



## **Financial Services Audit Committee Communication**

**Date:** June 23, 2023

**To:** Great Lakes Water Authority Audit Committee

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

**Re:** FY 2023 Q3 Construction Work-in-Progress Report through March 31, 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 Q3 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 March 31, 2023**

**For questions, please contact:**

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**June 23, 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 March 31, 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 draft 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 March 31, 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 2022 activity resulting in 80% of planned spend for the Water system and 75% of planned spend for the Wastewater system. Effective April 26, 2023, GLWA Board of Directors passed an Adjusted Capital Spending Ratio (SRA) of 116.2 % for the Water system and 110.7% for the Wastewater system.

The Water System spend for the period ending March 31, 2023, is 105.8% of the FY 2023 board approved CIP, 103.0% of the FY 2023 board approved CIP with project amendments, 132.2% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 91.0% 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 \$194,375,536 to \$199,550,303 is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending March 31, 2023, is 77.9% of the FY 2023 board approved CIP, 72.5% of the FY 2023 board approved CIP with project amendments, 103.9% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 70.4% 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 \$125,932,245 to \$135,331,233 is provided in the subsequent Project Amendment Summary appendix of this report.

				FY 2023	FY 2023		
Water System Projects		FY 2022	FY 2022	FY 2022	Prorated	Activity	FY 2023
			Activity	Percentage	(Nine Months)	(Unaudited)	Percentage
FY 2022 Board Approved CIP		\$ 179,210,481	\$ 158,984,475	88.7%			
FY 2022 Board Approved CIP With Project Amendments		180,250,867	158,984,475	88.2%			
FY 2022 Capital Spend Rate Assumption (SRA)		170,249,957	158,984,475	93.4%			
FY 2023 Board Approved CIP					\$ 194,375,536	\$ 145,781,652	\$ 154,223,982
FY 2023 Board Approved CIP With Project Amendments					199,550,303	149,662,727	154,223,982
FY 2023 Capital Spend Rate Assumption (SRA) - Approved					155,500,429	116,625,322	154,223,982
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted					225,864,373	169,398,279	154,223,982
				FY 2023	FY 2023		
Wastewater System Projects		FY 2022	FY 2022	FY 2022	Prorated	Activity	FY 2023
			Activity	Percentage	(Nine Months)	(Unaudited)	Percentage
FY 2022 Board Approved CIP		\$ 106,050,041	\$ 70,532,064	66.5%			
FY 2022 Board Approved CIP With Project Amendments		100,248,682	70,532,064	70.4%			
FY 2022 Capital Spend Rate Assumption (SRA)		74,022,928	70,532,064	95.3%			
FY 2023 Board Approved CIP					\$ 125,932,245	\$ 94,449,184	\$ 73,618,411
FY 2023 Board Approved CIP With Project Amendments					135,331,233	101,498,425	73,618,411
FY 2023 Capital Spend Rate Assumption (SRA) - Approved					94,449,184	70,836,888	73,618,411
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted					139,406,996	104,555,247	73,618,411

## **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.

**\$412.0** million is in CWIP as of March 31, 2023 as shown for the Water System in A1 - Water - CWIP Rollforward by Jurisdiction

**\$261.5** million is in CWIP as of March 31, 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 March 31, 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 March 31, 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 March 31, 2023	CWIP Balance March 31, 2023
City of Detroit	\$ 586,743,000	\$ 81,436,384	\$ 63,482,209	\$ 64,489,409	\$ 38,263,029	\$ 117,835,387
Lapeer County	5,373,000	1,332,496	115,188	115,188	3,338,429	4,670,925
Mutiple Counties	766,763,000	50,555,675	37,374,236	43,935,236	41,189,553	90,163,250
Oakland County	296,959,000	56,921,561	46,824,890	49,689,119	51,260,224	108,181,786
Saint Clair County	220,073,000	9,935,379	14,840,398	14,840,398	2,705,368	12,640,748
Wayne County - Outside Detroit	898,628,000	72,772,563	31,738,615	26,480,954	17,467,379	78,471,464
<b>Grand Total</b>	<b>\$ 2,774,539,000</b>	<b>\$ 272,954,060</b>	<b>\$ 194,375,536</b>	<b>\$ 199,550,303</b>	<b>\$ 154,223,982</b>	<b>\$ 411,963,559</b>



# Construction Work-in-Progress Quarterly Report

As of March 31, 2023

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 March 31, 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 March 31, 2023	CWIP Balance March 31, 2023
City of Detroit	\$ 1,451,487,000	\$ 155,664,232	\$ 63,607,797	\$ 66,106,785	\$ 37,125,110	\$ 190,441,390
Mutiple Counties	1,475,727,000	36,400,308	61,791,748	68,691,748	36,115,509	70,619,108
Wayne County - Outside Detroit	88,314,000	1,035,923	532,700	532,700	377,791	429,162
<b>Grand Total</b>	<b>\$ 3,015,528,000</b>	<b>\$ 193,100,463</b>	<b>\$ 125,932,245</b>	<b>\$ 135,331,233</b>	<b>\$ 73,618,411</b>	<b>\$ 261,489,660</b>

## 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 CA&FR 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>
170303	2000644	Power Monitoring Equipment
170801	1900744	Reservoir Rehab Construction Project at Imlay, LH, Springwells and SW Water Treatment Facilities
170102	SCP-CS-1656	CS-1656: Applied Science: Flow Measurement
113006	2002193	SWWTP Chlorine Scrubber, Raw Water Screens & Related Improvements
115004	SCP-CS-1721	Eng Svc for WWP WTP Chlorine Disinfection System Replacement and Improvements
111011	1904449	LH WTP Pilot Plant D/B Services

**\$412.0** million is in CWIP as of March 31, 2023, as shown for the Water System in B1 - Water - Detailed CWIP Rollforward

**\$261.5** million is in CWIP as of March 31, 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 March 31, 2023

Great Lakes Water Authority

B1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward

Unaudited Activity For the Fiscal Quarter Ended March 31, 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 March 31, 2023	Life to Date Capitalization / Expense through March 31, 2023	CWIP Balance March 31, 2023	Life to Date Activity Through March 31, 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	\$ 445,977	\$ -	\$ 3,364,227	\$ 3,364,227	5%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	25,941,000	1,281,522	600,000	600,000	4,802	-	1,286,324	1,286,324	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	1,083,105	-	4,118,197	4,118,197	14%
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	985,397	-	3,222,111	3,222,111	97%
111012	LHWTP-Flocculation Improvements	32,079,000	463,802	2,112,585	2,112,585	186,087	-	649,889	649,889	2%
112003	NE WTP High Lift Pumping Electrical	72,115,000	536,340	1,000,000	1,000,000	21,228	-	557,569	557,569	1%
112006	Northeast Water Treatment Plant Flocculator Replacements	14,054,000	333,817	2,760,000	2,760,000	3,178,748	52,671	3,459,895	3,512,565	25%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	20,182	-	-	-	171,079	20,182	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	3,039,928	-	5,522,641	5,522,641	69%
113007	Architectural and Building Mechanical	1,000,000	-	-	-	-	-	-	-	0%
113008	Water Supply Pumping Assessment Study	45,000,000	-	-	-	-	-	-	-	0%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	281,908,000	22,467,665	12,000,000	3,476,339	3,012,093	-	25,479,758	25,479,758	9%
114005	Springwells WTP Admin Building Improvements	10,109,000	1,211,635	-	-	105,631	-	1,317,266	1,317,266	13%
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	-	10,674	-	-	-	1,021,039	10,674	1,031,712	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	228,032	11,738,479	243,478	11,981,957	0%
114010	Yard Piping Improvements	195,689,000	1,705,045	-	-	101,413	-	1,806,458	1,806,458	1%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	25,853,000	23,945,367	807,907	807,907	583,340	-	24,528,708	24,528,708	95%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	1,524,000	15,260	-	-	(15,991)	1,566,470	(731)	1,565,739	103%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	20,730,000	895,893	660,000	660,000	129,249	-	1,025,143	1,025,143	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	14,151,594	-	26,188,610	26,188,610	48%
115004	Water Works Park WTP Chlorine System Upgrade	-	9,563	-	-	-	6,957,032	9,563	6,966,596	0%
115005	WWP WTP Building Ventilation Improvements	11,449,000	764,514	5,400,000	6,407,200	2,856,880	-	3,621,394	3,621,394	32%
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 Improvements based on	98,986,000	51,427,985	13,663,132	13,663,132	10,278,136	4,685,231	61,706,121	66,391,352	67%
116005	Belle Isle Seawall Rehabilitation	2,540,000	702	600,000	600,000	113,685	-	114,387	114,387	5%
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	3,562,725	29,790,267	8,728,461	38,518,728	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	24,280,992	148,741	40,353,459	40,502,200	16%
122005	Replacement Schoolcraft Watermain	15,049,000	640,821	-	3,266,000	3,146,741	13,656,834	3,787,562	17,444,396	116%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	25,697,000	1,756,084	-	-	2,458,088	20,751,264	4,214,172	24,965,436	97%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	22,154,000	-	-	-	-	-	-	-	0%
122011	Park-Merriman Water Main-Final Phase	9,318,000	725,309	-	-	116,914	6,435,948	842,223	7,278,171	78%
122013	Lyon Township Transmission Main Extension Project	111,420,000	28,177,042	29,635,560	30,349,642	37,083,721	357,808	65,260,763	65,618,571	59%
122016	Downriver Transmission Loop	62,962,000	2,450,853	7,500,000	7,500,000	135,229	-	2,586,082	2,586,082	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	1,909,456	-	7,955,778	7,955,778	13%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	53,938,000	1,381,474	1,998,892	1,998,892	1,337,018	-	2,718,492	2,718,492	5%
122019	Jefferson Main Replacement	29,700,000	-	827,195	827,195	374,264	-	374,264	374,264	1%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	-	1,731	-	-	-	3,226,045	1,731	3,227,776	0%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,146,000	1,105,151	115,188	115,188	3,338,429	-	4,443,579	4,443,579	86%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,588,000	28,175,975	16,689,330	16,689,330	13,655,747	-	41,831,722	41,831,722	92%
132012	Ypsilanti PS Improvements	39,084,000	659,128	200,000	200,000	1,703,860	-	2,362,988	2,362,988	6%
132014	Adams Road Booster Pumping Improvements	52,875,000	83,262	-	-	-	-	83,262	83,262	0%
132015	Newburgh BPS	45,083,000	493,886	-	-	722,843	30,000	1,186,730	1,216,730	3%
132016	North Service Center BPS Improvements	82,263,000	371,816	500,000	2,650,147	520,756	-	892,572	892,572	1%
132018	Schoolcraft BPS	24,469,000	47,317	-	-	-	-	47,317	47,317	0%
132019	Wick Road BPS - Switchgear	24,661,000	56,912	-	-	-	-	56,912	56,912	0%
132020	Franklin BPS - Isolation Gate Valves	4,813,000	93,160	-	-	-	-	93,160	93,160	2%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	227,000	227,346	-	-	-	-	227,346	227,346	100%

# Construction Work-in-Progress Quarterly Report

As of March 31, 2023

Great Lakes Water Authority

B1 - Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward

Unaudited Activity For the Fiscal Quarter Ended March 31, 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 March 31, 2023	Life to Date Capitalization / Expense through March 31, 2023	CWIP Balance March 31, 2023	Life to Date Activity Through March 31, 2023	Life to Date Activity / Total Project Plan Estimate
132022	Joy Road BPS - Replace Reservoir Pumps	39,685,000	71,380	-	-	-	-	71,380	71,380	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%
170302	SW WTP SCADA Improvements	7,979,000	1,140,911	4,000,000	4,000,000	2,000,008	-	3,140,919	3,140,919	39%
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	149,154	-	410,296	410,296	129%
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	0
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,000,000	3,163,184	1,314,960	7,875,960	7,808,970	-	10,972,154	10,972,154	110%
170504	Repair of WTM, Valves, & Priority Repair	7,500,000	8,514,195	1,250,000	1,250,000	618,135	-	9,132,330	9,132,330	122%
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	4,151,060	8,766,834	13,463,502	22,230,336	90%
170802	Reservoir Inspection, Design	41,500,000	-	8,000,000	8,000,000	2,429,733	-	2,429,733	2,429,733	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	-	-	1,900,290	7,703,013	4,212,700	11,915,713	112%
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	1,138,691	9,219,066	10,357,757	0%
351001	Water Facility Lighting Renovations	-	6,667	-	-	-	-	6,667	6,667	0%
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil 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%
<b>Grand Total</b>		<b>\$ 2,774,539,000</b>	<b>\$ 272,954,060</b>	<b>\$ 194,375,536</b>	<b>\$ 199,550,303</b>	<b>\$ 154,223,982</b>	<b>\$ 367,640,785</b>	<b>\$ 411,963,559</b>	<b>\$ 779,604,344</b>	<b>28%</b>
<b>Project Amendments:</b>					<b>5,174,767</b>					

# Construction Work-in-Progress Quarterly Report

As of March 31, 2023

Great Lakes Water Authority

B2 - Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward

Unaudited Activity For the Fiscal Quarter Ended March 31, 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 March 31, 2023	Life to Date Capitalization / Expense Through March 31, 2023	CWIP Balance March 31, 2023	Life to Date Activity Through March 31, 2023	Life to Date Activity / Total Project Plan Estimate
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	100%
211002	Pump Station No. 2 Pumping Improvments	3,463,000.00	2,634,214.71	-	-	10,384.86	-	2,644,599.57	2,644,599.57	76%
211005	Pump Station No. 2 Improvements	67,002,000	14,864	-	-	281,059	-	295,922	295,922	0%
211006	Pump Station No. 1 Improvements	70,042,000	6,014,644	8,100,000	8,189,860	1,277,571	-	7,292,215	7,292,215	10%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	88,771,000	5,318,275	2,461,426	2,461,426	2,934,537	-	8,252,812	8,252,812	9%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	12,644,000	5,488,309	2,506,271	2,522,271	3,500,136	-	8,988,445	8,988,445	71%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	21,790,000	201,653	1,000,000	1,000,000	344,348	-	546,001	546,001	3%
211010	Rehabilitation of Sludge Processing Complexes A and B	19,894,000	94,337	-	-	-	-	94,337	94,337	0%
211011	WRRF PS1 Screening and Grit Improvements	93,000,000	-	-	-	7,574	-	7,574	7,574	0%
212008	WRRF Rehabilitation of Intermediate Lift	73,884,000	968,407	-	-	183,572	-	1,151,979	1,151,979	2%
212009	WRRF Aeration Improvements 3 and 4	66,983,000	-	-	-	-	-	-	-	0%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,456,000	-	-	-	-	-	-	-	0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	7,094,000	297,000	750,000	750,000	18,057	-	315,057	315,057	4%
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	23,810,000	21,788,969	-	-	830,424	-	22,619,393	22,619,393	95%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	6,351,000	151,058	-	-	-	-	151,058	151,058	2%
213009	Phosphorous Recovery Facility at the WWRF	180,000,000	-	-	-	2,863	-	2,863	2,863	0%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	14,282,000	-	-	-	-	14,300,183	-	14,300,183	100%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	5,281,000	6,338,791	-	-	1,247,032	-	7,585,823	7,585,823	144%
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	21,108,000	3,761,533	2,963,200	4,760,328	1,647,522	-	5,409,055	5,409,055	26%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,226,000	1,665,007	2,509,960	2,509,960	1,535,365	-	3,200,372	3,200,372	8%
216011	WRRF Structural Improvements	11,400,000	25,011	400,000	400,000	883,633	-	908,644	908,644	8%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,466,000	1,812,691	1,181,929	1,181,929	777,337	-	2,590,027	2,590,027	5%
222002	Detroit River Interceptor Evaluation and Rehabilitation	77,184,000	42,278,907	9,415,401	9,415,401	6,430,550	-	48,709,457	48,709,457	63%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	39,756,000	38,787,010	38,292	38,292	3,035,158	-	41,822,168	41,822,168	105%
232002	Freud and Connor Creek Pump Station Improvements	262,798,000	9,045,858	10,753,379	10,753,379	2,826,369	6,103,686	11,769,137	17,872,823	7%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	257,000	-	-	-	-	-	-	-	0%
233003	Rouge River In-system Storage Devices	46,317,000	-	-	-	-	-	-	-	0%
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	65,845,000	-	6,603,863	6,603,863	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	38,252,000	16,407,136	3,050,766	3,050,766	3,692,412	18,542,127	20,099,549	38,641,676	101%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	50,053,000	1,923,103	11,168,334	11,168,334	8,546,679	-	10,469,782	10,469,782	21%
260205	NWI Outfall Rehabilitation	10,379,000	334,750	5,044,122	5,044,122	1,246,306	-	1,581,056	1,581,056	15%
260206	Conveyance System Rehabilitation - Interceptors	35,270,000	395,678	2,149,139	2,149,139	183,562	-	579,241	579,241	2%
260207	Rehabilitation of Woodward Sewer System	19,160,000	3,576,770	4,848,636	4,848,636	6,337,909	-	9,914,679	9,914,679	52%
260208	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	34,697	-	-	5,965	-	40,662	40,662	0%
260209	Sewer Repair Contract - As Needed	12,200,000	3,836	4,504,389	4,504,389	1,922,923	-	1,926,759	1,926,759	16%
260210	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	209	-	-	31,420	-	31,629	31,629	0%
260500	CSO Outfall Rehab	21,500,000	-	1,641,572	1,641,572	-	-	-	-	0%
260504	Rehabilitation of Outfalls - Phase II	5,042,000	22,843	-	-	-	4,900,746	22,843	4,923,589	98%
260508	B-39 Outfall Rehab	8,755,000	873,311	5,391,594	5,391,594	3,474,273	-	4,347,585	4,347,585	50%
260509	B-40 Outfall Rehab	-	82,308	-	-	30,283	-	112,591	112,591	0%
260510	Conveyance System Rehabilitation - Outfalls	35,825,000	902,646	1,340,350	1,340,350	868,598	-	1,771,244	1,771,244	5%
260600	CSO Facilities Improvements	1,045,500,000	-	1,500,000	1,500,000	-	-	-	-	0%
260603	Conner Creek CSO Basin Rehab	8,175,000	65,894	-	-	8,379	7,675,407	74,272	7,749,679	95%
260613	Baby Creek HVAC Improvements	604,000	-	-	-	-	545,401	-	545,401	90%
260614	CSO Facilities Structural Improvements	13,590,000	6,908,490	3,100,700	4,100,700	3,845,762	115,312	10,638,939	10,754,251	79%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	759,000	-	-	-	-	582,444	-	582,444	77%
260617	St. Aubin Chemical Disinfection Improvements	6,456,000	-	274,800	274,800	-	-	-	-	0%
260618	Oakwood HVAC Improvements	6,091,000	4,850,407	498,000	1,094,000	759,010	-	5,609,417	5,609,417	92%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	7,635,000	62,766	2,116,286	2,116,286	608,166	-	670,932	670,932	9%
260620	Baby Creek Roof Replacement	1,047,000	610,931	-	-	373,621	984,552	-	984,552	94%
260621	Connor Creek Berm Improvements	2,542,000	2,218,752	-	-	26,110	2,244,862	-	2,244,862	88%
260622	CSO Facilities Emergency Generator Improvements	2,061,000	95,455	1,220,000	1,220,000	957,036	104,250	948,241	1,052,491	51%
260623	Baby Creek Screen Rehabilitation	2,175,000	22,933	1,077,500	1,077,500	149,923	-	172,856	172,856	8%
260700	Sewer System Infrastructure Improvements & Pumping Stations	526,000	-	75,129	75,129	-	-	-	-	0%
260701	Conveyance System Infrastructure Improvements	55,631,000	2,241,437	15,638,605	21,538,605	5,537,037	-	7,778,474	7,778,474	14%
260702	Pump Station Assets Updates	2,000,000	-	-	-	-	-	-	-	0%
260800	WRRF Roof Replacement Program	5,000,000	-	1,891,192	1,891,192	-	-	-	-	0%

# Construction Work-in-Progress Quarterly Report

As of March 31, 2023

Great Lakes Water Authority

B2 - Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward

Unaudited Activity For the Fiscal Quarter Ended March 31, 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 March 31, 2023	Life to Date Capitalization / Expense Through March 31, 2023	CWIP Balance March 31, 2023	Life to Date Activity Through March 31, 2023	Life to Date Activity / Total Project Plan Estimate
260802	2022 WRRF Roof Improvements Project	-	44,637	-	-	216,149	-	260,786	260,786	0%
260900	WRRF Facility Optimization Program	429,000	-	-	-	-	-	-	-	0%
260901	Rehab. Hazmat Facility at WRRF	1,405,000	227,002	1,273,978	1,273,978	41,522	-	268,524	268,524	19%
260902	WRRF Renovation of 4th Floor	2,721,000	65,149	2,671,406	2,671,406	2,250,570	-	2,315,719	2,315,719	85%
260903	WRRF Front Entrance Rehab.	1,005,000	136,823	1,004,587	1,004,587	199,210	-	336,032	336,032	33%
260904	WRRF 3rd Floor Renovation	-	2,752	-	-	6,139	-	8,891	8,891	0%
261000	WRRF Rehabilitation of Secondary Clarifiers	46,827,000	-	-	-	-	-	-	-	0%
261001	Rehabilitation of Secondary Clarifiers	4,030,000	2,986	-	-	12,408	-	15,394	15,394	0%
270001	Pilot CSO Netting Facility	6,199,000	329	-	-	362	-	692	692	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,840,000	-	-	-	-	-	-	-	0%
270003	Long Term CSO Control Plan	8,249,000	-	2,519,339	2,519,339	1,612,829	1,612,829	-	1,612,829	20%
270004	Oakwood Lieb CSO Facility Improvement	17,004,000	69,908	1,250,000	1,250,000	1,358,517	-	1,428,425	1,428,425	8%
270005	CSO Safety Improvements & Building Rehab	6,481,000	-	122,200	122,200	-	-	-	-	0%
270006	Control System Upgrades - Baby Creek/Belle	1,916,000	477,215	93,200	93,200	310,488	-	787,704	787,704	41%
270007	Disinfection System Improvements at CSO	8,216,000	285	-	-	80	-	365	365	0%
270008	Flushing System Improvements at Conner Creek and St. Aubin CSO Facilities	7,007,000	-	-	-	-	-	-	-	0%
270009	Site Improvements at St. Aubin, Belle Isle, and Baby Creek CSO Facilities	1,378,000	-	-	-	-	-	-	-	0%
270010	HVAC Improvements at Puritan Fenkell and Seven Mile CSO Facilities	1,509,000	-	-	-	156	-	156	156	0%
270011	HVAC Improvements at Conner Creek and Belle Isle CSO Facilities	384,000	-	-	-	-	-	-	-	0%
270012	Control System Upgrades at Conner Creek, Oakwood, and Puritan Fenkell CSO Facilities	5,921,000	-	-	-	-	-	-	-	0%
270013	Facility Improvements at Puritan Fenkell and Seven Mile CSO Facilities	894,000	-	-	-	-	-	-	-	0%
270014	Convert to Complete Capture Basin CSO Fa	4,442,000	-	-	-	-	-	-	-	0%
273001	Hubbell Southfield CSO Facility Improvement	38,576,000	424,992	532,700	532,700	4,170	-	429,162	429,162	1%
273002	CSO Hubbell Southfield VR-8 Gate Improvements	1,770,000	-	-	-	-	-	-	-	0%
276002	Replacement Make-up Air Unit at CON	-	8,172	-	-	334,346	-	342,518	342,518	0%
277001	Baby Creek Outfall Improvements Project	13,287,000	37,444	1,250,000	1,250,000	877,520	444,619	850,645	1,295,264	10%
277002	Baby Creek CSO Facility Influent Flushing System	738,000	-	-	-	-	-	-	-	0%
341002	Security Infrastructure Improvements	-	3,197,089	-	-	3,762	-	3,200,851	3,200,851	0%
<b>Grand Total</b>		<b>3,015,528,000</b>	<b>193,100,463</b>	<b>125,932,245</b>	<b>135,331,233</b>	<b>73,618,411</b>	<b>\$ 417,154,711</b>	<b>261,489,660</b>	<b>678,644,371</b>	<b>23%</b>
					<b>Project Amendments:</b>	<b>9,398,988</b>				

## **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.

**\$5,174,767** of Capital Reserve project amendments have been prepared as of March 31, 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.

**\$9,398,988** of Capital Reserve project amendments have been prepared as of March 31, 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 March 31, 2023

**Great Lakes Water Authority****C1 - Water System Project Amendment Summary****Unaudited Activity For the Fiscal Quarter Ended March 31, 2023**

<b>Project</b>	<b>Project Name</b>	<b>Capital Reserve</b>	<b>Grand Total</b>
<b>115005</b>	WWP WTP Building Ventilation Improvements	1,007,200	1,007,200
<b>114002</b>	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	1,098,339	1,098,339
<b>132016</b>	North Service Center BPS Improvements	2,150,147	2,150,147
<b>122013</b>	14 Mile Transmission Main Loop	529,374	529,374
<b>114002</b>	Springwells WTP Low and High Lift Improvements	(9,622,000)	(9,622,000)
<b>122013</b>	14 Mile Transmission Main Loop	184,708	184,708
<b>122005</b>	Replacement Schoolcraft Water Main	3,266,000	3,266,000
<b>170503</b>	Transmission System Valve Replacement Pa	6,561,000	6,561,000
<b>Grand Total</b>		<b>\$ 5,174,767</b>	<b>\$ 5,174,767</b>



**Construction Work-in-Progress Quarterly Report**

As of March 31, 2023

**Great Lakes Water Authority**  
**C2 - Wastewater System Project Amendment Summary**  
**Unaudited Activity For the Fiscal Quarter Ended March 31, 2023**

<b>Project</b>	<b>Project Name</b>		<b>Capital Reserve</b>	<b>Grand Total</b>
<b>211008</b>	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	\$	16,000	\$ 16,000
<b>216006</b>	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System		1,797,128	1,797,128
<b>211006</b>	Pump Station No. 1 Improvements		89,860	89,860
<b>260701</b>	Conveyance System Infrastructure Improvements		5,900,000	5,900,000
<b>260618</b>	Oakwood HVAC Improvement		596,000	596,000
<b>260614</b>	CSO Facilities - Structural Improvements		1,000,000	1,000,000
<b>Grand Total</b>		\$	<b>9,398,988</b>	<b>\$ 9,398,988</b>