

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	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 Program” (CIP). The CIP focuses on longer lived constructed assets with a useful life greater than 20 years.

Many of the tables in this section present an entity-wide view of GLWA’s capital outlay. This is because some capital outlay is subject to cost sharing between the water and sewer systems. Examples of this include fleet, centralized services and facilities, and information technology.

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.

- ❖ The replacement of the security perimeter fencing and electronic components around all GLWA facilities. This project is scheduled to run from FY 2018 through FY 2022 replacing approximately 20% of these assets each year at an average annual projected cost of \$1.1 million.
- ❖ Instrumentation & control hardware and software for the wastewater system. This project is forecast for FY 2019 through FY 2022 at an average annual cost of \$4.0 million.
- ❖ GLWA enterprise wide software systems. The forecast replacement of these systems is scheduled from FY 2019 through FY 2023 at an average annual cost of \$1.0 million.
- ❖ Facility renovations such as the data center move. This project is expected to run from FY 2020 through FY 2022 at an average annual cost of \$1.0 million.
- ❖ An assessment of the Combined Sewer Overflow facilities reviewing the criticality, condition and forecast replacement schedule of these facilities. The assessment is scheduled to run from FY 2020 through FY 2021 at an average annual cost of \$2.3 million.

Funding Sources

The Capital Outlay expenditures are proposed to be \$45.7 million for FY 2021, and \$37.4 million for FY 2022. As shown in Table 1A – *Capital Outlay Biennial Budget by Funding Source* and Table 1B – *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 the O&M Fund 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.

Improvement & Extension: Capital outlay items funded by the I&E Fund are paid with revenue financed capital carried over from prior years. 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.

Table 1A – Capital Outlay Biennial Budget by Funding Source

Funding Source	FY 2020 Amended Budget	FY 2020 Activity thru 10.31.2019	FY 2021 Department Requested	FY 2021 Dollar Variance	FY 2021 Percent Variance	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
Operations & Maintenance	\$ 7,177,000	\$ 2,214,600	\$ 7,311,600	\$ 134,900	1.9%	\$ 7,859,800	\$ 6,740,400	\$ 7,422,100	\$ 6,808,100
Improvement & Extension	30,247,400	2,893,100	38,373,100	8,125,600	26.9%	29,554,900	15,182,500	15,833,500	19,505,200
Grand Total	\$ 37,424,400	\$ 5,107,700	\$ 45,684,700	\$ 8,260,500	22.1%	\$ 37,414,700	\$ 21,922,900	\$ 23,255,600	\$ 26,313,300

Table 1B – Capital Outlay by Funding Source

Funding Source	FY 2020 Department Requested	FY 2021 Department Requested	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
Operations & Maintenance	\$ 7,177,000	\$ 7,311,600	\$ 7,859,800	\$ 6,740,400	\$ 7,422,100	\$ 6,808,100
Improvement & Extension	30,247,400	38,373,100	29,554,900	15,182,500	15,833,500	19,505,200
Grand Total	\$ 37,424,400	\$ 45,684,700	\$ 37,414,700	\$ 21,922,900	\$ 23,255,600	\$ 26,313,300

Table 2 - Total Capital Outlay by Asset Type (funded by both I&E and O&M)

Asset Type	FY 2020 Amended Budget	FY 2021 Department Requested	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
Operations & Maintenance	\$ 7,177,000	\$ 7,311,600	\$ 7,859,800	\$ 6,740,400	\$ 7,422,100	\$ 6,808,100
Information Technology	5,690,600	6,419,300	6,931,100	5,855,500	6,372,500	5,900,000
Data/Network	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Hardware	1,156,000	1,272,900	1,291,300	1,310,500	1,330,000	1,334,000
Software	2,534,600	3,146,400	3,639,800	2,545,000	3,042,500	2,566,000
Leasehold Improvements	192,000	2,000	2,000	2,000	2,000	2,000
Machinery & Equipment	1,210,600	688,600	664,500	669,900	820,800	693,800
Computers & IT	4,650	4,700	60,400	14,200	151,700	17,900
Controls & Communication	656,000	237,300	189,800	206,400	255,200	208,400
Flow Measuring & Meters	2,750	-	3,000	-	3,000	-
Furniture & Fixtures	501,200	282,100	280,200	280,500	280,700	280,800
Laboratory	2,000	45,000	6,000	46,500	7,000	48,500
Machinery & Equipment	25,000	50,000	50,000	50,000	50,000	50,000
Pipes, Gates & Valves	-	12,500	12,500	12,600	12,700	12,800
Process Equipment	15,000	35,000	35,000	36,000	36,200	36,600
Pumps & Motors	4,000	22,000	27,600	23,700	24,300	38,800
Tools, Shop & Warehouse	22,600	105,300	111,800	110,900	119,100	109,000
Multiple Asset Types	35,700	70,400	70,600	70,800	70,800	70,800
Safety & Security	25,500	26,000	79,800	31,300	36,900	32,500



Capital Outlay
Budget & Five-Year Plan
FY 2021 through FY 2025

Asset Type	FY 2020 Amended Budget	FY 2021 Department Requested	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
Improvement & Extension	\$ 30,247,400	\$ 38,373,100	\$ 29,554,900	\$ 15,182,500	\$ 15,833,500	\$ 19,505,200
Buildings & Structures	1,007,500	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Information Technology	5,580,500	10,830,500	10,830,500	80,500	80,500	80,500
Hardware	5,500,000	6,750,000	6,750,000	-	-	-
Software	80,500	4,080,500	4,080,500	80,500	80,500	80,500
Leasehold Improvements	910,000	278,000	750,000	250,000	1,050,000	208,000
Machinery & Equipment	16,110,300	16,273,200	11,976,900	10,711,100	11,030,000	15,882,700
Computers & IT	4,380,000	3,507,500	4,437,200	2,315,000	1,533,000	1,071,500
Controls & Communication	610,000	2,220,000	200,000	816,000	3,185,000	8,022,000
Flow Measuring & Meters	820,600	626,000	747,000	250,900	220,000	175,000
Furniture & Fixtures	484,000	556,000	120,000	110,000	105,000	123,800
Heavy Equipment	605,000	985,000	485,000	89,000	120,000	512,000
Heavy Equipment & Misc.	-	500,000	-	-	-	-
Laboratory	364,700	279,000	357,100	393,400	258,000	376,000
Machinery & Equipment	-	68,000	-	-	68,000	-
Pipes, Gates & Valves	767,000	955,000	941,500	1,489,000	655,000	565,000
Process Equipment	2,164,000	1,199,000	1,166,500	1,590,200	1,045,000	995,000
Pumps & Motors	5,749,000	5,297,100	3,417,600	3,622,600	3,766,000	4,032,400
Tools, Shop & Warehouse	166,000	80,600	105,000	20,000	75,000	10,000
Utility Vehicle	-	-	-	15,000	-	-
Multiple Asset Types	2,000,000	2,950,000	2,000,000	-	-	-
Safety & Security	2,359,000	1,093,800	850,300	-	-	-
Site Improvements	50,000	50,000	50,000	50,000	50,000	50,000
Vehicles	2,230,100	2,864,600	2,097,200	3,090,900	2,623,000	2,284,000
Heavy Truck	385,000	150,000	-	-	475,000	-
Light Truck	495,000	590,000	130,000	110,000	80,000	80,000
Passenger	773,000	1,036,300	1,034,600	1,512,600	1,013,000	1,130,000
Trailer & Towable Equipment	-	20,000	40,000	-	40,000	-
Utility Vehicle	57,000	32,000	-	7,000	15,000	74,000
Vehicles	520,100	1,036,300	892,600	1,461,300	1,000,000	1,000,000
Non-Capitalizable Improvement	-	3,033,000	-	-	-	-
Grand Total	\$ 37,424,400	\$ 45,684,700	\$ 37,414,700	\$ 21,922,900	\$ 23,255,600	\$ 26,313,300

Table 3 - Total Capital Outlay by Team (funded by both I&E and O&M)

Team	FY 2020 Amended Budget	FY 2021 Department Requested	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
881101 - Public Affairs	\$ 37,500	\$ 5,000	\$ 18,000	\$ 10,000	\$ 22,000	\$ 5,000
881201- Security	1,173,200	-	-	-	-	-
881202- HazMat	31,800	26,000	79,800	31,200	36,900	32,500
882111 - Water Engineering	5,500	11,500	5,500	5,500	5,500	11,500
882111- Water Engineering	54,700	5,000	5,000	5,000	5,000	5,000
882121 - Water Quality	37,000	47,000	45,000	66,000	37,000	65,000
882131 - Water Works Park	365,400	636,100	358,100	423,800	404,000	404,000
882141 - Springwells Water Plant	745,200	979,400	642,600	361,800	911,800	360,800
882151 - Northeast Water Plant	940,300	930,000	410,000	610,000	410,000	610,000
882161 - Southwest Water Plant	248,200	640,000	275,000	275,000	275,000	275,000
882171 - Lake Huron Water Plant	159,000	678,000	63,000	28,000	436,000	50,000
882301 - Systems Operations Control	1,477,000	1,605,000	1,567,500	1,605,000	1,505,000	1,505,000
882421 - Facility Operations	162,500	187,500	187,500	187,500	187,500	187,500
882422 - Fleet Operations	990,100	1,506,300	942,600	1,550,100	1,000,000	1,000,000
882431 - Field Service Operations	-	75,000	75,000	75,000	75,000	75,000
882501 - Energy, Research & Innovation	-	127,000	-	75,000	-	50,000
883321- Info Technology Service Desk	1,170,100	1,410,000	1,433,300	1,454,000	1,474,000	1,482,000
883331- Info Technology Infrastructure	4,741,800	4,313,800	4,788,100	3,362,500	3,859,000	3,378,000
883341- Info Technology Business Applications	-	50,000	50,000	50,000	50,000	50,000
883341- Info Technology Enterprise Applications	666,100	4,000,000	4,000,000	-	-	-
883351- Info Technology Business Applications	2,800,000	5,582,500	5,596,200	925,000	925,000	925,000
883361- Info Technology Security & Risk	62,500	63,000	63,500	64,000	64,500	65,000
884124- Logistics & Materials	-	1,250,000	-	-	-	-
886001 - Chief Planning Officer	-	28,000	-	-	-	-
886001- Chief Planning Officer	2,000	2,000	2,000	2,000	2,000	2,000
886101 - Systems Planning	194,800	450,000	20,000	10,000	5,000	5,000
886201 - Asset Mangement	55,000	-	14,000	-	-	-
886401 - Systems Analytics	285,700	827,900	765,800	763,900	849,900	760,400
886601 - Capital Improvement Planning	57,500	-	-	-	-	-
891101 - Public Affairs	37,500	2,500	9,000	5,000	11,000	-
891201- Security	1,173,200	1,093,800	850,300	-	-	-
891202- HazMat	6,300	-	-	-	-	-
892201 - Wastewater Director	1,302,500	435,000	346,000	347,000	623,000	149,000
892211 - Wastewater Engineering	445,700	-	-	-	-	-
892221 - Wastewater Operations	1,200,000	1,620,000	1,651,000	1,098,500	1,056,000	1,116,000
892222 - Wastewater Process Control	3,034,600	1,304,700	2,970,600	814,200	151,700	584,400
892223 - Wastewater Primary Process	2,605,000	1,892,000	370,300	306,600	395,700	308,200
892224 - Wastewater Secondary Process	320,000	485,000	135,300	165,100	135,900	136,200
892225 - Wastewater Dewatering Process	350,000	368,000	238,000	259,000	211,700	146,600
892226 - Wastewater Incineration Process	253,100	88,000	178,500	89,000	49,500	496,000
892231 - Industrial Waste Control	154,900	73,000	190,000	75,500	36,500	226,800
892235 - Wastewater Laboratories	137,000	-	40,100	143,200	15,000	3,500



Capital Outlay
Budget & Five-Year Plan
FY 2021 through FY 2025

Team	FY 2020 Amended Budget	FY 2021 Department Requested	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested
892270 - Combined Sewer Overflow	-	3,033,000	-	-	-	-
892271 - Puritan-Fenkell						
Combined Sewer Overflow	374,300	149,800	230,000	235,500	95,000	990,000
892272 - 7 Mile						
Combined Sewer Overflow	451,800	5,100	131,000	35,000	60,000	1,256,400
892273 - Hubbell-Southfield						
Combined Sewer Overflow	180,000	110,000	260,000	110,000	2,710,000	110,000
892274 - Leib						
Combined Sewer Overflow	220,000	462,000	302,000	197,500	42,000	42,000
892275 - St. Aubin						
Combined Sewer Overflow	33,000	281,000	152,000	827,400	18,000	68,000
892276 - Conner Creek						
Combined Sewer Overflow	140,000	325,000	275,000	573,000	285,000	6,140,000
892277 - Baby Creek						
Combined Sewer Overflow	424,200	307,000	222,000	324,800	229,000	234,000
892278 - Oakwood						
Combined Sewer Overflow	385,000	150,000	95,000	332,000	1,095,000	95,000
892301 - Systems Operations Control	1,375,000	1,475,000	1,125,000	1,475,000	1,375,000	1,375,000
892421 - Facility Operations	62,500	62,500	62,500	62,500	62,500	62,500
892422 - Fleet Operations	520,100	1,036,300	1,362,600	1,461,300	1,000,000	1,470,000
893331- Info Technology Infrastructure	1,000,000	1,000,000	1,000,000	-	-	-
893351- Info Technology						
Business Applications	2,750,000	2,750,000	2,750,000	-	-	-
896101 - Systems Planning	168,000	-	-	-	-	-
896201 - Asset Mangement	55,000	-	-	-	-	-
896401 - Systems Analytics	1,745,300	1,740,000	1,061,000	1,045,500	1,045,000	-
896601 - Capital Improvement Planning	57,500	-	-	-	13,000	-
Grand Total	\$ 37,424,400	\$ 45,684,700	\$ 37,414,700	\$ 21,922,900	\$ 23,255,600	\$ 26,313,300