revenues - Detroit Customers	73,264,300	104,684,700	177,949,000	73,964,800	101,441,800	175,406,600
Miscellaneous Revenue (Local System)	6,428,400	6,810,800	13,239,200	6,436,500	6,819,200	13,255,700
Non-Operating Revenue (Regional System)	1,222,300	1,423,300	2,645,600	1,224,800	1,614,300	2,839,100
Total Revenues	\$ 423,723,200	\$ 586,924,700	\$ 1,010,647,900	\$ 434,752,700	\$ 597,953,100	\$ 1,032,705,800
Revenue Requirements						
Operations & Maintenance Expense						
Regional System Wholesale Expenses	\$ 143,933,800	\$ 181,299,800	\$ 325,233,600	\$ 148,117,300	\$ 183,783,000	\$ 331,900,300
Local System Expenses	34,648,600	69,233,000	103,881,600	35,721,600	69,233,000	104,954,600
GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	6,048,000	10,824,000	16,872,000
GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	4,272,000	2,856,000	7,128,000
Total Operations & Maintenance Expense	188,902,400	264,212,800	453,115,200	194,158,900	266,696,000	460,854,900
<i>Net Revenues after Operations & Maintenance Expense</i>	<i>234,820,800</i>	<i>322,711,900</i>	<i>557,532,700</i>	<i>240,593,800</i>	<i>331,257,100</i>	<i>571,850,900</i>
Non-operating Activities						
Debt Service Allocable to Regional System	135,481,000	207,209,500	342,690,500	146,520,400	204,566,500	351,086,900
Debt Service Allocable to Local System	42,364,200	31,800,800	74,165,000	43,378,400	32,508,700	75,887,100
GRS Accelerated Pension from Regional System	6,268,300	11,620,700	17,889,000	6,268,300	11,620,700	17,889,000
GRS Accelerated Pension from Local System	4,427,400	3,066,700	7,494,100	4,427,400	3,066,700	7,494,100
WRAP Contribution from Regional System	1,705,500	2,358,300	4,063,800	1,756,700	2,429,000	4,185,700
WRAP Contribution from Local System	671,100	1,510,400	2,181,500	680,600	1,491,600	2,172,200
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	190,917,500	257,566,400	448,483,900	203,031,800	255,683,200	458,715,000
<i>Net Revenues Available for Revenue Financed Capital</i>	<i>43,903,300</i>	<i>65,145,500</i>	<i>109,048,800</i>	<i>37,562,000</i>	<i>75,573,900</i>	<i>113,135,900</i>
Reserve for Revenue Financed Capital from Net Revenues						
Lease Payment to Local System I&E Account	15,809,400	27,500,000	43,309,400	14,421,300	26,605,000	41,026,300
Net Revenues Allocable to Local System	-	3,028,600	3,028,600	-	-	-
Net Revenues Allocable to Regional System	28,093,900	34,616,900	62,710,800	23,140,700	48,968,900	72,109,600
Total Reserve for Revenue Financed Capital Both Systems	43,903,300	65,145,500	109,048,800	37,562,000	75,573,900	113,135,900
Total Revenue Requirements	\$ 423,723,200	\$ 586,924,700	\$ 1,010,647,900	\$ 434,752,700	\$ 597,953,100	\$ 1,032,705,800

*Rows highlighted in light grey in the above table are designed to align with the DWSD Budget (DWSD data preliminary at February 17, 2021).

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 2022 Water Fund Requested	FY 2022 Sewer Fund Requested	FY 2022 Combined (Informational Only)	FY 2023 Water Fund Requested	FY 2023 Sewer Fund Requested	FY 2023 Combined (Informational Only)
Debt Service Coverage Calculation						
Revenues						
1 Regional System Wholesale Revenues	\$ 342,808,200	\$ 474,005,900	\$ 816,814,100	\$ 353,126,600	\$ 488,077,800	\$ 841,204,400
2 Local System Revenues	73,264,300	104,684,700	177,949,000	73,964,800	101,441,800	175,406,600
3 Miscellaneous Revenue (Local System)	6,428,400	6,810,800	13,239,200	6,436,500	6,819,200	13,255,700
4 Non-Operating Revenue (Regional System)	1,222,300	1,423,300	2,645,600	1,224,800	1,614,300	2,839,100
5 Total Revenues	\$ 423,723,200	\$ 586,924,700	\$ 1,010,647,900	\$ 434,752,700	\$ 597,953,100	\$ 1,032,705,800
Revenue Requirements						
Operations & Maintenance Expense						
6 Regional System Wholesale Expenses	\$ 143,933,800	\$ 181,299,800	\$ 325,233,600	\$ 148,117,300	\$ 183,783,000	\$ 331,900,300
7 Local System Expenses	34,648,600	69,233,000	103,881,600	35,721,600	69,233,000	104,954,600
8 GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	6,048,000	10,824,000	16,872,000
9 GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	4,272,000	2,856,000	7,128,000
10 Total Operations & Maintenance Expense	188,902,400	264,212,800	453,115,200	194,158,900	266,696,000	460,854,900
11 Net Revenues after Operations & Maintenance Expense	\$ 234,820,800	\$ 322,711,900	\$ 557,532,700	\$ 240,593,800	\$ 331,257,100	\$ 571,850,900
Debt Service by Lien						
12 Senior Lien Bonds	\$ 124,309,700	\$ 133,195,700	\$ 257,505,400	\$ 132,433,500	\$ 148,824,800	\$ 281,258,300
13 Second Lien Bonds	46,840,400	51,893,000	98,733,400	47,200,100	36,738,500	83,938,600
14 SRF Junior Lien Bonds	6,695,100	53,921,600	60,616,700	10,265,200	51,511,900	61,777,100
15 Total Debt Service	\$ 177,845,200	\$ 239,010,300	\$ 416,855,500	\$ 189,898,800	\$ 237,075,200	\$ 426,974,000
Debt Service Coverage						
16 Senior Lien Bonds (11)/(12)	1.89	2.42		1.82	2.23	
17 Second Lien Bonds (11)/[(12)+(13)]	1.37	1.74		1.34	1.79	
18 SRF Junior Lien Bonds (11)/(15)	1.32	1.35		1.27	1.40	

**Rows highlighted in light grey in the above table are designed to align with the DWSD Budget (DWSD data preliminary at February 17, 2021).

Schedule 5 – Improvement & Extension Funds and Construction Bond Funds

Improvement & Extension Funds: The tables on the following pages present the FY 2022 and FY 2023 biennial budgets and five-year financial plan for the separate Improvement & Extension (I&E) Funds for the water and sewer systems. See also **Section 6 – Capital Investment**.

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 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 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Revenues							
Water System Revenue Transfers In	\$ 23,962,500	\$ 31,194,800	\$ 28,093,900	\$ 23,140,700	\$ 28,178,800	\$ 31,090,800	\$ 32,129,300
Earnings on Investments	-	3,048,400	-	-	-	-	-
Net Use of Reserves	68,929,500	63,675,200	97,220,700	48,202,200	162,600	185,100	227,400
Total Revenues	\$ 92,892,000	\$ 97,918,400	\$ 125,314,600	\$ 71,342,900	\$ 28,341,400	\$ 31,275,900	\$ 32,356,700
Expenditures							
Water System Revenue Transfers Out	\$ -	\$ 3,048,400	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Outlay	17,892,000	17,892,000	17,006,600	14,078,600	8,759,500	8,582,000	8,519,700
Revenue Financed Capital - Operating							
Transfer to Construction Fund	75,000,000	76,978,000	108,308,000	57,264,300	19,581,900	22,693,900	23,837,000
Total Expenditures	\$ 92,892,000	\$ 97,918,400	\$ 125,314,600	\$ 71,342,900	\$ 28,341,400	\$ 31,275,900	\$ 32,356,700

Schedule 5B – Sewer Improvement & Extension Fund

Sewer Improvement & Extension Fund Inflows & Outflows	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Revenues							
Sewer System Revenue Transfers In	\$ 39,705,500	\$ 42,820,000	\$ 34,616,900	\$ 48,968,900	\$ 61,442,600	\$ 79,169,900	\$ 88,644,000
Receipt of DWSD Shortfall Loan Interest	19,288,300	19,288,300	406,400	-	-	-	-
Earnings on Investments	-	1,401,300	-	-	-	-	-
Net Use of Reserves	3,987,300	2,894,400	28,487,800	5,602,000	(292,300)	50,500	(434,700)
Total Revenues	\$ 62,981,100	\$ 66,404,000	\$ 63,511,100	\$ 54,570,900	\$ 61,150,300	\$ 79,220,400	\$ 88,209,300
Expenditures							
Sewer System Revenue Transfers Out	\$ -	\$ 1,401,300	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Outlay	\$ 20,481,100	\$ 20,481,100	\$ 15,965,100	\$ 18,211,900	\$ 7,979,900	\$ 7,110,100	\$ 7,631,900
Revenue Financed Capital - Operating							
Transfer to Construction Fund	42,500,000	44,521,600	47,546,000	36,359,000	53,170,400	72,110,300	80,577,400
Total Expenditures	\$ 62,981,100	\$ 66,404,000	\$ 63,511,100	\$ 54,570,900	\$ 61,150,300	\$ 79,220,400	\$ 88,209,300

Construction Funds: The tables below present the FY 2022 and FY 2023 biennial budgets and five-year financial plan for the separate Construction Funds for the water and sewage disposal systems. See also **Section 6 – Capital Investment**.

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 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Revenues							
Transfers from Improvement & Extension Fund	\$ 75,000,000	\$ 76,978,000	\$ 108,308,000	\$ 57,264,300	\$ 19,581,900	\$ 22,693,900	\$ 23,837,000
Bond Proceeds	-	-	-	192,700,000	-	183,300,000	-
Bond Fund Earnings on Investments	820,400	26,800	-	202,300	674,100	356,700	984,600
Grant Revenues (SRF Loans)	12,365,800	12,365,800	26,100,000	16,600,000	16,600,000	16,600,000	15,810,000
Net Use of Reserves	22,486,800	23,280,400	-	(116,231,600)	112,518,000	(94,748,600)	96,191,400
Total Revenues	\$ 110,673,000	\$ 112,651,000	\$ 134,408,000	\$ 150,535,000	\$ 149,374,000	\$ 128,202,000	\$ 136,823,000
Expenditures							
Capital Improvement Plan	\$ 147,564,000	\$ 147,564,000	\$ 179,210,000	\$ 200,713,000	\$ 199,165,000	\$ 170,936,000	\$ 182,430,000
Capital Spend Rate Adjustment	(36,891,000)	(34,913,000)	(44,802,000)	(50,178,000)	(49,791,000)	(42,734,000)	(45,607,000)
Total Expenditures	\$ 110,673,000	\$ 112,651,000	\$ 134,408,000	\$ 150,535,000	\$ 149,374,000	\$ 128,202,000	\$ 136,823,000

Schedule 5D – Sewer Construction Fund

Sewer Construction Fund Inflows & Outflows	FY 2021 Adopted Budget	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Revenues							
Transfers from Improvement & Extension Fund	\$ 42,500,000	\$ 44,521,600	\$ 47,546,000	\$ 36,359,000	\$ 53,170,400	\$ 72,110,300	\$ 80,577,400
Bond Proceeds	-	-	-	122,200,000	-	108,100,000	-
Bond Fund Earnings on Investments	497,700	27,600	-	128,300	408,400	218,300	539,500
Grant Revenues (SRF Loans)	33,200,000	33,200,000	31,992,000	4,122,000	-	-	-
Net Use of Reserves	6,781,300	7,251,400	-	(70,416,300)	67,126,200	(50,660,600)	50,283,100
Total Revenues	\$ 82,979,000	\$ 85,000,600	\$ 79,538,000	\$ 92,393,000	\$ 120,705,000	\$ 129,768,000	\$ 131,400,000
Expenditures							
Capital Improvement Plan	\$ 110,638,000	\$ 110,638,000	\$ 106,050,000	\$ 123,190,000	\$ 160,940,000	\$ 173,024,000	\$ 175,200,000
Capital Spend Rate Adjustment	(27,659,000)	(25,637,400)	(26,512,000)	(30,797,000)	(40,235,000)	(43,256,000)	(43,800,000)
Total Expenditures	\$ 82,979,000	\$ 85,000,600	\$ 79,538,000	\$ 92,393,000	\$ 120,705,000	\$ 129,768,000	\$ 131,400,000

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Section 3

Operating Financial Plans

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Operating Financial Plans Introduction

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 2022 and 2023 and the forecasted financial plan for fiscal years 2024 through 2026.

Variance columns in Section 3 are based on a comparison to the amended FY 2021 budget. This provides a more useful analysis of the budget for FY 2022 by comparing to the expected expenditures for FY 2021.

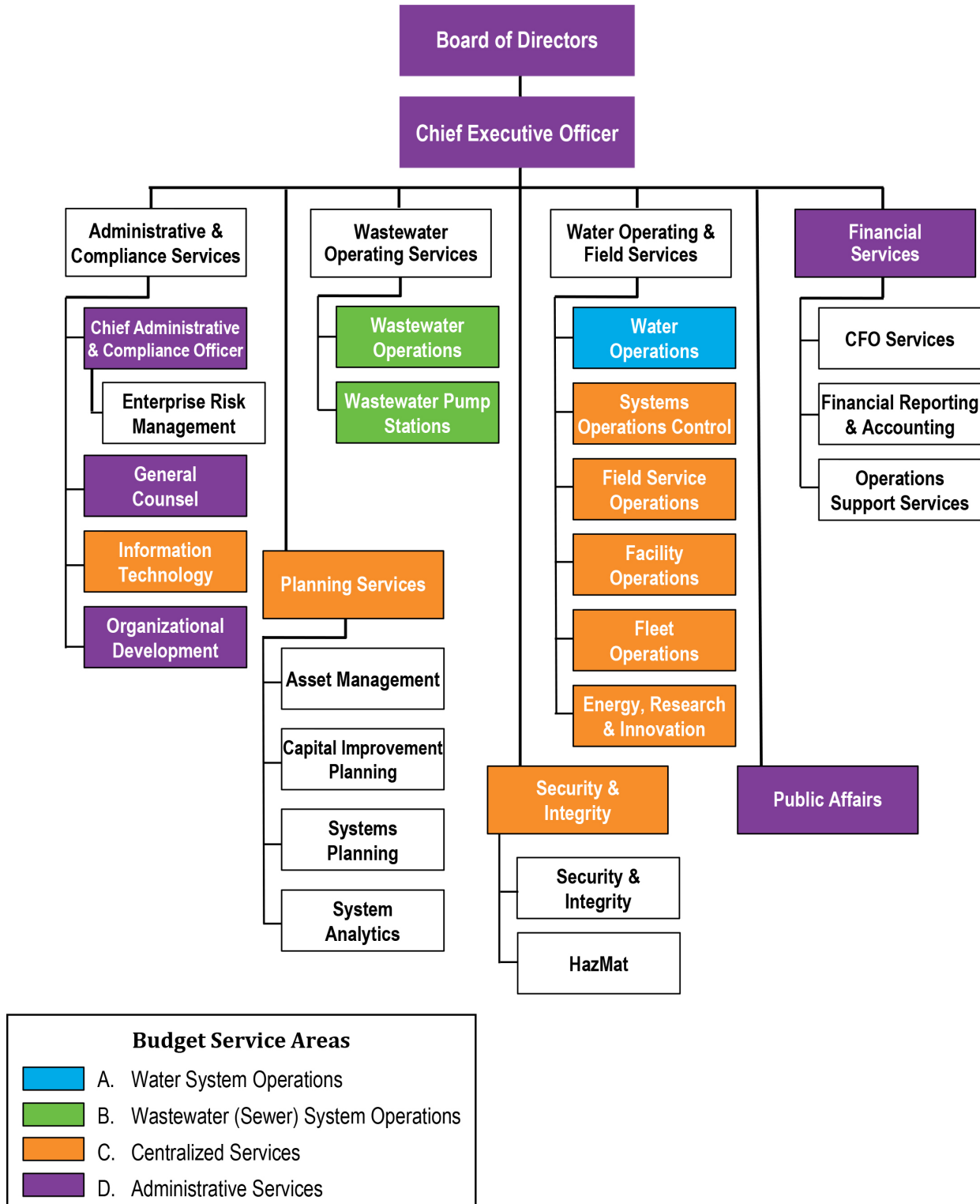
The tables in Section 3 are pulled from a database in which the underlying data is not rounded. The budget tables presented in this document are rounded to hundreds. This may result in some of the totals within the individual departments in Sections 3A, 3B, 3C and 3D not matching the department totals 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 Schedule 2B. 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 2A and 2B.

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

A Water System Operations by Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Adams Road Pumping Station	\$ 655,400	\$ 605,000	\$ 368,300	\$ 605,000	\$ -	0.0%	\$ 605,000
COO - Water Operations & Field Services	454,600	462,900	257,900	494,000	31,100	6.7%	495,900
Discontinued Capital Program	26,800	-	-	-	-	0.0%	-
Eastside Pumping Station	35,100	53,000	22,500	53,500	500	0.9%	53,500
Electric Ave Pumping Station	28,600	19,500	8,100	21,500	2,000	10.3%	21,500
Ford Rd Pumping Station	470,700	423,700	279,300	423,700	-	0.0%	423,700
Franklin Road Pumping Station	898,900	915,000	458,900	875,000	(40,000)	-4.4%	875,000
Haggerty Road Pumping Station	278,700	248,000	165,900	257,500	9,500	3.8%	257,500
Imlay Pumping Station	2,624,100	2,305,000	1,289,400	2,405,000	100,000	4.3%	2,405,000
Joy Road Pumping Station	650,300	657,500	344,700	662,500	5,000	0.8%	662,500
Lake Huron Water Plant	12,435,000	12,031,300	5,891,100	12,676,700	645,400	5.4%	12,690,400
Michigan Ave Pumping Station	119,600	102,000	53,000	105,700	3,700	3.6%	105,700
Newburgh Pumping Station	358,800	390,000	203,600	380,000	(10,000)	-2.6%	380,000
North Service Center Pumping Station	2,372,700	2,416,000	1,206,800	2,461,000	45,000	1.9%	2,461,000
Northeast Water Plant	9,302,800	9,824,300	4,506,500	10,873,700	1,049,400	10.7%	10,888,300
Northwest Pumping Station	41,300	27,000	20,500	35,700	8,700	32.2%	35,700
Orion Township Pumping Station	78,100	74,500	42,000	73,500	(1,000)	-1.3%	73,500
Rochester Pumping Station	245,100	231,000	237,500	218,000	(13,000)	-5.6%	218,000
Roseville Pumping Station	200	-	-	300	300	0.0%	300
Schoolcraft Pumping Station	463,000	416,000	238,200	433,000	17,000	4.1%	433,000
Southwest Water Plant	9,257,200	9,407,500	3,414,700	9,898,700	491,200	5.2%	9,918,200
Springwells Water Plant	12,537,000	13,327,300	9,317,400	13,715,000	387,700	2.9%	13,731,500
Water Director	1,388,100	1,724,200	717,000	1,835,400	111,200	6.4%	1,842,500
Water Engineering	1,460,000	1,360,900	671,800	1,501,700	140,800	10.3%	1,505,900
Water Quality	2,107,800	1,944,700	1,120,300	2,033,900	89,200	4.6%	2,049,400
Water Works Park	8,792,800	8,729,500	4,342,100	9,149,000	419,500	4.8%	9,165,400
West Chicago Rd Pumping Station	35,100	36,000	10,200	37,000	1,000	2.8%	37,000
West Service Center Pumping Station	756,200	799,300	408,200	798,700	(600)	-0.1%	798,700
Wick Road Pumping Station	628,400	589,500	393,800	605,500	16,000	2.7%	605,500
Ypsilanti Pumping Station	414,300	406,800	229,900	384,000	(22,800)	-5.6%	384,000
Water System Operations Unallocated	-	1,292,400	-	1,798,800	506,400	39.2%	4,246,600
Grand Total	\$ 68,916,700	\$ 70,819,800	\$ 36,219,600	\$ 74,813,000	\$ 3,993,200	5.6%	\$ 77,370,200

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

A Water System Operations by Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Adams Road Pumping Station	\$ 605,000	\$ 368,300	\$ 605,000	\$ 605,000	\$ 605,000	\$ 605,000	\$ 605,000
COO - Water Operations & Field Services	462,900	257,900	494,000	495,900	497,700	499,600	501,500
Eastside Pumping Station	53,000	22,500	53,500	53,500	53,500	53,500	53,500
Electric Ave Pumping Station	19,500	8,100	21,500	21,500	21,500	21,500	21,500
Ford Rd Pumping Station	423,700	279,300	423,700	423,700	423,700	423,700	423,700
Franklin Road Pumping Station	915,000	458,900	875,000	875,000	875,000	875,000	875,000
Haggerty Road Pumping Station	248,000	165,900	257,500	257,500	257,500	257,500	257,500
Imlay Pumping Station	2,305,000	1,289,400	2,405,000	2,405,000	2,405,000	2,405,000	2,405,000
Joy Road Pumping Station	657,500	344,700	662,500	662,500	662,500	662,500	662,500
Lake Huron Water Plant	12,031,300	5,891,100	12,676,700	12,690,400	12,701,900	12,715,600	12,729,400
Michigan Ave Pumping Station	102,000	53,000	105,700	105,700	105,700	105,700	105,700
Newburgh Pumping Station	390,000	203,600	380,000	380,000	380,000	380,000	380,000
North Service Center Pumping Station	2,416,000	1,206,800	2,461,000	2,461,000	2,461,000	2,461,000	2,461,000
Northeast Water Plant	9,824,300	4,506,500	10,873,700	10,888,300	10,900,500	10,915,300	10,929,900
Northwest Pumping Station	27,000	20,500	35,700	35,700	35,700	35,700	35,700
Orion Township Pumping Station	74,500	42,000	73,500	73,500	73,500	73,500	73,500
Rochester Pumping Station	231,000	237,500	218,000	218,000	218,000	218,000	218,000
Roseville Pumping Station	-	-	300	300	300	300	300
Schoolcraft Pumping Station	416,000	238,200	433,000	433,000	433,000	433,000	433,000
Southwest Water Plant	9,407,500	3,414,700	9,898,700	9,918,200	9,930,400	9,945,000	9,959,500
Springwells Water Plant	13,327,300	9,317,400	13,715,000	13,731,500	13,744,800	13,761,300	13,777,800
Water Director	1,724,200	717,000	1,835,400	1,842,500	1,849,700	1,856,800	1,863,900
Water Engineering	1,360,900	671,800	1,501,700	1,505,900	1,505,000	1,509,100	1,513,200
Water Quality	1,944,700	1,120,300	2,033,900	2,049,400	2,071,900	2,065,400	2,080,900
Water Works Park	8,729,500	4,342,100	9,149,000	9,165,400	9,166,500	9,182,900	9,215,200
West Chicago Rd Pumping Station	36,000	10,200	37,000	37,000	37,000	37,000	37,000
West Service Center Pumping Station	799,300	408,200	798,700	798,700	798,700	798,700	798,700
Wick Road Pumping Station	589,500	393,800	605,500	605,500	605,500	605,500	605,500
Ypsilanti Pumping Station	406,800	229,900	384,000	384,000	384,000	384,000	384,000
Water System Operations Unallocated	1,292,400	-	1,798,800	4,246,600	5,044,600	8,140,500	10,092,400
Grand Total	\$ 70,819,800	\$ 36,219,600	\$ 74,813,000	\$ 77,370,200	\$ 78,249,100	\$ 81,427,600	\$ 83,499,800

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

B Sewer System Operations by Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Wastewater Operations Group							
7 Mile Combined Sewer Overflow	\$ 118,000	\$ 156,800	\$ 112,300	\$ 164,200	\$ 7,400	4.7%	\$ 168,800
Baby Creek Combined Sewer Overflow	1,012,800	1,137,800	411,500	972,900	(164,900)	-14.5%	1,027,100
BDF, COF & Hauling	19,778,800	20,297,500	9,820,800	20,177,500	(120,000)	-0.6%	20,689,400
Belle Isle Combined Sewer Overflow	(95,400)	800	43,200	31,400	30,600	3825.0%	4,800
Chief Operating Officer Wastewater	1,603,200	2,667,300	863,500	2,269,900	(397,400)	-14.9%	2,280,800
Combined Sewer Overflow	4,469,600	4,677,400	1,915,900	4,516,100	(161,300)	-3.4%	4,781,400
Connor Creek Combined Sewer Overflow	2,996,800	1,285,300	886,600	2,102,800	817,500	63.6%	2,112,400
Hubble Southfield CSO	653,000	451,900	299,800	568,300	116,400	25.8%	572,100
Industrial Waste Control	2,373,700	2,496,300	1,227,300	2,473,600	(22,700)	-0.9%	2,518,700
Leib Combined Sewer Overflow	535,400	155,800	194,700	305,800	150,000	96.3%	310,800
Oakwood Combined Sewer Overflow	1,434,700	1,287,800	753,200	1,290,800	3,000	0.2%	1,453,600
Puritan Fenkell Combined Sewer Overflow	373,600	306,200	87,100	306,500	300	0.1%	313,800
St Aubin Combined Sewer Overflow	295,200	148,200	116,500	279,000	130,800	88.3%	201,100
Suburban Only Green Infrastructure Allocation	1,750,000	584,000	-	388,900	(195,100)	-33.4%	392,800
Wastewater Dewatering Process	6,760,600	6,176,300	3,095,500	6,558,200	381,900	6.2%	6,719,300
Wastewater Director	4,314,700	5,136,200	2,528,800	6,491,500	1,355,300	26.4%	6,642,800
Wastewater Engineering	1,732,400	2,453,300	1,542,200	2,758,600	305,300	12.4%	2,827,100
Wastewater Fire Damage	-	1,000,000	87,000	-	(1,000,000)	-100.0%	-
Wastewater Incineration Process	4,476,500	5,167,800	2,796,400	6,283,700	1,115,900	21.6%	6,529,900
Wastewater Laboratories	4,495,900	4,558,500	2,153,400	4,077,300	(481,200)	-10.6%	4,263,800
Wastewater Operations	23,600,900	26,613,800	10,525,500	21,593,500	(5,020,300)	-18.9%	22,298,500
Wastewater Primary Process	7,826,200	7,836,000	4,446,000	8,279,900	443,900	5.7%	8,416,300
Wastewater Process Control	3,165,300	5,229,700	1,798,200	4,607,400	(622,300)	-11.9%	4,170,100
Wastewater Secondary Process	9,725,300	9,847,600	5,069,500	10,455,300	607,700	6.2%	10,472,900
Wastewater System Operations							
Unallocated	-	2,318,500	-	2,250,900	(67,600)	-2.9%	2,349,600
Total Wastewater Operations Group	103,397,200	111,990,800	50,774,900	109,204,000	(2,786,800)	-2.5%	111,517,900
Wastewater Pump Stations							
Belle Isle Pumping Station	(138,900)	(6,000)	(13,200)	(8,800)	(2,800)	46.7%	(10,000)
Blue Hill Pumping Station	(67,000)	132,500	8,500	99,200	(33,300)	-25.1%	97,700
Conner Pumping Station	645,200	870,000	335,200	725,000	(145,000)	-16.7%	725,000
Fairview Pumping Station	493,400	535,000	514,400	555,000	20,000	3.7%	555,000
Fischer Pumping Station	(30,900)	(5,100)	(3,000)	300	5,400	-105.9%	100
Fox Creek Pumping Station	700	2,000	300	1,000	(1,000)	-50.0%	1,000
Freud Pumping Station	466,000	357,500	423,800	390,500	33,000	9.2%	390,500
Northeast Pumping Station	983,700	748,000	766,900	796,000	48,000	6.4%	793,900
Oakwood Pumping Station	107,500	283,000	69,700	178,000	(105,000)	-37.1%	178,000
Woodmere Pumping Station	(74,000)	67,300	6,900	31,200	(36,100)	-53.6%	30,400
Total Wastewater Pump Stations	2,385,700	2,984,200	2,109,500	2,767,400	(216,800)	-7.3%	2,761,600
Grand Total	\$ 105,782,900	\$ 114,975,000	\$ 52,884,400	\$ 111,971,400	\$ (3,003,600)	-2.6%	\$ 114,279,500

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

B Sewer System Operations by Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Wastewater Operations Group							
7 Mile Combined Sewer Overflow	\$ 156,800	\$ 112,300	\$ 164,200	\$ 168,800	\$ 171,400	\$ 173,400	\$ 175,300
Baby Creek Combined Sewer Overflow	1,137,800	411,500	972,900	1,027,100	1,115,400	793,100	745,800
BDF, COF & Hauling	20,297,500	9,820,800	20,177,500	20,689,400	20,777,400	20,886,700	21,015,700
Belle Isle Combined Sewer Overflow	800	43,200	31,400	4,800	4,300	3,200	2,100
Chief Operating Officer Wastewater	2,667,300	863,500	2,269,900	2,280,800	1,890,700	1,898,300	1,811,200
Combined Sewer Overflow	4,677,400	1,915,900	4,516,100	4,781,400	4,756,700	4,805,000	4,851,200
Connor Creek Combined Sewer Overflow	1,285,300	886,600	2,102,800	2,112,400	2,148,400	2,313,400	2,203,300
Hubble Southfield CSO	451,900	299,800	568,300	572,100	582,200	586,200	588,800
Industrial Waste Control	2,496,300	1,227,300	2,473,600	2,518,700	2,532,300	2,722,100	2,933,100
Leib Combined Sewer Overflow	155,800	194,700	305,800	310,800	356,900	359,500	362,200
Oakwood Combined Sewer Overflow	1,287,800	753,200	1,290,800	1,453,600	1,300,300	1,333,100	1,305,800
Puritan Fenkell Combined Sewer Overflow	306,200	87,100	306,500	313,800	317,300	318,800	322,000
St Aubin Combined Sewer Overflow	148,200	116,500	279,000	201,100	204,700	206,900	209,400
Suburban Only Green Infrastructure Allocation	584,000	-	388,900	392,800	396,700	400,700	404,700
Wastewater Dewatering Process	6,176,300	3,095,500	6,558,200	6,719,300	6,556,700	6,588,700	6,690,900
Wastewater Director	5,136,200	2,528,800	6,491,500	6,642,800	6,515,600	6,589,600	6,665,900
Wastewater Engineering	2,453,300	1,542,200	2,758,600	2,827,100	2,848,000	2,868,800	2,890,200
Wastewater Fire Damage	1,000,000	87,000	-	-	-	-	-
Wastewater Incineration Process	5,167,800	2,796,400	6,283,700	6,529,900	6,345,400	6,410,500	6,445,500
Wastewater Laboratories	4,558,500	2,153,400	4,077,300	4,263,800	4,286,100	4,318,300	4,407,900
Wastewater Operations	26,613,800	10,525,500	21,593,500	22,298,500	22,984,800	23,491,400	23,894,800
Wastewater Primary Process	7,836,000	4,446,000	8,279,900	8,416,300	8,315,200	8,314,300	8,423,400
Wastewater Process Control	5,229,700	1,798,200	4,607,400	4,170,100	4,182,000	4,085,900	4,183,400
Wastewater Secondary Process	9,847,600	5,069,500	10,455,300	10,472,900	10,403,300	10,461,000	10,545,000
Wastewater System Operations							
Unallocated	2,318,500	-	2,250,900	2,349,600	5,510,000	7,834,600	10,212,300
Total Wastewater Operations Group	111,990,800	50,774,900	109,204,000	111,517,900	114,501,800	117,763,500	121,289,900
Wastewater Pump Stations							
Belle Isle Pumping Station	(6,000)	(13,200)	(8,800)	(10,000)	(11,200)	(12,400)	(13,600)
Blue Hill Pumping Station	132,500	8,500	99,200	97,700	96,100	94,500	92,900
Conner Pumping Station	870,000	335,200	725,000	725,000	725,000	725,000	725,000
Fairview Pumping Station	535,000	514,400	555,000	555,000	555,000	555,000	555,000
Fischer Pumping Station	(5,100)	(3,000)	300	100	(200)	(500)	(700)
Fox Creek Pumping Station	2,000	300	1,000	1,000	1,000	1,000	1,000
Freud Pumping Station	357,500	423,800	390,500	390,500	390,500	390,500	390,500
Northeast Pumping Station	748,000	766,900	796,000	793,900	793,900	793,900	793,900
Oakwood Pumping Station	283,000	69,700	178,000	178,000	178,000	178,000	178,000
Woodmere Pumping Station	67,300	6,900	31,200	30,400	29,700	28,800	28,200
Total Wastewater Pump Stations	2,984,200	2,109,500	2,767,400	2,761,600	2,757,800	2,753,800	2,750,200
Grand Total	\$ 114,975,000	\$ 52,884,400	\$ 111,971,400	\$ 114,279,500	\$ 117,259,600	\$ 120,517,300	\$ 124,040,100

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

C Centralized Services by Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Planning Services							
Asset Management	\$ 1,879,100	\$ 3,154,600	\$ 1,174,700	\$ 4,590,900	\$ 1,436,300	45.5%	\$ 4,910,100
Capital Improvement Planning	7,621,200	3,559,600	4,235,000	1,267,200	(2,292,400)	-64.4%	1,389,500
Chief Planning Officer	302,600	382,000	141,500	297,500	(84,500)	-22.1%	299,300
Systems Analytics	5,165,900	6,017,800	1,924,400	5,939,600	(78,200)	-1.3%	5,968,900
Systems Planning	3,124,700	2,799,400	776,700	2,870,100	70,700	2.5%	3,723,300
Total Planning Services	18,093,500	15,913,400	8,252,300	14,965,300	(948,100)	-6.0%	16,291,100
Systems Operations Control	9,035,600	11,958,700	5,175,000	12,308,400	349,700	2.9%	12,320,400
Facility Operations	9,172,500	5,963,400	3,454,500	7,249,500	1,286,100	21.6%	7,310,300
Fleet Operations	2,179,900	2,333,900	648,000	2,295,800	(38,100)	-1.6%	2,297,600
Field Service Operations	16,771,400	18,085,600	9,828,500	17,709,700	(375,900)	-2.1%	17,732,400
Energy, Research & Innovation	2,104,100	2,785,500	1,066,200	2,995,800	210,300	7.6%	3,413,000
Information Technology							
Info Tech Enterprise Asset Mgmt Systems	6,054,800	9,090,900	2,414,800	8,320,600	(770,300)	-8.5%	7,755,800
Info Tech Business Productivity Systems	4,247,800	2,570,600	1,307,900	4,722,700	2,152,100	83.7%	4,793,200
Info Technology Infrastructure	23,272,900	17,127,200	8,206,700	18,195,400	1,068,200	6.2%	18,585,400
Info Technology Security & Risk	242,200	424,800	100,900	468,600	43,800	10.3%	471,800
Info Technology Service Delivery	2,840,100	3,458,600	1,201,800	3,716,100	257,500	7.4%	3,811,700
Info Technology Project Management Office	1,759,300	1,704,200	624,200	1,328,200	(376,000)	-22.1%	1,334,700
Office of the CIO	915,400	878,200	412,100	1,183,600	305,400	34.8%	1,199,200
Total Information Technology	39,332,500	35,254,500	14,268,400	37,935,200	2,680,700	7.6%	37,951,800
Security & Integrity							
HazMat	1,577,300	1,594,200	750,700	1,717,300	123,100	7.7%	1,679,100
Security and Integrity	4,432,600	4,365,200	2,243,600	4,481,300	116,100	2.7%	4,543,400
Total Security & Integrity	6,009,900	5,959,400	2,994,300	6,198,600	239,200	4.0%	6,222,500
Centralized Services Unallocated Reserve							
Reserve	-	2,083,900	-	2,187,600	103,700	5.0%	984,000
Grand Total	\$ 102,699,400	\$ 100,338,300	\$ 45,687,200	\$ 103,845,900	\$ 3,507,600	3.5%	\$ 104,523,100

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

C Centralized Services by Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Planning Services							
Asset Management	\$ 3,154,600	\$ 1,174,700	\$ 4,590,900	\$ 4,910,100	\$ 5,045,800	\$ 4,902,300	\$ 5,255,500
Capital Improvement Planning	3,559,600	4,235,000	1,267,200	1,389,500	885,500	890,600	895,800
Chief Planning Officer	382,000	141,500	297,500	299,300	301,600	303,600	305,800
Systems Analytics	6,017,800	1,924,400	5,939,600	5,968,900	6,481,500	6,543,000	6,604,700
Systems Planning	2,799,400	776,700	2,870,100	3,723,300	3,134,500	2,590,100	2,093,900
Total Planning Services	15,913,400	8,252,300	14,965,300	16,291,100	15,848,900	15,229,600	15,155,700
Systems Operations Control	11,958,700	5,175,000	12,308,400	12,320,400	12,332,100	12,343,900	12,218,600
Facility Operations	5,963,400	3,454,500	7,249,500	7,310,300	7,369,800	7,430,400	7,491,800
Fleet Operations	2,333,900	648,000	2,295,800	2,297,600	2,299,400	2,301,100	2,302,800
Field Service Operations	18,085,600	9,828,500	17,709,700	17,732,400	17,774,200	17,806,600	17,838,800
Energy, Research & Innovation	2,785,500	1,066,200	2,995,800	3,413,000	3,306,200	3,202,400	3,507,700
Information Technology							
Info Tech Enterprise Asset Mgmt Systems	9,090,900	2,414,800	8,320,600	7,755,800	8,189,600	8,325,900	8,464,800
Info Tech Business Productivity Systems	2,570,600	1,307,900	4,722,700	4,793,200	4,864,900	4,937,900	5,012,200
Info Technology Infrastructure	17,127,200	8,206,700	18,195,400	18,585,400	19,053,300	19,411,600	19,822,300
Info Technology Security & Risk	424,800	100,900	468,600	471,800	475,000	478,100	481,300
Info Technology Service Delivery	3,458,600	1,201,800	3,716,100	3,811,700	4,134,300	4,198,200	4,263,000
Info Technology Project Management Office	1,704,200	624,200	1,328,200	1,334,700	1,341,000	1,347,300	1,353,600
Office of the CIO	878,200	412,100	1,183,600	1,199,200	1,215,100	1,231,200	1,247,600
Total Information Technology	35,254,500	14,268,400	37,935,200	37,951,800	39,273,200	39,930,200	40,644,800
Security & Integrity							
HazMat	1,594,200	750,700	1,717,300	1,679,100	1,850,600	1,857,600	1,836,700
Security and Integrity	4,365,200	2,243,600	4,481,300	4,543,400	4,575,300	4,664,500	4,754,500
Total Security & Integrity	5,959,400	2,994,300	6,198,600	6,222,500	6,425,900	6,522,100	6,591,200
Centralized Services Unallocated Reserve	2,083,900	-	2,187,600	984,000	2,216,200	2,221,200	1,921,600
Grand Total	\$ 100,338,300	\$ 45,687,200	\$ 103,845,900	\$ 104,523,100	\$ 106,845,900	\$ 106,987,500	\$ 107,673,000

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

D Administrative Services by Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Board of Directors	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400
Chief Executive Officer	557,100	663,000	282,400	662,600	(400)	-0.1%	669,400
Chief Administrative and Compliance Officer							
Chief Administrative Officer	707,000	1,083,700	337,400	1,174,100	90,400	8.3%	1,186,500
Enterprise Risk Management and Safety	1,040,800	1,410,100	606,400	1,735,800	325,700	23.1%	1,903,400
Enterprise Risk Mgt. Insurance Fund	3,584,500	2,634,100	1,923,000	3,504,000	869,900	33.0%	3,672,000
Total Chief Administrative & Compliance Officer	5,332,300	5,127,900	2,866,800	6,413,900	1,286,000	25.1%	6,761,900
General Counsel	3,641,100	3,011,200	1,350,200	3,203,500	192,300	6.4%	3,377,900
Public Affairs	1,240,800	1,542,800	417,300	1,544,400	1,600	0.1%	1,678,500
Organizational Development							
OD Administration	3,631,200	4,421,200	499,100	654,100	(3,767,100)	-85.2%	658,800
OD Compensation	-	-	76,600	361,200	361,200	0.0%	365,900
OD Organizational Wellness	-	-	215,900	435,600	435,600	0.0%	439,000
OD Performance	-	-	163,000	741,800	741,800	0.0%	752,100
OD Recruiting	-	-	176,800	438,300	438,300	0.0%	442,000
OD Talent Management	-	-	254,700	600,300	600,300	0.0%	604,900
OD Training	-	-	630,500	1,586,100	1,586,100	0.0%	1,600,700
Total Organizational Development	3,631,200	4,421,200	2,016,600	4,817,400	396,200	9.0%	4,863,400
Financial Services							
Chief Financial Officer	769,500	828,900	400,600	1,147,100	318,200	38.4%	1,047,000
Data Analytics & Internal Audit	505,400	667,500	134,800	760,400	92,900	13.9%	766,800
Financial Planning & Analysis	1,330,800	1,295,600	644,300	1,441,400	145,800	11.3%	1,452,600
Financial Reporting & Accounting	3,132,000	3,382,000	1,474,400	3,664,000	282,000	8.3%	3,692,800
Logistics and Materials	2,220,200	1,921,300	926,700	2,633,700	712,400	37.1%	2,583,900
Owners' Representative	515,000	590,300	231,500	618,400	28,100	4.8%	622,100
Procurement Director	2,998,700	3,111,500	1,581,900	3,402,800	291,300	9.4%	3,594,200
Public Finance	908,400	1,014,300	470,800	1,082,500	68,200	6.7%	1,093,500
Reporting and Compliance	476,000	516,900	212,900	533,000	16,100	3.1%	535,300
Transformation	795,700	839,900	304,600	1,110,300	270,400	32.2%	1,272,600
Treasury	769,100	929,500	333,800	853,600	(75,900)	-8.2%	860,800
Total Financial Services	14,420,800	15,097,700	6,716,300	17,247,200	2,149,500	14.2%	17,521,600
Administrative Services Unallocated Reserve	-	252,700	-	544,700	292,000	115.6%	676,400
Grand Total	\$ 28,955,600	\$ 30,290,000	\$ 13,712,600	\$ 34,603,300	\$ 4,313,300	14.2%	\$ 35,727,500

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

D Administrative Services by Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Board of Directors	\$ 173,500	\$ 63,000	\$ 169,600	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100
Chief Executive Officer	663,000	282,400	662,600	669,400	676,200	683,600	690,500
Chief Administrative and Compliance Officer							
Chief Administrative Officer	1,083,700	337,400	1,174,100	1,186,500	1,199,100	1,212,000	1,225,100
Enterprise Risk Management and Safety	1,410,100	606,400	1,735,800	1,903,400	1,928,500	1,953,900	1,979,800
Enterprise Risk Mgt. Insurance Fund	2,634,100	1,923,000	3,504,000	3,672,000	3,745,400	3,820,300	3,896,800
Total Chief Administrative & Compliance Officer	5,127,900	2,866,800	6,413,900	6,761,900	6,873,000	6,986,200	7,101,700
General Counsel	3,011,200	1,350,200	3,203,500	3,377,900	3,427,700	3,478,100	3,529,400
Public Affairs	1,542,800	417,300	1,544,400	1,678,500	1,698,700	1,719,000	1,739,700
Organizational Development							
OD Administration	4,421,200	499,100	654,100	658,800	663,700	668,300	673,100
OD Compensation	-	76,600	361,200	365,900	370,700	375,700	380,600
OD Organizational Wellness	-	215,900	435,600	439,000	442,500	446,100	449,700
OD Performance	-	163,000	741,800	752,100	762,700	773,400	784,200
OD Recruiting	-	176,800	438,300	442,000	445,900	450,000	454,100
OD Talent Management	-	254,700	600,300	604,900	609,500	614,200	618,900
OD Training	-	630,500	1,586,100	1,600,700	1,615,700	1,630,500	1,645,800
Total Organizational Development	4,421,200	2,016,600	4,817,400	4,863,400	4,910,700	4,958,200	5,006,400
Financial Services							
Chief Financial Officer	828,900	400,600	1,147,100	1,047,000	1,051,600	1,056,600	1,061,400
Data Analytics & Internal Audit	667,500	134,800	760,400	766,800	773,400	780,000	786,900
Financial Planning & Analysis	1,295,600	644,300	1,441,400	1,452,600	1,463,500	1,474,600	1,485,800
Financial Reporting & Accounting	3,382,000	1,474,400	3,664,000	3,692,800	3,722,000	3,751,400	3,781,200
Logistics and Materials	1,921,300	926,700	2,633,700	2,583,900	2,609,100	2,635,000	2,661,100
Owners' Representative	590,300	231,500	618,400	622,100	625,800	629,400	633,200
Procurement Director	3,111,500	1,581,900	3,402,800	3,594,200	3,693,200	3,717,400	3,742,000
Public Finance	1,014,300	470,800	1,082,500	1,093,500	1,104,900	1,116,600	1,128,100
Reporting and Compliance	516,900	212,900	533,000	535,300	537,600	539,900	542,200
Transformation	839,900	304,600	1,110,300	1,272,600	1,338,600	1,340,100	1,341,800
Treasury	929,500	333,800	853,600	860,800	867,800	875,100	882,300
Total Financial Services	15,097,700	6,716,300	17,247,200	17,521,600	17,787,500	17,916,100	18,046,000
Administrative Services Unallocated Reserve	252,700	-	544,700	676,400	734,500	561,400	824,800
Grand Total	\$ 30,290,000	\$ 13,712,600	\$ 34,603,300	\$ 35,727,500	\$ 36,287,400	\$ 36,482,100	\$ 37,118,600

Following this introduction section, there 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. Each department section 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 6. 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 (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 3A

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.

The Water Operations Area presently leads several 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 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 recently received the 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 five years, 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. In the chart below are 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	Job Order Contract - Construction, Environmental, Special Testing, Inspection & Technical Services	Total
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	Professional Service Industries Inc	
Contract #	1803705	1803685	SCO-1134	1803508	GLWA-CON-170	1900995	GLWA-CS-166	2001082	GLWA-CS-201	
Contract Amount	\$6,931,619	\$3,317,750	\$14,000,000	\$1,795,500	\$15,298,560	\$9,702,373	\$11,300,000	\$1,587,500	\$1,626,350	
Contract End Date	11/08/24	07/01/22	07/11/21	03/31/22	03/31/21	TBD	01/08/21	01/01/23	07/05/21	
Cost Center Name	Various	Various	Various	Various	Various	Various	Various	Various	Various	
Expense Category	Contractual Services	Chemicals	Contractual Services	Chemicals	Contractual Services	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2020 Spend	\$ -	\$ 3,981,917	\$ 312,362	\$ 811,118	\$ 10,634,418	\$ 1,643,892	\$ 673,213	\$ 484,601	\$ -	\$ 18,541,521
FY 2020 Spend	462,303	2,538,847	-	637,602	4,701,430	1,288,286	437,902	136,596	89,810	10,292,776
FY 2021 Budget	1,100,000	1,950,000	250,000	382,400	8,082,600	1,276,000	100,000	187,000	84,700	13,412,700
FY 2022 Requested	1,175,000	2,605,000	250,000	488,000	8,141,800	1,199,000	360,000	239,000	84,700	14,542,500
FY 2023 Requested	1,175,000	2,605,000	250,000	488,000	8,141,800	1,199,000	360,000	239,000	84,700	14,542,500
FY 2024 Requested	1,175,000	2,605,000	250,000	488,000	8,141,800	1,199,000	360,000	239,000	84,700	14,542,500
FY 2025 Requested	1,175,000	2,605,000	250,000	488,000	8,141,800	1,199,000	360,000	239,000	84,700	14,542,500
FY 2026 Requested	1,175,000	2,605,000	250,000	488,000	8,141,800	1,199,000	360,000	239,000	84,700	14,542,500
Total	\$ 7,437,303	\$ 21,495,764	\$ 1,812,362	\$ 4,271,120	\$ 64,127,448	\$ 10,203,178	\$ 3,011,115	\$ 2,003,197	\$ 598,010	\$ 114,959,496

Organization

The Water Operations Area consists of five 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

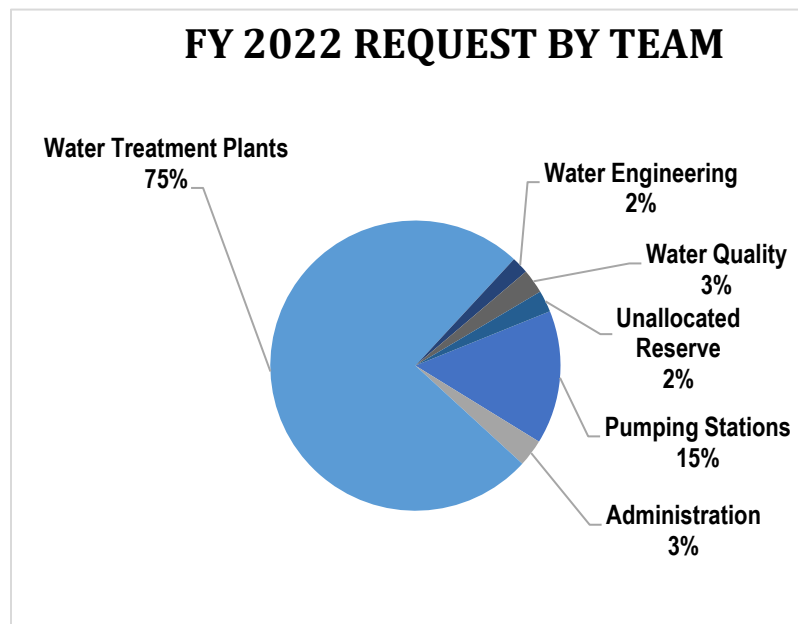
❖ Water Quality

❖ Water Treatment Plants

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

❖ Pumping Stations (water only)

- Nineteen (19) water booster pump stations and one decommissioned pump station (Roseville Pump Station) throughout the regional service area

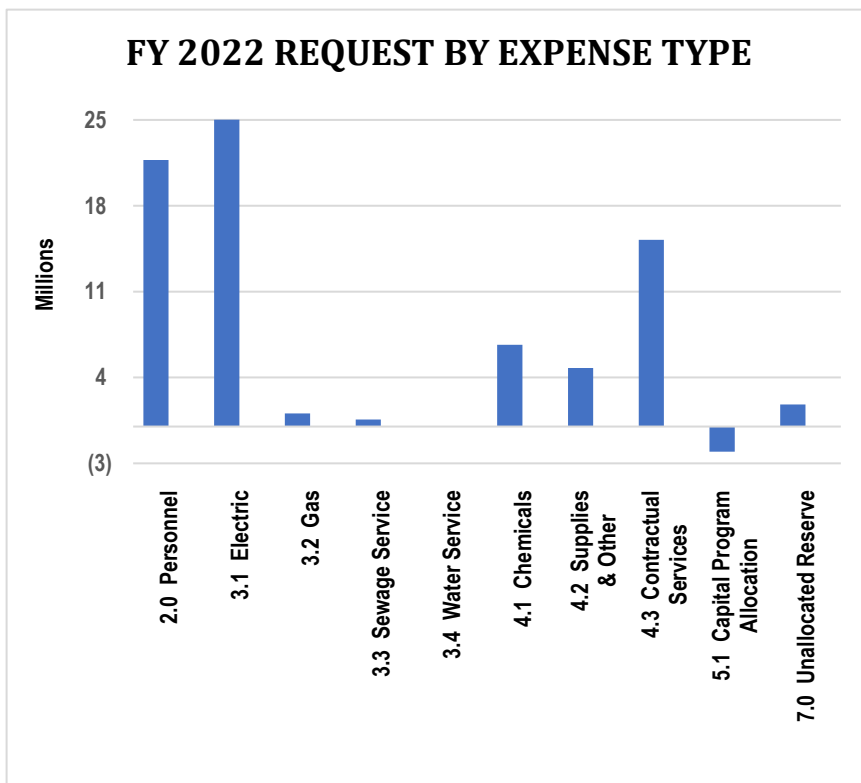


Expense Categories

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

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

The electric utilities are the 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.



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 second highest expense category.

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 2022 of \$3.99 million, or 5.6%. Key factors that impact FY 2022 include the following.

- ❖ Chemical prices have increased since the last contract renewal. The water treatment quality has been based on a three-year rolling average. Updated assumptions for usage and pricing are based on the most recent information for all chemicals (\$1.6 million).
- ❖ Contractual operating services (total increase \$1 million)
 - Rotork Actuators preventative maintenance contract for the 5 water treatment plants. (\$700,000)
 - Fire Alarms, Sprinklers, Fire Suppression Systems preventative maintenance contract. This contract was realigned to be budgeted under the individual locations' budgets (previously budgeted under Risk Management). (\$160,000)
 - Alum sludge removal, hauling and disposal project contract renewal for Water Works Park & Southwest WTP increased. (\$140,000)
- ❖ Personnel expenses increased due to the adjustment of benefits to reflect the current rate increases (\$963,200). It should be noted that the provision for wage and benefit adjustments is included in the annual unallocated O&M reserve.
- ❖ Energy consumption fluctuates from year to year and is dependent on flow rate, total pressure, climate, and overall pump efficiency (\$603,200).

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 20,747,300	\$ 20,765,100	\$ 10,950,000	\$ 21,728,300	\$ 963,200	4.6%	\$ 21,836,900
3.1 Electric	26,112,000	24,417,800	14,133,300	25,021,000	603,200	2.5%	25,021,000
3.2 Gas	1,014,700	1,082,000	318,400	1,066,600	(15,400)	-1.4%	1,066,600
3.3 Sewage Service	542,500	649,000	106,800	577,700	(71,300)	-11.0%	577,700
3.4 Water Service	1,200	5,000	200	4,500	(500)	-10.0%	4,500
4.1 Chemicals	5,569,400	5,053,900	3,207,700	6,662,600	1,608,700	31.8%	6,662,600
4.2 Supplies & Other	4,509,600	5,168,800	1,866,400	4,779,100	(389,700)	-7.5%	4,784,100
4.3 Contractual Services	12,365,700	14,191,000	6,609,300	15,222,300	1,031,300	7.3%	15,227,300
5.1 Capital Program Allocation	(2,030,200)	(1,805,200)	(972,500)	(2,047,800)	(242,600)	13.4%	(2,057,000)
5.2 Shared Services	57,600	-	-	-	-	0.0%	-
7.0 Unallocated Reserve	-	1,292,400	-	1,798,400	506,000	39.2%	4,247,000
Grand Total	\$ 68,889,800	\$ 70,819,800	\$ 36,219,600	\$ 74,812,700	\$ 3,992,900	5.6%	\$ 77,370,700

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Administration	\$ 1,842,700	\$ 2,187,100	\$ 974,900	\$ 2,329,400	\$ 142,300	6.5%	\$ 2,338,400
Water Treatment Plants	52,324,700	53,319,900	27,471,800	56,313,200	2,993,300	5.6%	56,393,900
Water Engineering	1,460,000	1,360,900	671,800	1,501,700	140,800	10.3%	1,505,900
Water Quality	2,107,800	1,944,700	1,120,300	2,033,900	89,200	4.6%	2,049,400
Water System Operations							
Unallocated	-	1,292,400	-	1,798,400	506,000	39.2%	4,247,000
Pumping Stations	11,154,600	10,714,800	5,980,800	10,836,100	121,300	1.1%	10,836,100
Grand Total	\$ 68,889,800	\$ 70,819,800	\$ 36,219,600	\$ 74,812,700	\$ 3,992,900	5.6%	\$ 77,370,700

Personnel Budget

Water system operations personnel consists of 235 positions and is largely comprised of staffing at the five water treatment plants at 170 positions for FY 2022. Water Quality, at 26 positions, and Water Engineering, at 23 positions, are the second and third largest categories for FY 2022, respectively. The staffing plan decrease from FY 2020 to FY 2021 of one position for Water Engineering is a result of transferring the Power Quality Manager position to Energy, Research & Innovation (Centralized Services cost center 882501). Recruiting and developing talent is a high priority for GLWA. For this reason, seven 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 four 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Water System Operations	224.00	227.00	235.00	235.00	235.00	235.00	235.00
Chief Operating Officer - Water Operations & Field Services	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Water Director	9.00	11.00	13.00	13.00	13.00	13.00	13.00
Water Engineering	24.00	23.00	23.00	23.00	23.00	23.00	23.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Subtotal Water Treatment Plants	163.00	164.00	170.00	170.00	170.00	170.00	170.00
Water Works Park	37.00	35.00	36.00	36.00	36.00	36.00	36.00
Springwells Water Plant	36.00	36.00	37.00	37.00	37.00	37.00	37.00
Northeast Water Plant	30.00	32.00	33.00	33.00	33.00	33.00	33.00
Southwest Water Plant	30.00	30.00	33.00	33.00	33.00	33.00	33.00
Lake Huron Water Plant	30.00	31.00	31.00	31.00	31.00	31.00	31.00

*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. For this budget area, the Staffing Plan and the FTEs are consistent.

*Full-time Equivalent*s

Team	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Water System Operations	224.00	226.75	234.75	234.75	234.75	234.75	234.75
Chief Operating Officer - Water Operations & Field Services	2.00	2.75	2.75	2.75	2.75	2.75	2.75
Water Director	9.00	11.00	13.00	13.00	13.00	13.00	13.00
Water Engineering	24.00	23.00	23.00	23.00	23.00	23.00	23.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Subtotal Water Treatment Plants	163.00	164.00	170.00	170.00	170.00	170.00	170.00
Water Works Park	37.00	35.00	36.00	36.00	36.00	36.00	36.00
Springwells Water Plant	36.00	36.00	37.00	37.00	37.00	37.00	37.00
Northeast Water Plant	30.00	32.00	33.00	33.00	33.00	33.00	33.00
Southwest Water Plant	30.00	30.00	33.00	33.00	33.00	33.00	33.00
Lake Huron Water Plant	30.00	31.00	31.00	31.00	31.00	31.00	31.00

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Administration	\$ 1,527,600	\$ 1,721,600	\$ 808,600	\$ 1,946,200	\$ 224,600	13.0%	\$ 1,955,200
Water Treatment Plants	14,732,700	14,706,800	7,806,600	15,179,500	472,700	3.2%	15,255,700
Water Engineering	2,679,200	2,645,800	1,355,200	2,805,000	159,200	6.0%	2,817,900
Water Quality	1,807,800	1,690,900	979,600	1,797,600	106,700	6.3%	1,808,100
Grand Total	\$ 20,747,300	\$ 20,765,100	\$ 10,950,000	\$ 21,728,300	\$ 963,200	4.6%	\$ 21,836,900

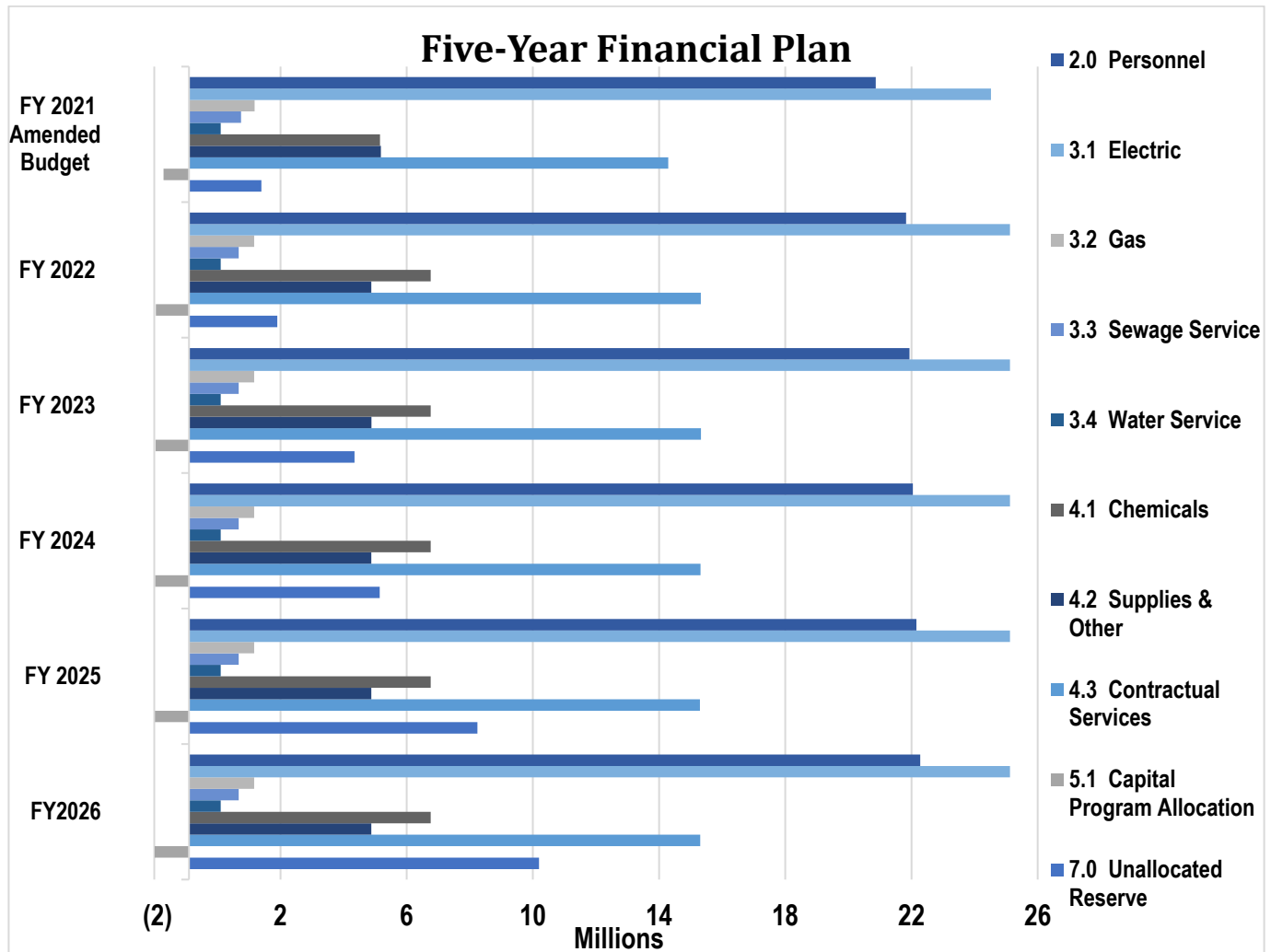
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water System Operations	\$ 20,765,100	\$ 21,728,300	\$ 21,836,900	\$ 21,945,800	\$ 22,054,500	\$ 22,163,300
Chief Operating Officer - Water Operations & Field Services	414,400	420,000	421,900	423,800	425,700	427,500
Water Director	1,307,200	1,526,200	1,533,300	1,540,500	1,547,600	1,554,800
Water Engineering	2,645,800	2,805,000	2,817,900	2,830,700	2,843,600	2,856,500
Water Quality	1,690,900	1,797,600	1,808,100	1,818,600	1,829,100	1,839,600
Subtotal Water Treatment Plants	14,706,800	15,179,500	15,255,700	15,332,200	15,408,500	15,484,900
Water Works Park	3,245,800	3,341,500	3,357,800	3,374,200	3,390,600	3,407,000
Springwells Water Plant	3,137,000	3,249,200	3,265,700	3,282,300	3,298,800	3,315,300
Northeast Water Plant	2,848,600	2,852,300	2,867,100	2,881,800	2,896,600	2,911,300
Southwest Water Plant	2,766,200	3,028,200	3,043,100	3,058,100	3,073,000	3,088,000
Lake Huron Water Plant	2,709,200	2,708,300	2,722,000	2,735,800	2,749,500	2,763,300

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 20,765,100	\$ 10,950,000	\$ 21,728,300	\$ 963,200	4.6%	\$ 21,836,900	\$ 21,945,900	\$ 22,054,600	\$ 22,179,200
3.1 Electric	24,417,800	14,133,300	25,021,000	603,200	2.5%	25,021,000	25,021,000	25,021,000	25,021,000
3.2 Gas	1,082,000	318,400	1,066,600	(15,400)	-1.4%	1,066,600	1,066,600	1,066,600	1,066,600
3.3 Sewage Service	649,000	106,800	577,700	(71,300)	-11.0%	577,700	577,700	577,700	577,700
3.4 Water Service	5,000	200	4,500	(500)	-10.0%	4,500	4,500	4,500	4,500
4.1 Chemicals	5,053,900	3,207,700	6,662,600	1,608,700	31.8%	6,662,600	6,662,600	6,662,600	6,662,600
4.2 Supplies & Other	5,168,800	1,866,400	4,779,100	(389,700)	-7.5%	4,784,100	4,779,100	4,779,100	4,779,100
4.3 Contractual Services	14,191,000	6,609,300	15,222,300	1,031,300	7.3%	15,227,300	15,213,800	15,196,800	15,201,800
5.1 Capital Program Allocation	(1,805,200)	(972,500)	(2,047,800)	(242,600)	13.4%	(2,057,000)	(2,066,400)	(2,075,700)	(2,085,000)
7.0 Unallocated Reserve	1,292,400	-	1,798,400	506,000	39.2%	4,247,000	5,043,900	8,141,300	10,092,600
Grand Total	\$ 70,819,800	36,219,600	\$ 74,812,700	\$ 3,992,900	5.6%	\$ 77,370,700	\$ 78,248,700	\$ 81,428,500	\$ 83,500,100

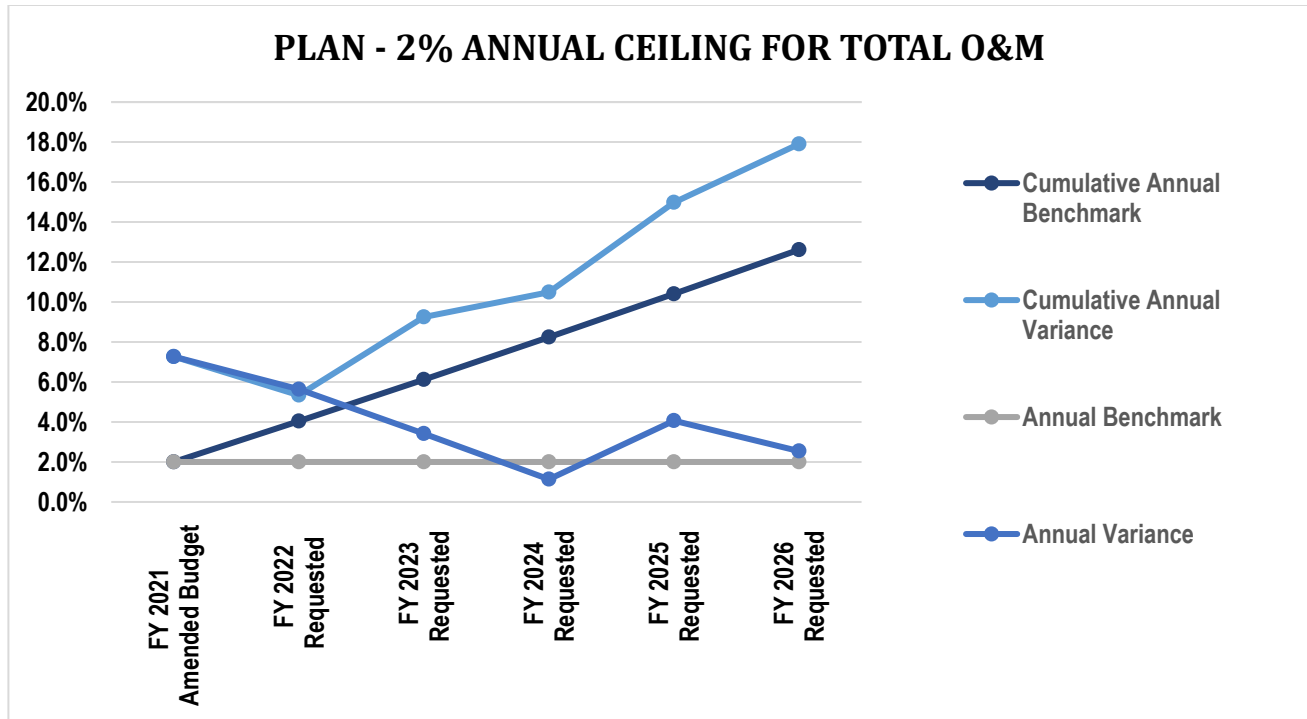


Five-Year Financial Plan by Team

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Administration	\$ 2,187,100	\$ 974,900	\$ 2,329,400	\$ 142,300	6.5%	\$ 2,338,400	\$ 2,347,400	\$ 2,356,400	\$ 2,365,400
Water Treatment Plants	53,319,900	27,471,800	56,313,200	2,993,300	5.6%	56,393,900	56,444,400	56,520,200	56,611,900
Water Engineering	1,360,900	671,800	1,501,700	140,800	10.3%	1,505,900	1,505,000	1,509,100	1,513,200
Water Quality	1,944,700	1,120,300	2,033,900	89,200	4.6%	2,049,400	2,071,900	2,065,400	2,080,900
Water System Operations									
Unallocated	1,292,400	-	1,798,400	506,000	39.2%	4,247,000	5,043,900	8,141,300	10,092,600
Pumping Stations	10,714,800	5,980,800	10,836,100	121,300	1.1%	10,836,100	10,836,100	10,836,100	10,836,100
Grand Total	\$ 70,819,800	\$ 36,219,600	\$ 74,812,700	\$ 3,992,900	5.6%	\$ 77,370,700	\$ 78,248,700	\$ 81,428,500	\$ 83,500,100

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 17.9% which is above the entity-wide goal of a cumulative ceiling of no more than 12.6% for planning purposes (based upon an annual 2% adjustment). The largest yearly increase is for FY 2022 which has a 5.6% increase over FY 2021. Items causing this large 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 2022, the Heavy Equipment asset category request of \$500,000 is driven by the need to replace several heavy duty outdoor high and low lifts due to the condition of the current equipment.

Asset Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 3,796,600	\$ 2,758,600	\$ 2,113,300	\$ 2,614,500	\$ 1,852,500	\$ 1,552,000
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	3,764,100	2,691,100	2,100,800	2,547,000	1,682,000	1,484,500
Controls & Communication	1,505,000	25,000	139,000	35,000	52,000	120,000
Furniture & Fixtures	6,000	-	-	-	-	45,000
Heavy Equipment	-	500,000	150,000	105,000	57,000	30,000
Laboratory	254,000	328,000	330,700	280,000	254,000	199,500
Pipes, Gates & Valves	375,000	253,500	137,000	263,000	158,000	210,000
Process Equipment	400,000	452,000	449,000	377,000	305,000	445,000
Pumps & Motors	1,204,100	1,132,600	875,100	1,467,000	846,000	415,000
Tools, Shop & Warehouse	20,000	-	20,000	20,000	10,000	20,000
Vehicles	27,000	62,000	7,000	62,000	7,000	62,000
Trailer & Towable Equipment	20,000	40,000	-	40,000	-	40,000
Utility Vehicle	7,000	22,000	7,000	22,000	7,000	22,000
Grand Total	\$ 3,796,600	\$ 2,758,600	\$ 2,113,300	\$ 2,614,500	\$ 1,852,500	\$ 1,552,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 3,796,600	\$ 2,758,600	\$ 2,113,300	\$ 2,614,500	\$ 1,852,500	\$ 1,552,000
Grand Total	\$ 3,796,600	\$ 2,758,600	\$ 2,113,300	\$ 2,614,500	\$ 1,852,500	\$ 1,552,000

Five-Year Capital Outlay Plan by Team

In FY 2022, the Northeast Water Plant request of \$1,175,000 is driven by the critical need to replace current equipment such as heavy duty outdoor high and low lifts, turbidimeters, chlorinators, valves, and pumps.

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water Engineering	\$ 11,500	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500
Water Quality	32,000	20,000	51,000	18,000	30,000	17,500
Water Treatment Plants	3,753,100	2,733,100	2,056,800	2,591,000	1,817,000	1,529,000
Water Works Park	586,100	308,100	373,800	354,000	354,000	633,000
Springwells Water Plant	969,000	510,000	351,000	901,000	350,000	359,000
Northeast Water Plant	920,000	1,175,000	958,000	463,000	628,000	110,000
Southwest Water Plant	615,000	250,000	169,000	265,000	280,000	250,000
Lake Huron Water Plant	663,000	490,000	205,000	608,000	205,000	177,000
Grand Total	\$ 3,796,600	\$ 2,758,600	\$ 2,113,300	\$ 2,614,500	\$ 1,852,500	\$ 1,552,000

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 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882001 - COO - Water Operations & Field Services	\$ 454,600	\$ 462,900	\$ 257,900	\$ 494,000	\$ 495,900	\$ 497,700	\$ 499,600	\$ 501,500
2.1 Salaries & Wages	328,900	329,300	165,700	326,400	326,400	326,400	326,400	326,400
2.4 Employee Benefits	81,700	85,100	39,100	93,600	95,500	97,300	99,200	101,100
4.2 Supplies & Other	44,000	38,500	53,100	69,000	69,000	69,000	69,000	69,000
Memberships, Licenses & Subscriptions	26,200	25,600	52,400	53,500	53,500	53,500	53,500	53,500
Office Supplies	200	500	100	500	500	500	500	500
Training and Internal Meetings	10,100	2,400	600	5,000	5,000	5,000	5,000	5,000
Travel	7,500	10,000	-	10,000	10,000	10,000	10,000	10,000
4.3 Contractual Services	-	10,000	-	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	-	10,000	-	5,000	5,000	5,000	5,000	5,000
882101 - Water Director	1,388,100	1,724,200	717,000	1,835,400	1,842,500	1,849,700	1,856,800	1,863,900
2.1 Salaries & Wages	867,000	982,100	455,800	1,128,900	1,128,900	1,128,900	1,128,900	1,128,900
2.3 Overtime	29,900	40,000	18,100	40,000	40,000	40,000	40,000	40,000
2.4 Employee Benefits	220,100	285,100	129,900	357,300	364,400	371,600	378,700	385,800
4.2 Supplies & Other	268,900	402,000	113,200	303,200	303,200	303,200	303,200	303,200
Employee Uniform Expense	106,600	85,000	47,800	85,000	85,000	85,000	85,000	85,000
Inspection and Permit Fees	-	5,500	600	-	-	-	-	-
Memberships, Licenses & Subscriptions	900	2,300	500	1,000	1,000	1,000	1,000	1,000
Mileage and Parking	14,400	5,000	5,200	5,000	5,000	5,000	5,000	5,000
Office Supplies	13,800	7,200	23,600	7,200	7,200	7,200	7,200	7,200
Operating Supplies	700	-	-	-	-	-	-	-
Training and Internal Meetings	105,700	246,000	35,400	175,000	175,000	175,000	175,000	175,000
Travel	26,800	50,000	100	30,000	30,000	30,000	30,000	30,000
Tuition Refund	-	1,000	-	-	-	-	-	-
4.3 Contractual Services	2,200	15,000	-	6,000	6,000	6,000	6,000	6,000
Contractual Professional Services	2,200	15,000	-	6,000	6,000	6,000	6,000	6,000
882111 - Water Engineering	1,460,000	1,360,900	671,800	1,501,700	1,505,900	1,505,000	1,509,100	1,513,200
2.1 Salaries & Wages	2,005,300	1,963,500	989,000	2,041,300	2,041,300	2,041,300	2,041,300	2,041,300
2.3 Overtime	134,200	100,000	79,300	120,000	120,000	120,000	120,000	120,000
2.4 Employee Benefits	539,700	582,300	286,900	643,700	656,600	669,500	682,400	695,200
4.2 Supplies & Other	151,200	92,800	21,600	79,300	79,300	74,300	74,300	74,300
Capital Outlay less than \$5,000	80,600	5,000	-	5,000	5,000	-	-	-
Employee Uniform Expense	5,600	12,000	3,200	10,000	10,000	10,000	10,000	10,000
Memberships, Licenses & Subscriptions	1,900	9,700	3,600	6,700	6,700	6,700	6,700	6,700
Mileage and Parking	21,000	18,000	8,500	18,000	18,000	18,000	18,000	18,000
Office Supplies	7,900	13,000	500	13,000	13,000	13,000	13,000	13,000
Operating Supplies	3,300	3,500	-	3,500	3,500	3,500	3,500	3,500
Postage	-	100	-	100	100	100	100	100
Rentals-Miscellaneous	3,000	-	-	-	-	-	-	-
Supplies & Other - Covid19	200	-	-	-	-	-	-	-
Training and Internal Meetings	9,600	18,500	5,800	10,000	10,000	10,000	10,000	10,000
Travel	12,100	10,000	-	10,000	10,000	10,000	10,000	10,000
Tuition Refund	6,000	3,000	-	3,000	3,000	3,000	3,000	3,000
4.3 Contractual Services	549,600	290,000	241,400	550,000	550,000	550,000	550,000	550,000
Contractual Professional Services	549,600	290,000	241,400	550,000	550,000	550,000	550,000	550,000
5.1 Capital Program Allocation	(1,920,000)	(1,667,700)	(946,400)	(1,932,600)	(1,941,300)	(1,950,100)	(1,958,900)	(1,967,600)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882121 - Water Quality	2,107,800	1,944,700	1,120,300	2,033,900	2,049,400	2,071,900	2,065,400	2,080,900
2.1 Salaries & Wages	1,123,100	1,186,800	612,000	1,221,100	1,221,100	1,221,100	1,221,100	1,221,100
2.3 Overtime	129,200	50,800	49,900	50,800	50,800	50,800	50,800	50,800
2.4 Employee Benefits	555,500	453,300	317,700	525,700	536,200	546,700	557,200	567,700
4.1 Chemicals	89,200	60,000	60,900	103,500	103,500	103,500	103,500	103,500
4.2 Supplies & Other	91,400	114,300	41,500	80,300	80,300	80,300	80,300	80,300
Capital Outlay less than \$5,000	12,700	15,000	5,000	-	-	-	-	-
Memberships, Licenses & Subscriptions	300	500	100	500	500	500	500	500
Mileage and Parking	-	200	-	200	200	200	200	200
Office Supplies	14,100	10,000	19,400	10,000	10,000	10,000	10,000	10,000
Operating Supplies	64,300	86,600	17,000	67,600	67,600	67,600	67,600	67,600
Printing	-	2,000	-	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	61,800	79,500	38,300	52,500	57,500	69,500	52,500	57,500
Contractual Operating Services	61,800	79,000	38,300	52,000	57,000	69,000	52,000	57,000
Contractual Professional Services	-	500	-	500	500	500	500	500
5.2 Shared Services	57,600	-	-	-	-	-	-	-
Shared Services : Salaries & Wages Reimb	11,900	-	-	-	-	-	-	-
Shared Services Reimbursement	40,900	-	-	-	-	-	-	-
Shared Services: Employee Benefit Reimb	4,800	-	-	-	-	-	-	-
882131 - Water Works Park	8,792,800	8,729,500	4,342,100	9,149,000	9,165,400	9,166,500	9,182,900	9,215,200
2.1 Salaries & Wages	1,793,500	1,888,200	950,600	1,974,600	1,974,600	1,974,600	1,974,600	1,974,600
2.2 Workforce Development	109,500	94,500	19,500	36,500	36,500	36,500	36,500	36,500
2.3 Overtime	486,400	500,000	244,300	511,100	511,100	511,100	511,100	525,800
2.4 Employee Benefits	804,400	763,100	430,900	819,200	835,600	852,000	868,400	886,000
3.1 Electric	2,114,600	2,000,000	996,500	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000
3.2 Gas	223,400	250,000	72,600	240,000	240,000	240,000	240,000	240,000
3.3 Sewage Service	25,700	95,000	12,100	25,000	25,000	25,000	25,000	25,000
4.1 Chemicals	1,170,600	936,900	583,400	1,165,700	1,165,700	1,165,700	1,165,700	1,165,700
4.2 Supplies & Other	639,000	822,000	146,200	655,000	655,000	655,000	655,000	655,000
Capital Outlay less than \$5,000	43,000	50,000	10,600	30,000	30,000	30,000	30,000	30,000
Inspection and Permit Fees	700	2,500	1,900	1,500	1,500	1,500	1,500	1,500
Memberships, Licenses & Subscriptions	700	1,000	500	1,000	1,000	1,000	1,000	1,000
Mileage and Parking	-	1,000	-	-	-	-	-	-
Office Supplies	14,200	9,000	14,100	10,000	10,000	10,000	10,000	10,000
Operating Supplies	131,600	129,500	37,000	129,500	129,500	129,500	129,500	129,500
Operating Supplies-Janitorial	10,900	15,000	4,800	15,000	15,000	15,000	15,000	15,000
Rentals- Office Equipment	-	-	2,300	-	-	-	-	-
Repairs & Maintenance-Equipment	435,200	613,500	74,100	468,000	468,000	468,000	468,000	468,000
Supplies & Other - Covid19	2,700	-	900	-	-	-	-	-
Tuition Refund	-	500	-	-	-	-	-	-
4.3 Contractual Services	1,425,700	1,379,800	886,000	1,671,900	1,671,900	1,656,600	1,656,600	1,656,600
Contract Services-Information Technology	202,500	191,000	50,800	316,000	316,000	301,000	301,000	301,000
Contractual Buildings & Grounds Maint	519,300	576,000	149,500	585,100	585,100	584,800	584,800	584,800
Contractual Operating Services	481,800	315,800	428,900	468,800	468,800	468,800	468,800	468,800
Contractual Professional Services	212,700	295,000	256,800	295,000	295,000	295,000	295,000	295,000
Telecom, Managed Security & Network Svcs	9,400	2,000	-	7,000	7,000	7,000	7,000	7,000

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882141 - Springwells Water Plant	12,537,000	13,327,300	9,317,400	13,715,100	13,731,600	13,744,900	13,761,400	13,777,900
2.1 Salaries & Wages	1,913,600	1,855,600	996,600	1,891,200	1,891,200	1,891,200	1,891,200	1,891,200
2.2 Workforce Development	108,300	128,300	58,200	143,400	143,400	143,400	143,400	143,400
2.3 Overtime	491,600	400,000	251,800	388,900	388,900	388,900	388,900	388,900
2.4 Employee Benefits	824,700	753,100	456,400	825,700	842,200	858,800	875,300	891,800
3.1 Electric	2,935,100	3,100,000	1,987,800	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
3.2 Gas	263,800	280,200	79,100	280,300	280,300	280,300	280,300	280,300
4.1 Chemicals	1,322,700	1,600,000	1,052,600	1,981,000	1,981,000	1,981,000	1,981,000	1,981,000
4.2 Supplies & Other	430,500	612,400	216,100	478,400	478,400	478,400	478,400	478,400
Capital Outlay less than \$5,000	15,700	10,400	9,700	20,000	20,000	20,000	20,000	20,000
Inspection and Permit Fees	200	4,100	300	1,500	1,500	1,500	1,500	1,500
Memberships, Licenses & Subscriptions	500	500	200	500	500	500	500	500
Mileage and Parking	1,000	1,000	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	14,600	11,200	8,700	11,200	11,200	11,200	11,200	11,200
Operating Supplies	150,200	124,100	18,800	156,100	156,100	156,100	156,100	156,100
Operating Supplies-Janitorial	13,800	10,000	4,200	10,000	10,000	10,000	10,000	10,000
Repairs & Maintenance-Equipment	232,800	449,100	174,000	276,100	276,100	276,100	276,100	276,100
Supplies & Other - Covid19	200	-	-	-	-	-	-	-
Tuition Refund	1,500	2,000	200	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	4,246,700	4,597,700	4,218,800	4,726,200	4,726,200	4,722,900	4,722,900	4,722,900
Contract Services-Information Technology	46,100	95,000	67,600	120,000	120,000	117,000	117,000	117,000
Contractual Buildings & Grounds Maint	890,400	365,000	162,500	411,100	411,100	410,800	410,800	410,800
Contractual Operating Services	3,202,600	3,861,300	3,795,500	3,944,500	3,944,500	3,944,500	3,944,500	3,944,500
Contractual Professional Services	107,600	276,400	193,200	250,600	250,600	250,600	250,600	250,600
882151 - Northeast Water Plant	9,302,700	9,824,300	4,506,500	10,873,700	10,888,300	10,900,600	10,915,300	10,929,900
2.1 Salaries & Wages	1,621,300	1,885,900	880,600	1,794,000	1,794,000	1,794,000	1,794,000	1,794,000
2.2 Workforce Development	47,900	33,800	23,700	70,300	70,300	70,300	70,300	70,300
2.3 Overtime	398,400	250,000	278,900	250,000	250,000	250,000	250,000	250,000
2.4 Employee Benefits	671,900	678,900	393,900	738,000	752,700	767,500	782,300	797,000
3.1 Electric	3,069,400	2,800,000	1,658,500	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
3.2 Gas	161,400	153,100	45,600	153,100	153,100	153,100	153,100	153,100
3.3 Sewage Service	127,000	130,000	65,200	130,000	130,000	130,000	130,000	130,000
3.4 Water Service	-	2,000	-	2,000	2,000	2,000	2,000	2,000
4.1 Chemicals	1,136,300	1,000,000	589,800	1,518,500	1,518,500	1,518,500	1,518,500	1,518,500
4.2 Supplies & Other	552,200	365,000	157,000	364,100	364,100	364,100	364,100	364,100
Capital Outlay less than \$5,000	34,800	10,000	18,300	10,000	10,000	10,000	10,000	10,000
Inspection and Permit Fees	7,500	4,200	300	3,200	3,200	3,200	3,200	3,200
Memberships, Licenses & Subscriptions	1,400	1,500	300	1,500	1,500	1,500	1,500	1,500
Mileage and Parking	100	1,000	-	500	500	500	500	500
Office Supplies	8,100	5,200	11,100	5,200	5,200	5,200	5,200	5,200
Operating Supplies	140,300	115,400	67,700	116,000	116,000	116,000	116,000	116,000
Operating Supplies-Janitorial	15,300	12,000	5,400	12,000	12,000	12,000	12,000	12,000
Postage	100	100	-	100	100	100	100	100
Repairs & Maintenance-Equipment	342,800	215,600	51,700	215,600	215,600	215,600	215,600	215,600
Supplies & Other - Covid19	1,800	-	200	-	-	-	-	-
Tuition Refund	-	-	2,000	-	-	-	-	-
4.3 Contractual Services	1,537,700	2,591,200	410,400	3,078,100	3,078,100	3,075,800	3,075,800	3,075,800
Contract Services-Information Technology	5,700	66,600	3,500	86,600	86,600	84,600	84,600	84,600
Contractual Buildings & Grounds Maint	440,500	318,300	125,400	379,400	379,400	379,100	379,100	379,100
Contractual Operating Services	976,300	1,980,300	96,000	2,386,100	2,386,100	2,386,100	2,386,100	2,386,100
Contractual Professional Services	115,200	226,000	185,500	226,000	226,000	226,000	226,000	226,000
5.1 Capital Program Allocation	(20,800)	(65,600)	2,900	(24,400)	(24,500)	(24,700)	(24,800)	(24,900)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882161 - Southwest Water Plant	9,257,200	9,407,500	3,414,700	9,898,700	9,918,200	9,930,500	9,945,000	9,959,500
2.1 Salaries & Wages	1,627,400	1,714,600	815,400	1,757,900	1,757,900	1,757,900	1,757,900	1,757,900
2.2 Workforce Development	26,400	-	28,600	73,100	73,100	73,100	73,100	73,100
2.3 Overtime	518,400	400,000	218,000	450,000	450,000	450,000	450,000	450,000
2.4 Employee Benefits	666,000	651,600	368,300	747,300	762,200	777,200	792,100	807,100
3.1 Electric	1,436,600	1,270,000	799,500	1,270,000	1,270,000	1,270,000	1,270,000	1,270,000
3.2 Gas	154,000	140,000	48,100	140,000	140,000	140,000	140,000	140,000
3.3 Sewage Service	319,200	350,000	-	350,000	350,000	350,000	350,000	350,000
3.4 Water Service	600	500	-	500	500	500	500	500
4.1 Chemicals	648,300	451,700	381,900	693,600	693,600	693,600	693,600	693,600
4.2 Supplies & Other	397,900	731,900	354,900	724,400	729,400	729,400	729,400	729,400
Capital Outlay less than \$5,000	62,000	25,000	17,500	35,000	35,000	35,000	35,000	35,000
Inspection and Permit Fees	700	3,000	1,900	3,000	3,000	3,000	3,000	3,000
Memberships, Licenses & Subscriptions	-	1,500	100	800	800	800	800	800
Mileage and Parking	-	1,000	-	100	100	100	100	100
Office Supplies	12,100	9,000	5,300	9,000	9,000	9,000	9,000	9,000
Operating Supplies	86,400	129,200	23,500	129,300	129,300	129,300	129,300	129,300
Operating Supplies-Janitorial	14,600	10,000	5,100	10,000	10,000	10,000	10,000	10,000
Property Taxes	2,200	260,200	240,800	245,200	250,200	250,200	250,200	250,200
Rentals-Miscellaneous	-	3,000	-	3,000	3,000	3,000	3,000	3,000
Repairs & Maintenance-Equipment	219,900	289,000	57,000	289,000	289,000	289,000	289,000	289,000
Supplies & Other - Covid19	-	-	3,700	-	-	-	-	-
Tuition Refund	-	1,000	-	-	-	-	-	-
4.3 Contractual Services	3,551,800	3,769,100	429,000	3,782,700	3,782,700	3,780,400	3,780,400	3,780,400
Contract Services-Information Technology	12,000	90,000	24,800	107,000	107,000	105,000	105,000	105,000
Contractual Buildings & Grounds Maint	355,800	527,000	128,900	533,100	533,100	532,800	532,800	532,800
Contractual Operating Services	3,066,900	2,905,100	56,600	2,895,600	2,895,600	2,895,600	2,895,600	2,895,600
Contractual Professional Services	117,100	247,000	218,700	247,000	247,000	247,000	247,000	247,000
5.1 Capital Program Allocation	(89,400)	(71,900)	(29,000)	(90,800)	(91,200)	(91,600)	(92,000)	(92,500)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882171 - Lake Huron Water Plant	12,435,000	12,031,300	5,891,100	12,676,700	12,690,400	12,701,900	12,715,600	12,729,400
2.1 Salaries & Wages	1,650,900	1,709,400	853,700	1,670,700	1,670,700	1,670,700	1,670,700	1,670,700
2.3 Overtime	246,700	350,000	130,800	350,000	350,000	350,000	350,000	350,000
2.4 Employee Benefits	725,400	649,800	406,400	687,600	701,300	715,100	728,800	742,600
3.1 Electric	6,466,400	6,100,000	3,278,900	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000
3.2 Gas	145,100	180,000	52,000	180,000	180,000	180,000	180,000	180,000
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	-	1,000	1,000	1,000	1,000	1,000
4.1 Chemicals	1,202,300	1,005,300	539,100	1,200,300	1,200,300	1,200,300	1,200,300	1,200,300
4.2 Supplies & Other	939,700	557,100	217,700	677,200	677,200	677,200	677,200	677,200
Capital Outlay less than \$5,000	31,000	15,000	26,900	15,000	15,000	15,000	15,000	15,000
Inspection and Permit Fees	800	3,000	400	1,000	1,000	1,000	1,000	1,000
Memberships, Licenses & Subscriptions	800	1,500	300	1,000	1,000	1,000	1,000	1,000
Mileage and Parking	2,000	3,000	-	3,000	3,000	3,000	3,000	3,000
Office Supplies	9,400	9,000	11,000	9,000	9,000	9,000	9,000	9,000
Operating Supplies	213,900	202,000	55,300	211,500	211,500	211,500	211,500	211,500
Operating Supplies-Automotive	8,900	9,600	-	-	-	-	-	-
Operating Supplies-Janitorial	7,100	6,500	4,300	6,500	6,500	6,500	6,500	6,500
Postage	-	500	-	200	200	200	200	200
Property Taxes	6,400	8,000	-	8,000	8,000	8,000	8,000	8,000
Repairs & Maintenance-Equipment	659,200	297,000	119,500	422,000	422,000	422,000	422,000	422,000
Supplies & Other - Covid19	200	-	-	-	-	-	-	-
Tuition Refund	-	2,000	-	-	-	-	-	-
4.3 Contractual Services	990,200	1,408,700	384,000	1,339,900	1,339,900	1,337,600	1,337,600	1,337,600
Contract Services-Information Technology	-	65,000	13,100	88,000	88,000	86,000	86,000	86,000
Contractual Buildings & Grounds Maint	140,500	285,000	47,600	311,100	311,100	310,800	310,800	310,800
Contractual Operating Services	701,300	824,700	132,900	706,800	706,800	706,800	706,800	706,800
Contractual Professional Services	148,400	234,000	190,400	234,000	234,000	234,000	234,000	234,000
882321 - Ford Rd Pumping Station	470,700	423,700	279,300	423,700	423,700	423,700	423,700	423,700
3.1 Electric	442,000	400,000	198,600	400,000	400,000	400,000	400,000	400,000
3.2 Gas	3,400	3,700	1,600	3,700	3,700	3,700	3,700	3,700
4.2 Supplies & Other	25,300	20,000	79,100	20,000	20,000	20,000	20,000	20,000
Repairs & Maintenance-Equipment	25,300	20,000	79,100	20,000	20,000	20,000	20,000	20,000
882322 - Eastside Pumping Station	35,100	53,000	22,500	53,500	53,500	53,500	53,500	53,500
3.1 Electric	24,000	30,000	16,100	30,000	30,000	30,000	30,000	30,000
3.2 Gas	4,100	3,000	1,300	3,500	3,500	3,500	3,500	3,500
4.2 Supplies & Other	7,000	20,000	5,100	20,000	20,000	20,000	20,000	20,000
Repairs & Maintenance-Equipment	7,000	20,000	5,100	20,000	20,000	20,000	20,000	20,000
882323 - Northwest Pumping Station	41,300	27,000	20,500	35,700	35,700	35,700	35,700	35,700
3.1 Electric	34,500	10,000	17,500	25,000	25,000	25,000	25,000	25,000
3.3 Sewage Service	200	500	100	200	200	200	200	200
3.4 Water Service	400	500	200	500	500	500	500	500
4.2 Supplies & Other	6,200	16,000	2,700	10,000	10,000	10,000	10,000	10,000
Repairs & Maintenance-Equipment	6,200	16,000	2,700	10,000	10,000	10,000	10,000	10,000

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882324 - West Service Center Pumping Station	756,200	799,300	408,200	798,700	798,700	798,700	798,700	798,700
3.1 Electric	678,700	650,000	387,700	650,000	650,000	650,000	650,000	650,000
3.2 Gas	6,200	8,000	1,200	7,000	7,000	7,000	7,000	7,000
4.2 Supplies & Other	71,300	141,300	19,300	141,700	141,700	141,700	141,700	141,700
Repairs & Maintenance-Equipment	71,300	141,300	19,300	141,700	141,700	141,700	141,700	141,700
882325 - Michigan Ave Pumping Station	119,600	102,000	53,000	105,700	105,700	105,700	105,700	105,700
3.1 Electric	98,900	85,000	48,600	90,000	90,000	90,000	90,000	90,000
3.3 Sewage Service	100	1,000	-	200	200	200	200	200
3.4 Water Service	200	1,000	-	500	500	500	500	500
4.2 Supplies & Other	20,400	15,000	4,400	15,000	15,000	15,000	15,000	15,000
Repairs & Maintenance-Equipment	20,400	15,000	4,400	15,000	15,000	15,000	15,000	15,000
882326 - West Chicago Rd Pumping Station	35,100	36,000	10,200	37,000	37,000	37,000	37,000	37,000
3.1 Electric	24,700	30,000	9,700	30,000	30,000	30,000	30,000	30,000
4.2 Supplies & Other	10,400	6,000	500	7,000	7,000	7,000	7,000	7,000
Repairs & Maintenance-Equipment	10,400	6,000	500	7,000	7,000	7,000	7,000	7,000
882327 - Electric Ave Pumping Station	28,600	19,500	8,100	21,500	21,500	21,500	21,500	21,500
3.1 Electric	17,000	16,000	6,900	16,000	16,000	16,000	16,000	16,000
4.2 Supplies & Other	11,600	3,500	1,200	5,500	5,500	5,500	5,500	5,500
Repairs & Maintenance-Equipment	11,600	3,500	1,200	5,500	5,500	5,500	5,500	5,500
882328 - Orion Township Pumping Station	78,100	74,500	42,000	73,500	73,500	73,500	73,500	73,500
3.1 Electric	77,800	70,000	38,700	70,000	70,000	70,000	70,000	70,000
3.2 Gas	200	2,000	100	1,000	1,000	1,000	1,000	1,000
4.2 Supplies & Other	100	2,500	3,200	2,500	2,500	2,500	2,500	2,500
Repairs & Maintenance-Equipment	100	2,500	3,200	2,500	2,500	2,500	2,500	2,500
882329 - North Service Center Pumping Station	2,372,700	2,416,000	1,206,800	2,461,000	2,461,000	2,461,000	2,461,000	2,461,000
3.1 Electric	2,105,800	1,950,000	1,109,700	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
3.2 Gas	25,600	30,000	5,500	25,000	25,000	25,000	25,000	25,000
4.2 Supplies & Other	241,300	436,000	91,600	436,000	436,000	436,000	436,000	436,000
Repairs & Maintenance-Equipment	241,300	436,000	91,600	436,000	436,000	436,000	436,000	436,000
882330 - Adams Road Pumping Station	655,400	605,000	368,300	605,000	605,000	605,000	605,000	605,000
3.1 Electric	551,600	500,000	355,800	500,000	500,000	500,000	500,000	500,000
4.2 Supplies & Other	103,800	105,000	12,500	105,000	105,000	105,000	105,000	105,000
Repairs & Maintenance-Equipment	103,800	105,000	12,500	105,000	105,000	105,000	105,000	105,000
882331 - Newburgh Pumping Station	358,800	390,000	203,600	380,000	380,000	380,000	380,000	380,000
3.1 Electric	351,200	365,000	194,500	365,000	365,000	365,000	365,000	365,000
4.2 Supplies & Other	7,600	25,000	9,100	15,000	15,000	15,000	15,000	15,000
Repairs & Maintenance-Equipment	7,600	25,000	9,100	15,000	15,000	15,000	15,000	15,000
882332 - Franklin Road Pumping Station	898,900	915,000	458,900	875,000	875,000	875,000	875,000	875,000
3.1 Electric	816,600	750,000	407,200	750,000	750,000	750,000	750,000	750,000
4.2 Supplies & Other	82,300	165,000	51,700	125,000	125,000	125,000	125,000	125,000
Repairs & Maintenance-Equipment	82,300	165,000	51,700	125,000	125,000	125,000	125,000	125,000
882333 - Roseville Pumping Station	200	-	-	300	300	300	300	300
3.3 Sewage Service	200	-	-	300	300	300	300	300

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882334 - Wick Road Pumping Station	628,400	589,500	393,800	605,500	605,500	605,500	605,500	605,500
3.1 Electric	515,700	494,000	304,600	500,000	500,000	500,000	500,000	500,000
3.2 Gas	2,800	5,000	4,700	5,000	5,000	5,000	5,000	5,000
3.3 Sewage Service	400	500	200	500	500	500	500	500
4.2 Supplies & Other	109,500	90,000	84,300	100,000	100,000	100,000	100,000	100,000
Repairs & Maintenance-Equipment	109,500	90,000	84,300	100,000	100,000	100,000	100,000	100,000
882335 - Joy Road Pumping Station	650,300	657,500	344,700	662,500	662,500	662,500	662,500	662,500
3.1 Electric	596,000	525,000	327,300	550,000	550,000	550,000	550,000	550,000
3.2 Gas	3,000	3,000	1,800	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	50,900	129,000	15,400	109,000	109,000	109,000	109,000	109,000
Repairs & Maintenance-Equipment	50,900	129,000	15,400	109,000	109,000	109,000	109,000	109,000
882336 - Schoolcraft Pumping Station	463,000	416,000	238,200	433,000	433,000	433,000	433,000	433,000
3.1 Electric	381,500	370,000	212,000	380,000	380,000	380,000	380,000	380,000
3.2 Gas	3,300	3,000	800	3,000	3,000	3,000	3,000	3,000
4.2 Supplies & Other	78,200	43,000	25,400	50,000	50,000	50,000	50,000	50,000
Repairs & Maintenance-Equipment	78,200	43,000	25,400	50,000	50,000	50,000	50,000	50,000
882337 - Ypsilanti Pumping Station	414,300	406,800	229,900	384,000	384,000	384,000	384,000	384,000
3.1 Electric	396,300	332,800	225,900	350,000	350,000	350,000	350,000	350,000
3.2 Gas	3,800	5,000	1,000	5,000	5,000	5,000	5,000	5,000
4.2 Supplies & Other	14,200	19,000	2,300	19,000	19,000	19,000	19,000	19,000
Repairs & Maintenance-Equipment	14,200	19,000	2,300	19,000	19,000	19,000	19,000	19,000
4.3 Contractual Services	-	50,000	700	10,000	10,000	10,000	10,000	10,000
Contractual Professional Services	-	50,000	700	10,000	10,000	10,000	10,000	10,000
882338 - Imlay Pumping Station	2,624,100	2,305,000	1,289,400	2,405,000	2,405,000	2,405,000	2,405,000	2,405,000
3.1 Electric	2,523,500	2,200,000	1,198,200	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000
4.2 Supplies & Other	100,600	105,000	90,500	105,000	105,000	105,000	105,000	105,000
Repairs & Maintenance-Equipment	100,600	105,000	90,500	105,000	105,000	105,000	105,000	105,000
4.3 Contractual Services	-	-	700	-	-	-	-	-
Contractual Professional Services	-	-	700	-	-	-	-	-
882339 - Rochester Pumping Station	245,100	231,000	237,500	218,000	218,000	218,000	218,000	218,000
3.1 Electric	218,600	170,000	199,700	185,000	185,000	185,000	185,000	185,000
3.2 Gas	8,200	6,000	200	7,000	7,000	7,000	7,000	7,000
3.3 Sewage Service	500	500	200	500	500	500	500	500
4.2 Supplies & Other	17,800	54,500	37,400	25,500	25,500	25,500	25,500	25,500
Repairs & Maintenance-Equipment	17,800	54,500	37,400	25,500	25,500	25,500	25,500	25,500
882340 - Haggerty Road Pumping Station	278,700	248,000	165,900	257,500	257,500	257,500	257,500	257,500
3.1 Electric	235,500	200,000	153,400	210,000	210,000	210,000	210,000	210,000
3.2 Gas	6,400	10,000	2,800	10,000	10,000	10,000	10,000	10,000
3.3 Sewage Service	500	1,000	300	500	500	500	500	500
4.2 Supplies & Other	36,300	37,000	9,400	37,000	37,000	37,000	37,000	37,000
Repairs & Maintenance-Equipment	36,300	37,000	9,400	37,000	37,000	37,000	37,000	37,000
887601 - Water System Operations								
Unallocated	-	1,292,400	-	1,798,400	4,247,000	5,043,900	8,141,300	10,092,600
7.0 Unallocated Reserve	-	1,292,400	-	1,798,400	4,247,000	5,043,900	8,141,300	10,092,600
Grand Total	\$ 68,889,800	\$ 70,819,800	\$ 36,219,600	\$ 74,812,700	\$ 77,370,700	\$ 78,248,700	\$ 81,428,500	\$ 83,500,100

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Section 3B

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).

The Wastewater Operating Group pursues various strategic initiatives including:**❖ Safeguarding the public's health and the environment (Ongoing)**

Through compliance with the NPDES permit and partnership with our co-permittee DWSD, and our member partners, and others. This is measured through continuous 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 a reliable workforce (Ongoing)

In accordance with the EGLE staffing plan through the recruitment and retention of talented individuals and implementation of apprenticeship programs. This is monitored through staff training records and turn-over tracking.

❖ Optimizing the Biosolid Dryer Facility (Completion by end of FY 2022)

To enable the elimination of the Central Offloading process to minimize landfill disposal and maximize beneficial reuse. 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 in the Water Resource Recovery Facility (WRRF) and Combined Sewer Overflow (CSO) real time data to improve response time.

❖ 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.

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			x
	Continue efforts towards innovation	x	x	x	x	x	x	x	x			x

Wastewater Operations Contracts

The Wastewater Operations budget contains several contracts for services, commodities, 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.

Project Description	Facilities Maintenance Services	Landfill Service For Lime Stabilized Dewatered Sludge	Ferric Chloride	Gaseous Oxygen Service	Sodium Bisulfite	Sulfur Dioxide	Sodium Hypochlorite	Total
Prime Consultant or Supplier	Lakeshore Global Corporation	Waste Management Of Michigan Inc	Kemira Water Solutions	Praxair Inc	Sulco Chemicals Limited	PVS Technologies Inc	PVS Nolwood Chemical Inc	
Contract #	CON-1901658	PO 16507	PO 9172	2920576	PO 9857	PO 9172	08901	
Contract Amount	\$ 10,944,780	\$ 2,000,000	\$ 3,999,550	\$ 14,091,663	\$ 1,336,152	\$ 3,003,000	\$ 3,134,080	
Contract End Date	01/19/22	03/31/25	05/01/21	07/31/19	04/30/22	05/27/21	03/31/21	
Cost Center Name	Various	Central Off Loading & Hauling	Wastewater Primary Processing	Wastewater Secondary Processing	Wastewater Secondary Processing	Wastewater Secondary Processing	CSO Facilities and Wastewater Secondary Processing	
Expense Category	Personnel	Contract Services	Chemicals	Chemicals	Chemicals	Chemicals	Chemicals	
Pre-FY 2020 Spend	\$ -	\$ -	\$ 1,837,980	\$ 10,126,881	\$ 234,838	\$ 525,301	\$ 1,637,177	\$ 14,362,177
FY 2020 Spend	2,032,948	127,608	2,010,306	2,647,972	169,093	477,671	1,434,770	\$ 8,900,368
FY 2021 Budget	6,927,071	290,000	1,731,400	3,195,400	415,200	465,000	1,484,500	\$ 14,508,571
FY 2022 Requested	7,216,400	450,000	2,107,200	2,943,100	170,800	479,000	1,536,400	\$ 14,902,900
FY 2023 Requested	7,284,000	458,500	2,212,600	2,943,100	170,800	488,500	1,574,900	\$ 15,132,400
FY 2024 Requested	7,352,600	468,000	2,212,600	2,943,100	211,300	488,500	1,574,900	\$ 15,251,000
FY 2025 Requested	7,422,200	477,000	2,212,600	2,943,100	211,300	488,500	1,574,900	\$ 15,329,600
FY 2026 Requested	7,492,800	487,000	2,212,600	2,943,100	211,300	488,500	1,574,900	\$ 15,410,200
Total	\$ 45,728,019	\$ 2,758,108	\$ 16,537,286	\$ 30,685,753	\$ 1,794,631	\$ 3,900,972	\$ 12,392,447	\$ 113,797,216

Project Description	Flocculant, Organic Polymer	Maintenance Service contract for Accusonic Flow Meters	Fire -Alarms, Sprinklers, Extinguishers- Maintenance & Repair	Refractory Inspection and Repairs	HVAC Services	Biosolids Dryer Facility	Chlorine (90 Ton Tank Cars)	Total
Prime Consultant or Supplier	Polydyne Inc	HESCO Group Inc	Johnson Controls Fire Protection LP	Commercial Contracting Corporation	Professional Thermal Systems	New England Fertilizer Company	JCI Jones Chemicals Inc	
Contract #	1802179	PO 12613	200284	2000917	1902548	PC-792	PO 15323	
Contract Amount	\$ 7,875,000	\$ 2,204,531	\$ 1,659,587	\$ 4,752,640	\$ 5,790,800	\$ 540,000,000	\$ 2,046,816	
Contract End Date	01/31/24	04/29/24	08/31/23	12/20/25	12/28/23	07/31/41	12/21/20	
Cost Center Name	Wastewater Incineration	All CSO Facilities	Wastewater Operations & CSO Facilities	Wastewater Incineration	Wastewater Operations & CSO Facilities	Central Off Loading & Hauling	Wastewater Secondary Processing	
Expense Category	Chemicals	Contract Services	Supplies & Other	Supplies & Other	Supplies & Other	Contract Services	Chemicals	
Pre-FY 2020 Spend	\$ 291,927	\$ -	\$ -	\$ -	\$ -	\$ 41,795,131	\$ 936,299	\$ 43,023,357
FY 2020 Spend	1,032,273	116,360	-	-	-	14,054,605	200,515	\$ 15,403,753
FY 2021 Budget	871,700	347,800	65,000	-	2,206,669	13,800,000	398,400	\$ 17,689,569
FY 2022 Requested	1,033,600	189,700	531,036	950,528	2,044,400	14,124,000	473,300	\$ 19,346,564
FY 2023 Requested	1,033,600	197,000	532,336	950,528	2,063,400	14,136,000	482,800	\$ 19,395,664
FY 2024 Requested	1,033,600	233,100	535,136	950,528	2,101,000	14,136,000	482,800	\$ 19,472,164
FY 2025 Requested	1,085,300	233,300	540,500	950,528	2,138,400	14,150,000	492,500	\$ 19,590,528
FY 2026 Requested	1,137,000	233,500	546,000	970,000	2,177,100	14,164,000	492,500	\$ 19,720,100
Total	\$ 7,519,000	\$ 1,550,760	\$ 2,750,008	\$ 4,772,112	\$ 12,730,969	\$ 140,359,736	\$ 3,959,114	\$ 173,641,699

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 2020 Spend	FY 2020 Spend
Job Order Maintenance Contract (JOC)	06/30/23	6	\$ 24,000,000	\$ 10,930,206	-	1,142,357
Task Order Engineering (TOE)	02/02/23	6	30,000,000	2,476,016	-	22,785
Task Instrumentation and Control (TIC)	09/30/25	5	7,620,000	-	-	-

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)

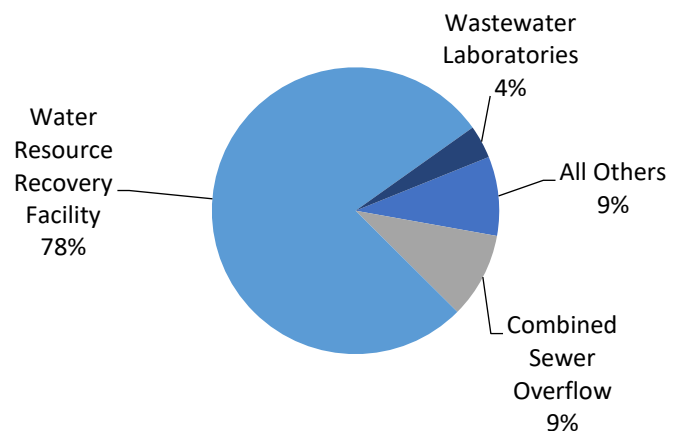
Facilities utilized to control flow volumes for protecting the system and the receiving waters during increased system demand such as during rainstorms or snow melt. GLWA currently operates 6 CSO retention and treatment basins and 3 screening and disinfection facilities. The Belle Isle

retention basin is owned by DWSD and operated by GLWA under a shared services agreement. See Shared Services under Section 4. Each CSO facility has its own cost center. Costs that are applicable to all CSO facilities are budgeted in cost center 892270.

❖ Wastewater Laboratories

Monitoring of pollutants entering and exiting the GLWA sewage facilities

FY 2022 REQUEST BY TEAM



❖ **All Others (including)**

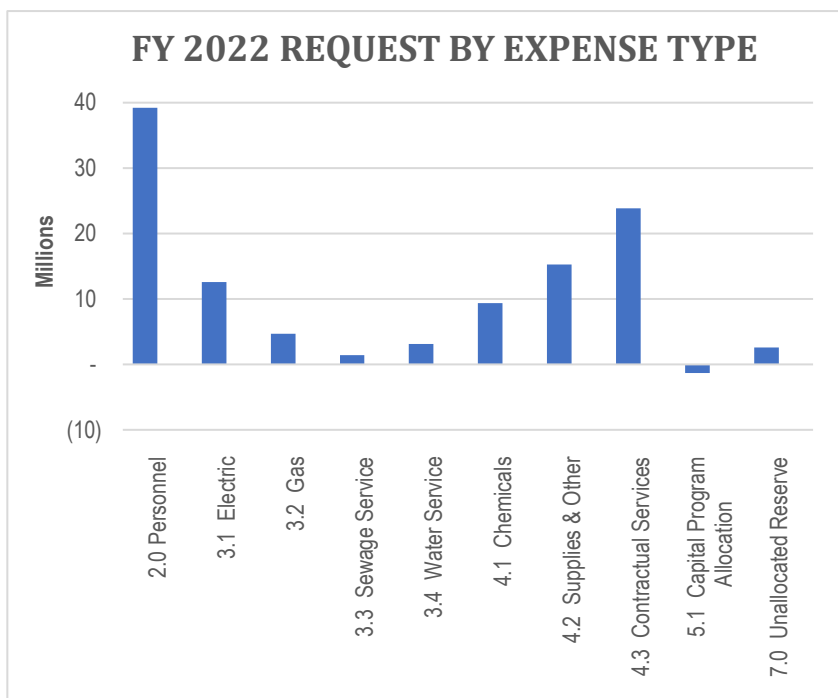
- **Wastewater Engineering**
Provide study, design, and construction administration services for improvements to the WRRF and CSO facilities
- **Industrial Waste Control**
Identification and monitoring of industrial users for pollutants
- **Wastewater Systems Unallocated**
Funds not apportioned for a specific purpose used for significant unexpected or unbudgeted expenditures

Expense Categories

There are two major categories for 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 two years an estimated two thirds of the biological waste has been processed by the BDF.

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 a net reduction in FY 2022, decreasing \$2.8 million, or 2.5%. Key factors that impact this change include the following.

- ❖ Staffing, as noted in the *Personnel Budget* section below, increased by \$1.4 million, or 3.6%. This increase is due to a combination of factors: 1) the staffing mix reflects continued focus on equipment maintenance and asset management; 2) additional positions that have proven more difficult to fill were budgeted as transitional contractors, and 3) use of actual salaries and an updated benefits calculation for FY 2022.
- ❖ Gas was decreased \$1.0 million, or 19.0%. Natural gas use has decreased over the past two years on average of 12.5%. This savings is due to a combination of operational changes. As noted in the goals, there has been an increased volume of biosolids processed through the Biosolids Dryer Facility. Additionally, a method of cycling the incinerator hearths, keeping a reduced number in production, while keeping only two in standby mode have led to these savings.
- ❖ Water was decreased by \$0.8 million, or 21.6%. Operational changes and equipment upgrades in secondary processing for disinfection have had a significant impact on the total water units used. These changes, implemented during FY 2020, have continued to have a significant impact on water usage.
- ❖ The chemical budget was increased by \$1.0 million, or 12.1%, due to the renewal and forecast renewal of several bulk chemical contracts in the primary and secondary operational areas.
- ❖ Supplies & Other were increased by \$0.3 million, or 2.4%. Of this, repairs and maintenance had the largest increase (\$0.9 million). Several maintenance contracts have been put in place, such as contract 2000917 for Refractory Inspection & Repairs in wastewater incineration that started in FY 2021. This was offset by a reduction in facilities lease cost (\$0.3 million) with the consolidation of the wastewater laboratories. Additionally, short term vehicle rentals were reduced (\$0.1 million) as replacement vehicles are obtained.
- ❖ Contract Services was decreased \$3.4 million, or 12.7%. Significant contracts impacting this change include the following: A contract for regulatory assistance expired (\$0.9 million). As noted under staffing, additional skilled labor positions were moved to Transition Services (\$1.6 million). Contract services in Process Control for skilled labor were moved to Information Technology (\$0.5 million) and equipment maintenance contract for instrumentation and controls was taken over by GLWA staff (\$0.5 million).
- ❖ Contribution to the unallocated reserve was decreased by \$0.1 million, or 2.9%. The unallocated reserve is set aside for unbudgeted expenditures needed in operations. An example of these unknown events would be the potential impact of historically high-water levels in Lake St Clair and the Detroit and Rouge Rivers on the wastewater system.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 36,296,300	\$ 37,871,500	\$ 18,766,600	\$ 39,230,900	\$ 1,359,400	3.6%	\$ 40,535,300
3.1 Electric	12,340,800	12,538,000	5,828,600	12,301,600	(236,400)	-1.9%	12,628,200
3.2 Gas	4,160,900	5,491,000	1,829,000	4,449,800	(1,041,200)	-19.0%	4,617,500
3.3 Sewage Service	1,539,200	1,417,500	786,100	1,452,400	34,900	2.5%	1,480,000
3.4 Water Service	3,110,500	3,880,100	1,258,000	3,042,400	(837,700)	-21.6%	3,099,500
4.1 Chemicals	8,672,400	8,365,900	4,150,500	9,381,700	1,015,800	12.1%	9,510,100
4.2 Supplies & Other	15,210,200	14,928,400	7,702,700	15,282,500	354,100	2.4%	14,918,000
4.3 Contractual Services	23,732,500	26,663,100	10,923,600	23,265,600	(3,397,500)	-12.7%	23,857,200
5.1 Capital Program Allocation	(1,183,400)	(1,325,800)	(459,400)	(1,292,700)	33,100	-2.5%	(1,313,100)
5.2 Shared Services	(482,400)	(157,400)	(78,700)	(160,400)	(3,000)	1.9%	(163,700)
6.0 Capital Outlay	-	-	67,900	-	-	n/a	-
7.0 Unallocated Reserve	-	2,318,500	-	2,250,200	(68,300)	-2.9%	2,348,900
Grand Total	\$ 103,397,000	\$ 111,990,800	\$ 50,774,900	\$ 109,204,000	\$ (2,786,800)	-2.5%	\$ 111,517,900

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Wastewater Administration	\$ 1,603,200	\$ 2,667,300	\$ 863,500	\$ 2,269,900	\$ (397,400)	-14.9%	\$ 2,280,800
Water Resource Recovery Facility	81,398,100	87,888,900	40,167,700	84,836,500	(3,052,400)	-3.5%	86,332,600
Wastewater Engineering	1,732,400	2,453,300	1,542,200	2,758,700	305,400	12.4%	2,827,200
Industrial Waste Control	2,373,700	2,496,300	1,227,300	2,473,600	(22,700)	-0.9%	2,518,700
Wastewater Laboratories	4,495,900	4,558,500	2,153,400	4,077,300	(481,200)	-10.6%	4,263,800
Combined Sewer Overflow	11,793,700	9,608,000	4,820,800	10,537,800	929,800	9.7%	10,945,900
Wastewater Operations Unallocated	-	2,318,500	-	2,250,200	(68,300)	-2.9%	2,348,900
Grand Total	\$ 103,397,000	\$ 111,990,800	\$ 50,774,900	\$ 109,204,000	\$ (2,786,800)	-2.5%	\$ 111,517,900

Personnel Budget

Wastewater Operations Group personnel expense is largely comprised of wastewater operations and maintenance staffing of 440 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. This is an increase of five from the current fiscal year. These positions demonstrate GLWA's commitment to developing the talent necessary to accomplish its initiatives effectively.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Wastewater System Operations	440.00	443.00	448.00	448.00	448.00	448.00	448.00
Wastewater Administration	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Water Resource Recovery Facility	299.00	299.00	301.00	301.00	301.00	301.00	301.00
Wastewater Engineering	24.00	24.00	26.00	26.00	26.00	26.00	26.00
Wastewater Laboratories	38.00	40.00	41.00	41.00	41.00	41.00	41.00
Industrial Waste Control	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Combined Sewer Overflow	36.00	37.00	37.00	37.00	37.00	37.00	37.00

*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, based upon a standard of 2,080 hours per year.

Full Time Equivalent

Team	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Wastewater System Operations	432.25	436.75	431.25	447.75	447.75	447.75	447.75
Wastewater Administration	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Water Resource Recovery Facility	293.00	294.25	289.00	301.00	301.00	301.00	301.00
Wastewater Engineering	24.00	23.50	25.50	26.00	26.00	26.00	26.00
Wastewater Laboratories	38.00	40.00	28.25	29.00	29.00	29.00	29.00
Industrial Waste Control	29.00	28.50	39.75	41.00	41.00	41.00	41.00
Combined Sewer Overflow	34.25	36.50	34.75	36.75	36.75	36.75	36.75

Personnel Budget – The tables below 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 Equivalent*s 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

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.1 Salaries & Wages	19,698,700	21,639,900	9,584,100	21,262,600	(377,300)	-1.7%	22,046,000
2.2 Workforce Development	395,800	85,300	155,600	255,500	170,200	199.5%	255,500
2.3 Overtime	3,111,200	3,405,500	1,469,300	3,129,700	(275,800)	-8.1%	3,137,400
2.4 Employee Benefits	8,955,900	8,133,100	4,541,400	8,668,400	535,300	6.6%	9,181,700
2.5 Transition Services	4,134,700	4,607,700	3,016,200	5,914,700	1,307,000	28.4%	5,914,700
Grand Total	\$ 36,296,300	\$ 37,871,500	\$ 18,766,600	\$ 39,230,900	\$ 1,359,400	3.6%	\$ 40,535,300

Personnel Budget – Five-Year Financial Plan

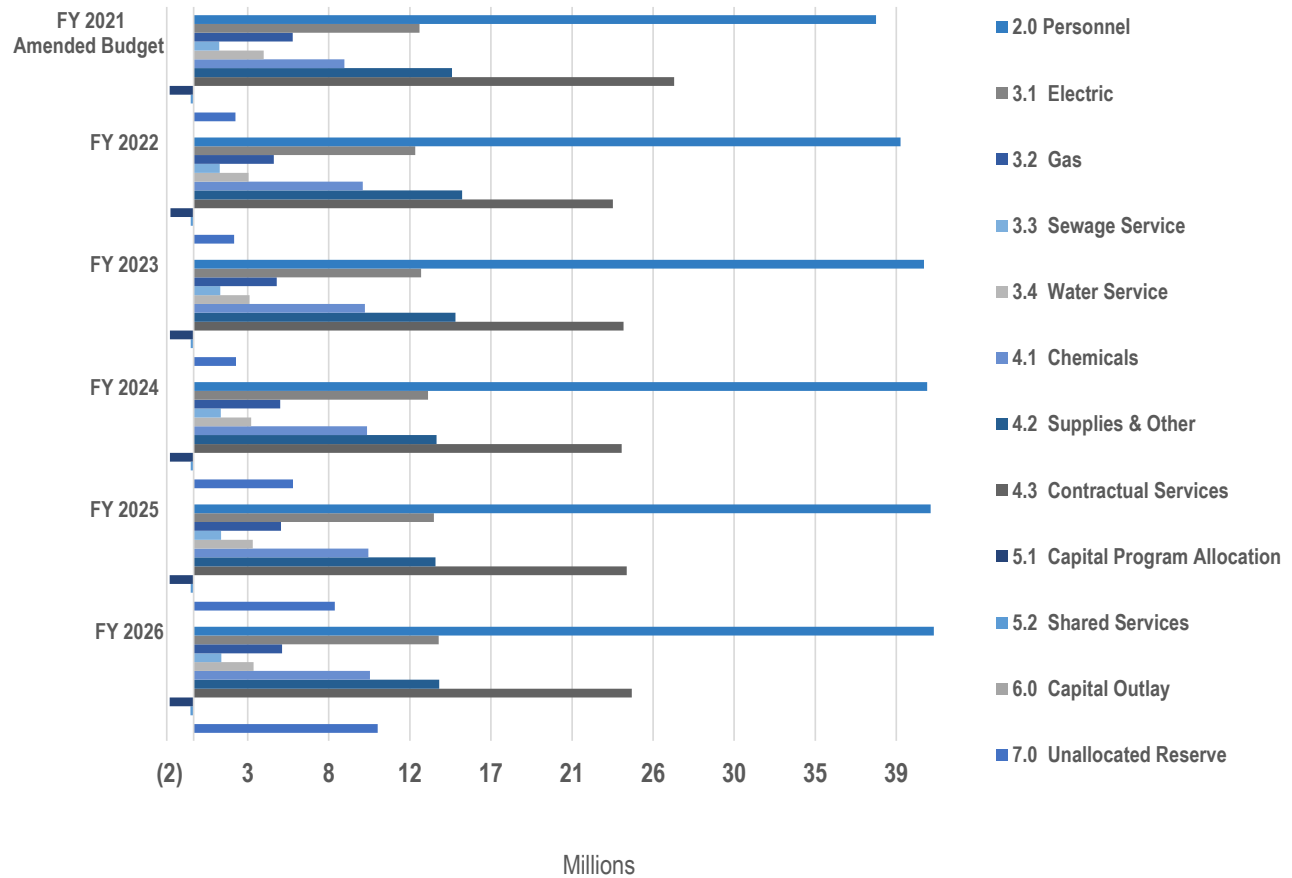
Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Wastewater Administration	1,609,500	1,625,340	1,633,050	1,640,760	1,648,469	1,656,179
Water Resource Recovery Facility	24,585,700	25,938,198	26,812,208	26,925,359	27,038,510	27,151,661
Wastewater Engineering	2,336,400	2,573,710	2,644,382	2,657,233	2,670,085	2,682,936
Wastewater Laboratories	3,765,000	3,624,253	3,757,403	3,776,531	3,795,659	3,814,786
Industrial Waste Control	2,107,600	2,208,329	2,256,873	2,269,389	2,281,905	2,294,420
Combined Sewer Overflow	3,467,300	3,261,484	3,431,335	3,446,014	3,460,693	3,475,372
Grand Total	\$ 37,871,500	\$ 39,230,900	\$ 40,535,300	\$ 40,715,400	\$ 40,895,400	\$ 41,075,600

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.1 Salaries & Wages	\$ 21,639,900	\$ 9,584,100	\$ 21,262,600	\$ (377,300)	-1.7%	\$ 22,046,000	\$ 22,046,000	\$ 22,046,000	\$ 22,046,000
2.2 Workforce									
Development	85,300	155,600	255,500	170,200	199.5%	255,500	255,500	255,500	255,500
2.3 Overtime	3,405,500	1,469,300	3,129,700	(275,800)	-8.1%	3,137,400	3,137,400	3,137,400	3,137,400
2.4 Employee Benefits	8,133,100	4,541,400	8,668,400	535,300	6.6%	9,181,700	9,361,800	9,541,800	9,722,000
2.5 Transition Services	4,607,700	3,016,200	5,914,700	1,307,000	28.4%	5,914,700	5,914,700	5,914,700	5,914,700
3.1 Electric	12,538,000	5,828,600	12,301,600	(236,400)	-1.9%	12,628,200	13,000,700	13,337,200	13,596,700
3.2 Gas	5,491,000	1,829,000	4,449,800	(1,041,200)	-19.0%	4,617,500	4,797,800	4,853,300	4,908,300
3.3 Sewage Service	1,417,500	786,100	1,452,400	34,900	2.5%	1,480,000	1,504,000	1,515,700	1,530,500
3.4 Water Service	3,880,100	1,258,000	3,042,400	(837,700)	-21.6%	3,099,500	3,193,200	3,274,800	3,331,100
4.1 Chemicals	8,365,900	4,150,500	9,381,700	1,015,800	12.1%	9,510,100	9,629,500	9,695,100	9,791,400
4.2 Supplies & Other	14,928,400	7,702,700	15,282,500	354,100	2.4%	14,918,000	13,884,300	13,821,900	14,032,600
4.3 Contractual Services	26,663,100	10,923,600	23,265,600	(3,397,500)	-12.7%	23,857,200	23,753,600	24,031,700	24,317,500
5.1 Capital Program									
Allocation	(1,325,800)	(459,400)	(1,292,700)	33,100	-2.5%	(1,313,100)	(1,319,300)	(1,325,500)	(1,331,800)
5.2 Shared Services	(157,400)	(78,700)	(160,400)	(3,000)	1.9%	(163,700)	(167,000)	(170,300)	(173,800)
6.0 Capital Outlay	-	67,900	-	-	n/a	-	-	-	-
7.0 Unallocated Reserve	2,318,500	-	2,250,200	(68,300)	-2.9%	2,348,900	5,509,600	7,834,200	10,211,800
Grand Total	\$ 111,990,800	\$ 50,774,900	\$ 109,204,000	\$ (2,786,800)	-2.5%	\$ 111,517,900	\$ 114,501,800	\$ 117,763,500	\$ 121,289,900

Five-Year Financial Plan



Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Wastewater Administration	\$ 2,667,300	\$ 863,500	\$ 2,269,900	\$ (397,400)	-14.9%	\$ 2,280,800	\$ 1,890,700	\$ 1,898,300	\$ 1,811,200
Water Resource Recovery Facility	87,888,900	40,167,700	84,836,500	(3,052,400)	-3.5%	86,332,600	86,477,500	87,229,200	88,269,800
Industrial Waste Control	2,453,300	1,542,200	2,758,700	305,400	12.4%	2,827,200	2,848,000	2,868,800	2,890,200
Wastewater Engineering	2,496,300	1,227,300	2,473,600	(22,700)	-0.9%	2,518,700	2,532,300	2,722,100	2,933,100
Wastewater Laboratories	4,558,500	2,153,400	4,077,300	(481,200)	-10.6%	4,263,800	4,286,100	4,318,300	4,407,900
Combined Sewer Overflow	9,608,000	4,820,800	10,537,800	929,800	9.7%	10,945,900	10,957,600	10,892,600	10,765,900
Wastewater Operations Unallocated	2,318,500	-	2,250,200	(68,300)	-2.9%	2,348,900	5,509,600	7,834,200	10,211,800
Grand Total	\$ 111,990,800	\$ 50,774,900	\$ 109,204,000	\$ (2,786,800)	-2.5%	\$ 111,517,900	\$ 114,501,800	\$ 117,763,500	\$ 121,289,900

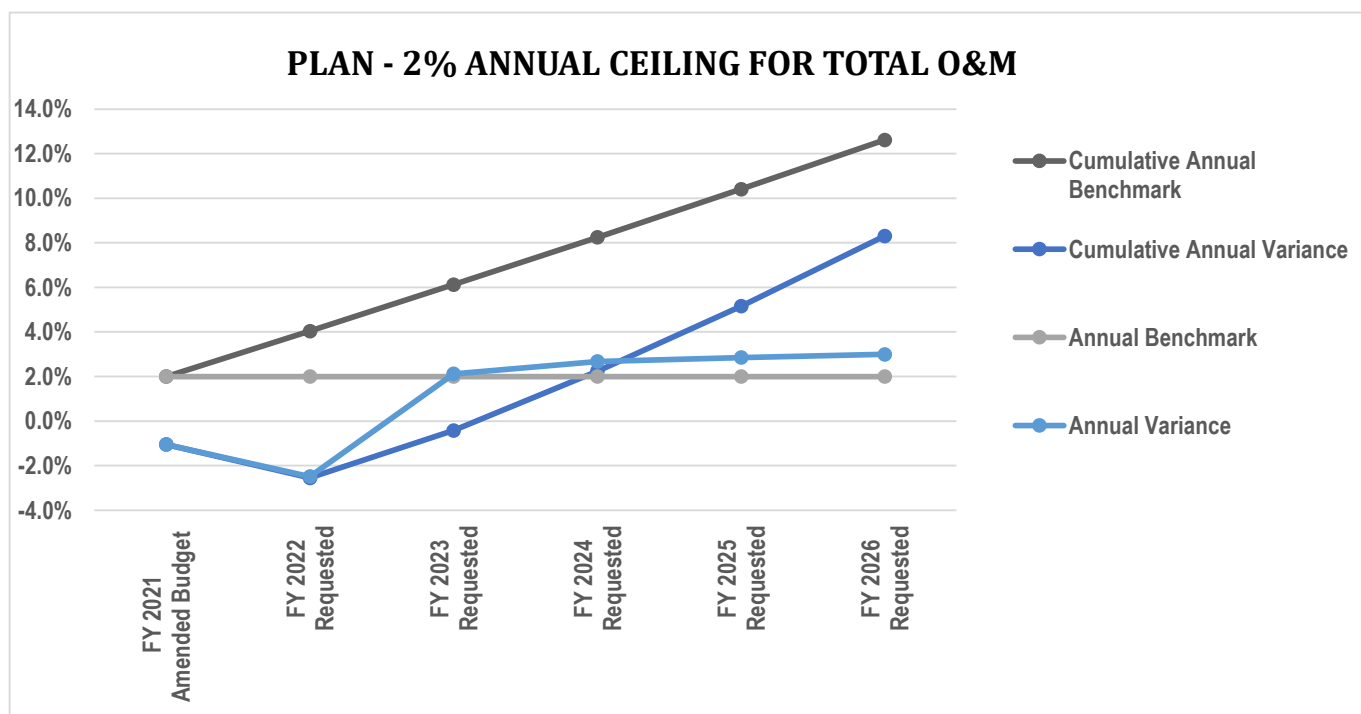
Wastewater Master Plan

In September 2020, the Board approved the Comprehensive Regional Wastewater Master Plan (WWMP). The 40-year plan, unlike any other in the nation, is the result of unprecedented regional collaboration among 100 stakeholders, including GLWA's member partners, watershed advocacy

groups, regulatory agencies and more. The WWMP gives the region a roadmap for the future and a plan that builds on the work already done – with a focus on water quality and a path that manages affordability through partnerships and collaboration. This five-year financial 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.

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 8.3% which is well within the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Adopted Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2025 Department Requested
Improvement & Extension	\$ 10,871,000	\$ 7,206,000	\$ 9,406,600	\$ 4,479,400	\$ 4,200,100	\$ 5,140,440
Building/Structures	1,000,000	357,500	362,800	368,100	373,500	379,000
Leasehold Improvements	250,000	880,000	500,000	500,000	-	-
Machinery & Equipment	5,923,000	5,168,500	8,243,800	3,611,300	3,804,600	4,561,440
Computers & IT	1,300,000	150,000	150,000	100,000	360,500	-
Controls & Communication	90,000	1,960,000	5,307,500	1,924,000	1,146,500	2,855,000
Flow Measuring & Meters	531,000	625,000	145,000	120,000	35,000	20,000
Furniture & Fixtures	-	-	-	-	2,000	7,000
Heavy Equipment & Misc	850,000	-	-	-	-	-
Laboratory	25,000	40,100	61,700	14,200	43,400	101,200
Pipes, Gates & Valves	280,000	261,500	275,000	249,500	281,000	252,500
Process Equipment/Treatment	292,000	439,000	570,000	351,600	570,400	462,640
Pumps & Motors	2,533,000	1,613,900	1,684,600	844,700	1,365,800	854,100
Tools, Shop & Warehouse	22,000	79,000	50,000	7,300	-	9,000
Site Improvements	50,000	-	-	-	-	-
Lighting	50,000	-	-	-	-	-
Vehicles	615,000	-	300,000	-	22,000	200,000
Heavy Truck	-	-	-	-	-	200,000
Light Truck	590,000	-	300,000	-	-	-
Utility Vehicle	25,000	-	-	-	22,000	-
Non-Capitalizable Improvement	3,033,000	800,000	-	-	-	-
Grand Total	\$ 10,871,000	\$ 7,206,000	\$ 9,406,600	\$ 4,479,400	\$ 4,200,100	\$ 5,140,440

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2021 Adopted Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2025 Department Requested
Improvement & Extension	\$ 10,871,000	\$ 7,206,000	\$ 9,406,600	\$ 4,479,400	\$ 4,200,100	\$ 5,140,400
Grand Total	\$ 10,871,000	\$ 7,206,000	\$ 9,406,600	\$ 4,479,400	\$ 4,200,100	\$ 5,140,400

Five-Year Capital Outlay by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water Resource Recovery Facility	6,023,000	4,346,500	7,725,300	3,420,900	2,255,700	4,189,800
Wastewater Engineering		-	-	-	-	-
Industrial Waste Control	25,000	-	25,000	-	27,500	7,000
Wastewater Laboratories		40,100	36,700	14,200	17,900	101,200
Combined Sewer Overflow	4,823,000	2,819,400	1,619,600	1,044,300	1,899,000	842,400
Combined Sewer Overflow	3,033,000	1,834,500	800,000	-	-	-
Puritan Fenkell CSO	149,800	126,100	165,000	155,500	15,000	60,000
7 Mile CSO	5,200	76,600	131,000	35,000	68,000	756,400
Hubble Southfield CSO	110,000	155,200	200,000	260,000	110,000	110,000
Leib CSO	462,000	-	382,000	198,800	144,600	45,900
St Aubin CSO	281,000	35,800	229,400	45,000	18,000	68,000
Connor Creek CSO	325,000	191,500	515,000	440,500	324,700	489,700
Baby Creek CSO	307,000	114,900	302,000	364,800	269,000	274,000
Oakwood CSO	150,000	28,800	95,000	120,000	95,000	95,000
Grand Total	10,871,000	7,206,000	9,406,600	4,479,400	4,200,100	5,140,400

Line-Item Budget and Financial Plan

The five-year plan by line-item expense starts 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892001 - Chief Operating Officer Wastewater	1,603,200	2,667,300	863,500	2,269,900	2,280,800	1,890,700	1,898,300	1,811,200
2.1 Salaries & Wages	1,200,500	1,168,100	573,400	1,237,000	1,237,000	1,237,000	1,237,000	1,237,000
2.3 Overtime	1,900	7,500	-	2,800	2,800	2,800	2,800	2,800
2.4 Employee Benefits	329,000	330,900	170,000	385,500	393,200	400,900	408,600	416,300
2.5 Transition Services	64,700	103,000	-	-	-	-	-	-
4.2 Supplies & Other	21,600	61,000	106,800	170,900	171,300	171,600	171,700	172,000
Memberships, Licenses & Subscriptions	1,000	3,000	105,000	54,800	54,900	55,000	55,000	55,100
Mileage and Parking	900	5,000	100	1,600	1,700	1,800	1,800	1,800
Office Supplies	10,000	9,000	2,100	9,500	9,700	9,800	9,900	10,100
Training and Internal Meetings	4,700	30,000	-	75,000	75,000	75,000	75,000	75,000
Travel	5,000	14,000	(400)	30,000	30,000	30,000	30,000	30,000
4.3 Contractual Services	28,500	1,000,000	18,700	510,000	513,000	115,000	115,000	20,000
5.1 Capital Program Allocation	(43,000)	(3,200)	(5,400)	(36,300)	(36,500)	(36,600)	(36,800)	(36,900)
892201 - Wastewater Director	4,314,700	5,136,200	2,528,800	6,491,500	6,642,800	6,515,600	6,589,600	6,665,900
2.1 Salaries & Wages	1,854,400	2,071,400	920,500	1,939,600	1,998,000	1,998,000	1,998,000	1,998,000
2.2 Workforce Development	13,500	-	19,900	36,500	36,500	36,500	36,500	36,500
2.3 Overtime	462,200	431,100	221,300	463,000	462,300	462,300	462,300	462,300
2.4 Employee Benefits	856,100	788,100	424,700	803,400	847,900	864,600	881,200	897,800
2.5 Transition Services	595,300	1,157,600	707,600	1,993,500	1,993,500	1,993,500	1,993,500	1,993,500
4.2 Supplies & Other	293,300	488,000	166,900	429,000	416,200	209,400	202,800	196,400
Car Lease	79,200	185,000	13,000	30,000	20,000	10,000	-	-
Memberships, Licenses & Subscriptions	700	2,000	-	1,500	1,500	1,500	1,500	1,500
Office Supplies	2,600	5,000	1,500	3,500	3,600	3,700	3,800	3,900
Repairs & Maintenance-Equipment	150,000	200,000	147,300	155,000	158,000	161,000	164,200	167,600
Training and Internal Meetings	9,800	40,000	1,500	-	-	-	-	-
Travel	-	8,000	-	-	-	-	-	-
Tuition Refund	1,100	3,000	-	3,000	3,100	3,200	3,300	3,400
Capital Outlay less than \$5,000	49,900	45,000	3,600	236,000	230,000	30,000	30,000	20,000
4.3 Contractual Services	239,900	200,000	67,900	826,500	888,400	951,300	1,015,300	1,081,400

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892211 - Wastewater Engineering	1,732,400	2,453,300	1,542,200	2,758,700	2,827,200	2,848,000	2,868,800	2,890,200
2.1 Salaries & Wages	1,382,800	1,623,000	720,800	1,776,500	1,820,700	1,820,700	1,820,700	1,820,700
2.3 Overtime	168,100	176,300	86,300	168,400	168,200	168,200	168,200	168,200
2.4 Employee Benefits	502,100	537,100	252,000	628,800	655,400	668,300	681,100	694,000
2.5 Transition Services	-	-	92,800	-	-	-	-	-
4.2 Supplies & Other	44,500	61,600	29,600	44,000	43,000	43,600	43,600	44,100
Memberships, Licenses & Subscriptions	3,700	6,500	3,500	5,000	5,000	5,000	5,000	5,000
Mileage and Parking	17,500	12,600	11,600	18,000	18,000	18,400	18,400	18,700
Office Supplies	8,200	18,200	7,200	10,000	9,000	9,200	9,200	9,400
Operating Supplies	5,600	9,000	1,700	9,000	9,000	9,000	9,000	9,000
Repairs & Maintenance-Equipment	-	100	-	-	-	-	-	-
Training and Internal Meetings	600	4,000	4,700	-	-	-	-	-
Travel	300	9,200	-	-	-	-	-	-
Tuition Refund	500	2,000	900	2,000	2,000	2,000	2,000	2,000
Capital Outlay less than \$5,000	8,100	-	-	-	-	-	-	-
4.3 Contractual Services	731,300	1,323,500	801,300	1,339,200	1,358,400	1,371,500	1,385,300	1,399,200
5.1 Capital Program Allocation	(1,096,400)	(1,268,200)	(440,600)	(1,198,200)	(1,218,500)	(1,224,300)	(1,230,100)	(1,236,000)
892221 - Wastewater Operations	23,600,800	26,613,800	10,525,500	21,593,700	22,298,700	22,985,000	23,491,600	23,895,000
2.1 Salaries & Wages	660,000	630,800	353,700	713,700	846,100	846,100	846,100	846,100
2.3 Overtime	196,200	186,100	94,300	202,700	202,200	202,200	202,200	202,200
2.4 Employee Benefits	236,500	246,700	132,500	271,700	337,000	343,600	350,200	356,800
2.5 Transition Services	292,600	359,400	-	-	-	-	-	-
3.1 Electric	10,389,400	10,498,000	4,750,700	10,226,200	10,533,000	10,888,000	11,187,000	11,411,000
3.2 Gas	2,104,300	3,094,000	859,000	2,343,600	2,388,000	2,526,000	2,539,000	2,552,000
3.3 Sewage Service	532,700	494,000	267,900	497,600	508,000	518,000	528,000	539,000
3.4 Water Service	2,565,300	3,331,000	983,000	2,502,100	2,552,000	2,641,000	2,722,000	2,776,000
4.1 Chemicals	5,000	2,500	-	5,000	5,100	5,200	5,300	5,400
4.2 Supplies & Other	3,576,000	4,033,000	2,080,800	4,281,100	4,366,300	4,442,900	4,528,800	4,611,500
Inspection and Permit Fees	227,600	250,000	16,300	250,000	255,000	260,000	266,000	272,000
Memberships, Licenses & Subscriptions	700	2,000	-	1,200	1,200	1,200	1,200	1,200
Mileage and Parking	400	-	100	-	-	-	-	-
Office Supplies	27,400	47,000	11,000	30,000	30,600	31,200	31,800	32,400
Operating Supplies	103,300	125,000	38,100	105,000	107,200	109,400	111,600	113,900
Operating Supplies-Janitorial	56,200	30,000	21,000	55,000	56,000	57,000	58,000	59,000
Penalties	-	-	9,600	-	-	-	-	-
Repairs & Maintenance-Equipment	70,300	100,000	127,600	75,000	76,400	77,900	79,400	49,700
Repairs & Maintenance-Facilities	2,959,900	3,200,000	1,777,900	3,636,700	3,706,200	3,772,700	3,844,500	3,941,000
Supplies & Other - Covid19	300	-	4,900	-	-	-	-	-
Training and Internal Meetings	(300)	120,000	26,400	-	-	-	-	-
Travel	8,600	8,000	100	-	-	-	-	-
Tuition Refund	-	3,000	-	3,000	3,100	3,200	3,300	3,400
Uniforms, Laundry, Cleaning	102,700	103,000	43,100	115,200	117,600	120,300	123,000	125,800
Capital Outlay less than \$5,000	18,900	45,000	4,700	10,000	13,000	10,000	10,000	13,100
4.3 Contractual Services	3,042,800	3,738,300	1,003,600	550,000	561,000	572,000	583,000	595,000
892222 - Wastewater Process Control	3,165,300	5,229,700	1,798,200	4,607,400	4,170,100	4,182,000	4,085,900	4,183,400
2.1 Salaries & Wages	1,195,900	1,296,400	693,300	1,610,100	1,610,100	1,610,100	1,610,100	1,610,100
2.2 Workforce Development	49,700	-	-	-	-	-	-	-
2.3 Overtime	110,200	123,000	59,200	110,200	110,200	110,200	110,200	110,200
2.4 Employee Benefits	483,700	440,500	276,500	588,600	600,400	612,200	623,900	635,700
2.5 Transition Services	66,100	423,000	36,900	-	-	-	-	-
4.1 Chemicals	(200)	-	500	-	-	-	-	-
4.2 Supplies & Other	683,900	881,200	432,400	1,293,000	816,800	633,700	602,800	700,400
Operating Supplies	9,500	7,100	400	10,800	10,800	11,000	11,100	11,200
Repairs & Maintenance-Equipment	269,600	134,600	120,800	636,200	387,600	139,000	140,400	141,800
Repairs & Maintenance-Hardware	213,700	692,600	245,700	414,000	382,000	403,200	389,700	433,600
Repairs & Maintenance-Software	98,700	22,200	63,300	172,000	22,400	65,500	44,600	95,800
Training and Internal Meetings	10,100	20,000	-	-	-	-	-	-
Tuition Refund	2,000	-	-	-	-	-	-	-
Capital Outlay less than \$5,000	80,300	4,700	2,200	60,000	14,000	15,000	17,000	18,000
4.3 Contractual Services	764,800	2,127,200	330,200	1,068,300	1,096,700	1,281,200	1,205,600	1,195,000
5.2 Shared Services	(188,800)	(61,600)	(30,800)	(62,800)	(64,100)	(65,400)	(66,700)	(68,000)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892223 - Wastewater Primary Process	7,826,200	7,836,000	4,446,000	8,280,000	8,416,400	8,315,200	8,314,300	8,423,400
2.1 Salaries & Wages	1,976,000	2,238,000	931,300	2,120,100	2,171,100	2,171,100	2,171,100	2,171,100
2.2 Workforce Development	85,800	67,600	20,000	-	-	-	-	-
2.3 Overtime	513,500	542,700	213,300	539,200	548,900	548,900	548,900	548,900
2.4 Employee Benefits	1,165,600	972,200	559,400	957,100	998,200	1,017,800	1,037,400	1,057,000
2.5 Transition Services	508,000	449,100	420,400	822,600	822,600	822,600	822,600	822,600
4.1 Chemicals	2,010,700	1,731,400	958,000	2,107,200	2,212,600	2,212,600	2,212,600	2,212,600
4.2 Supplies & Other	1,137,300	1,675,000	1,341,800	1,302,800	1,223,300	1,093,800	1,064,500	1,145,200
Operating Supplies	57,200	60,000	38,200	60,000	61,200	62,400	63,600	64,800
Repairs & Maintenance-Equipment	1,072,800	1,600,000	1,282,400	1,190,000	1,159,100	978,200	997,500	1,016,800
Tuition Refund	-	-	600	-	-	-	-	-
Capital Outlay less than \$5,000	7,300	15,000	20,600	52,800	3,000	53,200	3,400	63,600
4.3 Contractual Services	429,300	160,000	1,800	431,000	439,700	448,400	457,200	466,000
892224 - Wastewater Secondary Process	9,725,300	9,847,600	5,069,500	10,455,400	10,473,000	10,403,400	10,461,100	10,545,100
2.1 Salaries & Wages	2,017,100	2,065,800	1,071,800	2,119,700	2,119,700	2,119,700	2,119,700	2,119,700
2.2 Workforce Development	36,200	-	37,300	72,900	72,900	72,900	72,900	72,900
2.3 Overtime	291,100	356,300	145,600	292,200	295,700	295,700	295,700	295,700
2.4 Employee Benefits	914,600	785,800	522,200	904,800	923,200	941,300	959,400	977,500
2.5 Transition Services	653,100	673,000	410,000	750,100	750,100	750,100	750,100	750,100
4.1 Chemicals	4,251,500	4,401,700	2,180,900	4,801,700	4,821,600	4,908,100	4,920,200	4,961,700
4.2 Supplies & Other	985,200	1,365,000	586,600	1,320,000	1,291,000	1,112,000	1,134,700	1,154,300
Operating Supplies	27,600	50,000	22,300	40,000	40,800	41,600	42,500	43,400
Repairs & Maintenance-Equipment	954,700	1,300,000	528,900	1,275,000	1,245,100	1,065,200	1,085,400	1,105,600
Capital Outlay less than \$5,000	2,900	15,000	35,400	5,000	5,100	5,200	6,800	5,300
4.3 Contractual Services	576,500	200,000	115,100	194,000	198,800	203,600	208,400	213,200
892225 - Wastewater Dewatering Process	6,760,600	6,176,300	3,095,500	6,558,200	6,719,300	6,556,700	6,588,700	6,690,900
2.1 Salaries & Wages	1,781,300	2,167,200	793,400	1,997,400	2,055,000	2,055,000	2,055,000	2,055,000
2.2 Workforce Development	57,900	-	19,600	36,500	36,500	36,500	36,500	36,500
2.3 Overtime	307,800	373,800	140,600	307,800	303,600	303,600	303,600	303,600
2.4 Employee Benefits	1,020,300	876,300	507,100	909,400	952,600	971,300	990,000	1,008,700
2.5 Transition Services	1,045,100	517,300	536,600	519,500	519,500	519,500	519,500	519,500
4.1 Chemicals	1,032,300	871,700	460,700	1,033,600	1,033,600	1,033,600	1,085,300	1,137,000
4.2 Supplies & Other	1,427,000	1,270,000	540,700	1,662,000	1,724,600	1,541,400	1,501,100	1,531,000
Operating Supplies	50,600	100,000	17,400	60,000	61,200	62,400	63,600	64,800
Repairs & Maintenance-Equipment	1,362,300	1,150,000	519,800	1,600,000	1,578,400	1,406,800	1,435,400	1,464,000
Supplies & Other - Covid19	100	-	-	-	-	-	-	-
Tuition Refund	1,500	-	-	-	-	-	-	-
Capital Outlay less than \$5,000	12,500	20,000	3,500	2,000	85,000	72,200	2,100	2,200
4.3 Contractual Services	88,900	100,000	96,800	92,000	93,900	95,800	97,700	99,600
892226 - Wastewater Incineration Process	4,476,500	5,167,800	2,796,400	6,283,800	6,530,000	6,345,400	6,410,500	6,445,600
2.1 Salaries & Wages	1,738,600	2,191,200	761,600	1,841,100	1,990,800	1,990,800	1,990,800	1,990,800
2.2 Workforce Development	126,100	-	19,500	36,500	36,500	36,500	36,500	36,500
2.3 Overtime	225,900	246,500	131,800	225,800	243,900	243,900	243,900	243,900
2.4 Employee Benefits	962,700	863,300	438,200	834,400	924,400	942,500	960,600	978,700
2.5 Transition Services	545,100	301,500	481,200	1,127,400	1,127,400	1,127,400	1,127,400	1,127,400
4.1 Chemicals	38,900	15,300	36,000	45,000	45,000	45,000	45,000	47,300
4.2 Supplies & Other	757,000	1,150,000	762,100	1,846,200	1,832,800	1,628,300	1,671,500	1,678,800
Operating Supplies	23,600	25,000	8,100	25,000	25,400	25,800	26,300	26,800
Repairs & Maintenance-Equipment	730,400	1,100,000	741,200	1,777,200	1,742,300	1,557,500	1,573,700	1,605,800
Tuition Refund	1,500	-	-	-	-	-	-	-
Capital Outlay less than \$5,000	1,500	25,000	12,800	44,000	65,100	45,000	71,500	46,200
4.3 Contractual Services	82,200	400,000	166,000	327,400	329,200	331,000	334,800	342,200
892227 - BDF, COF & Hauling	19,778,700	20,297,500	9,820,800	20,177,600	20,689,500	20,777,500	20,886,800	21,015,800
2.1 Salaries & Wages	349,400	477,300	134,700	343,900	402,300	402,300	402,300	402,300
2.3 Overtime	86,700	70,400	28,600	87,400	83,100	83,100	83,100	83,100
2.4 Employee Benefits	168,500	196,300	65,200	155,700	187,000	190,600	194,300	198,000
2.5 Transition Services	143,800	-	36,300	203,200	203,200	203,200	203,200	203,200
3.1 Electric	1,118,100	1,065,000	575,300	1,120,000	1,131,200	1,142,500	1,176,800	1,212,100
3.2 Gas	1,868,400	2,187,000	900,300	1,900,000	2,020,000	2,060,000	2,101,000	2,143,000
3.3 Sewage Service	345,200	350,000	204,800	350,400	357,600	361,200	361,200	364,800
3.4 Water Service	172,100	179,000	101,400	180,000	182,400	184,200	184,200	186,000
4.3 Contractual Services	15,526,500	15,772,500	7,774,200	15,837,000	16,122,700	16,150,400	16,180,700	16,223,300
892228 - Wastewater Fire Damage	-	1,000,000	87,000	-	-	-	-	-
4.2 Supplies & Other	-	1,000,000	87,000	-	-	-	-	-
Repairs & Maintenance-Damage Recovery	-	1,000,000	87,000	-	-	-	-	-

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892231 - Industrial Waste Control	2,373,700	2,496,300	1,227,300	2,473,600	2,518,700	2,532,300	2,722,100	2,933,100
2.1 Salaries & Wages	1,552,500	1,541,900	785,300	1,571,300	1,595,600	1,595,600	1,595,600	1,595,600
2.3 Overtime	29,300	17,100	12,200	24,200	22,900	22,900	22,900	22,900
2.4 Employee Benefits	666,000	530,500	351,600	612,800	638,300	650,800	663,300	675,900
2.5 Transition Services	-	18,100	-	-	-	-	-	-
4.1 Chemicals	-	-	200	-	-	-	-	-
4.2 Supplies & Other	72,900	205,000	40,000	148,300	139,900	133,200	138,000	147,900
Advertising	27,600	52,000	26,900	56,200	57,400	58,000	58,600	59,200
Memberships, Licenses & Subscriptions	500	2,500	-	2,900	2,500	2,900	2,500	2,900
Mileage and Parking	-	800	-	1,000	1,000	1,000	1,000	1,000
Office Supplies	7,600	17,500	3,900	14,500	15,000	15,100	15,100	15,200
Operating Supplies	22,100	30,000	4,100	25,400	25,800	26,300	26,600	27,200
Operating Supplies-Janitorial	-	5,000	300	1,900	2,000	2,100	2,200	2,300
Postage	1,700	22,500	2,300	10,000	10,000	10,200	10,200	10,200
Printing	-	2,500	-	-	-	-	-	-
Repairs & Maintenance-Equipment	-	10,000	-	2,000	2,000	2,000	2,000	2,000
Training and Internal Meetings	1,100	9,000	200	7,500	7,500	7,600	7,700	7,700
Travel	1,000	1,200	-	4,000	4,000	4,000	4,000	4,000
Uniforms, Laundry, Cleaning	3,100	4,000	1,500	4,000	4,000	4,000	4,100	4,100
Capital Outlay less than \$5,000	8,200	48,000	800	18,900	8,700	-	4,000	12,100
4.3 Contractual Services	53,000	183,700	38,000	117,000	122,000	129,800	302,300	490,800
892235 - Wastewater Laboratories	4,495,900	4,558,500	2,153,400	4,077,300	4,263,800	4,286,100	4,318,300	4,407,900
2.1 Salaries & Wages	2,418,100	2,439,700	1,154,700	2,489,500	2,583,300	2,583,300	2,583,300	2,583,300
2.3 Overtime	208,800	309,900	131,900	209,000	198,600	198,600	198,600	198,600
2.4 Employee Benefits	911,400	847,100	469,500	925,800	975,500	994,600	1,013,800	1,032,900
2.5 Transition Services	-	168,300	-	-	-	-	-	-
4.1 Chemicals	135,200	167,300	43,800	131,200	134,200	135,500	137,200	137,900
4.2 Supplies & Other	636,300	433,500	299,100	170,200	155,200	154,700	164,100	239,500
Car Lease	24,300	9,800	1,800	10,000	5,500	-	-	-
Memberships, Licenses & Subscriptions	300	1,500	4,200	6,500	1,500	1,500	7,500	1,500
Office Supplies	6,000	1,000	1,000	5,900	6,000	1,000	1,000	-
Operating Supplies	125,600	59,800	59,900	127,900	130,400	133,500	135,600	136,700
Rentals-Buildings	442,900	276,300	191,500	-	-	-	-	-
Repairs & Maintenance-Equipment	7,100	17,600	2,700	7,800	8,000	8,200	8,400	8,600
Repairs & Maintenance-Facilities	23,700	60,000	12,100	-	-	-	-	-
Training and Internal Meetings	800	4,000	-	-	-	-	-	-
Tuition Refund	800	-	100	-	-	-	-	-
Uniforms, Laundry, Cleaning	3,300	3,500	2,000	3,500	3,500	3,500	3,700	3,700
Capital Outlay less than \$5,000	1,500	-	23,800	8,600	300	7,000	7,900	89,000
4.3 Contractual Services	186,100	192,700	54,400	151,600	217,000	219,400	221,300	215,700
892269 - Suburban Only	1,750,000	584,000	-	388,900	392,800	396,700	400,700	404,700
Green Infrastructure Allocation	1,750,000	584,000	-	388,900	392,800	396,700	400,700	404,700
4.2 Supplies & Other	1,750,000	584,000	-	388,900	392,800	396,700	400,700	404,700
Inspection and Permit Fees	1,750,000	584,000	-	388,900	392,800	396,700	400,700	404,700
892270 - Combined Sewer Overflow	4,469,600	4,677,400	1,915,900	4,516,100	4,781,400	4,756,700	4,805,000	4,851,200
2.1 Salaries & Wages	1,572,100	1,729,100	689,600	1,502,700	1,616,300	1,616,300	1,616,300	1,616,300
2.2 Workforce Development	26,600	17,700	39,300	73,100	73,100	73,100	73,100	73,100
2.3 Overtime	509,500	564,800	204,200	497,000	495,000	495,000	495,000	495,000
2.4 Employee Benefits	739,400	718,300	372,500	690,400	748,600	763,300	778,000	792,700
2.5 Transition Services	220,900	437,400	294,400	498,400	498,400	498,400	498,400	498,400
4.2 Supplies & Other	81,000	88,400	17,800	82,000	83,200	84,200	85,000	73,800
Car Lease	48,100	-	5,500	49,800	49,800	49,800	49,800	37,700
Inspection and Permit Fees	500	-	-	700	700	700	700	700
Memberships, Licenses & Subscriptions	400	500	200	500	500	500	500	500
Mileage and Parking	3,300	2,400	-	2,800	2,900	3,000	3,000	3,100
Office Supplies	4,700	-	-	4,100	4,100	4,100	4,100	4,200
Operating Supplies	2,000	71,500	2,600	2,000	2,100	2,100	2,200	2,200
Training and Internal Meetings	11,900	2,000	5,000	9,600	9,600	9,800	10,000	10,100
Travel	2,100	4,000	-	4,500	5,000	5,500	6,000	6,100
Tuition Refund	1,500	1,000	1,500	1,000	1,500	1,500	1,500	2,000
Uniforms, Laundry, Cleaning	6,500	7,000	3,000	7,000	7,000	7,200	7,200	7,200
4.3 Contractual Services	1,423,500	1,195,500	321,200	1,250,400	1,345,000	1,305,300	1,338,700	1,382,200
5.1 Capital Program Allocation	(44,000)	(54,400)	(13,400)	(58,200)	(58,100)	(58,400)	(58,600)	(58,900)
5.2 Shared Services	(59,400)	(19,400)	(9,700)	(19,700)	(20,100)	(20,500)	(20,900)	(21,400)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892271 - Puritan Fenkell								
Combined Sewer Overflow	373,600	306,200	87,100	306,500	313,800	317,300	318,800	322,000
3.1 Electric	51,300	46,000	23,100	52,000	52,200	52,500	52,500	52,500
3.2 Gas	17,200	21,000	5,200	20,000	21,000	21,000	21,000	21,000
3.3 Sewage Service	6,800	10,000	9,600	10,000	10,000	10,000	10,000	10,100
3.4 Water Service	7,500	9,100	6,600	10,000	10,000	10,000	10,000	10,100
4.1 Chemicals	8,800	12,700	3,500	9,800	9,800	10,000	10,000	10,000
4.2 Supplies & Other	241,400	202,300	23,700	159,800	165,300	168,000	169,100	171,300
Office Supplies	200	200	100	200	200	200	200	200
Operating Supplies	8,900	31,000	1,700	1,800	1,800	1,800	1,900	1,900
Repairs & Maintenance-Equipment	65,500	72,400	14,300	73,000	79,500	81,000	82,000	83,000
Repairs & Maintenance-Facilities	166,800	98,700	7,600	84,800	83,800	85,000	85,000	86,200
4.3 Contractual Services	40,600	5,100	15,400	44,900	45,500	45,800	46,200	47,000
892272 - 7 Mile Combined Sewer Overflow	118,000	156,800	112,300	164,200	168,800	171,400	173,400	175,300
3.1 Electric	800	42,000	18,400	26,000	26,500	27,000	27,000	27,000
3.2 Gas	11,600	12,000	3,200	12,000	12,000	12,000	12,500	12,500
3.3 Sewage Service	10,400	8,000	6,100	9,000	9,000	9,000	9,200	9,200
3.4 Water Service	7,400	42,000	6,600	12,000	13,600	13,600	13,600	14,000
4.1 Chemicals	-	7,800	-	1,900	1,900	2,000	2,000	2,000
4.2 Supplies & Other	73,100	40,300	72,900	60,000	61,700	63,300	63,900	64,900
Office Supplies	-	-	200	-	-	-	-	-
Operating Supplies	700	11,100	400	1,800	1,800	1,800	1,800	1,800
Repairs & Maintenance-Equipment	20,400	16,700	9,700	42,600	43,900	45,200	45,400	46,100
Repairs & Maintenance-Facilities	52,000	12,500	62,600	15,600	16,300	16,300	16,700	17,000
4.3 Contractual Services	14,700	4,700	5,100	43,300	44,100	44,500	45,200	45,700
892273 - Hubble Southfield								
Combined Sewer Overflow	653,000	451,900	299,800	568,300	572,100	582,200	586,200	588,800
3.1 Electric	62,800	66,000	38,400	63,000	63,600	64,200	64,200	64,200
3.2 Gas	15,500	21,000	17,800	18,500	18,700	18,900	18,900	18,900
3.3 Sewage Service	1,600	2,000	100	2,000	2,000	2,000	2,000	2,000
3.4 Water Service	74,900	108,000	28,600	90,800	91,000	91,500	91,500	91,500
4.1 Chemicals	85,900	122,200	47,600	112,000	112,000	114,900	114,900	114,900
4.2 Supplies & Other	348,600	128,600	146,300	219,200	219,600	223,700	226,900	228,800
Office Supplies	900	-	-	600	600	600	600	600
Operating Supplies	15,400	11,100	800	16,000	16,300	16,600	17,000	17,000
Repairs & Maintenance-Equipment	162,000	101,100	132,900	157,700	160,300	163,800	166,500	168,200
Repairs & Maintenance-Facilities	148,900	16,400	12,600	44,900	42,400	42,700	42,800	43,000
Capital Outlay less than \$5,000	21,400	-	-	-	-	-	-	-
4.3 Contractual Services	63,700	4,100	21,000	62,800	65,200	67,000	67,800	68,500
892274 - Leib Combined Sewer Overflow	535,400	155,800	194,700	305,800	310,800	356,900	359,500	362,200
3.1 Electric	800	45,000	19,000	27,000	27,300	27,500	27,800	28,000
3.2 Gas	9,000	16,000	1,500	16,000	16,200	16,500	16,600	16,600
3.3 Sewage Service	9,500	3,000	3,500	9,000	9,000	9,200	9,200	9,200
3.4 Water Service	5,300	2,000	2,000	5,000	5,000	5,100	5,100	5,100
4.1 Chemicals	15,000	17,900	8,900	17,800	17,800	18,300	18,300	18,300
4.2 Supplies & Other	424,000	68,100	153,500	164,200	167,400	211,300	212,400	214,000
Office Supplies	500	-	1,300	500	500	600	600	600
Operating Supplies	5,200	5,200	1,600	5,500	5,500	5,600	5,600	5,700
Repairs & Maintenance-Equipment	384,000	54,600	130,300	131,100	134,400	177,600	178,500	179,600
Repairs & Maintenance-Facilities	31,400	8,300	19,600	27,100	27,000	27,500	27,700	28,100
Capital Outlay less than \$5,000	2,900	-	700	-	-	-	-	-
4.3 Contractual Services	71,800	3,800	6,300	66,800	68,100	69,000	70,100	71,000
892275 - St Aubin Combined Sewer Overflow	295,200	148,200	116,500	279,000	201,100	204,700	206,900	209,400
3.1 Electric	(3,000)	26,000	12,100	26,000	26,000	26,000	26,000	26,000
3.2 Gas	7,600	8,000	2,300	8,000	8,000	8,000	8,000	8,000
3.3 Sewage Service	1,500	2,500	1,000	2,300	2,400	2,500	2,500	2,600
3.4 Water Service	2,900	4,000	1,600	3,000	3,100	3,200	3,300	3,300
4.1 Chemicals	15,700	24,300	-	21,600	21,600	22,100	22,100	22,100
4.2 Supplies & Other	281,700	75,500	88,900	173,500	94,600	96,800	98,300	99,900
Office Supplies	1,100	-	-	1,000	1,000	1,100	1,100	1,100
Operating Supplies	7,000	11,200	1,100	8,400	8,600	8,700	8,900	9,000
Repairs & Maintenance-Equipment	67,400	54,100	24,800	69,100	70,600	72,300	73,400	74,600
Repairs & Maintenance-Facilities	202,500	10,200	59,500	95,000	14,400	14,700	14,900	15,200
Capital Outlay less than \$5,000	3,700	-	3,500	-	-	-	-	-
4.3 Contractual Services	(11,200)	7,900	10,600	44,600	45,400	46,100	46,700	47,500

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892276 - Connor Creek								
Combined Sewer Overflow	2,996,800	1,285,300	886,600	2,102,800	2,112,400	2,148,400	2,313,400	2,203,300
3.1 Electric	300,600	244,000	134,000	280,400	283,200	286,000	288,900	288,900
3.2 Gas	87,000	73,000	29,000	83,800	85,200	86,100	87,000	87,000
3.3 Sewage Service	209,800	83,000	68,000	150,100	151,200	152,700	154,200	154,200
3.4 Water Service	88,700	30,000	28,200	53,100	54,000	54,500	55,000	55,000
4.1 Chemicals	864,200	575,400	255,600	771,200	771,200	790,500	790,500	790,500
4.2 Supplies & Other	1,279,000	262,800	338,700	586,800	590,600	600,000	756,400	643,400
Office Supplies	6,100	5,200	3,200	6,600	7,200	7,400	7,500	7,600
Operating Supplies	39,200	15,700	18,300	35,000	35,700	36,400	36,800	37,200
Repairs & Maintenance-Equipment	555,300	171,300	245,100	427,800	433,800	440,200	594,400	478,100
Repairs & Maintenance-Facilities	630,200	70,600	59,500	117,400	113,900	116,000	117,700	120,500
Capital Outlay less than \$5,000	48,200	-	12,600	-	-	-	-	-
4.3 Contractual Services	167,500	17,100	33,100	177,400	177,000	178,600	181,400	184,300
892277 - Baby Creek								
Combined Sewer Overflow	1,012,800	1,137,800	411,500	972,900	1,027,100	1,115,400	793,100	745,800
3.1 Electric	127,400	157,000	48,400	132,000	133,200	135,000	135,000	135,000
3.2 Gas	40,100	53,000	10,500	45,400	45,800	46,300	46,300	46,300
4.1 Chemicals	117,900	289,300	92,800	212,600	212,600	218,000	218,000	218,000
4.2 Supplies & Other	600,100	620,500	230,700	497,300	548,700	628,800	305,700	257,700
Office Supplies	400	-	-	500	500	600	600	600
Operating Supplies	11,300	11,000	2,900	12,400	12,500	12,700	13,000	13,300
Repairs & Maintenance-Equipment	342,500	79,500	97,500	129,300	129,700	133,000	133,400	133,600
Repairs & Maintenance-Facilities	245,900	530,000	130,300	355,100	406,000	482,500	158,700	110,200
4.3 Contractual Services	127,300	18,000	29,100	85,600	86,800	87,300	88,100	88,800
892278 - Oakwood Combined Sewer Overflow								
Combined Sewer Overflow	1,434,700	1,287,800	753,200	1,290,800	1,453,600	1,300,300	1,333,100	1,305,800
3.1 Electric	292,600	349,000	209,200	349,000	352,000	352,000	352,000	352,000
3.2 Gas	200	6,000	200	2,500	2,600	3,000	3,000	3,000
3.3 Sewage Service	421,700	465,000	225,100	422,000	430,800	439,400	439,400	439,400
3.4 Water Service	186,400	175,000	100,000	186,400	188,400	190,100	190,100	190,100
4.1 Chemicals	82,100	121,100	59,800	99,200	99,200	101,700	101,700	101,700
4.2 Supplies & Other	385,700	163,900	146,900	197,700	353,100	185,500	218,100	190,600
Office Supplies	1,000	-	100	1,000	1,000	1,000	1,000	1,000
Operating Supplies	13,500	11,200	3,700	13,500	13,700	13,900	14,200	14,500
Repairs & Maintenance-Equipment	217,300	97,700	55,800	97,800	130,400	102,200	134,100	105,900
Repairs & Maintenance-Facilities	151,800	55,000	87,300	85,400	208,000	68,400	68,800	69,200
Capital Outlay less than \$5,000	2,100	-	-	-	-	-	-	-
4.3 Contractual Services	66,000	7,800	12,000	34,000	27,500	28,600	28,800	29,000
892279 - Belle Isle Combined Sewer Overflow								
Combined Sewer Overflow	(95,400)	800	43,200	31,400	4,800	4,300	3,200	2,100
4.1 Chemicals	9,400	5,300	2,200	11,900	11,900	12,000	12,000	12,000
4.2 Supplies & Other	110,600	70,700	9,500	85,600	60,600	61,400	61,800	62,400
Office Supplies	3,500	-	-	-	-	-	-	-
Operating Supplies	400	4,400	800	1,900	1,900	2,000	2,000	2,100
Repairs & Maintenance-Equipment	26,400	36,300	4,300	28,700	28,700	29,200	29,600	30,100
Repairs & Maintenance-Facilities	80,300	30,000	4,400	55,000	30,000	30,200	30,200	30,200
4.3 Contractual Services	18,800	1,200	1,800	11,800	11,800	12,000	12,100	12,100
5.2 Shared Services	(234,200)	(76,400)	(38,200)	(77,900)	(79,500)	(81,100)	(82,700)	(84,400)
6.0 Capital Outlay	-	-	67,900	-	-	-	-	-
897600 - Wastewater System								
Operations Unallocated	-	2,318,500	-	2,250,200	2,348,900	5,509,600	7,834,200	10,211,800
7.0 Unallocated Reserve	-	2,318,500	-	2,250,200	2,348,900	5,509,600	7,834,200	10,211,800
Grand Total	103,397,000	111,990,800	50,774,900	109,204,000	111,517,900	114,501,800	117,763,500	121,289,900

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.

The Wastewater Operations Area Pumping (Lift) Stations strategic initiatives include the following.

❖ **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 pressure, 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.

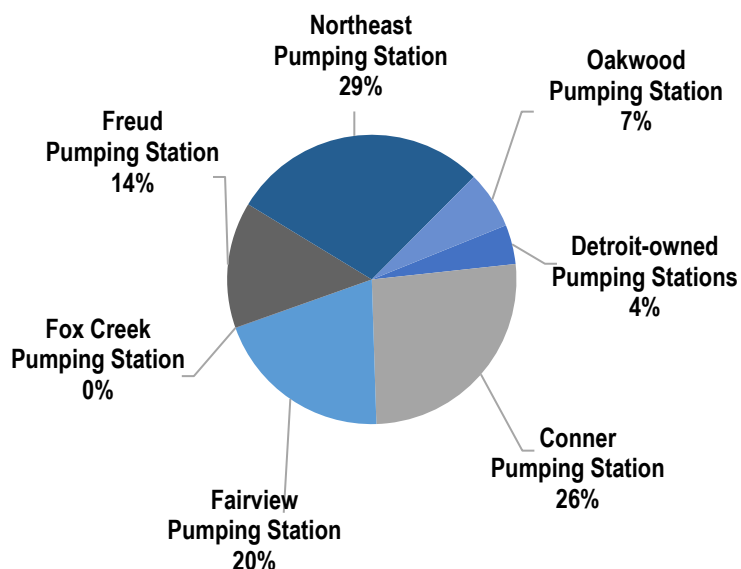
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership 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 and (1) sewer pump 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 Pumping Station (sewer pump station)

FY 2022 REQUEST BY TEAM

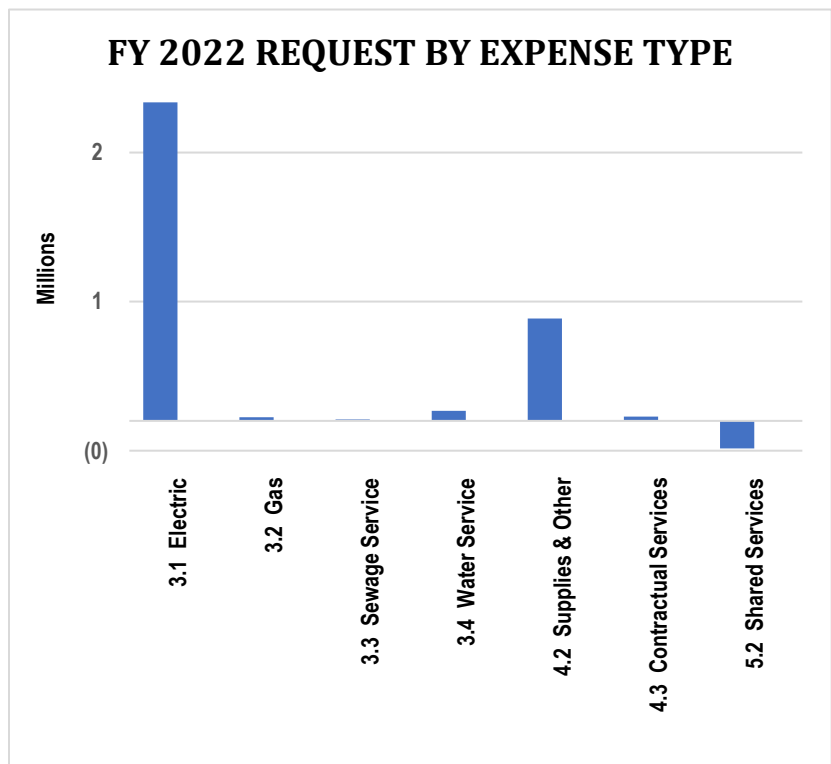


Expense Categories

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 2022 of \$216,800, or 7.3%. Key factors that impact the FY 2022 budget include the following.

- ❖ Energy consumption being directly proportional to the unit cost of power and the actual power used by the lift station pumps (increase of \$27,500).
- ❖ Contractual services decrease of \$34,300 is based on updated estimate for as-needed expert opinion services.
- ❖ Annual maintenance costs vary, depending on the complexity of the equipment and instrumentation. New forecast in usage result in a decrease of \$211,300.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
3.1 Electric	\$ 2,148,000	\$ 2,109,500	\$ 1,416,600	\$ 2,137,000	\$ 27,500	1.3%	\$ 2,134,900
3.2 Gas	13,600	29,000	4,300	24,000	(5,000)	-17.2%	24,000
3.3 Sewage Service	8,700	10,500	4,500	9,000	(1,500)	-14.3%	9,000
3.4 Water Service	66,400	56,000	35,100	67,500	11,500	20.5%	67,500
4.2 Supplies & Other	698,700	897,500	735,800	686,200	(211,300)	-23.5%	686,200
4.3 Contractual Services	4,700	62,500	3,500	28,200	(34,300)	-54.9%	28,200
5.2 Shared Services	(554,400)	(180,800)	(90,300)	(184,500)	(3,700)	2.0%	(188,200)
Grand Total	\$ 2,385,700	\$ 2,984,200	\$ 2,109,500	\$ 2,767,400	\$ (216,800)	-7.3%	\$ 2,761,600

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Detroit-owned							
Pumping Stations	(310,800)	188,700	(800)	121,900	(66,800)	-35.4%	118,200
Belle Isle Pumping Station	(138,900)	(6,000)	(13,200)	(8,800)	(2,800)	46.7%	(10,000)
Blue Hill Pumping Station	(67,000)	132,500	8,500	99,200	(33,300)	-25.1%	97,700
Fischer Pumping Station	(30,900)	(5,100)	(3,000)	300	5,400	-105.9%	100
Woodmere Pumping Station	(74,000)	67,300	6,900	31,200	(36,100)	-53.6%	30,400
Conner Pumping Station	645,200	870,000	335,200	725,000	(145,000)	-16.7%	725,000
Fairview Pumping Station	493,400	535,000	514,400	555,000	20,000	3.7%	555,000
Fox Creek Pumping Station	700	2,000	300	1,000	(1,000)	-50.0%	1,000
Freud Pumping Station	466,000	357,500	423,800	390,500	33,000	9.2%	390,500
Northeast Pumping Station	983,700	748,000	766,900	796,000	48,000	6.4%	793,900
Oakwood Pumping Station	107,500	283,000	69,700	178,000	(105,000)	-37.1%	178,000
Grand Total	\$ 2,385,700	\$ 2,984,200	\$ 2,109,500	\$ 2,767,400	\$ (216,800)	-7.3%	\$ 2,761,600

Personnel Budget

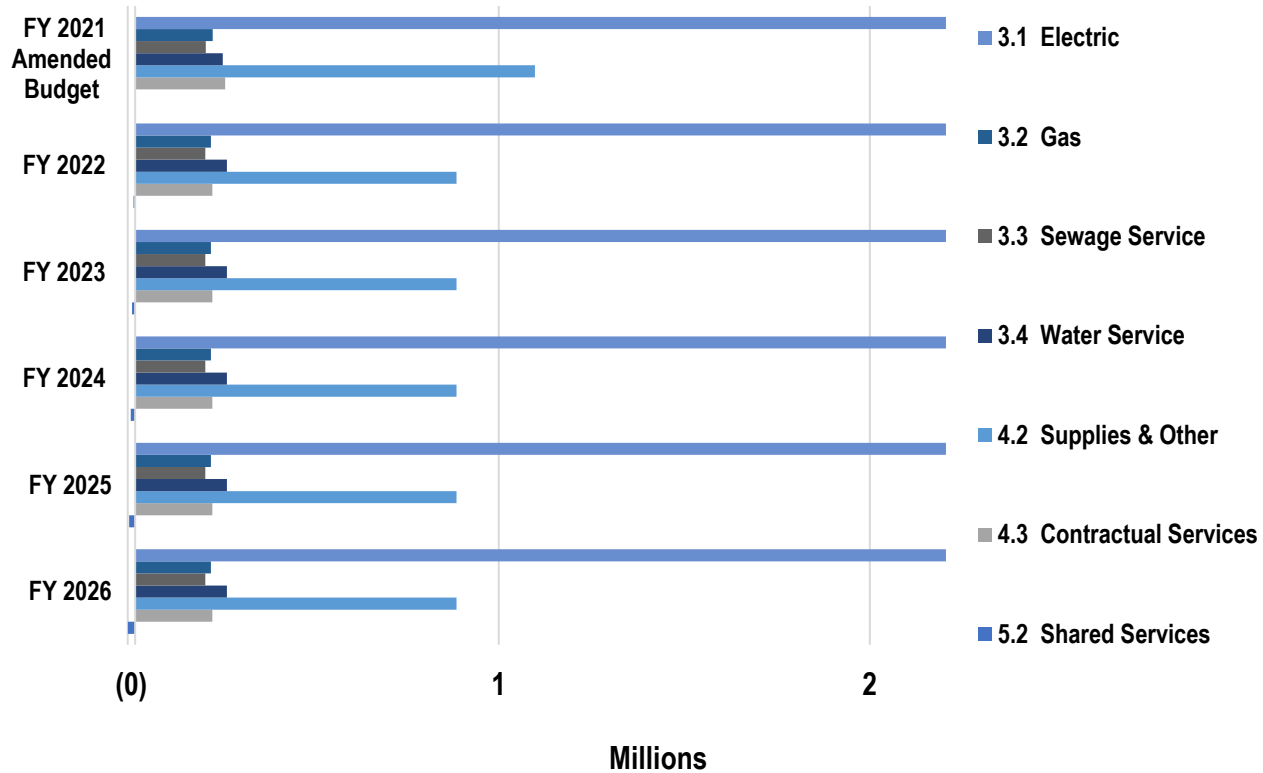
Personnel budget is not a component of the Wastewater Operations Area Pumping (Lift) Stations.

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
3.1 Electric	\$ 2,109,500	\$ 1,416,600	\$ 2,137,000	\$ 27,500	1.3%	\$ 2,134,900	\$ 2,134,900	\$ 2,134,900	\$ 2,134,900
3.2 Gas	29,000	4,300	24,000	(5,000)	-17.2%	24,000	24,000	24,000	24,000
3.3 Sewage Service	10,500	4,500	9,000	(1,500)	-14.3%	9,000	9,000	9,000	9,000
3.4 Water Service	56,000	35,100	67,500	11,500	20.5%	67,500	67,500	67,500	67,500
4.2 Supplies & Other	897,500	735,800	686,200	(211,300)	-23.5%	686,200	686,200	686,200	686,200
4.3 Contractual Services	62,500	3,500	28,200	(34,300)	-54.9%	28,200	28,200	28,200	28,200
5.2 Shared Services	(180,800)	(90,300)	(184,500)	(3,700)	2.0%	(188,200)	(192,000)	(196,000)	(199,600)
Grand Total	\$ 2,984,200	2,109,500	\$ 2,767,400	\$ (216,800)	-7.3%	\$ 2,761,600	\$ 2,757,800	\$ 2,753,800	\$ 2,750,200

Five-Year Financial Plan

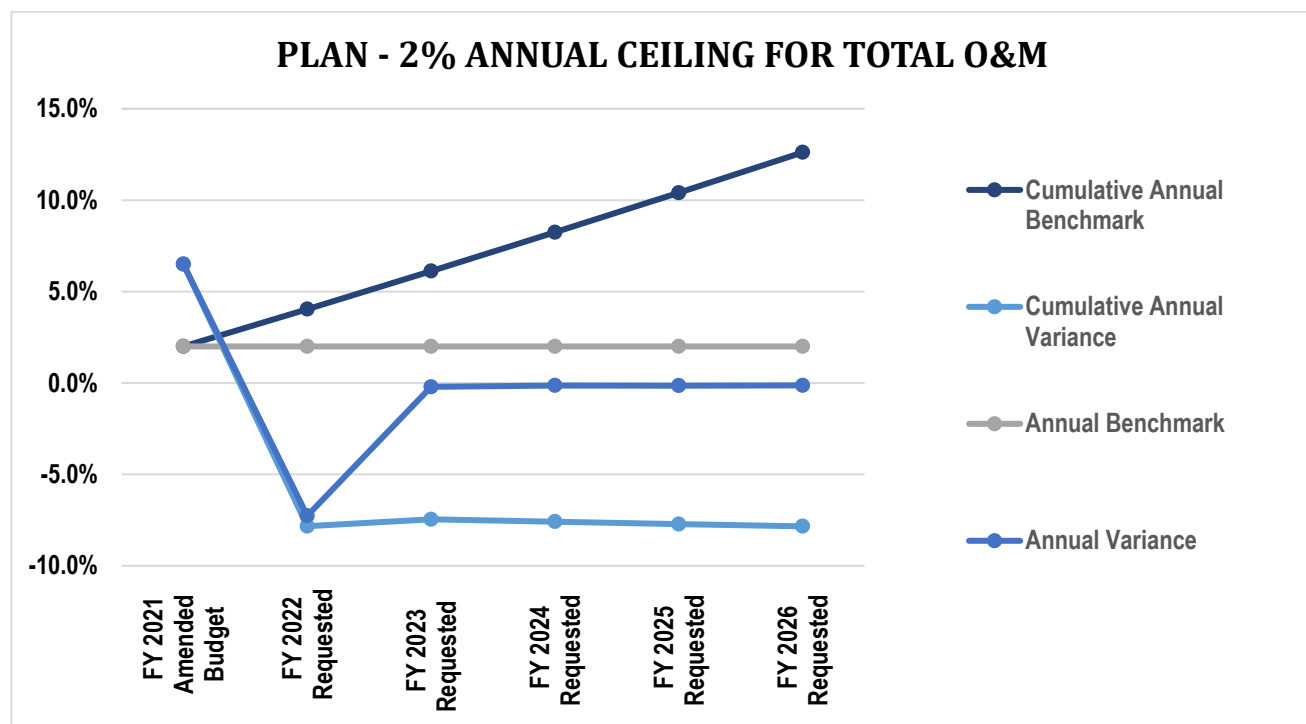


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Detroit-owned									
Pumping Stations	\$ 188,700	\$ (800)	\$ 121,900	\$ (66,800)	-35.4%	\$ 118,200	\$ 114,400	\$ 110,400	\$ 106,800
Belle Isle Pumping Station	(6,000)	(13,200)	(8,800)	(2,800)	46.7%	(10,000)	(11,200)	(12,400)	(13,600)
Blue Hill Pumping Station	132,500	8,500	99,200	(33,300)	-25.1%	97,700	96,100	94,500	92,900
Fischer Pumping Station	(5,100)	(3,000)	300	5,400	-105.9%	100	(200)	(500)	(700)
Woodmere Pumping Station	67,300	6,900	31,200	(36,100)	-53.6%	30,400	29,700	28,800	28,200
Conner Pumping Station	870,000	335,200	725,000	(145,000)	-16.7%	725,000	725,000	725,000	725,000
Fairview Pumping Station	535,000	514,400	555,000	20,000	3.7%	555,000	555,000	555,000	555,000
Fox Creek Pumping Station	2,000	300	1,000	(1,000)	-50.0%	1,000	1,000	1,000	1,000
Freud Pumping Station	357,500	423,800	390,500	33,000	9.2%	390,500	390,500	390,500	390,500
Northeast Pumping Station	748,000	766,900	796,000	48,000	6.4%	793,900	793,900	793,900	793,900
Oakwood Pumping Station	283,000	69,700	178,000	(105,000)	-37.1%	178,000	178,000	178,000	178,000
Grand Total	\$ 2,984,200	\$ 2,109,500	\$ 2,767,400	\$ (216,800)	-7.3%	\$ 2,761,600	\$ 2,757,800	\$ 2,753,800	\$ 2,750,200

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 7.8% which is well within the entity-wide goal of a cumulative ceiling of no more than 12.6% for planning purposes (based upon an annual 2% adjustment).



Capital Outlay

Capital Outlay is not a component of the Wastewater Pumping (Lift) 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
892342 - Belle Isle Pumping Station	(138,900)	(6,000)	(13,200)	(8,800)	(10,000)	(11,200)	(12,400)	(13,600)
4.2 Supplies & Other	33,500	50,400	13,800	45,000	45,000	45,000	45,000	45,000
Repairs & Maintenance-Equipment	33,500	50,400	13,800	45,000	45,000	45,000	45,000	45,000
4.3 Contractual Services	500	-	1,200	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	500	-	1,200	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(172,900)	(56,400)	(28,200)	(57,500)	(58,700)	(59,900)	(61,100)	(62,300)
Shared Services Reimbursement	(172,900)	(56,400)	(28,200)	(57,500)	(58,700)	(59,900)	(61,100)	(62,300)
892343 - Blue Hill Pumping Station	(67,000)	132,500	8,500	99,200	97,700	96,100	94,500	92,900
4.2 Supplies & Other	164,100	208,000	45,600	173,000	173,000	173,000	173,000	173,000
Repairs & Maintenance-Equipment	164,100	208,000	45,600	173,000	173,000	173,000	173,000	173,000
4.3 Contractual Services	300	-	600	3,200	3,200	3,200	3,200	3,200
Contractual Buildings & Grounds Maint	300	-	600	3,200	3,200	3,200	3,200	3,200
5.2 Shared Services	(231,400)	(75,500)	(37,700)	(77,000)	(78,500)	(80,100)	(81,700)	(83,300)
Shared Services Reimbursement	(231,400)	(75,500)	(37,700)	(77,000)	(78,500)	(80,100)	(81,700)	(83,300)
892345 - Conner Pumping Station	645,200	870,000	335,200	725,000	725,000	725,000	725,000	725,000
3.1 Electric	460,400	600,000	255,100	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	8,700	10,000	4,500	9,000	9,000	9,000	9,000	9,000
3.4 Water Service	38,800	36,000	19,800	39,000	39,000	39,000	39,000	39,000
4.2 Supplies & Other	134,200	207,000	55,300	170,000	170,000	170,000	170,000	170,000
Repairs & Maintenance-Equipment	134,200	207,000	55,300	170,000	170,000	170,000	170,000	170,000
4.3 Contractual Services	2,000	15,000	-	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	2,000	15,000	-	5,000	5,000	5,000	5,000	5,000
892346 - Fairview Pumping Station	493,400	535,000	514,400	555,000	555,000	555,000	555,000	555,000
3.1 Electric	404,300	450,000	501,600	450,000	450,000	450,000	450,000	450,000
3.2 Gas	500	15,000	200	10,000	10,000	10,000	10,000	10,000
3.4 Water Service	19,100	15,000	5,700	20,000	20,000	20,000	20,000	20,000
4.2 Supplies & Other	69,500	55,000	6,900	75,000	75,000	75,000	75,000	75,000
Repairs & Maintenance-Equipment	69,500	55,000	6,900	75,000	75,000	75,000	75,000	75,000
892347 - Fischer Pumping Station	(30,900)	(5,100)	(3,000)	300	100	(200)	(500)	(700)
4.2 Supplies & Other	6,200	7,100	2,100	7,200	7,200	7,200	7,200	7,200
Repairs & Maintenance-Equipment	6,200	7,100	2,100	7,200	7,200	7,200	7,200	7,200
4.3 Contractual Services	400	-	1,000	5,600	5,600	5,600	5,600	5,600
Contractual Buildings & Grounds Maint	400	-	1,000	5,600	5,600	5,600	5,600	5,600
5.2 Shared Services	(37,500)	(12,200)	(6,100)	(12,500)	(12,700)	(13,000)	(13,300)	(13,500)
Shared Services Reimbursement	(37,500)	(12,200)	(6,100)	(12,500)	(12,700)	(13,000)	(13,300)	(13,500)
892348 - Fox Creek Pumping Station	700	2,000	300	1,000	1,000	1,000	1,000	1,000
3.1 Electric	700	1,500	300	1,000	1,000	1,000	1,000	1,000
3.3 Sewage Service	-	500	-	-	-	-	-	-
892349 - Freud Pumping Station	466,000	357,500	423,800	390,500	390,500	390,500	390,500	390,500
3.1 Electric	369,200	190,000	149,000	275,000	275,000	275,000	275,000	275,000
3.2 Gas	12,000	12,000	3,600	12,000	12,000	12,000	12,000	12,000
3.4 Water Service	8,500	5,000	9,600	8,500	8,500	8,500	8,500	8,500
4.2 Supplies & Other	75,100	143,000	261,600	90,000	90,000	90,000	90,000	90,000
Repairs & Maintenance-Equipment	75,100	143,000	261,600	90,000	90,000	90,000	90,000	90,000
4.3 Contractual Services	1,200	7,500	-	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	1,200	7,500	-	5,000	5,000	5,000	5,000	5,000
892350 - Northeast Pumping Station	983,700	748,000	766,900	796,000	793,900	793,900	793,900	793,900
3.1 Electric	815,900	748,000	440,900	796,000	793,900	793,900	793,900	793,900
4.2 Supplies & Other	167,800	-	326,000	-	-	-	-	-
Repairs & Maintenance-Equipment	167,800	-	326,000	-	-	-	-	-
892351 - Oakwood Pumping Station	107,500	283,000	69,700	178,000	178,000	178,000	178,000	178,000
3.1 Electric	97,500	120,000	69,700	115,000	115,000	115,000	115,000	115,000
4.2 Supplies & Other	10,000	123,000	-	61,000	61,000	61,000	61,000	61,000
Repairs & Maintenance-Equipment	10,000	123,000	-	61,000	61,000	61,000	61,000	61,000
4.3 Contractual Services	-	40,000	-	2,000	2,000	2,000	2,000	2,000
Contractual Professional Services	-	40,000	-	2,000	2,000	2,000	2,000	2,000
892352 - Woodmere Pumping Station	(74,000)	67,300	6,900	31,200	30,400	29,700	28,800	28,200
4.2 Supplies & Other	38,300	104,000	24,500	65,000	65,000	65,000	65,000	65,000
Repairs & Maintenance-Equipment	38,300	104,000	24,500	65,000	65,000	65,000	65,000	65,000
4.3 Contractual Services	300	-	700	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	300	-	700	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(112,600)	(36,700)	(18,300)	(37,500)	(38,300)	(39,000)	(39,900)	(40,500)
Shared Services Reimbursement	(112,600)	(36,700)	(18,300)	(37,500)	(38,300)	(39,000)	(39,900)	(40,500)
Grand Total	\$ 2,385,700	\$ 2,984,200	\$ 2,109,500	\$ 2,767,400	\$ 2,761,600	\$ 2,757,800	\$ 2,753,800	\$ 2,750,200

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Section 3C

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.

The Planning Services Area leads several strategic initiatives that impact both the Water and Wastewater Systems.

Water System Programs:

- ❖ **Linear System Integrity Program – (Completion Date – June 2027)**

Assess the risk to the water delivery infrastructure through the physical review of the system as well as assessing reliability to ensure stability of service delivery to member partners. We have selected vendor, HDR Water Resource Management as our strategic partner for this initiative with plans to commence in early FY 2022.

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

This initiative ensures quality and efficiency at local levels by monitoring community water systems with performance dashboards providing real time system data directly to our member partners.

- ❖ **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.

- ❖ **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:

❖ **Asset Management Planning – (Ongoing)**

○ **Strategic Asset Management Plan (SAMP)**

To identify the timing related to key initiatives, identify how asset management related information is used to drive prudent Capital Improvement Plan expenditures and provide a long-term, 10-year, roadmap to execute various asset management initiatives. The plan is now in phase 2 of its execution cycle.

○ **Water and Wastewater Asset Management Plan (AMP) Development**

Currently in development of tactical water and wastewater AMP plans that will document the asset portfolio and risk profile, identify current preventative maintenance and possible mitigation strategies, and perform preventative maintenance optimization and visual condition assessments on high-risk assets. These plans will identify and prioritize improvement initiatives over the three-year life of the plan.

❖ **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 bulk of the agreement will be funded as Capital as it targets specific, long-term projects. However, there is a significant O&M component involving business improvement, process

development and other O&M related support. As we continue to complete the initial O&M groundwork for the CIP, activities and related expenditures will shift to capital funded programs. This shift is clearly seen in our FY 2021 and FY 2022 budgets.

❖ **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	Strategic Asset Management Plan				x					x		
	Capital Improvement Plan				x	x	x			x		
	Oracle Work and Asset Management System Support				x		x					

Planning Services Contracts

In the tables below, 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, 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
Prime Consultant or Supplier	HDR	Aquasight	TBD	Black & Veatch	
Contract #	TBD	1900949	TBD	GLWA-CS-039	
Contract Amount	TBD	\$ 850,000	TBD	\$ 1,824,800	
Contract End Date	TBD	04/25/22	TBD	10/31/21	
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 Amended	979,300	350,000	500,000	300,000	2,129,300
FY 2022 Requested	2,770,400	350,000	500,000	300,000	3,920,400
FY 2023 Requested	2,993,400	350,000	1,500,000	309,000	5,152,400
FY 2024 Requested	2,970,600	350,000	1,000,000	318,300	4,638,900
FY 2025 Requested	2,970,600	350,000	500,000	327,900	4,148,500
FY 2026 Requested	3,317,500	350,000		337,700	4,005,200
Total	\$ 16,001,800	\$ 2,100,000	\$ 4,000,000	\$ 3,530,300	\$ 25,632,100

LSIP expenditures contain a small wastewater component of \$100K/YR.

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	Total
Prime Consultant or Supplier	CDM Smith or Other	CDM Smith	Applied Science	PCI LLC	
Contract #	GLWA-CS-036	GLWA-CS-239	GLWA-CS-236	GLWA-CON-179	
Contract Amount	\$ 9,022,700	\$ 2,420,900	\$ 1,435,100	\$ 6,465,800	
Contract End Date	10/31/20	In Renewal	In Renewal	07/02/22	
Cost Center Name	Systems Planning	Systems Analytics	Systems Analytics	Systems Analytics	
Expense Category	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 Amended	125,000	816,000	675,000	490,000	2,106,000
FY 2022 Requested	-	600,000	425,000	490,000	1,515,000
FY 2023 Requested	-	600,000	425,000	490,000	1,515,000
FY 2024 Requested	-	700,000	425,000	490,000	1,615,000
FY 2025 Requested	-	730,000	425,000	490,000	1,645,000
FY 2026 Requested	-	760,000	425,000	490,000	1,675,000
Total	\$ 8,999,900	\$ 5,540,200	\$ 3,537,900	\$ 5,462,033	\$ 23,540,033

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
Prime Consultant or Supplier	Wade Trim	Jacobs Engineering or Other	AECOM	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	8,182,600
FY 2021 Amended	679,800	936,000	2,938,700	320,000	4,194,700
FY 2022 Requested	600,000	500,000	510,000	250,000	1,260,000
FY 2023 Requested	200,000	500,000	510,000	250,000	1,260,000
FY 2024 Requested		500,000	-	150,000	650,000
FY 2025 Requested		500,000			500,000
FY 2026 Requested		500,000	-	-	500,000
Total	\$ 1,571,800	\$ 6,129,300	\$ 11,624,500	\$ 1,804,800	\$ 19,558,600

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.

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

❖ Asset Management

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

❖ Systems Planning

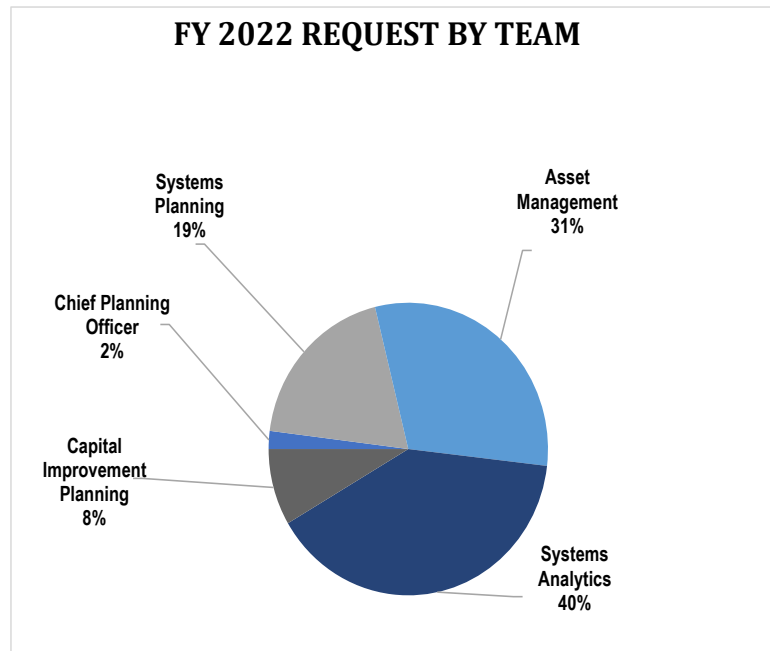
Responsible for internal and external strategic planning, outreach, and coordination with member partners

❖ 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

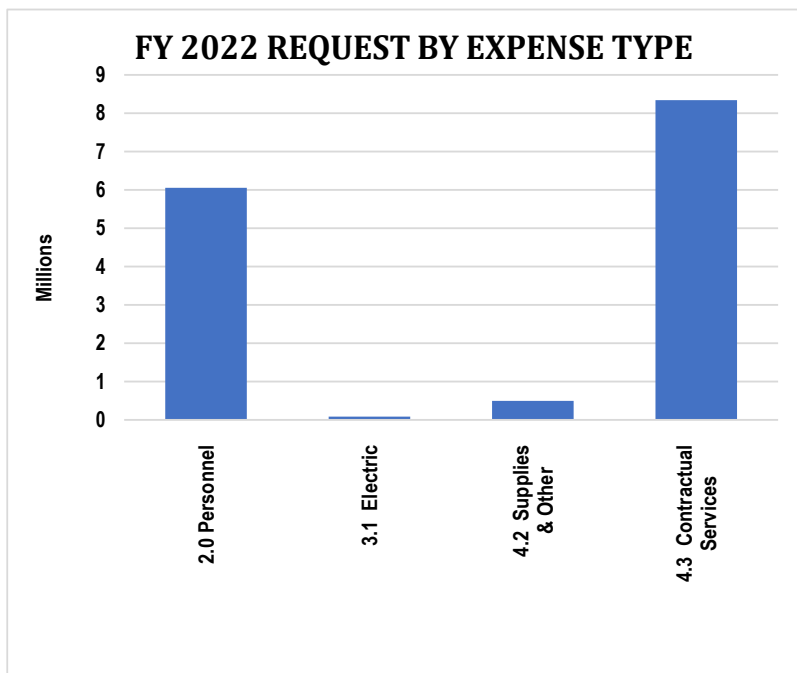
There are two major categories of Planning Services Area expenses in the operations and maintenance budget as listed below.

- Contractual services
- Personnel Costs

Contractual Services is the largest expense category with strategic initiatives spanning the entire organization. Significant efforts include the development of management plans in Systems Planning, Asset Management and Capital Improvement Planning. 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 five years. Given the breadth of assignments, recruiting, and retaining top talent is a high priority. Accordingly, personnel costs are the second highest expense category. 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 decrease in FY 2022 due to changes in activity levels of several large consulting projects within the Planning Services Area.

- ❖ Capital Improvement Planning spending with vendor, AECOM will continue to decrease in FY 2022 as initial O&M based assessment and improvement of our existing CIP operations shifts to more Capital focused work. This shift began in FY 2021 and will continue through contract completion.
- ❖ Systems Planning has completed phase one of the Wastewater Master Plan with vendor, CDM Smith in FY 2020. Phase II of this initiative will commence in FY 2024.
- ❖ The Asset Management Team has completed phase one of the Asset Master Plan with vendor, Jacobs Engineering and has now entered phase 2. Phase 1 consisted of development of the Strategic Asset Management Plan while Phase 2 will result in the development of tactical water and wastewater Asset Management Plans. As noted earlier, the Asset Management Team has selected strategic vendor HDR Water Resource Management for the Linear System Integrity Program and will begin preliminary work in early FY 2022.
- ❖ Systems Analytics has consolidated its East and West Side Sewer Modeling and Monitoring initiatives with the overall Wastewater Master Plan resulting in the reduction of significant organizational overlap and related costs of capital in the future.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity thru 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 4,710,800	\$ 5,623,100	\$ 2,473,400	\$ 6,053,200	\$ 430,100	7.6%	\$ 6,439,800
3.1 Electric	18,600	81,700	26,700	81,700	-	0.0%	82,000
4.2 Supplies & Other	427,600	564,900	85,800	492,900	(72,000)	-12.7%	487,900
4.3 Contractual Services	12,790,300	9,738,700	5,713,900	8,337,700	(1,401,000)	-14.4%	9,281,600
5.1 Capital Program Allocation	-	-	-	-	-	0.0%	-
5.2 Shared Services	146,300	(95,000)	(47,500)	-	95,000	0.0%	-
Grand Total	\$ 18,093,600	\$ 15,913,400	\$ 8,252,300	\$ 14,965,500	\$ (947,900)	-6.0%	\$ 16,291,300

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity thru 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY2022 Percent Variance	FY 2023 Department Requested
Chief Planning Officer	\$ 302,700	\$ 382,000	\$ 141,500	\$ 297,500	\$ (84,500)	-22.1%	\$ 299,300
Systems Planning	3,124,800	2,799,400	776,700	2,870,200	70,800	2.5%	3,723,300
Asset Management	1,879,100	3,154,600	1,174,700	4,591,000	1,436,400	45.5%	4,910,200
Systems Analytics	5,165,800	6,017,800	1,924,400	5,939,600	(78,200)	-1.3%	5,968,900
Capital Improvement Planning	7,621,200	3,559,600	4,235,000	1,267,200	(2,292,400)	-64.4%	1,389,500
Grand Total	\$ 18,093,600	\$ 15,913,400	\$ 8,252,300	\$ 14,965,500	\$ (947,900)	-6.0%	\$ 16,291,200

Personnel Budget

The staffing plan provides for a steady state of 66 positions as of FY 2022. These positions are forecasted to be filled by FY 2024 as Planning Services levels out its staffing requirements.

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

Team	Prior Year FY 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Planning Services	70.00	73.00	57.00	60.00	66.00	66.00	66.00
Chief Planning Officer	3.00	3.00	2.00	2.00	2.00	2.00	2.00
Systems Planning	7.00	7.00	5.00	7.00	7.00	7.00	7.00
Asset Management	9.00	11.00	8.00	9.00	11.00	11.00	11.00
Systems Analytics	43.00	44.00	36.00	36.00	39.00	39.00	39.00
Capital Improvement Planning	8.00	8.00	6.00	6.00	7.00	7.00	7.00

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Planning Services	64.25	63.25	56.00	59.50	66.00	66.00	66.00
Chief Planning Officer	2.00	3.00	2.00	2.00	2.00	2.00	2.00
Systems Planning	6.00	6.00	4.50	7.00	7.00	7.00	7.00
Asset Management	9.00	9.50	7.50	8.50	11.00	11.00	11.00
Systems Analytics	43.00	39.25	36.00	36.00	39.00	39.00	39.00
Capital Improvement Planning	4.25	5.50	6.00	6.00	7.00	7.00	7.00

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity thru 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY2022 Percent Variance	FY 2023 Department Requested
Chief Planning Officer	\$ 295,000	\$ 368,100	\$ 138,200	\$ 282,600	\$ (85,500)	-23.2%	\$ 283,800
Systems Planning	314,900	469,700	178,300	497,000	27,300	5.8%	640,300
Asset Management	668,200	880,200	366,600	928,300	48,100	5.5%	1,033,200
Systems Analytics	3,072,600	3,291,200	1,540,300	3,620,800	329,600	10.0%	3,636,200
Capital Improvement Planning	360,100	613,900	250,000	724,500	110,600	18.0%	846,200
Grand Total	\$ 4,710,800	\$ 5,623,100	\$ 2,473,400	\$ 6,053,200	\$ 430,100	7.6%	\$ 6,439,700

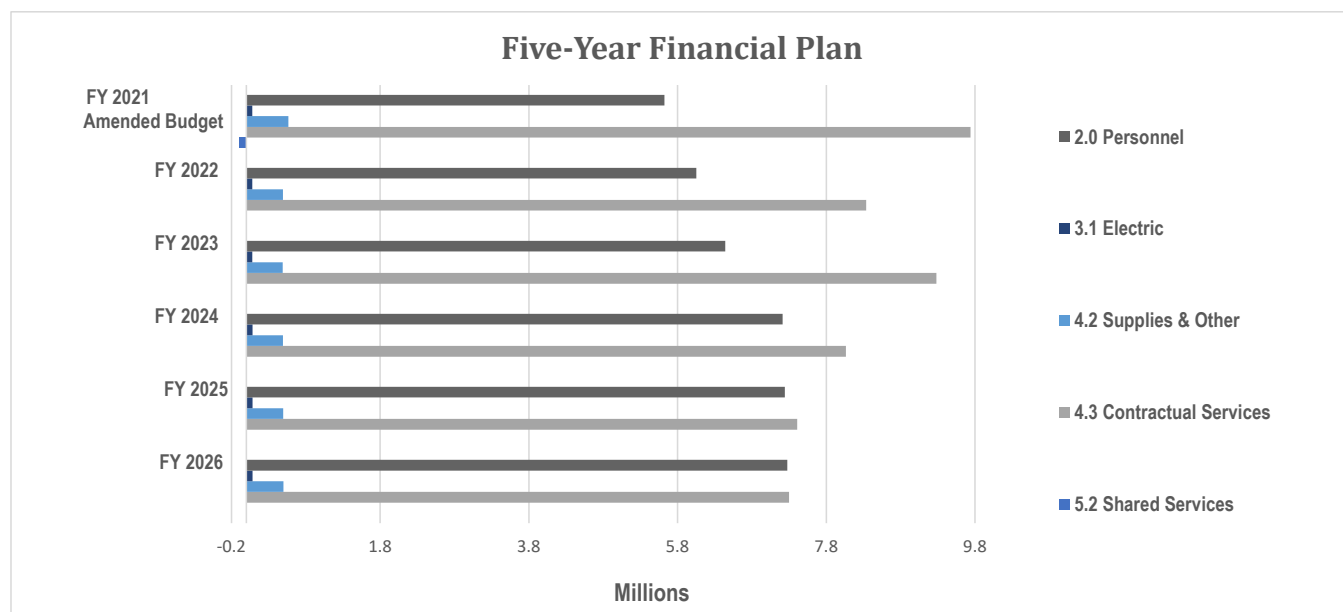
Five-Year Personnel Budget

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Planning Officer	295,000	368,100	282,600	283,800	285,100	286,400	287,600
Systems Planning	314,900	469,700	497,000	640,300	750,500	754,100	757,800
Asset Management	668,200	880,200	928,300	1,033,200	1,290,900	1,296,900	1,303,000
Capital Improvement Planning	360,100	613,900	724,500	846,200	850,200	854,200	858,100
Grand Total	\$ 4,710,800	\$ 5,623,100	\$ 6,053,200	\$ 6,439,700	\$ 7,211,300	\$ 7,243,300	\$ 7,275,500

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity thru 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 5,623,100	\$ 2,473,400	\$ 6,053,200	\$ 430,100	7.6%	\$ 6,439,700	\$ 7,211,300	\$ 7,243,300	\$ 7,275,500
3.1 Electric	81,700	26,700	81,700	-	0.0%	82,000	82,300	82,600	82,900
4.2 Supplies & Other	564,900	85,800	492,900	(72,000)	-12.7%	487,900	493,200	496,500	499,900
4.3 Contractual Services	9,738,700	5,713,900	8,337,700	(1,401,000)	-14.4%	9,281,600	8,062,300	7,407,200	7,297,600
5.1 Capital Program Allocation	-	-	-	-	0.0%	-	-	-	-
5.2 Shared Services	(95,000)	(47,500)	-	95,000	0.0%	-	-	-	-
Grand Total	\$ 15,913,400	\$ 8,252,300	\$ 14,965,500	\$ (947,900)	-6.0%	\$ 16,291,200	\$ 15,849,100	\$ 15,229,600	\$ 15,155,900

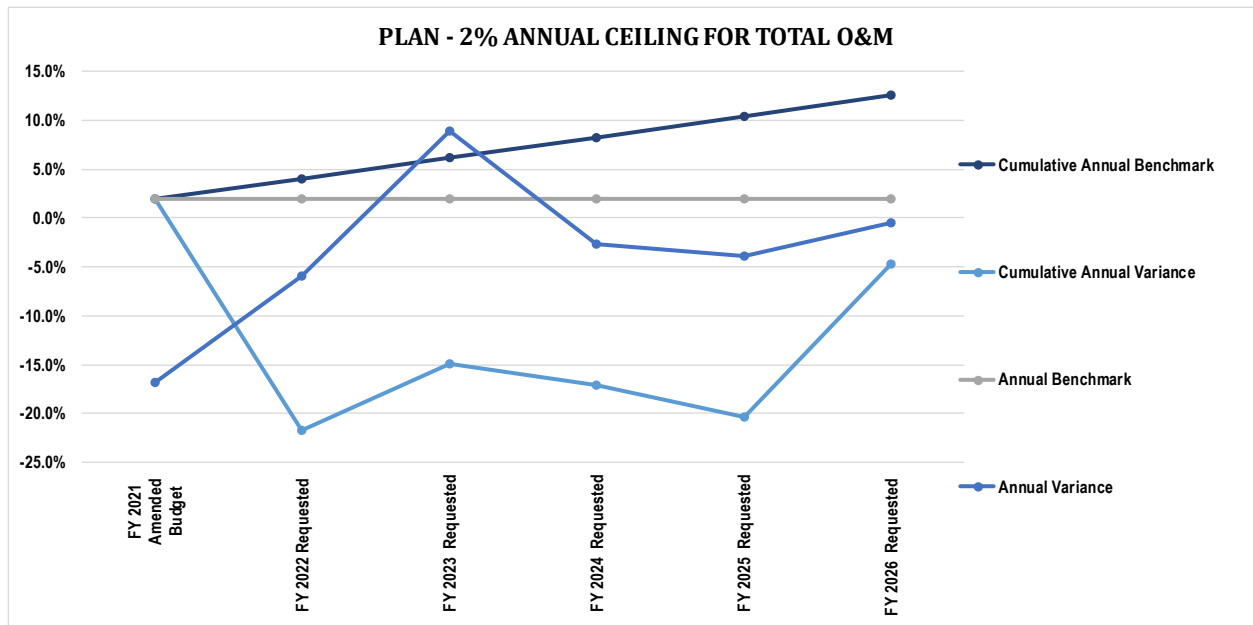


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity thru 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Planning Officer	\$ 382,000	\$ 141,500	\$ 297,500	\$ (84,500)	-22.1%	\$ 299,300	\$ 301,600	\$ 303,600	\$ 305,800
Systems Planning	2,799,400	776,700	2,870,200	70,800	2.5%	3,723,300	3,134,600	2,590,100	2,094,000
Asset Management	3,154,600	1,174,700	4,591,000	1,436,400	45.5%	4,910,200	5,045,900	4,902,300	5,255,600
Systems Analytics	6,017,800	1,924,400	5,939,600	(78,200)	-1.3%	5,968,900	6,481,500	6,543,000	6,604,700
Capital Improvement Planning	3,559,600	4,235,000	1,267,200	(2,292,400)	-64.4%	1,389,500	885,500	890,600	895,800
Grand Total	\$ 15,913,400	\$ 8,252,300	\$ 14,965,500	\$ (947,900)	-6.0%	\$ 16,291,200	\$ 15,849,100	\$ 15,229,600	\$ 15,155,900

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

The Planning Services Area financial plan reflects a five-year overall decrease of 4.8% while the entity-wide goal is a cumulative ceiling of no more than 12.6% for planning purposes (based upon an annual 2% adjustment). This decrease is primarily explained by the completion and or consolidation of significant initiatives that utilized outside consulting services, the largest of which being in the Capital Improvement Planning area with their lead contractor AECOM. Significant O&M cost reductions are forecasted as the initiative shifts to its capital-intensive phase. As noted earlier, project completion is projected to be June 2023.



Capital Outlay

Planning Services capital outlay is funded by the Improvement and Extension (I&E) Budget. Significant components of the FY 2022 I&E budget are as follows:

- ✓ Computers & IT/Machinery & Equipment – 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 equipment necessary to repair meters.

Five-Year Capital Outlay Plan by Asset Category

Asset Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,811,600	\$ 1,415,600	\$ 1,700,600	\$ 1,447,300	\$ 349,600	\$ 349,600
Computers & IT	2,200,000	1,000,000	1,300,000	1,000,000	-	-
Flow Metering & Meters	95,000	401,600	400,600	394,600	349,600	309,500
Furniture & Fixtures	450,000	-	-	-	-	-
Leasehold Improvements	28,000	-	-	-	-	-
Passenger Vehicles	-	14,000	-	13,000	-	-
Tools, Shop & Warehouse	38,600	-	-	39,700	-	40,100
Grand Total	2,811,600	1,415,600	1,700,600	1,447,300	349,600	349,600

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,811,600	\$ 1,415,600	\$ 1,700,600	\$ 1,447,300	\$ 349,600	\$ 349,600
Grand Total	\$ 2,811,600	\$ 1,415,600	\$ 1,700,600	\$ 1,447,300	\$ 349,600	\$ 349,600

Five-Year Capital Outlay Plan by Team

Asset Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Systems Planning	\$ 2,811,600	\$ 1,415,600	\$ 1,700,600	\$ 1,447,300	\$ 349,600	\$ 349,600
Chief Planning Officer	28,000	-	-	-	-	-
Systems Planning	450,000	-	300,000	-	-	-
Asset Management	-	-	-	-	-	-
Systems Analytics	2,333,600	1,415,600	1,400,600	1,447,300	349,600	349,600
Capital Improvement Planning	-	-	-	-	-	-
Grand Total	\$ 2,811,600	\$ 1,415,600	\$ 1,700,600	\$ 1,447,300	\$ 349,600	\$ 349,600

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
886001 - Chief Planning Officer	\$ 302,600	\$ 382,000	\$ 141,500	\$ 297,500	\$ 299,400	\$ 301,600	\$ 303,500	\$ 305,800
2.1 Salaries & Wages	246,100	288,500	112,100	219,800	219,800	219,800	219,800	219,800
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	48,900	79,600	26,100	62,800	64,100	65,300	66,600	67,800
4.2 Supplies & Other	7,100	13,300	3,300	14,300	14,900	15,900	16,500	17,600
Capital Outlay less than \$5000	2,000	2,000	-	2,000	2,000	2,000	2,000	2,000
Memberships, Licenses & Subscriptions	600	600	400	900	1,100	1,400	1,500	1,900
Mileage and Parking	-	-	-	-	-	-	-	-
Office Supplies	3,100	2,200	300	2,500	2,700	3,000	3,200	3,500
Training and Internal Meetings	1,400	3,500	2,600	3,600	3,600	3,700	3,800	3,900
Travel	-	5,000	-	5,300	5,500	5,800	6,000	6,300
Tuition Refund	-	-	-	-	-	-	-	-
4.3 Contractual Services	500	600	-	600	600	600	600	600
886101 - Systems Planning	3,124,700	2,799,400	776,700	2,870,200	3,723,300	3,134,600	2,590,200	2,094,000
2.1 Salaries & Wages	244,800	363,400	139,200	376,900	480,900	560,900	560,900	560,900
2.3 Overtime	400	-	-	-	-	-	-	-
2.4 Employee Benefits	69,700	106,300	39,100	120,100	159,400	189,600	193,200	196,900
4.2 Supplies & Other	65,300	79,700	900	83,600	84,600	85,700	86,100	86,200
Capital Outlay less than \$5000	-	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	400	500	-	800	1,000	1,300	1,500	1,500
Mileage and Parking	400	1,200	-	1,200	1,200	1,300	1,300	1,300
Office Supplies	2,900	6,000	200	6,900	7,200	7,500	7,500	7,500
Operating Supplies	49,800	62,500	(300)	65,000	65,000	65,000	65,000	65,000
Training and Internal Meetings	4,900	500	700	500	800	1,000	1,000	1,000
Travel	6,900	9,000	300	9,200	9,400	9,600	9,800	9,900
4.3 Contractual Services	2,744,500	2,250,000	597,500	2,289,600	2,998,400	2,298,400	1,750,000	1,250,000
886201 - Asset Management	1,879,100	3,154,600	1,174,700	4,591,100	4,910,200	5,045,900	4,902,200	5,255,600
2.1 Salaries & Wages	534,700	687,400	292,500	712,900	787,900	975,400	975,300	975,400
2.4 Employee Benefits	133,500	192,800	74,100	215,400	245,300	315,500	321,500	327,600
4.2 Supplies & Other	86,000	80,100	50,400	42,400	33,600	34,300	34,800	35,100
Capital Outlay less than \$5000	-	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	1,500	1,200	300	1,500	1,800	2,100	2,100	2,100
Mileage and Parking	2,300	7,100	-	7,200	7,400	7,500	7,700	7,800
Office Supplies	6,800	8,700	600	9,000	9,100	9,200	9,500	9,700
Repairs & Maintenance	-	-	-	-	-	-	-	-
Software	55,900	40,000	48,500	10,000	2,500	2,500	2,500	2,500
Training and Internal Meetings	7,900	11,100	1,000	500	800	1,000	1,000	1,000
Travel	7,600	12,000	-	12,200	10,000	10,000	10,000	10,000
Tuition Refund	4,000	-	-	2,000	2,000	2,000	2,000	2,000
4.3 Contractual Services	1,124,900	2,194,300	757,700	3,620,400	3,843,400	3,720,600	3,570,600	3,917,500

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
886401 - Systems Analytics	5,165,900	6,017,800	1,924,400	5,939,600	5,968,900	6,481,500	6,543,000	6,604,700
2.1 Salaries & Wages	1,587,000	1,696,500	861,500	1,883,600	1,883,600	2,175,600	2,175,600	2,175,600
2.2 Workforce								
Development	188,400	246,400	-	-	-	-	-	-
2.3 Overtime	134,000	112,400	59,700	136,400	137,700	139,100	140,500	141,900
2.4 Employee Benefits	680,600	647,800	350,000	697,900	712,000	817,000	832,800	848,700
2.5 Transition Services	482,600	588,100	269,100	902,900	902,900	902,900	902,900	902,900
3.1 Electric	18,600	81,700	26,700	81,700	82,000	82,300	82,600	82,900
4.2 Supplies & Other	262,100	384,800	31,200	345,000	346,500	347,900	349,100	350,400
Capital Outlay less than \$5000	156,600	234,300	-	205,400	205,400	205,400	205,400	205,400
Memberships, Licenses & Subscriptions	2,400	2,500	100	2,500	2,500	2,500	2,500	2,500
Mileage and Parking	2,800	2,700	200	2,700	2,700	2,700	2,700	2,700
Office Supplies	9,800	12,000	2,900	9,000	9,000	9,000	9,000	9,000
Operating Supplies	15,800	14,600	2,300	14,600	15,000	15,500	16,000	16,400
Repairs & Maintenance								
Equipment	42,300	68,000	15,100	68,300	68,600	68,900	69,200	69,500
Repairs & Maintenance								
Hardware	200	8,600	-	9,000	9,400	9,700	9,700	10,000
Repairs & Maintenance								
Miscellaneous	2,500	17,000	(400)	10,000	10,000	10,000	10,000	10,000
Training and Internal								
Meetings	19,100	5,100	6,400	5,100	5,100	5,100	5,100	5,100
Travel	3,200	5,000	300	5,900	6,000	6,000	6,000	6,000
Tuition Refund	700	2,000	-	2,000	2,000	2,000	2,000	2,000
Uniforms, Laundry, Cleaning	6,700	13,000	4,300	10,500	10,800	11,100	11,500	11,800
4.3 Contractual Services	1,666,400	2,355,100	373,700	1,892,100	1,904,200	2,016,700	2,059,500	2,102,400
5.2 Shared Services	146,200	(95,000)	(47,500)	-	-	-	-	-
886601 - Capital Improvement Planning	7,621,200	3,559,600	4,235,000	1,267,200	1,389,500	885,500	890,700	895,800
2.1 Salaries & Wages	294,600	477,600	180,500	554,900	644,900	644,900	644,900	644,900
2.4 Employee Benefits	65,500	136,300	50,100	169,700	201,200	205,400	209,400	213,200
2.5 Transition Services	-	-	19,400	-	-	-	-	-
4.2 Supplies & Other	7,100	7,000	-	7,600	8,400	9,200	9,900	10,600
Memberships, Licenses & Subscriptions	400	700	-	700	1,100	1,200	1,500	1,600
Mileage and Parking	100	800	-	800	800	800	800	900
Office Supplies	1,600	1,500	-	1,800	2,000	2,300	2,500	2,700
Training and Internal								
Meetings	2,000	1,000	-	1,000	1,000	1,100	1,100	1,100
Travel	3,000	3,000	-	3,300	3,500	3,800	4,000	4,300
4.3 Contractual Services	7,254,000	2,938,700	3,985,000	535,000	535,000	26,000	26,500	27,100
5.1 Capital Program Allocation	-	-	-	-	-	-	-	-
Grand Total	\$ 18,093,600	\$ 15,913,400	\$ 8,252,300	\$ 14,965,500	\$ 16,291,200	\$ 15,849,100	\$ 15,229,600	\$ 15,155,900

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.

The Systems Control Area strategic initiatives include the following.

❖ **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.

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, both CON-158 & CON-089A, are shared with other departments.

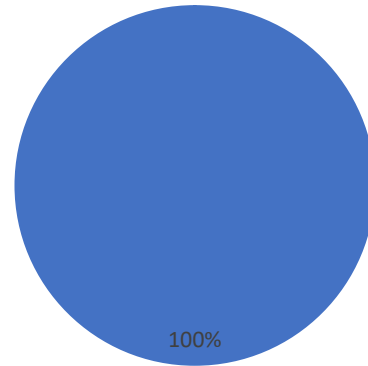
Project Description	VFD Maintenance & Service	Specialized Services (contract split w/ Field Service)	Professional Engineering Services for Instrumentation & SCADA	Low Voltage Electrical Wiring	(Wastewater) Regional River Water Quality Monitoring Program	Total
Prime Consultant or Supplier	Siemens Industry	Lakeshore Global Corp	PCI LLC	Lakeshore Global Corp	U.S. Geological Survey	
Contract #	SCO-1091	GLWA-CON-158	CS-090A	CON-089A	2003901	
Contract Amount	\$ 250,000	\$ 15,139,200	\$ 10,302,139	\$ 5,498,000	\$ 1,365,000	
Contract End Date	07/17/20	07/17/20	08/14/21	04/17/21	TBD	
Cost Center Name	Systems Control	Systems Control	Systems Control	Systems Control	Systems Control	
Expense Category	Supplies & Other	Contractual Services	Contractual Services	Contractual Services	Contractual Services	
Pre-FY 2020 Spend	\$ -	\$ 4,610,605	\$ 4,672,926	\$ 1,436,953	\$ -	\$ 10,720,484
FY 2020 Actual	50,000	2,791,516	1,345,873	3,366,738	-	7,554,126
FY 2021 Budget	100,000	2,900,000	2,100,000	2,000,018	-	7,100,018
FY 2022 Requested	100,000	2,900,000	2,100,000	2,100,000	273,000	7,473,000
FY 2023 Requested	100,000	2,900,000	2,100,000	2,100,000	273,000	7,473,000
FY 2024 Requested	100,000	2,900,000	2,100,000	2,100,000	273,000	7,473,000
FY 2025 Requested	100,000	2,900,000	2,100,000	2,100,000	273,000	7,473,000
FY 2026 Requested	100,000	2,900,000	2,100,000	2,100,000	273,000	7,473,000
Total	\$ 650,000	\$ 24,802,121	\$ 18,618,799	\$ 17,303,709	\$ 1,365,000	\$ 62,739,628

Organization

The Systems Control area has one team.

FY 2022 REQUEST BY TEAM

■ Systems Control



Expense Categories

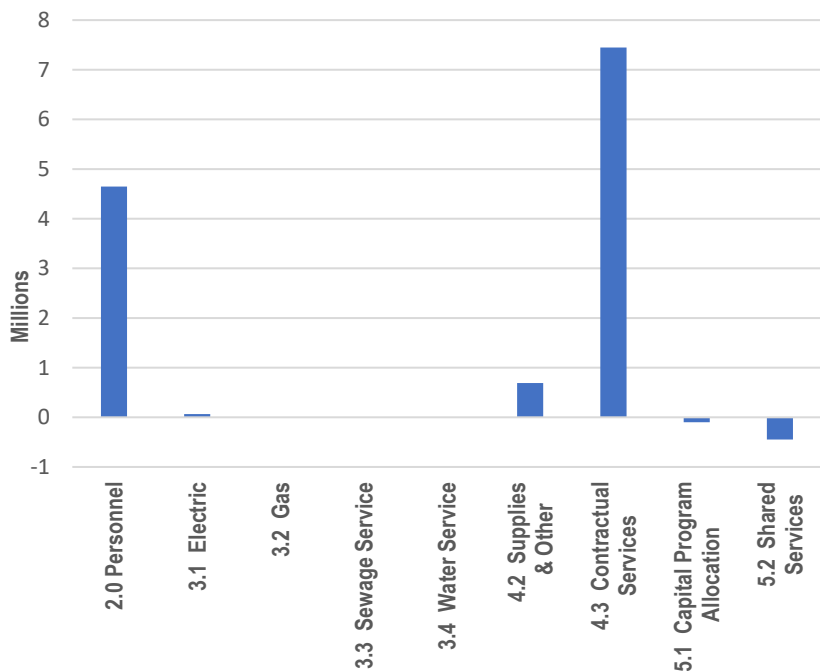
There are two major categories of Systems Control expenses in the Operations and Maintenance Budget as listed below.

- ❖ 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.

FY 2022 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an increase of \$349,800, or 2.9%, in Operations & Maintenance for FY 2022. Key factors that impact the FY 2022 budget include the following:

- ❖ Decreased usage of stock check-out and other items in the Supplies & Other Category (-\$94,200)
- ❖ This is also impacted by the new Regional River Water Quality Monitoring Program Contract (\$273,000). This contract is to be allocated 100% to wastewater as it aligns with their programs.
- ❖ Increased personnel cost due to addition of EICT-E position and benefits true up (\$212,500)

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 4,635,600	\$ 4,435,100	\$ 2,434,000	\$ 4,647,600	\$ 212,500	4.8%	\$ 4,668,800
3.1 Electric	45,300	65,000	26,500	65,000	-	0.0%	65,000
3.2 Gas	200	500	100	200	(300)	-50.0%	200
3.3 Sewage Service	1,300	9,000	600	5,000	(4,000)	-44.4%	5,000
3.4 Water Service	500	600	200	600	-	0.0%	600
4.2 Supplies & Other	840,400	783,600	352,700	689,400	(94,200)	-12.0%	689,400
4.3 Contractual Services	4,950,700	7,207,000	2,603,700	7,447,500	240,500	3.3%	7,447,500
5.1 Capital Program Allocation	(96,500)	(104,300)	(23,900)	(100,300)	4,000	-3.9%	(100,700)
5.2 Shared Services	(1,341,900)	(437,800)	(218,900)	(446,600)	(8,800)	2.0%	(455,500)
Grand Total	\$ 9,035,600	\$ 11,958,700	\$ 5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Systems Control	\$ 9,035,600	\$ 11,958,700	\$ 5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400
Grand Total	\$ 9,035,600	\$ 11,958,700	\$ 5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400

Personnel Budget

Systems Control personnel consists of 44 positions for FY 2022. 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Systems Control	43.00	43.00	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	FY 2020 FTEs	FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Systems Control	43.00	43.00	44.00	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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Systems Control	\$ 4,635,600	\$ 4,435,100	\$ 2,434,000	\$ 4,647,600	\$ 212,500	4.8%	\$ 4,668,800
Grand Total	\$ 4,635,600	\$ 4,435,100	\$ 2,434,000	\$ 4,647,600	\$ 212,500	4.8%	\$ 4,668,800

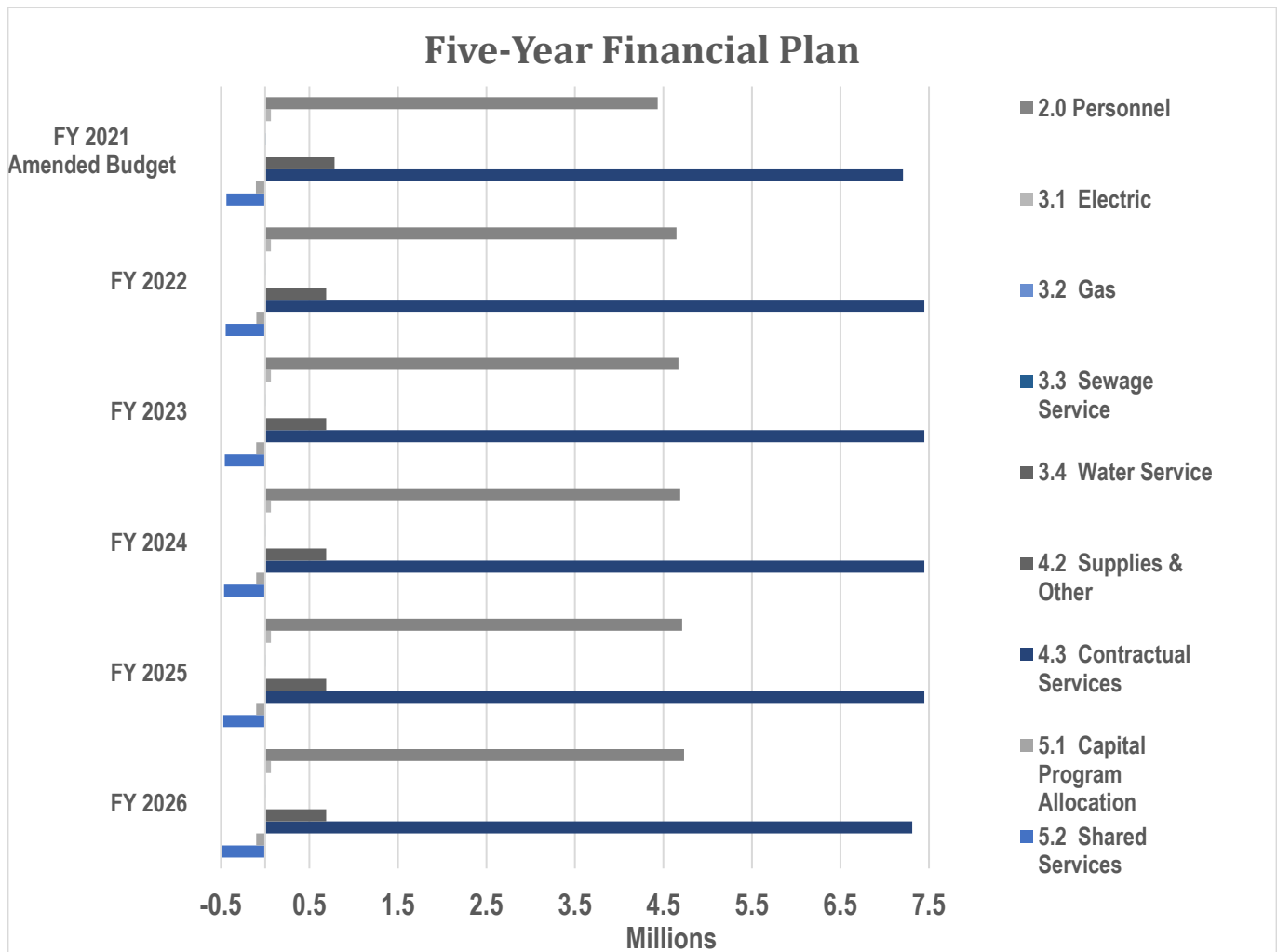
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Systems Control	\$ 4,435,100	\$ 4,647,600	\$ 4,668,800	\$ 4,690,100	\$ 4,711,300	\$ 4,732,600
Grand Total	\$ 4,435,100	\$ 4,647,600	\$ 4,668,800	\$ 4,690,100	\$ 4,711,300	\$ 4,732,600

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 4,435,100	\$ 2,434,000	\$ 4,647,600	\$ 212,500	4.8%	\$ 4,668,800	\$ 4,690,100	\$ 4,711,300	\$ 4,732,600
3.1 Electric	65,000	26,500	65,000	-	0.0%	65,000	65,000	65,000	65,000
3.2 Gas	500	100	200	(300)	-50.0%	200	300	300	300
3.3 Sewage Service	9,000	600	5,000	(4,000)	-44.4%	5,000	5,000	5,000	5,000
3.4 Water Service	600	200	600	-	0.0%	600	600	600	600
4.2 Supplies & Other	783,600	352,700	689,400	(94,200)	-12.0%	689,400	689,400	689,400	689,400
4.3 Contractual Services	7,207,000	2,603,700	7,447,500	240,500	3.3%	7,447,500	7,447,500	7,447,500	7,311,000
5.1 Capital Program Allocation	(104,300)	(23,900)	(100,300)	4,000	-3.9%	(100,700)	(101,100)	(101,500)	(101,900)
5.2 Shared Services	(437,800)	(218,900)	(446,600)	(8,800)	2.0%	(455,500)	(464,600)	(473,800)	(483,300)
Grand Total	\$ 11,958,700	\$ 5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400	\$ 12,332,200	\$ 12,343,800	\$ 12,218,700

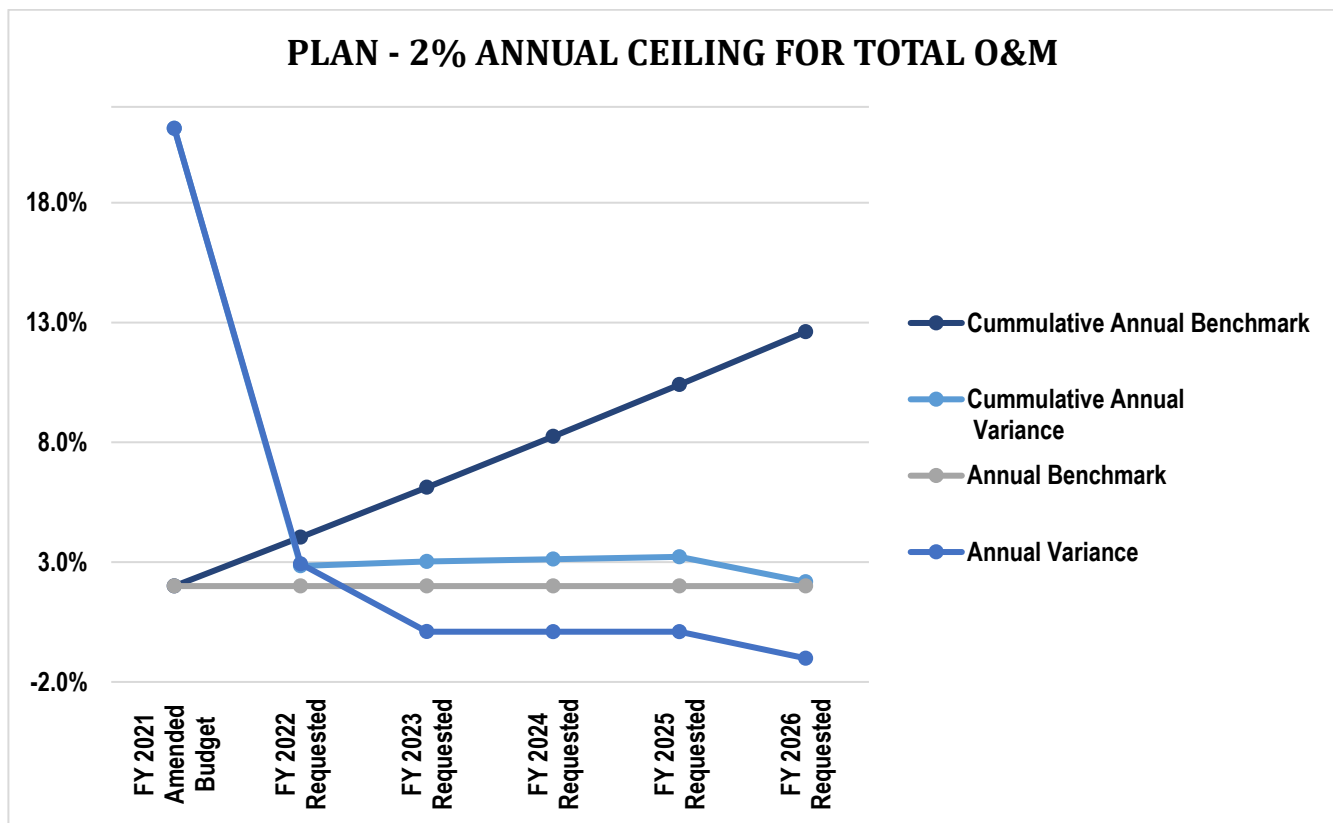


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Systems Control	\$ 11,958,700	\$ 5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400	\$ 12,332,200	\$ 12,343,800	\$ 12,218,700
Grand Total	\$ 11,958,700	5,175,000	\$ 12,308,500	\$ 349,800	2.9%	\$ 12,320,400	\$ 12,332,200	\$ 12,343,800	\$ 12,218,700

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 2.2% which is well within the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000
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	2,875,000	2,737,500	2,900,000	2,700,000	3,325,000	3,675,000
Controls & Communication	500,000	375,000	375,000	375,000	625,000	500,000
Pipes, Gates & Valves	300,000	450,000	450,000	450,000	450,000	450,000
Process Equipment/Treatment	575,000	412,500	575,000	375,000	375,000	475,000
Pumps & Motors	1,500,000	1,500,000	1,500,000	1,500,000	1,875,000	2,250,000
Grand Total	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000
Grand Total	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Systems Control	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000
Grand Total	\$ 2,950,000	\$ 2,812,500	\$ 2,975,000	\$ 2,775,000	\$ 3,400,000	\$ 3,750,000

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882301 - Systems Operations Control	\$ 9,035,600	\$ 11,958,700	\$ 5,029,100	\$ 12,308,500	\$ 12,320,400	\$ 12,332,200	\$ 12,343,800	\$ 12,218,700
2.1 Salaries & Wages	2,429,500	2,347,300	1,261,700	2,590,000	2,590,000	2,590,000	2,590,000	2,590,000
2.2 Workforce Development	264,700	279,700	4,100	94,500	94,500	94,500	94,500	94,500
2.3 Overtime	938,100	800,000	525,600	900,000	900,000	900,000	900,000	900,000
2.4 Employee Benefits	1,003,300	1,008,100	496,700	1,063,100	1,084,400	1,105,600	1,126,900	1,148,100
3.1 Electric	45,300	65,000	26,500	65,000	65,000	65,000	65,000	65,000
3.2 Gas	200	500	100	200	200	300	300	300
3.3 Sewage Service	1,300	9,000	600	5,000	5,000	5,000	5,000	5,000
3.4 Water Service	500	600	200	600	600	600	600	600
4.2 Supplies & Other	840,400	783,600	352,700	689,400	689,400	689,400	689,400	689,400
Capital Outlay less than \$5,000	179,900	130,000	14,300	130,000	130,000	130,000	130,000	130,000
Employee Uniform Expense	20,400	20,000	8,200	20,000	20,000	20,000	20,000	20,000
Inspection and Permit Fees	-	1,000	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	700	10,400	4,800	10,500	10,500	10,500	10,500	10,500
Mileage and Parking	4,900	4,000	400	4,000	4,000	4,000	4,000	4,000
Office Supplies	11,300	12,200	1,900	12,200	12,200	12,200	12,200	12,200
Operating Supplies	60,100	169,700	199,300	114,800	114,800	114,800	114,800	114,800
Operating Supplies-Janitorial	900	1,000	200	1,000	1,000	1,000	1,000	1,000
Property Taxes	100	4,000	-	-	-	-	-	-
Rentals-Buildings	77,700	38,100	17,700	38,100	38,100	38,100	38,100	38,100
Repairs & Maintenance-Equipment	150,300	135,000	33,200	150,000	150,000	150,000	150,000	150,000
Repairs & Maintenance-Hardware	306,100	119,000	56,100	119,000	119,000	119,000	119,000	119,000
Repairs & Maintenance-Software	10,600	73,200	15,900	50,300	50,300	50,300	50,300	50,300
Training and Internal Meetings	6,600	53,000	700	28,000	28,000	28,000	28,000	28,000
Travel	9,600	10,000	-	10,000	10,000	10,000	10,000	10,000
Tuition Refund	1,200	3,000	-	1,500	1,500	1,500	1,500	1,500
4.3 Contractual Services	4,950,700	7,207,000	2,603,700	7,447,500	7,447,500	7,447,500	7,447,500	7,311,000
Contract Services-Information Technology	40,000	210,000	-	100,000	100,000	100,000	100,000	100,000
Contractual Buildings & Grounds Maint	2,900	5,000	1,000	5,000	5,000	5,000	5,000	5,000
Contractual Operating Services	1,066,300	3,392,000	1,267,600	3,492,000	3,492,000	3,492,000	3,492,000	3,492,000
Contractual Professional Services	3,841,500	3,600,000	1,335,100	3,850,500	3,850,500	3,850,500	3,850,500	3,714,000
5.1 Capital Program Allocation	(96,500)	(104,300)	(23,900)	(100,300)	(100,700)	(101,100)	(101,500)	(101,900)
5.2 Shared Services	(1,341,900)	(437,800)	(218,900)	(446,600)	(455,500)	(464,600)	(473,800)	(483,300)
Shared Services : Salaries & Wages Reimb	(423,700)	(138,200)	(69,100)	(141,000)	(143,800)	(146,700)	(149,600)	(152,600)
Shared Services Reimbursement	(749,100)	(244,400)	(122,200)	(249,300)	(254,300)	(259,400)	(264,500)	(269,800)
Shared Services: Employee Benefit Reimb	(169,100)	(55,200)	(27,600)	(56,300)	(57,400)	(58,500)	(59,700)	(60,900)
Grand Total	\$ 9,035,600	\$ 11,958,700	\$ 5,029,100	\$ 12,308,500	\$ 12,320,400	\$ 12,332,200	\$ 12,343,800	\$ 12,218,700

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.

The Facility Operations Area key strategic initiative focuses on the following.

❖ **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						

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 chart below are the key contracts for these services. The GDI Services Commercial Janitorial Services budget is shared across multiple cost centers and not completely represented in the budget below.

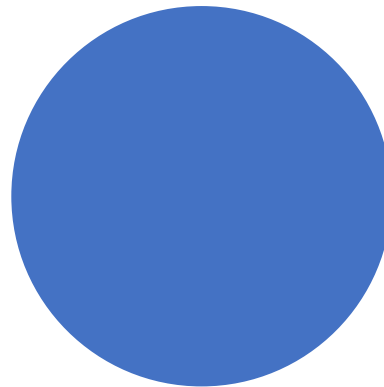
Project Description	Commerical Janitorial Services	Deicing/Snow Removal Services	Lawn care/ Grounds Maintenance	Elevators Preventative Maintenance & Repair Service	Refuse & Recycling Service	Shared Facilities Shared Cost	Total
Prime Consultant or Supplier	GDI Services	Premier Group Associates	Premier Group Associates	ThyssenKrupp Elevator Service	Waste Management	OPS-006 DWSD Shared Service	
Contract #	1904332	1901555	1900702	1703524	1902536	N/A	
Contract Amount	\$ 6,996,554	\$ 1,079,053	\$ 1,679,388	\$ 978,987	\$ 322,150		
Contract End Date	04/05/23	11/30/2021	7/31/2021	10/31/2021	10/15/2021		
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 2020 Spend	\$ -	\$ 404,143	\$ -	\$ 501,608	\$ 111,584	\$ 3,833,133	\$ 4,850,468
FY 2020 Actual	705,286	337,351	913,821	265,120	22,761	2,300,000	4,544,338
FY 2021 Budget	1,245,300	600,000	900,000	500,000	85,000	2,300,000	5,630,300
FY 2022 Requested	1,251,900	600,000	900,000	500,000	85,000	2,440,800	5,777,700
FY 2023 Requested	1,262,820	600,000	900,000	500,000	85,000	2,489,600	5,837,420
FY 2024 Requested	1,274,500	600,000	900,000	500,000	85,000	2,539,400	5,898,900
FY 2025 Requested	1,285,500	600,000	900,000	500,000	85,000	2,590,200	5,960,700
FY 2026 Requested	1,297,600	600,000	900,000	500,000	85,000	2,642,000	6,024,600
Total	\$ 8,322,906	\$ 4,341,494	\$ 6,313,821	\$ 3,766,728	\$ 644,345	\$ 21,135,133	\$ 44,524,425

Organization

The Facility Operations area has one team.

FY 2022 REQUEST BY TEAM

■ Facility Operations

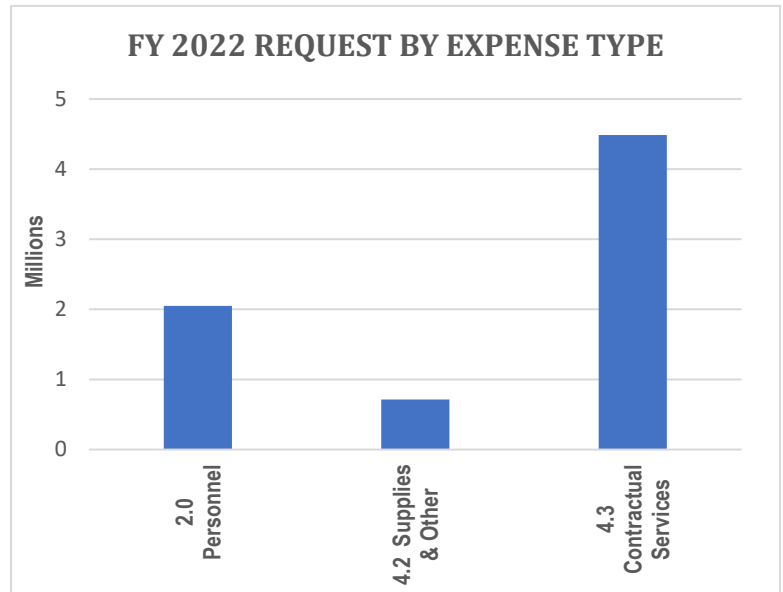


Expense Categories

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 \$1,286,200, or 21.6%, in FY 2022 as a result in increased contractual services that are required now that the fleet portion of the shared service contract has been terminated with DWSD.

- ❖ In the prior year, contractual services was reduced to \$3.3 million to accommodate a budget reduction effort. This line item was selected because it includes fluctuating expense levels depending on that year's equipment repair needs. Based upon further information and analysis, that did not previously exist, a budget increase by \$1.2 million (which results in a budget of \$4.4 million is still less than the FY 2020 actual of \$6.6 million) is being proposed.
- ❖ In addition, this budget now also provides for the GDI Services commercial janitorial services (1904332) contract for \$91,500 per year for cleaning services at all GLWA-owned pump stations.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 1,969,900	\$ 1,904,600	\$ 949,900	\$ 2,048,900	\$ 144,200	7.6%	\$ 2,059,600
4.2 Supplies & Other	592,700	727,900	396,400	714,100	\$ (13,800)	-1.9%	714,800
4.3 Contractual Services	6,609,900	3,330,800	2,108,200	4,486,600	1,155,800	34.7%	4,535,900
Grand Total	\$ 9,172,500	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Facility Operations	\$ 9,172,500	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300
Grand Total	\$ 9,172,500	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300

Personnel Budget

Facility Operations personnel consists of 23 positions for FY 2022 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 decrease of 2 positions from FY 2020 is due to the transfer of fleet exclusive positions to the Fleet Operations Cost Center.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Facility Operations	25.00	25.00	23.00	23.00	23.00	23.00	23.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Facility Operations	25.00	24.50	22.50	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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Facility Operations	\$ 1,969,900	\$ 1,904,600	\$ 949,900	\$ 2,048,900	\$ 144,200	7.6%	\$ 2,059,600
Grand Total	\$ 1,969,900	\$ 1,904,600	\$ 949,900	\$ 2,048,900	\$ 144,200	7.6%	\$ 2,059,600

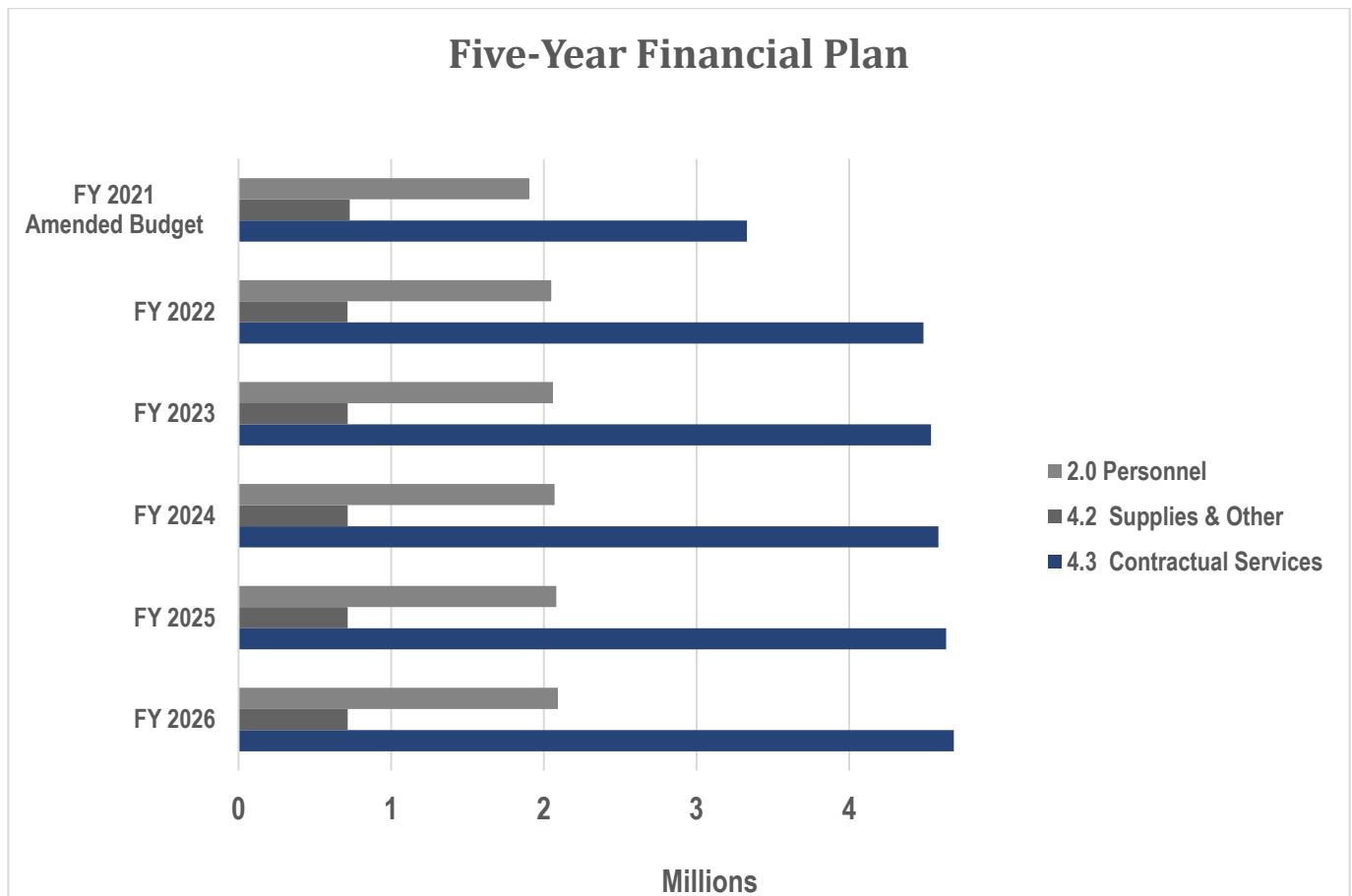
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Facility Operations	\$ 1,904,600	\$ 2,048,900	\$ 2,059,600	\$ 2,070,300	\$ 2,081,100	\$ 2,091,800
Grand Total	\$ 1,904,600	\$ 2,048,900	\$ 2,059,600	\$ 2,070,300	\$ 2,081,100	\$ 2,091,800

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 1,904,600	\$ 949,900	\$ 2,048,900	\$ 144,200	7.6%	\$ 2,059,600	\$ 2,070,300	\$ 2,081,100	\$ 2,091,800
4.2 Supplies & Other	727,900	396,400	714,100	(13,800)	-1.9%	714,800	714,800	714,800	714,800
4.3 Contractual Services	3,330,800	2,108,200	4,486,600	1,155,800	34.7%	4,535,900	4,584,700	4,634,500	4,685,300
Grand Total	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300	\$ 7,369,800	\$ 7,430,400	\$ 7,491,900

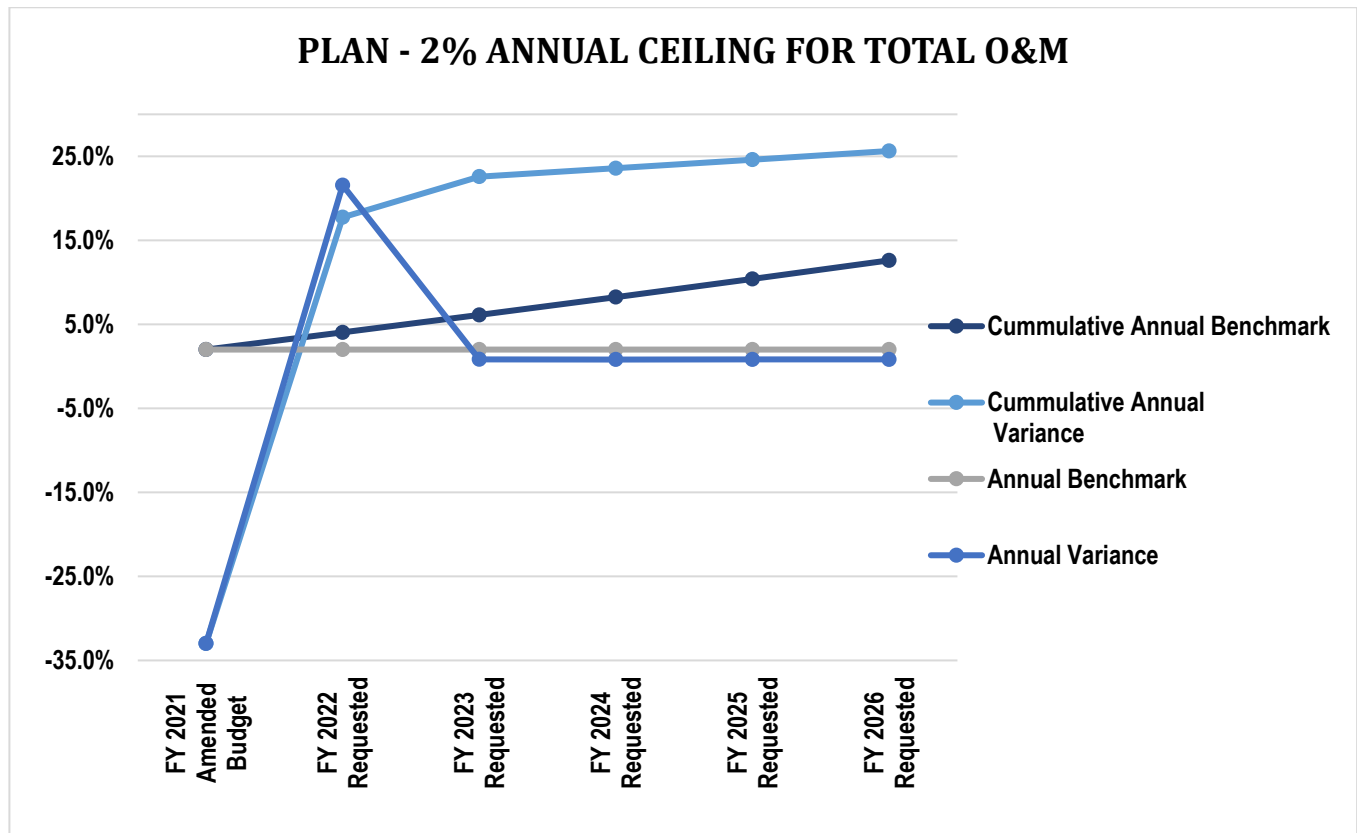


Five-Year Financial Plan by Team

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Facility Operations	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300	\$ 7,369,800	\$ 7,430,400	\$ 7,491,900
Grand Total	\$ 5,963,300	\$ 3,454,500	\$ 7,249,600	\$ 1,286,200	21.6%	\$ 7,310,300	\$ 7,369,800	\$ 7,430,400	\$ 7,491,900

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 25.6%. This increase is a result of the rightsizing of the contractual services budget. This is above the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 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 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Grand Total	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Facility Operations	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Grand Total	\$ 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882421 - Facility Operations	9,172,500	5,963,300	3,454,500	7,249,600	7,310,300	7,369,800	7,430,400	7,491,900
2.1 Salaries & Wages	1,436,600	1,422,800	682,800	1,491,700	1,491,700	1,491,700	1,491,700	1,491,700
2.3 Overtime	9,100	20,000	2,600	20,000	20,000	20,000	20,000	20,000
2.4 Employee Benefits	524,200	461,900	264,500	537,200	547,900	558,700	569,400	580,100
4.2 Supplies & Other	592,700	727,900	396,400	714,100	714,800	714,800	714,800	714,800
Capital Outlay less than \$5,000	49,800	125,000	-	125,000	125,000	125,000	125,000	125,000
Employee Uniform Expense	8,200	10,000	3,700	10,000	10,000	10,000	10,000	10,000
Inspection and Permit Fees	800	2,000	-	2,000	2,000	2,000	2,000	2,000
Memberships, Licenses & Subscriptions	7,000	8,000	8,700	16,000	16,000	16,000	16,000	16,000
Mileage and Parking	100	500	-	500	500	500	500	500
Office Supplies	8,200	8,000	600	8,000	8,000	8,000	8,000	8,000
Operating Supplies	202,300	231,000	83,300	231,000	231,000	231,000	231,000	231,000
Operating Supplies-Janitorial	3,200	5,000	3,600	5,000	5,000	5,000	5,000	5,000
Rentals-Miscellaneous	89,300	50,000	-	50,000	50,000	50,000	50,000	50,000
Repairs & Maintenance-Buildings & Ground	194,700	279,400	299,500	261,100	261,800	261,800	261,800	261,800
Repairs & Maintenance-Equipment	3,700	-	(2,900)	-	-	-	-	-
Supplies & Other - Covid19	23,300	-	-	-	-	-	-	-
Training and Internal Meetings	900	5,000	100	2,000	2,000	2,000	2,000	2,000
Travel	700	2,500	(200)	2,500	2,500	2,500	2,500	2,500
Tuition Refund	500	1,500	-	1,000	1,000	1,000	1,000	1,000
4.3 Contractual Services	6,609,900	3,330,800	2,108,200	4,486,600	4,535,900	4,584,700	4,634,500	4,685,300
Contractual Buildings & Grounds Maint	2,302,700	1,227,000	852,400	1,568,500	1,568,500	1,568,500	1,568,500	1,568,500
Contractual Operating Services	2,581,000	2,103,800	1,196,400	2,918,100	2,967,400	3,016,200	3,066,000	3,116,800
Contractual Services - Covid19	1,726,200	-	59,400	-	-	-	-	-
Grand Total	9,172,500	5,963,300	3,454,500	7,249,600	7,310,300	7,369,800	7,430,400	7,491,900

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.

The Fleet Operations Area strategic initiatives includes the following.

❖ **Improving 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.

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					

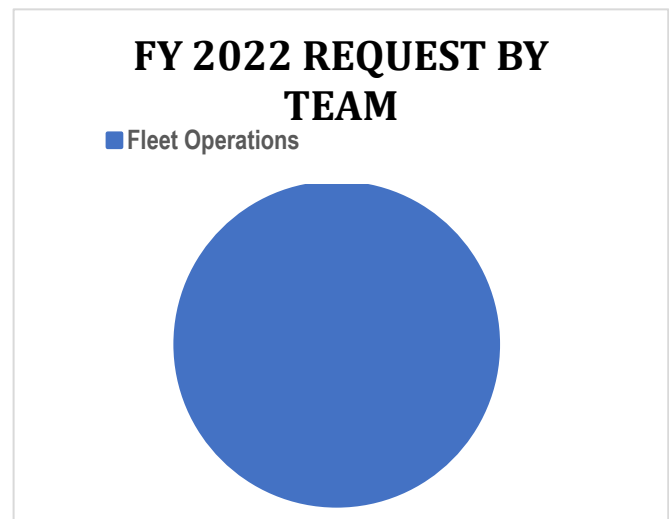
Fleet Operations Contracts

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
Prime Consultant or Supplier	Enterprise Fleet Management	Waterfront Petroleum Terminal Co.	Enterprise Holding Inc.	GEOTAB Inc.	
Contract #	1802710	2850143	1802910	1904862	
Contract Amount	\$ 1,553,000	\$ 1,562,738	\$ 310,887	\$ 375,000	
Contract End Date	11/04/24	07/31/20	08/08/21	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 2020 Spend	\$ -	\$ 764,397	\$ 82,448	\$ -	\$ 846,845
FY 2020 Actual	347,617	335,326	167,961	-	850,904
FY 2021 Budget	1,530,000	425,423	58,746	-	2,014,169
FY 2022 Requested	1,015,600	440,000	-	75,000	1,530,600
FY 2023 Requested	1,015,600	440,000	-	75,000	1,530,600
FY 2024 Requested	1,015,600	440,000	-	75,000	1,530,600
FY 2025 Requested	1,015,600	440,000	-	75,000	1,530,600
FY 2026 Requested	1,015,600	440,000	-	75,000	1,530,600
Total	\$ 6,955,617	\$ 3,725,146	\$ 309,155	\$ 375,000	\$ 11,364,917

Organization

The Fleet Operations area has one team.

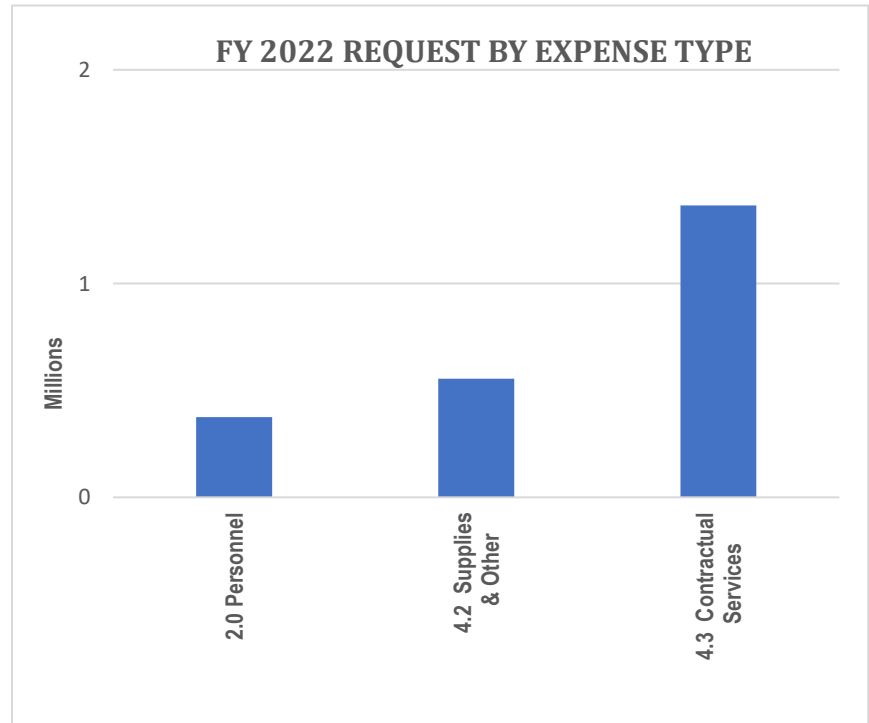


Expense Categories

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 reflects 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 \$38,000, or 1.6%, in Operations & Maintenance for FY2022. Key Factors that are impacting the decrease include the following:

- ❖ Personnel increase of \$150,400 due to account coding reallocation of two team members from the Facilities cost center and to establish a fleet manager position.
- ❖ Implementation of GEOTAB (Contract 1904862) GPS/AVL Vehicle Tracking program for \$75,000.
- ❖ Establishment of a Weingartz (Contract 2001636) Small Engine Repair contract for \$40,000.
- ❖ Establishment of a pump rental program with Sunbelt Rentals (Contract 2001596) for \$75,000
- ❖ Fleet Contractual Operating Services were initially budgeted at \$1.5 million per year in conjunction with the shared service agreement. This budget has been reduced \$204,400 to align with current projected spending.
- ❖ Lakeshore Services (Contract 200243) for welding services and materials for \$40,000 a year.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ -	\$ 225,000	\$ -	\$ 375,300	\$ 150,400	66.9%	\$ 377,100
4.2 Supplies & Other	469,900	539,000	213,600	555,000	16,000	3.0%	555,000
4.3 Contractual Services	1,710,000	1,570,000	434,400	1,365,600	(204,400)	-13.0%	1,365,600
Grand Total	\$ 2,179,900	\$ 2,334,000	\$ 648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Fleet Operations	\$ 2,179,900	\$ 2,334,000	\$ 648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700
Grand Total	\$ 2,179,900	\$ 2,334,000	\$ 648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700

Personnel Budget

Fleet Operations personnel consists of 3 positions for FY 2022. During FY 2021, two positions will be transferred from the Facility Operations budget and added to Fleet Operations for the purpose of fleet management. A Fleet Operations Manager position has also been added with anticipation that it will be filled during FY 2021.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Fleet Operations	0.00	0.00	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. For this budget area, the Staffing Plan and the FTEs are consistent.

Full-time Equivalents

Team	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Fleet Operations	0.00	0.00	3.00	3.00	3.00	3.00	3.00

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Fleet Operations	\$ -	\$ 225,000	\$ -	\$ 375,300	\$ 150,400	66.9%	\$ 377,100
Grand Total	\$ -	\$ 225,000	\$ -	\$ 375,300	\$ 150,400	66.9%	\$ 377,100

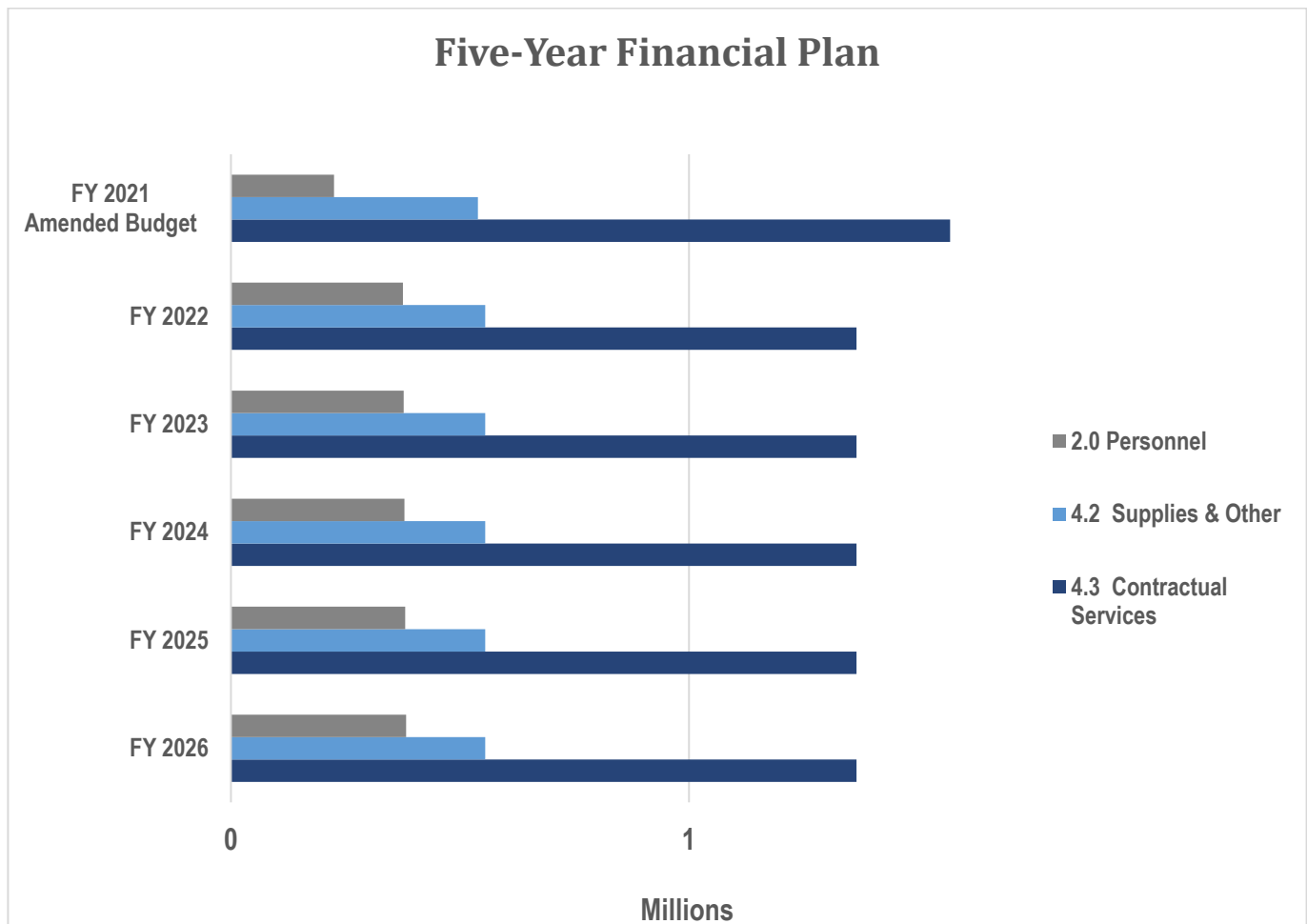
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Fleet Operations	\$ 225,000	\$ 375,300	\$ 377,100	\$ 378,800	\$ 380,500	\$ 382,300
Grand Total	\$ 225,000	\$ 375,300	\$ 377,100	\$ 378,800	\$ 380,500	\$ 382,300

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 225,000	\$ -	\$ 375,300	\$ 150,400	66.9%	\$ 377,100	\$ 378,800	\$ 380,500	\$ 382,300
4.2 Supplies & Other	539,000	213,600	555,000	16,000	3.0%	555,000	555,000	555,000	555,000
4.3 Contractual Services	1,570,000	434,400	1,365,600	(204,400)	-13.0%	1,365,600	1,365,600	1,365,600	1,365,600
Grand Total	\$ 2,334,000	648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700	\$ 2,299,400	\$ 2,301,100	\$ 2,302,900

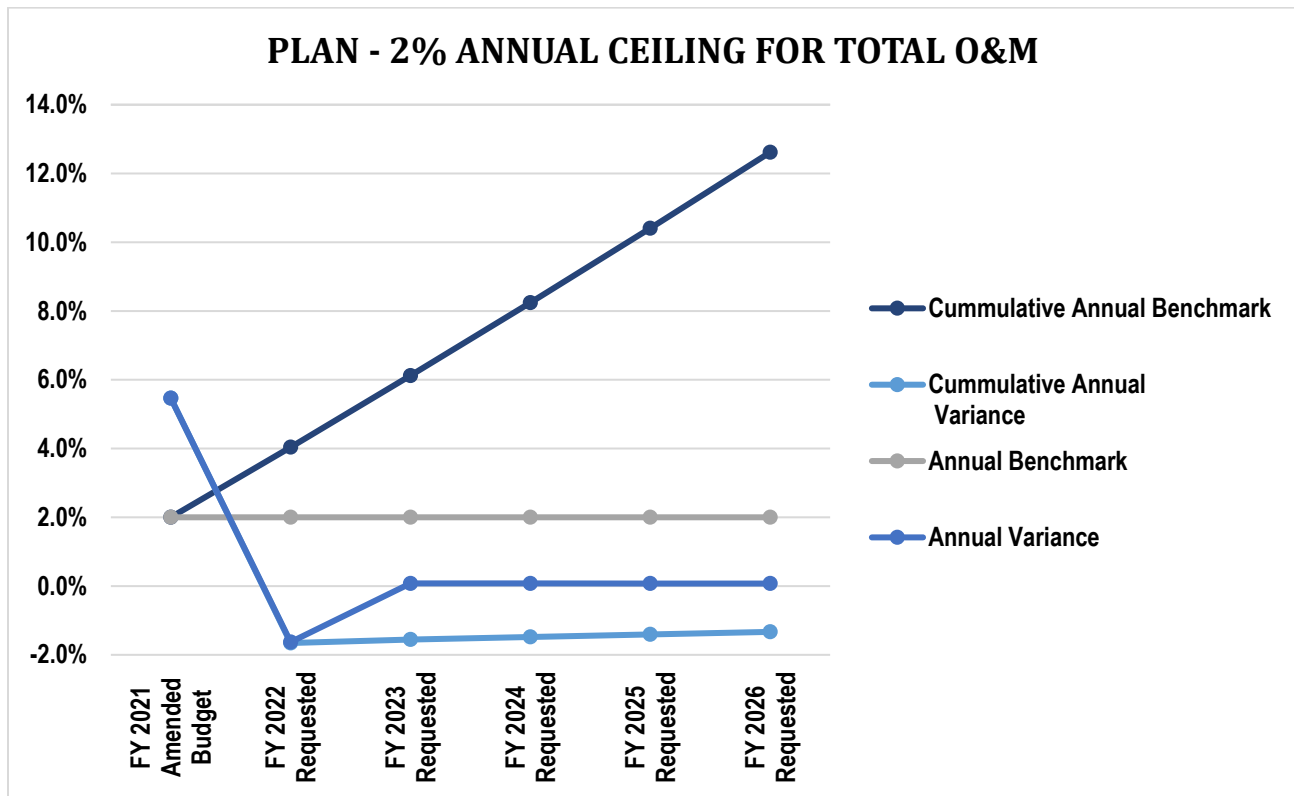


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Fleet Operations	\$ 2,334,000	\$ 648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700	\$ 2,299,400	\$ 2,301,100	\$ 2,302,900
Grand Total	\$ 2,334,000	648,000	\$ 2,295,900	\$ (38,000)	-1.6%	\$ 2,297,700	\$ 2,299,400	\$ 2,301,100	\$ 2,302,900

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

The Fleet Operations Group's financial plan reflects a five-year overall decrease of 1.3%, which is well within the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000
Machinery & Equipment	470,000	470,000	74,000	-	470,000	-
Heavy Equipment & Misc	470,000	470,000	74,000	-	470,000	-
Vehicles	2,072,600	1,835,200	2,937,400	2,000,000	2,000,000	2,000,000
Light Truck	-	50,000	-	-	-	-
Passenger	1,036,300	892,600	1,461,100	1,000,000	1,000,000	1,000,000
Utility Vehicle	1,036,300	892,600	1,476,300	1,000,000	1,000,000	1,000,000
Grand Total	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000
Grand Total	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Fleet Operations	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000
Grand Total	\$ 2,542,600	\$ 2,305,200	\$ 3,011,400	\$ 2,000,000	\$ 2,470,000	\$ 2,000,000

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 2020 Actual	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882422 - Fleet Operations	2,179,900	2,334,000	648,000	2,295,900	2,297,700	2,299,400	2,301,100	2,302,900
2.1 Salaries & Wages	-	175,100	-	288,500	288,500	288,500	288,500	288,500
2.4 Employee Benefits	-	49,800	-	86,800	88,500	90,300	92,000	93,700
4.2 Supplies & Other	469,900	539,000	213,600	555,000	555,000	555,000	555,000	555,000
Capital Outlay less than \$5,000	-	-	3,800	-	-	-	-	-
Inspection and Permit Fees	1,500	1,000	400	1,000	1,000	1,000	1,000	1,000
Operating Supplies	-	-	11,000	-	-	-	-	-
Operating Supplies – Fuel	425,500	500,000	182,100	500,000	500,000	500,000	500,000	500,000
Operating Supplies-Automotive	25,300	9,000	6,900	9,000	9,000	9,000	9,000	9,000
Repairs & Maintenance-Automotive	17,600	29,000	9,400	45,000	45,000	45,000	45,000	45,000
4.3 Contractual Services	1,710,000	1,570,000	434,400	1,365,600	1,365,600	1,365,600	1,365,600	1,365,600
Contractual Operating Services	1,522,100	1,530,000	294,900	1,270,600	1,270,600	1,270,600	1,270,600	1,270,600
Contractual Vehicle Services	187,900	40,000	139,500	95,000	95,000	95,000	95,000	95,000
Grand Total	\$ 2,179,900	\$ 2,334,000	\$ 648,000	\$ 2,295,900	\$ 2,297,700	\$ 2,299,400	\$ 2,301,100	\$ 2,302,900

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.

The Field Service Operations Area strategic initiatives include the following.

❖ **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 Assessment Program			x	x	x	x	x	x			x
	Transmission Main Assessment & 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.

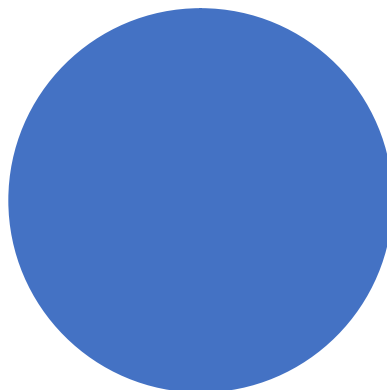
Project Description	Water Transmission Main Repair	Sewer Repair Contract	Gate Valve Inspection/ Exercising	Specialized Services (contract split w/ Systems Control)	As Needed Field Services	Total
Prime Consultant or Supplier	Ric-Man Construction Inc.	Inland Waters Pollution Control, Inc.	Hydromax USA LLC	Lakeshore Global Corp	OPS-003 Shared Service	
Contract #	1802745	CON-149	2000292	CON-158		
Contract Amount	\$ 1,500,000	\$ 53,600,000	\$ 5,601,663	\$ 5,360,762	N/A	
Contract End Date	05/28/21	07/17/21	08/10/23	07/17/21		
Cost Center Name	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	
Pre-FY 2020 Spend	\$ -	\$ 13,305,616	\$ -	\$ 2,557,524	\$ 90,547	\$ 15,953,687
FY 2020 Actual	-	4,629,522	-	2,971,616	100,000	7,701,138
FY 2021 Budget	2,500,000	4,825,600	2,288,000	3,200,000	102,000	12,915,600
FY 2022 Requested	2,500,000	4,918,400	1,866,667	3,200,000	104,000	12,589,067
FY 2023 Requested	2,500,000	4,918,400	1,866,667	3,200,000	106,100	12,591,167
FY 2024 Requested	2,500,000	4,918,400	1,866,667	3,200,000	108,200	12,593,267
FY 2025 Requested	2,500,000	4,918,400	1,866,667	3,200,000	110,400	12,595,467
FY 2026 Requested	2,500,000	4,918,400	1,866,667	3,200,000	112,600	12,597,667
Total	\$ 15,000,000	\$ 47,352,738	\$ 11,621,333	\$ 24,729,140	\$ 833,847	\$ 99,537,058

Organization

The Field Services Operations area has one team.

FY 2022 REQUEST BY TEAM

■ Field Service Operations



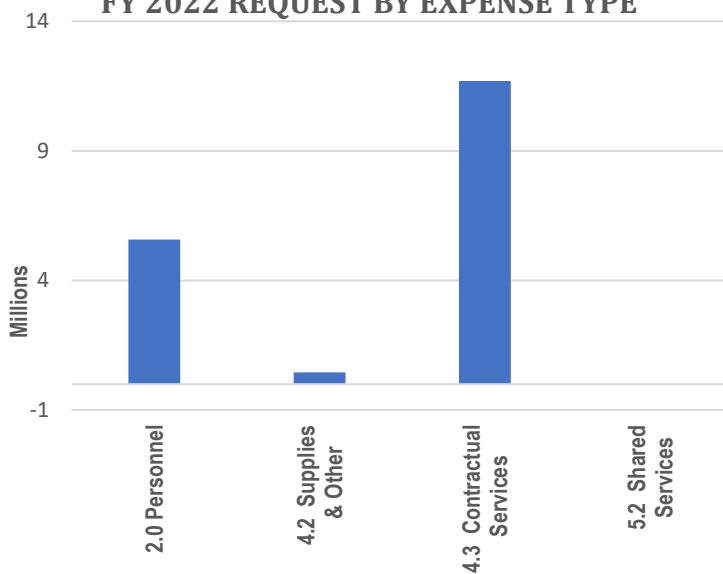
Expense Categories

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.

FY 2022 REQUEST BY EXPENSE TYPE



Personnel costs are the second highest expense category.

Biennial Budget Request

The biennial budget reflects an overall decrease of \$375,800, or 2.1%, for FY 2022. Key Factors impacting FY 2022 include the following:

- ❖ Decrease in contractual services of \$421,000 for new Hydromax USA, LLC valve exercising contract. This program no longer includes valve repair, only maintenance and exercising.
- ❖ Increase in personnel from FY 2021 by \$359,600 primarily for the addition of six apprenticeship positions and a new team leader position.
- ❖ Reduction of stock checkout supplies budget by \$175,000 based on actual usage.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 4,918,900	\$ 5,216,300	\$ 2,759,000	\$ 5,575,900	\$ 359,600	6.9%	\$ 5,596,700
4.2 Supplies & Other	447,800	578,200	319,000	456,700	(121,500)	-21.0%	456,700
4.3 Contractual Services	11,456,700	12,308,100	6,759,000	11,694,600	(613,500)	-5.0%	11,696,700
5.2 Shared Services	(52,100)	(17,000)	(8,500)	(17,400)	(400)	2.4%	(17,700)
Grand Total	\$ 16,771,300	\$ 18,085,600	\$ 9,828,500	\$ 17,709,800	\$ (375,900)	-2.1%	\$ 17,732,400

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Field Service Operations	\$ 16,771,300	\$ 18,085,600	\$ 9,828,500	\$ 17,709,700	\$ (375,900)	-2.1%	\$ 17,732,400
Grand Total	\$ 16,771,300	\$ 18,085,600	\$ 9,828,500	\$ 17,709,700	\$ (375,900)	-2.1%	\$ 17,732,400

Personnel Budget

Field Service Operations personnel consists of 71 positions for FY 2022. 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 staffing level is in the tables 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Field Service Operations	65.00	65.00	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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Field Service Operations	65.00	65.00	71.00	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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Field Service Operations	\$ 4,918,900	\$ 5,216,300	\$ 2,759,000	\$ 5,575,900	\$ 359,600	6.9%	\$ 5,596,700
Grand Total	\$ 4,918,900	\$ 5,216,300	\$ 2,759,000	\$ 5,575,900	\$ 359,600	6.9%	\$ 5,596,700

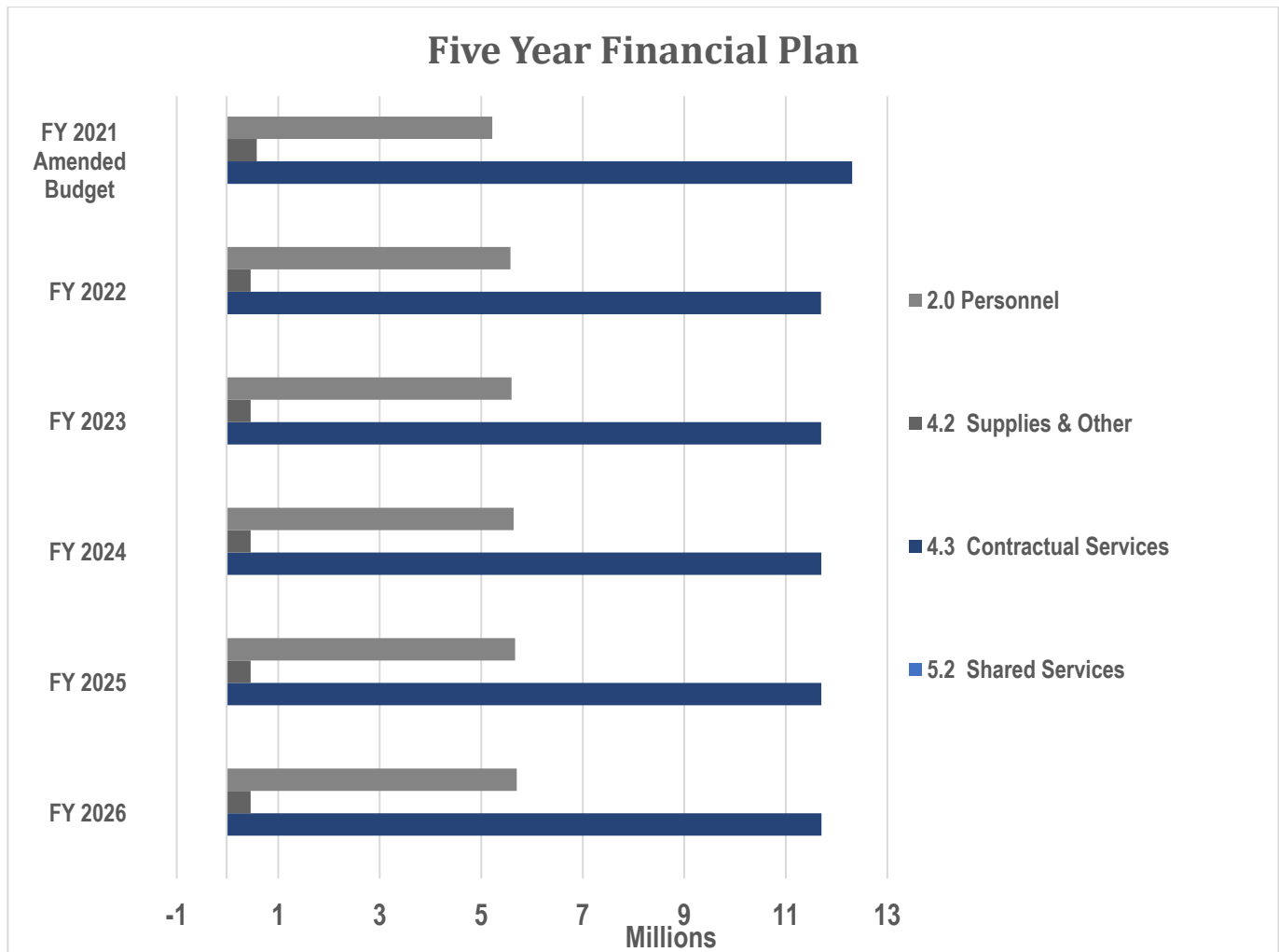
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended	FY 2022 Department	FY 2023 Department	FY 2024 Department	FY 2025 Department	FY 2026 Department
Field Service Operations	\$ 5,216,300	\$ 5,575,900	\$ 5,596,700	\$ 5,636,800	\$ 5,667,300	\$ 5,697,800
Grand Total	\$ 5,216,300	\$ 5,575,900	\$ 5,596,700	\$ 5,636,800	\$ 5,667,300	\$ 5,697,800

Five Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Requested Budget	FY 2024 Requested Budget	FY 2025 Requested Budget	FY 2026 Requested Budget
2.0 Personnel	\$ 5,216,300	\$ 2,759,000	\$ 5,575,900	\$ 359,600	6.9%	\$ 5,596,700	\$ 5,636,800	\$ 5,667,300	\$ 5,697,800
4.2 Supplies & Other	578,200	319,000	456,700	(121,500)	-21.0%	456,700	456,700	456,700	456,700
4.3 Contractual Services	12,308,100	6,759,000	11,694,600	(613,500)	-5.0%	11,696,700	11,698,800	11,701,000	11,703,200
5.2 Shared Services	(17,000)	(8,500)	(17,400)	(400)	2.4%	(17,700)	(18,000)	(18,300)	(18,800)
Grand Total	\$ 18,085,600	\$ 9,828,500	\$ 17,709,700	\$ (375,900)	-2.1%	\$ 17,732,400	\$ 17,774,300	\$ 17,806,700	\$ 17,838,800

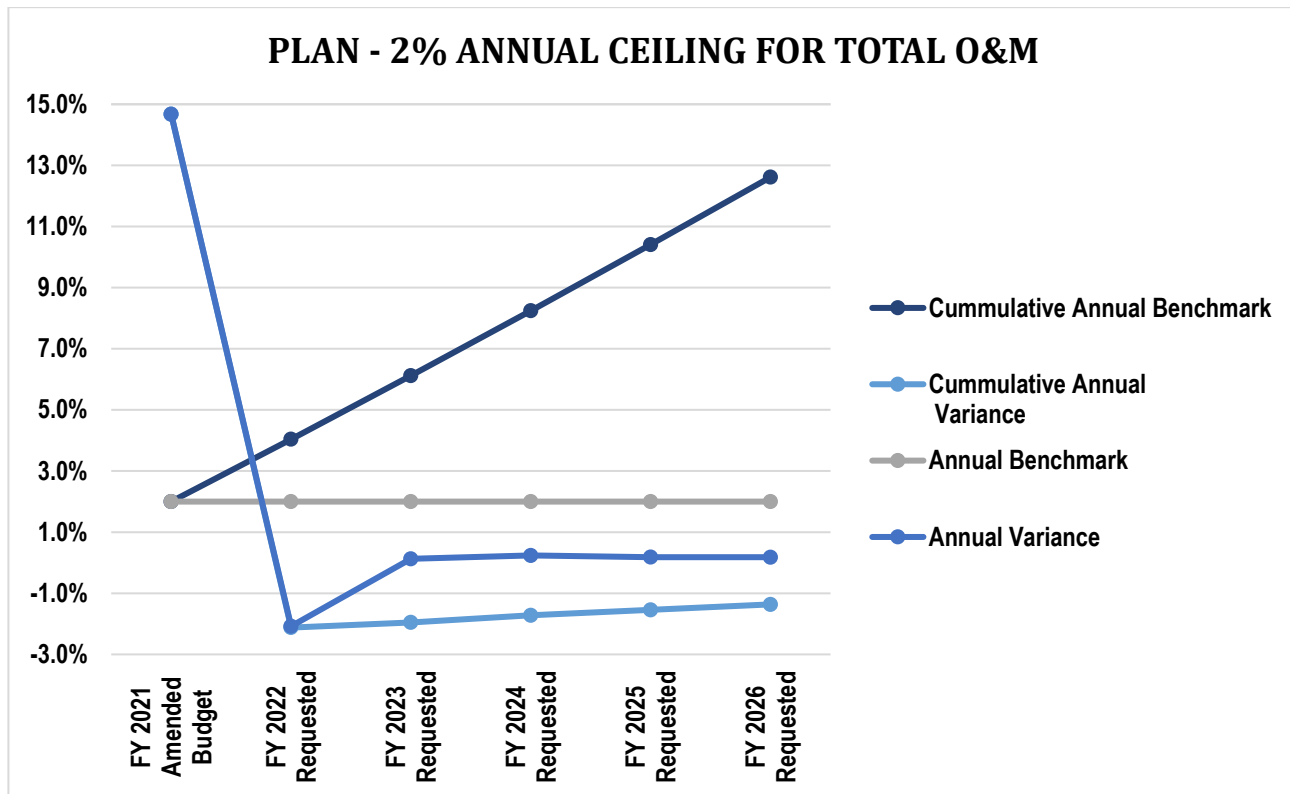


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Field Service Operations	\$ 18,085,600	\$ 9,828,500	\$ 17,709,700	\$ (375,900)	-2.1%	\$ 17,732,400	\$ 17,774,300	\$ 17,806,700	\$ 17,838,800
Grand Total	\$ 18,085,600	9,828,500	\$ 17,709,700	\$ (375,900)	-2.1%	\$ 17,732,400	\$ 17,774,300	\$ 17,806,700	\$ 17,838,800

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

The Field Service Operations Group's financial plan reflects a five-year overall decrease of 1.4% which is well within the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 50,000	\$ 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
Projects & Programs	-	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Grand Total	\$ 50,000	\$ 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 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 50,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000
Grand Total	\$ 50,000	\$ 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 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Field Service Operations	\$ 50,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000	\$ 3,050,000
Grand Total	\$ 50,000	\$ 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 2020 Actual	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882431 - Field Service Operations	16,771,300	18,085,600	9,828,500	17,709,700	17,732,400	17,774,300	17,806,700	17,838,800
2.1 Salaries & Wages	3,004,100	3,584,500	1,534,300	3,466,100	3,466,100	3,466,100	3,466,100	3,466,100
2.2 Workforce Development	110,900	67,600	154,600	290,800	290,800	290,800	290,800	290,800
2.3 Overtime	509,400	275,000	282,400	295,500	286,600	295,500	295,500	295,500
2.4 Employee Benefits	1,294,500	1,289,200	787,700	1,523,500	1,553,300	1,584,400	1,614,900	1,645,400
4.2 Supplies & Other	447,800	578,200	319,000	456,700	456,700	456,700	456,700	456,700
Capital Outlay less than \$5,000	66,400	25,000	65,100	50,000	50,000	50,000	50,000	50,000
Employee Uniform Expense	32,700	37,500	19,800	35,000	35,000	35,000	35,000	35,000
Inspection and Permit Fees	5,100	10,000	29,000	7,000	7,000	7,000	7,000	7,000
Memberships, Licenses & Subscriptions	23,700	39,200	20,900	30,100	30,100	30,100	30,100	30,100
Mileage and Parking	300	1,000	-	500	500	500	500	500
Office Supplies	24,000	24,000	6,400	17,000	17,000	17,000	17,000	17,000
Operating Supplies	249,100	400,000	122,400	273,500	273,500	273,500	273,500	273,500
Rentals-Buildings	800	-	2,400	5,100	5,100	5,100	5,100	5,100
Repairs & Maintenance-Equipment	2,800	5,000	(2,700)	2,000	2,000	2,000	2,000	2,000
Training and Internal Meetings	18,000	25,000	55,700	25,000	25,000	25,000	25,000	25,000
Travel	22,500	10,000	-	10,000	10,000	10,000	10,000	10,000
Tuition Refund	2,400	1,500	-	1,500	1,500	1,500	1,500	1,500
4.3 Contractual Services	11,456,700	12,308,100	6,759,000	11,694,600	11,696,700	11,698,800	11,701,000	11,703,200
Contractual Operating Services	9,603,700	10,508,100	4,597,200	9,894,600	9,896,700	9,898,800	9,901,000	9,903,200
Contractual Operating Services-All Sewer	-	-	633,000	-	-	-	-	-
Contractual Operating Services-All Water	-	-	572,600	-	-	-	-	-
Contractual Professional Services	1,853,000	1,800,000	956,200	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
5.1 Capital Program Allocation	-	-	-	-	-	-	-	-
5.2 Shared Services	(52,100)	(17,000)	(8,500)	(17,400)	(17,700)	(18,000)	(18,300)	(18,800)
Shared Services : Salaries & Wages Reimb	(33,100)	(10,800)	(5,400)	(11,000)	(11,200)	(11,400)	(11,600)	(11,900)
Shared Services Reimbursement	(5,600)	(1,800)	(900)	(1,900)	(1,900)	(1,900)	(2,000)	(2,000)
Shared Services: Employee Benefit Reimb	(13,400)	(4,400)	(2,200)	(4,500)	(4,600)	(4,700)	(4,700)	(4,900)
Grand Total	\$ 16,771,300	\$ 18,085,600	\$ 9,828,500	\$ 17,709,700	\$ 17,732,400	\$ 17,774,300	\$ 17,806,700	\$ 17,838,800

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.

The Energy, Research & Innovation Area key strategic initiative includes the following.

- ❖ **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	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.

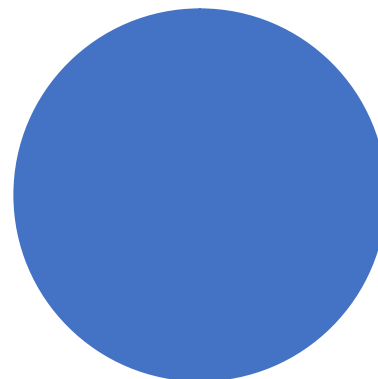
Project Description	PFAS Health & Ecological Impacts	Microplastics & Human Health	Lake Huron to Lake Erie Monitoring Platform, Photocatalytic UV materials	Transport & Fate of Nutrients in Biosolids	Smart Pipes	Biological Phosphorus Removal Pilot	Total
Prime Consultant or Supplier	Wayne State University	Wayne State University	Wayne State University	Michigan State University	Regents of the University of Michigan	Regents of the University of Michigan	
Contract #	1902151	1904710		1902059	1900902	1900169	
Contract Amount	\$ 192,153	\$ 195,000	TBD	\$ 227,498	\$ 299,702	\$ 250,000	
Contract End Date	06/15/22	07/31/22		07/31/21	08/01/21	05/31/21	
Cost Center Name	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	
Pre-FY 2020 Spend	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2020 Actual	-	-	-	140,759	159,687	84,690	385,135
FY 2021 Budget	96,000	85,000	71,000	114,000	150,000	125,000	641,000
FY 2022 Requested	96,000	100,000	-	114,000	150,000	-	460,000
FY 2023 Requested	10,000	110,000	35,000	-	150,000	125,000	430,000
FY 2024 Requested	110,000	110,000	35,000	-	175,000	125,000	555,000
FY 2025 Requested	150,000	-	35,000	-	175,000	125,000	485,000
FY 2026 Requested	-	-	-	-	-	-	-
Total	\$ 462,000	\$ 405,000	\$ 176,000	\$ 368,759	\$ 959,687	\$ 584,690	\$ 2,956,135

Organization

The Energy, Research & Innovation area has one team.

FY 2022 REQUEST BY TEAM

■ Energy, Research & Innovation



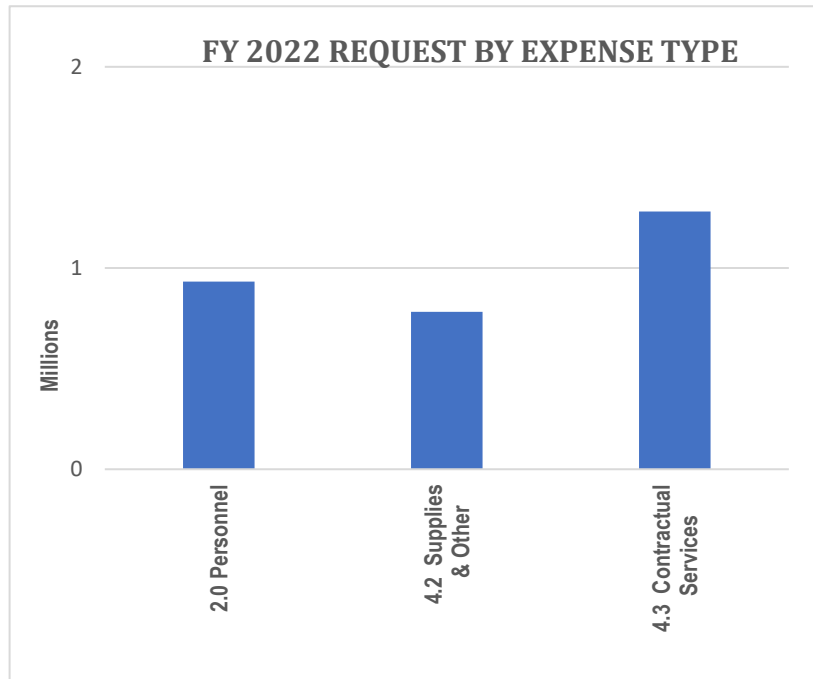
Expense Categories

There are two major categories of Energy, Research & Innovation expenses in the Operations 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 \$210,300, or 7.6%, in Operations & Maintenance for FY 2022. This is a result of the key factors listed below.

- ❖ Transfer of Power Quality Manager Position from Water Engineering (\$122,600).
- ❖ Request for new laboratory equipment at WRRF, Lake Huron Water Plant and Water Works Park (\$290,000).

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 544,300	\$ 791,400	\$ 312,100	\$ 932,600	\$ 141,200	17.8%	\$ 936,800
4.2 Supplies & Other	472,100	494,100	208,600	782,200	288,100	58.3%	663,200
4.3 Contractual Services	1,087,700	1,500,000	545,500	1,281,000	(219,000)	-14.6%	1,813,000
Grand Total	\$ 2,104,100	\$ 2,785,500	\$ 1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Energy, Research & Innovation	\$ 2,104,100	\$ 2,785,500	\$ 1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000
Grand Total	\$ 2,104,100	\$ 2,785,500	\$ 1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000

Personnel Budget

Energy, Research & Innovation personnel consists of seven positions for FY 2022 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Energy, Research & Innovation	6.00	6.00	7.00	7.00	7.00	7.00	7.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Energy, Research & Innovation	6.00	6.00	7.00	7.00	7.00	7.00	7.00

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

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Energy, Research & Innovation	\$ 544,300	\$ 791,400	\$ 312,100	\$ 932,600	\$ 141,200	17.8%	\$ 936,800
Grand Total	\$ 544,300	\$ 791,400	\$ 312,100	\$ 932,600	\$ 141,200	17.8%	\$ 936,800

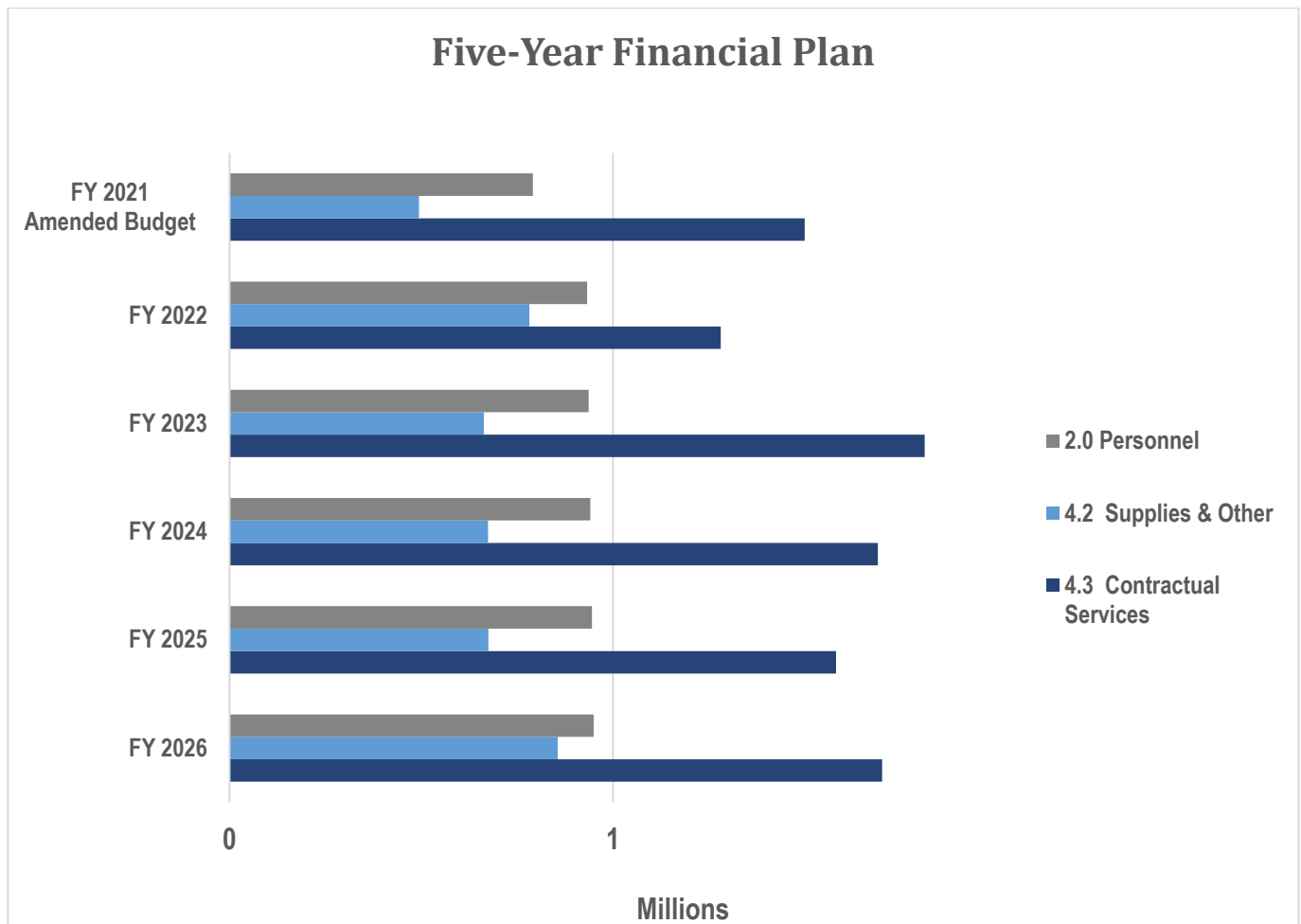
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Energy, Research & Innovation	\$ 791,400	\$ 932,600	\$ 936,800	\$ 941,000	\$ 945,200	\$ 949,500
Grand Total	\$ 791,400	\$ 932,600	\$ 936,800	\$ 941,000	\$ 945,200	\$ 949,500

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 791,400	\$ 312,100	\$ 932,600	\$ 141,200	17.8%	\$ 936,800	\$ 941,000	\$ 945,200	\$ 949,500
4.2 Supplies & Other	494,100	208,600	782,200	288,100	58.3%	663,200	674,200	675,200	856,200
4.3 Contractual Services	1,500,000	545,500	1,281,000	(219,000)	-14.6%	1,813,000	1,691,000	1,582,000	1,702,000
Grand Total	\$ 2,785,500	1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000	\$ 3,306,200	\$ 3,202,400	\$ 3,507,700

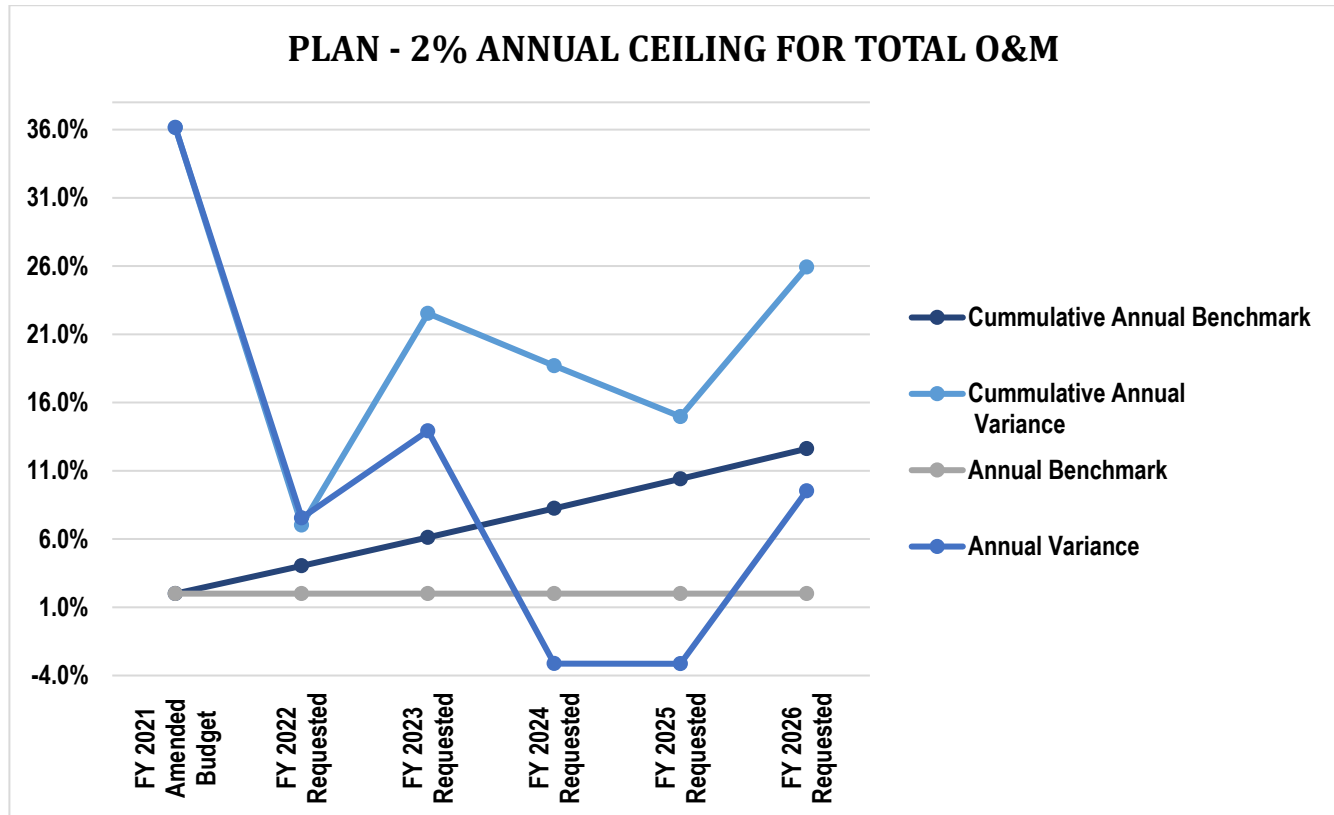


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Energy, Research & Innovation	\$ 2,785,500	\$ 1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000	\$ 3,306,200	\$ 3,202,400	\$ 3,507,700
Grand Total	\$ 2,785,500	1,066,200	\$ 2,995,800	\$ 210,300	7.6%	\$ 3,413,000	\$ 3,306,200	\$ 3,202,400	\$ 3,507,700

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 25.9%. This increase is a result of the ramp up of the contractual services initiatives defined in the expense categories section which is above the entity-wide goal of a cumulative ceiling of no more than 12.6% 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000
Machinery & Equipment	125,000	170,000	230,000	155,000	155,000	35,000
Laboratory Equipment & Sensors	125,000	170,000	230,000	155,000	155,000	35,000
Grand Total	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000
Grand Total	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Energy, Research, & Innovation	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 35,000
Grand Total	\$ 125,000	\$ 170,000	\$ 230,000	\$ 155,000	\$ 155,000	\$ 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
882501 - Energy, Research & Innovation	2,104,100	2,785,500	643,600	3,215,800	3,588,000	3,581,200	3,502,400	3,507,700
2.1 Salaries & Wages	445,700	623,500	124,000	721,400	721,400	721,400	721,400	721,400
2.4 Employee Benefits	98,600	167,900	31,400	211,200	215,400	219,600	223,800	228,000
4.2 Supplies & Other	472,100	494,100	106,800	782,200	663,200	674,200	675,200	856,200
Capital Outlay less than \$5,000	14,100	2,000	-	290,000	170,000	180,000	180,000	360,000
Memberships, Licenses & Subscriptions	372,200	423,000	96,600	423,100	423,100	423,100	423,100	423,100
Mileage and Parking	2,800	2,000	-	2,000	2,000	2,000	2,000	2,000
Office Supplies	5,200	7,100	500	7,100	7,100	7,100	7,100	7,100
Operating Supplies	45,000	25,000	9,900	25,000	25,000	25,000	25,000	25,000
Postage	200	-	(200)	-	-	-	-	-
Supplies & Other - Covid19	-	-	-	-	-	-	-	-
Training and Internal Meetings	13,300	20,000	-	20,000	20,000	20,000	20,000	20,000
Travel	19,300	15,000	-	15,000	16,000	17,000	18,000	19,000
4.3 Contractual Services	1,087,700	1,500,000	381,400	1,501,000	1,988,000	1,966,000	1,882,000	1,702,000
Contractual Professional Services	1,063,100	1,500,000	381,400	1,501,000	1,988,000	1,966,000	1,882,000	1,702,000
Covid-19 Study	24,600	-	-	-	-	-	-	-
Grand Total	\$ 2,104,100	\$ 2,785,500	\$ 643,600	\$ 3,215,800	\$ 3,588,000	\$ 3,581,200	\$ 3,502,400	\$ 3,507,700

Information Technology

A center of excellence that provides reliable, contemporary, and integrated technology to support and facilitate teaching, learning, research, and service for GLWA.

The Information Technology Group is leading GLWA in several strategic initiatives.**❖ Shared Services (Ongoing)**

The dollar amount of shared services reimbursement from DWSD will significantly decrease over the five-year plan. This is consistent with a long-term plan for DWSD to separate from GLWA systems. The decrease in service to DWSD shifts resources to an increased focus on growing demands for GLWA's IT services. There are shared services that are expected to continue beyond the originally estimated end date of June 2021. This continued need for support could impact progress on other GLWA initiatives. Additionally, depending on how long these services continue, there will likely be a need to procure for DWSD security services that are being deployed at GLWA to protect our network from cyber threats. These services will be tracked through the IT Project Management Office.

❖ Data Center Modernization (Completion by end of FY 2022)

A three-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. The Phase 1 update of the data center infrastructure was completed in the second quarter of FY 2021. In FY 2022, an implementation of a hybrid cloud environment will occur which means that certain applications will be moved from the on-premises data center to a cloud environment. Also, new Disaster Recovery Services and extending the internal firewall protections to remote devices will be completed. This initiative will be tracked through the IT Project Management Office's established processes including project plan schedules and weekly status reports.

❖ Enterprise Resource Planning (ERP) (Completion by end of FY 2023)

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 will replace these systems and fully integrate HR, Finance, Procurement, and reporting functions across the Enterprise. This system will leverage best practices to increase efficiency and effectiveness in reporting and operations. It will also ensure the proper controls and procedures are followed. Currently, FSA, OD, and IT team members are working collaboratively to evaluate responses to the RFP for these services. Once a vendor is selected and the contract is negotiated, it is anticipated that the system configuration and implementation will take 18 – 24 months. This initiative will be tracked through the IT Project Management Office's established processes including project plan schedules and weekly status reports.

❖ Enterprise Asset Management (EAM) (Completion by end of FY 2023)

The current EAM (WAM) system is on extended support from the vendor (Oracle) and no longer meets the growing needs of our organization. GLWA will implement a new EAM to support enterprise asset management operations using improved technology platforms. The system will streamline work for maintenance technicians, add mobility for field workers and

help to achieve the goals set forth in the Strategic Asset Management Plan (SAMP). Representatives from all impacted areas worked collaboratively to evaluate responses to the RFP for these services. Once a vendor is selected and contract negotiated, it is anticipated that the transition from WAM to the new system will be completed in 24 months. This initiative will be tracked through the IT Project Management Office's established processes including project plan schedules and weekly status reports.

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 licensing services, subscriptions for cloud-based solutions, hardware and software maintenance, contracted services including enhancement of our Geographical Information System (GIS). The largest expense category is Telecom, Managed Security & Network Services, due to an annual contract with AT&T who owns, operates, updates, and maintain 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	Professional Services 617400	Professional Services 617400	Professional Services 617400	Repairs & Maintenance - Software 62302	Professional Services 617400	Professional Services 617400	Total
Prime Consultant or Supplier	AT&T	Verizon	Disaster Recovery	ERP PM Services	GIS Strategic Services	Staff Augmentation	EAM Subscription	DXC - WAM	Ceridian Human Resources Information Systems (HRIS)	
Contract #	CS-1689	1801674	TBD	TBD	1901592	CS - 071	TBD	CS-119	1803978	
Contract Amount	\$ 60,000,000	\$ 500,000	TBD	TBD	TBD	\$ 4,114,800	TBD	\$ 7,000,000	\$ 3,217,779	
Contract End Date	TBD	TBD	TBD	TBD	TBD	TBD	TBD	06/30/22	TBD	
Cost Center Name	Infrastructure	IT Service Delivery	Infrastructure	IT Project Management	IT Enterprise Applications	Various	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	Contractual Services	
Pre-FY 2020 Spend	\$ 34,272,962	\$ 1,348,000	\$ 800,000	\$ -	\$ 1,170,571	\$ 248,232	\$ -	\$ 7,716,258	\$ 700,000	\$ 46,256,023
FY 2020 Requested	12,000,000	420,000	400,000	333,234	720,000	298,266		3,400,000	700,000	18,271,500
FY 2021 Requested	12,000,000	424,200	400,000	369,898	720,000	296,166	1,500,000	3,400,000	700,000	19,810,264
FY 2022 Requested	12,000,000	432,700	400,000	346,696	720,000	299,306	1,500,000	3,400,000	700,000	19,798,702
FY 2023 Requested	12,000,000	441,300	400,000	353,630	800,000	299,306	1,500,000	-	700,000	16,494,236
FY 2024 Requested	12,000,000	450,200	400,000	360,703	800,000	299,306	1,500,000	-	700,000	16,510,209
FY 2025 Requested	12,000,000	450,200	400,000	360,703	800,000	299,306	1,500,000	-	700,000	16,510,209
Total	\$ 106,272,962	\$ 3,966,600	\$ 3,200,000	\$ 2,124,864	\$ 5,730,571	\$ 2,039,888	\$ 7,500,000	\$ 17,916,258	\$ 4,900,000	\$ 153,651,143

Organization

The GLWA Information Technology (IT) Group consists of seven teams.

❖ Office of the Chief Information Officer

Provides administration and oversight for the entire IT operational area.

❖ Project Management Office

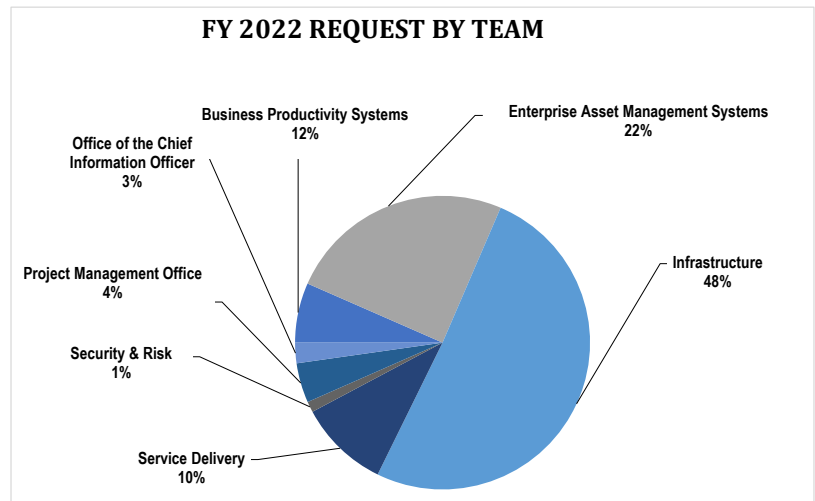
Fosters collaboration, support and oversees the execution of technology initiatives.

❖ 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. These services include 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 such as email, office automation, and document management.

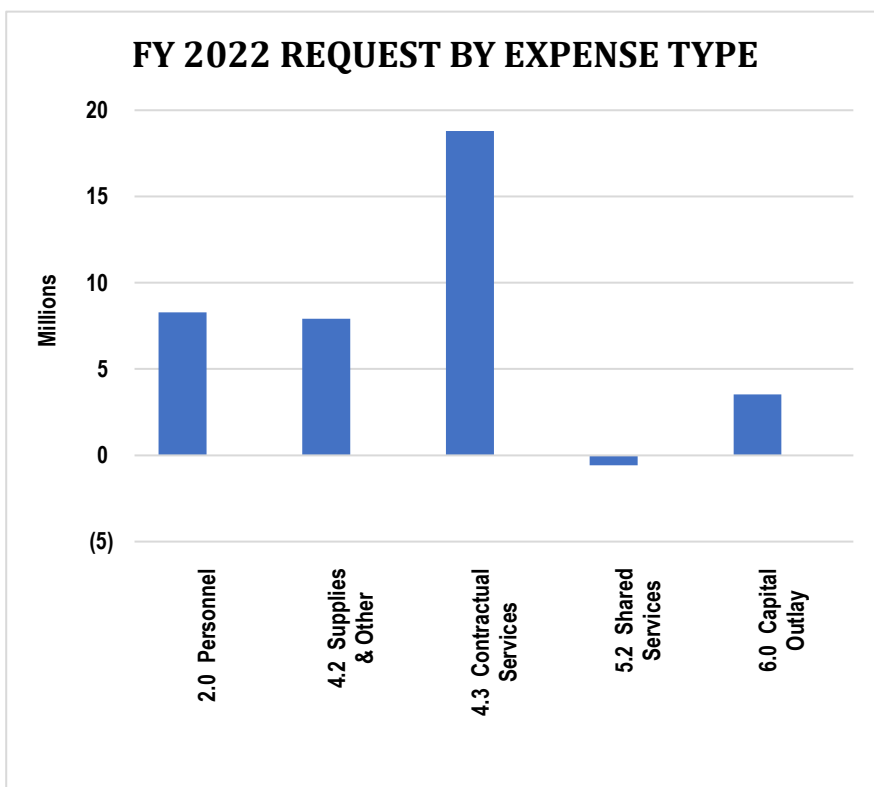
❖ **Service Delivery** – Provides frontline service and support to all team members and is responsible for deployment and support of all team member assigned computing and mobile devices and printers.

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 2022. Included in this account are the budgets for ERP PM Services, Telecom Managed Security & Network Services, and the launch of the GIS Professional Services for Improvement Projects.



Biennial Budget Request

The biennial budget reflects an overall increase of \$2,681,200, or 7.6%, in FY 2022.

- ❖ The personnel account is increasing by \$516,700 in FY 2022 due to the combination of adding three Application Analysts and one intern to support the increased need for new applications and application support along with the FY 2022 employee benefits budget being adjusted to reflect the current rate increases.
- ❖ The supplies & other account is increasing by \$495,500 in FY 2022 due to an investment in ERP subscription services.
- ❖ The contractual services account is decreasing by \$1,278,000 due to changes in the WAM support contract.
- ❖ The shared service reimbursements will decrease by \$2,565,300 due to DWSD canceling services with GLWA as it continues to integrate its systems with the City of Detroit.
- ❖ The capital outlay account is increasing by \$381,700 in FY 2022 due to a combination of purchasing the Data Center Modernization Software for \$780,000 and the reducing of both Oracle and WAM licenses in a combine amount of \$390,000. The licenses are reducing as a result of DWSD separating from GLWA to integrate with the City of Detroit and GLWA moving to new systems.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 6,722,600	\$ 7,761,300	\$ 3,583,700	\$ 8,278,000	\$ 516,700	6.7%	\$ 8,317,200
4.2 Supplies & Other	4,537,200	7,412,800	\$ 2,087,000	7,908,300	495,500	6.7%	8,116,800
4.3 Contractual Services	21,253,300	20,069,300	\$ 9,124,500	18,791,300	(1,278,000)	-6.4%	19,201,400
5.2 Shared Services	1,022,400	(3,142,100)	\$ (1,571,100)	(576,800)	2,565,300	-81.6%	(588,300)
6.0 Capital Outlay	5,797,000	3,153,200	\$ 1,044,300	3,534,900	381,700	12.1%	2,904,800
Grand Total	\$ 39,332,500	\$ 35,254,500	\$ 14,268,400	\$ 37,935,700	\$ 2,681,200	7.6%	\$ 37,951,900

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Enterprise Asset Management Systems	\$ 6,054,800	\$ 9,090,900	\$ 2,414,800	\$ 8,320,700	\$ (770,200)	-8.5%	\$ 7,755,800
Business Productivity Systems	4,247,800	2,570,600	1,307,900	4,722,800	2,152,200	83.7%	4,793,200
Infrastructure	23,272,900	17,127,200	8,206,700	18,195,600	1,068,400	6.2%	18,585,500
Security & Risk	242,200	424,800	100,900	468,600	43,800	10.3%	471,800
Service Delivery	2,840,100	3,458,600	1,201,800	3,716,200	257,600	7.4%	3,811,700
Project Management Office	1,759,300	1,704,200	624,200	1,328,200	(376,000)	-22.1%	1,334,700
Office of the CIO	915,400	878,200	412,100	1,183,600	305,400	34.8%	1,199,200
Grand Total	\$ 39,332,500	\$ 35,254,500	\$ 14,268,400	\$ 37,935,700	\$ 2,681,200	7.6%	\$ 37,951,900

Personnel Budget

Information Technology personnel consists of 75 positions for FY 2022. The increase in positions is for three Application Analysts and one intern to support the increased need for new applications and application support.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Information Technology	71.00	71.00	75.00	75.00	75.00	75.00	75.00
Office of the CIO	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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	13.00	10.00	17.00	17.00	17.00	17.00	17.00
Business Productivity Systems	13.00	16.00	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 - 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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Information Technology	71.00	71.00	74.50	74.50	74.50	74.50	74.50
Office of the CIO	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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	13.00	10.00	16.50	16.50	16.50	16.50	16.50
Business Productivity Systems	13.00	16.00	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

Personnel Budget - The table below presents 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Office of the CIO	\$ 505,200	\$ 508,100	\$ 257,700	\$ 522,000	\$ 13,900	2.7%	\$ 524,400
Project Management Office	1,259,000	1,288,200	623,000	1,311,800	23,600	1.8%	1,317,800
Service Delivery	1,220,100	1,227,000	630,200	1,265,200	38,200	3.1%	1,272,100
Infrastructure	1,156,100	1,388,600	673,200	1,462,900	74,300	5.4%	1,469,900
Enterprise Asset Management Systems	1,360,200	1,781,200	798,100	1,774,400	(6,800)	-0.4%	1,782,700
Business Productivity Systems	992,900	1,175,000	494,000	1,540,300	365,300	31.1%	1,547,100
Security & Risk	229,100	393,200	107,500	401,400	8,200	2.1%	403,200
Grand Total	\$ 6,722,600	\$ 7,761,300	\$ 3,583,700	\$ 8,278,000	\$ 516,700	6.7%	\$ 8,317,200

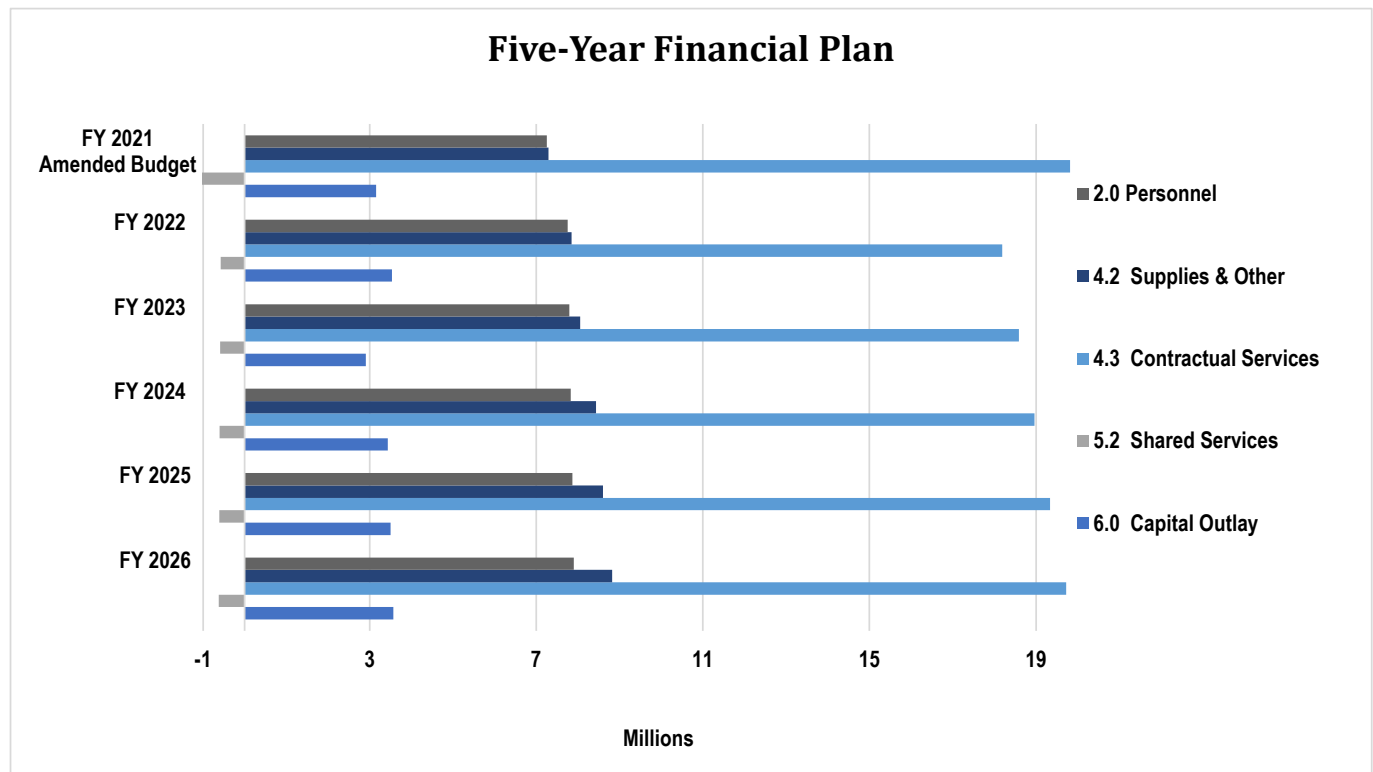
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Office of the CIO	\$ 508,100	\$ 522,000	\$ 524,400	\$ 526,800	\$ 529,100	\$ 531,500
Project Management Office	1,288,200	1,311,800	1,317,800	1,323,800	1,329,800	1,335,700
Service Delivery	1,227,000	1,265,200	1,272,100	1,278,900	1,285,700	1,292,500
Infrastructure	1,388,600	1,462,900	1,469,900	1,477,000	1,484,000	1,491,000
Enterprise Asset Management Systems	1,781,200	1,774,400	1,782,700	1,791,100	1,799,400	1,807,800
Business Productivity Systems	1,175,000	1,540,300	1,547,100	1,553,900	1,560,700	1,567,500
Security & Risk	393,200	401,400	403,200	405,000	406,800	408,600
Grand Total	\$ 7,761,300	\$ 8,278,000	\$ 8,317,200	\$ 8,356,500	\$ 8,395,500	\$ 8,434,600

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 7,761,300	\$ 3,583,700	\$ 8,278,000	\$ 516,700	6.7%	\$ 8,317,200	\$ 8,356,500	\$ 8,395,500	\$ 8,434,600
4.2 Supplies & Other	7,412,800	2,087,000	7,908,300	495,500	6.7%	8,116,800	8,498,600	8,668,200	8,886,500
4.3 Contractual Services	20,069,300	9,124,500	18,791,300	(1,278,000)	-6.4%	19,201,400	19,585,400	19,977,000	20,376,700
5.2 Shared Services	(3,142,100)	(1,571,100)	(576,800)	2,565,300	-81.6%	(588,300)	(600,100)	(612,100)	(624,300)
6.0 Capital Outlay	3,153,200	1,044,300	3,534,900	381,700	12.1%	2,904,800	3,433,100	3,501,700	3,571,600
Grand Total	\$ 35,254,500	\$ 14,268,400	\$ 37,935,700	\$ 2,681,200	7.6%	\$ 37,951,900	\$ 39,273,500	\$ 39,930,300	\$ 40,645,100

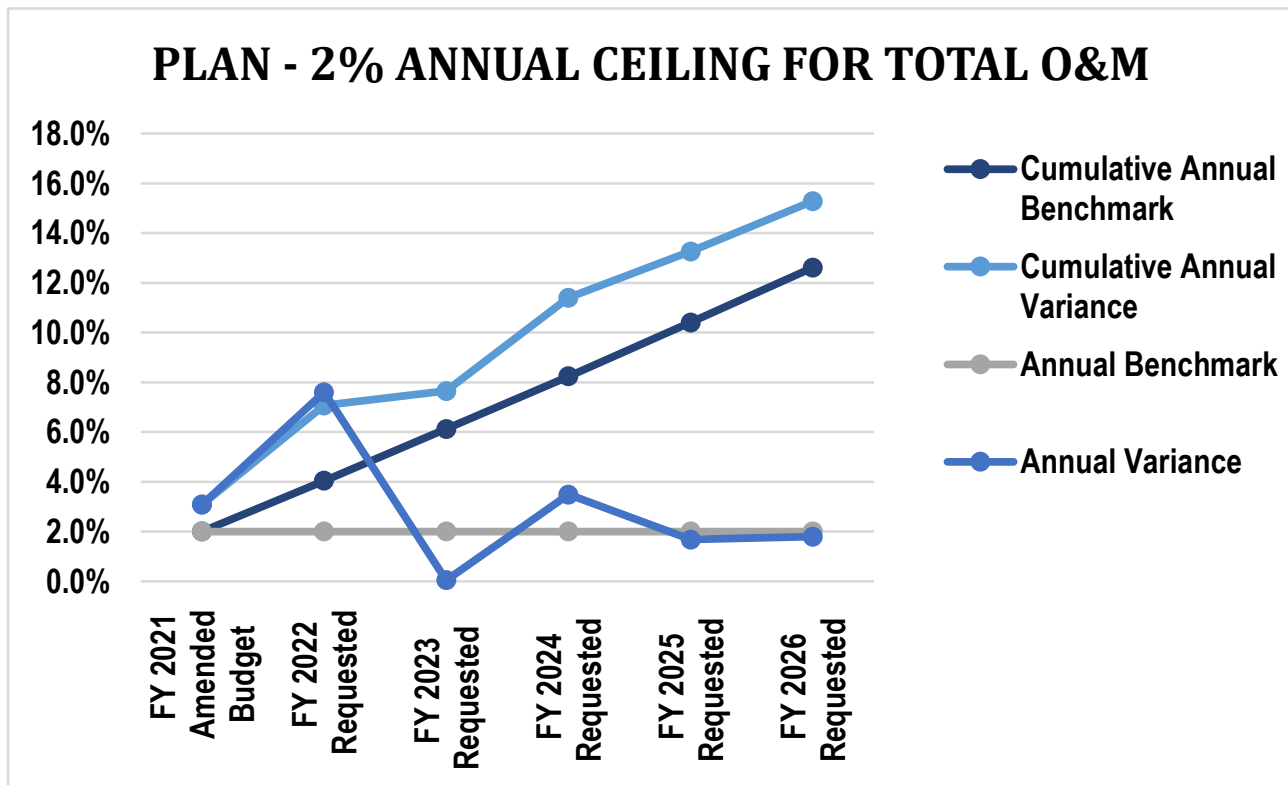


Five-Year Biennial Budget Request by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Enterprise Asset Management	\$ 9,090,900	\$ 2,414,800	\$ 8,320,700	\$ (770,200)	-8.5%	\$ 7,755,800	\$ 8,189,600	\$ 8,325,900	\$ 8,464,800
Systems	2,570,600	1,307,900	4,722,800	2,152,200	83.7%	4,793,200	4,865,000	4,937,900	5,012,300
Business Productivity Systems	17,127,200	8,206,700	18,195,600	1,068,400	6.2%	18,585,500	19,053,400	19,411,700	19,822,400
Infrastructure	424,800	100,900	468,600	43,800	10.3%	471,800	475,000	478,100	481,300
Security & Risk	3,458,600	1,201,800	3,716,200	257,600	7.4%	3,811,700	4,134,400	4,198,200	4,263,100
Service Delivery	1,704,200	624,200	1,328,200	(376,000)	-22.1%	1,334,700	1,341,000	1,347,300	1,353,600
Project Management Office	878,200	412,100	1,183,600	305,400	34.8%	1,199,200	1,215,100	1,231,200	1,247,600
Office of the CIO									
Grand Total	\$ 35,254,500	\$ 14,268,400	\$ 37,935,700	\$ 2,681,200	7.6%	\$ 37,951,900	\$ 39,273,500	\$ 39,930,300	\$ 40,645,100

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

The IT financial plan reflects a five-year overall increase of 15.3% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment. The increase over the entity-wide goal is mainly a result of the decrease in shared service reimbursements in FY 2022. As noted previously, the decrease in service to DWSD shifts resources to an increased focus on growing demands for GLWA's IT services.



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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Operations & Maintenance	\$ 3,153,200	\$ 3,534,900	\$ 2,904,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600
Data/Network	2,000,018	-	-	-	-	-
Hardware	444,000	1,925,729	1,966,349	2,107,660	2,149,752	2,192,613
Software	709,182	1,609,171	938,450	1,325,439	1,351,948	1,378,987
Improvement & Extension	12,750,000	10,000,000	9,500,000	-	-	-
Hardware	6,750,000	-	-	-	-	-
Leasehold Improvements, Computers & IT, Furniture & Fixtures	2,000,000	1,000,000	1,000,000	-	-	-
Software	4,000,000	9,000,000	8,500,000	-	-	-
Grand Total	\$ 15,903,200	\$ 13,534,900	\$ 12,404,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Operations & Maintenance	\$ 3,153,200	\$ 3,534,900	\$ 2,904,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600
Improvement & Extension	12,750,000	10,000,000	9,500,000	-	-	-
Grand Total	\$ 15,903,200	\$ 13,534,900	\$ 12,404,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Service Delivery	\$ 494,000	\$ 1,583,320	\$ 1,359,986	\$ 1,387,186	\$ 1,414,930	\$ 1,443,228
Technology Infrastructure	5,313,754	2,191,880	2,219,043	1,407,582	1,435,734	1,464,448
Business Productivity Systems	4,050,000	4,000,000	4,000,000	-	-	-
Enterprise Asset Management Systems	8,332,500	5,696,200	4,761,000	572,266	583,649	595,189
Security & Risks	63,000	63,500	64,770	66,065	67,387	68,734
Grand Total	\$ 18,253,254	\$ 13,534,900	\$ 12,404,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600

Line-Item Budget and Plan

The Information Technology five-year plan by line-item expense begins on the next page. 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883301 - Office of the CIO	\$ 915,400	\$ 878,200	\$ 412,100	\$ 1,183,600	\$ 1,199,200	\$ 1,215,100	\$ 1,231,200	\$ 1,247,600
2.1 Salaries & Wages	409,500	399,300	205,500	403,000	403,000	403,000	403,000	403,000
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	95,700	108,800	52,200	119,000	121,400	123,800	126,100	128,500
4.2 Supplies & Other	75,600	120,100	81,800	61,600	62,800	64,100	65,400	66,600
Memberships, Licenses & Subscriptions	18,600	28,600	76,000	27,400	27,900	28,500	29,100	29,600
Mileage and Parking	100	-	-	-	-	-	-	-
Office Supplies	46,700	72,800	4,800	14,300	14,600	14,900	15,200	15,500
Operating Supplies	300	-	-	-	-	-	-	-
Training and Internal Meetings	1,600	8,300	1,000	9,000	9,200	9,300	9,500	9,700
Travel	8,300	10,400	-	10,900	11,100	11,400	11,600	11,800
4.3 Contractual Services	317,400	250,000	72,600	600,000	612,000	624,200	636,700	649,500
Contract Services-Information Technology	317,400	250,000	72,600	600,000	612,000	624,200	636,700	649,500
6.0 Capital Outlay	17,200	-	-	-	-	-	-	-
Capital Outlay over \$5k(O&M-Capitalized)	17,200	-	-	-	-	-	-	-
883311 Project Management Office	1,759,300	1,704,200	624,200	1,328,200	1,334,700	1,341,000	1,347,300	1,353,600
2.1 Salaries & Wages	1,008,700	1,013,300	497,300	1,013,300	1,013,300	1,013,300	1,013,300	1,013,300
2.4 Employee Benefits	250,300	274,900	125,700	298,500	304,500	310,500	316,500	322,400
4.2 Supplies & Other	29,300	76,100	1,200	16,400	16,900	17,200	17,500	17,900
Memberships, Licenses & Subscriptions	2,300	1,600	700	1,600	1,700	1,700	1,700	1,800
Repairs & Maintenance-Software	-	60,000	-	-	-	-	-	-
Training and Internal Meetings	19,300	13,700	(400)	14,000	14,300	14,600	14,900	15,200
Travel	7,100	800	-	800	900	900	900	900
Tuition Refund	600	-	900	-	-	-	-	-
4.3 Contractual Services	500	339,900	-	-	-	-	-	-
Contract Services-Information Technology	-	339,900	-	-	-	-	-	-
Contractual Operating Services	500	-	-	-	-	-	-	-
6.0 Capital Outlay	470,500	-	-	-	-	-	-	-
Capital Outlay over \$5k(O&M-Capitalized)	470,500	-	-	-	-	-	-	-
883321 - Service Delivery	2,840,100	3,458,600	1,201,800	3,716,200	3,811,700	4,134,400	4,198,200	4,263,100
2.1 Salaries & Wages	881,300	925,800	447,400	924,600	924,600	924,600	924,600	924,600
2.3 Overtime	900	-	200	-	-	-	-	-
2.4 Employee Benefits	337,900	301,200	182,600	340,600	347,500	354,300	361,100	367,900
4.2 Supplies & Other	743,300	1,480,000	326,700	759,900	780,300	1,061,100	1,082,300	1,103,800
Capital Outlay less than \$5,000	280,800	916,000	83,700	100,000	102,000	104,000	106,100	108,200
Office Supplies	-	-	3,000	-	-	-	-	-
Memberships, Licenses & Subscriptions	1,200	5,200	-	5,300	5,400	5,500	5,600	5,700
Printing	-	205,000	-	300,000	306,000	312,100	318,400	324,700
Repairs & Maintenance-Hardware	(100)	44,600	-	45,500	46,400	47,300	48,200	49,200
Repairs & Maintenance-Miscellaneous	-	26,100	-	26,400	26,900	27,500	28,000	28,600
Repairs & Maintenance-Software	419,700	205,200	238,300	203,300	212,600	482,000	491,700	501,500
Training and Internal Meetings	40,900	62,300	400	63,500	64,800	66,100	67,400	68,700
Travel	800	15,600	-	15,900	16,200	16,600	16,900	17,200
Tuition Refund	-	-	1,300	-	-	-	-	-
4.3 Contractual Services	358,400	424,200	220,000	507,700	552,200	563,200	574,500	586,000
Contract Services-Information Technology	(500)	-	-	-	-	-	-	-
Telecom, Managed Security & Network Svcs	358,900	424,200	220,000	507,700	552,200	563,200	574,500	586,000
5.2 Shared Services	(24,000)	(166,600)	(83,300)	(149,900)	(152,900)	(156,000)	(159,200)	(162,400)
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(17,100)	(119,000)	(59,500)	(56,500)	(57,600)	(58,800)	(60,000)	(61,200)
Shared Services Reimbursement	-	-	-	(70,800)	(72,200)	(73,600)	(75,100)	(76,600)
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(6,900)	(47,600)	(23,800)	(22,600)	(23,100)	(23,600)	(24,100)	(24,600)
6.0 Capital Outlay	542,300	494,000	108,200	1,333,300	1,360,000	1,387,200	1,414,900	1,443,200
Capital Outlay over \$5k(O&M-Capitalized)	542,300	494,000	108,200	1,333,300	1,360,000	1,387,200	1,414,900	1,443,200

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883331 - Infrastructure	23,272,900	17,127,200	8,206,700	18,195,624	18,585,549	19,053,382	19,411,723	19,822,374
2.1 Salaries & Wages	896,400	1,076,300	516,700	1,111,800	1,111,800	1,111,800	1,111,800	1,111,800
2.4 Employee Benefits	259,700	312,300	156,500	351,100	358,100	365,200	372,200	379,200
4.2 Supplies & Other	1,790,100	2,136,300	634,900	1,800,024	1,881,049	1,872,782	1,910,123	1,993,374
Capital Outlay less than \$5,000	190,400	-	169,400	-	-	-	-	-
Operating Supplies	-	-	-	-	-	-	-	-
Repairs & Maintenance-Hardware	1,454,800	2,003,900	373,800	1,664,900	1,698,200	1,732,200	1,766,800	1,802,200
Repairs & Maintenance-Software	134,200	92,000	89,800	93,900	140,800	97,700	99,600	146,600
Memberships, Licenses & Subscriptions	2,200	-	1,900	-	-	-	-	-
Mileage and Parking	200	-	-	-	-	-	-	-
Training and Internal Meetings	4,900	20,800	-	21,224	21,649	22,082	22,523	22,974
Travel	3,400	19,600	-	20,000	20,400	20,800	21,200	21,600
4.3 Contractual Services	17,096,900	14,364,200	7,213,300	14,167,700	14,451,000	14,740,100	15,034,800	15,335,500
Contract Services-Information Technology	122,800	392,500	3,100	92,500	94,300	96,200	98,100	100,100
Contractual Operating Services	215,500	553,000	79,500	556,100	567,200	578,600	590,100	601,900
Telecom, Managed Security & Network Svcs	16,758,600	13,418,700	7,130,700	13,519,100	13,789,500	14,065,300	14,346,600	14,633,500
5.2 Shared Services	(781,900)	(1,725,600)	(862,800)	(426,900)	(435,400)	(444,100)	(452,900)	(461,900)
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(125,300)	(94,000)	(47,000)	(146,400)	(149,300)	(152,300)	(155,300)	(158,400)
Shared Services Reimbursement	(606,500)	(1,594,000)	(797,000)	(221,900)	(226,300)	(230,800)	(235,400)	(240,100)
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(50,100)	(37,600)	(18,800)	(58,600)	(59,800)	(61,000)	(62,200)	(63,400)
6.0 Capital Outlay	4,011,700	963,700	548,100	1,191,900	1,219,000	1,407,600	1,435,700	1,464,400
Capital Outlay over \$5k(O&M-Capitalized)	4,011,700	963,700	548,100	1,191,900	1,219,000	1,407,600	1,435,700	1,464,400
883341 - Business Productivity Systems	4,247,800	2,570,600	1,307,900	4,722,800	4,793,200	4,865,000	4,937,900	5,012,300
2.1 Salaries & Wages	782,700	917,900	385,000	1,110,900	1,110,900	1,110,900	1,110,900	1,110,900
2.4 Employee Benefits	210,200	257,100	109,000	339,300	346,100	352,900	359,700	366,500
2.5 Transition Services	-	-	-	90,100	90,100	90,100	90,100	90,100
4.2 Supplies & Other	650,100	757,500	555,000	2,557,400	2,608,500	2,660,700	2,713,900	2,768,200
Memberships, Licenses & Subscriptions	600	-	200	-	-	-	-	-
Repairs & Maintenance-Software	640,100	700,500	551,500	2,499,200	2,549,200	2,600,200	2,652,200	2,705,200
Training and Internal Meetings	7,800	35,400	3,300	36,100	36,800	37,500	38,300	39,100
Travel	1,100	21,600	-	22,100	22,500	23,000	23,400	23,900
Tuition Refund	500	-	-	-	-	-	-	-
4.3 Contractual Services	535,200	588,100	258,900	625,100	637,600	650,400	663,300	676,600
Contract Services-Information Technology	522,300	588,100	178,800	469,000	478,400	488,000	497,700	507,700
Contractual Operating Services	12,900	-	80,100	156,100	159,200	162,400	165,600	168,900
5.2 Shared Services	2,061,400	-	-	-	-	-	-	-
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	480,900	-	-	-	-	-	-	-
Shared Services Reimbursement	1,388,200	-	-	-	-	-	-	-
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	192,300	-	-	-	-	-	-	-
6.0 Capital Outlay	8,200	50,000	-	-	-	-	-	-
Capital Outlay over \$5k(O&M-Capitalized)	8,200	50,000	-	-	-	-	-	-
883351 - Enterprise Asset Management	6,054,800	9,090,900	2,414,800	8,320,700	7,755,800	8,189,600	8,325,900	8,464,800
Systems	6,054,800	9,090,900	2,414,800	8,320,700	7,755,800	8,189,600	8,325,900	8,464,800
2.1 Salaries & Wages	1,064,900	1,385,500	618,700	1,286,900	1,286,900	1,286,900	1,286,900	1,286,900
2.4 Employee Benefits	295,300	395,700	179,400	417,500	425,800	434,200	442,500	450,900
2.5 Transition Services	-	-	-	70,000	70,000	70,000	70,000	70,000
4.2 Supplies & Other	1,225,400	2,839,200	476,500	2,709,300	2,763,500	2,818,800	2,875,100	2,932,600
Memberships, Licenses & Subscriptions	800	500	300	500	500	600	600	600
Capital Outlay less than \$5,000	-	-	29,200	-	-	-	-	-
Repairs & Maintenance-Software	1,169,900	2,800,000	449,700	2,670,000	2,723,400	2,777,900	2,833,400	2,890,100
Training and Internal Meetings	35,400	20,000	-	20,000	20,400	20,800	21,200	21,600
Mileage and Parking	300	700	-	800	800	800	800	800
Travel	19,000	18,000	(2,700)	18,000	18,400	18,700	19,100	19,500
4.3 Contractual Services	2,944,900	4,102,900	1,359,700	2,890,800	2,948,600	3,007,500	3,067,700	3,129,100
Contract Services-Information Technology	2,458,900	3,905,000	1,079,400	2,845,000	2,901,900	2,959,900	3,019,100	3,079,500
Contractual Operating Services	486,000	197,900	280,300	45,800	46,700	47,600	48,600	49,600
5.2 Shared Services	(222,800)	(1,214,900)	(607,500)	-	-	-	-	-
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(113,500)	(133,000)	(66,500)	-	-	-	-	-
Shared Services Reimbursement	(64,200)	(1,028,700)	(514,400)	-	-	-	-	-
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(45,100)	(53,200)	(26,600)	-	-	-	-	-
6.0 Capital Outlay	747,100	1,582,500	388,000	946,200	261,000	572,200	583,700	595,300
Capital Outlay over \$5k(O&M-Capitalized)	747,100	1,582,500	388,000	946,200	261,000	572,200	583,700	595,300

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883361 - Security & Risk	242,200	424,800	100,900	468,600	471,800	475,000	478,100	481,300
2.1 Salaries & Wages	176,000	309,700	81,400	310,600	310,600	310,600	310,600	310,600
2.4 Employee Benefits	53,100	83,500	26,100	90,800	92,600	94,400	96,200	98,000
4.2 Supplies & Other	23,400	3,600	10,900	3,700	3,800	3,900	3,900	4,000
Capital Outlay less than \$5,000	23,400	-	10,900	-	-	-	-	-
Memberships, Licenses & Subscriptions	-	3,600	-	3,700	3,800	3,900	3,900	4,000
5.2 Shared Services	(10,300)	(35,000)	(17,500)	-	-	-	-	-
Shared Services : Salaries & Wages								
Reimbursement	(7,400)	(25,000)	(12,500)	-	-	-	-	-
Shared Services: Employee Benefit								
Reimbursement	(2,900)	(10,000)	(5,000)	-	-	-	-	-
6.0 Capital Outlay	-	63,000	-	63,500	64,800	66,100	67,400	68,700
Capital Outlay over \$5k(O&M-Capitalized)	-	63,000	-	63,500	64,800	66,100	67,400	68,700
Grand Total	\$ 39,332,500	\$ 35,254,500	\$ 14,268,400	\$ 37,935,724	\$ 37,951,949	\$ 39,273,482	\$ 39,930,323	\$ 40,645,074

Security & Integrity

Provide high quality, professional security operations and technical intelligence for the organization and its valued customers throughout Michigan

The Security and Integrity Area presently is leading GLWA in several 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 2022)**

Transition to a modernized record and reporting system. This system will be maintained by Information Technology.

❖ **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 will be 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.

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

Organization

The Security and Integrity Area consists of two teams.

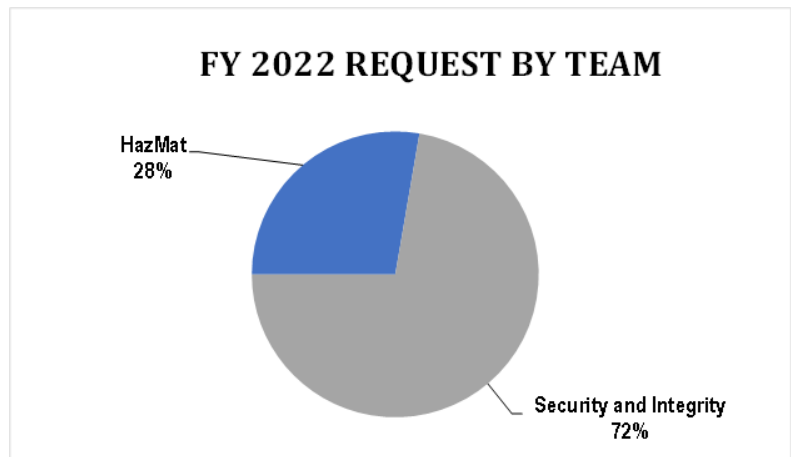
❖ Security and Integrity

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.

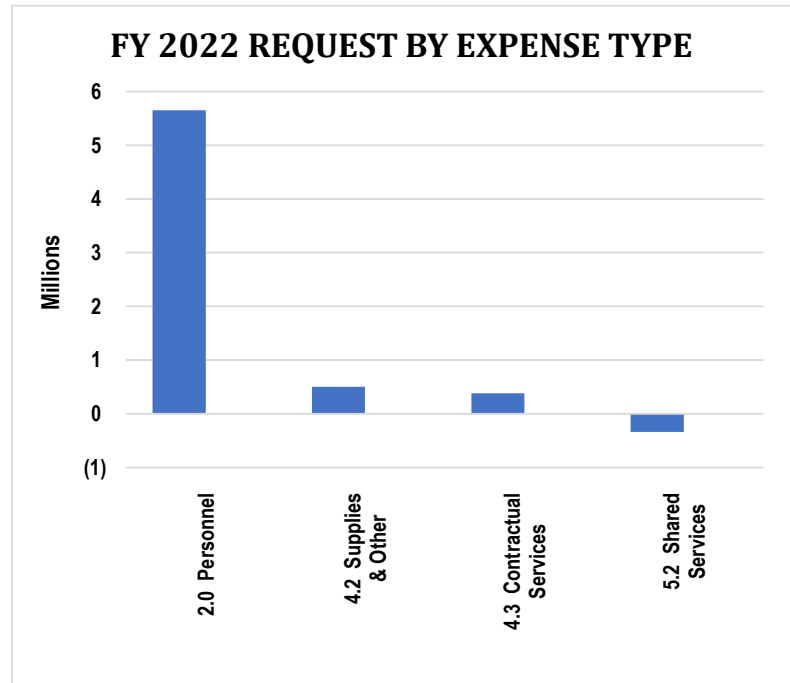


Expense Categories

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. The cost center is now fully staffed for its current responsibilities with 19 FTE's in HazMat and 60 FTE's in Security and Integrity.



Biennial Budget Request

The biennial budget reflects an overall \$239,200 increase, or 4.0%, in FY 2022.

- ❖ The personnel account is increasing by \$159,900 due to the FY 2022 employee benefits budget being adjusted to reflect the current rate increases.
- ❖ The \$50,600 increase in supplies & other is for the purchase of turnout gear for the HazMat Team. The turnout gear is estimated at \$79,800; (\$4,200 each for nineteen employees). The cost is being offset by \$30,000 due to the Continuity of Operations Plan (COOP) implementation being delayed until FY 2023.
- ❖ The contractual services account is increasing \$35,300 to implement a report management system.

Biennial Budget Request by Expense Category

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 6,028,200	\$ 5,492,500	\$ 3,061,400	\$ 5,652,400	\$ 159,900	2.9%	\$ 5,684,700
4.2 Supplies & Other	226,800	453,100	64,200	503,700	50,600	11.2%	494,400
4.3 Contractual Services	118,900	345,300	34,400	380,600	35,300	10.2%	388,200
5.2 Shared Services	(364,000)	(331,500)	(165,700)	(338,100)	(6,600)	2.0%	(344,800)
Grand Total	\$ 6,009,900	\$ 5,959,400	\$ 2,994,300	\$ 6,198,600	\$ 239,200	4.0%	\$ 6,222,500

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
HazMat	1,577,300	1,594,200	\$ 750,700	1,717,300	123,100	7.7%	1,679,100
Security and Integrity	4,432,600	4,365,200	\$ 2,243,600	4,481,300	116,100	2.7%	4,543,400
Grand Total	\$ 6,009,900	\$ 5,959,400	\$ 2,994,300	\$ 6,198,600	\$ 239,200	4.0%	\$ 6,222,500

Personnel Budget

The Security and Integrity Area consists of 79 positions in FY 2022, which is staying consistent with FY 2021 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Security and Integrity Area	79.00	79.00	79.00	79.00	81.00	82.00	83.00
Security and Integrity	60.00	60.00	60.00	60.00	60.00	61.00	62.00
HazMat	19.00	19.00	19.00	19.00	21.00	21.00	21.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Security and Integrity Area	79.00	79.00	79.00	79.00	81.00	82.00	83.00
Security and Integrity	60.00	60.00	60.00	60.00	60.00	61.00	62.00
HazMat	19.00	19.00	19.00	19.00	21.00	21.00	21.00

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 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Security and Integrity	\$ 4,002,900	\$ 2,314,200	\$ 4,126,800	\$ 123,900	3.1%	\$ 4,150,900
HazMat	1,489,600	747,200	1,525,600	36,000	2.4%	1,533,800
Grand Total	\$ 5,492,500	\$ 3,061,400	\$ 5,652,400	\$ 159,900	2.9%	\$ 5,684,700

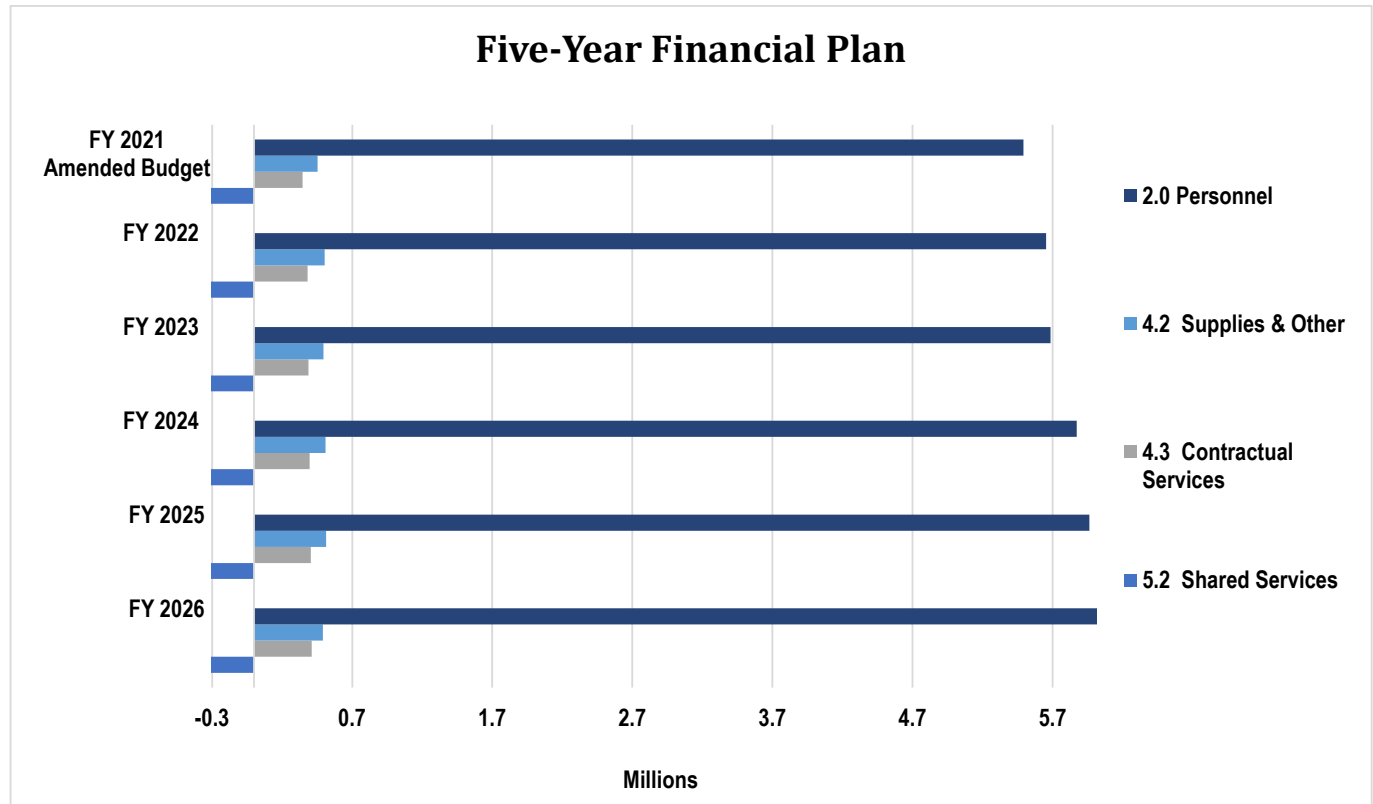
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Security and Integrity	\$ 4,002,900	\$ 4,126,800	\$ 4,150,900	\$ 4,175,000	\$ 4,256,200	\$ 4,338,100
HazMat	1,489,600	1,525,600	1,533,800	1,697,400	1,706,400	1,715,500
Grand Total	\$ 5,492,500	\$ 5,652,400	\$ 5,684,700	\$ 5,872,400	\$ 5,962,600	\$ 6,053,600

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 5,492,500	\$ 3,061,400	\$ 5,652,400	\$ 159,900	2.9%	\$ 5,684,700	\$ 5,872,400	\$ 5,962,600	\$ 6,053,600
4.2 Supplies & Other	453,100	64,200	503,700	50,600	11.2%	494,400	509,300	514,500	491,600
4.3 Contractual Services	345,300	34,400	380,600	35,300	10.2%	388,200	396,000	403,900	412,000
5.2 Shared Services	(331,500)	(165,700)	(338,100)	(6,600)	2.0%	(344,800)	(351,800)	(358,900)	(366,000)
Grand Total	\$ 5,959,400	\$ 2,994,300	\$ 6,198,600	\$ 239,200	4.0%	\$ 6,222,500	\$ 6,425,900	\$ 6,522,100	\$ 6,591,200

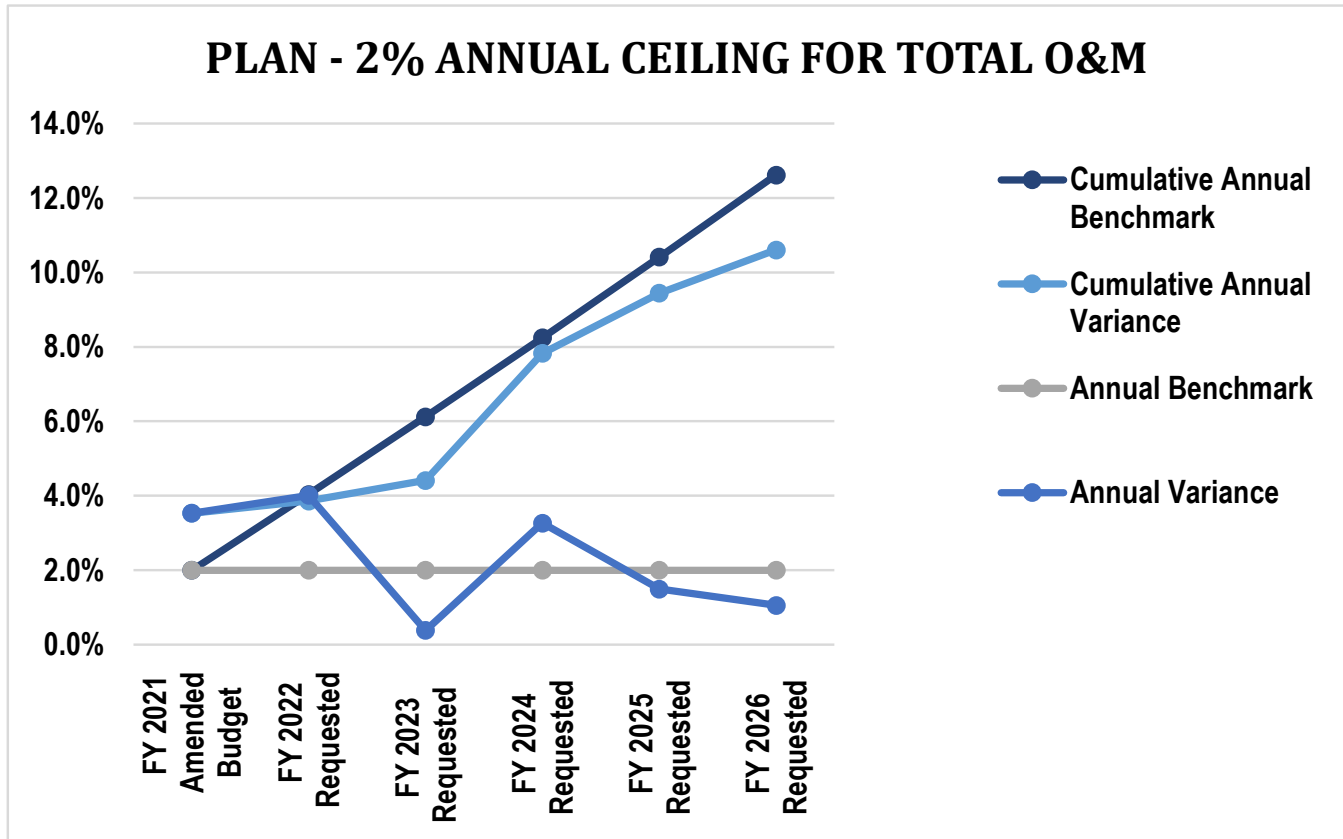


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
HazMat	\$ 1,594,200	\$ 750,700	\$ 1,717,300	\$ 123,100	7.7%	\$ 1,679,100	\$ 1,850,600	\$ 1,857,600	\$ 1,836,700
Security and Integrity	4,365,200	2,243,600	4,481,300	116,100	2.7%	4,543,400	4,575,300	4,664,500	4,754,500
Grand Total	\$ 5,959,400	\$ 2,994,300	\$ 6,198,600	239,200	4.0%	\$ 6,222,500	\$ 6,425,900	\$ 6,522,100	\$ 6,591,200

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 10.6% which is within the entity-wide goal of a cumulative ceiling of no more than 12.6% for planning purposes (based upon an annual 2% adjustment).



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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ -	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600
Access Control, Surveillance	-	80,000	81,600	83,200	84,900	86,600
Grand Total	\$ -	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ -	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600
Grand Total	\$ -	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600

Five-Year Capital Outlay by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Security and Integrity		\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600
Grand Total	\$ -	\$ 80,000	\$ 81,600	\$ 83,200	\$ 84,900	\$ 86,600

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
881201 - Security and Integrity	\$ 4,432,600	\$ 4,365,200	\$ 2,243,600	\$ 4,481,300	\$ 4,543,400	\$ 4,575,300	\$ 4,664,500	\$ 4,754,500
2.1 Salaries & Wages	2,809,200	2,772,400	1,415,300	2,753,000	2,753,000	2,753,000	2,788,000	2,823,000
2.3 Overtime	248,500	168,500	146,600	168,500	168,500	168,500	171,400	174,200
Overtime	239,800	168,500	146,600	168,500	168,500	168,500	171,400	174,200
Personnel – Overtime Covid-19	8,700	-	-	-	-	-	-	-
2.4 Employee Benefits	1,437,500	1,062,000	752,300	1,205,300	1,229,400	1,253,500	1,296,800	1,340,900
4.2 Supplies & Other	182,500	348,500	60,700	312,000	349,100	356,100	363,300	370,400
Memberships, Licenses & Subscriptions	24,000	24,000	12,900	32,000	32,600	33,300	34,000	34,600
Mileage and Parking	-	200	-	200	200	200	200	200
Office Supplies	16,900	20,500	3,700	15,000	15,300	15,600	15,900	16,200
Supplies & Other - Covid19	3,000	-	100	-	-	-	-	-
Operating Supplies	26,200	134,800	21,300	114,100	116,300	118,700	121,000	123,500
Training and Internal Meetings	37,300	100,700	4,100	71,000	103,400	105,400	107,600	109,700
Travel	19,800	15,800	-	16,100	16,400	16,700	17,100	17,400
Tuition Refund	6,400	-	2,500	10,000	10,200	10,400	10,600	10,800
Employee Uniform Expense	48,900	52,500	16,100	53,600	54,700	55,800	56,900	58,000
4.3 Contractual Services	118,900	345,300	34,400	380,600	388,200	396,000	403,900	412,000
Contractual Operating Services	118,900	334,900	34,400	370,000	377,400	385,000	392,700	400,500
Contractual Security Services	-	10,400	-	10,600	10,800	11,000	11,200	11,500
5.2 Shared Services	(364,000)	(331,500)	(165,700)	(338,100)	(344,800)	(351,800)	(358,900)	(366,000)
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(220,100)	(200,400)	(100,200)	(204,400)	(208,500)	(212,700)	(217,000)	(221,300)
Shared Services Reimbursement	(56,000)	(51,000)	(25,500)	(52,000)	(53,000)	(54,100)	(55,200)	(56,300)
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(87,900)	(80,100)	(40,000)	(81,700)	(83,300)	(85,000)	(86,700)	(88,400)
881202 - HazMat	1,577,300	1,594,200	750,700	1,717,300	1,679,100	1,850,600	1,857,600	1,836,700
2.1 Salaries & Wages	1,027,800	1,020,600	464,300	1,016,700	1,016,700	1,117,400	1,117,400	1,117,400
2.3 Overtime	62,300	97,700	47,700	97,700	97,700	108,500	108,500	108,500
2.4 Employee Benefits	442,900	371,300	235,200	411,200	419,400	471,500	480,500	489,600
4.2 Supplies & Other	44,300	104,600	3,500	191,700	145,300	153,200	151,200	121,200
Memberships, Licenses & Subscriptions	900	1,200	-	1,600	1,600	1,600	1,700	1,700
Office Supplies	200	7,000	200	18,500	18,900	19,300	19,700	20,100
Supplies & Other - Covid19	1,700	-	400	-	-	-	-	-
Operating Supplies	15,000	25,000	700	35,000	35,700	36,400	37,100	37,900
Repairs & Maintenance-Equipment	1,800	15,900	700	15,500	15,800	16,100	16,400	16,800
Training and Internal Meetings	12,000	17,500	(800)	20,500	20,900	21,300	21,800	22,200
Travel	2,600	4,000	-	4,100	4,100	4,200	4,300	4,400
Tuition Refund	1,300	-	-	-	-	-	-	-
Capital Outlay less than \$5,000	-	26,000	-	79,800	31,300	36,900	32,500	-
Uniforms, Laundry, Cleaning	-	6,000	-	7,200	7,300	7,500	7,600	7,800
Employee Uniform Expense	8,800	2,000	2,300	9,500	9,700	9,900	10,100	10,300
Grand Total	\$ 6,009,900	\$ 5,959,400	\$ 2,994,300	\$ 6,198,600	\$ 6,222,500	\$ 6,425,900	\$ 6,522,100	\$ 6,591,200

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Section 3D

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

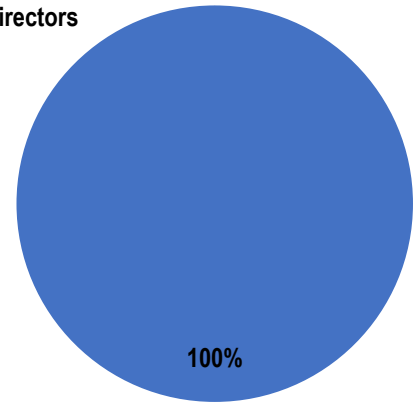
The primary cost driver in the Board of Directors' area is Salaries, Wages and Benefits. This is the category in which the Board's stipends are recorded. A budget to actual variance is recognized when a Board member opts out of receiving the monthly stipend.

Supplies & Other is the other expenditure category which includes the following expenses:

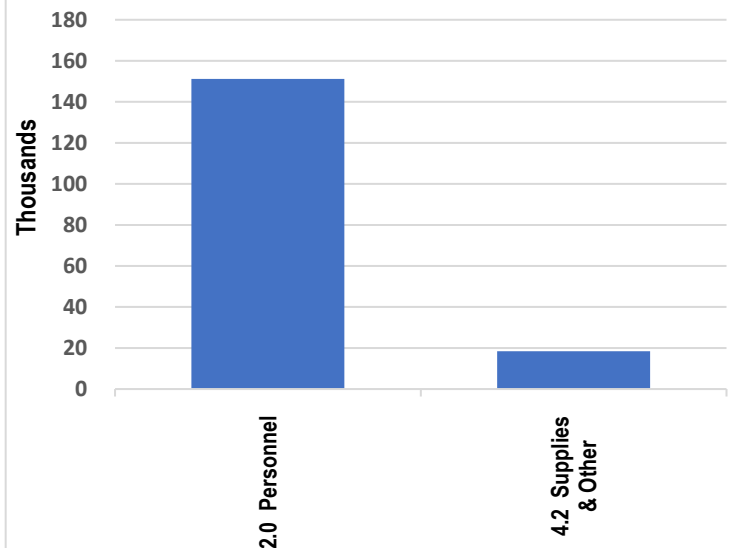
- ❖ Memberships, Licenses & Subscriptions
- ❖ Travel
- ❖ Training & Internal Meetings

FY 2022 REQUEST BY TEAM

■ Board of Directors



FY 2022 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects a slight decrease of \$3,900, or 2.2%, in Operations & Maintenance for FY 2022.

- ❖ Personnel - FY 2022 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.
- ❖ Supplies & Other – The budget for FY 2022 has slightly increased in anticipation of future price increases.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 130,200	\$ 155,400	\$ 63,000	\$ 151,200	\$ (4,200)	-2.7%	\$ 151,200
4.2 Supplies & Other	2,100	18,100	-	18,400	300	1.7%	27,200
Grand Total	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Board of Directors	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400
Grand Total	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400

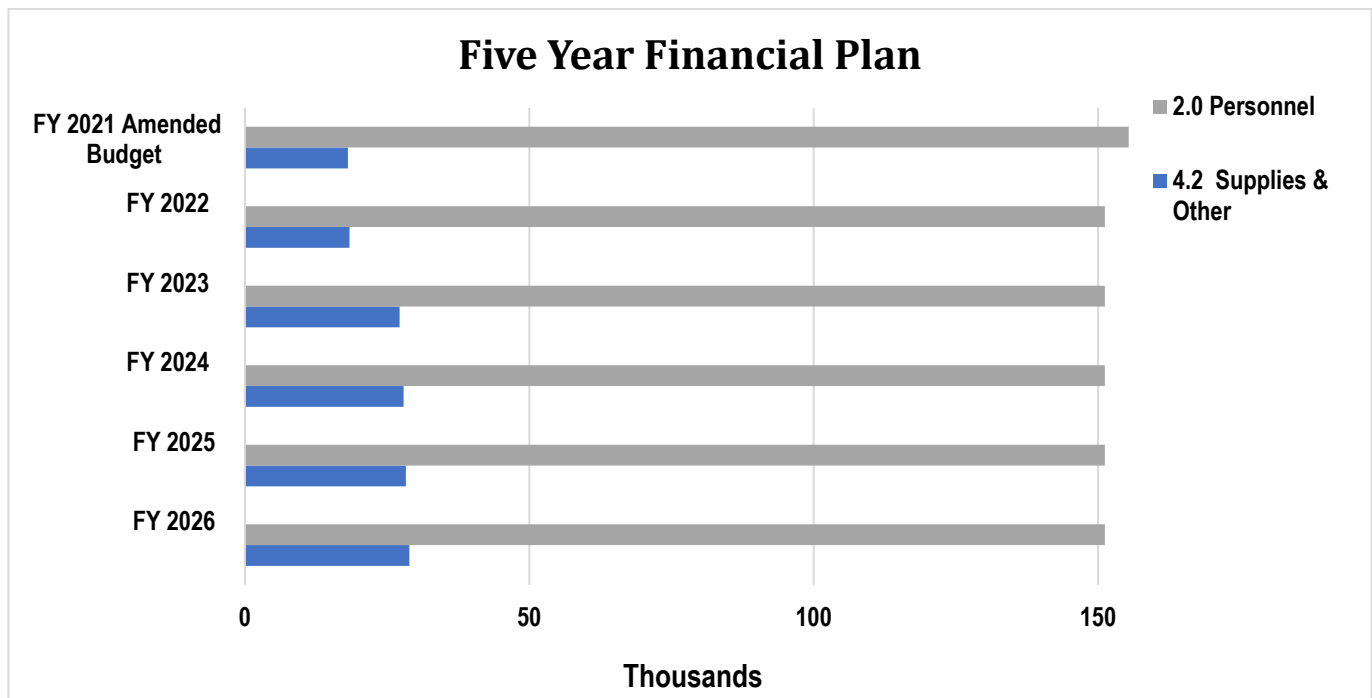
Personnel Budget

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 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 155,400	\$ 63,000	\$ 151,200	\$ (4,200)	-2.7%	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200
4.2 Supplies & Other	18,100	-	18,400	300	1.7%	27,200	27,900	28,300	28,900
Grand Total	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100

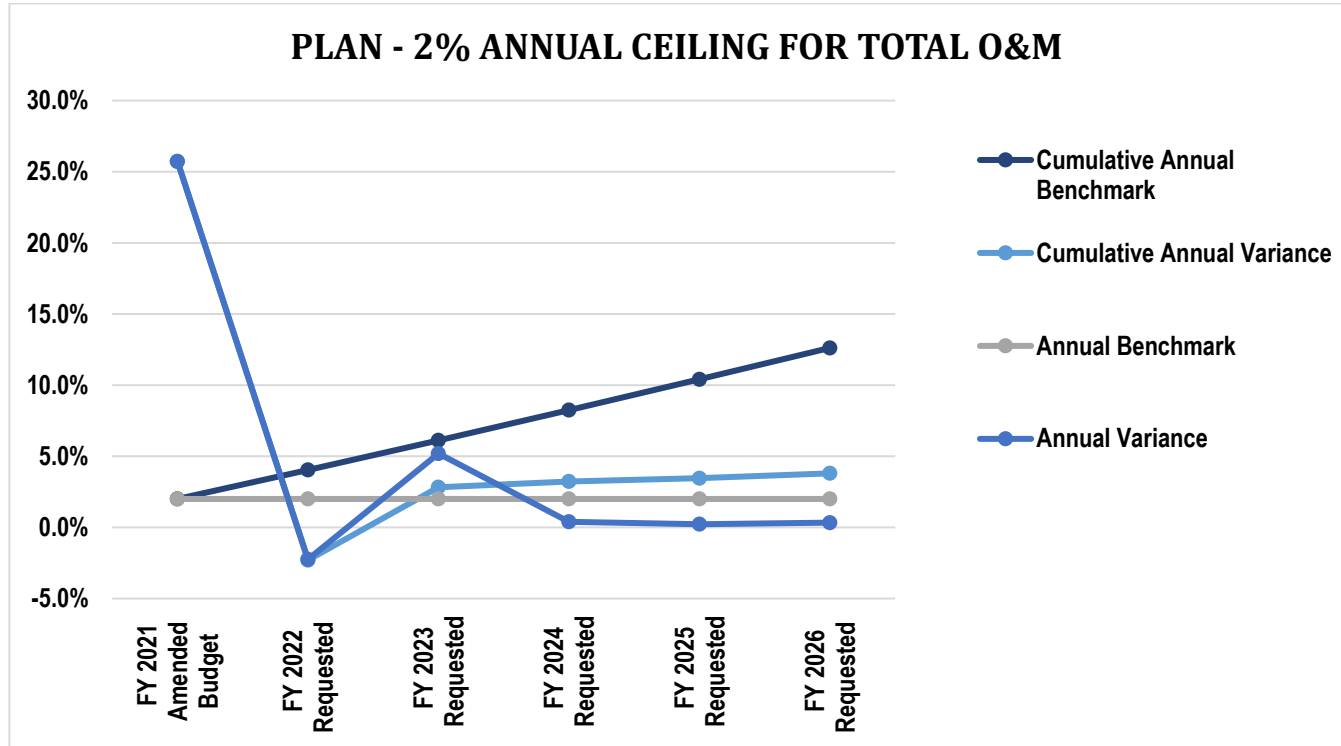


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Board of Directors	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100
Grand Total	\$ 173,500	\$ 63,000	\$ 169,600	\$ (3,900)	-2.2%	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100

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

The Board of Directors' financial plan reflects a five-year overall increase of 3.8% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment.



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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
881151 - Board of Directors	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100
2.1 Salaries & Wages	130,200	155,400	63,000	151,200	151,200	151,200	151,200	151,200
4.2 Supplies & Other	2,100	18,100	-	18,400	27,200	27,900	28,300	28,900
Memberships, Licenses & Subscriptions	-	5,100	-	5,300	7,800	8,000	8,100	8,300
Office Supplies	-	2,600	-	2,600	3,900	4,000	4,100	4,100
Training and Internal Meetings	-	5,200	-	5,300	7,800	8,000	8,100	8,300
Travel	2,100	5,200	-	5,200	7,700	7,900	8,000	8,200
Grand Total	\$ 132,300	\$ 173,500	\$ 63,000	\$ 169,600	\$ 178,400	\$ 179,100	\$ 179,500	\$ 180,100

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.

Highlights

In conjunction with the GLWA Board, the Chief Executive Officer's initiatives were established in FY 2019 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 table below shows how the Chief Executive Officer's initiatives relate to the organizational strategic goals.

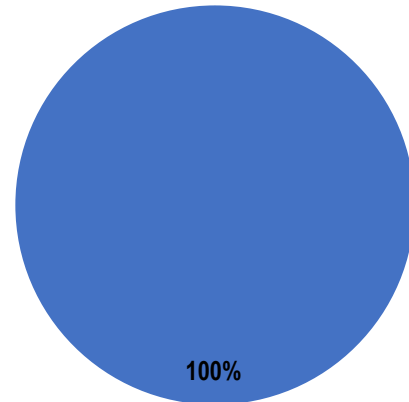
		Organizational Strategic Goals										
		Bond credit rating of AA	Financial Viability	Product Quality	Infrastructure Strategy and Performance	Operational Optimization	Enterprise Resiliency	Customer Satisfaction	Water Resource Sustainability	Stakeholder Understanding and Support	Employee and Leadership 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.

FY 2022 REQUEST BY TEAM

■ Chief Executive Officer



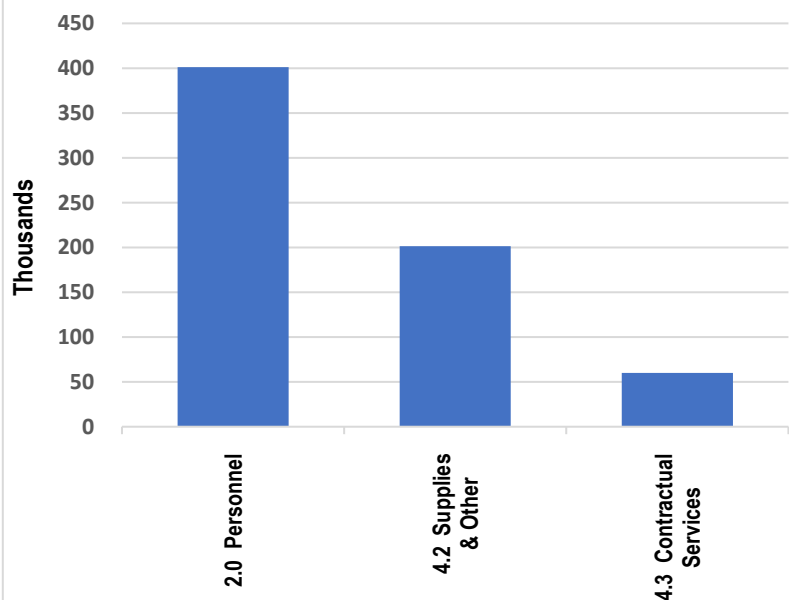
Expense Categories

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.

FY 2022 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects a decrease of \$400, or 0.1%, in FY 2022. The budget for both the Supplies & Other and Contractual Services categories includes a realignment based on a review of historical data.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 375,800	\$ 397,200	\$ 199,400	\$ 401,100	\$ 3,900	1.0%	\$ 402,700
4.2 Supplies & Other	181,300	202,600	83,000	201,500	(1,100)	-0.5%	205,500
4.3 Contractual Services	-	63,200	-	60,000	(3,200)		61,200
Grand Total	\$ 557,100	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Executive Officer	\$ 557,100	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400
Grand Total	\$ 557,100	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 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 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Executive Officer	\$ 375,800	\$ 397,200	\$ 199,400	\$ 401,100	\$ 3,900	1.0%	\$ 402,700
Grand Total	\$ 375,800	\$ 397,200	\$ 199,400	\$ 401,100	\$ 3,900	1.0%	\$ 402,700

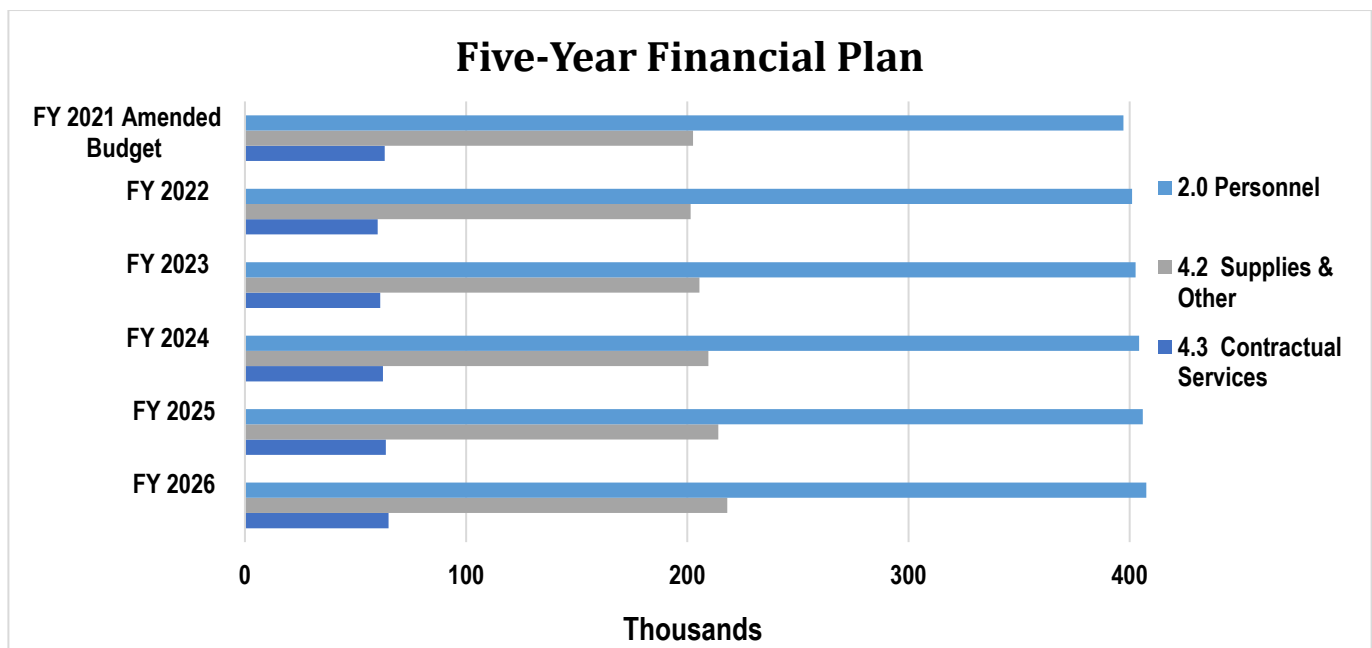
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Executive Officer	\$ 397,200	\$ 401,100	\$ 402,700	\$ 404,300	\$ 405,900	\$ 407,500
Grand Total	\$ 397,200	\$ 401,100	\$ 402,700	\$ 404,300	\$ 405,900	\$ 407,500

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 397,200	\$ 199,400	\$ 401,100	\$ 3,900	1.0%	\$ 402,700	\$ 404,300	\$ 405,900	\$ 407,500
4.2 Supplies & Other	202,600	83,000	201,500	(1,100)	-0.5%	205,500	209,500	214,000	218,100
4.3 Contractual Services	63,200	-	60,000	(3,200)	0.0%	61,200	62,400	63,700	64,900
Grand Total	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400	\$ 676,200	\$ 683,600	\$ 690,500

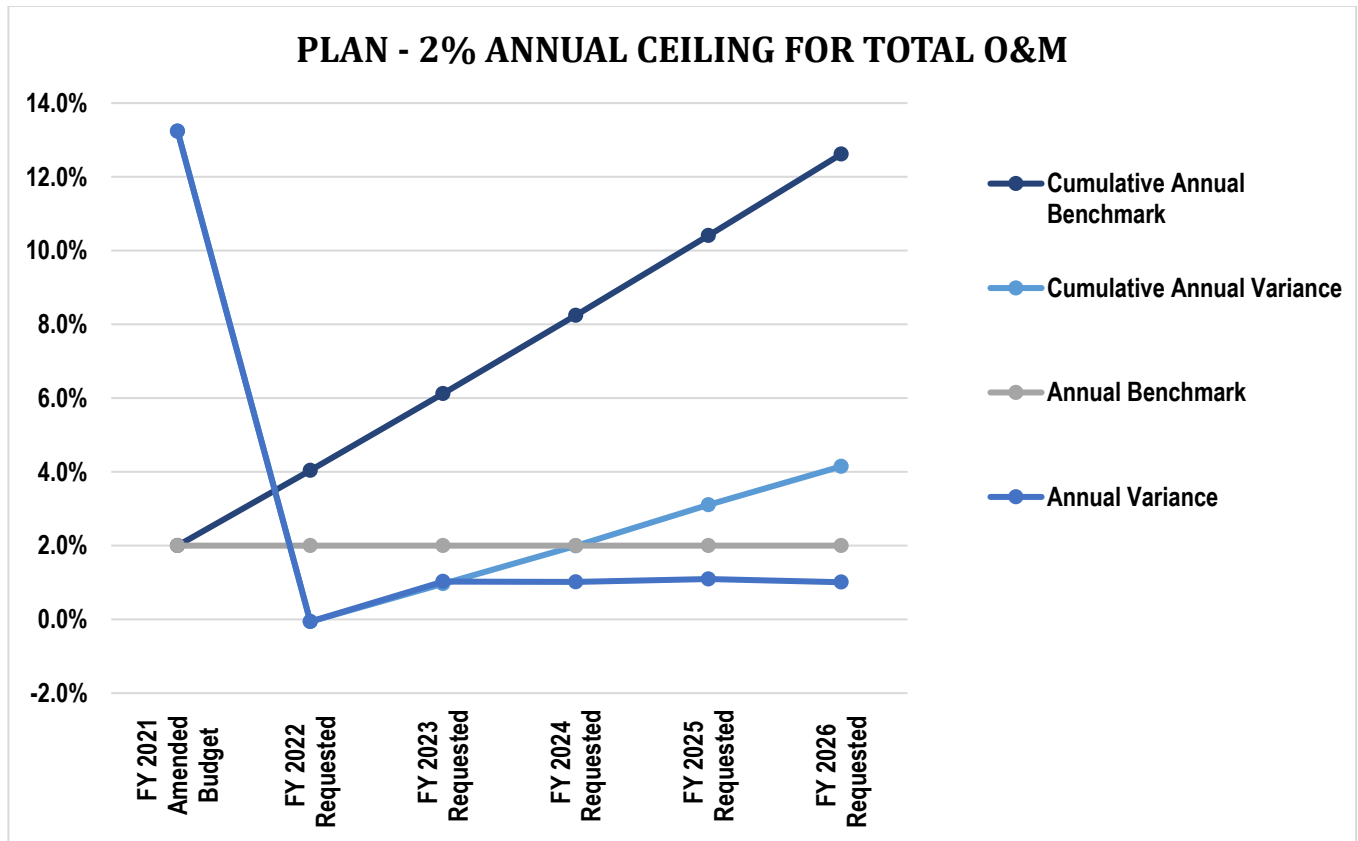


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Executive Officer	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400	\$ 676,200	\$ 683,600	\$ 690,500
Grand Total	\$ 663,000	\$ 282,400	\$ 662,600	\$ (400)	-0.1%	\$ 669,400	\$ 676,200	\$ 683,600	\$ 690,500

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

The Chief Executive Officer's financial plan reflects a five-year overall increase of 4.1% while the entity-wide goal is a cumulative 12.6% 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
881001 - Chief Executive Officer	\$ 557,100	\$ 663,000	\$ 282,400	\$ 662,600	\$ 669,400	\$ 676,200	\$ 683,600	\$ 690,500
2.1 Salaries & Wages	326,900	320,200	173,300	320,200	320,200	320,200	320,200	320,200
Salaries & Wages	326,900	320,200	173,300	320,200	320,200	320,200	320,200	320,200
2.4 Employee Benefits	48,900	77,000	26,100	80,900	82,500	84,100	85,700	87,300
Employee Benefits	48,900	77,000	26,100	80,900	82,500	84,100	85,700	87,300
4.2 Supplies & Other	181,300	202,600	83,000	201,500	205,500	209,500	214,000	218,100
Memberships, Licenses & Subscriptions	102,000	105,200	51,700	107,300	109,400	111,600	113,900	116,100
Office Supplies	3,500	10,500	100	10,700	10,900	11,100	11,400	11,600
Postage	-	-	-	-	-	-	-	-
Mileage and Parking	62,200	63,800	31,200	65,100	66,400	67,700	69,100	70,400
Training and Internal Meetings	2,900	7,300	-	7,400	7,600	7,700	7,900	8,100
Travel	10,700	15,800	-	11,000	11,200	11,400	11,700	11,900
4.3 Contractual Services	-	63,200	-	60,000	61,200	62,400	63,700	64,900
Contractual Professional Services	-	31,600	-	60,000	61,200	62,400	63,700	64,900
Legal	-	31,600	-	-	-	-	-	-
Grand Total	\$ 557,100	\$ 663,000	\$ 282,400	\$ 662,600	\$ 669,400	\$ 676,200	\$ 683,600	\$ 690,500

Chief Administrative and Compliance Officer

The Chief Administrative and Compliance Officer Area support the ongoing labor negotiations throughout GLWA.

The Chief Administrative and Compliance Officer Area presently is leading GLWA in several 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

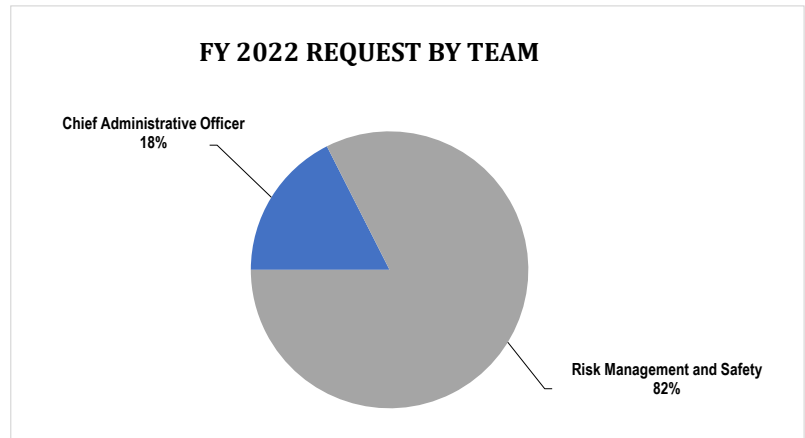
The Chief Administrative and Compliance Officer (CACO) Area consists of two teams.

❖ 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.



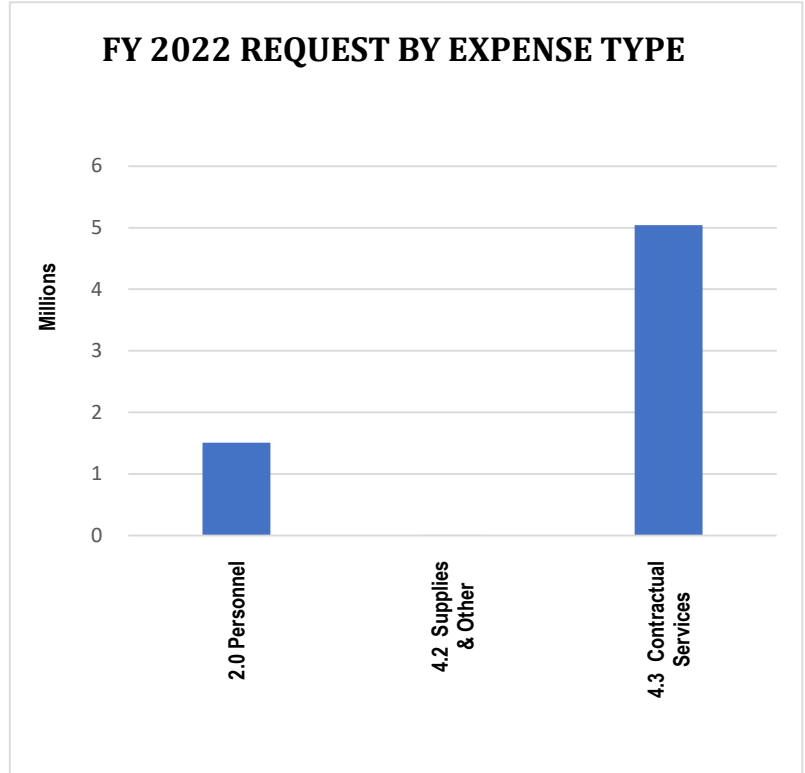
Expense Categories

There are two major categories of Chief Administrative and Compliance Officer area expenses in the Operations and Maintenance Budget as listed below.

❖ Personnel

❖ Contractual Services

Contractual Services is the highest expense category and for FY 2022 the contractual services account encompasses two major contracts; Government Relation Services and NTH Engineering contract (CS-213) which replaced SOMAT (CS- 1513) for environmental health and safety compliance services.



Biennial Budget Request

The biennial budget reflects an overall increase of \$1.3 million, or 25.1% in FY 2022.

- ❖ The personnel account is increasing by \$160,800 due to the FY 2022 employee benefits budget has been adjusted to reflect the current rate increases.
- ❖ The contractual services account is increasing by \$1.1 million to reflect the projected annual rate increases within the Enterprise Risk Management Fund associated with the placement of insurance policies.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 1,060,700	\$ 1,260,600	\$ 562,400	\$ 1,421,400	\$ 160,800	12.8%	\$ 1,571,700
4.2 Supplies & Other	19,100	28,100	3,800	28,900	800	2.8%	29,400
4.3 Contractual Services	4,252,500	3,839,200	2,300,600	4,963,600	1,124,400	29.3%	5,160,800
Grand Total	\$ 5,332,300	\$ 5,127,900	\$ 2,866,800	\$ 6,413,900	\$ 1,286,000	25.1%	\$ 6,761,900

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Administrative Officer	\$ 707,000	\$ 1,083,700	\$ 337,400	\$ 1,174,100	\$ 90,400	8.3%	\$ 1,186,500
Risk Management and Safety	4,625,300	4,044,200	2,529,400	5,239,800	1,195,600	29.6%	5,575,400
Grand Total	\$ 5,332,300	\$ 5,127,900	\$ 2,866,800	\$ 6,413,900	\$ 1,286,000	25.1%	\$ 6,761,900

Personnel Budget

The Chief Administrative and Compliance Officer Area consists of 13 positions for FY 2022, which is staying consistent with FY 2021 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 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 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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Chief Administrative and Compliance Officer Area	13.00	11.00	11.50	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	6.00	6.50	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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Administrative Officer	\$ 577,400	\$ 622,500	\$ 287,800	\$ 707,600	\$ 85,100	13.7%	\$ 710,700
Risk Management and Safety	483,300	638,100	274,600	713,800	75,700	11.9%	861,000
Grand Total	\$ 1,060,700	\$ 1,260,600	\$ 562,400	\$ 1,421,400	\$ 160,800	12.8%	\$ 1,571,700

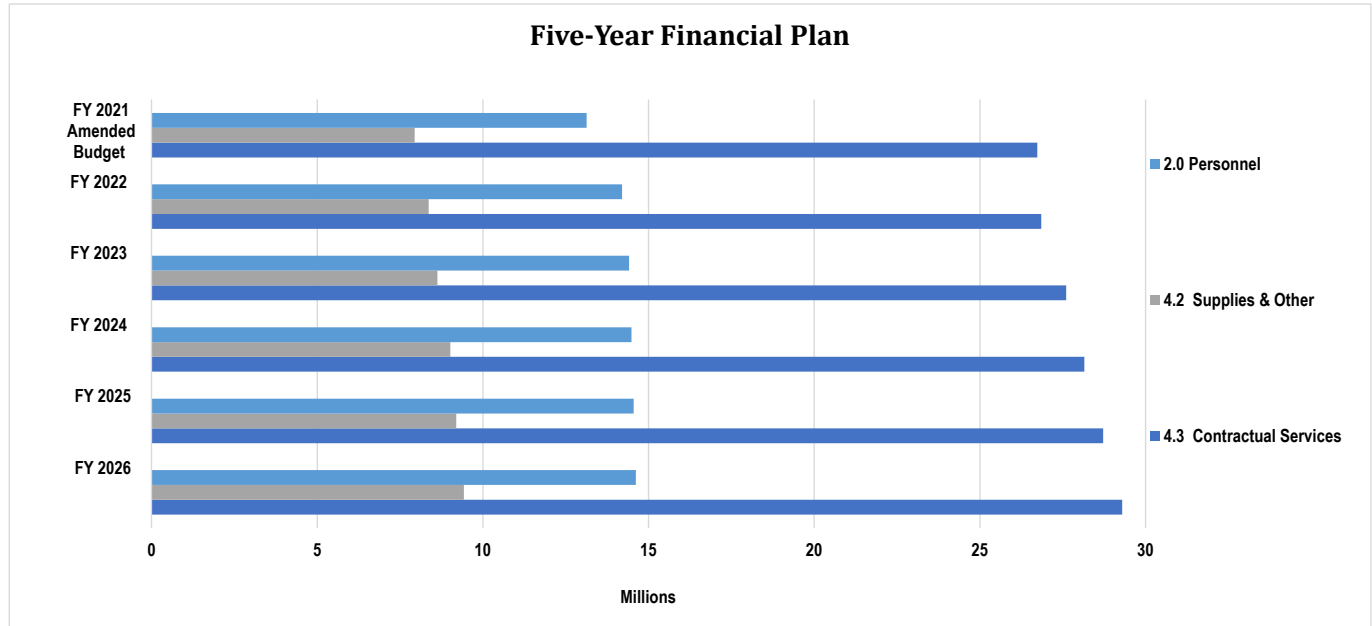
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Administrative Officer	\$ 622,500	\$ 707,600	\$ 710,700	\$ 713,800	\$ 717,000	\$ 720,100
Risk Management and Safety	638,100	713,800	861,000	865,200	869,400	873,600
Grand Total	\$ 1,260,600	\$ 1,421,400	\$ 1,571,700	\$ 1,579,000	\$ 1,586,400	\$ 1,593,700

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 1,260,600	\$ 562,400	\$ 1,421,400	\$ 160,800	12.8%	\$ 1,571,700	\$ 1,579,000	\$ 1,586,400	\$ 1,593,700
4.2 Supplies & Other	28,100	3,800	28,900	800	2.8%	29,400	30,000	30,600	31,300
4.3 Contractual Services	3,839,200	2,300,600	4,963,600	1,124,400	29.3%	5,160,800	5,264,000	5,369,200	5,476,700
Grand Total	\$ 5,127,900	\$ 2,866,800	\$ 6,413,900	\$ 1,286,000	25.1%	\$ 6,761,900	\$ 6,873,000	\$ 6,986,200	\$ 7,101,700

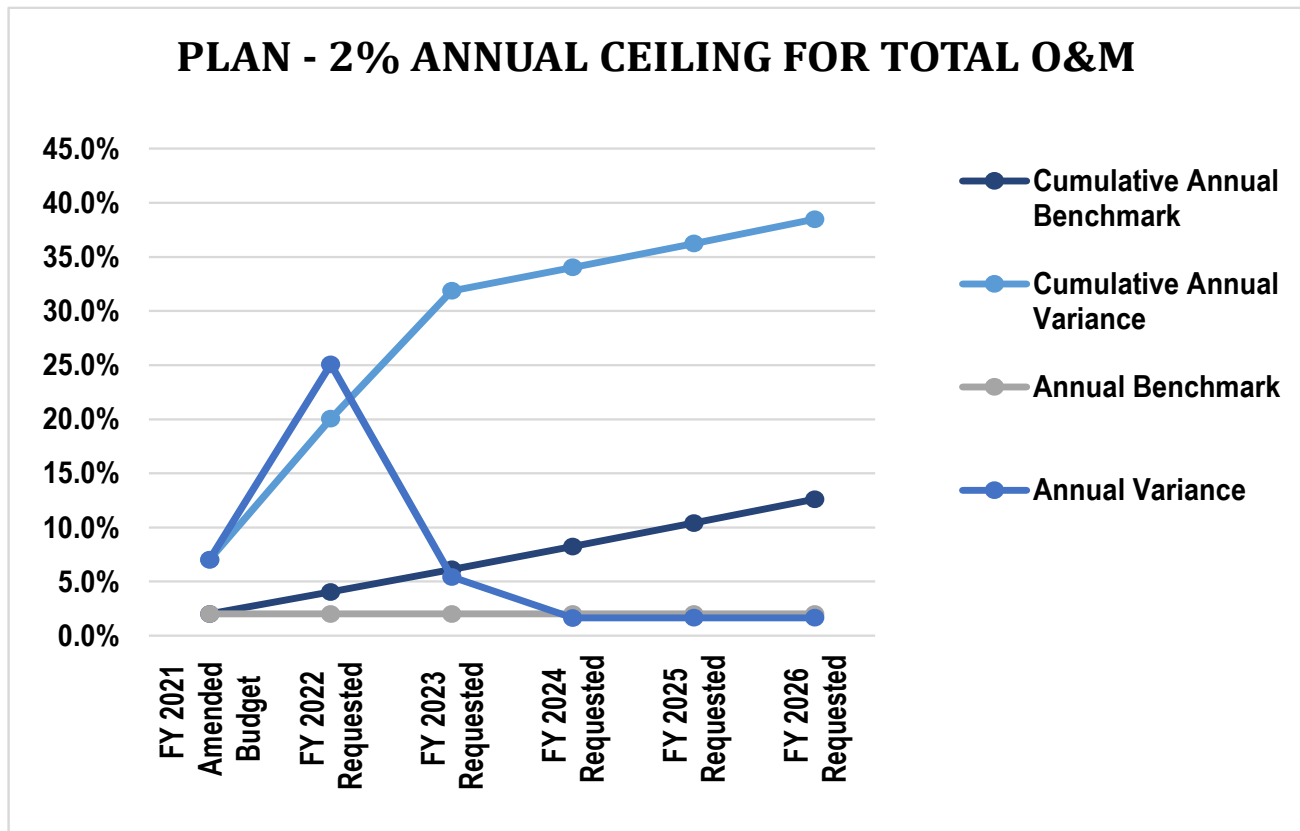


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Administrative Officer	\$ 1,083,700	\$ 337,400	\$ 1,174,100	\$ 90,400	8.3%	\$ 1,186,500	\$ 1,199,100	\$ 1,212,000	\$ 1,225,100
Risk Management and Safety	4,044,200	2,529,400	5,239,800	1,195,600	29.6%	5,575,400	5,673,900	5,774,200	5,876,600
Grand Total	\$ 5,127,900	\$ 2,866,800	\$ 6,413,900	\$ 1,286,000	25.1%	\$ 6,761,900	\$ 6,873,000	\$ 6,986,200	\$ 7,101,700

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 38.5% while the entity-wide goal is a cumulative 12.6% for planning purposes (based upon an annual 2% adjustment). The key increase is due to the contractual services account increasing by \$1.1 million to reflect the projected annual rate increases within the Enterprise Risk Management Fund associated with the placement of insurance policies.



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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883001 - Chief Administrative Officer	\$ 707,000	\$ 1,083,700	\$ 337,400	\$ 1,174,100	\$ 1,186,500	\$ 1,199,100	\$ 1,212,000	\$ 1,225,100
2.1 Salaries & Wages	479,700	492,100	235,600	550,400	550,400	550,400	550,400	550,400
2.4 Employee Benefits	97,700	130,400	52,200	157,200	160,300	163,400	166,600	169,700
4.2 Supplies & Other	6,300	6,100	1,600	6,900	7,000	7,100	7,300	7,500
Memberships, Licenses & Subscriptions	700	-	400	700	700	700	700	800
Office Supplies	-	-	400	-	-	-	-	-
Supplies & Other - Covid19	-	-	-	-	-	-	-	-
Training and Internal Meetings	1,600	2,100	800	2,100	2,200	2,200	2,300	2,300
Travel	4,000	4,000	-	4,100	4,100	4,200	4,300	4,400
4.3 Contractual Services	123,300	455,100	48,000	459,600	468,800	478,200	487,700	497,500
883401 - Risk Management and Safety	4,625,300	4,044,200	2,529,400	5,239,800	5,575,400	5,673,900	5,774,200	5,876,600
2.1 Salaries & Wages	380,000	494,500	211,500	540,900	647,400	647,400	647,400	647,400
2.4 Employee Benefits	103,300	143,600	63,100	172,900	213,600	217,800	222,000	226,200
4.2 Supplies & Other	12,800	22,000	2,200	22,000	22,400	22,900	23,300	23,800
Operating Supplies	11,000	7,000	1,600	7,000	7,100	7,300	7,400	7,600
Mileage and Parking	1,000	-	-	-	-	-	-	-
Tuition Refund	800	-	-	-	-	-	-	-
Training and Internal Meetings	-	15,000	600	15,000	15,300	15,600	15,900	16,200
4.3 Contractual Services	4,129,200	3,384,100	2,252,600	4,504,000	4,692,000	4,785,800	4,881,500	4,979,200
Grand Total	\$ 5,332,300	\$ 5,127,900	\$ 2,866,800	\$ 6,413,900	\$ 6,761,900	\$ 6,873,000	\$ 6,986,200	\$ 7,101,700

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.

The General Counsel Area presently is leading GLWA in several 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.

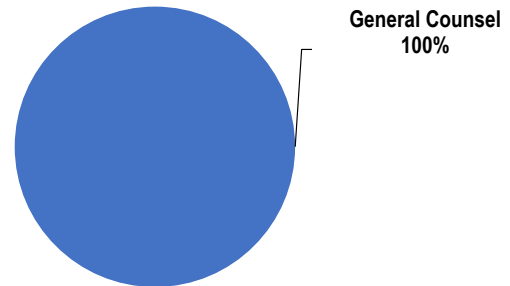
The following table shows how the General Counsel Area strategic initiatives relate to the organizational strategic goals.

		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	x
	Create a Best Practices Manual				x	x	x	x		x	x	
	Incorporate a bill review software for Contractual				x	x	x	x				

Organization

The General Counsel area has one team.

FY 2022 REQUEST BY TEAM



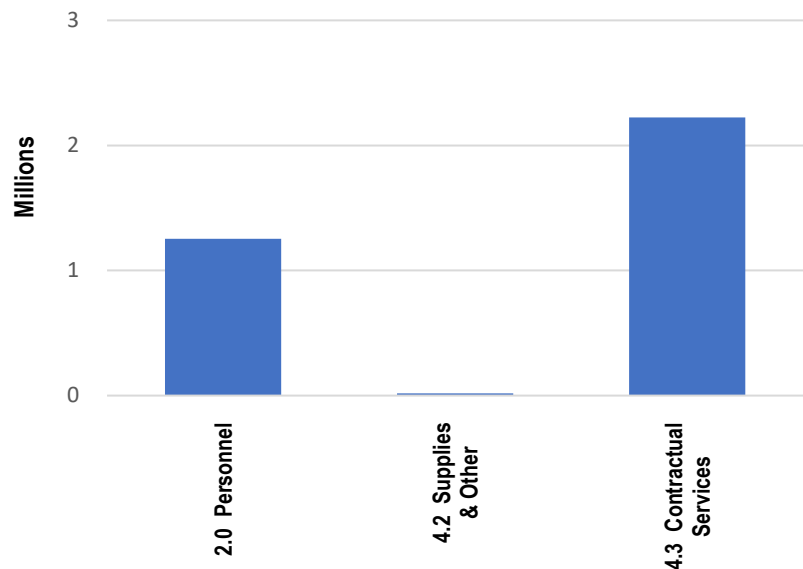
Expense Categories

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

- ❖ Personnel Costs
- ❖ Contractual Services

Contractual Services is the highest expense category and for FY 2022 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 2022 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an overall increase of \$192,300 or 6.4% in FY 2022.

- ❖ The personnel account is increasing by \$175,500 due to the combination of adding an Associate General Counsel position in the first quarter of FY 2022 along with the FY 2022 employee benefits budget being adjusted to reflect the current rate increases.
- ❖ The supplies and other account is decreasing by \$44,300 due to the training and membership accounts being lowered in FY 2022 regarding COVID 19 travel restrictions and employees working remotely from home.
- ❖ The contractual services account is increasing by \$61,100, an incremental cost increase for general legal services. To manage this cost, the General Counsel team will start handling more matters in-house and use some insurance carriers who have panel counsel lists for handling GLWA claims. The negotiated rates with these insurance companies are below market rate, which is keeping the contractual services expenses to a minimum.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 972,300	\$ 971,900	\$ 487,100	\$ 1,147,400	\$ 175,500	18.1%	\$ 1,152,400
4.2 Supplies & Other	32,100	79,900	5,000	35,600	(44,300)	-55.4%	83,000
4.3 Contractual Services	2,636,700	1,959,400	858,100	2,020,500	61,100	3.1%	2,142,500
Grand Total	\$ 3,641,100	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
General Counsel	\$ 3,641,100	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900
Grand Total	\$ 3,641,100	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900

Personnel Budget

General Counsel consists of eight positions for FY 2022, which is an increase of one staffing position from FY 2021. An Associate General Counsel position will be added in first quarter of FY 2022.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
General Counsel	7.00	7.00	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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
General Counsel	7.00	7.00	8.00	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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
General Counsel	\$ 972,300	\$ 971,900	\$ 487,100	\$ 1,147,400	\$ 175,500	18.1%	\$ 1,152,400
Grand Total	\$ 972,300	\$ 971,900	\$ 487,100	\$ 1,147,400	\$ 175,500	18.1%	\$ 1,152,400

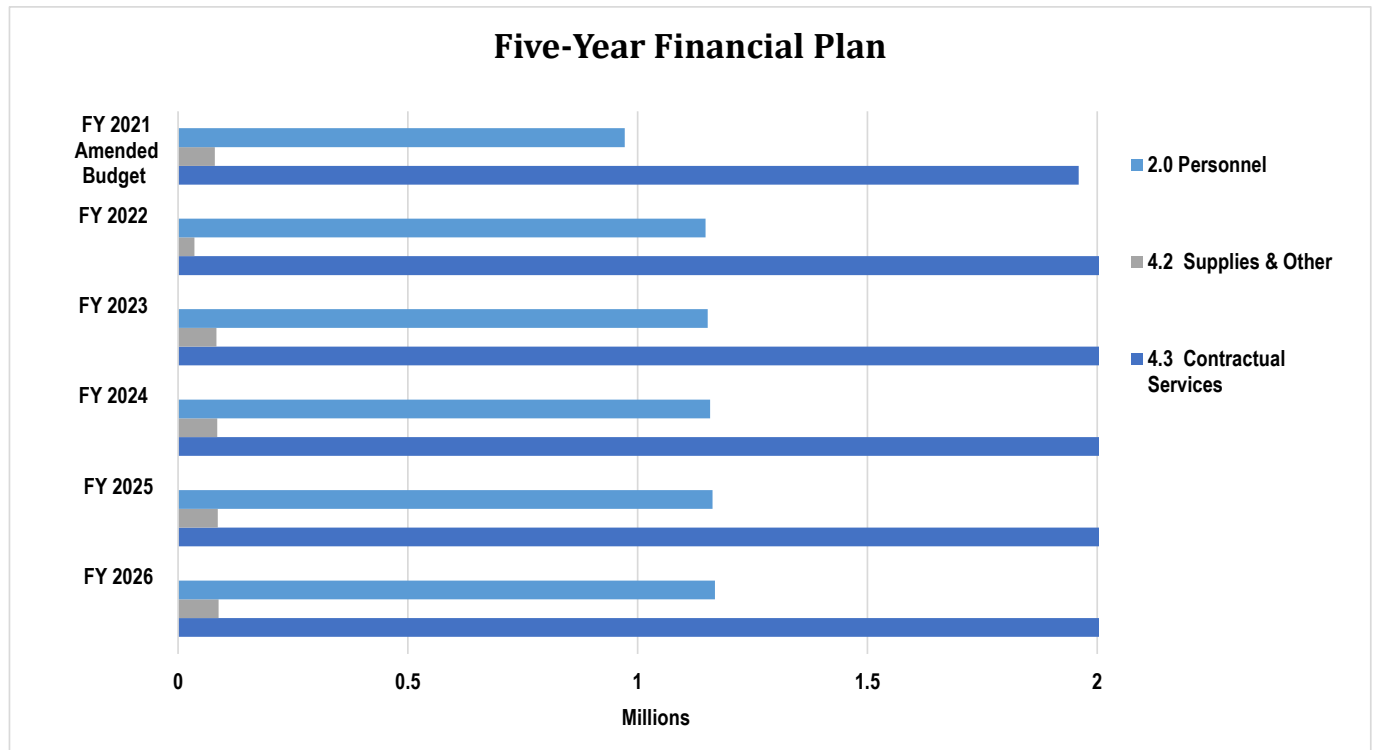
Personnel Budget – Five Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
General Counsel	\$ 971,900	\$ 1,147,400	\$ 1,152,400	\$ 1,157,500	\$ 1,162,600	\$ 1,167,700
Grand Total	\$ 971,900	\$ 1,147,400	\$ 1,152,400	\$ 1,157,500	\$ 1,162,600	\$ 1,167,700

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 971,900	\$ 487,100	\$ 1,147,400	\$ 175,500	18.1%	\$ 1,152,400	\$ 1,157,500	\$ 1,162,600	\$ 1,167,700
4.2 Supplies & Other	79,900	5,000	35,600	(44,300)	-55.4%	83,000	84,800	86,400	88,100
4.3 Contractual Services	1,959,400	858,100	2,020,500	61,100	3.1%	2,142,500	2,185,400	2,229,100	2,273,600
Grand Total	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900	\$ 3,427,700	\$ 3,478,100	\$ 3,529,400



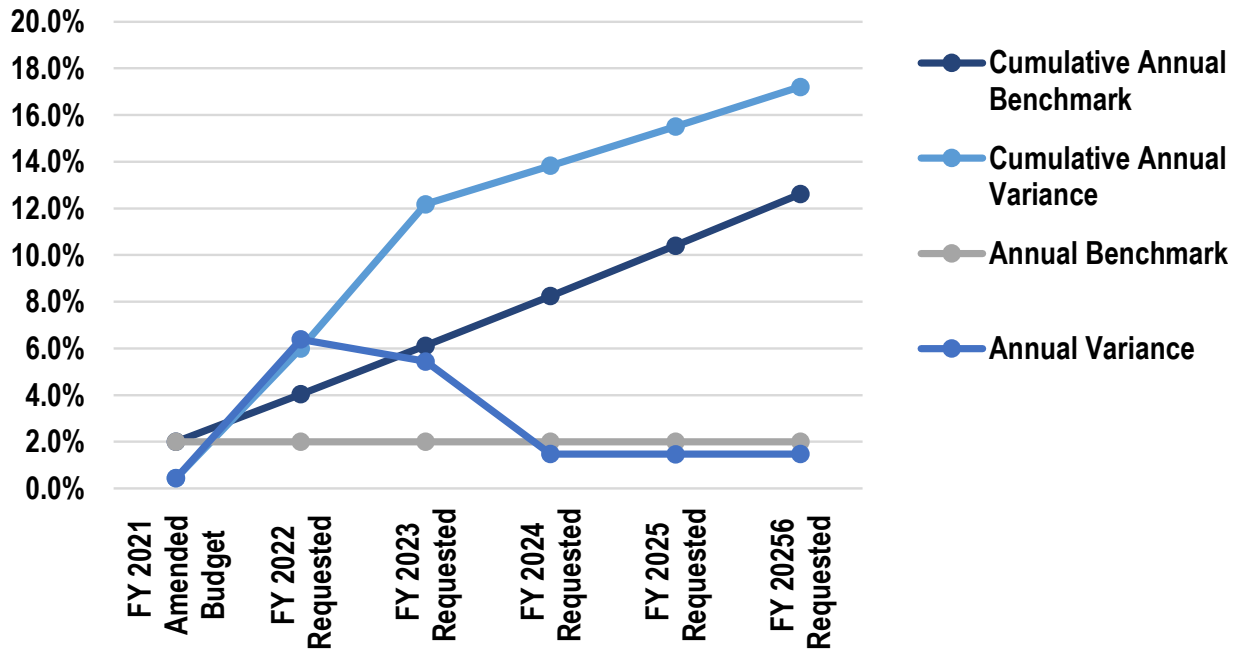
Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
General Counsel	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900	\$ 3,427,700	\$ 3,478,100	\$ 3,529,400
Grand Total	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 192,300	6.4%	\$ 3,377,900	\$ 3,427,700	\$ 3,478,100	\$ 3,529,400

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

The General Counsel Area financial plan reflects a five-year overall increase of 17.2% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment. This higher overall increase is expected with the increase in staff discussed previously.

PLAN - 2% ANNUAL CEILING FOR TOTAL O&M



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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883101 - General Counsel	\$ 3,641,100	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 3,377,900	\$ 3,427,700	\$ 3,478,100	\$ 3,529,400
2.1 Salaries & Wages	795,000	768,400	395,800	893,600	893,600	893,600	893,600	893,600
2.4 Employee Benefits	177,300	203,500	91,300	253,800	258,800	263,900	269,000	274,100
4.2 Supplies & Other	32,100	79,900	5,000	35,600	83,000	84,800	86,400	88,100
Memberships, Licenses & Subscriptions	8,900	12,300	4,200	9,500	12,700	13,000	13,300	13,500
Office Supplies	6,100	5,200	100	5,300	5,400	5,500	5,600	5,700
Postage	-	2,800	-	-	2,900	3,000	3,000	3,100
Mileage and Parking	-	-	-	-	-	-	-	-
Training and Internal Meetings	6,200	44,600	700	10,800	46,700	47,700	48,600	49,600
Travel	10,900	15,000	-	10,000	15,300	15,600	15,900	16,200
4.3 Contractual Services	2,636,700	1,959,400	858,100	2,020,500	2,142,500	2,185,400	2,229,100	2,273,600
Contractual Operating Services	500	-	-	-	-	-	-	-
Legal	2,636,200	1,959,400	858,100	2,020,500	2,142,500	2,185,400	2,229,100	2,273,600
Grand Total	\$ 3,641,100	\$ 3,011,200	\$ 1,350,200	\$ 3,203,500	\$ 3,377,900	\$ 3,427,700	\$ 3,478,100	\$ 3,529,400

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.

The Public Affairs Area is presently leading GLWA in several strategic initiatives.

❖ **Grow and Enhance GLWA's Brand Recognition (Ongoing)**

Continue implementation of a comprehensive, proactive public relations campaign to heighten knowledge of GLWA and the value it brings to its member partners and the southeast Michigan. This initiative is tracked through a message pulled 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 in February 2022, to help identify what information team members want and how to improve the ways we communicate that information.

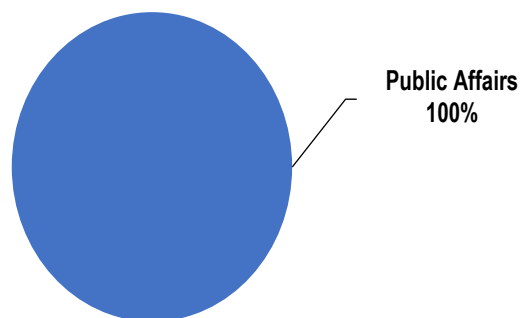
The following table shows how the Public Affairs Area strategic initiatives relate to the organizational strategic goals.

		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	Grow and Enhance GLWA's Brand Recognition						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 2022 REQUEST BY TEAM



Expense Categories

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

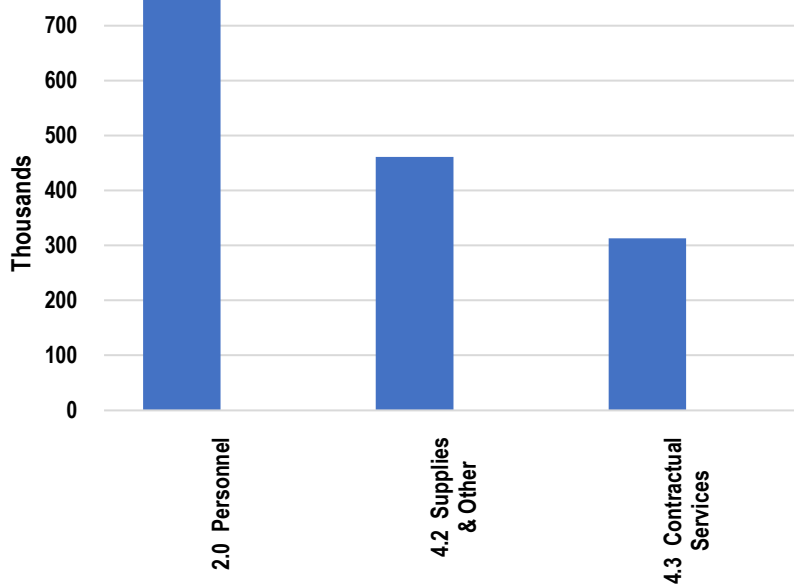
- ❖ Personnel
- ❖ Supplies & Other
- ❖ Contractual Services

Personnel is the highest expense category for Public Affairs. The cost center is now fully staffed for its current responsibilities with 8 FTE's.

Both Supplies & Other and Contractual Services are decreasing from FY 2021 due to the contract with Gallup, for an employee survey tool, being moved to Organizational Development to assume responsibility.

The contractual services account will decrease with the Fleishman Hillard marketing and communications contract being reduced due to internal capacity building.

FY 2022 REQUEST BY EXPENSE TYPE



Biennial Budget Request

The biennial budget reflects an overall \$1,600 increase, or 0.1% in FY 2022.

- ❖ The personnel account is increasing by \$60,300 due to the FY 2022 employee benefit budget being adjusted to reflect the current rate increases.
- ❖ The supplies & other account has a \$25,100 decrease due to a change in process. In FY 2021, the contract with Gallup for an employee satisfaction survey tool was budgeted in Public Affairs, but in FY 2022 Organizational Development will assume responsibility for the survey.
- ❖ The contractual services account has a \$33,600 decrease due to the Fleishman Hillard marketing and communications contract being reduced because of internal capacity building.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 652,700	\$ 710,000	\$ 315,200	\$ 770,300	\$ 60,300	8.5%	\$ 889,100
4.2 Supplies & Other	224,900	486,300	41,600	461,200	(25,100)	-5.2%	470,300
4.3 Contractual Services	363,200	346,500	60,500	312,900	(33,600)	-9.7%	319,100
Grand Total	\$ 1,240,800	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Public Affairs	\$ 1,240,800	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500
Grand Total	\$ 1,240,800	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500

Personnel Budget

Public Affairs personnel consists of 7 positions for FY 2022. The vacant Office Support Specialist position forecasted during the FY 2021 budgeting process has been moved to FY 2023, due to the COVID-19 restrictions requiring staff to work from home. 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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Public Affairs	8.00	8.00	7.00	8.00	8.00	8.00	8.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Public Affairs	7.50	7.25	7.00	8.00	8.00	8.00	8.00

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Public Affairs	\$ 652,700	\$ 710,000	\$ 315,200	\$ 770,300	\$ 60,300	8.5%	\$ 889,100
Grand Total	\$ 652,700	\$ 710,000	\$ 315,200	\$ 770,300	\$ 60,300	8.5%	\$ 889,100

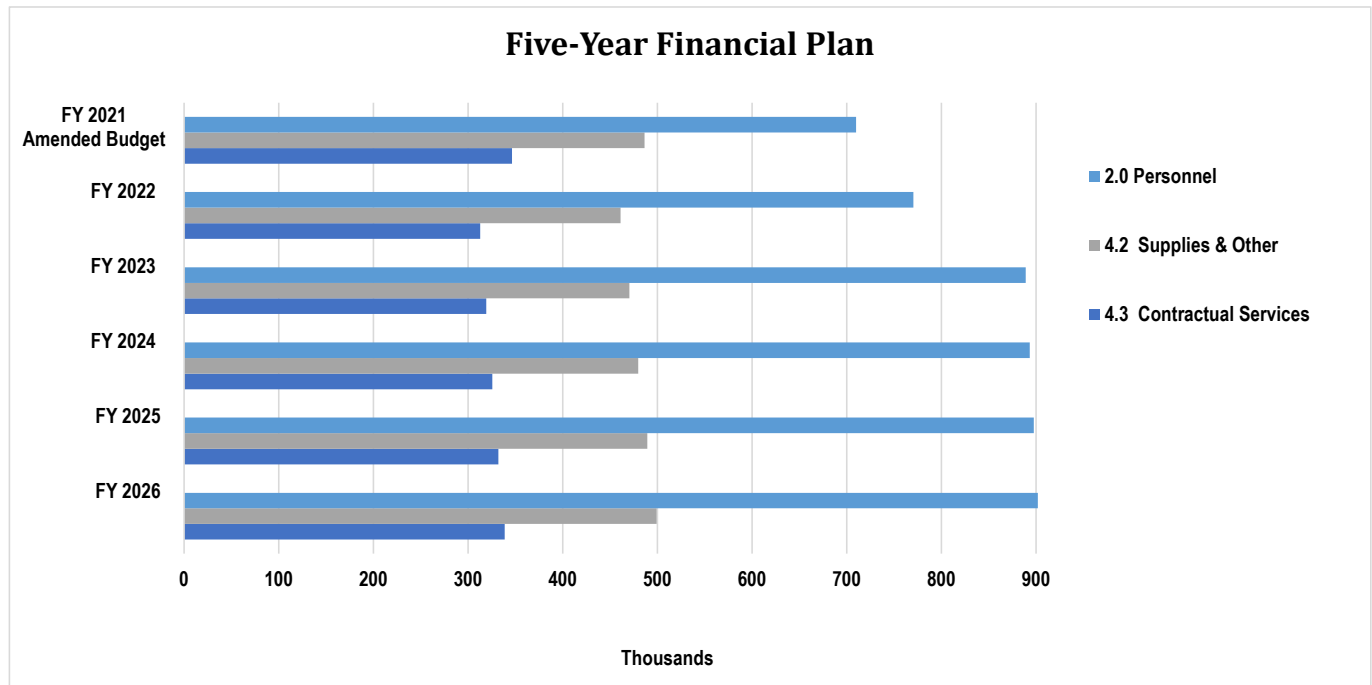
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Public Affairs	\$ 710,000	\$ 770,300	\$ 889,100	\$ 893,400	\$ 897,600	\$ 901,900
Grand Total	\$ 710,000	\$ 770,300	\$ 889,100	\$ 893,400	\$ 897,600	\$ 901,900

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 710,000	\$ 315,200	\$ 770,300	\$ 60,300	8.5%	\$ 889,100	\$ 893,400	\$ 897,600	\$ 901,900
4.2 Supplies & Other	486,300	41,600	461,200	(25,100)	-5.2%	470,300	479,800	489,400	499,100
4.3 Contractual Services	346,500	60,500	312,900	(33,600)	-9.7%	319,100	325,500	332,000	338,700
Grand Total	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500	\$ 1,698,700	\$ 1,719,000	\$ 1,739,700

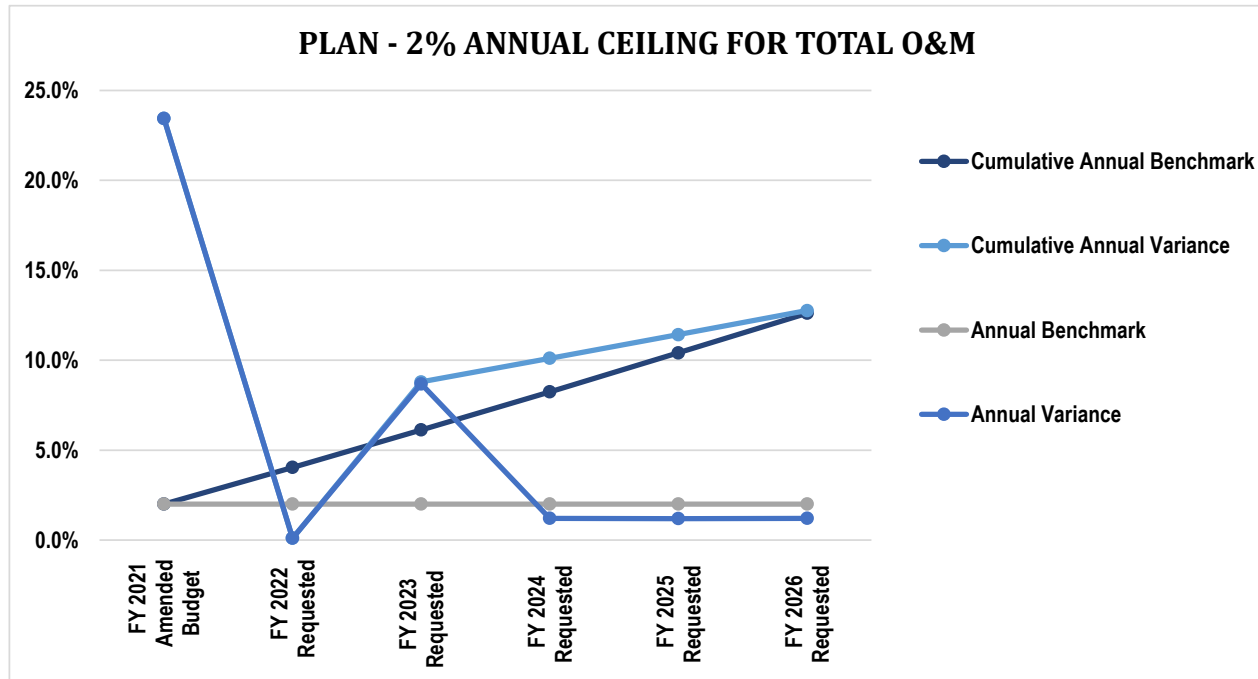


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Public Affairs	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500	\$ 1,698,700	\$ 1,719,000	\$ 1,739,700
Grand Total	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,600	0.1%	\$ 1,678,500	\$ 1,698,700	\$ 1,719,000	\$ 1,739,700

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 12.8% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment.



Capital Outlay

Public Affairs capital outlay is funded by the Improvement & Extension budget.

Five-Year Capital Outlay by Asset Category

Asset Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000
Computers & IT	7,500	18,000	22,000	10,000	5,000	18,000
Grand Total	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000

Five-Year Capital Outlay by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000
Grand Total	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000

Five-Year Capital Outlay by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Public Affairs	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000
Grand Total	\$ 7,500	\$ 18,000	\$ 22,000	\$ 10,000	\$ 5,000	\$ 18,000

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
881101 - Public Affairs	\$ 1,240,800	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,678,500	\$ 1,698,700	\$ 1,719,000	\$ 1,739,700
2.1 Salaries & Wages	506,100	549,600	237,000	583,900	671,100	671,100	671,100	671,100
2.4 Employee Benefits	146,600	160,400	78,200	186,400	218,000	222,300	226,500	230,800
4.2 Supplies & Other	224,900	486,300	41,600	461,200	470,350	479,825	489,373	499,197
Mileage and Parking	100	-	-	1,300	1,298	1,324	1,351	1,378
Memberships, Licenses & Subscriptions	200	-	100	-	-	-	-	-
Office Supplies	3,900	6,300	-	6,500	6,602	6,735	6,869	7,007
Operating Supplies	102,100	122,500	15,600	105,200	107,276	109,422	111,610	113,843
Printing	12,100	41,600	700	42,400	43,297	44,163	45,046	45,947
Training and Internal Meetings	6,000	12,000	(200)	12,300	12,546	12,797	13,053	13,314
Travel	9,400	12,200	-	12,500	12,730	12,984	13,244	13,509
Miscellaneous Expense	-	1,200	-	-	-	-	-	-
Advertising	69,200	290,500	21,200	281,000	286,600	292,400	298,200	304,200
Capital Outlay less than \$5,000	21,900	-	4,200	-	-	-	-	-
4.3 Contractual Services	363,200	346,500	60,500	312,900	319,100	325,500	332,000	338,700
Grand Total	\$ 1,240,800	\$ 1,542,800	\$ 417,300	\$ 1,544,400	\$ 1,678,500	\$ 1,698,700	\$ 1,719,000	\$ 1,739,700

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 collaborate manner, that also provides the best water treatment and service to our customers.

The Organization Development Area presently is leading GLWA in several strategic initiatives.

❖ **Apprentice Program (Ongoing)**

GLWA has established a robust apprenticeship program. In FY 2022, 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.

❖ **Ceridian Reimplementation (Ongoing)**

Organizational Development is now responsible for managed services that will affect Organizational Development, Financial Services and Information Technology in terms of increased responsibilities and staffing. The Ceridian initiative will be participating in vendor selection, establish implementation requirements, support implementation and working with Information Technology who is the project owner and maintain the strategic KPI's for this initiative.

❖ **Compensation Team (Ongoing)**

Having initiated an internal compensation team in FY 2021, Organizational Development will initiate a compensation benchmarking study and review of job classifications, job duties and compensation. KPIs will be reported on select vendor for market survey and maintain alignment with AWWA benchmarks.

❖ **GLWA Handbook (Completion by end of June 2022)**

Review and update the employee handbook "The Way We Work".

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
	Ceridian Reimplementation		x	x	x	x	x					
	Compensation Team		x				x				x	
	GLWA Handbook					x	x				x	

Organization

The Organizational Development Area consists of seven 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 supporting all aspects of the employment relationship within the GLWA team.

❖ Organizational Wellness

Provides strategy, implementation and administration of health and welfare plans and wellness initiatives that meet the needs of team members and supports talent retention efforts.



❖ **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.

❖ **Performance**

The Performance Team supports the performance review, progression processes and provides a pipeline of skilled talent through the development and administration of apprenticeships.

❖ **Recruiting**

Supports the processes of matching GLWA and prospective team members from identification to interview to offer to on-boarding support.

❖ **Compensation**

The compensation team supports equity and inclusion in the employment relationship by reviewing and benchmarking compensation for the organization.

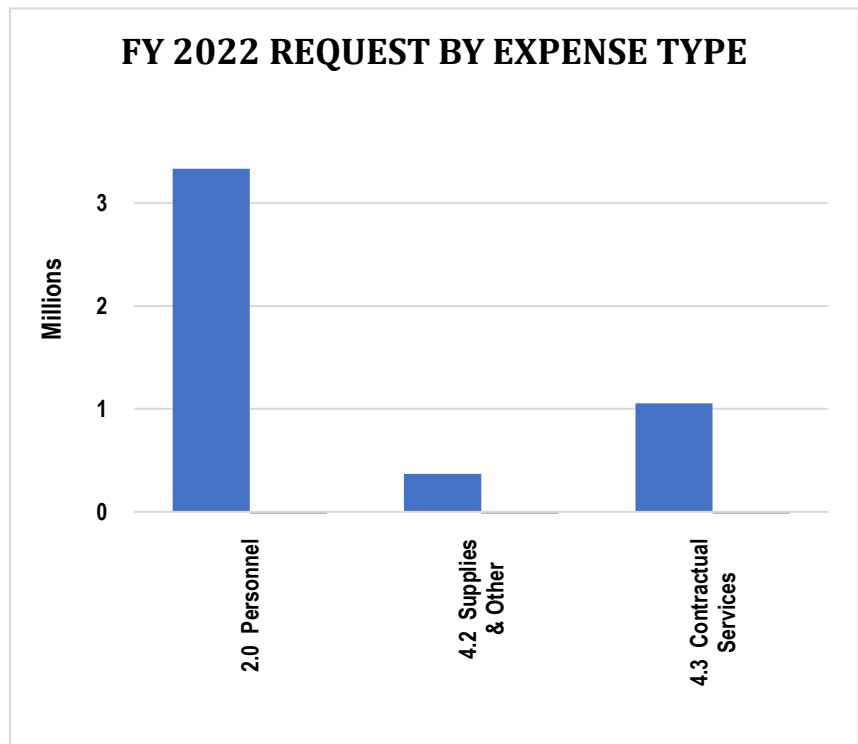
Expense Categories

There are three major categories of Organizational Development 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 2022 two office support specialist positions will be added to support Organizational Wellness.

Contractual Services is the second highest expense category which includes the contracts for OWI training specialists and online facilitation services.



Biennial Budget Request

The biennial budget reflects a net \$396,400 increase, or 9.0% in FY 2022.

- ❖ The Personnel account has a \$218,200 increase due to the combination of adding two office support specialist positions to support Organizational Wellness along with the FY 2022 employee benefits budget being adjusted to reflect the current rate increases.
- ❖ The supplies & other account is decreasing by \$30,300 in FY 2022, due to eliminating the printing budget of \$20,204. In FY 2022, printing will be done internally through the print shop as a cost saving initiative. The office supplies account has been decreased by \$10,223 to align the budget to match actual spend.
- ❖ The contractual services account is increasing by \$208,500 to conduct a compensation study for the organization.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 2,860,500	\$ 3,135,700	\$ 1,546,800	\$ 3,353,900	\$ 218,200	7.0%	\$ 3,371,000
4.2 Supplies & Other	279,300	419,000	45,700	388,700	(30,300)	-7.2%	396,000
4.3 Contractual Services	495,900	866,500	424,100	1,075,000	208,500	24.1%	1,096,600
5.2 Shared Services	(4,500)	-	-	-	-	0.0%	-
Grand Total	\$ 3,631,200	\$ 4,421,200	\$ 2,016,600	\$ 4,817,600	\$ 396,400	9.0%	\$ 4,863,600

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Administration	\$ 3,631,200	\$ 4,421,200	\$ 499,100	\$ 654,100	\$ (3,767,100)	-85.2%	\$ 658,800
Talent Management	-	-	254,700	600,300	600,300	0.0%	604,900
Organizational Wellness	-	-	215,900	435,600	435,600	0.0%	439,000
Training	-	-	630,500	1,586,200	1,586,200	0.0%	1,600,800
Performance	-	-	163,000	741,900	741,900	0.0%	752,200
Recruiting	-	-	176,800	438,300	438,300	0.0%	442,000
Compensation	-	-	76,600	361,200	361,200	0.0%	365,900
Grand Total	\$ 3,631,200	\$ 4,421,200	\$ 2,016,600	\$ 4,817,600	\$ 396,400	9.0%	\$ 4,863,600

Personnel Budget

Organizational Development personnel consists of 35 positions for FY 2022 which is an increase of two staff positions from FY 2021. The increase in staffing is to support Organizational Wellness by adding two office support specialists to start in the first quarter of FY 2022.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Organizational Development	31.00	33.00	35.00	35.00	35.00	35.00	35.00
Administration	31.00	33.00	5.00	5.00	5.00	5.00	5.00
Talent Management	-	-	6.00	6.00	6.00	6.00	6.00
Organizational Wellness	-	-	4.00	4.00	4.00	4.00	4.00
Training	-	-	12.00	12.00	12.00	12.00	12.00
Performance	-	-	3.00	3.00	3.00	3.00	3.00
Recruiting	-	-	4.00	4.00	4.00	4.00	4.00
Compensation	-	-	1.00	1.00	1.00	1.00	1.00

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 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Organizational Development	31.00	33.00	35.00	35.00	35.00	35.00	35.00
Administration	31.00	33.00	5.00	5.00	5.00	5.00	5.00
Talent Management	-	-	6.00	6.00	6.00	6.00	6.00
Organizational Wellness	-	-	4.00	4.00	4.00	4.00	4.00
Training	-	-	12.00	12.00	12.00	12.00	12.00
Performance	-	-	3.00	3.00	3.00	3.00	3.00
Recruiting	-	-	4	4	4	4	4
Compensation	-	-	1	1	1	1	1

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Administration	\$ 2,860,500	\$ 3,135,700	\$ 233,500	\$ 553,200	\$ (2,582,500)	-82.4%	\$ 555,900
Talent Management	-	-	225,200	505,800	505,800	0.0%	508,600
Organizational Wellness	-	-	146,600	353,200	353,200	0.0%	355,000
Training	-	-	550,700	1,147,600	1,147,600	0.0%	1,153,400
Performance	-	-	155,400	301,100	301,100	0.0%	302,600
Recruiting	-	-	158,800	335,800	335,800	0.0%	337,600
Compensation	-	-	76,600	157,200	157,200	0.0%	157,900
Grand Total	\$ 2,860,500	\$ 3,135,700	\$ 1,546,800	\$ 3,353,900	\$ 218,200	7.0%	\$ 3,371,000

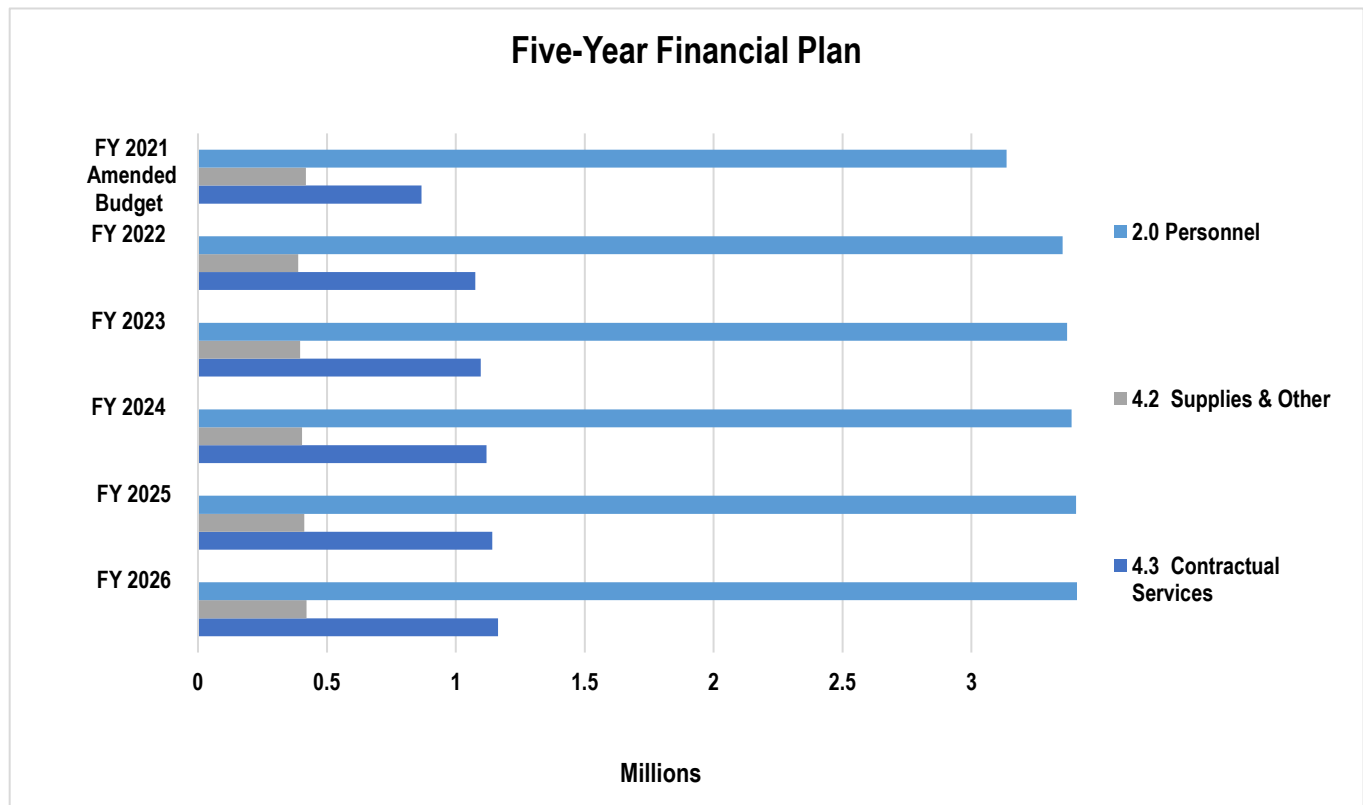
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Administration	\$ 3,135,700	\$ 553,200	\$ 555,900	\$ 558,600	\$ 561,200	\$ 563,900
Talent Management	-	505,800	508,600	511,300	514,000	516,700
Organizational Wellness	-	353,200	355,000	356,900	358,700	360,600
Training	-	1,147,600	1,153,400	1,159,300	1,165,200	1,171,000
Performance	-	301,100	302,600	304,100	305,600	307,100
Recruiting	-	335,800	337,600	339,400	341,200	343,000
Compensation	-	157,200	157,900	158,600	159,300	159,900
Grand Total	\$ 3,135,700	\$ 3,353,900	\$ 3,371,000	\$ 3,388,200	\$ 3,405,200	\$ 3,422,200

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 3,135,700	\$ 1,546,800	\$ 3,353,900	\$ 218,200	7.0%	\$ 3,371,000	\$ 3,388,200	\$ 3,405,200	\$ 3,422,200
4.2 Supplies & Other	419,000	45,700	388,700	(30,300)	-7.2%	396,000	404,000	412,100	420,400
4.3 Contractual Services	866,500	424,100	1,075,000	208,500	24.1%	1,096,600	1,118,500	1,140,900	1,163,800
Grand Total	\$ 4,421,200	\$ 2,016,600	\$ 4,817,600	\$ 396,400	9.0%	\$ 4,863,600	\$ 4,910,700	\$ 4,958,200	\$ 5,006,400

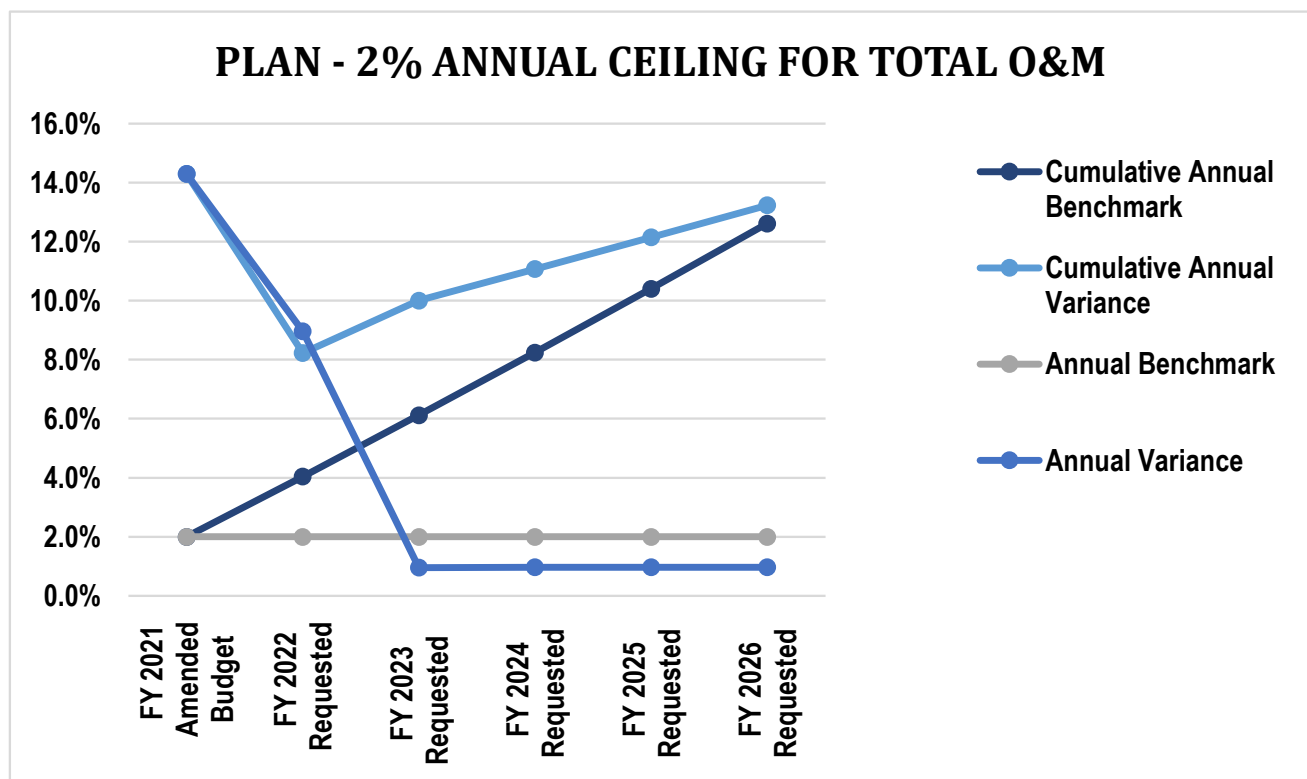


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Administration	\$ 4,421,200	\$ 499,100	\$ 654,100	\$ (3,767,100)	-85.2%	\$ 658,800	\$ 663,700	\$ 668,300	\$ 673,100
Talent Management	-	254,700	600,300	600,300	0%	604,900	609,500	614,200	618,900
Organizational Wellness	-	215,900	435,600	435,600	0%	439,000	442,500	446,100	449,700
Training	-	630,500	1,586,200	1,586,200	0%	1,600,800	1,615,700	1,630,500	1,645,800
Performance	-	163,000	741,900	741,900	0%	752,200	762,700	773,400	784,200
Recruiting	-	176,800	438,300	438,300	0%	442,000	445,900	450,000	454,100
Compensation	-	76,600	361,200	361,200	0%	365,900	370,700	375,700	380,600
Grand Total	\$ 4,421,200	\$ 2,016,600	\$ 4,817,600	\$ 396,400	9.0%	\$ 4,863,600	\$ 4,910,700	\$ 4,958,200	\$ 5,006,400

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 13.2% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment. The increase over the entity-wide goal is anticipated with the addition of staff as discussed previously.



Capital Outlay

Capital outlay is not a component of the Organizational Development Area.

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883201 - Administration	\$ 3,631,200	\$ 4,421,200	\$ 499,100	\$ 654,100	\$ 658,800	\$ 663,700	\$ 668,300	\$ 673,100
2.1 Salaries & Wages	2,087,700	2,404,300	184,300	419,600	419,600	419,600	419,600	419,600
2.3 Overtime	5,200	-	-	-	-	-	-	-
2.4 Employee Benefits	660,000	731,400	52,200	133,600	136,300	139,000	141,600	144,300
2.5 Transition Services	107,600	-	(3,000)	-	-	-	-	-
4.2 Supplies & Other	279,300	419,000	9,900	46,200	47,100	48,100	49,000	49,900
Memberships, Licenses & Subscriptions	7,300	7,700	2,500	400	400	400	400	400
Office Supplies	22,100	59,200	2,200	20,000	20,400	20,800	21,200	21,600
Supplies & Other - Covid19	400	-	1,000	-	-	-	-	-
Operating Supplies	70,400	96,900	3,900	100	100	100	100	100
Printing	-	20,200	-	-	-	-	-	-
Training and Internal Meetings	135,600	93,800	1,500	10,000	10,200	10,400	10,600	10,800
Travel	11,800	43,900	(500)	10,000	10,200	10,400	10,600	10,800
Mileage and Parking	1,100	2,200	-	-	-	-	-	-
Tuition Refund	4,900	12,200	-	3,700	3,800	3,900	4,000	4,000
Advertising	25,700	82,900	(700)	2,000	2,000	2,100	2,100	2,200
4.3 Contractual Services	495,900	866,500	255,700	54,700	55,800	57,000	58,100	59,300
Contractual Operating Services	362,500	866,500	41,200	54,700	55,800	57,000	58,100	59,300
Contractual Professional Services	900	-	-	-	-	-	-	-
Contractual Services - Covid19	132,500	-	214,500	-	-	-	-	-
5.2 Shared Services	(4,500)	-	-	-	-	-	-	-
Shared Services Reimbursement	(2,300)	-	-	-	-	-	-	-
Shared Services : Salaries & Wages	-	-	-	-	-	-	-	-
Reimbursement	(1,600)	-	-	-	-	-	-	-
Shared Services: Employee Benefit	-	-	-	-	-	-	-	-
Reimbursement	(600)	-	-	-	-	-	-	-
883211 - Talent Management	-	-	254,700	600,300	604,900	609,500	614,200	618,900
2.1 Salaries & Wages	-	-	150,800	368,700	368,700	368,700	368,700	368,700
2.3 Overtime	-	-	800	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	-	-	73,600	136,100	138,900	141,600	144,300	147,000
4.2 Supplies & Other	-	-	200	4,500	4,500	4,600	4,700	4,800
Office Supplies	-	-	-	1,000	1,000	1,000	1,100	1,100
Operating Supplies	-	-	-	100	100	100	100	100
Memberships, Licenses & Subscriptions	-	-	200	2,000	2,000	2,100	2,100	2,200
Mileage and Parking	-	-	-	400	400	400	400	400
Travel	-	-	-	500	500	500	500	500
Training and Internal Meetings	-	-	-	500	500	500	500	500
4.3 Contractual Services	-	-	29,300	90,000	91,800	93,600	95,500	97,400
Contractual Operating Services	-	-	29,300	90,000	91,800	93,600	95,500	97,400
883221 - Organizational Wellness	-	-	215,900	435,600	439,000	442,500	446,100	449,700
2.1 Salaries & Wages	-	-	105,400	259,000	259,000	259,000	259,000	259,000
2.3 Overtime	-	-	500	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	-	-	35,400	93,200	95,000	96,900	98,700	100,600
2.5 Transition Services	-	-	5,300	-	-	-	-	-
4.2 Supplies & Other	-	-	200	12,400	12,600	12,800	13,100	13,300
Office Supplies	-	-	100	1,000	1,000	1,000	1,100	1,100
Operating Supplies	-	-	-	100	100	100	100	100
Advertising	-	-	-	10,000	10,200	10,400	10,600	10,800
Memberships, Licenses & Subscriptions	-	-	-	300	300	300	300	300
Mileage and Parking	-	-	100	-	-	-	-	-
Travel	-	-	-	500	500	500	500	500
Training and Internal Meetings	-	-	-	500	500	500	500	500
4.3 Contractual Services	-	-	69,100	70,000	71,400	72,800	74,300	75,800
Contractual Operating Services	-	-	69,100	70,000	71,400	72,800	74,300	75,800

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883231 - Training	-	-	630,500	1,586,200	1,600,800	1,615,700	1,630,500	1,645,800
2.1 Salaries & Wages	-	-	407,200	853,500	853,500	853,500	853,500	853,500
2.3 Overtime	-	-	-	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	-	-	143,500	293,100	298,900	304,800	310,700	316,500
4.2 Supplies & Other	-	-	32,100	284,800	290,500	296,400	302,100	308,300
Office Supplies	-	-	-	15,000	15,300	15,600	15,900	16,200
Operating Supplies	-	-	100	54,000	55,100	56,200	57,300	58,500
Memberships, Licenses & Subscriptions	-	-	2,400	11,800	12,000	12,300	12,500	12,800
Travel	-	-	-	4,000	4,100	4,200	4,200	4,300
Training and Internal Meetings	-	-	29,600	200,000	204,000	208,100	212,200	216,500
4.3 Contractual Services	-	-	47,700	153,800	156,900	160,000	163,200	166,500
Contractual Operating Services	-	-	47,700	153,800	156,900	160,000	163,200	166,500
883241 - Performance	-	-	163,000	741,900	752,200	762,700	773,400	784,200
2.1 Salaries & Wages	-	-	116,300	225,600	225,600	225,600	225,600	225,600
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	-	-	39,100	75,500	77,000	78,500	80,000	81,500
4.2 Supplies & Other	-	-	2,000	4,300	4,300	4,400	4,500	4,600
Office Supplies	-	-	-	1,000	1,000	1,000	1,100	1,100
Operating Supplies	-	-	-	100	100	100	100	100
Memberships, Licenses & Subscriptions	-	-	-	2,000	2,000	2,100	2,100	2,200
Mileage and Parking	-	-	-	200	200	200	200	200
Travel	-	-	-	500	500	500	500	500
Training and Internal Meetings	-	-	-	500	500	500	500	500
Tuition Refund	-	-	2,000	-	-	-	-	-
4.3 Contractual Services	-	-	5,600	436,500	445,300	454,200	463,300	472,500
Contractual Operating Services	-	-	5,600	436,500	445,300	454,200	463,300	472,500
883251 - Recruiting	-	-	176,800	438,300	442,000	445,900	450,000	454,100
2.1 Salaries & Wages	-	-	95,200	244,300	244,300	244,300	244,300	244,300
2.3 Overtime	-	-	1,600	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	-	-	38,600	90,500	92,300	94,100	95,900	97,700
2.5 Transition Services	-	-	23,400	-	-	-	-	-
4.2 Supplies & Other	-	-	1,300	32,500	33,000	33,700	34,500	35,300
Office Supplies	-	-	-	1,000	1,000	1,000	1,100	1,100
Operating Supplies	-	-	-	500	500	500	500	500
Advertising	-	-	1,300	25,000	25,500	26,000	26,500	27,100
Memberships, Licenses & Subscriptions	-	-	-	2,000	2,000	2,100	2,100	2,200
Mileage and Parking	-	-	-	1,000	1,000	1,000	1,100	1,100
Travel	-	-	-	2,000	2,000	2,100	2,100	2,200
Training and Internal Meetings	-	-	-	1,000	1,000	1,000	1,100	1,100
4.3 Contractual Services	-	-	16,700	70,000	71,400	72,800	74,300	75,800
Contractual Operating Services	-	-	16,700	70,000	71,400	72,800	74,300	75,800
883261 - Compensation	-	-	76,600	361,200	365,900	370,700	375,700	380,600
2.1 Salaries & Wages	-	-	63,600	123,400	123,400	123,400	123,400	123,400
2.3 Overtime	-	-	-	-	-	-	-	-
2.4 Employee Benefits	-	-	13,000	33,800	34,500	35,200	35,900	36,500
4.2 Supplies & Other	-	-	-	4,000	4,000	4,000	4,200	4,200
Office Supplies	-	-	-	1,000	1,000	1,000	1,100	1,100
Operating Supplies	-	-	-	500	500	500	500	500
Advertising	-	-	-	500	500	500	500	500
Printing	-	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	-	-	-	1,000	1,000	1,000	1,100	1,100
Mileage and Parking	-	-	-	-	-	-	-	-
Travel	-	-	-	500	500	500	500	500
Training and Internal Meetings	-	-	-	500	500	500	500	500
4.3 Contractual Services	-	-	-	200,000	204,000	208,100	212,200	216,500
Contractual Operating Services	-	-	-	200,000	204,000	208,100	212,200	216,500
Grand Total	\$ 3,631,200	\$ 4,421,200	\$ 2,016,600	\$ 4,817,600	\$ 4,863,600	\$ 4,910,700	\$ 4,958,200	\$ 5,006,400

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 *Business Operation Support Services* group is responsible for procurement, inventory management, and transformational business support. The *Financial Reporting & Accounting* group is responsible for construction, general ledger, accounts payable, payroll, asset management and related activities.

The Financial Services Area is engaged in several strategic initiatives – both as leader and key participant in entity-wide 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 table on the following page 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

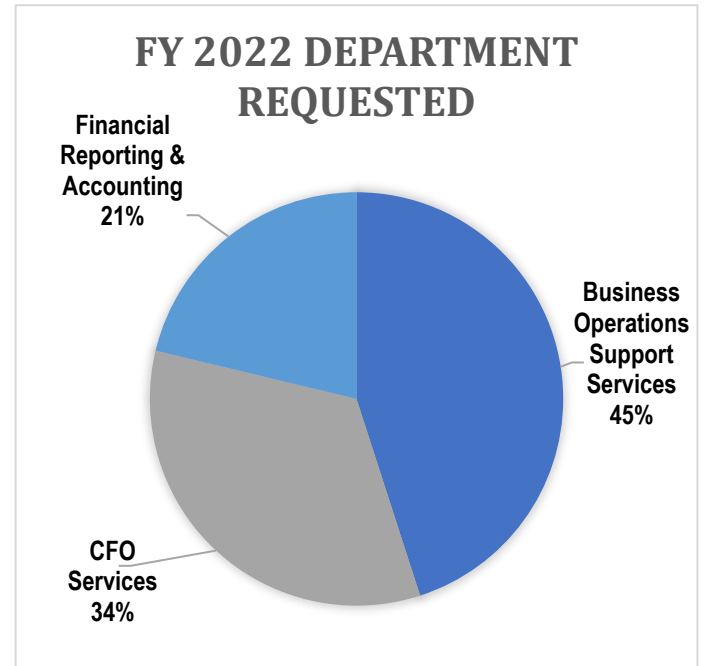
Chief Financial Officer
Data Analytics & Internal Audit
Financial Planning & Analysis
Public Finance
Reporting and Compliance
Treasury

❖ Business Operation Support Services

Procurement Director
Logistics and Materials
Owners' Representation
Transformation

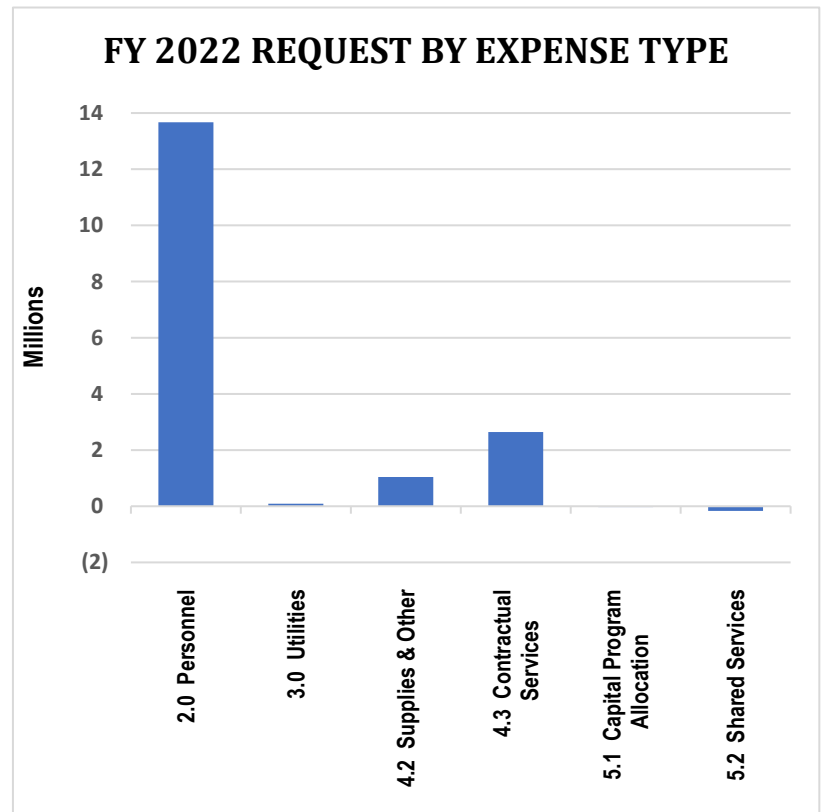
❖ Financial Reporting & Accounting

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 \$2.1 million, or 14.2%. The primary reasons for this increase are highlighted below.

- ❖ **Personnel** – The primary driver is support for new and/or expanding programs and system as described further below in the Personnel section. In addition, the budget for benefits was increased based on the current benefit cost information.
- ❖ **Supplies & Other** – The primary reason for the variance in this category is the lease for the new warehouse. The amount of this lease is estimated at \$45,000 per month or \$540,000 per year. This lease was initiated in FY 2021 after the sale of the prior warehouse which no longer met the needs of GLWA and needed significant capital investment. The long-term plan is contingent upon further evaluation of the space needs for warehousing operations that support the WRRF. Once the long-term vision is determined by WRRF leadership, a decision will follow regarding the lease, build, or purchase of a facility.
- ❖ **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. A review of the activity has shown that the number of hours that can be capitalize (moved from the O&M account to the CIP) are fewer than planned. The FY 2022 through FY 2026 budget has been adjusted accordingly.
- ❖ **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. A review of the history has shown that the bank fees are coming in lower than anticipated. A budget was amended for FY 2021 and the budgets for FY 2022 through FY 2026 have been adjusted accordingly.

Biennial Budget Request by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
2.0 Personnel	\$ 11,640,300	\$ 11,965,600	\$ 5,769,000	\$ 13,669,400	\$ 1,703,800	14.2%	\$ 13,891,700
3.0 Utilities	28,300	94,800	13,300	92,000	(2,800)	-3.0%	93,900
4.2 Supplies & Other	433,600	563,800	113,700	1,041,900	478,100	84.8%	1,234,800
4.3 Contractual Services	2,516,200	2,726,800	943,100	2,642,900	(83,900)	-3.1%	2,500,600
5.1 Capital Program Allocation	(37,100)	(84,900)	(7,300)	(30,200)	54,700	-64.4%	(30,300)
5.2 Shared Services	(160,600)	(168,400)	(115,500)	(168,700)	(300)	0.2%	(169,100)
Grand Total	\$ 14,420,700	\$ 15,097,700	\$ 6,716,300	\$ 17,247,300	\$ 2,149,600	14.2%	\$ 17,521,600

Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
CFO Services	\$ 4,759,200	\$ 5,252,700	\$ 2,197,200	\$ 5,818,100	\$ 565,400	10.8%	\$ 5,756,000
Chief Financial Officer	769,500	828,900	400,600	1,147,100	318,200	38.4%	1,047,000
Data Analytics & Internal Audit	505,400	667,500	134,800	760,400	92,900	13.9%	766,800
Financial Planning & Analysis	1,330,800	1,295,600	644,300	1,441,400	145,800	11.3%	1,452,600
Public Finance	908,400	1,014,300	470,800	1,082,500	68,200	6.7%	1,093,500
Reporting and Compliance	476,000	516,900	212,900	533,000	16,100	3.1%	535,300
Treasury	769,100	929,500	333,800	853,700	(75,800)	-8.2%	860,800
Business Operations Support Services	6,529,500	6,463,000	3,044,700	7,765,200	1,302,200	20.1%	8,072,800
Procurement Director	2,998,600	3,111,500	1,581,900	3,402,800	291,300	9.4%	3,594,200
Logistics and Materials	2,220,200	1,921,300	926,700	2,633,700	712,400	37.1%	2,583,900
Owners' Representative	515,000	590,300	231,500	618,400	28,100	4.8%	622,100
Transformation	795,700	839,900	304,600	1,110,300	270,400	32.2%	1,272,600
Financial Reporting & Accounting	3,132,000	3,382,000	1,474,400	3,664,000	282,000	8.3%	3,692,800
Grand Total	\$ 14,420,700	\$ 15,097,700	\$ 6,716,300	\$ 17,247,300	\$ 2,149,600	14.2%	\$ 17,521,600

Personnel Budget

The staffing plan provides for an increase of 8 positions in FY 2022 and a steady state of 133 total positions beginning in FY 2023. The staffing level is shown in the tables below.

- Chief Financial Officer – Addition of one Professional Administrative Analyst to support special projects and communications.
- Financial Planning & Analysis – Addition of one Management Professional to support reporting, analysis, and special projects.
- Public Finance – Addition of one Management Professional and one Professional Administrative Analyst for the administration of the WRAP program and other affordability initiatives.
- Procurement Director – Addition of three positions (Manager, Management Professional, and a Professional Administrative Assistant) to support the Business Inclusion & Diversity (BID) program. In FY 2022, two part time positions (Procurement Specialist and a Security Training Coordinator/Investigator) were eliminated. These positions became vacant in FY 2021 and were determined not to be needed going forward.
- Financial Reporting & Accounting –
 - Addition of two Management Professionals to assist with managing technology initiatives, projects, and staff development as well as succession planning. The cost of these additional positions is offset by a decrease to Contractual Professional Services. Currently project management is being performed by consultants.
 - An additional three positions (Manager, Management Professional, and a Professional Administrative Assistant) are being added to provide controls over enterprise-wide contracts which now total over \$130 million. The amount of job order and enterprise-wide contracts has grown significantly over the past year. These contracts are

inherently complex, are not able to be efficiently accounted for by the existing financial system and are prone to overspending and errors.

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 2020 Staffing Plan	Current Year FY 2021 Staffing Plan	FY 2022 Staffing Plan	FY 2023 Staffing Plan	FY 2024 Staffing Plan	FY 2025 Staffing Plan	FY 2026 Staffing Plan
Financial Services Area	123.00	124.00	132.00	133.00	133.00	133.00	133.00
Chief Financial Officer	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Data Analytics & Internal Audit	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Financial Planning & Analysis	9.00	9.00	10.00	10.00	10.00	10.00	10.00
Public Finance	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Reporting and Compliance	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Business Operations Support Services	67.00	68.00	68.00	69.00	69.00	69.00	69.00
Procurement Director	29.00	31.00	32.00	32.00	32.00	32.00	32.00
Logistics and Materials	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	6.00	5.00	5.00	5.00	5.00	5.00	5.00
Transformation	8.00	8.00	7.00	8.00	8.00	8.00	8.00
Financial Reporting & Accounting	27.00	26.00	31.00	31.00	31.00	31.00	31.00

*Full Time Equivalent*s - 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*s

Team	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Financial Services Area	119.25	122.00	129.75	131.00	131.50	131.50	131.50
CFO Services	29.00	29.50	32.50	32.50	32.50	32.50	32.50
Chief Financial Officer	5.00	4.50	5.50	5.50	5.50	5.50	5.50
Data Analytics & Internal Audit	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Financial Planning & Analysis	9.00	9.00	10.00	10.00	10.00	10.00	10.00
Public Finance	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Reporting and Compliance	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Business Operations Support Services	64.25	67.50	67.25	68.50	69.00	69.00	69.00
Procurement Director	27.00	30.50	32.00	32.00	32.00	32.00	32.00
Logistics and Materials	23.25	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	6.00	5.00	5.00	5.00	5.00	5.00	5.00
Transformation	8.00	8.00	6.25	7.50	8.00	8.00	8.00
Financial Reporting & Accounting	26.00	25.00	30.00	30.00	30.00	30.00	30.00

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
CFO Services	\$ 3,288,300	\$ 3,499,500	\$ 1,581,900	\$ 4,014,900	\$ 515,400	14.7%	\$ 4,032,300
Chief Financial Officer	628,000	781,500	348,200	853,900	72,400	9.3%	857,700
Data Analytics & Internal Audit	392,900	409,900	134,500	497,600	87,700	21.4%	498,800
Financial Planning & Analysis	958,400	973,000	471,000	1,173,400	200,400	20.6%	1,179,000
Public Finance	561,200	560,200	270,200	688,500	128,300	22.9%	691,800
Reporting and Compliance	463,700	499,400	210,900	518,300	18,900	3.8%	520,300
Treasury	284,100	275,500	147,100	283,200	7,700	2.8%	284,700
Business Operations Support Services	5,754,300	5,986,500	2,934,000	6,737,800	751,300	12.5%	6,928,700
Procurement Director	2,785,400	2,930,900	1,545,600	3,253,500	322,600	11.0%	3,269,700
Logistics and Materials	1,690,700	1,681,200	852,100	1,817,000	135,800	8.1%	1,827,300
Owners' Representative	496,000	583,500	234,300	599,500	16,000	2.7%	602,300
Transformation	782,200	790,900	302,000	1,067,800	276,900	35.0%	1,229,400
Financial Reporting & Accounting	2,597,700	2,479,600	1,253,100	2,916,700	437,100	17.6%	2,930,700
Grand Total	\$ 11,640,300	\$ 11,965,600	\$ 5,769,000	\$ 13,669,400	\$ 1,703,800	14.2%	\$ 13,891,700

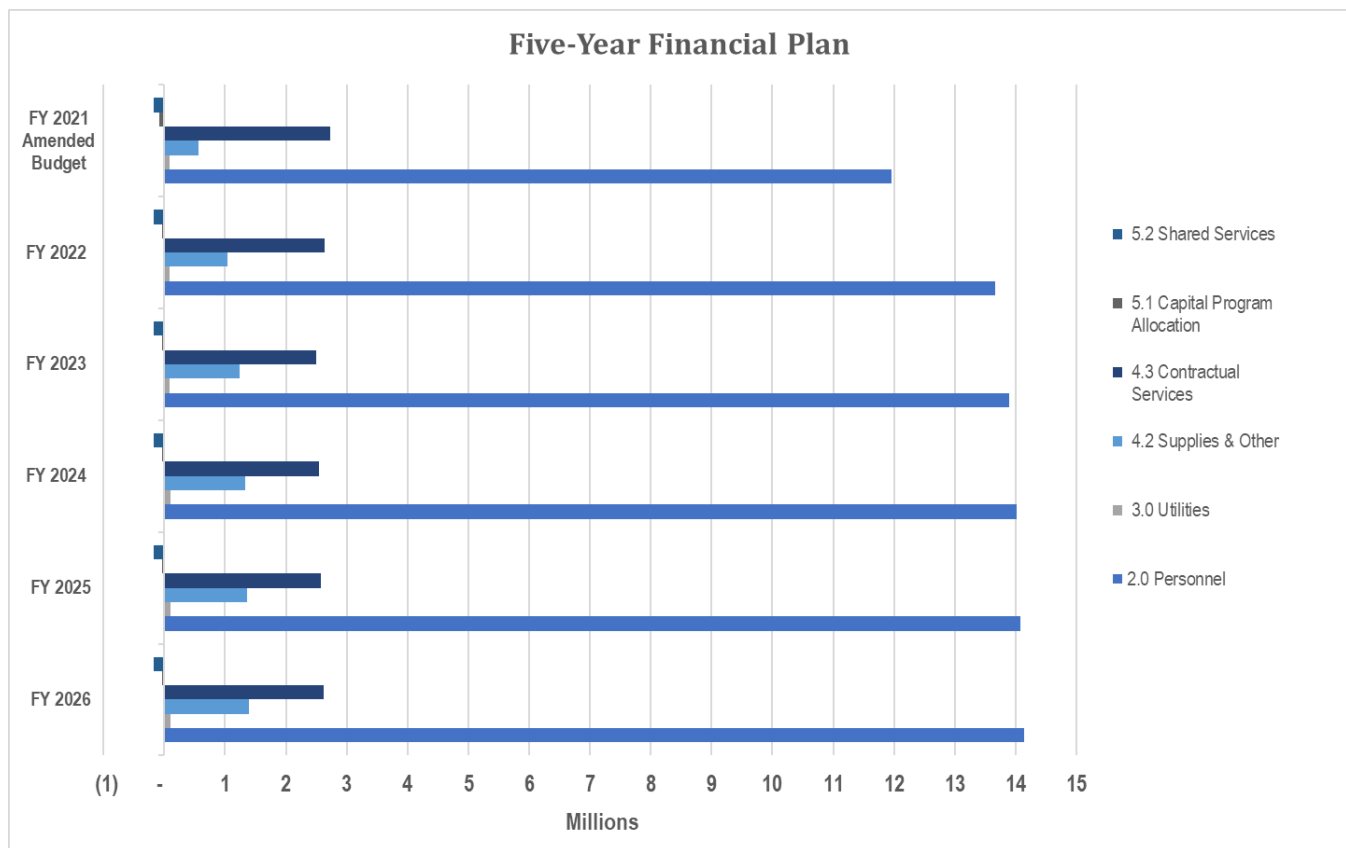
Personnel Budget – Five-Year Financial Plan

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Financial Services	11,965,600	13,669,400	13,891,700	14,016,900	14,078,300	14,139,400
CFO Services	3,499,500	4,014,900	4,032,300	4,049,500	4,066,900	4,084,200
Chief Financial Officer	781,500	853,900	857,700	861,500	865,300	869,100
Data Analytics & Internal Audit	409,900	497,600	498,800	500,000	501,200	502,400
Financial Planning & Analysis	973,000	1,173,400	1,179,000	1,184,500	1,190,100	1,195,600
Public Finance	560,200	688,500	691,800	695,000	698,300	701,600
Reporting and Compliance	499,400	518,300	520,300	522,400	524,400	526,500
Treasury	275,500	283,200	284,700	286,100	287,600	289,000
Business Operations Support Services	5,986,500	6,737,800	6,928,700	7,022,800	7,052,800	7,082,700
Procurement Director	2,930,900	3,253,500	3,269,700	3,285,800	3,302,000	3,318,100
Logistics and Materials	1,681,200	1,817,000	1,827,300	1,837,500	1,847,800	1,858,100
Owners' Representative	583,500	599,500	602,300	605,100	607,900	610,700
Transformation	790,900	1,067,800	1,229,400	1,294,400	1,295,100	1,295,800
Financial Reporting & Accounting	2,479,600	2,916,700	2,930,700	2,944,600	2,958,600	2,972,500

Five-Year Financial Plan

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
2.0 Personnel	\$ 11,965,600	\$ 5,769,000	\$ 13,669,400	\$ 1,703,800	14.2%	\$ 13,891,700	\$ 14,016,900	\$ 14,078,300	\$ 14,139,400
3.0 Utilities	94,800	13,300	92,000	(2,800)	-3.0%	93,900	95,700	97,600	99,700
4.2 Supplies & Other	563,800	113,700	1,041,900	478,100	84.8%	1,234,800	1,335,800	1,362,600	1,389,700
4.3 Contractual Services	2,726,800	943,100	2,642,900	(83,900)	-3.1%	2,500,600	2,539,000	2,578,000	2,618,100
5.1 Capital Program Allocation	(84,900)	(7,300)	(30,200)	54,700	-64.4%	(30,300)	(30,400)	(30,600)	(30,700)
5.2 Shared Services	(168,400)	(115,500)	(168,700)	(300)	0.2%	(169,100)	(169,500)	(169,800)	(170,200)
Grand Total	\$ 15,097,700	\$ 6,716,300	\$ 17,247,300	\$ 2,149,600	14.2%	\$ 17,521,600	\$ 17,787,500	\$ 17,916,100	\$ 18,046,000

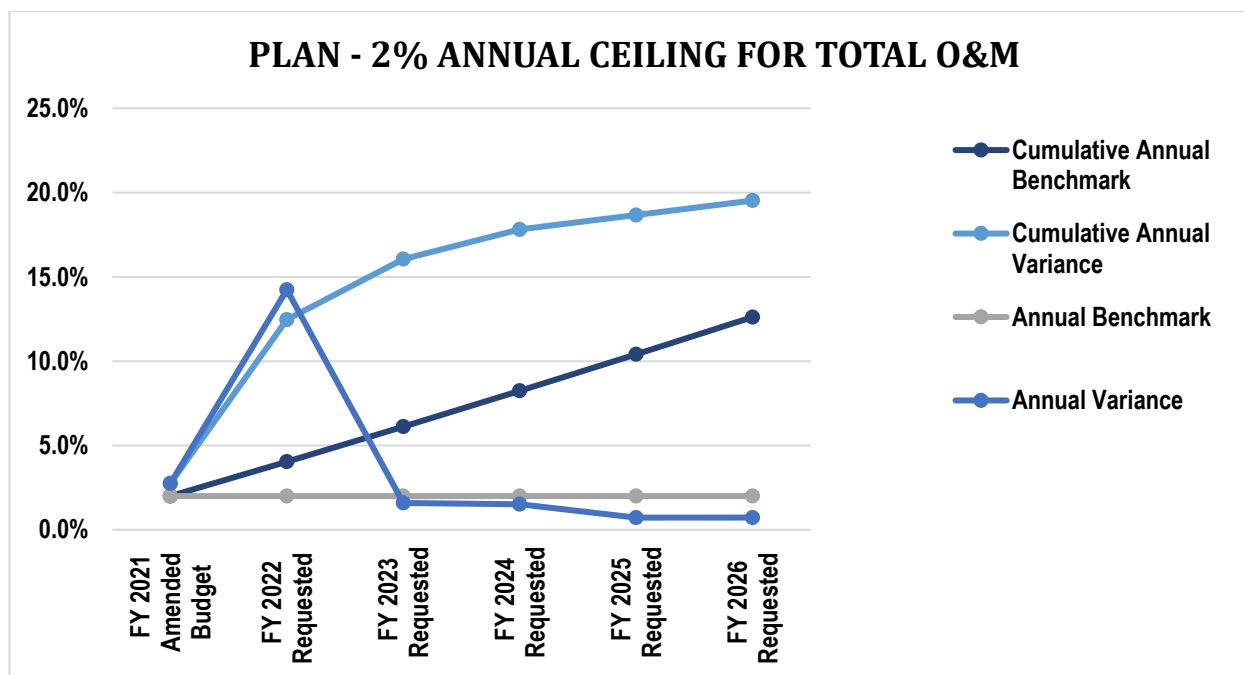


Five-Year Financial Plan by Team

Team	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
CFO Services	\$ 5,252,700	\$ 2,197,200	\$ 5,818,100	\$ 565,400	10.8%	\$ 5,756,000	\$ 5,798,800	\$ 5,842,800	\$ 5,886,700
Chief Financial Officer	828,900	400,600	1,147,100	318,200	38.4%	1,047,000	1,051,600	1,056,600	1,061,400
Financial Planning & Analysis	1,295,600	644,300	1,441,400	145,800	11.3%	1,452,600	1,463,500	1,474,600	1,485,800
Reporting and Compliance	516,900	212,900	533,000	16,100	3.1%	535,300	537,600	539,900	542,200
Data Analytics & Internal Audit	667,500	134,800	760,400	92,900	13.9%	766,800	773,400	780,000	786,900
Public Finance	1,014,300	470,800	1,082,500	68,200	6.7%	1,093,500	1,104,900	1,116,600	1,128,100
Treasury	929,500	333,800	853,700	(75,800)	-8.2%	860,800	867,800	875,100	882,300
Business Operations Support Services	6,463,000	3,044,700	7,765,200	1,302,200	20.1%	8,072,800	8,266,700	8,321,900	8,378,100
Procurement Director	3,111,500	1,581,900	3,402,800	291,300	9.4%	3,594,200	3,693,200	3,717,400	3,742,000
Logistics and Materials	1,921,300	926,700	2,633,700	712,400	37.1%	2,583,900	2,609,100	2,635,000	2,661,100
Owners' Representative	590,300	231,500	618,400	28,100	4.8%	622,100	625,800	629,400	633,200
Transformation	839,900	304,600	1,110,300	270,400	32.2%	1,272,600	1,338,600	1,340,100	1,341,800
Financial Reporting & Accounting	3,382,000	1,474,400	3,664,000	282,000	8.3%	3,692,800	3,722,000	3,751,400	3,781,200
Grand Total	\$ 15,097,700	\$ 6,716,300	\$ 17,247,300	\$ 2,149,600	14.2%	\$ 17,521,600	\$ 17,787,500	\$ 17,916,100	\$ 18,046,000

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

The Financial Services area financial plan reflects a five-year overall increase of 19.5% while the entity-wide goal is a cumulative 12.6% for planning purposes based upon an annual 2% adjustment. This increase which is above the entity-wide goal is driven by personnel costs and supplies & other costs that were previously discussed under the Biennial Budget Request section.



Capital Outlay

Financial Services capital outlay is funded by the Improvement & Extension (I&E) budget.

The renovation of a new warehouse is scheduled to take place in FY 2022. This warehouse will be replacing the McKinstry warehouse.

In addition to the warehouse renovations, Sprinter Pup delivery trucks and 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 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -
Machinery & Equipment	-	75,000	75,000	-	-	-
Projects & Programs	-	2,805,700	-	-	-	-
Vehicles	-	150,000	-	-	-	-
Grand Total	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -

Five-Year Capital Outlay Plan by Funding Source

Funding Source	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -
Grand Total	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -

Five-Year Capital Outlay Plan by Team

Team	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Logistics & Material	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -
Grand Total	\$ -	\$ 3,030,700	\$ 75,000	\$ -	\$ -	\$ -

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
884001 - Chief Financial Officer	769,500	828,900	400,600	1,147,100	1,047,000	1,051,600	1,056,600	1,061,400
2.1 Salaries & Wages	461,300	440,500	289,300	664,600	664,600	664,600	664,600	664,600
2.4 Employee Benefits	85,200	93,000	58,900	189,300	193,100	196,900	200,700	204,500
2.5 Transition Services	81,500	248,000	-	-	-	-	-	-
4.2 Supplies & Other	36,400	46,600	3,200	47,400	48,500	49,300	50,500	51,500
Memberships, Licenses & Subscriptions	6,800	10,400	1,500	10,600	10,800	11,000	11,300	11,500
Mileage and Parking	-	2,000	-	2,000	2,100	2,100	2,200	2,200
Office Supplies	14,400	12,200	1,000	12,400	12,700	12,900	13,200	13,500
Training and Internal Meetings	12,600	10,400	700	10,600	10,800	11,000	11,300	11,500
Travel	2,600	11,400	-	11,600	11,900	12,100	12,300	12,600
Postage	-	200	-	200	200	200	200	200
4.3 Contractual Services	105,100	800	49,200	245,800	140,800	140,800	140,800	140,800
Contractual Operating Services	500	800	-	800	800	800	800	800
Contractual Professional Services	104,600	-	49,200	245,000	140,000	140,000	140,000	140,000
884113 - Financial Planning & Analysis	1,330,800	1,295,600	644,300	1,441,400	1,452,600	1,463,500	1,474,600	1,485,800
2.1 Salaries & Wages	735,900	758,000	366,700	896,000	896,000	896,000	896,000	896,000
2.4 Employee Benefits	191,300	215,000	104,300	277,400	283,000	288,500	294,100	299,600
2.5 Transition Services	31,200	-	-	-	-	-	-	-
4.2 Supplies & Other	6,300	16,600	2,000	16,600	16,600	16,800	17,100	17,400
Memberships, Licenses & Subscriptions	1,600	2,300	1,100	2,300	2,400	2,400	2,500	2,500
Mileage and Parking	-	300	-	300	400	400	400	400
Office Supplies	300	2,800	800	2,000	2,000	2,100	2,100	2,200
Training and Internal Meetings	3,200	6,100	100	6,200	6,500	6,500	6,600	6,700
Travel	1,200	5,100	-	5,200	5,300	5,400	5,500	5,600
4.3 Contractual Services	366,100	306,000	171,300	252,000	257,000	262,200	267,400	272,800
884131 - Treasury	769,100	929,500	333,800	853,700	860,800	867,800	875,100	882,300
2.1 Salaries & Wages	210,400	210,400	107,500	210,400	210,400	210,400	210,400	210,400
2.3 Overtime	400	100	500	100	100	100	100	100
2.4 Employee Benefits	73,300	65,000	39,100	72,700	74,200	75,600	77,100	78,500
4.2 Supplies & Other	6,900	20,500	3,100	23,400	23,800	24,200	24,600	25,000
Memberships, Licenses & Subscriptions	1,100	2,500	400	2,600	2,600	2,700	2,700	2,800
Mileage and Parking	800	500	1,600	3,000	3,000	3,000	3,000	3,000
Office Supplies	500	2,000	700	2,000	2,100	2,100	2,200	2,200
Training and Internal Meetings	1,500	5,000	200	5,100	5,200	5,300	5,400	5,500
Travel	2,900	10,000	-	10,200	10,400	10,600	10,800	11,000
Postage	100	500	200	500	500	500	500	500
4.3 Contractual Services	586,900	783,500	257,600	697,100	702,300	707,500	712,900	718,300
Contractual Operating Services	586,900	783,500	257,600	697,100	702,300	707,500	712,900	718,300
5.2 Shared Services	(108,800)	(150,000)	(74,000)	(150,000)	(150,000)	(150,000)	(150,000)	(150,000)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
884135 - Reporting and Compliance	476,000	516,900	212,900	533,000	535,300	537,600	539,900	542,200
2.1 Salaries & Wages	322,500	299,200	157,200	307,100	307,100	307,100	307,100	307,100
2.3 Overtime	2,600	6,000	1,500	6,000	6,000	6,000	6,000	6,000
2.4 Employee Benefits	97,700	91,200	52,200	102,200	104,200	106,300	108,300	110,400
2.5 Transition Services	40,900	103,000	-	103,000	103,000	103,000	103,000	103,000
4.2 Supplies & Other	12,300	14,500	2,000	14,700	15,000	15,200	15,500	15,700
Memberships, Licenses & Subscriptions	2,300	3,000	1,100	3,000	3,100	3,100	3,200	3,200
Mileage and Parking	100	300	-	300	300	300	300	300
Office Supplies	1,300	1,000	600	2,000	2,000	2,100	2,100	2,200
Training and Internal Meetings	2,800	2,300	300	3,000	3,100	3,100	3,200	3,200
Travel	5,700	5,700	-	5,900	6,000	6,100	6,200	6,300
Postage	100	2,200	-	500	500	500	500	500
4.3 Contractual Services	-	3,000	-	-	-	-	-	-
884141 - Public Finance	908,400	1,014,300	470,800	1,082,500	1,093,500	1,104,900	1,116,600	1,128,100
2.1 Salaries & Wages	439,000	436,000	205,000	524,400	524,400	524,400	524,400	524,400
2.4 Employee Benefits	122,200	124,200	65,200	164,100	167,400	170,600	173,900	177,200
4.2 Supplies & Other	7,900	10,800	600	14,000	14,100	14,600	15,000	15,100
Memberships, Licenses & Subscriptions	1,000	700	600	1,500	1,500	1,600	1,600	1,600
Mileage and Parking	800	800	-	1,500	1,500	1,600	1,600	1,600
Office Supplies	300	1,000	-	1,000	1,000	1,000	1,100	1,100
Training and Internal Meetings	800	1,300	-	1,500	1,500	1,600	1,600	1,600
Travel	5,000	6,000	-	7,500	7,600	7,800	8,000	8,100
Postage	-	1,000	-	1,000	1,000	1,000	1,100	1,100
4.3 Contractual Services	391,100	461,700	241,500	398,700	406,700	414,800	423,100	431,600
Contractual Operating Services	30,200	26,700	12,500	48,700	49,700	50,700	51,700	52,700
Contractual Professional Services	360,900	410,000	229,000	350,000	357,000	364,100	371,400	378,900
Legal	-	25,000	-	-	-	-	-	-
5.2 Shared Services	(51,800)	(18,400)	(41,500)	(18,700)	(19,100)	(19,500)	(19,800)	(20,200)
Shared Services Reimbursement	(27,800)	-	-	-	-	-	-	-
Shared Services : Salaries & Wages Reimb	(17,100)	(13,100)	(29,600)	(13,300)	(13,600)	(13,900)	(14,100)	(14,400)
Shared Services: Employee Benefit Reimb	(6,900)	(5,300)	(11,900)	(5,400)	(5,500)	(5,600)	(5,700)	(5,800)
884151 - Data Analytics & Internal Audit	505,400	667,500	134,800	760,400	766,800	773,400	780,000	786,900
2.1 Salaries & Wages	113,500	142,700	57,200	200,700	200,700	200,700	200,700	200,700
2.4 Employee Benefits	24,400	29,600	13,000	59,300	60,500	61,700	62,900	64,100
2.5 Transition Services	255,000	237,600	64,300	237,600	237,600	237,600	237,600	237,600
4.2 Supplies & Other	500	7,600	300	7,800	7,900	8,100	8,200	8,500
Memberships, Licenses & Subscriptions	300	2,000	300	2,100	2,100	2,200	2,200	2,300
Mileage and Parking	-	100	-	100	100	100	100	100
Office Supplies	-	300	-	300	300	300	300	300
Training and Internal Meetings	200	3,200	-	3,200	3,300	3,300	3,400	3,500
Travel	-	2,000	-	2,100	2,100	2,200	2,200	2,300
4.3 Contractual Services	112,000	250,000	-	255,000	260,100	265,300	270,600	276,000
884161 - Transformation	795,700	839,900	304,600	1,110,300	1,272,600	1,338,600	1,340,100	1,341,800
2.1 Salaries & Wages	135,900	129,500	66,000	129,500	129,500	129,500	129,500	129,500
2.4 Employee Benefits	24,400	32,800	13,000	34,900	35,600	36,300	37,000	37,700
2.5 Transition Services	621,900	628,600	223,000	903,400	1,064,300	1,128,600	1,128,600	1,128,600
4.2 Supplies & Other	13,500	49,000	2,600	42,500	43,200	44,200	45,000	46,000
Memberships, Licenses & Subscriptions	800	5,000	-	2,000	2,000	2,100	2,100	2,200
Mileage and Parking	-	2,000	-	500	500	500	500	500
Office Supplies	1,200	1,000	-	1,000	1,000	1,000	1,100	1,100
Operating Supplies	11,500	10,000	2,600	15,000	15,300	15,600	15,900	16,200
Training and Internal Meetings	-	23,000	-	17,000	17,300	17,700	18,000	18,400
Travel	-	8,000	-	7,000	7,100	7,300	7,400	7,600

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
884121 - Procurement Director	2,998,600	3,111,500	1,581,900	3,402,800	3,594,200	3,693,200	3,717,400	3,742,000
2.1 Salaries & Wages	1,822,300	2,180,600	966,900	2,410,300	2,410,300	2,410,300	2,410,300	2,410,300
2.3 Overtime	34,300	81,000	35,500	35,000	35,000	35,000	35,000	35,000
2.4 Employee Benefits	612,600	669,300	334,400	808,200	824,400	840,500	856,700	872,800
2.5 Transition Services	316,200	-	208,800	-	-	-	-	-
4.2 Supplies & Other	112,900	139,800	36,000	104,300	278,600	360,600	367,700	375,200
Memberships, Licenses & Subscriptions	24,800	28,200	6,000	28,200	29,000	41,600	42,400	43,300
Mileage and Parking	700	-	-	700	1,000	15,600	15,900	16,200
Office Supplies	71,700	97,500	29,000	50,100	61,300	62,500	63,800	65,100
Operating Supplies	500	11,800	-	500	25,500	26,000	26,500	27,100
Training and Internal Meetings	7,400	600	600	17,100	153,000	156,100	159,200	162,400
Travel	7,700	300	300	7,700	8,500	41,600	42,400	43,300
Postage	-	-	-	-	100	6,800	6,900	7,000
Tuition Refund	-	-	-	-	200	10,400	10,600	10,800
Repairs & Maintenance-Equipment	-	1,100	-	-	-	-	-	-
Advertising	100	300	100	-	-	-	-	-
4.3 Contractual Services	100,300	40,800	300	45,000	45,900	46,800	47,700	48,700
Contractual Operating Services	99,200	25,500	-	20,000	20,400	20,800	21,200	21,600
Contractual Professional Services	1,100	15,300	300	25,000	25,500	26,000	26,500	27,100
884124 - Logistics and Materials	2,220,200	1,921,300	926,700	2,633,700	2,583,900	2,609,100	2,635,000	2,661,100
2.1 Salaries & Wages	1,123,000	1,238,800	576,300	1,303,600	1,303,600	1,303,600	1,303,600	1,303,600
2.3 Overtime	2,200	5,000	1,400	-	-	-	-	-
2.4 Employee Benefits	513,300	437,400	274,400	513,400	523,700	533,900	544,200	554,500
2.5 Transition Services	52,200	-	-	-	-	-	-	-
3.1 Electric	4,500	28,000	2,600	27,000	27,600	28,100	28,700	29,300
3.2 Gas	6,200	26,500	1,600	25,000	25,500	26,000	26,500	27,100
3.3 Sewage Service	17,600	33,800	9,100	35,000	35,700	36,400	37,100	37,900
3.4 Water Service	-	6,500	-	5,000	5,100	5,200	5,300	5,400
4.2 Supplies & Other	143,600	145,300	55,800	649,700	662,700	675,900	689,600	703,300
Memberships, Licenses & Subscriptions	-	3,200	-	1,000	1,000	1,000	1,100	1,100
Mileage and Parking	800	2,000	-	2,000	2,100	2,100	2,200	2,200
Office Supplies	55,600	22,700	23,800	25,000	25,500	26,000	26,500	27,100
Operating Supplies	60,300	43,800	19,100	55,700	56,800	58,000	59,100	60,300
Training and Internal Meetings	1,100	14,400	-	1,000	1,000	1,000	1,100	1,100
Travel	-	4,100	-	2,000	2,000	2,100	2,100	2,200
Employee Uniform Expense	17,400	25,400	5,600	15,000	15,300	15,600	15,900	16,200
Tuition Refund	-	1,700	-	-	-	-	-	-
Repairs & Maintenance-Buildings & Ground	2,700	10,000	-	3,000	3,100	3,100	3,200	3,200
Repairs & Maintenance-Equipment	5,700	18,000	7,300	5,000	5,100	5,200	5,300	5,400
Rentals-Buildings-All Sewer	-	-	-	540,000	550,800	561,800	573,100	584,500
4.3 Contractual Services	357,600	-	5,500	75,000	-	-	-	-
Contractual Operating Services	(600)	-	-	-	-	-	-	-
Contractual Professional Services	358,200	-	5,500	75,000	-	-	-	-
884126 - Owners' Representative	515,000	590,300	231,500	618,400	622,100	625,800	629,400	633,200
2.1 Salaries & Wages	385,700	455,600	184,700	458,800	458,800	458,800	458,800	458,800
2.4 Employee Benefits	110,300	127,900	49,600	140,700	143,500	146,300	149,100	151,900
4.2 Supplies & Other	33,600	23,700	2,800	24,100	24,600	25,100	25,600	26,100
Capital Outlay less than \$5,000	19,200	-	-	-	-	-	-	-
Memberships, Licenses & Subscriptions	3,600	1,200	-	1,200	1,200	1,300	1,300	1,300
Mileage and Parking	500	500	-	500	500	500	500	600
Operating Supplies	-	2,000	-	2,000	2,100	2,100	2,200	2,200
Training and Internal Meetings	10,200	10,000	2,800	10,200	10,400	10,600	10,800	11,000
Travel	100	10,000	-	10,200	10,400	10,600	10,800	11,000
4.3 Contractual Services	22,500	68,000	1,700	25,000	25,500	26,000	26,500	27,100
5.1 Capital Program Allocation	(37,100)	(84,900)	(7,300)	(30,200)	(30,300)	(30,400)	(30,600)	(30,700)
Capital Program: Salaries & Wages-Direct	(26,600)	(84,900)	(5,200)	(23,200)	(23,200)	(23,200)	(23,200)	(23,200)
Capital Program: Employee Benefits	(10,500)	-	(2,100)	(7,000)	(7,100)	(7,200)	(7,400)	(7,500)

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
884111 - Financial Reporting & Accounting	3,132,000	3,382,000	1,474,400	3,664,000	3,692,800	3,722,000	3,751,400	3,781,200
2.1 Salaries & Wages	1,825,000	1,710,600	937,200	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000
2.2 Workforce Development	-	12,800	-	12,800	12,800	12,800	12,800	12,800
2.3 Overtime	400	1,000	800	1,000	1,000	1,000	1,000	1,000
2.4 Employee Benefits	565,800	507,900	315,100	697,900	711,900	725,800	739,800	753,700
2.5 Transition Services	206,500	247,300	-	180,000	180,000	180,000	180,000	180,000
4.2 Supplies & Other	59,700	89,400	5,300	98,000	99,800	101,800	103,800	105,900
Memberships, Licenses & Subscriptions	6,200	5,000	900	7,000	7,100	7,300	7,400	7,600
Mileage and Parking	1,800	3,000	200	3,100	3,100	3,200	3,200	3,300
Office Supplies	17,300	34,000	2,100	34,700	35,400	36,100	36,800	37,500
Training and Internal Meetings	13,100	10,000	(500)	15,000	15,300	15,600	15,900	16,200
Travel	3,600	10,400	-	10,600	10,800	11,000	11,300	11,500
Postage	16,800	23,000	2,600	23,500	23,900	24,400	24,900	25,400
Tuition Refund	900	4,000	-	4,100	4,200	4,200	4,300	4,400
4.3 Contractual Services	474,600	813,000	216,000	649,300	662,300	675,600	689,000	702,800
Contractual Operating Services	4,200	4,700	2,100	4,800	4,900	5,000	5,100	5,200
Contractual Professional Services	253,300	513,000	52,100	343,300	350,200	357,200	364,300	371,600
Auditing	217,100	295,300	161,800	301,200	307,200	313,400	319,600	326,000
Grand Total	\$ 14,420,700	\$ 15,097,700	\$ 6,716,300	\$ 17,247,300	\$ 17,521,600	\$ 17,787,500	\$ 17,916,100	\$ 18,046,000

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Section 4

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
- ❖ Debt Management

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 \$6.7 million, or 6.2%, between FY 2021 and FY 2022. While specific reasons for the variances in the personnel budget are addressed in Section 3 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 20 in total to support key initiatives.
- 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 a slight increase in budget of \$28,500, or 3.0%. There was a total of eighteen apprentices that graduated at the end of FY 2021. New apprenticeship programs for Wastewater and Water operations have been implemented. More detail is provided in the respective operating sections in Section 3 of this document.

Overtime – Overall, there was slight decrease to overtime in the amount of \$108,000, or 1.5%.

- ✓ Wastewater Operations decreased by \$276,000 due to improved monitoring and controls of its cost centers.
- ✓ Water Operations increased by \$191,000 due to the delay in filling vacant positions thereby increasing the need for others to work overtime. The increases were mainly in the Southwest Water Plant and Systems Operations Control cost centers.

Employee Benefits – Increased by \$2.9 million, or 12.2%, between FY 2021 and FY 2022. This is mainly due to an increase in medical premiums charged by the health insurance vendors, and the increase in the staffing plan from 1,219 to 1,239 positions. The annual plan renewals and related carrier rates are based on a calendar year.

Contractual Transition Services – There was an overall increase of \$1.7 million, or 26.1%, in the Contractual Transition Services. The increase in the Contractual Transition Services budget in the areas of *Chief Planning Officer*, *Chief Administrative & Compliance Officer*, and *Chief Operating Officer Wastewater Operations* and 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 2021 budget was developed. There has been a need to temporarily fill these positions on a contractual basis until they can be permanently filled. The decrease in the Contractual Transition Services budget in the *Chief Financial Officer* area is the result of transitioning positions previously filled by individuals on a contract basis to GLWA team members.

Personnel Budget by Expense Category

Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Salaries & Wages	64,189,400	69,829,100	32,599,600	71,970,000	2,140,900	3.1%	73,216,100
Salaries & Wages - Workforce Development	1,251,900	948,400	444,300	976,900	28,500	3.0%	976,900
Overtime	7,493,800	7,063,000	3,847,800	6,954,700	(108,300)	-1.5%	6,954,800
Employee Benefits	25,001,000	24,181,500	13,368,900	27,134,500	2,953,000	12.2%	28,172,300
Contractual Transition Services	6,330,300	6,660,300	3,972,400	8,401,700	1,741,400	26.1%	8,562,600
Grand Total	\$ 104,266,400	\$ 108,682,300	\$ 54,233,000	\$ 115,437,800	\$ 6,755,500	6.2%	\$ 117,882,700

Personnel Budget by Operating Area and Expense Category

Operating Area and Expense Category	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Operating Officer Water Operations	\$ 32,816,000	\$ 33,337,500	\$ 17,405,000	\$ 35,308,600	\$ 1,971,100	5.9%	\$ 35,476,000
Salaries & Wages	20,246,900	21,668,600	10,445,100	22,363,800	695,200	3.2%	22,363,800
Salaries & Wages - Workforce Development	667,700	603,900	288,700	708,600	104,700	17.3%	708,600
Overtime	3,891,400	3,185,800	2,081,700	3,376,300	190,500	6.0%	3,367,400
Employee Benefits	8,010,000	7,879,200	4,443,600	8,859,900	980,700	12.4%	9,036,200
Contractual Transition Services	-	-	145,900	-	-	0.0%	-
Chief Operating Officer Wastewater Operations	36,296,300	37,871,500	18,766,600	39,230,900	1,359,400	3.6%	40,535,300
Salaries & Wages	19,698,700	21,639,900	9,584,100	21,262,600	(377,300)	-1.7%	22,046,000
Salaries & Wages - Workforce Development	395,800	85,300	155,600	255,500	170,200	199.5%	255,500
Overtime	3,111,200	3,405,500	1,469,300	3,129,700	(275,800)	-8.1%	3,137,400
Employee Benefits	8,955,900	8,133,100	4,541,400	8,668,400	535,300	6.6%	9,181,700
Contractual Transition Services	4,134,700	4,607,700	3,016,200	5,914,700	1,307,000	28.4%	5,914,700
Chief Planning Officer	4,710,800	5,623,100	2,473,400	6,053,200	430,100	7.6%	6,439,700
Salaries & Wages	2,907,200	3,513,400	1,585,800	3,748,100	234,700	6.7%	4,017,100
Salaries & Wages - Workforce Development	188,400	246,400	-	-	(246,400)	-100.0%	-
Overtime	134,400	112,400	59,700	136,400	24,000	21.4%	137,700
Employee Benefits	998,200	1,162,800	539,400	1,265,800	103,000	8.9%	1,382,000
Contractual Transition Services	482,600	588,100	288,500	902,900	314,800	53.5%	902,900
Chief Administrative & Compliance Officer	11,616,100	13,129,500	6,180,000	14,200,700	1,071,200	8.2%	14,412,300
Salaries & Wages	8,961,900	10,187,100	4,717,700	10,640,100	453,000	4.4%	10,746,600
Overtime	6,100	-	3,100	4,000	4,000	0.0%	4,000
Employee Benefits	2,540,500	2,942,400	1,433,500	3,396,500	454,100	15.4%	3,501,600
Contractual Transition Services	107,600	-	25,700	160,100	160,100	0.0%	160,100
Chief Financial Officer	11,640,300	11,965,600	5,769,000	13,669,400	1,703,800	14.2%	13,891,700
Salaries & Wages	7,574,500	8,001,900	3,914,000	9,130,400	1,128,500	14.1%	9,130,400
Salaries & Wages - Workforce Development	-	12,800	-	12,800	-	0.0%	12,800
Overtime	39,900	93,100	39,700	42,100	(51,000)	-54.8%	42,100
Employee Benefits	2,420,500	2,393,300	1,319,200	3,060,100	666,800	27.9%	3,121,500
Contractual Transition Services	1,605,400	1,464,500	496,100	1,424,000	(40,500)	-2.8%	1,584,900
Chief Executive Officer	7,186,900	6,755,100	3,639,000	6,975,000	219,900	3.3%	7,127,700
Salaries & Wages	4,800,200	4,818,200	2,352,900	4,825,000	6,800	0.1%	4,912,200
Overtime	310,800	266,200	194,300	266,200	-	0.0%	266,200
Employee Benefits	2,075,900	1,670,700	1,091,800	1,883,800	213,100	12.8%	1,949,300
Grand Total	\$ 104,266,400	\$ 108,682,300	\$ 54,233,000	\$ 115,437,800	\$ 6,755,500	6.2%	\$ 117,882,700

Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Salaries & Wages	69,829,100	71,970,000	73,216,100	73,876,300	73,911,300	73,946,300
Salaries & Wages - Workforce Development	948,400	976,900	976,900	976,900	976,900	976,900
Overtime	7,063,000	6,954,700	6,954,800	6,975,900	6,980,200	6,999,100
Employee Benefits	24,181,500	27,134,500	28,172,300	28,953,100	29,528,800	30,106,800
Contractual Transition Services	6,660,300	8,401,700	8,562,600	8,626,900	8,626,900	8,626,900
Grand Total	\$ 108,682,300	\$ 115,437,800	\$ 117,882,700	\$ 119,409,100	\$ 120,024,100	\$ 120,656,000

Five-Year Financial Plan by Operating Area and Expense Category

Operating Area and Expense Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Operating Officer Water Operations	\$ 33,337,500	\$ 35,308,600	\$ 35,476,000	\$ 35,663,000	\$ 35,840,100	\$ 36,033,100
Salaries & Wages	21,668,600	22,363,800	22,363,800	22,363,800	22,363,800	22,363,800
Salaries & Wages - Workforce Development	603,900	708,600	708,600	708,600	708,600	708,600
Overtime	3,185,800	3,376,300	3,367,400	3,376,300	3,376,300	3,391,000
Employee Benefits	7,879,200	8,859,900	9,036,200	9,214,300	9,391,400	9,569,700
Chief Operating Officer Wastewater Operations	37,871,500	39,230,900	40,535,300	40,715,400	40,895,400	41,075,600
Salaries & Wages	21,639,900	21,262,600	22,046,000	22,046,000	22,046,000	22,046,000
Salaries & Wages - Workforce Development	85,300	255,500	255,500	255,500	255,500	255,500
Overtime	3,405,500	3,129,700	3,137,400	3,137,400	3,137,400	3,137,400
Employee Benefits	8,133,100	8,668,400	9,181,700	9,361,800	9,541,800	9,722,000
Contractual Transition Services	4,607,700	5,914,700	5,914,700	5,914,700	5,914,700	5,914,700
Chief Planning Officer	5,623,100	6,053,200	6,439,700	7,211,300	7,243,300	7,275,500
Salaries & Wages	3,513,400	3,748,100	4,017,100	4,576,600	4,576,600	4,576,600
Salaries & Wages - Workforce Development	246,400	-	-	-	-	-
Overtime	112,400	136,400	137,700	139,100	140,500	141,900
Employee Benefits	1,162,800	1,265,800	1,382,000	1,592,700	1,623,300	1,654,100
Contractual Transition Services	588,100	902,900	902,900	902,900	902,900	902,900
Chief Administrative & Compliance Officer	13,129,500	14,200,700	14,412,300	14,481,200	14,549,700	14,618,200
Salaries & Wages	10,187,100	10,640,100	10,746,600	10,746,600	10,746,600	10,746,600
Overtime	-	4,000	4,000	4,000	4,000	4,000
Employee Benefits	2,942,400	3,396,500	3,501,600	3,570,500	3,639,000	3,707,500
Contractual Transition Services	-	160,100	160,100	160,100	160,100	160,100
Chief Financial Officer	11,965,600	13,669,400	13,891,700	14,016,900	14,078,300	14,139,400
Salaries & Wages	8,001,900	9,130,400	9,130,400	9,130,400	9,130,400	9,130,400
Salaries & Wages - Workforce Development	12,800	12,800	12,800	12,800	12,800	12,800
Overtime	93,100	42,100	42,100	42,100	42,100	42,100
Employee Benefits	2,393,300	3,060,100	3,121,500	3,182,400	3,243,800	3,304,900
Contractual Transition Services	1,464,500	1,424,000	1,584,900	1,649,200	1,649,200	1,649,200
Chief Executive Officer	6,755,100	6,975,000	7,127,700	7,321,300	7,417,300	7,514,200
Salaries & Wages	4,818,200	4,825,000	4,912,200	5,012,900	5,047,900	5,082,900
Overtime	266,200	266,200	266,200	277,000	279,900	282,700
Employee Benefits	1,670,700	1,883,800	1,949,300	2,031,400	2,089,500	2,148,600
Grand Total	\$ 108,682,300	\$ 115,437,800	\$ 117,882,700	\$ 119,409,100	\$ 120,024,100	\$ 120,656,000

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 supports project delivery of the Capital Improvement Plan (CIP). The 4.5% increase represents an overall consistent level of activity with a decrease in wastewater operations due to a shift in focus by the engineers on O&M project priorities rather than the capital program.

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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Chief Operating Officer Water Operations	\$ (2,126,700)	\$ (1,909,500)	\$ (996,400)	\$ (2,148,100)	\$ (238,600)	12.5%	\$ (2,157,700)
Capital Program: Employee Benefits	(600,000)	-	(282,700)	(485,600)	(485,600)	0.0%	(495,200)
Capital Program: Salaries & Wages-Direct	(1,515,000)	(1,909,500)	(713,700)	(1,632,500)	277,000	-14.5%	(1,632,500)
Capital Program: Salaries & Wages-Indire	(11,700)	-	-	(30,000)	(30,000)	0.0%	(30,000)
Chief Operating Officer Wastewater Operations	(1,183,400)	(1,325,800)	(459,400)	(1,292,700)	33,100	-2.5%	(1,313,100)
Capital Program: Employee Benefits	(335,700)	(256,900)	(130,300)	(308,000)	(51,100)	19.9%	(317,700)
Capital Program: Salaries & Wages-Direct	(847,700)	(1,068,900)	(329,100)	(984,700)	84,200	-7.9%	(995,400)
Chief Planning Officer	-	-	-	-	-	0.0%	-
Capital Program: Employee Benefits	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	0.0%	-
Chief Administrative & Compliance Officer	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	0.0%	-
Chief Financial Officer	(37,100)	(84,900)	(7,300)	(30,200)	54,700	-64.4%	(30,300)
Capital Program: Employee Benefits	(10,500)	-	(2,100)	(7,000)	(7,000)	0.0%	(7,100)
Capital Program: Salaries & Wages-Direct	(26,600)	(84,900)	(5,200)	(23,200)	61,700	-72.7%	(23,200)
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	0.0%	-
Chief Executive Officer	-	-	-	-	-	0.0%	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	0.0%	-
Grand Total	\$ (3,347,200)	\$ (3,320,200)	\$ (1,463,100)	\$ (3,471,000)	\$ (150,800)	4.5%	\$ (3,501,100)

Capital Program Allocation Five-Year Plan

Operating Area and Expense Category	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Chief Operating Officer Water Operations	\$ (1,909,500)	\$ (2,148,100)	\$ (2,157,700)	\$ (2,167,500)	\$ (2,177,200)	\$ (2,186,900)
Capital Program: Employee Benefits	-	(485,600)	(495,200)	(505,000)	(514,700)	(524,400)
Capital Program: Salaries & Wages-Direct	(1,909,500)	(1,632,500)	(1,632,500)	(1,632,500)	(1,632,500)	(1,632,500)
Capital Program: Salaries & Wages-Indire	-	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)
Chief Operating Officer Wastewater Operations	(1,325,800)	(1,292,700)	(1,313,100)	(1,319,300)	(1,325,500)	(1,331,800)
Capital Program: Employee Benefits	(256,900)	(308,000)	(317,700)	(323,900)	(330,100)	(336,400)
Capital Program: Salaries & Wages-Direct	(1,068,900)	(984,700)	(995,400)	(995,400)	(995,400)	(995,400)
Chief Planning Officer	-	-	-	-	-	-
Capital Program: Employee Benefits	-	-	-	-	-	-
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	-
Chief Administrative & Compliance Officer	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	-
Chief Financial Officer	(84,900)	(30,200)	(30,300)	(30,400)	(30,600)	(30,700)
Capital Program: Employee Benefits	-	(7,000)	(7,100)	(7,200)	(7,400)	(7,500)
Capital Program: Salaries & Wages-Direct	(84,900)	(23,200)	(23,200)	(23,200)	(23,200)	(23,200)
Capital Program: Salaries & Wages-Indire	-	-	-	-	-	-
Chief Executive Officer	-	-	-	-	-	-
Capital Program: Salaries & Wages-Direct	-	-	-	-	-	-
Grand Total	\$ (3,320,200)	\$ (3,471,000)	\$ (3,501,100)	\$ (3,517,200)	\$ (3,533,300)	\$ (3,549,400)

Staffing Plan

The increase in the staffing plan of 20 positions from 1,219 to 1,239 positions are presented in the following table. For comparison, the change in FTEs is also presented.

<i>Operating Area</i>	<i>+Increase, -Decrease Staffing Plan from FY 2021 to FY 2022</i>	<i>+Increase, -Decrease in FTEs from FY 2021 to FY 2022</i>
Water Operations	+17.00	+17.00
Financial Services	+8.00	+7.75
Administration & Compliance Officer	+7.00	+5.00
Wastewater Operations	+5.00	-5.50
Planning Services	-16.00	-7.25
Chief Executive Officer	-1.00	-0.25
Total	20.00	16.75

The Staffing Plan and FTE counts level out beginning in FY 2023 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

	Prior Year FY 2020	Current Year FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Area and Team	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan
Chief Operating Officer Water Operations	363.00	366.00	383.00	383.00	383.00	383.00	383.00
COO - Water Operations & Field Services	2.00	3.00	3.00	3.00	3.00	3.00	3.00
Energy, Research & Innovation	6.00	6.00	7.00	7.00	7.00	7.00	7.00
Facility Operations	25.00	23.00	23.00	23.00	23.00	23.00	23.00
Fleet Operations		2.00	3.00	3.00	3.00	3.00	3.00
Field Service Operations	65.00	65.00	71.00	71.00	71.00	71.00	71.00
Lake Huron Water Plant	30.00	31.00	31.00	31.00	31.00	31.00	31.00
Northeast Water Plant	30.00	32.00	33.00	33.00	33.00	33.00	33.00
Southwest Water Plant	30.00	30.00	33.00	33.00	33.00	33.00	33.00
Springwells Water Plant	36.00	36.00	37.00	37.00	37.00	37.00	37.00
Systems Operations Control	43.00	43.00	44.00	44.00	44.00	44.00	44.00
Water Director	9.00	11.00	13.00	13.00	13.00	13.00	13.00
Water Engineering	24.00	23.00	23.00	23.00	23.00	23.00	23.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Water Works Park	37.00	35.00	36.00	36.00	36.00	36.00	36.00
Chief Operating Officer Wastewater Operations	440.00	443.00	448.00	448.00	448.00	448.00	448.00
BDF, COF & Hauling	12.00	11.00	11.00	11.00	11.00	11.00	11.00
Chief Operating Officer Wastewater	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Combined Sewer Overflow	36.00	37.00	37.00	37.00	37.00	37.00	37.00
Industrial Waste Control	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Wastewater Dewatering Process	50.00	51.00	50.00	50.00	50.00	50.00	50.00
Wastewater Director	47.00	47.00	49.00	49.00	49.00	49.00	49.00
Wastewater Engineering	24.00	24.00	26.00	26.00	26.00	26.00	26.00
Wastewater Incineration Process	52.00	51.00	53.00	53.00	53.00	53.00	53.00
Wastewater Laboratories	38.00	40.00	41.00	41.00	41.00	41.00	41.00
Wastewater Operations	15.00	15.00	14.00	14.00	14.00	14.00	14.00
Wastewater Primary Process	50.00	55.00	52.00	52.00	52.00	52.00	52.00
Wastewater Process Control	27.00	25.00	25.00	25.00	25.00	25.00	25.00
Wastewater Secondary Process	46.00	44.00	47.00	47.00	47.00	47.00	47.00
Chief Planning Officer	70.00	73.00	57.00	60.00	66.00	66.00	66.00
Asset Management	9.00	11.00	8.00	9.00	11.00	11.00	11.00
Capital Improvement Planning	8.00	8.00	6.00	7.00	7.00	7.00	7.00
Chief Planning Officer	3.00	3.00	2.00	2.00	2.00	2.00	2.00
Energy Management	0.00	0.00					
Systems Analytics	43.00	44.00	36.00	36.00	39.00	39.00	39.00
Systems Planning	7.00	7.00	5.00	6.00	7.00	7.00	7.00
Chief Administration & Compliance Officer	122.00	124.00	131.00	131.00	131.00	131.00	131.00
Chief Administrative Officer	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Enterprise Risk Management and Safety	8.00	8.00	8.00	8.00	8.00	8.00	8.00
General Counsel	7.00	7.00	8.00	8.00	8.00	8.00	8.00
Info Technology Business Productivity Systems	13.00	10.00	13.00	13.00	13.00	13.00	13.00
Info Technology Enterprise Asset Mgmt Systems	13.00	16.00	17.00	17.00	17.00	17.00	17.00
Info Technology Infrastructure	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Security & Risk	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Info Technology Service Delivery	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Info Technology Project Management Office	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Office of the CIO	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Staffing Plan (continued)

	Prior Year FY 2020	Current Year FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Area and Team	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan	Staffing Plan
Chief Administration & Compliance Officer (continued)							
Organizational Development Administration	31.00	4.00	5.00	5.00	5.00	5.00	5.00
Organizational Development Talent Management		6.00	6.00	6.00	6.00	6.00	6.00
Organizational Development Organizational Wellness		3.00	4.00	4.00	4.00	4.00	4.00
Organizational Development Training		12.00	12.00	12.00	12.00	12.00	12.00
Organizational Development Performance		3.00	3.00	3.00	3.00	3.00	3.00
Organizational Development Recruiting		4.00	4.00	4.00	4.00	4.00	4.00
Organizational Development Compensation		1.00	1.00	1.00	1.00	1.00	1.00
Chief Financial Officer	123.00	124.00	132.00	133.00	133.00	133.00	133.00
Chief Financial Officer	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Data Analytics & Internal Audit	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Financial Planning & Analysis	9.00	9.00	10.00	10.00	10.00	10.00	10.00
Financial Reporting & Accounting	27.00	26.00	31.00	31.00	31.00	31.00	31.00
Logistics and Materials	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	6.00	5.00	5.00	5.00	5.00	5.00	5.00
Procurement Director	29.00	31.00	32.00	32.00	32.00	32.00	32.00
Public Finance	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Reporting and Compliance	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Transformation	8.00	8.00	7.00	8.00	8.00	8.00	8.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Chief Executive Officer	89.00	89.00	88.00	89.00	91.00	92.00	93.00
Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00
HazMat	19.00	19.00	19.00	19.00	21.00	21.00	21.00
Public Affairs	8.00	8.00	7.00	8.00	8.00	8.00	8.00
Security and Integrity	60.00	60.00	60.00	60.00	60.00	61.00	62.00
Grand Total	1,207.00	1,219.00	1,239.00	1,244.00	1,252.00	1,253.00	1,254.00

Full-time Equivalents

	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Operating Area and Team							
Chief Operating Officer Water Operations	363.00	365.25	382.25	382.25	382.25	382.25	382.25
COO - Water Operations & Field Services	2.00	2.75	2.75	2.75	2.75	2.75	2.75
Energy, Research & Innovation	6.00	6.00	7.00	7.00	7.00	7.00	7.00
Facility Operations	25.00	22.50	22.50	22.50	22.50	22.50	22.50
Fleet Operations		2.00	3.00	3.00	3.00	3.00	3.00
Field Service Operations	65.00	65.00	71.00	71.00	71.00	71.00	71.00
Lake Huron Water Plant	30.00	31.00	31.00	31.00	31.00	31.00	31.00
Northeast Water Plant	30.00	32.00	33.00	33.00	33.00	33.00	33.00
Southwest Water Plant	30.00	30.00	33.00	33.00	33.00	33.00	33.00
Springwells Water Plant	36.00	36.00	37.00	37.00	37.00	37.00	37.00
Systems Operations Control	43.00	43.00	44.00	44.00	44.00	44.00	44.00
Water Director	9.00	11.00	13.00	13.00	13.00	13.00	13.00
Water Engineering	24.00	23.00	23.00	23.00	23.00	23.00	23.00
Water Quality	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Water Works Park	37.00	35.00	36.00	36.00	36.00	36.00	36.00
Chief Operating Officer Wastewater Operations	432.25	436.75	431.25	447.75	447.75	447.75	447.75
BDF, COF & Hauling	11.00	11.00	9.50	11.00	11.00	11.00	11.00
Chief Operating Officer Wastewater	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Combined Sewer Overflow	34.25	36.50	34.75	36.75	36.75	36.75	36.75
Industrial Waste Control	29.00	28.50	28.25	29.00	29.00	29.00	29.00
Wastewater Dewatering Process	49.00	51.00	48.75	50.00	50.00	50.00	50.00
Wastewater Director	47.00	46.00	47.50	49.00	49.00	49.00	49.00
Wastewater Engineering	24.00	23.50	25.50	26.00	26.00	26.00	26.00
Wastewater Incineration Process	52.00	49.75	49.25	53.00	53.00	53.00	53.00
Wastewater Laboratories	38.00	40.00	39.75	41.00	41.00	41.00	41.00
Wastewater Operations	12.00	13.50	11.00	14.00	14.00	14.00	14.00
Wastewater Primary Process	50.00	54.50	51.00	52.00	52.00	52.00	52.00
Wastewater Process Control	26.00	24.50	25.00	25.00	25.00	25.00	25.00
Wastewater Secondary Process	46.00	44.00	47.00	47.00	47.00	47.00	47.00
Chief Planning Officer	64.25	63.25	56.00	59.50	66.00	66.00	66.00
Asset Management	9.00	9.50	7.50	8.50	11.00	11.00	11.00
Capital Improvement Planning	4.25	5.50	6.00	7.00	7.00	7.00	7.00
Chief Planning Officer	2.00	3.00	2.00	2.00	2.00	2.00	2.00
Energy Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Systems Analytics	43.00	39.25	36.00	36.00	39.00	39.00	39.00
Systems Planning	6.00	6.00	4.50	6.00	7.00	7.00	7.00
Chief Administration & Compliance Officer	120.00	124.00	129.00	130.50	130.50	130.50	130.50
Chief Administrative Officer	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Enterprise Risk Management and Safety	6.00	8.00	6.50	8.00	8.00	8.00	8.00
General Counsel	7.00	7.00	8.00	8.00	8.00	8.00	8.00
Info Technology Business Productivity Systems	13.00	10.00	13.00	13.00	13.00	13.00	13.00
Info Technology Enterprise Asset Mgmt Systems	13.00	16.00	16.50	16.50	16.50	16.50	16.50
Info Technology Infrastructure	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Info Technology Security & Risk	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Info Technology Service Delivery	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Info Technology Project Management Office	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Office of the CIO	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Full-time Equivalents (continued)

Operating Area and Team	Prior Year FY 2020 FTEs	Current Year FY 2021 FTEs	FY 2022 FTEs	FY 2023 FTEs	FY 2024 FTEs	FY 2025 FTEs	FY 2026 FTEs
Chief Administration & Compliance Officer (continued)							
Organizational Development Administration	31.00	4.00	5.00	5.00	5.00	5.00	5.00
Organizational Development Talent Management		6.00	6.00	6.00	6.00	6.00	6.00
Organizational Development Organizational Wellness		3.00	4.00	4.00	4.00	4.00	4.00
Organizational Development Training		12.00	12.00	12.00	12.00	12.00	12.00
Organizational Development Performance		3.00	3.00	3.00	3.00	3.00	3.00
Organizational Development Recruiting		4.00	4.00	4.00	4.00	4.00	4.00
Organizational Development Compensation		1.00	1.00	1.00	1.00	1.00	1.00
Chief Financial Officer	119.25	122.00	129.75	131.00	131.50	131.50	131.50
Chief Financial Officer	5.00	4.50	5.50	5.50	5.50	5.50	5.50
Data Analytics & Internal Audit	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Financial Planning & Analysis	9.00	9.00	10.00	10.00	10.00	10.00	10.00
Financial Reporting & Accounting	26.00	25.00	30.00	30.00	30.00	30.00	30.00
Logistics and Materials	23.25	24.00	24.00	24.00	24.00	24.00	24.00
Owners' Representative	6.00	5.00	5.00	5.00	5.00	5.00	5.00
Procurement Director	27.00	30.50	32.00	32.00	32.00	32.00	32.00
Public Finance	5.00	5.00	6.00	6.00	6.00	6.00	6.00
Reporting and Compliance	4.00	5.00	5.00	5.00	5.00	5.00	5.00
Transformation	8.00	8.00	6.25	7.50	8.00	8.00	8.00
Treasury	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Chief Executive Officer	88.50	88.25	88.00	89.00	91.00	92.00	93.00
Chief Executive Officer	2.00	2.00	2.00	2.00	2.00	2.00	2.00
HazMat	19.00	19.00	19.00	19.00	21.00	21.00	21.00
Public Affairs	7.50	7.25	7.00	8.00	8.00	8.00	8.00
Security and Integrity	60.00	60.00	60.00	60.00	60.00	61.00	62.00
Grand Total	1,187.25	1,199.50	1,216.25	1,240.00	1,249.00	1,250.00	1,251.00

Utilities

Capturis, our multi-site utility information management system, has now been implemented for 2.5 years. There are a total of 68 trained users. The system allows employees to easily view invoices, run reports and pull any utility information that may be needed. Capturis continues to allow us to monitor our utility usage and billing more accurately and efficiently.

Last year, we took initiative to eliminate all summary billing accounts from DTE. These were bills that had multiple locations on them. The elimination of these summary accounts has given us much more timely bills over the last year and eliminated many prior billing issues.

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 3 – Operating Financial Plans.

Biennial Budget Request (tables 1 through 4)

Table 1 – Electric

FY 2022 indicates an increase of \$393,300, or 1.0%. The largest driving factor is the increased usage in the water pumping station and water plants.

Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Biosolids Dryer Facility	\$ 1,118,100	\$ 1,065,000	\$ 575,300	\$ 1,120,000	\$ 55,000	5.2%	\$ 1,131,200
Combined Sewer Overflow Facilities	\$ 833,300	\$ 975,000	\$ 502,600	\$ 955,400	\$ (19,600)	-2.0%	\$ 964,000
Lake Huron Water Plant	\$ 6,466,400	\$ 6,100,000	\$ 3,278,900	\$ 6,500,000	\$ 400,000	6.6%	\$ 6,500,000
McKinstry Warehouse	\$ 4,500	\$ 28,000	\$ 2,600	\$ 27,000	\$ (1,000)	-3.4%	\$ 27,600
Northeast Water Plant	\$ 3,069,400	\$ 2,800,000	\$ 1,658,500	\$ 2,800,000	\$ -	0.0%	\$ 2,800,000
Southwest Water Plant	\$ 1,436,600	\$ 1,270,000	\$ 799,500	\$ 1,270,000	\$ -	0.0%	\$ 1,270,000
Springwells Water Plant	\$ 2,935,100	\$ 3,100,000	\$ 1,987,800	\$ 3,000,000	\$ (100,000)	-3.2%	\$ 3,000,000
Systems Analytics	\$ 18,600	\$ 81,700	\$ 26,700	\$ 81,700	\$ -	0.0%	\$ 82,000
Systems Operations Control	\$ 45,300	\$ 65,000	\$ 26,500	\$ 65,000	\$ -	0.0%	\$ 65,000
Wastewater Operations	\$ 10,389,400	\$ 10,498,000	\$ 4,750,700	\$ 10,226,200	\$ (271,800)	-2.6%	\$ 10,533,000
Wastewater Operations Pumping (Lift) Stations	2,148,000	2,109,500	1,416,600	2,137,000	27,500	1.3%	2,134,900
Water Pumping Stations	10,089,900	9,147,800	5,412,100	9,401,000	253,200	2.8%	9,401,000
Water Works Park	2,114,600	2,000,000	996,500	2,050,000	50,000	2.5%	2,050,000
Grand Total	\$ 40,669,200	\$ 39,240,000	\$ 21,434,300	\$ 39,633,300	\$ 393,300	1.0%	\$ 39,958,700

Table 2 – Gas

Natural gas has a decrease of \$1,063,400, or 16.0%. The biggest drive to this decrease is continued decline in usage at the Biosolids Dryer Facility and WRRF.

Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Biosolids Dryer Facility	\$ 1,868,400	\$ 2,187,000	\$ 900,300	\$ 1,900,000	\$ (287,000)	-13.1%	\$ 2,020,000
Combined Sewer Overflow Facilities	\$ 188,200	\$ 210,000	\$ 69,700	\$ 206,200	\$ (3,800)	-1.8%	\$ 209,500
Lake Huron Water Plant	\$ 145,100	\$ 180,000	\$ 52,000	\$ 180,000	\$ -	0.0%	\$ 180,000
McKinstry Warehouse	\$ 6,200	\$ 26,500	\$ 1,600	\$ 25,000	\$ (1,500)	-5.7%	\$ 25,500
Northeast Water Plant	\$ 161,400	\$ 153,100	\$ 45,600	\$ 153,100	\$ -	0.0%	\$ 153,100
Southwest Water Plant	\$ 154,000	\$ 140,000	\$ 48,100	\$ 140,000	\$ -	0.0%	\$ 140,000
Springwells Water Plant	\$ 263,800	\$ 280,200	\$ 79,100	\$ 280,300	\$ 100	0.0%	\$ 280,300
Systems Operations Control	\$ 200	\$ 500	\$ 100	\$ 200	\$ (300)	-50.0%	\$ 200
Wastewater Operations	\$ 2,104,300	\$ 3,094,000	\$ 859,000	\$ 2,343,600	\$ (750,400)	-24.3%	\$ 2,388,000
Wastewater Operations Pumping (Lift) Stations	13,600	29,000	4,300	24,000	(5,000)	-17.2%	24,000
Water Pumping Stations	67,000	78,700	21,000	73,200	(5,500)	-7.0%	73,200
Water Works Park	223,400	250,000	72,600	240,000	(10,000)	-4.0%	240,000
Grand Total	\$ 5,195,600	\$ 6,629,000	\$ 2,153,400	\$ 5,565,600	\$ (1,063,400)	-16.0%	\$ 5,733,800

Table 3 – Water

Water reflects a decrease of \$828,200, or 21.0%. This decrease is almost exclusively driven by plumbing repairs at the Chlor/Dechlor facility resulting in a decrease of almost 50% in water consumption at this facility.

Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Biosolids Dryer Facility	\$ 172,100	\$ 179,000	\$ 101,400	\$ 180,000	\$ 1,000	0.6%	\$ 182,400
Combined Sewer Overflow Facilities	\$ 373,100	\$ 370,100	\$ 173,600	\$ 360,300	\$ (9,800)	-2.6%	\$ 365,100
Lake Huron Water Plant	\$ -	\$ 1,000	\$ -	\$ 1,000	\$ -	0.0%	\$ 1,000
McKinstry Warehouse	\$ -	\$ 6,500	\$ -	\$ 5,000	\$ (1,500)	-23.3%	\$ 5,100
Northeast Water Plant	\$ -	\$ 2,000	\$ -	\$ 2,000	\$ -	0.0%	\$ 2,000
Southwest Water Plant	\$ 600	\$ 500	\$ -	\$ 500	\$ -	0.0%	\$ 500
Systems Operations Control	\$ 500	\$ 600	\$ 200	\$ 600	\$ -	0.0%	\$ 600
Wastewater Operations	\$ 2,565,300	\$ 3,331,000	\$ 983,000	\$ 2,502,100	\$ (828,900)	-24.9%	\$ 2,552,000
Wastewater Operations Pumping (Lift) Stations	66,400	56,000	35,100	67,500	11,500	20.5%	67,500
Water Pumping Stations	600	1,500	200	1,000	(500)	-33.3%	1,000
Water Works Park	-	-	-	-	-	n/a	-
Grand Total	\$ 3,178,600	\$ 3,948,200	\$ 1,293,500	\$ 3,120,000	\$ (828,200)	-21.0%	\$ 3,177,200

Table 4 – Sewer

Sewer reflects a decrease in cost of \$40,700, or 1.9%. The sewer charges represent sewer usage and stormwater drainage charges. The largest driving factor is a budget reduction of \$70,000 at Water Works Park to better align with actual stormwater charges.

Cost Center	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Biosolids Dryer Facility	\$ 345,200	\$ 350,000	\$ 204,800	\$ 350,400	\$ 400	0.1%	\$ 357,600
Combined Sewer Overflow Facilities	\$ 661,300	\$ 573,500	\$ 313,400	\$ 604,400	\$ 30,900	5.4%	\$ 614,400
Lake Huron Water Plant	\$ 68,300	\$ 70,000	\$ 28,500	\$ 70,000	\$ -	0.0%	\$ 70,000
McKinstry Warehouse	\$ 17,600	\$ 33,800	\$ 9,100	\$ 35,000	\$ 1,200	3.6%	\$ 35,700
Northeast Water Plant	\$ 127,000	\$ 130,000	\$ 65,200	\$ 130,000	\$ -	0.0%	\$ 130,000
Southwest Water Plant	\$ 319,200	\$ 350,000	\$ -	\$ 350,000	\$ -	0.0%	\$ 350,000
Systems Operations Control	\$ 1,300	\$ 9,000	\$ 600	\$ 5,000	\$ (4,000)	-44.4%	\$ 5,000
Wastewater Operations	\$ 532,700	\$ 494,000	\$ 267,900	\$ 497,600	\$ 3,600	0.7%	\$ 508,000
Wastewater Operations Pumping (Lift) Stations	8,700	10,500	4,500	9,000	\$ (1,500)	-14.3%	9,000
Water Pumping Stations	2,300	4,000	1,000	2,700	(1,300)	-32.5%	2,700
Water Works Park	25,700	95,000	12,100	25,000	(70,000)	-73.7%	25,000
Grand Total	\$ 2,109,300	\$ 2,119,800	\$ 907,100	\$ 2,079,100	\$ (40,700)	-1.9%	\$ 2,107,400

Five-Year Financial Plan (tables 5 through 8)
Table 5 – Electric

The increase in the amount requested for electric through FY 2026 is less than 1% per year, representing the assumed increase in surcharges and electric cost each year from DTE.

Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Biosolids Dryer Facility	\$ 1,065,000	\$ 575,300	\$ 1,120,000	\$ 55,000	5.2%	\$ 1,131,200	\$ 1,142,500	\$ 1,176,800	\$ 1,212,100
Combined Sewer Overflow Facilities	975,000	502,600	955,400	(19,600)	-2.0%	964,000	970,200	973,400	973,600
Lake Huron Water Plant	6,100,000	3,278,900	6,500,000	400,000	6.6%	6,500,000	6,500,000	6,500,000	6,500,000
McKinstry Warehouse	28,000	2,600	27,000	(1,000)	-3.4%	27,600	28,100	28,700	29,300
Northeast Water Plant	2,800,000	1,658,500	2,800,000	-	0.0%	2,800,000	2,800,000	2,800,000	2,800,000
Southwest Water Plant	1,270,000	799,500	1,270,000	-	0.0%	1,270,000	1,270,000	1,270,000	1,270,000
Springwells Water Plant	3,100,000	1,987,800	3,000,000	(100,000)	-3.2%	3,000,000	3,000,000	3,000,000	3,000,000
Systems Analytics	81,700	26,700	81,700	-	0.0%	82,000	82,300	82,600	82,900
Systems Operations Control	65,000	26,500	65,000	-	0.0%	65,000	65,000	65,000	65,000
Wastewater Operations	10,498,000	4,750,700	10,226,200	(271,800)	-2.6%	10,533,000	10,888,000	11,187,000	11,411,000
Wastewater Operations Pumping (Lift) Stations	2,109,500	1,416,600	2,137,000	27,500	1.3%	2,134,900	2,134,900	2,134,900	2,134,900
Water Pumping Stations	9,147,800	5,412,100	9,401,000	253,200	2.8%	9,401,000	9,401,000	9,401,000	9,401,000
Water Works Park	2,000,000	996,500	2,050,000	50,000	2.5%	2,050,000	2,050,000	2,050,000	2,050,000
Grand Total	\$ 39,240,000	\$ 21,434,300	\$ 39,633,300	\$ 393,300	1.0%	\$ 39,958,700	\$ 40,332,000	\$ 40,669,400	\$ 40,929,800

Table 6 – Gas

The average increase for FY 2023 through FY 2026 in the amount requested for gas each year is approximately 2%. This is based on the assumed increase in natural gas cost from the State of Michigan & transportation cost from DTE. The decrease for FY 2022 is discussed in Table 2 above.

Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Biosolids Dryer Facility	\$ 2,187,000	\$ 900,300	\$ 1,900,000	\$ (287,000)	-13.1%	\$ 2,020,000	\$ 2,060,000	\$ 2,101,000	\$ 2,143,000
Combined Sewer Overflow Facilities	210,000	69,700	206,200	(3,800)	-1.8%	209,500	211,800	213,300	213,300
Lake Huron Water Plant	180,000	52,000	180,000	-	0.0%	180,000	180,000	180,000	180,000
McKinstry Warehouse	26,500	1,600	25,000	(1,500)	-5.7%	25,500	26,000	26,500	27,100
Northeast Water Plant	153,100	45,600	153,100	-	0.0%	153,100	153,100	153,100	153,100
Southwest Water Plant	140,000	48,100	140,000	-	0.0%	140,000	140,000	140,000	140,000
Springwells Water Plant	280,200	79,100	280,300	100	0.0%	280,300	280,300	280,300	280,300
Systems Operations Control	500	100	200	(300)	-50.0%	200	300	300	300
Wastewater Operations	3,094,000	859,000	2,343,600	(750,400)	-24.3%	2,388,000	2,526,000	2,539,000	2,552,000
Wastewater Operations Pumping (Lift) Stations	29,000	4,300	24,000	(5,000)	-17.2%	24,000	24,000	24,000	24,000
Water Pumping Stations	78,700	21,000	73,200	(5,500)	-7.0%	73,200	73,200	73,200	73,200
Water Works Park	250,000	72,600	240,000	(10,000)	-4.0%	240,000	240,000	240,000	240,000
Grand Total	\$ 6,629,000	\$ 2,153,400	\$ 5,565,600	\$ (1,063,400)	-16.0%	\$ 5,733,800	\$ 5,914,700	\$ 5,970,700	\$ 6,026,200

Table 7 – Water

We have budgeted for an approximate 2% increase for water for FY 2023 through FY 2026 to compensate for the increase in water charges from DWSD and other municipalities.

Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Biosolids Dryer Facility	\$ 179,000	\$ 101,400	\$ 180,000	\$ 1,000	0.6%	\$ 182,400	\$ 184,200	\$ 184,200	\$ 186,000
Combined Sewer Overflow Facilities	370,100	173,600	360,300	(9,800)	-2.6%	365,100	368,000	368,600	369,100
Lake Huron Water Plant	1,000	-	1,000	-	0.0%	1,000	1,000	1,000	1,000
McKinstry Warehouse	6,500	-	5,000	(1,500)	-23.3%	5,100	5,200	5,300	5,400
Northeast Water Plant	2,000	-	2,000	-	0.0%	2,000	2,000	2,000	2,000
Southwest Water Plant	500	-	500	-	0.0%	500	500	500	500
Systems Operations Control	600	200	600	-	0.0%	600	600	600	600
Wastewater Operations	3,331,000	983,000	2,502,100	(828,900)	-24.9%	2,552,000	2,641,000	2,722,000	2,776,000
Wastewater Operations Pumping (Lift) Stations	56,000	35,100	67,500	\$ 11,500	20.5%	67,500	67,500	67,500	67,500
Water Pumping Stations	1,500	200	1,000	(500)	-33.3%	1,000	1,000	1,000	1,000
Water Works Park	-	-	-	-	n/a	-	-	-	-
Grand Total	\$ 3,948,200	\$ 1,293,500	\$ 3,120,000	\$ (828,200)	-21.0%	\$ 3,177,200	\$ 3,271,000	\$ 3,352,700	\$ 3,409,100

Table 8 – Sewer

The decrease for FY 2022 is discussed in Table 4. The Budget Request for FY 2023 through FY 2026 increases an average of 1% per year.

Cost Center	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Biosolids Dryer Facility	\$ 350,000	\$ 204,800	\$ 350,400	\$ 400	0.1%	\$ 357,600	\$ 361,200	\$ 361,200	\$ 364,800
Combined Sewer Overflow Facilities	573,500	313,400	604,400	30,900	5.4%	614,400	624,800	626,500	626,700
Lake Huron Water Plant	70,000	28,500	70,000	-	0.0%	70,000	70,000	70,000	70,000
McKinstry Warehouse	33,800	9,100	35,000	1,200	3.6%	35,700	36,400	37,100	37,900
Northeast Water Plant	130,000	65,200	130,000	-	0.0%	130,000	130,000	130,000	130,000
Southwest Water Plant	350,000	-	350,000	-	0.0%	350,000	350,000	350,000	350,000
Systems Operations Control	9,000	600	5,000	(4,000)	-44.4%	5,000	5,000	5,000	5,000
Wastewater Operations	494,000	267,900	497,600	3,600	0.7%	508,000	518,000	528,000	539,000
Wastewater Operations Pumping (Lift) Stations	10,500	4,500	9,000	(1,500)	-14.3%	9,000	9,000	9,000	9,000
Water Pumping Stations	4,000	1,000	2,700	(1,300)	-32.5%	2,700	2,700	2,700	2,700
Water Works Park	95,000	12,100	25,000	(70,000)	-73.7%	25,000	25,000	25,000	25,000
Grand Total	\$ 2,119,800	\$ 907,100	\$ 2,079,100	\$ (40,700)	-1.9%	\$ 2,107,400	\$ 2,132,100	\$ 2,144,500	\$ 2,160,100

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. The process is subject to manual tabulation until appropriate systems are in place. 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 to 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 3 – Operating Financial Plans.

Biennial Budget Request

The biennial budget reflects an overall decrease in FY 2022 as a result of several shared services nearing completion in the Information Technology and Systems Analytics Areas. The GLWA and DWSD are continuing to evaluate operational goals.

Biennial Budget by Area - Shared Services - GLWA as Provider

Cost Center & Description	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Water System Operations	\$ 57,600	\$ -	\$ -	\$ -	\$ -	0.0%	\$ -
882121 - Water Quality	57,600	-	-	-	-	0.0%	-
Wastewater System Operations	(1,036,800)	(338,200)	(169,000)	(344,900)	(6,700)	2.0%	(351,900)
892222 - Wastewater Process Control	(188,800)	(61,600)	(30,800)	(62,800)	(1,200)	1.9%	(64,100)
892270 - Combined Sewer Overflow	(59,400)	(19,400)	(9,700)	(19,700)	(300)	1.5%	(20,100)
892279 - Belle Isle Combined Sewer Overflow	(234,200)	(76,400)	(38,200)	(77,900)	(1,500)	2.0%	(79,500)
892342 - Belle Isle Pumping Station	(172,900)	(56,400)	(28,200)	(57,500)	(1,100)	2.0%	(58,700)
892343 - Blue Hill Pumping Station	(231,400)	(75,500)	(37,700)	(77,000)	(1,500)	2.0%	(78,500)
892347 - Fischer Pumping Station	(37,500)	(12,200)	(6,100)	(12,500)	(300)	2.5%	(12,700)
892352 - Woodmere Pumping Station	(112,600)	(36,700)	(18,300)	(37,500)	(800)	2.2%	(38,300)
Centralized Services	(589,400)	(4,023,400)	(2,011,700)	(1,378,900)	2,644,500	-65.7%	(1,406,300)
881201 - Security and Integrity	(364,000)	(331,500)	(165,700)	(338,100)	(6,600)	2.0%	(344,800)
882301 - Systems Operations Control	(1,341,900)	(437,800)	(218,900)	(446,600)	(8,800)	2.0%	(455,500)
882421 - Facility Operations	-	-	-	-	-	0.0%	-
882431 - Field Service Operations	(52,100)	(17,000)	(8,500)	(17,400)	(400)	2.4%	(17,700)
883321 - IT Service Delivery	(24,000)	(166,600)	(83,300)	(149,900)	16,700	0.0%	(152,900)
883331 - IT Infrastructure	(781,900)	(1,725,600)	(862,800)	(426,900)	1,298,700	-75.3%	(435,400)
883341 - IT Business Productivity Systems	2,061,400	-	-	-	-	0.0%	-
883351 - IT Enterprise Asset Management Systems	(222,800)	(1,214,900)	(607,500)	-	1,214,900	-100.0%	-
883361 - IT Security & Risk	(10,300)	(35,000)	(17,500)	-	35,000	-100.0%	-
886401 - Systems Analytics	146,200	(95,000)	(47,500)	-	95,000	-100.0%	-
Administrative & Other Services	(165,100)	(168,400)	(115,500)	(168,700)	(300)	0.2%	(169,100)
883101 - General Counsel	-	-	-	-	-	0.0%	-
883201 - Organizational Development	(4,500)	-	-	-	-	0.0%	-
884131 - Treasury	(108,800)	(150,000)	(74,000)	(150,000)	-	0.0%	(150,000)
884141 - Public Finance	(51,800)	(18,400)	(41,500)	(18,700)	(300)	1.6%	(19,100)
Grand Total	\$ (1,733,700)	\$ (4,530,000)	\$ (2,296,200)	\$ (1,892,500)	\$ 2,637,500	-58.2%	\$ (1,927,300)

Biennial Budget by Area - Shared Services - GLWA as Subscriber

Cost Center & Description	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Centralized Services	\$ 5,963,100	\$ 3,597,100	\$ 2,797,000	\$ 3,551,100	\$ (46,000)	-1.3%	\$ 2,912,000
882421 - Facility Operations	2,300,000	2,346,000	1,150,000	2,392,900	46,900	2.0%	2,440,800
882422 - Fleet Operations	1,590,000	-	795,000	-	-	0.0%	-
882431 - Field Service Operations	200,000	204,000	100,000	104,000	(100,000)	-49.0%	106,100
883331 - IT Infrastructure	1,010,000	153,000	97,000	156,100	3,100	2.0%	159,200
883341 - Info Tech Business Productivity Systems	150,000	153,000	75,000	156,100	3,100	2.0%	159,200
883351 - IT Enterprise Asset Management Systems	713,100	741,100	580,000	742,000	900	0.1%	46,700
Grand Total	\$ 5,963,100	\$ 3,597,100	\$ 2,797,000	\$ 3,551,100	\$ (46,000)	-1.3%	\$ 2,912,000

Five-Year Financial Plan

Five-Year Financial Plan by Area - Shared Services - GLWA as Provider

Cost Center & Description	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water System Operations	\$ -	\$ -	\$ -	\$ -	0.0%	\$ -	\$ -	\$ -	\$ -
882121 - Water Quality	-	-	-	-	0.0%	-	-	-	-
Wastewater System Operations	(338,200)	(169,000)	(344,900)	(6,700)	2.0%	(351,900)	(359,000)	(366,300)	(373,400)
892222 - Wastewater Process Control	(61,600)	(30,800)	(62,800)	(1,200)	1.9%	(64,100)	(65,400)	(66,700)	(68,000)
892270 - Combined Sewer Overflow	(19,400)	(9,700)	(19,700)	(300)	1.5%	(20,100)	(20,500)	(20,900)	(21,400)
892279 - Belle Isle Combined Sewer Overflow	(76,400)	(38,200)	(77,900)	(1,500)	2.0%	(79,500)	(81,100)	(82,700)	(84,400)
892342 - Belle Isle Pumping Station	(56,400)	(28,200)	(57,500)	(1,100)	2.0%	(58,700)	(59,900)	(61,100)	(62,300)
892343 - Blue Hill Pumping Station	(75,500)	(37,700)	(77,000)	(1,500)	2.0%	(78,500)	(80,100)	(81,700)	(83,300)
892347 - Fischer Pumping Station	(12,200)	(6,100)	(12,500)	(300)	2.5%	(12,700)	(13,000)	(13,300)	(13,500)
892352 - Woodmere Pumping Station	(36,700)	(18,300)	(37,500)	(800)	2.2%	(38,300)	(39,000)	(39,900)	(40,500)
Centralized Services	(4,023,400)	(2,011,700)	(1,378,900)	2,644,500	-65.7%	(1,406,300)	(1,434,500)	(1,463,100)	(1,492,400)
881201 - Security and Integrity	(331,500)	(165,700)	(338,100)	(6,600)	2.0%	(344,800)	(351,800)	(358,900)	(366,000)
882301 - Systems Operations Control	(437,800)	(218,900)	(446,600)	(8,800)	2.0%	(455,500)	(464,600)	(473,800)	(483,300)
882421 - Facility Operations	-	-	-	-	0.0%	-	-	-	-
882431 - Field Service Operations	(17,000)	(8,500)	(17,400)	(400)	2.4%	(17,700)	(18,000)	(18,300)	(18,800)
883321 - IT Service Delivery	(166,600)	(83,300)	(149,900)	16,700	0.0%	(152,900)	(156,000)	(159,200)	(162,400)
883331 - IT Infrastructure	(1,725,600)	(862,800)	(426,900)	1,298,700	-75.3%	(435,400)	(444,100)	(452,900)	(461,900)
883341 - IT Business Productivity Systems	-	-	-	-	0.0%	-	-	-	-
883351 - IT Enterprise Asset Management Systems	(1,214,900)	(607,500)	-	1,214,900	-100.0%	-	-	-	-
883361 - IT Security & Risk	(35,000)	(17,500)	-	35,000	-100.0%	-	-	-	-
886401 - Systems Analytics	(95,000)	(47,500)	-	95,000	-100.0%	-	-	-	-
Administrative & Other Services	(168,400)	(115,500)	(168,700)	(300)	0.2%	(169,100)	(169,500)	(169,800)	(170,200)
883101 - General Counsel	-	-	-	-	0.0%	-	-	-	-
883201 - Organizational Development	-	-	-	-	0.0%	-	-	-	-
884131 - Treasury	(150,000)	(74,000)	(150,000)	-	0.0%	(150,000)	(150,000)	(150,000)	(150,000)
884141 - Public Finance	(18,400)	(41,500)	(18,700)	(300)	1.6%	(19,100)	(19,500)	(19,800)	(20,200)
Grand Total	\$ (4,530,000)	\$ (2,296,200)	\$ (1,892,500)	\$ 2,637,500	-58.2%	\$ (1,927,300)	\$ (1,963,000)	\$ (1,999,200)	\$ (2,036,000)

Five-Year Financial Plan by Area - Shared Services - GLWA as Subscriber

Cost Center & Description	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Centralized Services	\$ 3,597,100	\$ 2,797,000	\$ 3,551,100	\$ (46,000)	-1.3%	\$ 2,912,000	\$ 2,970,200	\$ 3,029,600	\$ 3,090,200
882421 - Facility Operations	2,346,000	1,150,000	2,392,900	46,900	2.0%	2,440,800	2,489,600	2,539,400	2,590,200
882422 - Fleet Operations	-	795,000	-	-	0.0%	-	-	-	-
882431 - Field Service Operations	204,000	100,000	104,000	(100,000)	-49.0%	106,100	108,200	110,400	112,600
883331 - IT Infrastructure	153,000	97,000	156,100	3,100	2.0%	159,200	162,400	165,600	168,900
883341 - Info Tech Business Productivity Systems	153,000	75,000	156,100	3,100	2.0%	159,200	162,400	165,600	168,900
883351 - IT Enterprise Asset Management Systems	741,100	580,000	742,000	900	0.1%	46,700	47,600	48,600	49,600
Grand Total	\$ 3,597,100	\$ 2,797,000	\$ 3,551,100	\$ (46,000)	-1.3%	\$ 2,912,000	\$ 2,970,200	\$ 3,029,600	\$ 3,090,200

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 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
DoIT-001 Financial Information System	883341 - Info Tech Business Productivity Systems	\$ 153,000	\$ 75,000	\$ 156,100	\$ 159,200	\$ 162,400	\$ 165,600	\$ 168,900
DoIT-002 Radios	883331 - IT Infrastructure	153,000	75,000	156,100	159,200	162,400	165,600	168,900
DoIT-003 Customer Service Technology Suite	883331 - IT Infrastructure	44,900	22,000	45,800	46,700	47,600	48,600	49,600
Fuel	882422 - Fleet Operations	-	45,000	-	-	-	-	-
ITS-001 Retail AMR	883341 - IT Business Productivity Systems	-	-	-	-	-	-	-
ITS-002 Customer Service Tech Suite	886401 - Systems Analytics	-	-	-	-	-	-	-
	883321 - Info Technology Service Delivery	-	-	-	-	-	-	-
	883351 - IT Enterprise Asset Management Systems	-	-	-	-	-	-	-
	883351 - IT Enterprise Asset Management Systems	-	-	-	-	-	-	-
ITS-003 See-Click-Fix	883351 - IT Enterprise Asset Management Systems	-	-	-	-	-	-	-
ITS-004 WAM	883351 - IT Enterprise Asset Management Systems	(993,750)	(607,500)	-	-	-	-	-
ITS-005 Mobile Work Force	886401 - Systems Analytics	(95,000)	(47,500)	-	-	-	-	-
ITS-006 ESRI - Geographic Information System	883341 - IT Business Productivity Systems	-	-	-	-	-	-	-
	883351 - IT Enterprise Asset Management Systems	(93,800)	-	-	-	-	-	-
ITS-007 DADS	883351 - IT Enterprise Asset Management Systems	(127,350)	-	-	-	-	-	-
ITS-008 TIBCO	883331 - IT Infrastructure	(1,725,600)	(862,800)	(426,900)	(435,400)	(444,100)	(452,900)	(461,900)
ITS-009 IT Infrastructure	883321 - Info Technology Service Delivery	(166,600)	(83,300)	(149,900)	(152,900)	(156,000)	(159,200)	(162,400)
	883361 - IT Security & Risk	(35,000)	(17,500)	-	-	-	-	-
LS-001-A Litigation and Joint Defense (GLWA Provider)	883101 - General Counsel	-	-	-	-	-	-	-
New - DWSD - Bank Fees	884131 - Treasury	(150,000)	(74,000)	(150,000)	(150,000)	(150,000)	(150,000)	(150,000)
New - DWSD - Public Finance	884141 - Public Finance	(18,400)	(41,500)	(18,700)	(19,100)	(19,500)	(19,800)	(20,200)
New - DWSD Staff Training by GLWA	883201 - Organizational Development	-	-	-	-	-	-	-
	883351 - IT Enterprise Asset Management Systems	696,200	150,000	696,200	-	-	-	-
New - WAM (Annual License)	882422 - Fleet Operations	-	750,000	-	-	-	-	-
OPS-001 Fleet	882431 - Field Service Operations	102,000	50,000	52,000	53,050	54,100	55,200	56,300
OPS-002 MISS DIG	882431 - Field Service Operations	102,000	50,000	52,000	53,050	54,100	55,200	56,300
OPS-003 As Needed Field Services								
OPS-004 Water Quality Sampling, Testing, Reporting	882121 - Water Quality	-	-	-	-	-	-	-
OPS-005 Security and Integrity	881201 - Security and Integrity	(331,500)	(165,700)	(338,100)	(344,800)	(351,800)	(358,900)	(366,000)
OPS-006 Facilities	882421 - Facility Operations	-	-	-	-	-	-	-
OPS-006 Shared Facilities Shared Costs	882421 - Facility Operations	2,346,000	1,150,000	2,392,900	2,440,800	2,489,600	2,539,400	2,590,200
OPS-008 Systems Control Center: Detroit Only Pump Stations/CSO	882301 - Systems Operations Control	(437,800)	(218,900)	(446,600)	(455,500)	(464,600)	(473,800)	(483,300)
	882431 - Field Service Operations	(17,000)	(8,500)	(17,400)	(17,700)	(18,000)	(18,300)	(18,800)
	892222 - Wastewater Process Control	(61,600)	(30,800)	(62,800)	(64,100)	(65,400)	(66,700)	(68,000)
	892270 - Combined Sewer Overflow	(19,400)	(9,700)	(19,700)	(20,100)	(20,500)	(20,900)	(21,400)
	892279 - Belle Isle Combined Sewer Overflow	(76,400)	(38,200)	(77,900)	(79,500)	(81,100)	(82,700)	(84,400)
	892342 - Belle Isle Pumping Station	(56,400)	(28,200)	(57,500)	(58,700)	(59,900)	(61,100)	(62,300)
	892343 - Blue Hill Pumping Station	(75,500)	(37,700)	(77,000)	(78,500)	(80,100)	(81,700)	(83,300)
	892347 - Fischer Pumping Station	(12,200)	(6,100)	(12,500)	(12,700)	(13,000)	(13,300)	(13,500)
	892352 - Woodmere Pumping Station	(36,700)	(18,300)	(37,500)	(38,300)	(39,000)	(39,900)	(40,500)
	883351 - IT Enterprise Asset Management Systems	-	430,000	-	-	-	-	-
Oracle Licenses								
Grand Total		\$ (932,900)	\$ 500,800	\$ 1,658,600	\$ 984,700	\$ 1,007,200	\$ 1,030,400	\$ 1,054,200

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 (Chief Planning Officer, Asset Management, Systems Planning, Capital Improvement Planning and Systems Analytics)
- ✓ Systems Control
- ✓ Facility Operations
- ✓ Fleet Operations
- ✓ Field Service Operations
- ✓ Energy Research & Innovation
- ✓ Information Technology (Office of the CIO, Project Management Office, Security & Risk, Infrastructure, Enterprise Asset Management Systems, Business Productivity Systems and Service Delivery)
- ✓ Security & Integrity (includes HazMat)

Administrative Services

- ✓ Board of Directors
- ✓ Chief Executive Officer
- ✓ Chief Administrative & Compliance Officer (includes Risk Management & Safety)
- ✓ General Counsel
- ✓ Public Affairs
- ✓ Organizational Development (Administration, Talent Management, Organizational Wellness, Training, Performance, Recruiting and Compensation)
- ✓ Financial Services (CFO Services, Business Operations Support Services, Financial Reporting & Accounting)

Cost Allocation for the functional areas above disburse 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. This percentage basis allocation is reviewed annually based upon team member interviews and other corroborating reports and information.

The following tables detail 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Wastewater	\$ 68,343,800	\$ 65,639,400	\$ 31,187,600	\$ 69,317,800	\$ 3,678,400	5.6%	\$ 69,586,700
Administrative Services	14,477,800	15,145,000	6,856,400	17,517,600	2,372,600	15.7%	18,083,800
Centralized Services	53,866,000	50,494,400	24,331,200	51,800,200	1,305,800	2.6%	51,502,900
Water	63,311,100	64,988,900	28,212,300	69,131,800	4,142,900	6.4%	70,663,500
Administrative Services	14,477,700	15,145,000	6,856,400	17,085,600	1,940,600	12.8%	17,643,200
Centralized Services	48,833,400	49,843,900	21,355,900	52,046,200	2,202,300	4.4%	53,020,300
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 7,821,300	6.0%	\$ 140,250,200

Table 1b – Biennial Cost Allocation Summary

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Administrative	28,955,500	30,290,000	13,712,800	34,603,200	4,313,200	14.2%	35,727,000
Centralized Services	102,699,400	100,338,300	45,687,100	103,846,400	3,508,100	3.5%	104,523,200
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 7,821,300	6.0%	\$ 140,250,200

Table 2a – Five-Year Cost Allocation Summary

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Wastewater	\$ 68,343,800	\$ 65,639,400	\$ 31,187,600	\$ 69,317,800	\$ 69,586,700	\$ 71,469,300	\$ 71,904,600	\$ 72,327,800
Administrative Services	14,477,800	15,145,000	6,856,400	17,517,600	18,083,800	18,368,100	18,469,900	18,793,000
Centralized Services	53,866,000	50,494,400	24,331,200	51,800,200	51,502,900	53,101,200	53,434,700	53,534,800
Water	63,311,100	64,988,900	28,212,300	69,131,800	70,663,500	71,664,500	71,564,200	72,463,800
Administrative Services	14,477,700	15,145,000	6,856,400	17,085,600	17,643,200	17,918,700	18,011,400	18,325,400
Centralized Services	48,833,400	49,843,900	21,355,900	52,046,200	53,020,300	53,745,800	53,552,800	54,138,400
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 140,250,200	\$ 143,133,800	\$ 143,468,800	\$ 144,791,600

Table 2b – Five-Year Cost Allocation Summary

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Administrative	28,955,500	30,290,000	13,712,800	34,603,200	35,727,000	36,286,800	36,481,300	37,118,400
Centralized Services	102,699,400	100,338,300	45,687,100	103,846,400	104,523,200	106,847,000	106,987,500	107,673,200
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 140,250,200	\$ 143,133,800	\$ 143,468,800	\$ 144,791,600

Tables 3 and 4 – Costs Subject to Allocation to Water and Wastewater – Actual and Budget Amounts summarizes the financial plan by expense category subject to allocation to the water and wastewater systems.

Table 3- Biennial Costs Subject to Allocation by Expense Category

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Centralized Services	\$ 102,699,400	\$ 100,338,300	\$ 45,687,100	\$ 103,846,400	\$ 3,508,100	3.5%	\$ 104,523,200
2.1 Salaries & Wages	19,279,600	21,487,500	9,943,000	22,236,700	749,200	3.5%	22,505,700
2.2 Workforce Development	564,000	593,700	158,700	385,300	(208,400)	-35.1%	385,300
2.3 Overtime	1,902,700	1,473,600	1,064,800	1,618,100	144,500	9.8%	1,610,500
2.4 Employee Benefits	7,301,400	7,306,400	3,972,500	8,260,800	954,400	13.1%	8,516,300
2.5 Transition Services	482,600	588,100	434,400	1,063,000	474,900	80.8%	1,063,000
3.1 Electric	63,900	146,700	53,200	146,700	-	0.0%	147,000
3.2 Gas	200	500	100	300	(200)	-40.0%	200
3.3 Sewage Service	1,300	9,000	600	5,000	(4,000)	-44.4%	5,000
3.4 Water Service	500	600	200	600	-	0.0%	600
4.2 Supplies & Other	8,014,600	23,937,000	10,701,200	25,146,300	1,209,300	5.1%	25,705,600
4.3 Contractual Services	59,977,500	42,225,500	19,973,100	39,758,100	(2,467,400)	-5.8%	41,386,600
5.1 Capital Program Allocation	(96,500)	(104,300)	(23,900)	(100,300)	4,000	-3.8%	(100,700)
5.2 Shared Services	(589,400)	(4,023,400)	(2,011,700)	(1,378,900)	2,644,500	-65.7%	(1,406,300)
6.0 Capital Outlay	5,797,000	4,613,500	1,420,900	4,517,100	(96,400)	-2.1%	3,720,400
7.0 Unallocated Reserve	-	2,083,900	-	2,187,600	103,700	100.0%	984,000
Administrative Services	28,955,500	30,290,000	13,712,800	34,603,200	4,313,200	14.2%	35,727,000
2.1 Salaries & Wages	12,280,100	13,186,300	6,352,800	14,664,800	1,478,500	11.2%	14,858,500
2.2 Workforce Development	-	12,800	-	12,800	-	0.0%	12,800
2.3 Overtime	45,200	93,100	42,600	46,100	(47,000)	-50.5%	46,100
2.4 Employee Benefits	3,654,300	3,839,700	2,025,600	4,767,000	927,300	24.2%	4,927,500
2.5 Transition Services	1,713,000	1,464,400	521,800	1,424,000	(40,400)	-2.8%	1,584,800
3.1 Electric	4,500	28,000	2,600	27,000	(1,000)	-3.6%	27,600
3.2 Gas	6,200	26,500	1,600	25,000	(1,500)	-5.7%	25,500
3.3 Sewage Service	17,600	33,800	9,000	35,000	1,200	3.6%	35,700
3.4 Water Service	-	6,500	-	5,000	(1,500)	-23.1%	5,100
4.2 Supplies & Other	1,172,400	4,109,100	1,313,100	4,497,400	388,300	9.4%	4,895,300
4.3 Contractual Services	10,264,400	7,490,400	3,566,500	8,753,300	1,262,900	16.9%	8,831,100
5.1 Capital Program Allocation	(37,100)	(84,900)	(7,300)	(30,200)	54,700	-64.4%	(30,300)
5.2 Shared Services	(165,100)	(168,400)	(115,500)	(168,700)	(300)	0.2%	(169,100)
6.0 Capital Outlay	-	-	-	-	-	0.0%	-
7.0 Unallocated Reserve	-	252,700	-	544,700	292,000	0.0%	676,400
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 7,821,300	6.0%	\$ 140,250,200

Table 4 – Five-Year Cost Subject to Allocation by Expense Category

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Centralized Services	\$ 102,699,400	\$ 100,338,300	\$ 45,687,100	\$ 103,846,400	\$ 104,523,200	\$ 106,847,000	\$ 106,987,500	\$ 107,673,200
2.1 Salaries & Wages	19,279,600	21,487,500	9,943,000	22,236,700	22,505,700	23,165,800	23,200,800	23,235,800
2.2 Workforce Development	564,000	593,700	158,700	385,300	385,300	385,300	385,300	385,300
2.3 Overtime	1,902,700	1,473,600	1,064,800	1,618,100	1,610,500	1,631,700	1,635,900	1,640,200
2.4 Employee Benefits	7,301,400	7,306,400	3,972,500	8,260,800	8,516,300	8,911,200	9,101,900	9,293,400
2.5 Transition Services	482,600	588,100	434,400	1,063,000	1,063,000	1,063,000	1,063,000	1,063,000
3.1 Electric	63,900	146,700	53,200	146,700	147,000	147,300	147,600	147,900
3.2 Gas	200	500	100	300	200	300	200	300
3.3 Sewage Service	1,300	9,000	600	5,000	5,000	5,000	5,000	5,000
3.4 Water Service	500	600	200	600	600	600	600	600
4.2 Supplies & Other	8,014,600	23,937,000	10,701,200	25,146,300	25,705,600	26,387,000	26,860,100	27,388,300
4.3 Contractual Services	59,977,500	42,225,500	19,973,100	39,758,100	41,386,600	40,202,800	39,597,700	39,633,700
5.1 Capital Program Allocation	(96,500)	(104,300)	(23,900)	(100,300)	(100,700)	(101,100)	(101,500)	(101,900)
5.2 Shared Services	(589,400)	(4,023,400)	(2,011,700)	(1,378,900)	(1,406,300)	(1,434,500)	(1,463,100)	(1,492,400)
6.0 Capital Outlay	5,797,000	4,613,500	1,420,900	4,517,100	3,720,400	4,266,400	4,332,800	4,552,400
7.0 Unallocated Reserve	-	2,083,900	-	2,187,600	984,000	2,216,200	2,221,200	1,921,600
Administrative Services	28,955,500	30,290,000	13,712,800	34,603,200	35,727,000	36,286,800	36,481,300	37,118,400
2.1 Salaries & Wages	12,280,100	13,186,300	6,352,800	14,664,800	14,858,500	14,858,500	14,858,500	14,858,500
2.2 Workforce Development	-	12,800	-	12,800	12,800	12,800	12,800	12,800
2.3 Overtime	45,200	93,100	42,600	46,100	46,100	46,100	46,100	46,100
2.4 Employee Benefits	3,654,300	3,839,700	2,025,600	4,767,000	4,927,500	5,024,100	5,120,700	5,217,400
2.5 Transition Services	1,713,000	1,464,400	521,800	1,424,000	1,584,800	1,649,200	1,649,200	1,649,200
3.1 Electric	4,500	28,000	2,600	27,000	27,600	28,100	28,700	29,300
3.2 Gas	6,200	26,500	1,600	25,000	25,500	26,000	26,500	27,100
3.3 Sewage Service	17,600	33,800	9,000	35,000	35,700	36,400	37,100	37,900
3.4 Water Service	-	6,500	-	5,000	5,100	5,200	5,300	5,400
4.2 Supplies & Other	1,172,400	4,109,100	1,313,100	4,497,400	4,895,300	5,070,900	5,171,000	5,275,600
4.3 Contractual Services	10,264,400	7,490,400	3,566,500	8,753,300	8,831,100	8,994,900	9,164,400	9,335,200
5.1 Capital Program Allocation	(37,100)	(84,900)	(7,300)	(30,200)	(30,300)	(30,400)	(30,600)	(30,700)
5.2 Shared Services	(165,100)	(168,400)	(115,500)	(168,700)	(169,100)	(169,500)	(169,800)	(170,200)
6.0 Capital Outlay	-	-	-	-	-	-	-	-
7.0 Unallocated Reserve	-	252,700	-	544,700	676,400	734,500	561,400	824,800
Grand Total	\$ 131,654,900	\$ 130,628,300	\$ 59,399,900	\$ 138,449,600	\$ 140,250,200	\$ 143,133,800	\$ 143,468,800	\$ 144,791,600

Table 5 Cost Allocation - Water and Wastewater Percentages presents the projected aggregate allocation percentages for the five-year period 2022 through 2026. The percentages are based on the data presented in tables 1 and 2 above and forecasted expenditures for periods 2024-2026.

Table 5 – Five-Year Projected Cost Allocated Percentages

Expense Categories	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Centralized Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	47.5%	49.7%	46.7%	50.1%	50.7%	50.3%	50.1%	50.3%
Wastewater	52.5%	50.3%	53.3%	49.9%	49.3%	49.7%	49.9%	49.7%
Administrative Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	50.0%	50.0%	50.0%	49.4%	49.4%	49.4%	49.4%	49.4%
Wastewater	50.0%	50.0%	50.0%	50.6%	50.6%	50.6%	50.6%	50.6%
Total Allocated Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water	48.1%	49.8%	47.5%	49.9%	50.4%	50.1%	49.9%	50.0%
Wastewater	51.9%	50.2%	52.5%	50.1%	49.6%	49.9%	50.1%	50.0%

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

Cost Center	Contract	Vendor	Description of Service	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	Allocation
Logistics & Materials	2100822	Family Associates, LLC	Melvindale Warehouse Rental	\$ 540,000	\$ 550,800	\$ 561,800	\$ 573,100	\$ 584,500	Up to 90% Sewer
Total				\$ 540,000	\$ 550,800	\$ 561,800	\$ 573,100	\$ 584,500	

Table 7 – Centralized Services Water Specific Contracts

Cost Center	Contract	Vendor	Description of Service	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	Allocation
Systems Planning	12772	Aquasight	Water Performance Monitoring	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	Water
Systems Planning	Pending	TBD	Water Master Plan Update	500,000	1,500,000	1,000,000	500,000	-	Water
Systems Analytics	CS-039	Black & Veatch	Units of Service D+ Region	300,000	309,000	318,300	327,900	337,700	Water
Asset Management	Pending	HDR Water Resource Management	Linear System Integrity Program	2,470,400	2,693,400	2,870,600	2,870,600	3,217,500	Water
Field Service Operations	CON-181	Lakeshore Global	Water Transmission Main Repair	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	Water
Field Service Operations	WS-695C	Toolles Consulting (now Hydromax)	Transmission Main Exercising	1,866,700	1,866,700	1,866,700	1,866,700	1,866,700	Water
Total				\$ 7,987,100	\$ 9,219,100	\$ 8,905,600	\$ 8,415,200	\$ 8,271,900	

Table 8 – Centralized Services Sewer Specific Contracts

Cost Center	Contract	Vendor	Description of Service	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	Allocation
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	Sewer
Asset Management	Pending	HDR Water Resource Management	Linear System Integrity Program	300,000	300,000	100,000	100,000	100,000	Sewer
Systems Analytics	CON-179	PCI	Sewer Meter Support	490,000	490,000	490,000	490,000	490,000	Sewer
Systems Analytics	CS-236	Applied Science	Meter Dye Testing	425,000	425,000	425,000	425,000	425,000	Sewer
Systems Analytics	CS-239	CDM Michigan	Good Sewer Metering	600,000	600,000	700,000	730,000	760,000	Sewer
Systems Operational Control	USGS River Survey	USGS	Detroit River Survey	273,000	273,000	273,000	273,000	136,500	Sewer
Hazmat	Entire Center	N/A	Hazardous Materials Management	1,717,200	1,679,100	1,850,600	1,857,700	1,836,600	Sewer
Systems Planning	CS-036	TBD	Waste Water Master Plan	-	-	500,000	500,000	-	Sewer
Total				\$ 8,723,600	\$ 8,685,500	\$ 9,257,000	\$ 9,294,100	\$ 8,666,500	

Table 9 – Centralized Services Water/Sewer Specific Contracts

Cost Center	Contract	Vendor	Description of Service	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested	Allocation
Systems Operational Control	CON-089A	Lakeshore Global	Low Voltage Wiring	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	50% Water / 50% Sewer
Systems Operational Control (Net)	Entire Center	N/A	Water Transmission Control	9,825,500	9,837,400	9,959,200	9,970,800	9,982,200	55% Water / 45% Sewer
Total				\$ 11,925,500	\$ 11,937,400	\$ 12,059,200	\$ 12,070,800	\$ 12,082,200	

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, 2020, is approximately \$6.2 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 59.15% as reported in the June 30, 2020, 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 2021 through FY 2023 are based on an agreed upon payment schedule. For budget purposes, the FY 2024 through FY 2026 contributions were estimated at \$10 million. The most recent actuarial valuation dated June 30, 2019, estimates the FY 2024 contribution to be between \$8.2 million and \$10.5 million. With the state of the current economic environment, The Authority feels it is prudent to use the upper end of this estimate for budgeting purposes.

The administrative fee for FY 2024 through FY2026 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 concern over the growing liability and continues to seek innovative solutions to protect the financial sustainability of all parties.

Table 1 – Legacy Obligation Allocation – The blue and green highlighted amounts are included in the budget revenue requirements.

Description	Allocation Percentage	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operations & Maintenance (O&M) Portion of Legacy Payments-Component II						
O&M Admin Fee (a)						
GLWA-Water	25.20%	\$ 630,000	\$ 630,000	\$ -	\$ -	\$ -
GLWA-Sewer	45.10%	\$ 1,127,500	\$ 1,127,500	\$ -	\$ -	\$ -
DWSD-R-Water	17.80%	\$ 445,000	\$ 445,000	\$ -	\$ -	\$ -
DWSD-R-Sewer	11.90%	\$ 297,500	\$ 297,500	\$ -	\$ -	\$ -
Subtotal - Admin Fee in O&M		\$ 2,500,000	\$ 2,500,000	\$ -	\$ -	\$ -
O&M Legacy Pension (b)						
GLWA-Water	25.20%	\$ 5,418,000	\$ 5,418,000	\$ -	\$ -	\$ -
GLWA-Sewer	45.10%	\$ 9,696,500	\$ 9,696,500	\$ -	\$ -	\$ -
DWSD-R-Water	17.80%	\$ 3,827,000	\$ 3,827,000	\$ -	\$ -	\$ -
DWSD-R-Sewer	11.90%	\$ 2,558,500	\$ 2,558,500	\$ -	\$ -	\$ -
Subtotal - O&M Legacy Pension		\$ 21,500,000	\$ 21,500,000	\$ -	\$ -	\$ -
Total O&M Legacy Pension Payment (c) (Admin Fee (a) plus Pension Contribution (b))						
GLWA-Water	25.20%	\$ 6,048,000	\$ 6,048,000	\$ -	\$ -	\$ -
GLWA-Sewer	45.10%	\$ 10,824,000	\$ 10,824,000	\$ -	\$ -	\$ -
DWSD-R-Water	17.80%	\$ 4,272,000	\$ 4,272,000	\$ -	\$ -	\$ -
DWSD-R-Sewer	11.90%	\$ 2,856,000	\$ 2,856,000	\$ -	\$ -	\$ -
Total O&M Legacy Pension Payment		\$ 24,000,000	\$ 24,000,000	\$ -	\$ -	\$ -
Nonoperating Portion of Legacy Payments-Component II (d)						
GLWA-Water	25.20%	\$ 5,392,800	\$ 5,392,800	\$ 2,520,000	\$ 2,520,000	\$ 2,520,000
GLWA-Sewer	45.10%	\$ 9,651,400	\$ 9,651,400	\$ 4,510,000	\$ 4,510,000	\$ 4,510,000
DWSD-R-Water	17.80%	\$ 3,809,200	\$ 3,809,200	\$ 1,780,000	\$ 1,780,000	\$ 1,780,000
DWSD-R-Sewer	11.90%	\$ 2,546,600	\$ 2,546,600	\$ 1,190,000	\$ 1,190,000	\$ 1,190,000
Total Nonoperating Legacy Pension Payment		\$ 21,400,000	\$ 21,400,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000
Total Combined Legacy Pension O&M and Nonoperating Payment-Component II (c plus d)						
GLWA-Water	25.20%	\$ 11,440,800	\$ 11,440,800	\$ 2,520,000	\$ 2,520,000	\$ 2,520,000
GLWA-Sewer	45.10%	\$ 20,475,400	\$ 20,475,400	\$ 4,510,000	\$ 4,510,000	\$ 4,510,000
DWSD-R-Water	17.80%	\$ 8,081,200	\$ 8,081,200	\$ 1,780,000	\$ 1,780,000	\$ 1,780,000
DWSD-R-Sewer	11.90%	\$ 5,402,600	\$ 5,402,600	\$ 1,190,000	\$ 1,190,000	\$ 1,190,000
Total Legacy Pension Payment-Component II		\$ 45,400,000	\$ 45,400,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000
BC Notes (Nonoperating) (e)						
GLWA-Water	21.98%	\$ 875,500	\$ 875,500	\$ 875,500	\$ 1,653,300	\$ 1,622,200
GLWA-Sewer	49.44%	\$ 1,969,300	\$ 1,969,300	\$ 1,969,300	\$ 3,718,800	\$ 3,648,800
DWSD-R-Water	15.52%	\$ 618,200	\$ 618,200	\$ 618,200	\$ 1,167,400	\$ 1,145,400
DWSD-R-Sewer	13.06%	\$ 520,200	\$ 520,200	\$ 520,200	\$ 982,400	\$ 963,900
Total BC Notes (Nonoperating)		\$ 3,983,200	\$ 3,983,200	\$ 3,983,200	\$ 7,521,900	\$ 7,380,300
Total Accelerated Pension Payments (Nonoperating Pension (d) + BC Notes (e))						
GLWA-Water		\$ 6,268,300	\$ 6,268,300	\$ 3,395,500	\$ 4,173,300	\$ 4,142,200
GLWA-Sewer		\$ 11,620,700	\$ 11,620,700	\$ 6,479,300	\$ 8,228,800	\$ 8,158,800
DWSD-R-Water		\$ 4,427,400	\$ 4,427,400	\$ 2,398,200	\$ 2,947,400	\$ 2,925,400
DWSD-R-Sewer		\$ 3,066,800	\$ 3,066,800	\$ 1,710,200	\$ 2,172,400	\$ 2,153,900
Total Accelerated Pension Payments		\$ 25,383,200	\$ 25,383,200	\$ 13,983,200	\$ 17,521,900	\$ 17,380,300

Debt Management

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 2022 budget, debt service is 39% of the water system revenue requirement and 44% of the sewer system revenue requirement. For the FY 2023 budget, debt service is 41% of the water system revenue requirement and 42% 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 Revolving Fund (DWRf) and the Clean Water Revolving Fund (CWRf) programs.

Pursuant to the terms of the 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 collections from both systems are therefore 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/>.

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 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 issues 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.

Debt Service Coverage

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

Components of Pledged Revenue	Pledged Revenue Calculation	Rate Covenant Basis	GAAP Basis
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 Fund							
	MBO Required Minimum	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Adopted Budget 2022	Adopted Budget 2023
Rate Covenant Basis							
Senior Lien Bonds	1.20	2.07	2.13	1.94	1.81	1.89	1.82
Senior and second lien bonds	1.10	1.55	1.54	1.42	1.32	1.37	1.34
All bonds, including SRF junior lien	1.00	1.53	1.51	1.40	1.28	1.32	1.27
GAAP Basis							
Senior Lien Bonds		2.12	2.04	1.98			
Senior and second lien bonds		1.59	1.47	1.46			
All bonds, including SRF junior lien		1.57	1.45	1.43			

Debt Service Coverage Sewage Disposal Fund							
	MBO Required Minimum	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Adopted Budget 2022	Adopted Budget 2023
Rate Covenant Basis							
Senior Lien Bonds	1.20	2.04	2.11	2.15	2.44	2.42	2.23
Senior and second lien bonds	1.10	1.56	1.62	1.64	1.73	1.74	1.79
All bonds, including SRF junior lien	1.00	1.25	1.29	1.29	1.37	1.35	1.40
GAAP Basis							
Senior Lien Bonds		2.20	2.10	2.16			
Senior and second lien bonds		1.68	1.62	1.65			
All bonds, including SRF junior lien		1.34	1.28	1.30			

Annual Debt Service

The tables below provide an analysis of the annual debt service budgets for FY 2022 and FY 2023 for the water system and the sewage disposal system. 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 has payments 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 2022			FY 2023		
	Current	Proposed	Total	Current	Proposed	Total
Principal						
Senior Lien	\$ 53,890,000	\$ -	\$ 53,890,000	\$ 60,290,000	\$ -	\$ 60,290,000
Second Lien	15,505,000	-	15,505,000	16,640,000	-	16,640,000
Junior Lien-SRF	3,548,700	-	3,548,700	5,421,300	-	5,421,300
Total Principal	<u>\$ 72,943,700</u>	<u>\$ -</u>	<u>\$ 72,943,700</u>	<u>\$ 82,351,300</u>	<u>\$ -</u>	<u>\$ 82,351,300</u>
Interest						
Senior Lien	\$ 70,419,700	\$ -	\$ 70,419,700	\$ 67,787,200	\$ 4,356,300	\$ 72,143,500
Second Lien	31,335,400	-	31,335,400	30,560,100	-	30,560,100
Junior Lien-SRF	2,380,400	766,000 (1)	3,146,400	2,522,600	2,321,300 (1)	4,843,900
Total Interest	<u>\$ 104,135,500</u>	<u>\$ 766,000</u>	<u>\$ 104,901,500</u>	<u>\$ 100,869,900</u>	<u>\$ 6,677,600</u>	<u>\$ 107,547,500</u>
Total Debt Service						
Senior Lien	\$ 124,309,700	\$ -	\$ 124,309,700	\$ 128,077,200	\$ 4,356,300	\$ 132,433,500
Second Lien	46,840,400	-	46,840,400	47,200,100	-	47,200,100
Junior Lien-SRF	5,929,100	766,000 (1)	6,695,100	7,943,900	2,321,300 (1)	10,265,200
Total Debt Service	<u>\$ 177,079,200</u>	<u>\$ 766,000</u>	<u>\$ 177,845,200</u>	<u>\$ 183,221,200</u>	<u>\$ 6,677,600</u>	<u>\$ 189,898,800</u>
Allocation of Debt Service (see Core Financial Plan Schedule 3)						
Debt Service Allocable to Regional System			\$ 135,481,000			\$ 146,520,400
Debt Service Allocable to Local System			42,364,200			43,378,400
Total Debt Service			<u>\$ 177,845,200</u>			<u>\$ 189,898,800</u>

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

Annual Debt Service on a Budget Set Aside Basis - Sewage Disposal Fund						
	FY 2022			FY 2023		
	Current	Proposed	Total	Current	Proposed	Total
Principal						
Senior Lien Fixed	\$ 62,175,000	\$ -	\$ 62,175,000	\$ 80,260,000	\$ -	\$ 80,260,000
Senior Lien						
Variable Rate	-	-	-	-	-	-
Senior Lien-SRF	2,867,500	-	2,867,500	721,250	-	721,250
Second Lien	17,655,000	-	17,655,000	3,215,000	-	3,215,000
Junior Lien-SRF & SAW	44,710,600	-	44,710,600	41,780,300	881,300	42,661,600
Total Principal	\$ 127,408,100	\$ -	\$ 127,408,100	\$ 125,976,550	\$ 881,300	\$ 126,857,850
Interest						
Senior Lien	\$ 63,224,800	\$ -	\$ 63,224,800	\$ 60,224,300	\$ 2,762,500	\$ 62,986,800
Senior Lien						
Variable Rate	4,838,700	-	4,838,700	4,838,700	-	4,838,700
Senior Lien-SRF	89,700	-	89,700	18,000	-	18,000
Second Lien	34,238,000	-	34,238,000	33,523,500	-	33,523,500
Junior Lien-SRF & SAW	9,020,200	190,800 (1)	9,211,000	8,272,100	578,200 (1)	8,850,300
Total Interest	\$ 111,411,400	\$ 190,800	\$ 111,602,200	\$ 106,876,600	\$ 3,340,700	\$ 110,217,300
Total Debt Service						
Senior Lien	\$ 125,399,800	\$ -	\$ 125,399,800	\$ 140,484,300	\$ 2,762,500	\$ 143,246,800
Senior Lien	4,838,700	-	4,838,700	4,838,700	-	4,838,700
Variable Rate						
Senior Lien-SRF	2,957,200	-	2,957,200	739,300	-	739,300
Second Lien	51,893,000	-	51,893,000	36,738,500	-	36,738,500
Junior Lien-SRF & SAW	53,730,800	190,800 (1)	53,921,600	50,052,400	1,459,500 (1)	51,511,900
Total Debt Service	\$ 238,819,500	\$ 190,800	\$ 239,010,300	\$ 232,853,200	\$ 4,222,000	\$ 237,075,200
Allocation of Debt Service (see Core Financial Plan Schedule 3)						
Debt Service Allocable to Regional System			\$ 207,209,500			\$ 204,566,500
Debt Service Allocable to Local System			31,800,800			32,508,700
Total Debt Service			\$ 239,010,300			\$ 237,075,200

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

Projected Debt

The tables below show the projected outstanding principal debt activity for FY 2021 through FY 2023. 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 2021	\$ 2,285,563,300	\$ (70,080,000)	\$ -	\$ 45,397,000	\$ -	\$ 29,000,000	\$ 2,289,880,300
FY 2022	\$ 2,289,880,300	\$ (72,943,700)	\$ -	\$ 26,100,000	\$ -	\$ 19,713,000	\$ 2,262,749,600
FY 2023	\$ 2,262,749,600	\$ (82,351,300)	\$ 205,000,000	\$ 16,600,000	\$ -	\$ -	\$ 2,401,998,300

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 2021	\$ 3,003,326,500	\$ (119,910,000)	\$ -	\$ 23,586,000	\$ -	\$ 4,745,000	\$ 2,911,747,500
FY 2022	\$ 2,911,747,500	\$ (127,408,100)	\$ -	\$ 31,992,000	\$ -	\$ 9,000,000	\$ 2,825,331,400
FY 2023	\$ 2,825,331,400	\$ (126,857,850)	\$ 130,000,000	\$ 4,122,000	\$ -	\$ 8,500,000	\$ 2,841,095,550

- (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.

❖ Water Fund Additions

Based on the Projected Capital Expenditures included in the FY 2022 to FY 2026 Water Supply System Capital Improvement Plan and the Capital Program Spend Rate Assumption of 75 percent, the GLWA will need to issue approximately \$26,100,000 in Drinking Water Revolving Fund (DWRF) loans for the regional system and \$19,713,000 DWRF loans on behalf of the local system in FY 2022. GLWA will need to issue \$205,000,000 in new revenue bonds and \$16,600,000 in DWRF loans in FY 2023 for the regional system.

❖ Sewer Fund Additions

Based on the Projected Capital Expenditures included in the FY 2022 to FY 2026 Sewage Disposal System Capital Improvement Plan and the Capital Program Spend Rate Assumption of 75 percent, the GLWA will need to issue approximately \$31,992,000 in Clean Water Revolving Fund (CWRF) loans for the regional system and \$9,000,000 in CWRF loans on behalf of the local system in FY 2022. In FY 2023 the GLWA will need to issue approximately

\$130,000,000 in new revenue bonds and \$4,112,000 in CWRP loans for the regional system. GLWA will also issue on behalf of the local system \$8,500,000 CWRP loans in FY 2023.

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, 2020, by fund. These amounts assume that the current interest rates on variable-rate bonds will remain the same for their respective terms. As these rates vary, interest payments on variable-rate bonds will vary.

Water Fund					
Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct		Total
	Principal	Interest	Principal	Interest	
2021	\$ 15,690,000	\$ 81,356,372	\$ 1,955,000	\$ 862,449	\$ 99,863,821
2022	\$ 68,125,000	\$ 103,458,167	\$ 2,628,056	\$ 819,585	\$ 175,030,808
2023	\$ 69,395,000	\$ 100,051,172	\$ 3,915,000	\$ 761,970	\$ 174,123,142
2024	\$ 76,930,000	\$ 96,484,833	\$ 3,990,000	\$ 678,595	\$ 178,083,428
2025	\$ 82,590,000	\$ 92,746,039	\$ 4,080,000	\$ 593,582	\$ 180,009,621
2026-2030	\$ 474,535,000	\$ 400,193,965	\$ 9,331,930	\$ 2,034,170	\$ 886,095,065
2031-2035	\$ 615,955,000	\$ 269,255,744	\$ 4,238,636	\$ 1,400,172	\$ 890,849,552
2036-2040	\$ 431,480,000	\$ 133,883,228	\$ 3,120,000	\$ 982,580	\$ 569,465,808
2041-2045	\$ 293,400,000	\$ 65,957,661	\$ 3,500,000	\$ 572,705	\$ 363,430,366
2046-2050	\$ 133,835,000	\$ 8,816,125	\$ 2,559,642	\$ 129,010	\$ 145,339,777
	<u>\$ 2,261,935,000</u>	<u>\$ 1,352,203,306</u>	<u>\$ 39,318,264</u>	<u>\$ 8,834,818</u>	<u>\$ 3,662,291,388</u>

Sewer Fund					
Year Ended June 30	Bonds		Notes from Direct Borrowings and Direct		Total
	Principal	Interest	Principal	Interest	
2021	\$ 35,895,000	\$ 73,744,741	\$ 50,160,000	\$ 9,894,954	\$ 169,694,695
2022	\$ 69,750,000	\$ 99,686,437	\$ 46,935,000	\$ 8,768,369	\$ 225,139,806
2023	\$ 79,830,000	\$ 96,328,547	\$ 47,969,430	\$ 7,667,990	\$ 231,795,967
2024	\$ 83,475,000	\$ 92,593,928	\$ 38,725,000	\$ 6,657,799	\$ 221,451,727
2025	\$ 98,650,000	\$ 88,458,880	\$ 39,590,870	\$ 5,770,937	\$ 232,470,687
2026-2030	\$ 597,790,000	\$ 374,516,265	\$ 121,750,660	\$ 19,872,831	\$ 1,113,929,756
2031-2035	\$ 765,255,000	\$ 248,917,584	\$ 75,565,763	\$ 8,805,007	\$ 1,098,543,354
2036-2040	\$ 702,055,000	\$ 85,048,628	\$ 28,969,808	\$ 1,042,438	\$ 817,115,874
2041-2045	\$ 137,780,000	\$ 17,952,444	\$ -	\$ -	\$ 155,732,444
2046-2050	\$ 19,075,000	\$ 1,965,875	\$ -	\$ -	\$ 21,040,875
	<u>\$ 2,589,555,000</u>	<u>\$ 1,179,213,329</u>	<u>\$ 449,666,531</u>	<u>\$ 68,480,325</u>	<u>\$ 4,286,915,185</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 for principal and interest due on July 1, 2020, are not included in the debt service requirement amounts above as they were paid on June 24, 2020.

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Section 5

Member Partner Charges & Revenues

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Water System Revenue Charges

The Water System Revenue 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. This process included four Charges Roll-Out meetings held between October 29, 2020 and January 21, 2021. During this time, the proposed units of service, proposed budget, results of the annual cost of service study, and recommended service charges were the topic of discussion with member partners which resulted in a recommendation to the GLWA Board for the FY 2022 Schedule of Charges.

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 30, 2020, as finalized on March 31, 2021. 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, and member partners were formally notified of their proposed service charges on January 6, 2021. The memorandum report is available on the GLWA website at:

<https://www.glwater.org/wp-content/uploads/2021/04/FY-2022-Cost-of-Service-Study-and-Service-Charge-Recommendations-March-31-2021.pdf>

The proposed FY 2022 water service charges follow the same cost allocation strategies, practices and protocols that have been applied in these calculations without any major modifications from prior years. It is important to note that the existing FY 2021 Water service charges were determined via an "across the board" wholesale charge adjustments (based on the FY 2020 service charges) to all Member Partners.

The FY 2022 water service charge calculations continue a simplified, uniform approach. Costs are allocated to "cost pools" that align with characteristics that define each Member Partner's use of the System. In many instances, the allocation of specific revenue requirement elements to cost pools reflects the same allocation assumptions as those applied in the development of the past service charges, although specific operating programs as reflected in the budget request for FY 2022 do impact the cost pool allocations. The FY 2022 Cost of Service Study continues to reflect results of the independent GLWA capital asset inventory and valuation project to allocate capital revenue requirements to Cost Pools.

The public hearing was opened at the Board meeting on February 24, 2021. The proposed budget provided for a 2.2% increase in revenue from charges which results in an average system charge increase of 2%. The Board referred the budget and charges to the Audit Committee for further review. After the public hearing concluded on March 24, 2021, the Board approved the proposed budget with

a \$3.2 million reduction to the FY 2022 total O&M budget. The administration allocated \$1.4 million of the reduction to the water O&M budget. This budget reduction resulted in an increase in revenue from charges of 1.8% for the water system which results in an average system water service charge increase of 1.5%. The actual charge adjustment for individual members varies.

As a result of the 2018 Contract Alignment Process (CAP), the FY 2022 Units of Service changed for 11 member partners and FY 2022 Water charges for those member partners were calculated based on their new units of service. For the 77 member partners that did not have changes in contractual demands, the FY 2022 Water charges reflect the application of a simplified, uniform increase in common to all revenue requirements of 2.18 percent, with an average charge increase of 2.07 percent.

The final approved charges are set forth below:

Great Lakes Water Authority				
Approved FY 2022 Water Supply System Service Charges and Allocated Revenue Requirements				
Effective Date: July 1, 2021				
Line		Fixed Monthly	Commodity	Projected Revenue
No.	Member Partner	Charge (a)	Charge (a)	from Charges
		\$/mo	\$/Mcf	\$
1	Allen Park	126,400	7.82	2,527,900
2	Almont Village	12,600	10.54	251,300
3	Ash Township	43,900	8.27	877,400
4	Belleville	16,600	9.74	331,700
5	Berlin Township	38,400	11.54	767,800
6	Brownstown Township	190,600	11.09	3,812,100
7	Bruce Twp	16,700	61.19	333,800
8	Burtchville Twp	17,700	18.19	354,300
9	Canton Township	539,900	12.36	10,798,600
10	Center Line	24,600	6.28	491,100
11	Chesterfield Township	223,800	10.41	4,475,100
12	Clinton Township	398,900	7.92	7,979,400
13	Commerce Township	187,700	14.72	3,753,800
14	Dearborn	538,500	7.22	10,767,300
15	Dearborn Heights	193,300	7.84	3,867,200
16	Eastpointe	82,000	6.31	1,640,200
17	Ecorse	79,400	4.48	1,588,100
18	Farmington	53,000	9.52	1,060,600
19	Farmington Hills	465,600	10.57	9,314,200
20	Ferndale	54,100	6.19	1,081,300
21	Flat Rock	69,900	9.79	1,398,800
22	Flint (b)	564,400	9.43	11,286,900
23	Fraser	64,300	8.72	1,287,000
24	Garden City	88,100	8.71	1,761,800
25	Gibraltar	17,500	8.61	350,300
26	Grosse Ile Township	57,800	12.10	1,157,000
27	Grosse Pt. Park	71,000	10.21	1,419,700
28	Grosse Pt. Shores	34,800	13.75	695,400
29	Grosse Pt. Woods	67,700	7.50	1,353,900
30	Hamtramck	42,200	5.42	843,500
31	Harper Woods	42,500	7.12	848,900
32	Harrison Township	85,100	7.21	1,701,800
33	Hazel Park	38,800	6.15	776,200
34	Highland Park	61,200	4.63	1,223,800
35	Huron Township	77,600	10.28	1,551,100
36	Imlay City	77,200	13.50	1,543,400
37	Imlay Twp	800	42.50	16,400
38	Inkster	65,100	5.56	1,301,600
39	Keego Harbor	15,700	12.74	314,500
40	Lapeer	80,600	12.39	1,612,700
41	Lenox Township	15,600	8.42	312,700
42	Lincoln Park	121,000	6.04	2,419,600
43	Livonia	607,100	10.11	12,141,000
44	Macomb Township	669,300	16.23	13,384,300
45	Madison Heights	98,000	7.35	1,959,500
46	Mayfield Twp	2,500	24.68	49,500
47	Melvindale	34,100	6.42	682,700
48	New Haven, Village of	22,200	6.94	443,400
49	North Oakland County Water Authority	1,168,100	10.41	23,364,300
50	Northville	40,600	10.48	812,100
51	Northville Township	299,300	17.00	5,985,200
52	Novi	476,200	13.03	9,524,400
53	Oak Park	73,700	6.08	1,474,200
54	Oakland Co. Drain Comm.	4,300	3.49	85,500
55	Plymouth	57,000	10.34	1,140,000
56	Plymouth Township	234,100	11.57	4,682,400
57	Redford Township	167,100	8.32	3,340,600
58	River Rouge	35,900	7.58	718,100
59	Riverview	46,900	7.73	937,700

Great Lakes Water Authority
Approved FY 2022 Water Supply System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2021

60	Rockwood	14,700	11.79	293,100
61	Romeo	13,500	18.13	270,800
62	Romulus	224,200	8.21	4,484,300
63	Roseville	142,200	5.99	2,843,900
64	Royal Oak Township	10,400	7.65	209,000
65	Southeastern Oakland County Water Authority	1,215,400	7.75	24,309,500
66	Shelby Township	751,600	14.88	15,032,200
67	South Rockwood	6,100	10.17	121,000
68	Southgate	116,300	8.12	2,325,300
69	St. Clair County-Greenwood Township	49,400	19.18	987,900
70	St. Clair Shores	161,800	6.80	3,235,000
71	Sterling Heights	804,500	11.14	16,091,800
72	Sumpter Township	35,600	9.67	712,500
73	Sylvan Lake	12,300	15.48	246,700
74	Taylor	244,700	7.46	4,895,400
75	Trenton	89,100	8.19	1,782,500
76	Troy	722,200	12.20	14,443,100
77	Utica	30,000	9.72	600,100
78	Van Buren Township	183,700	11.10	3,674,000
79	Walled Lake	42,200	10.98	843,500
80	Warren	545,200	6.94	10,902,100
81	Washington Township	121,700	12.37	2,433,900
82	Wayne	168,700	12.96	3,373,500
83	West Bloomfield Township	551,000	16.52	11,019,500
84	Westland	327,500	7.99	6,551,500
85	Wixom	130,500	13.95	2,610,900
86	Woodhaven	88,100	12.22	1,762,300
87	Ypsilanti Community Utilities Authority	547,900	9.03	10,957,100
88	Total Wholesale Contract Member Partners			328,987,500
89	Adjustment to Flint Revenue Requirement for KWA Debt Service			(6,652,800)
90	Adjustment for Highland Park Bad Debt			(1,223,800)
91	Revenue from Wholesale Charges (agrees with "GLWA Budget Schedule 3")			321,110,900
<u>Detroit Customer Class - \$</u>				
92	<u>Wholesale</u> Revenue Requirement (c)			42,397,300
93	less: Ownership Benefit per Lease			(20,700,000)
94	<u>Net Wholesale</u> Revenue Requirement			21,697,300
95	<u>Indirect Retail</u> Revenue Requirements (d)			51,734,700
96	less: Use of Lease Payment for Debt Service			(6,690,600)
97	<u>Net Indirect Retail</u> Revenue Requirements (d)			45,044,100
98	Subtotal Subject to GLWA Board Approval (94) + (97)			66,741,400
99	<u>Direct Retail</u> Revenue Requirements (e)			34,648,600
100	Total Local System Revenue Requirement (97) + (99)			79,692,700
101	Total Requirement from Detroit Customer Class (agrees with "GLWA Budget Schedule 3")			101,390,000
102	Proposed Lead and Copper Rule Sample Testing Fee - \$/Sample			56.00

(a) Proposed effective date of July 1, 2021. Effective on all bills issued on or after August 1, 2021.

(b) Net fixed monthly charge will include \$554,400 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 February 17, 2021 and amended subsequently due to the GLWA Board action taken at the March 24, 2021 Board meeting.

Historical and projected produced and billed water volumes are presented in the table below.

Produced and Billed Water Volumes

Fisal Year	Estimated Total Water Produced (Mcf) [1]	Reported Water Sales			Estimated Non-Revenue Water (Mcf)	Estimated Non-Revenue % of Production [3]
		Wholesale Customer Billed (Mcf)	Local System Billed (Mcf)	Total Water Billed (Mcf) [2]		
<u>Projected</u>						
2021	23,000,000	13,552,900	4,339,100 [4]	17,892,000	5,108,000	22.2%
2022	23,000,000	13,588,930	4,186,400 [4]	17,775,330	5,224,670	22.7%
2023	23,000,000	13,588,930	4,186,400 [4]	17,775,330	5,224,670	22.7%
<u>Historical</u>						
2020	19,989,460	13,578,706	2,622,321	16,201,027	3,788,433	19.0%
2019	20,968,100	13,708,571	2,806,192	16,514,763	4,453,337	21.2%
2018	23,228,600	14,391,768	2,876,255	17,268,023	5,960,577	25.7%
2017	23,915,600	14,824,000	2,912,030	17,736,030	6,179,570	25.8%

[1] Represents, in part, estimated volumes based on pump curves and engineering analysis. GLWA engineering studies in 2017 concluded that the total water production values for calendar year 2016 were over-reported by 5.8%.

[2] Represents metered wholesale amounts for all customers other than Detroit, Dearborn, and Highland Park. Water sales to those customers reflect, in part, estimated retail water sales during this period. GLWA is modifying this approach, which will result in larger reported water sales figures in future years.

[3] As noted in [1] and [2], these values are likely overestimated. GLWA expects flow measuring methods to result in lower values in future years.

[4] Reflects retail sales plus estimated distribution system non-revenue water from engineering studies.

Sewer System Revenue Charges

The Sewer System Revenue 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 October 29, 2020 to January 21, 2021. During this time, the proposed Sewer Shares update, proposed budget, results of the annual cost of service study, and recommended service charges were presented to the member partners in order to get feed-back and to answer questions.

The basis for the proposed sewer 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 January 12, 2021. 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, and member partners were formally notified of their proposed service charges on January 6, 2021. The memorandum report is available on the GLWA website at:

<https://www.glwater.org/wp-content/uploads/2021/04/FY-2022-Cost-of-Service-Study-and-Service-Charge-Recommendations-March-31-2021.pdf>

The proposed FY 2022 sewer service charges, industrial waste control charges and industrial surcharges charges follow the same cost allocation strategies, practices and protocols that have been applied in these calculations without any major modifications from prior years, with the exception of the updated Sewer SHARES calculation. It is important to note that the existing FY 2021 sewer service charges were determined via an "across the board" Wholesale Charge Adjustments (based on the FY 2020 service charges) to all Member Partners, based on the existing SHARES. This was due to the continued discussions GLWA stakeholders regarding the updated Sewer SHARES methodology beyond the FY 2021 charge approval.

The sewer SHARES calculation, which is used in the allocation of the costs, reflects an updated core methodology to the SHARES calculation. The new SHARES methodology embraces simplicity and replaces the strength of flow notion with an appropriate weighting on sanitary volumes, resulting in 3 allocators: Average Volume, Sanitary Volume and CSO. The core calculation remains the same. Costs are allocated to "cost pools" that align with characteristics that define each Member Partner's use of the System.

In many instances, the allocation of specific revenue requirement elements to cost pools reflects the same allocation assumptions as those applied in the development of the past service charges, although specific operating programs as reflected in the budget request for FY 2022 do impact the cost pool allocations. The FY 2022 Cost of Service Study continues to reflect results of the independent GLWA capital asset inventory and valuation project to allocate capital revenue

requirements to Cost Pools. Industrial Waste Control charges and Industrial Surcharges reflect the updated cost of service analysis.

The public hearing was opened at the Board meeting on February 24, 2021. The proposed sewer budget provided for a decrease in revenues from charges of 1.1% which results in an average system charge decrease of 0.2%. The Board referred the budget to the Audit Committee for further review. After the public hearing concluded on March 24, 2021 the Board approved the proposed budget with a \$3.2 million reduction to the FY 2022 O&M budget. The administration allocated \$1.8 million of the reduction to the sewer O&M budget. This budget reduction resulted in a decrease in revenue from charges of 1.5% for the sewer system which results in an average system sewer service charge decrease of 0.6%. The actual charge adjustment for individual members will vary based on new SHAREs allocations.

The final approved charges are set forth below:

Great Lakes Water Authority		
Approved FY 2022 Sewage Disposal System Service Charges and Allocated Revenue Requirements		
Effective Date: July 1, 2021		
	Fixed Monthly Charge (a)	Projected Revenue from Charges
	\$/mo	\$
<u>Suburban Wholesale</u>		
1 Oakland Macomb Interceptor District	5,871,700	70,460,400
2 Rouge Valley	4,605,600	55,267,200
3 Oakland County - George W. Kuhn	3,819,000	45,828,000
4 Evergreen Farmington	2,980,500	35,766,000
5 SE Macomb Sanitary District	2,064,400	24,772,800
6 Dearborn	1,671,500	20,058,000
7 Grosse Pointe Farms	226,300	2,715,600
8 Grosse Pointe Park	156,900	1,882,800
9 Melvindale	129,500	1,554,000
10 Farmington	98,700	1,184,400
11 Center Line	85,800	1,029,600
12 Allen Park	69,800	837,600
13 Highland Park	446,400	5,356,800
14 Hamtramck	332,800	3,993,600
15 Grosse Pointe	74,100	889,200
16 Harper Woods	18,000	216,000
17 Redford Township	22,200	266,400
18 Wayne County #3	4,300	51,600
19 Subtotal "Regional Wholesale Revenues from Charges"		272,130,000
20 Industrial Specific Revenues		13,213,700
21 Subtotal "Regional Wholesale Revenues from Charges"		285,343,700
22 less: Highland Park Bad Debt		0
23 Total "Regional Wholesale Revenues" (a)		285,343,700
<u>Detroit Customer Class - \$</u>		
24 <u>Wholesale</u> Revenue Requirement (c)		194,178,200
25 less: Ownership Benefit per Lease		(5,516,000)
26 <u>Net Wholesale</u> Revenue Requirement		188,662,200
27 <u>Indirect Retail</u> Revenue Requirements (d)		39,233,900
28 less: Use of Lease Payment for Debt Service		0
29 <u>Net Indirect Retail</u> Revenue Requirements (d)		39,233,900
30 Subtotal Subject to GLWA Board Approval (26) + (29)		227,896,100
31 <u>Direct Retail</u> Revenue Requirements (e)		72,261,600
32 Total Local System Revenue Requirement (29) + (31)		111,495,500
33 Total Requirement from Detroit Customer Class (a)		300,157,700
(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 February 17, 2021 and amended subsequently due to the GLWA Board action taken at the March 24, 2021 Board meeting.		

Due to terms of the amended wastewater services contract with OMID, OMID's total annual revenue requirement includes components for wholesale services and OMID specific charges. For FY 2022 the total revenue requirement for OMID is \$70,460,400, of which, \$68,306,900 is OMID's wholesale budget allocation, \$1,403,500 is for specific OMID O&M charges and \$750,000 for estimated pass thru utility charges (this will be billed based on actual charges).

The table for Industrial Waste Control (IWC) Charges below has two separate types of charges. The first, labeled "Full Charge" includes both the administrative and field work components of the Industrial Pretreatment Program (IPP). The second, labeled "Admin Only Chg" 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 2022 Sewage Disposal System Industrial Specific Retail Charges Effective Date: July 1, 2021		
Industrial Waste Control Charges		
Meter Size <i>inches</i>	Full Charge <i>\$/mo</i>	Admin Only Chg <i>\$/mo</i>
5/8	3.54	0.89
3/4	5.31	1.33
1	8.85	2.21
1-1/2	19.47	4.87
2	28.32	7.08
3	51.33	12.83
4	70.80	17.70
6	106.20	26.55
8	177.00	44.25
10	247.80	61.95
12	283.20	70.80
14	354.00	88.50
16	424.80	106.20
18	495.60	123.90
20	566.40	141.60
24	637.20	159.30
30	708.00	177.00
36	778.80	194.70
48	849.60	212.40
Pollutant Surcharges		
<u>Pollutant</u>	<u>Charge</u>	
	<i>\$/lb</i>	
BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.347	
TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.476	
PHOSPHORUS (P) for concentrations > 12 mg/l	6.368	
FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.111	
SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	36.00	

Historical wastewater volumes 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 for fiscal years 2022 through 2024.

Treated and Billed Wastewater Volumes

Fiscal Year	Total Wastewater Treated (mg)	Customer Wastewater Volume (mg)		
		[1] Wholesale Customers	[2] Local System	Total
2020	213,700	117,200	18,500	135,700
2019	249,500	124,800	19,600	144,400
2018	235,600	119,400	19,500	138,900
2017	254,400	105,500	19,200	124,700

[1] Primarily metered wastewater volumes, but also includes water sales volumes for some customers whose wastewater is not metered. A fixed charge billing methodology was implemented in 2015. Volumes reflect measured and monitored wastewater flow.

[2] Reported water sales to retail customers.

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Section 6

Capital Investment

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Capital Investment 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 (O&M - Not Capitalized)	Capital Outlay - Direct Purchase Over \$5,000 (I&E Funded)	Capital Outlay - Projects and Programs (I&E Funded)	Capital Improvement Plan (I&E Funded)	Capital Improvement Plan (Bonds)
Funding Source	Operations & Maintenance	Improvement & Extension Fund	Improvement & Extension Fund	Improvement & Extension Fund	Construction Bond Fund
Fund Number	5910 - Water 5960 - Sewer	5506 - Water 5404 - Sewer	5506 - Water 5404 - Sewer	5506 - Water 5404 - Sewer	5519 - Water 5421 - Sewer
Account Number	901060	901100	901100	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	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	Project specific	Project Specific
Life	Greater than One Year	Greater than One Year	Greater than One Year	Greater than 20 Years	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, rehabilitation, and/or replacement	Infrastructure, plant, and facility upgrade, rehabilitation, and/or replacement	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	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, facilities, 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* on the following page as well as the assets noted above which support both systems.

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

Operating System	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity Thru 12.31.20	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Water System	\$ 8,366,000	\$ 21,045,200	\$ 5,143,100	\$ 20,541,500	\$ (503,700)	-2.4%	\$ 16,983,400
Operations & Maintenance	5,797,000	3,153,200	1,044,300	3,534,900	381,700	12.1%	2,904,800
Improvement & Extension	2,569,000	17,892,000	4,098,800	17,006,600	(885,400)	-4.9%	14,078,600
Wastewater System	6,518,300	20,481,100	3,913,100	15,965,100	(4,516,000)	-22.0%	18,211,900
Operations & Maintenance	-	-	67,900	-	-	0.0%	-
Improvement & Extension	6,518,300	20,481,100	3,845,200	15,965,100	(4,516,000)	-22.0%	18,211,900
Grand Total	\$ 14,884,300	\$ 41,526,300	\$ 9,056,200	\$ 36,506,600	\$ (5,019,700)	-12.1%	\$ 35,195,300

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

Operating System	FY 2020 Actual	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Water System	\$ 8,366,000	\$ 21,045,200	\$ 20,541,500	\$ 16,983,400	\$ 12,192,600	\$ 12,083,700	\$ 12,091,300
Operations & Maintenance	5,797,000	3,153,200	3,534,900	2,904,800	3,433,100	3,501,700	3,571,600
Improvement & Extension	2,569,000	17,892,000	17,006,600	14,078,600	8,759,500	8,582,000	8,519,700
Wastewater System	6,518,300	20,481,100	15,965,100	18,211,900	7,979,900	7,110,100	7,631,900
Improvement & Extension	6,518,300	20,481,100	15,965,100	18,211,900	7,979,900	7,110,100	7,631,900
Grand Total	\$ 14,884,300	\$ 41,526,300	\$ 36,506,600	\$ 35,195,300	\$ 20,172,500	\$ 19,193,800	\$ 19,723,200

Since assets are replaced on a periodic basis, annual expenditures may not be consistent. In addition, some capital outlay projects span several years and 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 occur periodically as technologies and control capabilities advance. The average annual program cost is \$2.1 million.
- ❖ GLWA enterprise-wide software systems. The forecast replacement of these systems is scheduled from FY 2021 through FY 2023 at an average annual cost of \$5.3 million.
- ❖ A program for the review and decommissioning of certain water mains is scheduled from FY 2022 through FY 2026 at an average annual cost of \$3.0 million.
- ❖ An assessment of the Combined Sewer Overflow facilities reviewing the criticality, condition and forecast replacement schedule of these facilities. The assessment started in FY 2020 and is scheduled to run through FY 2022 at an average annual cost of \$1.8 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 \$1.4 million.

Funding Sources

The Capital Outlay expenditures are proposed to be \$36.5 million for FY 2022, and \$35.2 million for FY 2023. 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:** 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:** The I&E Funds source of 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 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity Thru 12.31.20	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
Operations & Maintenance	\$ 5,797,000	\$ 3,153,200	\$ 1,112,200	\$ 3,534,900	\$ 381,700	12.1%	\$ 2,904,800
Improvement & Extension	9,087,300	38,373,100	7,944,000	32,971,700	(5,401,400)	-14.1%	32,290,500
Grand Total	\$ 14,884,300	\$ 41,526,300	\$ 9,056,200	\$ 36,506,600	\$ (5,019,700)	-12.1%	\$ 35,195,300

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

Funding Source	FY 2020 Actual	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Operations & Maintenance	\$ 5,797,000	\$ 3,153,200	\$ 3,534,900	\$ 2,904,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600
Improvement & Extension	9,087,300	38,373,100	32,971,700	32,290,500	16,739,400	15,692,100	16,151,600
Grand Total	\$ 14,884,300	\$ 41,526,300	\$ 36,506,600	\$ 35,195,300	\$ 20,172,500	\$ 19,193,800	\$ 19,723,200

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

Asset Type	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Operations & Maintenance	\$ 3,153,200	\$ 3,534,900	\$ 2,904,800	\$ 3,433,100	\$ 3,501,700	\$ 3,571,600
Information Technology	3,153,200	3,534,900	2,904,800	3,433,100	3,501,700	3,571,600
Hardware	444,000	2,025,800	2,066,300	2,107,600	2,149,800	2,192,700
Software	2,709,200	1,509,100	838,500	1,325,500	1,351,900	1,378,900

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

Asset Type	FY 2021 Amended Budget	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
Improvement & Extension	\$ 38,373,100	\$ 32,971,700	\$ 32,290,500	\$ 16,739,400	\$ 15,692,100	\$ 16,151,600
Building/Structures	1,000,000	357,500	362,800	368,100	373,500	379,000
Information Technology	10,830,500	9,080,500	8,580,500	80,500	80,500	80,500
Software	10,830,500	9,080,500	8,580,500	80,500	80,500	80,500
Leasehold Improvements	278,000	880,000	500,000	500,000	158,000	-
Machinery & Equipment	16,273,200	12,906,700	15,521,200	10,632,600	9,966,200	10,343,500
Computers & IT	3,507,500	1,168,000	1,472,000	1,110,000	365,500	18,000
Controls & Communication	2,220,000	2,530,000	6,051,500	2,489,000	1,978,500	3,510,000
Flow Measuring & Meters	626,000	1,026,600	545,600	514,600	384,600	374,500
Furniture & Fixtures	556,000	100,000	100,000	100,000	102,000	152,000
Heavy Equipment & Misc	1,485,000	1,060,000	314,000	120,000	542,000	45,000
Laboratory	279,000	368,100	392,400	294,200	297,400	300,700
Pipes, Gates & Valves	955,000	965,000	862,000	962,500	889,000	912,500
Process Equipment/Treatment	1,267,000	1,303,500	1,594,000	1,103,600	1,250,400	1,382,600
Pumps & Motors	5,297,100	4,306,500	4,119,700	3,871,700	4,146,800	3,579,100
Tools, Shop & Warehouse	80,600	79,000	70,000	67,000	10,000	69,100
Projects & Programs	5,983,000	7,605,800	4,000,000	3,000,000	3,000,000	3,000,000
Safety & Security	1,093,800	80,000	81,600	83,200	84,900	86,600
Site Improvements	50,000	-	-	-	-	-
Lighting	50,000	-	-	-	-	-
Vehicles	2,864,600	2,061,200	3,244,400	2,075,000	2,029,000	2,262,000
Heavy Truck	150,000	150,000	-	-	-	200,000
Light Truck	590,000	50,000	300,000	-	-	-
Passenger	1,036,300	906,600	1,461,100	1,013,000	1,000,000	1,000,000
Trailer & Towable Equipment	20,000	40,000	-	40,000	-	40,000
Utility Vehicle	1,068,300	914,600	1,483,300	1,022,000	1,029,000	1,022,000
Grand Total	\$ 41,526,300	\$ 36,506,600	\$ 35,195,300	\$ 20,172,500	\$ 19,193,800	\$ 19,723,200

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

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
881101 - Public Affairs	\$ -	\$ 5,000	\$ -	\$ 9,000	\$ 11,000	\$ 5,000	\$ 2,500	\$ 9,000
881201 - Security and Integrity	-	-	-	80,000	81,600	83,200	84,900	86,600
882111 - Water Engineering	170,900	11,500	-	5,500	5,500	5,500	5,500	5,500
882121 - Water Quality	8,700	32,000	145,800	20,000	51,000	18,000	30,000	17,500
882131 - Water Works Park	243,700	586,100	223,800	308,100	373,800	354,000	354,000	633,000
882141 - Springwells Water Plant	70,000	969,000	19,700	510,000	351,000	901,000	350,000	359,000
882151 - Northeast Water Plant	319,200	920,000	441,700	1,175,000	958,000	463,000	628,000	110,000
882161 - Southwest Water Plant	86,400	615,000	227,200	250,000	169,000	265,000	280,000	250,000
882171 - Lake Huron Water Plant	134,800	663,000	70,300	490,000	205,000	608,000	205,000	177,000
882301 - Systems Operations Control	131,300	1,475,000	-	1,437,500	1,500,000	1,400,000	2,025,000	2,375,000
882421 - Facility Operations	5,700	62,500	493,300	62,500	62,500	62,500	62,500	62,500
882422 - Fleet Operations	971,900	1,506,300	2,129,000	942,600	1,550,100	1,000,000	1,000,000	1,000,000
882431 - Field Service Operations	18,800	50,000	18,700	3,050,000	3,050,000	3,050,000	3,050,000	3,050,000
882501 - Energy, Research & Innovation	-	125,000	7,700	170,000	230,000	155,000	155,000	35,000
883301 - Office of the CIO	335,300	-	-	-	-	-	-	-
883311 - Info Technology Project Management	470,500	-	-	-	-	-	-	-

Team	FY 2020 Actual	FY 2021 Amended Budget	FY 2021 Activity as of 12.31.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
883321 - Info Technology Service Delivery	542,300	494,000	195,600	1,583,300	1,360,000	1,387,200	1,414,900	1,443,200
883331 - Info Technology Infrastructure	4,011,700	1,963,700	548,100	1,691,900	1,719,000	1,407,600	1,435,700	1,464,400
883341 - Info Technology Enterprise Applications	8,200	4,050,000	-	2,000,000	2,000,000	-	-	-
883351 - Info Technology Business Applications	747,100	5,582,500	388,000	3,321,200	2,511,000	572,200	583,700	595,300
883361 - Info Technology Security & Risk	-	63,000	-	63,500	64,800	66,100	67,400	68,700
884124 - Logistics and Materials	21,000	1,250,000	-	3,030,800	75,000	-	-	-
886001 - Chief Planning Officer	-	28,000	-	-	-	-	-	-
886101 - Systems Planning	-	-	-	-	300,000	-	-	-
886401 - Systems Analytics	68,500	593,600	234,200	340,600	355,100	389,300	349,600	349,600
891101 - Public Affairs	-	2,500	-	9,000	11,000	5,000	2,500	9,000
891201 - Security	-	1,093,800	-	-	-	-	-	-
892201 - Wastewater Director	197,400	390,000	-	566,500	887,500	507,500	7,500	207,500
892211 - Wastewater Engineering	12,100	-	-	-	-	-	-	-
892221 - Wastewater Operations	17,300	1,575,000	74,500	370,000	355,300	360,600	388,000	371,500
892222 - Wastewater Process Control	-	1,300,000	7,900	1,855,000	5,205,000	1,865,000	960,500	2,720,000
892223 - Wastewater Primary Process	823,600	1,877,000	830,700	993,500	676,500	261,200	230,300	437,700
892224 - Wastewater Secondary Process	76,500	470,000	128,200	145,000	149,500	130,200	36,500	35,400
892225 - Wastewater Dewatering Process	-	348,000	5,500	248,500	273,000	272,400	276,800	277,700
892226 - Wastewater Incineration Process	135,000	63,000	-	168,000	178,500	24,000	356,100	140,000
892231 - Industrial Waste Control	-	25,000	-	-	25,000	-	27,500	7,000
892235 - Wastewater Laboratories	3,300	-	18,500	40,100	36,700	14,200	17,900	101,200
892270 - Combined Sewer Overflow	2,250,400	3,033,000	1,834,500	800,000	-	-	-	-
892271 - Puritan Fenkell Combined Sewer Overflow	116,700	149,800	126,100	165,000	155,500	15,000	60,000	-
892272 - 7 Mile Combined Sewer Overflow	195,800	5,200	76,600	131,000	35,000	68,000	756,400	8,000
892273 - Hubble Southfield Combined Sewer Overflow	540,000	110,000	155,200	200,000	260,000	110,000	110,000	90,000
892274 - Leib Combined Sewer Overflow	19,800	462,000	-	382,000	198,800	144,600	45,900	47,300
892275 - St Aubin Combined Sewer Overflow	24,700	281,000	35,800	229,400	45,000	18,000	68,000	18,500
892276 - Connor Creek Combined Sewer Overflow	439,500	325,000	191,500	515,000	440,500	324,700	489,700	397,500
892277 - Baby Creek Combined Sewer Overflow	437,300	307,000	114,900	302,000	364,800	269,000	274,000	281,100
892278 - Oakwood Combined Sewer Overflow	186,900	150,000	28,800	95,000	120,000	95,000	95,000	-
892279 - Belle Isle Combined Sewer Overflow	-	-	67,900	-	-	-	-	-
892301 - Systems Operations Control	41,400	1,475,000	-	1,375,000	1,475,000	1,375,000	1,375,000	1,375,000
892421 - Facility Operations	5,700	62,500	-	62,500	62,500	62,500	62,500	62,500
892422 - Fleet Operations	926,400	1,036,300	216,500	1,362,600	1,461,300	1,000,000	1,470,000	1,000,000
893331 - Info Technology Infrastructure	-	1,000,000	-	500,000	500,000	-	-	-
893341 - Info Technology Enterprise Applications	-	-	-	2,000,000	2,000,000	-	-	-
893351 - Info Technology Business Applications	-	2,750,000	-	2,375,000	2,250,000	-	-	-
896101 - System Planning	-	450,000	-	-	-	-	-	-
896201 - Asset Management	-	-	-	14,000	-	-	-	-
896401 - System Analytics	68,500	1,740,000	-	1,061,000	1,045,500	1,045,000	-	45,000
896601 - Capital Improvement Planning	-	-	-	-	-	13,000	-	-
Grand Total	\$ 14,884,300	\$ 41,526,300	\$ 9,056,200	\$ 36,506,600	\$ 35,195,300	\$ 20,172,500	\$ 19,193,800	\$ 19,723,200

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 and their respective financing options. The plan does include a ten-year outlook.

Projects and programs established in the CIP are identified and recommended from many different sources. Several projects are necessary to meet permit and regulatory requirements, while others have been identified in master plans and condition or need assessments. The latter of which make up the primary sources of projects within 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

Capital Improvement Plan at-a-glance

Water System	Sewer System
The adopted FY 2022-2026 Water CIP calls for \$932.5 million of major capital expenditures over the next five fiscal years.	The FY 2022-2026 Wastewater CIP calls for \$738.4 million of major capital expenditures over the next five fiscal years.
The FY 2022-2026 capital financing plan is based on a 75% Spend Rate Assumption	The FY 2022 - 2026 capital financing plan is based on a 75% Spend Rate Assumption
The Regional Water System CIP projects are driven by: <ul style="list-style-type: none"> ✓ The Water System Master plan innovative "right sizing" approach ✓ Condition assessments to focus investment on "surgical" renewal and replacement ✓ Less than 1% of the CIP is driven by mandated permit requirements 	The Regional Wastewater System CIP projects are driven by: <ul style="list-style-type: none"> ✓ The Wastewater System Master plan "pipes don't know the boundaries" concept ✓ Innovative Wet Weather strategies
The CIP addresses: <ul style="list-style-type: none"> ✓ Water delivery – 39.8% of capital expenditures ✓ Production – 49.9% of capital expenditures 	The CIP addresses: <ul style="list-style-type: none"> ✓ Water Resource Recovery Facility – 44.5% of capital expenditures ✓ Collection and CSO – 28.4% of capital expenditures

✓ General Purpose and Central Services – 10.3% of capital expenditures	✓ General Purpose and Central Services – 27.1% 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.

This CIP is a planning document and not necessarily a budget. 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. A project at preliminary design phase will be more subject to estimate compared to a project where construction is in process. Execution of the CIP will provide greater system reliability and result in meeting or exceeding current service levels. Current and prior CIPs are available on GLWA’s website at <https://www.glwater.org/CIP/>.

Funding

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 Revolving Fund (DWRf) loan program and the Clean Water Revolving Fund (CWRf) 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.

❖ **Contributed Capital**

Periodically, the Authority may have the opportunity to optimize the systems with specific member partner participation. Depending on the nature of the shared financing strategy, the Authority may offset the cost of system expansion or improvements with contributed capital from that member partner.

Debt financing sources include bond proceeds for specific projects that are financed by the State Revolving Fund (SRF) at a lower cost of borrowing. The Authority intends to apply for future SRF funding; only approved SRF financings are shown in the financial plan.

The potential funding source identified for each project is subject to change based upon the systems need and financial resources available at the time. For the purposes of the financial plan, a board adopted “Capital Spending Ratio” (CSR) is applied to the total CIP to ensure that borrowings do not exceed program needs. For this five-year financial plan, the capital improvement plan project expenses are netted to 75% of the respective amount in the CIP. This differential is based on historical variances and the project mix in the CIP. This variance is not unusual given the project nature of the CIP.

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 receives the proceeds of bond issuances and related interest earnings for the purposes of financing capital improvements. GLWA has made a concentrated effort to implement a CIP financial plan strategy where long-lived assets, defined as constructed infrastructure and plant facilities with an estimated useful life greater than 20 years, are eligible for bond funding. The long-lived assets are funded with a blend of debt and I&E funds. I&E funds designated for CIP expenditures are transferred to the Construction Fund.

❖ **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, legacy pension obligations, system lease requirements, revenue financed capital targets, water residential assistance program commitments and Master Bond Ordinance (MBO) reserve requirements. The cost of capital improvements is allocated to customers among four general cost pools as described following:

1. ***Common-to-All (CTA)*** represents costs that are allocable to all customers.
2. ***Oakland-Macomb Interceptor Drainage District (OMID)*** represents costs that are allocable to a portion of the sewer system that receives flows from OMID's system.
3. ***Suburban Only*** represents costs that are allocable to wholesale customers outside the City of Detroit.
4. ***CSO 83/17*** represents capital costs that are allocated based upon terms of a 1999 rate settlement agreement sanctioned by a federal court. The outcome was an allocation of 83% of "combined sewer overflow control facilities" (CSO) costs to City of Detroit customers and 17% to other customers.

These cost pools forecast the allocation of the debt service among Member Partners. The following table shows the allocation of the CIP by those cost pools – although it should be noted that the annual charges costs of services study allocates costs based on actual, not planned, investment in infrastructure based on the capital asset ledger.

**Capital Improvement Plan
 Projected Capital Expenditures (\$000)**

Cost Allocation	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total FY 2022-2026	Percent of Five Year Total
Water							
Common-to-all	\$ 174,619	\$ 196,596	\$ 195,052	\$ 166,823	\$ 178,316	\$ 911,407	97.7%
Suburban Only	4,591	4,117	4,113	4,113	4,113	21,048	2.3%
Total Water	\$ 179,210	\$ 200,713	\$ 199,165	\$ 170,936	\$ 182,430	\$ 932,455	100.0%
75% Spend Rate Assumption (1)	\$ 134,408	\$150,535	\$149,374	\$128,202	\$136,823	\$699,342	
Sewer							
Common-to-all	\$ 90,730	\$ 111,816	\$ 144,793	\$ 148,184	\$ 150,126	\$ 645,650	87.4%
Suburban Only	13,367	8,718	7,514	14,002	19,176	62,778	8.5%
To Be Decided	1,953	2,655	8,633	10,837	5,897	29,975	4.1%
Total Sewer	\$ 106,050	\$ 123,190	\$ 160,940	\$ 173,024	\$ 175,200	\$ 738,403	100.0%
75% Spend Rate Assumption (1)	\$79,538	\$92,393	\$120,705	\$129,768	\$131,400	\$553,804	

(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 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027 & Beyond	Project Total
Treatment Plants & Facilities									
Lake Huron	\$ 19,868	\$ 6,081	\$ 10,661	\$ 18,803	\$ 27,104	\$ 23,325	\$ 23,403	\$ 70,172	\$ 199,417
Northeast	1,803	979	2,700	3,237	3,883	4,440	1,721	66,360	85,123
Southwest	5,402	268	5,184	2,244	840	78	42	24,979	39,038
Springwells	116,720	32,393	30,650	34,928	38,462	35,906	34,449	267,934	591,440
Water Works Park	9,797	4,752	7,124	8,472	8,444	7,502	17,974	97,908	161,973
General Purpose	15,411	7,024	8,678	18,926	23,635	18,016	5,372	-	97,062
Total Treatment Plants & Facilities	169,002	51,497	64,997	86,609	102,368	89,267	82,962	527,352	1,174,053
Field Services - Transmission System	33,372	46,312	71,317	64,199	61,193	43,350	59,995	244,239	623,978
System Control Center - Pump Stations/Reservoir	9,971	9,929	23,582	32,681	23,322	25,793	24,294	162,635	312,207
General Purpose	10,246	37,387	18,253	17,002	12,034	12,091	14,050	82,730	203,792
Total Water Projects	222,591	145,125	178,150	200,491	198,917	170,500	181,301	1,016,956	2,314,030
Central Service Projects Allocated to Water									
Facilities	-	-	-	-	-	-	-	25,000	25,000
Security	3,944	4,656	567	2	-	-	-	-	9,170
Energy Management	7	-	38	221	221	213	-	-	700
Programs	771	959	456	-	27	223	1,129	1,245	4,810
Total Central Services Allocated To Water	4,722	5,616	1,061	223	248	436	1,129	26,245	39,679
Total Water CIP	\$ 227,313	\$ 150,740	\$ 179,210	\$ 200,713	\$ 199,165	\$ 170,936	\$ 182,430	\$ 1,043,201	\$ 2,353,709
75% Spend Rate Assumption (1)			\$134,408	\$150,535	\$149,374	\$128,202	\$136,823		

(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 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027 & Beyond	Project Total
Water Resource Recovery Facility									
Primary Treatment	\$ 67,197	\$ 23,154	\$ 11,198	\$ 18,728	\$ 31,913	\$ 30,039	\$ 25,200	\$ 163,636	\$ 371,065
Secondary Treatment & Residuals	62,252	4,203	2,577	5,516	19,663	19,715	23,263	138,143	275,331
Management	15,537	4,703	3,137	2,547	2,234	1,518	3,979	1,429	35,084
IWC	10,584	2,067	-	-	-	-	-	-	12,651
CSO RTB & SDF	-	-	-	-	-	-	-	-	-
General Purpose	4,784	7,343	4,043	13,261	23,871	19,304	10,610	15,436	98,654
Total WRRF	160,355	41,470	20,955	40,052	77,682	70,577	63,051	318,644	792,785
Field Services-									
Inteceptors	20,151	12,117	11,982	10,843	6,475	10,106	20,119	34,380	126,172
System Control Center									
Pumping Stations	21,616	19,693	16,138	12,674	17,446	23,446	34,146	124,450	269,610
In System Devices	-	-	-	-	1,026	1,024	1,024	43,243	46,317
SCC Total	21,616	19,693	16,138	12,674	18,472	24,470	35,170	167,693	315,927
General Purpose	37,624	47,820	48,842	52,538	46,975	53,794	44,041	138,540	470,173
CSO Facilities	6	4,693	6,134	5,805	10,060	12,801	11,542	13,633	64,674
Total Wastewater Projects	239,751	125,793	104,051	121,913	159,664	171,747	173,923	672,889	1,769,731
Central Service Projects Allocated to Wastewater									
Facilities	1,123	148	1,277	1,277	1,276	1,277	1,277	1,234	8,888
Security	1,015	1,796	722	-	-	-	-	-	3,534
Total Central Services Allocated To Wastewater	2,138	1,945	1,999	1,277	1,276	1,277	1,277	1,234	12,422
Total Wastewater CIP	\$ 241,889	\$ 127,738	\$ 106,050	\$ 123,190	\$ 160,940	\$ 173,024	\$ 175,200	\$ 674,124	\$ 1,782,153
75% Spend Rate Assumption (1)			\$79,538	\$92,393	\$120,705	\$129,768	\$131,400		

(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. These programs will typically be funded in perpetuity.

Categories

The table below lists the categories of CIP and whether they are considered recurring. The General Purpose category is used to identify projects that cross over multiple project categories.

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

Nonrecurring Projects in the CIP for FY 2022 through FY 2026

The tables below list the nonrecurring projects that are budgeted for FY 2022 through FY 2026 that are greater than \$30 million. There are nine (9) projects in the Water category and five (5) projects in the Wastewater category.

Water Nonrecurring Projects with 2022-2026 CIP Total Greater than \$30M (\$000)											
CIP #	Project Title	Lifetime Actual Thru FY 2020	Projected Expenditures								Project Total
			FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027+	FY 2022-2026 CIP Total	
122013	14 Mile Transmission Main Loop	3,759	6,064	37,593	36,390	21,374	-	-	-	95,357	105,180
114002	Springwells Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improvements	5,496	11,812	16,546	18,135	19,954	18,584	18,391	115,303	91,611	224,222
122003	Water Works Park to Northeast Transmission Main	5,190	11,234	14,593	9,214	14,535	13,835	21,695	52,921	73,871	143,217
116002	Pennsylvania and Springwells Raw Water Supply Tunnel Improvements	15,411	7,024	8,360	17,395	23,304	18,016	5,372	-	72,446	94,880
114010	Springwells Water Treatment Plant, Yard Piping and High-Lift Header Improvements	241	267	1,568	4,614	13,057	16,057	16,057	148,610	51,354	200,472
122004	96-inch Water Transmission Main Relocation and Isolation Valve Installations	1,816	2,077	2,577	7,614	10,625	12,581	12,581	94,980	45,978	144,852
132010	West Service Center Pumping Station - Reservoir, Reservoir Pumping, and Division Valve	2,149	5,266	17,149	19,927	650	-	-	-	37,727	45,142
111001	Lake Huron Water Treatment Plant, Low-Lift, High Lift and Filter Backwash Pumping System Improvements	212	1,993	1,962	4,581	8,867	10,837	10,837	17,889	37,085	57,178
132015	Newburgh Road Booster Pumping Station Improvements	350	852	733	2,365	8,839	12,524	12,000	7,380	36,462	45,044

Wastewater Nonrecurring Projects with 2022-2026 CIP Total Greater than \$30M (\$000)											
CIP #	Project Title	Lifetime Actual Thru FY 2020	Projected Expenditures								Project Total
			FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027+	FY 2022-2026 CIP Total	
232002	Freud & Conner Creek Pump Station Improvements	7,342	6,445	3,357	12,646	17,446	23,446	34,146	124,450	91,041	229,279
212008	WRRF Aeration Improvements 1 and 2	16	2,264	2,567	5,392	19,423	19,370	18,576	14,323	65,328	81,931
211007	WRRF PS #2 Bar Racks Replacements and Grit Collection System Improvements	5	2,323	2,303	6,987	18,173	18,122	15,052	13,263	60,638	76,229
260510	Conveyance System Repairs (Outfalls)	-	557	7,710	7,710	7,728	7,710	9,240	8,210	40,096	48,863
211006	WRRF PS No. 1 Improvements	1,284	623	3,061	7,987	8,009	7,199	7,559	32,987	33,816	68,709

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. 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/ Reduced O&M Costs?	Service Level Reliability & Redundancy Improved?	SRF/DWRF Funded? (Lower Cost of Capital)	Avoided Future Capital Costs?
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	Yes	
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. 	Yes (Water Master Plan Rightsizing and NEWTP Repurposing)	Yes		
CIP # 122003 - Water Works Park to Northeast Transmission Main <ul style="list-style-type: none"> Facilitates the rightsizing of the system. Reduction of facility in operation will result in decrease among all related O&M categories costs. 	Yes (Water Master Plan Rightsizing and NEWTP Repurposing)	Yes	Yes	Yes
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		

Water Nonrecurring Projects – Impact on Financial Plan				
Project/Project Drivers	Optimized Operations/ Reduced O&M Costs?	Service Level Reliability & Redundancy Improved?	SRF/DWRF Funded? (Lower Cost of Capital)	Avoided Future Capital Costs?
CIP # 114010 – Springwells Water Treatment Plant Yard Piping and High-Left Header Improvements <ul style="list-style-type: none"> • Replace discharge header piping and yard piping. • Miscellaneous site infrastructure improvements (guardhouse, secondary entrance, replacement of access drives) 		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		
CIP # 132010 - West Service Center Pumping Station - Reservoir, Reservoir Pumping and Division Valve <ul style="list-style-type: none"> • This project addresses poor condition of the existing reservoirs and the suction hydraulic issues of the reservoir pumping system. • Construction of two new reservoirs and a new reservoir pump house will maintain water quality in the reservoirs and adequate reservoir pumping capacity at the WSC. • Replacement of the flow-control division valve vault No. 3 will improve the transmission system's operational flexibility. • The proposed capital improvements will also increase system reliability and reduce maintenance associated with the aging assets at the WSC. 	Yes	Yes		
CIP # 111001 – Lake Huron Water Treatment Plant (LHWTP) - Low Lift, High Lift, and Filter Backwash Pumping System <ul style="list-style-type: none"> • The 2015 Water Master Plan Update requires that the LHWTP's treatment and pumping capacity be aligned with the decreasing trend in overall system water demands. • Addressing the age and condition of existing major plant pumping and related electrical equipment. • The low-lift pumping equipment will be redesigned to operate as demand allows for current and forecasted water system demands. • Piping and transfer pumps associated with the phosphoric acid tanks will also be replaced which are over 20 years old to maintain reliability and integrity. 	Yes (Water Master Plan Rightsizing)	Yes		

Water Nonrecurring Projects – Impact on Financial Plan				
Project/Project Drivers	Optimized Operations/ Reduced O&M Costs?	Service Level Reliability & Redundancy Improved?	SRF/DWRF Funded? (Lower Cost of Capital)	Avoided Future Capital Costs?
CIP # 132015 – Newburgh Road Booster Pumping Station Improvements <ul style="list-style-type: none"> Construct new pumping station to pump flows to the Haggerty Station reservoir. 		Yes		

Sewer Nonrecurring Projects – Impact on Financial Plan				
Project/Project Drivers	Optimized Operations / Reduced O&M Costs?	Service Level Reliability & Redundancy Improved?	SRF/DWRF Funded? (Lower Cost of Capital)	Avoided Future Capital Costs?
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. 		Yes		
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. 	Yes	Yes		
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. 	Yes	Yes		
CIP # 260510 – Conveyance System Repairs (Outfall) <ul style="list-style-type: none"> Repairs to existing CSO outfalls Many of these CSO outfalls have sediment deposits that results in transportation capacity limitation. 		Yes		
CIP # 211006 – WRRF PS No. 1 Improvements <ul style="list-style-type: none"> Condition assessment and rehabilitation of all pumps at Pump Station 1 	Yes	Yes		



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 **2021-056** regarding **“Resolution Adopting the FY 2022 & FY 2023 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 March 24, 2021 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: John J. Zech, Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown, and Beverly Walker-Griffiea

NO: None

ABSTAIN: None

EXCUSED: None

Dated: March 24, 2021



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 2022 & FY 2023 Biennial Budget

Agenda of: February 24, 2021, March 10, 2021, March 24, 2021
Item No.: **2021-056**
Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: February 24, 2021

RE: Resolution Adopting the FY 2022 & FY 2023 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 2022 and FY 2023 Biennial Budget opened on February 24, 2021 and continued through March 24, 2021;**
- 2) **Pending public comment, adopts the attached resolution, 2021-056 adopting the FY 2022 and FY 2023 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 Chief Executive Officer to take such other action as may be necessary to accomplish the intent of this vote and authorizes the CEO 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 2022 and FY 2023 which was reviewed at Audit Committee meetings on December 18, 2020, January 15, 2021, and January 22, 2021; Board meetings of January 27, 2021 and February 24, 2021; and Member Partner meetings on January 7, 2021, as it relates to the proposed Schedule of Charges, and January 21, 2021.

At the Public Hearing on February 24, 2021, the Board referred the proposed budget for FY 2022 and FY 2023 to the Audit Committee for its regularly scheduled meeting on February 26, 2021. Special Audit Committee meetings were held on March 8, 2021 and on March 15, 2021 to continue discussion and review of the proposed budget.

A presentation is attached to this board letter related to the proposed budget as a result of the above meetings.

BUDGET IMPACT

This action establishes a budget for FY 2022 and FY 2023.

COMMITTEE REVIEW

The GLWA Audit Committee reviewed the budget and supplemental analysis at the meetings noted above.

On March 15, 2021, by a vote of 2-1, the Audit Committee adopted the following motion: “Director Baker made a motion, supported by Director Brown, to direct Administration to determine the 15 lowest prioritized positions that will total \$1.3 Million to total a total of \$4.5 Million and incorporate the \$4.5 Million in savings for the Audit Committee’s recommendation to the full Board on March 24, 2021 and to apply the savings to lower charge increases, water and sewer.”



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Great Lakes Water Authority

Resolution 2021 - 056

Resolution Adopting the Biennial FY 2022 & FY 2023 Budget

By Board Member: Beverly Walker-Griffiea, Ph.D.

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% though the fiscal year ending June 30, 2025; and

WHEREAS The GLWA Board is now adopting its sixth 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 0.7% which equates to an average 1.8% increase in revenues from Water Service Charges and a Regional Sewer System annual revenue requirements budget decrease of 2.3% which equates to an average 1.5% decrease 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 2022 is \$344,030,500 and for FY 2023 is \$354,351,400 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 2022 is \$475,429,200 and for FY 2023 is \$489,692,100 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 2022 is \$143,933,800 and for FY 2023 is \$148,117,300 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 2022 is \$181,299,800 and for FY 2023 is \$183,783,000 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 Regional Water System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$177,845,200 for FY 2022 and \$189,898,800 for FY 2023 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 Regional Sewer System bonds and to restore any reserves therefore established in the Master Bond Ordinance is \$239,010,300 for FY 2022 and \$237,075,200 for FY 2023 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 \$17,006,600 in FY 2022 and \$14,078,600 in FY 2023 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 \$134,408,000 in FY 2022 and \$150,535,000 in FY 2023 for the capital improvement plan in accordance with the Schedule 5A – Water Capital Financing Plan: Water Construction Fund budget with those capital amounts reflecting a 75% Capital Spending Ratio applied to FY 2022 and FY 2023 as shown in the proposed FY 2022 though FY 2026 Capital Improvement Plan; and
- WHEREAS** The amounts necessary to fund the annual sewer system capital expenditures of \$15,965,100 in FY 2022 and \$18,211,900 in FY 2023 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 \$79,538,000 in FY 2022 and \$92,393,000 in FY 2023 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 2022 and FY 2023 as shown in the proposed FY 2022 through FY 2026 Capital Improvement Plan; and

WHEREAS The GLWA Audit Committee began review of the budget and five-year financial plan document developed for FY 2022 through FY 2026 at its meeting on December 18, 2020; with updates at its meetings on January 15, 2021, and January 22, 2021; 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 24, 2021 at 2:00 p.m. 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 The public hearing was opened on February 24, 2021 and continued through March 24, 2021, at 2:00 p.m.; 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 24, 2021, and continued that hearing through March 24, 2021, to receive public comment regarding the proposed budget for the Fiscal Years 2022 and 2023; and be it further

RESOLVED That the GLWA Board approves the budget for Fiscal Years 2022 and 2023; and be it finally

RESOLVED That the 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 Budget

Water System Revenue Requirements	Current Year		Biennial Budget					
	FY 2021 Adopted	FY 2021 Estimated	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change	FY 2023 Requested	FY 2023 \$ Change	FY 2023 % Change
Revenues								
Revenues from Charges	\$336,807,600	\$335,060,200	\$342,808,200	\$ 6,000,600	1.8%	\$353,126,600	\$ 10,318,400	3.0%
Other Operating Revenue	-	175,000	175,000	175,000	0.0%	175,000	-	0.0%
Non-Operating Revenue	4,834,400	1,276,500	1,047,300	(3,787,100)	-78.3%	1,049,800	2,500	0.2%
Total Revenues	341,642,000	336,511,700	344,030,500	2,388,500	0.7%	354,351,400	10,320,900	3.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$137,127,300	\$134,127,300	\$143,933,800	\$6,806,500	5.0%	\$148,117,300	\$4,183,500	2.9%
General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	-	0.0%	6,048,000	-	0.0%
Debt Service	143,189,900	137,436,100	135,481,000	(7,708,900)	-5.4%	146,520,400	11,039,400	8.1%
General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	-	0.0%	6,268,300	-	0.0%
Water Residential Assistance Program Contribution	1,669,400	1,669,400	1,705,500	36,100	2.2%	1,756,700	51,200	3.0%
Lease Payment	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
Operating Reserve Deposit	876,600	-	-	(876,600)	-100.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	23,962,500	28,462,600	28,093,900	4,131,400	17.2%	23,140,700	(4,953,200)	-17.6%
Annual Water System Revenue Requirements	\$341,642,000	\$336,511,700	\$344,030,500	\$ 2,388,500	0.7%	\$354,351,400	\$ 10,320,900	3.0%

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	\$321,110,900
Regional System Wholesale Revenues – Detroit Customers	21,697,300
Total Revenues from Charges	<u>\$342,808,200</u>

Schedule 1B – Sewer System Revenue Requirements Budget

Sewer System Revenue Requirements	Current Year		Biennial Budget					
	FY 2021 Adopted	FY 2021 Estimated	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change	FY 2023 Requested	FY 2023 \$ Change	FY 2023 % Change
Revenues								
Revenues from Charges	\$481,162,100	\$475,904,100	\$474,005,900	\$ (7,156,200)	-1.5%	\$488,077,800	\$ 14,071,900	3.0%
Other Operating Revenue	-	400,000	400,000	400,000	0.0%	400,000	-	0.0%
Non-Operating Revenue	5,589,200	1,046,100	1,023,300	(4,565,900)	-81.7%	1,214,300	191,000	18.7%
Total Revenues	486,751,300	477,350,200	475,429,200	(11,322,100)	-2.3%	489,692,100	14,262,900	3.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$184,946,100	\$182,296,000	\$181,299,800	\$ (3,646,300)	-2.0%	\$183,783,000	\$2,483,200	1.4%
General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	-	0.0%	10,824,000	-	0.0%
Debt Service	209,739,900	201,780,500	207,209,500	(2,530,400)	-1.2%	204,566,500	(2,643,000)	-1.3%
General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	-	0.0%	11,620,700	-	0.0%
Water Residential Assistance Program Contribution	2,415,100	2,415,100	2,358,300	(56,800)	-2.4%	2,429,000	70,700	3.0%
Lease Payment	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
Operating Reserve Deposit	-	-	-	-	0.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	39,705,500	40,913,900	34,616,900	(5,088,600)	-12.8%	48,968,900	14,352,000	41.5%
Annual Sewer System Revenue Requirements	\$486,751,300	\$477,350,200	\$475,429,200	\$ (11,322,100)	-2.3%	\$489,692,100	\$ 14,262,900	3.0%

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	\$285,343,700
Regional System Wholesale Revenues – Detroit Customers	188,662,200
Total Revenues from Charges	<u>\$474,005,900</u>

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

Combined System Revenue Requirements	Current Year		Biennial Budget					
	FY 2021 Adopted	FY 2021 Estimated	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change	FY 2023 Requested	FY 2023 \$ Change	FY 2023 % Change
Revenues								
Revenues from Charges	\$817,969,700	\$810,964,300	\$816,814,100	\$ (1,155,600)	-0.1%	\$841,204,400	\$ 24,390,300	3.0%
Other Operating Revenue	-	575,000	575,000	575,000	0.0%	575,000	-	0.0%
Non-Operating Revenue	10,423,600	2,322,600	2,070,600	(8,353,000)	-80.1%	2,264,100	193,500	9.3%
Total Revenues	828,393,300	813,861,900	819,459,700	(8,933,600)	-1.1%	844,043,500	24,583,800	3.0%
Revenue Requirements								
Operations & Maintenance (O&M) Expense	\$322,073,400	\$316,423,300	\$325,233,600	\$3,160,200	1.0%	\$331,900,300	\$6,666,700	2.0%
General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	-	0.0%	16,872,000	-	0.0%
Debt Service	352,929,800	339,216,600	342,690,500	(10,239,300)	-2.9%	351,086,900	8,396,400	2.5%
General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	-	0.0%	17,889,000	-	0.0%
Water Residential Assistance Program Contribution	4,084,500	4,084,500	4,063,800	(20,700)	-0.5%	4,185,700	121,900	3.0%
Lease Payment	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
Operating Reserve Deposit	876,600	-	-	(876,600)	-100.0%	-	-	0.0%
Improvement & Extension Fund Transfer Pending	63,668,000	69,376,500	62,710,800	(957,200)	-1.5%	72,109,600	9,398,800	15.0%
Annual Revenue Requirements	828,393,300	813,861,900	819,459,700	\$ (8,933,600)	-1.1%	844,043,500	\$ 24,583,800	3.0%

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

Flow of Funds Basis		FY 2022 Water Fund	FY 2022 Sewer Fund	FY 22 Combined (Informational Only)	FY 2023 Water Fund	FY 2023 Sewer Fund	FY 23 Combined (Informational Only)
Revenues							
1	Regional System Wholesale Revenues	\$ 342,808,200	\$ 474,005,900	\$ 816,814,100	\$ 353,126,600	\$ 488,077,800	\$ 841,204,400
2	Local System Revenues	73,264,300	104,684,700	177,949,000	73,964,800	101,441,800	175,406,600
3	Miscellaneous Revenue (Local System)	6,428,400	6,810,800	13,239,200	6,436,500	6,819,200	13,255,700
4	Other Revenue (Regional System)	1,222,300	1,423,300	2,645,600	1,224,800	1,614,300	2,839,100
5	Total Revenues	\$ 423,723,200	\$ 586,924,700	\$ 1,010,647,900	\$ 434,752,700	\$ 597,953,100	\$ 1,032,705,800
Revenue Requirements							
Operations & Maintenance Expense							
6	Regional System Wholesale Expenses	\$ 143,933,800	\$ 181,299,800	\$ 325,233,600	\$ 148,117,300	\$ 183,783,000	\$ 331,900,300
7	Local System Expenses	34,648,600	69,233,000	103,881,600	35,721,600	69,233,000	104,954,600
8	GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	6,048,000	10,824,000	16,872,000
9	GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	4,272,000	2,856,000	7,128,000
10	Total Operations & Maintenance Expense	188,902,400	264,212,800	453,115,200	194,158,900	266,696,000	460,854,900
11	Net Revenues after Operations & Maintenance Expense	\$ 234,820,800	\$ 322,711,900	\$ 557,532,700	\$ 240,593,800	\$ 331,257,100	\$ 571,850,900
Debt Service by Lien							
12	Senior Lien Bonds	124,309,700	133,195,700	257,505,400	132,433,500	148,824,800	281,258,300
13	Second Lien Bonds	46,840,400	51,893,000	98,733,400	47,200,100	36,738,500	83,938,600
14	SRF Junior Lien Bonds	6,695,100	53,921,600	60,616,700	10,265,200	51,511,900	61,777,100
15	Total Debt Service	\$ 177,845,200	\$ 239,010,300	\$ 416,855,500	\$ 189,898,800	\$ 237,075,200	\$ 426,974,000
Debt Service Coverage							
	Senior Lien Bonds (11)/(12)	1.89	2.42		1.82	2.23	
16	Second Lien Bonds (11)/[(12)+(13)]	1.37	1.74		1.34	1.79	
17	SRF Junior Lien Bonds (11)/(15)	1.32	1.35		1.27	1.40	

Local System information provided from Detroit Water & Sewerage Department (DWSD) as of February 17, 2021, and amended subsequently due to the GLWA Board action taken at the March 24, 2021 Board meeting.

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 Fund

	Current Year	Biennial Budget	
	FY 2021	FY 2022	FY 2023
Inflows & Outflows	Estimated	Requested	Forecast
Water Improvement & Extension Fund			
Water System Revenue Transfers	\$28,462,600	\$28,093,900	\$23,140,700
Receipt of DWSD Shortfall Loan Interest	\$0	\$0	\$0
Budgeted Capital Outlay	(\$17,892,000)	(\$17,006,600)	(\$14,078,600)
Transfer to Construction Fund	(46,789,100)	(108,308,000)	(57,264,300)
Increase (Decrease) in I&E Reserves	(\$36,218,500)	(\$97,220,700)	(\$48,202,200)
Beginning Year Net Position	288,752,600	252,534,100	155,313,400
Projected Ending Net Position	\$252,534,100	\$155,313,400	\$107,111,200

Water Construction Fund

	Current Year	Biennial Budget	
	FY 2021	FY 2022	FY 2023
Inflows & Outflows	Estimated	Requested	Forecast
Water Construction Fund			
Bond Proceeds, Net	\$0	\$0	\$192,700,000
Bond Fund Earnings on Investments	62,600	-	202,300
Grant Revenues (DWRP Loans)	45,397,000	26,100,000	16,600,000
Transfers from I&E Fund	46,789,100	108,308,000	57,264,300
Project Expenditures	(113,055,000)	(134,408,000)	(150,535,000)
Increase (Decrease) in Construction Funds	(\$20,806,300)	\$0	\$116,231,600
Beginning Year Net Position	20,806,300	-	-
Projected Ending Net Position	\$0	\$0	\$116,231,600

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 Fund

	Current Year	Biennial Budget	
	FY 2021	FY 2022	FY 2023
Inflows & Outflows	Estimated	Requested	Forecast
Sewer Improvement & Extension Fund			
Sewer System Revenue Transfers	\$40,913,900	\$34,616,900	\$48,968,900
Receipt of DWSD Shortfall Loan Interest	\$1,081,900	\$406,400	\$0
Budgeted Capital Outlay	(\$20,521,300)	(\$15,965,100)	(\$18,211,900)
Transfer to Construction Fund	(48,837,100)	(47,546,000)	(36,359,000)
Increase (Decrease) in I&E Reserves	(\$27,362,600)	(\$28,487,800)	(\$5,602,000)
Beginning Year Net Position (a)	153,727,100	126,364,500	97,876,700
Projected Ending Net Position	\$126,364,500	\$97,876,700	\$92,274,700

(a) Net Position includes DWSD Loan Receivable

Sewer Construction Fund

	Current Year	Biennial Budget	
	FY 2021	FY 2022	FY 2023
Inflows & Outflows	Estimated	Requested	Forecast
Sewer Construction Fund			
Bond Proceeds, Net	\$0	\$0	\$122,200,000
Bond Fund Earnings on Investments	69,800	-	128,300
Grant Revenues (CWRF Loans)	23,586,000	31,992,000	4,122,000
Transfers from I&E Fund	48,837,100	47,546,000	36,359,000
Project Expenditures	(95,804,000)	(79,538,000)	(92,393,000)
Increase (Decrease) in Construction Funds	(\$23,311,100)	\$0	\$70,416,300
Beginning Year Net Position	23,311,100	-	-
Projected Ending Net Position	\$0	\$0	\$70,416,300



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 **2021-055** regarding **“Resolution Regarding Approval of FY 2022 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 March 24, 2021 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.

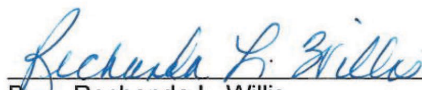
YES: John J. Zech, Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown, and Beverly Walker-Griffiea

NO: None

ABSTAIN: None

EXCUSED: None

Dated: March 24, 2021



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 2022 Schedule of Service Charges

Agenda of: February 24, 2021, March 10, 2021, March 24, 2021
Item No.: **2021-055**
Amount: N/A

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: February 24, 2021

RE: Resolution Regarding Approval of FY 2022 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 2021-055** with an effective date of July 1, 2021:

- 1) FY 2022 wholesale water service schedule of charges;
- 2) FY 2022 wholesale sewer service schedule of charges;
- 3) FY 2022 City of Detroit allocated wholesale water revenue requirement of \$21,697,300, which is the net of \$42,397,300 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 2022 City of Detroit allocated wholesale sewer revenue requirement of \$188,662,200 which is the net of \$194,178,200 gross revenue requirement less the Ownership Equity Credit of \$5,516,000 in accordance with the WSSA;

- 5) FY 2022 City of Detroit allocated indirect water revenue requirement of \$51,734,700, in accordance with the Regional Water Supply System Lease;
- 6) FY 2022 City of Detroit allocated indirect sewer revenue requirement of \$39,233,900, in accordance with the Regional Sewage Disposal System Lease;
- 7) If the proposed amended service contracts with the cities of Grosse Pointe Park and Northville are approved by the Board on this same date, the administration is authorized to adjust the schedule of charges and budget accordingly; and
- 8) authorizes the 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 2022 and 2023 Biennial Budget and five-year financial plan for FY 2022 to 2026 and an analysis of proposed water and sewer system charges at its January 27, 2021 meeting. A Public Hearing was opened for the FY 2022 Water Service Charges and Sewer Service Charges on February 24, 2021 and was held open until March 24, 2021.

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 2022 including the City of Detroit Revenue Requirement for the water and sewer systems. These charges support the proposed FY 2022 water system revenue requirements budget and the proposed FY 2022 sewer system revenue requirements, respectively. The FY 2022 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.

At the Public Hearing on February 24, 2021, the Board referred the proposed FY 2022 Water Service Charges and Sewer Service charges to the Audit Committee for its regularly scheduled meeting on February 26, 2021. Special Audit Committee meetings were held on March 8, 2021 and March 15, 2021 to continue discussion and review of the proposed service charges.

BUDGET IMPACT

The recommended FY 2022 Schedule of Water Service Charges and Sewer Service Charges as presented produces the necessary revenues to fund the FY 2022 Water System and Sewer System Budget.

It should be noted that proposed amended service contracts with the cities of Grosse Pointe Park and Northville are being brought to the board on the same date as this action item. If those amendments are approved, it is recommended that the administration be authorized to adjust the schedule of charges and budget accordingly.

COMMITTEE REVIEW

The Audit Committee has reviewed the FY 2022 financial plan, including charge setting matters, at its meetings on December 18, 2020, January 15, 2021, January 22, 2021, and as noted above in the Justification section.

Proposed FY 2022 Water Charges

The proposed FY 2022 water service charges reflect a proposed Water budget increase of 0.7 percent, reduced investment earnings, creating the need for a 1.1 percent increase and an offset of 0.2 percent from increased estimated sales volumes. As a result of the 2018 Contract Alignment Process (CAP), the FY 2022 Units of Service changed for only 11 member partners. **Therefore, the average water system charges increase will be 1.5 percent.**

Proposed FY 2022 Sewer Charges

The proposed FY 2022 sewer service charges reflect a proposed FY 2022 Sewer budget decrease of 2.3 percent which was offset by the loss of a one-time revenue source in the prior year and reduced investment earnings. **Therefore, the average sewer system charges decrease will be 0.6 percent.**

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 also attached.

SHARED SERVICES IMPACT

This item does not impact the Shared Services Agreement between the GLWA and the City of Detroit.



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

Great Lakes Water Authority

Resolution 2021-055

RE: Approval of FY 2022 Schedule of Water and Sewer Service Charges

By Board Member: Brian Baker

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 2022, including the direct and indirect City of Detroit Revenue Requirements for the water and sewer systems, to support the FY 2022 water system and sewer system revenue requirements budget with an effective date of July 1, 2021; and

Whereas The FY 2022 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 2022 on February 24, 2021 at 2:00 p.m.; and

Whereas The Public Hearing was held open through March 24, 2021, at 2:00 p.m.; and

NOW THEREFORE BE IT:

RESOLVED The Great Lakes Water Authority Board approves the proposed:

- 1) FY 2022 wholesale water service schedule of charges;
- 2) FY 2022 wholesale sewer service schedule of charges;
- 3) FY 2022 City of Detroit allocated wholesale water revenue requirement of \$21,697,300, which is the net of \$42,397,300 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 2022 City of Detroit allocated wholesale sewer revenue requirement of \$188,662,200 which is the net of \$194,178,200 gross revenue requirement less the Ownership Equity Credit of \$5,516,000 in accordance with the WSSA;
- 5) FY 2022 City of Detroit allocated indirect water revenue requirement of \$51,734,700, in accordance with the Regional Water Supply System Lease;
- 6) FY 2022 City of Detroit allocated indirect sewer revenue requirement of \$39,233,900, in accordance with the Regional Sewage Disposal System Lease; and

RESOLVED That the 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 2022 Water Supply System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2021

Line No.	Member Partner	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Projected Revenue from Charges \$
1	Allen Park	126,400	7.82	2,527,900
2	Almont Village	12,600	10.54	251,300
3	Ash Township	43,900	8.27	877,400
4	Belleville	16,600	9.74	331,700
5	Berlin Township	38,400	11.54	767,800
6	Brownstown Township	190,600	11.09	3,812,100
7	Bruce Twp	16,700	61.19	333,800
8	Burtchville Twp	17,700	18.19	354,300
9	Canton Township	539,900	12.36	10,798,600
10	Center Line	24,600	6.28	491,100
11	Chesterfield Township	223,800	10.41	4,475,100
12	Clinton Township	398,900	7.92	7,979,400
13	Commerce Township	187,700	14.72	3,753,800
14	Dearborn	538,500	7.22	10,767,300
15	Dearborn Heights	193,300	7.84	3,867,200
16	Eastpointe	82,000	6.31	1,640,200
17	Ecorse	79,400	4.48	1,588,100
18	Farmington	53,000	9.52	1,060,600
19	Farmington Hills	465,600	10.57	9,314,200
20	Ferndale	54,100	6.19	1,081,300
21	Flat Rock	69,900	9.79	1,398,800
22	Flint (b)	564,400	9.43	11,286,900
23	Fraser	64,300	8.72	1,287,000
24	Garden City	88,100	8.71	1,761,800
25	Gibraltar	17,500	8.61	350,300
26	Grosse Ile Township	57,800	12.10	1,157,000
27	Grosse Pt. Park	71,000	10.21	1,419,700
28	Grosse Pt. Shores	34,800	13.75	695,400
29	Grosse Pt. Woods	67,700	7.50	1,353,900
30	Hamtramck	42,200	5.42	843,500
31	Harper Woods	42,500	7.12	848,900
32	Harrison Township	85,100	7.21	1,701,800
33	Hazel Park	38,800	6.15	776,200
34	Highland Park	61,200	4.63	1,223,800
35	Huron Township	77,600	10.28	1,551,100
36	Imlay City	77,200	13.50	1,543,400
37	Imlay Twp	800	42.50	16,400
38	Inkster	65,100	5.56	1,301,600
39	Keego Harbor	15,700	12.74	314,500
40	Lapeer	80,600	12.39	1,612,700
41	Lenox Township	15,600	8.42	312,700
42	Lincoln Park	121,000	6.04	2,419,600
43	Livonia	607,100	10.11	12,141,000
44	Macomb Township	669,300	16.23	13,384,300
45	Madison Heights	98,000	7.35	1,959,500
46	Mayfield Twp	2,500	24.68	49,500
47	Melvindale	34,100	6.42	682,700
48	New Haven, Village of	22,200	6.94	443,400
49	North Oakland County Water Authority	1,168,100	10.41	23,364,300
50	Northville	40,600	10.48	812,100
51	Northville Township	299,300	17.00	5,985,200
52	Novi	476,200	13.03	9,524,400
53	Oak Park	73,700	6.08	1,474,200
54	Oakland Co. Drain Comm.	4,300	3.49	85,500
55	Plymouth	57,000	10.34	1,140,000
56	Plymouth Township	234,100	11.57	4,682,400
57	Redford Township	167,100	8.32	3,340,600
58	River Rouge	35,900	7.58	718,100
59	Riverview	46,900	7.73	937,700

APPROVED FY 2022 CHARGES

3/24/2021

Great Lakes Water Authority
Approved FY 2022 Water Supply System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2021

Line No.	Member Partner	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Projected Revenue from Charges \$
60	Rockwood	14,700	11.79	293,100
61	Romeo	13,500	18.13	270,800
62	Romulus	224,200	8.21	4,484,300
63	Roseville	142,200	5.99	2,843,900
64	Royal Oak Township	10,400	7.65	209,000
65	Southeastern Oakland County Water Authority	1,215,400	7.75	24,309,500
66	Shelby Township	751,600	14.88	15,032,200
67	South Rockwood	6,100	10.17	121,000
68	Southgate	116,300	8.12	2,325,300
69	St. Clair County-Greenwood Township	49,400	19.18	987,900
70	St. Clair Shores	161,800	6.80	3,235,000
71	Sterling Heights	804,500	11.14	16,091,800
72	Sumpter Township	35,600	9.67	712,500
73	Sylvan Lake	12,300	15.48	246,700
74	Taylor	244,700	7.46	4,895,400
75	Trenton	89,100	8.19	1,782,500
76	Troy	722,200	12.20	14,443,100
77	Utica	30,000	9.72	600,100
78	Van Buren Township	183,700	11.10	3,674,000
79	Walled Lake	42,200	10.98	843,500
80	Warren	545,200	6.94	10,902,100
81	Washington Township	121,700	12.37	2,433,900
82	Wayne	168,700	12.96	3,373,500
83	West Bloomfield Township	551,000	16.52	11,019,500
84	Westland	327,500	7.99	6,551,500
85	Wixom	130,500	13.95	2,610,900
86	Woodhaven	88,100	12.22	1,762,300
87	Ypsilanti Community Utilities Authority	547,900	9.03	10,957,100
88	Total Wholesale Contract Member Partners			328,987,500
89	Adjustment to Flint Revenue Requirement for KWA Debt Service			(6,652,800)
90	Adjustment for Highland Park Bad Debt			(1,223,800)
91	Revenue from Wholesale Charges (agrees with "GLWA Budget Schedule 3")			321,110,900
<u>Detroit Customer Class - \$</u>				
92	<u>Wholesale</u> Revenue Requirement (c)			42,397,300
93	less: Ownership Benefit per Lease			(20,700,000)
94	<u>Net Wholesale</u> Revenue Requirement			21,697,300
95	<u>Indirect Retail</u> Revenue Requirements (d)			51,734,700
96	less: Use of Lease Payment for Debt Service			(6,690,600)
97	<u>Net Indirect Retail</u> Revenue Requirements (d)			45,044,100
98	Subtotal Subject to GLWA Board Approval (94) + (97)			66,741,400
99	<u>Direct Retail</u> Revenue Requirements (e)			34,648,600
100	Total Local System Revenue Requirement (97) + (99)			79,692,700
101	Total Requirement from Detroit Customer Class (agrees with "GLWA Budget Schedule 3")			101,390,000
102	Proposed Lead and Copper Rule Sample Testing Fee - \$/Sample			56.00

- (a) Proposed effective date of July 1, 2021. Effective on all bills issued on or after August 1, 2021.
(b) Net fixed monthly charge will include \$554,400 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 February 17, 2021 and amended subsequently due to the GLWA Board action taken at the March 24, 2021 Board meeting.

Great Lakes Water Authority
Approved FY 2022 Sewage Disposal System Service Charges and Allocated Revenue Requirements
Effective Date: July 1, 2021

	Fixed Monthly Charge (a)	Projected Revenue from Charges
	\$/mo	\$
<u>Suburban Wholesale</u>		
1 Oakland Macomb Interceptor District	5,871,700	70,460,400
2 Rouge Valley	4,605,600	55,267,200
3 Oakland County - George W. Kuhn	3,819,000	45,828,000
4 Evergreen Farmington	2,980,500	35,766,000
5 SE Macomb Sanitary District	2,064,400	24,772,800
6 Dearborn	1,671,500	20,058,000
7 Grosse Pointe Farms	226,300	2,715,600
8 Grosse Pointe Park	156,900	1,882,800
9 Melvindale	129,500	1,554,000
10 Farmington	98,700	1,184,400
11 Center Line	85,800	1,029,600
12 Allen Park	69,800	837,600
13 Highland Park	446,400	5,356,800
14 Hamtramck	332,800	3,993,600
15 Grosse Pointe	74,100	889,200
16 Harper Woods	18,000	216,000
17 Redford Township	22,200	266,400
18 Wayne County #3	4,300	51,600
19 Subtotal "Regional Wholesale Revenues from Charges"		272,130,000
20 Industrial Specific Revenues		13,213,700
21 Subtotal "Regional Wholesale Revenues from Charges"		285,343,700
22 less: Highland Park Bad Debt		0
23 Total "Regional Wholesale Revenues" (a)		285,343,700
<u>Detroit Customer Class - \$</u>		
24 <u>Wholesale</u> Revenue Requirement (c)		194,178,200
25 less: Ownership Benefit per Lease		(5,516,000)
26 <u>Net Wholesale</u> Revenue Requirement		188,662,200
27 <u>Indirect Retail</u> Revenue Requirements (d)		39,233,900
28 less: Use of Lease Payment for Debt Service		0
29 <u>Net Indirect Retail</u> Revenue Requirements (d)		39,233,900
30 Subtotal Subject to GLWA Board Approval (26) + (29)		227,896,100
31 <u>Direct Retail</u> Revenue Requirements (e)		72,261,600
32 Total Local System Revenue Requirement (29) + (31)		111,495,500
33 Total Requirement from Detroit Customer Class (a)		300,157,700

(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 February 17, 2021 and amended subsequently due to the GLWA Board action taken at the March 24, 2021 Board meeting.

Great Lakes Water Authority
Approved FY 2022 Sewage Disposal System Industrial
Specific Retail Charges
Effective Date: July 1, 2021

Industrial Waste Control Charges		
Meter Size <i>inches</i>	Full Charge <i>\$/mo</i>	Admin Only Chg <i>\$/mo</i>
5/8	3.54	0.89
3/4	5.31	1.33
1	8.85	2.21
1-1/2	19.47	4.87
2	28.32	7.08
3	51.33	12.83
4	70.80	17.70
6	106.20	26.55
8	177.00	44.25
10	247.80	61.95
12	283.20	70.80
14	354.00	88.50
16	424.80	106.20
18	495.60	123.90
20	566.40	141.60
24	637.20	159.30
30	708.00	177.00
36	778.80	194.70
48	849.60	212.40

Pollutant Surcharges	
Pollutant	Charge <i>\$/lb</i>
BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.347
TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.476
PHOSPHORUS (P) for concentrations > 12 mg/l	6.368
FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.111
SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	36.00

APPROVED FY 2022 CHARGES

3/24/21



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 **2021-052** regarding **“Resolution Regarding Approval of FY 2022 through FY 2026 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 24, 2021 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: John J. Zech, Jaye Quadrozzi, Freman Hendrix, Brian Baker, Gary A. Brown, and Beverly Walker-Griffiea

NO: None

ABSTAIN: None

EXCUSED: None

Dated: February 24, 2021



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 2022 through FY 2026 Capital Improvement Plan

Agenda of: February 24, 2021
Item No.: **2021-052**

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: February 9, 2021

RE: Resolution Regarding Approval of FY 2022 through FY 2026 Capital Improvement Plan

MOTION

Upon recommendation of Suzanne Coffey, 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 2022 through 2026 and authorizes the Chief Executive Officer to approve the five year Capital Improvement Plan (CIP) for Fiscal Years 2022 through 2026, 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.

FINANCIAL PLAN IMPACT

The FY 2022 through FY 2026 Capital Improvement Plan identifies \$932.5 million of water system capital improvements and \$738.4 million of sewer system improvements. The financial plan anticipates expenditures at 75% of the identified improvements.

COMMITTEE REVIEW

The Capital Planning Committee reviewed Preliminary Drafts of the CIP on October 27, 2020 and December 15, 2020. The full Board of Directors reviewed the Final Proposed CIP on January 27, 2021 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 16, 2020. The Capital Planning Committee unanimously recommended that the GLWA Board approve the FY 2022 through FY 2026 Capital Improvement Plan as presented.

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.



Board of Directors
735 Randolph Street, Suite 1900
Detroit, Michigan 48226
(313) 224-4785

**Great Lakes Water Authority
Resolution 2021-052
Resolution Adopting the FY 2022 through FY 2026 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 2022 through FY 2026 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 27, 2020, December 15, 2020 and February 16, 2021; and
- Whereas The FY 2022 through FY 2026 Capital Improvement Plan and related financial plan has been prepared within the boundaries establish by the GLWA’s long-term financial strategy emphasizing effective capital delivery at the lowest cost of capital; and

Whereas The FY 2022 through FY 2026 Capital Improvement Plan identifies \$932.5 million of water system capital improvements and \$738.4 million of sewer system improvements; and

Whereas An affirmative vote of 5 Board Members is necessary for the adoption of this Resolution

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Section 8

Acronyms & Glossary

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Acronyms

ACFR	– Annual Comprehensive Financial Report
AMR	- Automatic Meter Reading
AMP	– Asset Management Plan
BCE	– Business Case Evaluation
BDF	- Biosolids Dryer Facility
BI	– Business Intelligence
CACO	– Chief Administrative and Compliance Officer
CAP	– Contract Alignment Process
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
CWRF	– Clean Water Revolving Fund
DMT	– Detroit Marine Terminal
DWRF	- Drinking Water 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
ERP	– Enterprise Resource Planning
EUM	– Effective Utility Management
FSA	– Financial Services Area

Acronyms *(continued)*

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

PA94 – Michigan Public Act 94

PAYGO – Pay as you go

PM – Preventative Maintenance

Acronyms *(continued)*

POA – Plan of adjustment (bankruptcy)

SAMP – Strategic Asset Management Plan

SAW - Stormwater, Asset Management, and Wastewater

SCADA - Supervisory Control and Data Acquisition system

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

WAMR – Wholesale Automatic Meter Reading

WRAP - Water Residential Assistance Program

WRRF - Wastewater Resource Recovery Facility

WSSA – Water and Sewer Services Agreement

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 – is 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 Revolving Fund (CWRP) – 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 Revolving Fund (DWRP) - 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*)

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.

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.

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.

Glossary (*continued*)

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 Revolving Fund (DWRF) or Clean Water Revolving Fund (CWRf). 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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