



Financial Services Audit Committee Communication

Date: September 22, 2023

To: Great Lakes Water Authority Audit Committee

From: William Baker, Financial Management Professional, Construction Accounting & Reporting

Re: FY 2023 Q4 Construction Work-in-Progress Report through June 30, 2023
(Unaudited)

Background: The quarterly construction work-in-progress (CWIP) provides information and analysis related to the execution of the Great Lakes Water Authority capital improvement program (CIP).

Analysis: The attached documents summarize the FY 2023 Q4 CWIP positions and provides a detailed snapshot to inform decision makers and stakeholders.

Proposed Action: Receive and file this report.



**Construction Work-in-Progress Quarterly Report
(Unaudited)**

As of June 30, 2023

For questions, please contact:

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Table of Contents

Introduction	1
Capital Delivery - Cost Summaries and Analysis	3
Capital Delivery - Executive Summaries.....	3
Construction Work-in-Progress	4
A1 - Water - Summary Construction Work-in-Progress Rollforward by Jurisdiction.....	5
A2 - Wastewater - Summary Construction Work-in-Progress Rollforward by Jurisdiction	6
B1 - Water - Detailed Construction Work-in-Progress Rollforward.....	7
B2 - Wastewater - Detailed Construction Work-in-Progress Rollforward	12
C1 - Water - FY 2023 Project Amendment Summary.....	14
C2 - Wastewater - FY 2023 Project Amendment Summary.....	16

September 22, 2023

To Our Stakeholders:

The contents of this report represent the financial presentation of construction work-in-progress activity for the Great Lakes Water Authority (GLWA) as of June 30, 2023. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2023–2027 Capital Improvement Plan (CIP) and look to inform decision makers as we evaluate the FY 2024–2028 CIP.

As we continue to refine this report to better communicate pertinent information to inform decision makers and stakeholders, content and formatting may be changed. With the summary of active projects now regularly being reported to the Capital Planning Committee the project highlights previously being reported have been removed from this report.

Report Contents and Organization

Construction Work-in-Progress (CWIP) Appendices: Includes breakdown by jurisdiction which provides a summary of the planned and actual project activity by the jurisdictions identified within the FY 2023 – 2027 Board Approved CIP Plan, detailed CWIP rollforward, which lists all projects in the CIP along with financial activity. These tables may be used to revisit priorities, workload, and phasing. In addition, this section contains project amendment summaries which consider the award of CIP contracts and the related execution thereof may result in deviations from the amount and timing of project activity. Project amendments are prepared to fund the related increase or decrease with either an adjustment to Capital Reserve or Program / Allowance accounts to amend the board approved fiscal year CIP accordingly and to inform decision makers in the development of future Capital Improvement Plans.

Financial Information

All project amounts are unaudited. This means that direct contractor costs are generally included in these totals with most pay estimates entered through June 30, 2023. There may, however, be some pay estimates that lag. The totals do not include indirect overhead.

Budget vs. Plan

Generally, GLWA's CIP projects span two or more fiscal years. The GLWA Board of Directors adopts a biennial "budget" and a five-year capital improvement "plan".

- ✓ The adopted **budget** relates to operations and maintenance expense, annual fixed commitments such as debt service, and incremental adjustments to reserves. The budget provides authority to spend within defined amounts. The budget is also referred to as the "revenue requirement" for the utility.
- ✓ After contracts are awarded at amounts variant from the CIP plan and more reliable anticipated spend data becomes available, the amended budget for the current fiscal year may increase or decrease by way of "Capital Reserve" budget amendments.
- ✓ The five-year capital improvement **plan** is a rolling plan that is updated at an administrative tracking level as projects move from estimated to actual bid numbers. An updated mid-cycle CIP would be presented to the Board for approval if the prioritization strategy was revised and/or the plan was in need of material revisions.
- ✓ In addition, 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.

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2023-2027 and related CIP Plan for FY 2023 were based on anticipation of FY 2023 activity resulting in 80% of planned spend for the Water system and 75% of planned spend for the Wastewater system. On June 26, 2023, the GLWA Board of Directors amended the Adjusted Capital Spending Ratio (SRA) to 107.0 % for the Water system and 86.2% for the Wastewater system.

The Water System spend for the period ending June 30, 2023, is 101.0% of the FY 2023 board approved CIP, 98.4% of the FY 2023 board approved CIP with project amendments, 126.2% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 94.4% of the FY 2023 Adjusted Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2023 Board Approved CIP was amended from \$194.4M to \$199.5M is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending June 30, 2023, is 83.2% of the FY 2023 board approved CIP, 77.0% of the FY 2023 board approved CIP with project amendments, 110.9% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 96.5% of the FY 2023 Adjusted Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2023 Board Approved CIP was amended from \$125.9M to \$136.0M is provided in the subsequent Project Amendment Summary appendix of this report.

Water System Projects (in millions)					Prorated (Twelve Months)	FY 2023 Activity (Unaudited)	FY 2023 Percentage
	FY 2022	FY 2022 Activity	FY 2022 Percentage	FY 2023			
FY 2022 Board Approved CIP	\$ 179.2	\$ 159.0	88.7%				
FY 2022 Board Approved CIP With Project Amendments	180.3	159.0	88.2%				
FY 2022 Capital Spend Rate Assumption (SRA)	170.3	159.0	93.4%				
FY 2023 Board Approved CIP				\$ 194.4	\$ 194.4	\$ 196.3	101.0%
FY 2023 Board Approved CIP With Project Amendments				199.5	199.5	196.3	98.4%
FY 2023 Capital Spend Rate Assumption (SRA) - Approved				155.5	155.5	196.3	126.2%
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted				208.0	208.0	196.3	94.4%
Wastewater System Projects (in millions)					Prorated (Twelve Months)	FY 2023 Activity (Unaudited)	FY 2023 Percentage
	FY 2022	FY 2022 Activity	FY 2022 Percentage	FY 2023			
FY 2022 Board Approved CIP	\$ 106.1	\$ 70.5	66.4%				
FY 2022 Board Approved CIP With Project Amendments	100.3	70.5	70.3%				
FY 2022 Capital Spend Rate Assumption (SRA)	74.0	70.5	95.3%				
FY 2023 Board Approved CIP				\$ 125.9	\$ 125.9	\$ 104.7	83.2%
FY 2023 Board Approved CIP With Project Amendments				136.0	136.0	104.7	77.0%
FY 2023 Capital Spend Rate Assumption (SRA) - Approved				94.4	94.4	104.7	110.9%
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted				108.5	108.5	104.7	96.5%

Appendix A - Construction Work-in-Progress Rollforward Summaries by Jurisdiction

The purpose of the construction work-in-progress (CWIP) summary rollforward by jurisdiction is to provide a high-level overview of the financial status of the projects identified within the current board approved CIP by their jurisdiction. Within the FY 2023 – 2027 Board Approved CIP Plan, projects are identified and categorized as either City of Detroit, Wayne County - Outside Detroit, Lapeer County, Macomb County, Oakland County, Saint Clair County or Multiple Counties and reflected accordingly in this report.

\$374.2 million is in CWIP as of June 30, 2023 as shown for the Water System in A1 - Water - CWIP Rollforward by Jurisdiction

\$288.7 million is in CWIP as of June 30, 2023 as show for the Wastewater System in A2 - Wastewater - CWIP Rollforward by Jurisdiction

The order of these appendices on the subsequent pages are in ascending by jurisdiction alphabetically.

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority

A1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward Summary By Jurisdiction

Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Jurisdiction	Total Project Plan Estimate from FY 2023-2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	FY 2023 Board Approved CIP With Project Amendments	FY 2023 Activity through June 30, 2023	CWIP Balance June 30, 2023
City of Detroit	\$ 586,743,000	\$ 81,436,384	\$ 63,482,209	\$ 64,489,409	\$ 49,432,075	\$ 106,551,466
Lapeer County	5,373,000	1,332,496	115,188	115,188	4,075,794	5,451,155
Mutiple Counties	766,763,000	50,555,675	37,374,236	43,935,236	55,539,100	94,920,092
Oakland County	296,959,000	56,921,561	46,824,890	49,689,119	62,215,625	101,425,208
Saint Clair County	220,073,000	9,935,379	14,840,398	14,330,398	3,503,000	10,362,274
Wayne County - Outside Detroit	898,628,000	72,772,563	31,738,615	26,942,288	21,498,182	55,533,758
Grand Total	\$ 2,774,539,000	\$ 272,954,060	\$ 194,375,536	\$ 199,501,638	\$ 196,263,776	\$ 374,243,953

Great Lakes Water Authority

A2 - Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward Summary By Jurisdiction
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Jurisdiction	Total Project Plan Estimate from FY 2023-2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	FY 2023 Board Approved CIP With Project Amendments	FY 2023 Activity through June 30, 2023	CWIP Balance June 30, 2023
City of Detroit	\$ 1,451,487,000	\$ 155,664,232	\$ 63,607,797	\$ 66,319,353	\$ 56,782,926	\$ 209,701,082
Mutiple Counties	1,475,727,000	36,400,308	61,791,748	69,155,730	47,484,788	78,549,059
Wayne County - Outside Detroit	88,314,000	1,035,923	532,700	532,700	387,088	438,459
Grand Total	\$ 3,015,528,000	\$ 193,100,463	\$ 125,932,245	\$ 136,007,783	\$ 104,654,802	\$ 288,688,600

Appendix B - Construction Work-in-Progress Rollforwards

The purpose of the construction work-in-progress (CWIP) rollforward is to analyze the current year activity for each project in relation to the overall capital improvement program as well as the project portfolio overall.

As part of our project life cycle review the Construction Accounting team identifies when it is appropriate for projects to be capitalized. Projects are to be capitalized when they have been completed in totality or are inclusive of identifiable assets that have been placed in service. Capitalization of project cost occurred in the FY 2023 3rd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
276002	1803025-3	2104157 – Task 76: Replacement of MUA-2 Unit
341001	SOQ-135A	Security Infrastructure Improvements
122011	1802775	Park Merriman Water Main Final Phase
260504	1900796	Rehabilitation of CSO Outfalls – Phase II
232002	CON-109	Emergency Refurb. Of Storm Pumps 5 & 7
122013	1903312	14 Mile Road Transmission Main Loop – Phase I
114011	CON-252	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP

Northeast Water Treatment Plant

The 2015 Water Master Plan recommended right-sizing the capacity of the Regional Water System based on the trends of lower projections of population and water volume demands. The Water Master Plan found that the Authority's combined water treatment plant design capacity was estimated to be over 60% greater than the forecasted 20-year water demands. The total rated capacity of the existing five water treatment plants is 1.7 billion gallons per day. The 2015 Master Plan Update identified likely maximum demands in the range of up to 1.0 billion gallons per day during the 20-year planning period. This provided the rationale to strategically align capacity and service requirements and planning for structural de-rating of capacity as warranted at all of the water treatment plants.

The Water Master Plan identified the financial benefit of capital cost avoidance in reducing the combined treatment capacity at all five of the GLWA Water Treatment Plants. That recommendation included the decommissioning of Water Treatment Plants. During FY 2023, operational, regulatory and life cycle cost updates no longer support decommissioning Water Treatment Plants. A report related to the factors that impacted this decision was presented to the GLWA Board of Directors on June 28, 2023 which included a write-off of some or all of the activity for the following CIP projects: 122003 - Waterworks Park to NE Transmission Main, 122017 - Seven Mile/Nevada Transmission Main, and 122018 - Garland, Hurlbut, Bewick Transmission Main.

\$374.2 million is in CWIP as of June 30, 2023, as shown for the Water System in B1 - Water - Detailed CWIP Rollforward

\$288.7 million is in CWIP as of June 30, 2023, as shown for the Wastewater System in B2 - Wastewater - Detailed CWIP Rollforward

The order of these appendices on the subsequent pages are in ascending order by CIP project number.

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority
 B1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Total Project Plan Estimate from FY 2023 - 2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	FY 2023 Board Approved CIP With Project Amendments	FY 2023 Activity through June 30, 2023	Life to Date Capitalization / Expense through June 30, 2023	CWIP Balance June 30, 2023	Life to Date Activity Through June 30, 2023	Life to Date Activity / Total Project Plan Estimate
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ 69,390,000	\$ 2,918,249	\$ 1,600,000	\$ 1,600,000	\$ 618,214	\$ -	\$ 3,536,463	\$ 3,536,463	5%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	25,941,000	1,281,522	600,000	90,000	99,751	-	1,381,273	1,381,273	5%
111008	LHWTP Architectural Programming - Lab	856,000	-	-	-	-	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	30,051,000	3,035,092	9,021,435	9,021,435	1,664,160	-	4,699,252	4,699,252	16%
111010	Lake Huron Water Treatment Plant -Filtration and Pretreatment Improvements	58,433,000	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	3,323,000	2,236,714	1,506,378	1,506,378	839,391	3,076,105	-	3,076,105	93%
111012	LHWTP-Flocculation Improvements	32,079,000	463,802	2,112,585	2,112,585	278,176	-	741,978	741,978	2%
111013	LH WTP Fireloop & Plant Water Improvements	-	-	-	-	3,308	-	3,308	3,308	-
112003	NE WTP High Lift Pumping Electrical	72,115,000	536,340	1,000,000	1,000,000	21,268	-	557,608	557,608	1%
112006	Northeast Water Treatment Plant Flocculator Replacements	14,054,000	333,817	2,760,000	2,760,000	3,784,975	52,671	4,066,122	4,118,793	29%
112007	NE WTP Structural Repair of Slab and Bea	-	-	-	-	235,924	-	235,924	235,924	-
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	20,182	-	-	-	191,262	-	191,262	0%
113003	Replacement of Butterfly Valves	21,812,000	-	-	-	-	-	-	-	0%
113006	SW WTP Chloring Scrubber	8,023,000	2,482,713	4,397,583	4,397,583	3,624,921	2,951,140	3,156,493	6,107,634	76%
113007	Architectural and Building Mechanical	1,000,000	-	-	-	-	-	-	-	0%
113008	Water Supply Pumping Assessment Study	45,000,000	-	-	-	-	-	-	-	0%
113009	SW WTP Flight and Chain Upgrades	-	-	-	-	-	(20,182)	20,182	-	-
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	281,908,000	22,467,665	12,000,000	3,476,339	4,150,764	731	26,617,698	26,618,429	9%
114005	Springwells WTP Admin Building Improvements	10,109,000	1,211,635	-	-	108,887	-	1,320,522	1,320,522	13%
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	-	10,674	-	-	(10,674)	1,021,039	-	1,021,039	0%
114007	Powder Activated Carbon Systems	4,021,000	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	-	11,753,925	125	125	389,054	11,738,479	404,500	12,142,979	0%
114010	Yard Piping Improvements	195,689,000	1,705,045	-	-	102,901	-	1,807,946	1,807,946	1%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete	25,853,000	23,945,367	807,907	807,907	1,739,326	24,356,450	1,328,244	25,684,693	99%
114016	Pavement Replacement	1,524,000	15,260	-	-	(15,991)	1,565,739	(0)	1,565,739	103%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	20,730,000	895,893	660,000	968,987	169,355	-	1,065,249	1,065,249	5%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	2,335,000	-	55,000	55,000	-	-	-	-	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	55,042,000	12,037,016	11,790,097	11,790,097	17,183,768	-	29,220,784	29,220,784	53%
115004	Water Works Park WTP Chlorine System Upgrade	-	9,563	-	-	-	6,966,596	-	6,966,596	0%
115005	WWP WTP Building Ventilation Improvements	11,449,000	764,514	5,400,000	6,407,200	5,177,363	-	5,941,878	5,941,878	52%
115006	Water Works Park Site/Civil Improvements	5,882,000	-	-	-	-	-	-	-	0%
115007	Water Works Park High Lift Pumping Station Modernization	96,800,000	-	-	-	-	-	-	-	0%
115009	Water Works Park Sedimentation Basins Structural Upgrades	18,339,000	-	-	-	-	-	-	-	0%
116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel	98,986,000	51,427,985	13,663,132	13,663,132	13,191,471	4,685,231	64,619,456	69,304,687	70%
116005	Belle Isle Seawall Rehabilitation	2,540,000	702	600,000	600,000	156,499	-	157,201	157,201	6%
116006	Belle Isle Intake System Rehabilitation and Improvements	3,363,000	-	-	-	-	-	-	-	0%
116007	System Electrical Power Improvements	4,000,000	-	2,229,508	2,229,508	-	-	-	-	0%
122003	New Waterworks Park to Northeast Transmission Main	147,768,000	5,165,736	23,903,829	23,903,829	3,786,576	38,742,580	(0)	38,742,580	26%
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	259,843,000	16,072,467	15,000,000	15,000,000	34,785,231	148,741	50,857,698	51,006,439	20%
122005	Replacement Schoolcraft Watermain	15,049,000	640,821	-	3,266,000	3,396,485	14,297,655	3,396,485	17,694,141	118%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	25,697,000	1,756,084	-	-	2,545,355	20,751,264	4,301,439	25,052,702	97%
122007	Design and Construction of a new Newburgh Road 24" Main along	22,154,000	-	-	-	-	-	-	-	0%

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority
B1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Total Project Plan Estimate from FY 2023 - 2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	FY 2023 Board Approved CIP With Project Amendments	FY 2023 Activity through June 30, 2023	Life to Date Capitalization / Expense through June 30, 2023	CWIP Balance June 30, 2023	Life to Date Activity Through June 30, 2023	Life to Date Activity / Total Project Plan Estimate
122011	Park-Merriman Water Main-Final Phase	9,318,000	725,309	-	-	(248,692)	6,912,565	(0)	6,912,565	74%
122013	Lyon Township Transmission Main Extension Project	111,420,000	28,177,042	29,635,560	30,349,642	46,687,887	18,111,180	57,111,557	75,222,737	68%
122016	Downriver Transmission Loop	62,962,000	2,450,853	7,500,000	7,652,348	161,217	(219,873)	2,831,943	2,612,070	4%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,729,000	6,046,322	1,023,269	1,023,269	3,177,840	9,224,162	-	9,224,162	15%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	53,938,000	1,381,474	1,998,892	1,998,892	1,344,677	2,726,151	-	2,726,151	5%
122019	Jefferson Main Replacement	29,700,000	-	827,195	827,195	1,097,554	-	1,097,554	1,097,554	4%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	-	1,731	-	-	(1,731)	3,226,045	(0)	3,226,045	0%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,146,000	1,105,151	115,188	115,188	4,075,794	-	5,180,944	5,180,944	101%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,588,000	28,175,975	16,689,330	16,689,330	14,731,125	(13,950)	42,921,051	42,907,101	94%
132012	Ypsilanti PS Improvements	39,084,000	659,128	200,000	200,000	1,771,873	(12,544)	2,443,545	2,431,001	6%
132014	Adams Road Booster Pumping Improvements	52,875,000	83,262	-	-	-	(19,187)	102,450	83,262	0%
132015	Newburgh BPS	45,083,000	493,886	-	-	754,843	15,805	1,232,925	1,248,730	3%
132016	North Service Center BPS Improvements	82,263,000	371,816	500,000	2,650,147	797,736	(25,912)	1,195,463	1,169,551	1%
132018	Schoolcraft BPS	24,469,000	47,317	-	-	-	47,317	-	47,317	0%
132019	Wick Road BPS - Switchgear	24,661,000	56,912	-	-	-	(7,699)	64,610	56,912	0%
132020	Franklin BPS - Isolation Gate Valves	4,813,000	93,160	-	-	-	(1,528)	94,688	93,160	2%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	227,000	227,346	-	-	-	(42,865)	270,211	227,346	100%
132022	Joy Road BPS - Replace Reservoir Pumps	39,685,000	71,380	-	-	-	71,380	-	71,380	0%
132025	Northwest Booster Station Yard Piping Improvements	-	20,306	-	-	(1,123)	19,183	-	19,183	0%
170102	Water Production Plant Flow Metering Improvements at NE, SP & SW WTP	-	373,640	-	-	-	373,640	-	373,640	0%
170109	Inspection of Raw Water Intakes and Tunnels	1,773,000	-	68,000	68,000	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	23,258,000	-	-	-	-	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	1,755,142	-	1,755,142	0%
170302	SW WTP SCADA Improvements	7,979,000	1,140,911	4,000,000	4,000,000	2,860,288	(1,540,778)	5,541,977	4,001,199	50%
170303	WWP WTP Power Monitoring Installation	2,266,000	1,716,628	438,000	438,000	94,728	1,811,356	-	1,811,356	80%
170304	WWP WTP SCADA Upgrade	319,000	261,142	77,795	77,795	179,433	(214,364)	654,940	440,575	138%
170305	WWP SCADA Network Upgrade	7,336,000	-	-	-	-	-	-	-	0%
170306	SPW SCADA PLC Network Upgrade	3,146,000	-	1,573,000	1,573,000	-	-	-	-	0%
170307	NE SCADA Network Upgrade	2,917,000	-	-	-	-	-	-	-	0%
170400	Water Transmission Improvement Program	32,049,000	-	-	-	-	-	-	-	0%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	5,327,000	-	276,826	276,826	-	-	-	-	0%
170502	Transmission System Valve Assessment and Rehabilitation/Replacement A	15,392,000	-	-	-	-	7,689,584	-	7,689,584	50%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,000,000	3,163,184	1,314,960	7,875,960	10,017,026	-	13,180,210	13,180,210	132%
170504	Repair of WTM, Valves, & Priority Repair	7,500,000	8,514,195	1,250,000	1,250,000	705,613	-	9,219,808	9,219,808	123%
170600	Water Transmission Main Asset Assessment Program	242,000	-	9,854	9,854	-	-	-	-	0%
170601	Linear System Integrity Program	9,082,000	-	1,815,370	1,815,370	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	127,000	-	12,727	12,727	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	24,758,000	10,894,420	6,830,000	6,830,000	5,182,095	8,766,834	14,494,537	23,261,371	94%
170802	Reservoir Inspection, Design	41,500,000	-	8,000,000	8,000,000	2,460,276	-	2,460,276	2,460,276	6%
170803	Reservoir Inspection, Design, and Construction Mangement Services Phase III	93,916,000	-	-	-	-	-	-	-	0%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	44,037,000	-	-	-	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	10,637,000	2,312,410	-	-	2,395,153	7,703,013	4,707,563	12,410,576	117%

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority
 B1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Total Project Plan Estimate from FY 2023 - 2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	FY 2023 Board Approved CIP With Project Amendments	FY 2023 Activity through June 30, 2023	Life to Date Capitalization / Expense through June 30, 2023	CWIP Balance June 30, 2023	Life to Date Activity Through June 30, 2023	Life to Date Activity / Total Project Plan Estimate
170902	Brownstown Meter Pit Rehabilitation	1,022,000	219,873	545,000	545,000	-	219,873	-	219,873	22%
171500	Roof Replacement - Var Facilities Program	15,908,000	-	-	-	-	-	-	-	0%
171502	Lake Huron and Southwest Roof Replacement	2,703,000	-	-	-	-	-	-	-	0%
341001	Security Infrastructure Improvements	-	9,218,693	-	-	373	10,357,757	-	10,357,757	0%
351001	Water Facility Lighting Renovations	-	6,667	-	-	(6,667)	-	-	-	0%
	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	602,000	-	-	-	-	-	-	-	-
380700	Borings, other Testing Services, and Related Services Allowance	602,000	-	-	-	-	-	-	-	-
381000	Energy Management: Electric Metering Improvement Program	2,624,000	-	566,991	566,991	-	-	-	-	0%
383300	Masonry Replacement and Rehabilitation Program	25,000,000	-	-	-	-	-	-	-	0%
Grand Total		\$ 2,774,539,000	\$ 272,954,060	\$ 194,375,536	\$ 199,501,638	\$ 196,263,776	\$ 447,400,185	\$ 374,243,953	\$ 821,644,138	30%
				Project Amendments:	5,126,102					

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority
 B2 - Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Total Project Plan	CWIP Balance	FY 2023	FY 2023 Board	FY 2023	Life to Date	CWIP Balance	Life to Date	Life to Date
		Estimate from		Board	Approved CIP		Capitalization /		Activity Through	
		FY 2023 - 2027 CIP	July 1, 2022	Approved CIP	With Project Amendments	June 30, 2023	Expense Through June 30, 2023	June 30, 2023	Activity Through June 30, 2023	Life to Date
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	\$ 54,968,000.00	\$ -	\$ -	\$ -	\$ -	\$ 54,748,738.03	\$ -	\$ 54,748,738.03	99.60%
211002	Pump Station No. 2 Pumping Improvments	3,463,000.00	2,634,214.71	-	-	20,488.27	-	2,654,702.98	2,654,702.98	76.66%
211005	Pump Station No. 2 Improvements	67,002,000	14,864	-	-	364,731	-	379,595	379,595	0.57%
211006	Pump Station No. 1 Improvements	70,042,000	6,014,644	8,100,000	8,189,860	5,396,288	-	11,410,932	11,410,932	16.29%
211007	2	88,771,000	5,318,275	2,461,426	2,461,426	3,459,563	-	8,777,838	8,777,838	9.89%
211008	Complex B Sludge Lines	12,644,000	5,488,309	2,506,271	2,522,271	4,990,510	-	10,478,819	10,478,819	82.88%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	21,790,000	201,653	1,000,000	1,000,000	347,691	-	549,344	549,344	2.52%
211010	Rehabilitation of Sludge Processing Complexes A and B	19,894,000	94,337	-	-	-	-	94,337	94,337	0.47%
211011	WRRF PS1 Screening and Grit Improvements	93,000,000	-	-	-	27,289	-	27,289	27,289	0.03%
212008	WRRF Rehabilitation of Intermediate Lift	73,884,000	968,407	-	-	227,484	-	1,195,891	1,195,891	1.62%
212009	WRRF Aeration Improvements 3 and 4	66,983,000	-	-	-	-	-	-	-	0.00%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,456,000	-	-	-	-	-	-	-	0.00%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	7,094,000	297,000	750,000	750,000	449,836	-	746,836	746,836	10.53%
213007	the WWTP	23,810,000	21,788,969	-	-	1,063,896	-	22,852,865	22,852,865	95.98%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	6,351,000	151,058	-	-	-	-	151,058	151,058	2.38%
213009	Phosphorous Recovery Facility at the WRRF	180,000,000	-	-	-	10,848	-	10,848	10,848	0.01%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	14,282,000	-	-	-	-	14,300,183	-	14,300,183	100.13%
216004	at WWTP	5,281,000	6,338,791	-	-	1,385,144	-	7,723,935	7,723,935	146.26%
216006	Secondary Water System	21,108,000	3,761,533	2,963,200	4,760,328	2,221,145	-	5,982,678	5,982,678	28.34%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,226,000	1,665,007	2,509,960	2,509,960	2,046,021	-	3,711,028	3,711,028	9.23%
216011	WRRF Structural Improvements	11,400,000	25,011	400,000	400,000	1,708,049	-	1,733,060	1,733,060	15.20%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,466,000	1,812,691	1,181,929	1,181,929	797,192	-	2,609,882	2,609,882	4.88%
222002	Detroit River Interceptor Evaluation and Rehabilitation	77,184,000	42,278,907	9,415,401	9,415,401	8,784,234	-	51,063,141	51,063,141	66.16%
222004	Collection System Valve Remote Operation Structures Improvements	-	4,246	-	-	-	4,246	-	4,246	0.00%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	39,756,000	38,787,010	38,292	38,292	5,062,160	-	43,849,170	43,849,170	110.30%
232002	Freud and Connor Creek Pump Station Improvements	262,798,000	9,045,858	10,753,379	10,753,379	3,295,653	6,103,686	12,238,422	18,342,108	6.98%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	257,000	-	-	-	-	-	-	-	0.00%
233003	Rouge River In-system Storage Devices	46,317,000	-	-	-	-	-	-	-	0.00%
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	65,845,000	-	6,603,863	6,603,863	-	-	-	-	0.00%
260201	Conveyance System Interceptor Rehab	38,252,000	16,407,136	3,050,766	3,050,766	3,818,487	18,542,127	20,225,624	38,767,751	101.35%
260202	Conveyance System Interceptor Rehab	-	1,904	-	-	-	-	1,904	1,904	0.00%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	50,053,000	1,923,103	11,168,334	11,168,334	8,085,755	(34,697)	10,043,555	10,008,858	20.00%
260205	NWI Outfall Rehabilitation	10,379,000	334,750	5,044,122	5,044,122	1,968,946	-	2,303,696	2,303,696	22.20%
260206	Conveyance System Rehabilitation - Interceptors	35,270,000	395,678	2,149,139	2,149,139	801,757	-	1,197,436	1,197,436	3.40%
260207	Rehabilitation of Woodward Sewer System	19,160,000	3,576,770	4,848,636	4,848,636	8,431,522	-	12,008,292	12,008,292	62.67%
260208	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	34,697	-	-	-	34,697	-	34,697	0.00%
260209	Sewer Repair Contract - As Needed	12,200,000	3,836	4,504,389	4,504,389	2,094,247	-	2,098,083	2,098,083	17.20%
260210	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	209	-	-	319,962	-	320,171	320,171	0.00%
260500	CSO Outfall Rehab	21,500,000	-	1,641,572	1,641,572	-	-	-	-	0.00%
260504	Rehabilitation of Outfalls - Phase II	5,042,000	22,843	-	-	-	4,923,589	-	4,923,589	97.65%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	(78,641)	-	-	-	0.00%
260508	B-39 Outfall Rehab	8,755,000	873,311	5,391,594	5,604,162	5,158,631	-	6,031,942	6,031,942	68.90%
260509	B-40 Outfall Rehab	-	82,308	-	-	30,283	-	112,591	112,591	0.00%
260510	Conveyance System Rehabilitation - Outfalls	35,825,000	902,646	1,340,350	1,340,350	968,961	-	1,871,607	1,871,607	5.22%
260600	CSO Facilities Improvements	1,045,500,000	-	1,500,000	1,500,000	-	-	-	-	0.00%
260603	Conner Creek CSO Basin Rehab	8,175,000	65,894	-	-	(65,894)	7,675,407	-	7,675,407	93.89%

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority
 B2 - Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Total Project Plan	CWIP Balance	FY 2023	FY 2023 Board	FY 2023	Life to Date		Life to Date	Life to Date
		Estimate from		Board	Approved CIP		Capitalization /	CWIP Balance		
		FY 2023 - 2027 CIP	July 1, 2022	Approved CIP	With Project Amendments	Activity through June 30, 2023	Expense Through June 30, 2023	June 30, 2023	June 30, 2023	Life to Date
260613	Baby Creek HVAC Improvements	604,000	-	-	-	-	545,401	-	545,401	90.30%
260614	CSO Facilities Structural Improvements	13,590,000	6,908,490	3,100,700	4,100,700	5,523,591	128,543	12,303,538	12,432,081	91.48%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	759,000	-	-	-	-	582,444	-	582,444	76.74%
260617	St. Aubin Chemical Disinfection Improvements	6,456,000	-	274,800	274,800	-	-	-	-	0.00%
260618	Oakwood HVAC Improvements	6,091,000	4,850,407	498,000	1,094,000	770,537	-	5,620,944	5,620,944	92.28%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	7,635,000	62,766	2,116,286	2,116,286	987,367	-	1,050,133	1,050,133	13.75%
260620	Baby Creek Roof Replacement	1,047,000	610,931	-	-	373,621	984,552	-	984,552	94.04%
260621	Connor Creek Berm Improvements	2,542,000	2,218,752	-	-	30,859	2,244,862	4,749	2,249,611	88.50%
260622	CSO Facilities Emergency Generator Improvements	2,061,000	95,455	1,220,000	1,220,000	988,339	105,382	978,411	1,083,793	52.59%
260623	Baby Creek Screen Rehabilitation	2,175,000	22,933	1,077,500	1,077,500	1,424,584	-	1,447,517	1,447,517	66.55%
260700	Sewer System Infrastructure Improvements & Pumping Stations	526,000	-	75,129	75,129	-	-	-	-	0.00%
260701	Conveyance System Infrastructure Improvements	55,631,000	2,241,437	15,638,605	22,002,586	10,931,963	(4,246)	13,177,646	13,173,400	23.68%
260702	Pump Station Assets Updates	2,000,000	-	-	-	-	-	-	-	0.00%
260800	WRRF Roof Replacement Program	5,000,000	-	1,891,192	1,891,192	-	-	-	-	0.00%
260802	2022 WRRF Roof Improvements Project	-	44,637	-	-	257,423	-	302,060	302,060	0.00%
260900	WRRF Facility Optimization Program	429,000	-	-	-	-	-	-	-	0.00%
260901	Rehab. Hazmat Facility at WRRF	1,405,000	227,002	1,273,978	1,273,978	102,596	-	329,597	329,597	23.46%
260902	WRRF Renovation of 4th Floor	2,721,000	65,149	2,671,406	2,671,406	3,078,143	-	3,143,292	3,143,292	115.52%
260903	WRRF Front Entrance Rehab.	1,005,000	136,823	1,004,587	1,004,587	230,774	-	367,597	367,597	36.58%
260904	WRRF 3rd Floor Renovation	-	2,752	-	-	65,665	-	68,417	68,417	0.00%
260905	WRRF Plumbing Shop Rehab	-	-	-	-	134,360	-	134,360	134,360	0.00%
261000	WRRF Rehabilitation of Secondary Clarifiers	46,827,000	-	-	-	-	-	-	-	0.00%
261001	Rehabilitation of Secondary Clarifiers	4,030,000	2,986	-	-	23,726	-	26,712	26,712	0.66%
270001	Pilot CSO Netting Facility	6,199,000	329	-	-	1,878	-	2,207	2,207	0.04%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,840,000	-	-	-	-	-	-	-	0.00%
270003	Long Term CSO Control Plan	8,249,000	-	2,519,339	2,519,339	1,771,799	1,771,799	-	1,771,799	21.48%
270004	Oakwood Lieb CSO Facility Improvement	17,004,000	69,908	1,250,000	1,250,000	2,000,944	-	2,070,852	2,070,852	12.18%
270005	CSO Safety Improvements & Building Rehab	6,481,000	-	122,200	122,200	-	-	-	-	0.00%
270006	Control System Upgrades - Baby Creek/Belle	1,916,000	477,215	93,200	93,200	676,871	50,128	1,103,959	1,154,086	60.23%
270007	Disinfection System Improvements at CSO	8,216,000	285	-	-	962	-	1,247	1,247	0.02%
270008	Flushing System Improvements at Conner Creek and St. Aubin CSO Facilities	7,007,000	-	-	-	-	-	-	-	0.00%
270009	Site Improvements at St. Aubin, Belle Isle, and Baby Creek CSO Facilities	1,378,000	-	-	-	-	-	-	-	0.00%
270010	HVAC Improvements at Puritan Fenkell and Seven Mile CSO Facilities	1,509,000	-	-	-	8,756	-	8,756	8,756	0.58%
270011	HVAC Improvements at Conner Creek and Belle Isle CSO Facilities	384,000	-	-	-	-	-	-	-	0.00%
270012	CSO Facilities	5,921,000	-	-	-	-	-	-	-	0.00%
270013	Facility Improvements at Puritan Fenkell and Seven Mile CSO Facilities	894,000	-	-	-	-	-	-	-	0.00%
270014	Convert to Complete Capture Basin CSO Fa	4,442,000	-	-	-	-	-	-	-	0.00%
273001	Hubbell Southfield CSO Facility Improvement	38,576,000	424,992	532,700	532,700	13,467	-	438,459	438,459	1.14%
273002	CSO Hubbell Southfield VR-8 Gate Improvements	1,770,000	-	-	-	-	-	-	-	0.00%
276002	Replacement Make-up Air Unit at CON	-	8,172	-	-	340,436	347,996	611	348,607	0.00%
277001	Baby Creek Outfall Improvements Project	13,287,000	37,444	1,250,000	1,250,000	1,720,140	486,918	1,650,965	2,137,883	16.09%
277002	Baby Creek CSO Facility Influent Flushing System	738,000	-	-	-	-	-	-	-	0.00%
341001	Security Infrastructure Improvements	-	-	-	-	-	-	-	-	0.00%
341002	Security Infrastructure Improvements	-	3,197,089	-	-	3,762	3,200,851	-	3,200,851	0.00%
Grand Totals		\$ 3,015,528,000	\$ 193,100,463	\$ 125,932,245	\$ 136,007,783	\$ 104,654,802	\$ 116,742,606	\$ 288,688,600	\$ 405,431,206	13%
				Project Amendments:	\$ 10,075,538					

Appendix C - Project Amendment Summaries

The purpose of the Project Amendment Summary is to illustrate the amendments to the current fiscal year board approved CIP for each project with an amendment resulting from the use of allowance and program funding for a specific amount necessitated by contract award.

The award of CIP contracts and the related execution thereof may result in deviation from the amount and timing of planned spend. Acknowledging the aforementioned deviation, project amendments are prepared to fund the related increase or decrease either to or from the Capital Reserve to amend the current fiscal year board approved Capital Improvement Plan accordingly and to inform decision makers in the development of future Capital Improvement Plans. Similar to the project amendments prepared for the Capital Reserve, project amendments are also prepared for contracts that are planned or funded by way of the CIP Program and Allowance accounts. As additional contracts are awarded, and other project information becomes available additional project amendments to and from the Capital Reserve will be prepared to amend the board approved FY 2023 Capital Improvement Plan.

\$5,126,102 of Capital Reserve project amendments have been prepared as of June 30, 2023, as shown for the Water System in C1 – Water FY 2023 Project Amendment Summary with project amendments detailing the assignment of funding within Program and Allowance accounts.

\$10,075,538 of Capital Reserve project amendments have been prepared as of June 30, 2023, as shown for the Wastewater system in C2 – Wastewater FY 2023 Project Amendment Summary with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of these appendices on the subsequent pages are in ascending order by CIP project number.

Construction Work-in-Progress Quarterly Report

As of June 30, 2023

Great Lakes Water Authority

C1 - Water System Project Amendment Summary

Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Capital Reserve	Grand Total
115005	WWP WTP Building Ventilation Improvements	1,007,200	1,007,200
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	1,098,339	1,098,339
132016	North Service Center BPS Improvements	2,150,147	2,150,147
122013	14 Mile Transmission Main Loop	529,374	529,374
114002	Springwells WTP Low and High Lift Improvements	(9,313,013)	(9,313,013)
122013	14 Mile Transmission Main Loop	184,708	184,708
122005	Replacement Schoolcraft Water Main	3,266,000	3,266,000
170503	Transmission System Valve Replacement Pa	6,561,000	6,561,000
111006	Replace Instrumentation: LHWTP	(510,000)	(510,000)
122016	Downriver Transmission Main Loop	152,348	152,348
Grand Total		\$ 5,126,102	\$ 5,126,102

Great Lakes Water Authority

C2 - Wastewater System Project Amendment Summary

Unaudited Activity For the Fiscal Quarter Ended June 30, 2023

Project	Project Name	Capital Reserve	Grand Total
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	\$ 16,000	\$ 16,000
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	1,797,128	1,797,128
211006	Pump Station No. 1 Improvements	89,860	89,860
260701	Conveyance System Infrastructure Improvements	5,900,000	5,900,000
260618	Oakwood HVAC Improvement	596,000	596,000
260614	CSO Facilities - Structural Improvements	1,000,000	1,000,000
260508	B-39 Outfall Rehabilitation	212,568	212,568
260701	Conveyance System Infrastructure Improvements	463,981	463,981
Grand Total		\$ 10,075,538	\$ 10,075,538