



Financial Services Audit Committee Communication

Date: March 24, 2023

To: Great Lakes Water Authority Audit Committee

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

Re: FY 2023 Q2 Construction Work-in-Progress Report through December 31, 2022 (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 Q2 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 December 31, 2022

For questions, please contact:

William Baker
Construction Accounting and Financial Reporting
Phone: 313.378.9760
Email: william.baker@glwater.org

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March 24, 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 December 31, 2022. 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 recently approved 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 December 31, 2022. 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.

Q2 Total Project Plan Estimate Revision

Total Project Plan Estimates have been updated from the Q1 FY2023 CWIP Report to align with the projected total cost per the approved 2023-2027 CIP.

This change impacts the Total Project Plan Estimate column in the Summary by Jurisdiction and CWIP Rollforwards of the Water and Wastewater systems (tables A1, A2, B1, and B2) but not the actual values reported.

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 July 1, 2022, GLWA Board of Directors passed an Adjusted Capital Spending Ratio (SRA) of 100% for the Water system and 100% for the Wastewater system.

The Water System spend for the period ending December 31, 2022, is 107.2% of the FY 2023 board approved CIP, 104.6% of the FY 2023 board approved CIP with project amendments, 134.0% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 107.2% 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 \$199,160,596 is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending December 31, 2022, is 72.4% of the FY 2023 board approved CIP, 67.9% of the FY 2023 board approved CIP with project amendments, 96.6% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 72.4% 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 \$134,331,233 is provided in the subsequent Project Amendment Summary appendix of this report.

Water System Projects		FY 2022	FY 2022 Activity	FY 2022 Percentage	FY 2023	FY 2023 Prorated (Six Months)	FY 2023 Activity (Unaudited)	FY 2023 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	\$	97,187,768	\$	104,186,160	107.2%	
FY 2023 Board Approved CIP With Project Amendments		199,160,596		99,580,298		104,186,160	104.6%	
FY 2023 Capital Spend Rate Assumption (SRA) - Approved		155,500,429		77,750,214		104,186,160	134.0%	
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted		194,375,536		97,187,768		104,186,160	107.2%	
Wastewater System Projects		FY 2022	FY 2022 Activity	FY 2022 Percentage	FY 2023	FY 2023 Prorated (Six Months)	FY 2023 Activity (Unaudited)	FY 2023 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	\$	62,966,123	\$	45,597,173	72.4%	
FY 2023 Board Approved CIP With Project Amendments		134,331,233		67,165,617		45,597,173	67.9%	
FY 2023 Capital Spend Rate Assumption (SRA) - Approved		94,449,184		47,224,592		45,597,173	96.6%	
FY 2023 Capital Spend Rate Assumption (SRA) - Adjusted		125,932,245		62,966,123		45,597,173	72.4%	

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.

\$377.1 million is in CWIP as of December 31, 2022 as shown for the Water System in A1 - Water - CWIP Rollforward by Jurisdiction

\$237.2 million is in CWIP as of December 31, 2022 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 December 31, 2022

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 December 31, 2022

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 December 31, 2022	CWIP Balance December 31, 2022
City of Detroit	\$ 586,743,000	\$ 81,436,384	\$ 63,482,209	\$ 64,489,409	\$ 27,183,361	\$ 108,567,075
Lapeer County	5,373,000	1,332,496	115,188	115,188	2,379,299	3,711,795
Mutiple Counties	766,763,000	50,555,675	37,374,236	37,374,236	23,622,995	74,178,670
Oakland County	296,959,000	56,921,561	46,824,890	49,504,411	36,950,628	93,872,190
Saint Clair County	220,073,000	9,935,379	14,840,398	14,840,398	1,743,426	11,678,805
Wayne County - Outside Detroit	898,628,000	72,772,563	31,738,615	32,836,954	12,306,452	85,079,015
Grand Total	\$ 2,774,539,000	\$ 272,954,060	\$ 194,375,536	\$ 199,160,596	\$ 104,186,160	\$ 377,087,550

Construction Work-in-Progress Quarterly Report

As of December 31, 2022

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 December 31, 2022

Jurisdiction	Total Project Plan		FY 2023 Board		FY 2023 Board		CWIP Balance
	Estimate from	CWIP Balance	FY 2023 Board	Approved CIP	Activity through	CWIP Balance	
	FY 2023-2027 CIP	July 1, 2022	Approved CIP	With Project Amendments	December 31, 2022	December 31, 2022	
City of Detroit	\$ 1,451,487,000	\$ 155,664,232	\$ 63,607,797	\$ 66,106,785	\$ 25,769,407	\$ 181,433,639	
Mutiple Counties	1,475,727,000	36,400,308	61,791,748	67,691,748	19,448,371	54,324,497	
Wayne County - Outside Detroit	88,314,000	1,035,923	532,700	532,700	379,394	1,415,318	
Grand Total	\$ 3,015,528,000	\$ 193,100,463	\$ 125,932,245	\$ 134,331,233	\$ 45,597,173	\$ 237,173,454	

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 2nd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
132015	1901767	Newburgh Road Booster Pumping Station Improvements
232002	CS-120	Freud and Connor Creek Pump Station Rehabilitation
260620	2100911	Roof Replacement at Baby Creek CSO Facility
260621	1900318-6	Conner Creek Berm Improvements Task 7T TOE
277001	1902908	Baby Creek CSO Effluent Conduit Access & Sedimentation Mitigation

\$377.1 million is in CWIP as of December 31, 2022, as shown for the Water System in B1 - Water - Detailed CWIP Rollforward

\$237.2 million is in CWIP as of December 31, 2022, 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 December 31, 2022

Great Lakes Water Authority

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

Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

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 December 31, 2022	Life to Date Capitalization / Expense through December 31, 2022	CWIP Balance December 31, 2022	Life to Date Activity Through December 31, 2022	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	\$ 315,197	\$ -	\$ 3,233,447	\$ 3,233,447	5%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	25,941,000	1,281,522	600,000	600,000	4,018	-	1,285,540	1,285,540	5%
111008	LHWWP 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	596,345	-	3,631,437	3,631,437	12%
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	644,667	-	2,881,382	2,881,382	87%
111012	LHWWP-Flocculation Improvements	32,079,000	463,802	2,112,585	2,112,585	183,198	-	647,000	647,000	2%
112003	NE WTP High Lift Pumping Electrical	72,115,000	536,340	1,000,000	1,000,000	23,653	-	559,994	559,994	1%
112006	Northeast Water Treatment Plant Flocculator Replacements	14,054,000	333,817	2,760,000	2,760,000	2,615,389	52,671	2,896,536	2,949,206	21%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facili	-	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	2,389,495	-	4,872,207	4,872,207	61%
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	13,098,339	783,515	-	23,251,179	23,251,179	8%
114005	Springwells WTP Admin Building Improvements	10,109,000	1,211,635	-	-	21,440	-	1,233,075	1,233,075	12%
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	30,979	-	11,784,904	11,784,904	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	472,648	-	24,418,015	24,418,015	94%
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	94,630	-	990,524	990,524	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	11,689,092	-	23,726,108	23,726,108	43%
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	47,861	-	812,375	812,375	7%
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	7,366,902	4,685,231	58,794,887	63,480,118	64%
116005	Belle Isle Seawall Rehabilitation	2,540,000	702	600,000	600,000	50,872	-	51,574	51,574	2%
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	2,844,386	29,790,267	8,010,121	37,800,389	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	12,877,333	148,741	28,949,800	29,098,541	11%
122005	Replacement Schoolcraft Watermain	15,049,000	640,821	-	-	3,023,798	13,656,834	3,664,619	17,321,453	115%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	25,697,000	1,756,084	-	-	1,868,422	20,751,264	3,624,506	24,375,769	95%
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	-	-	113,512	6,435,948	838,821	7,274,769	78%
122013	Lyon Township Transmission Main Extension Project	111,420,000	28,177,042	29,635,560	30,164,934	24,987,869	357,808	53,164,911	53,522,719	48%
122016	Downriver Transmission Loop	62,962,000	2,450,853	7,500,000	7,500,000	76,703	-	2,527,555	2,527,555	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	1,190,566	-	7,236,888	7,236,888	12%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	53,938,000	1,381,474	1,998,892	1,998,892	1,114,381	-	2,495,855	2,495,855	5%
122019	Jefferson Main Replacement	29,700,000	-	827,195	827,195	-	-	-	-	0%
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	2,379,299	-	3,484,449	3,484,449	68%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,588,000	28,175,975	16,689,330	16,689,330	11,727,316	-	39,903,291	39,903,291	88%
132012	Ypsilanti PS Improvements	39,084,000	659,128	200,000	200,000	1,652,085	-	2,311,213	2,311,213	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	-	-	370,965	-	864,851	864,851	2%
132016	North Service Center BPS Improvements	82,263,000	371,816	500,000	2,650,147	235,443	-	607,259	607,259	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 December 31, 2022

Great Lakes Water Authority

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

Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

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 December 31, 2022	Life to Date Capitalization / Expense through December 31, 2022	CWIP Balance December 31, 2022	Life to Date Activity Through December 31, 2022	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%
132025	Northwest Booster Station Yard Piping Improvements	-	20,306	-	-	-	-	20,306	20,306	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	1,322,838	-	2,463,749	2,463,749	31%
170303	WWP WTP Power Monitoring Installation	2,266,000	1,716,628	438,000	438,000	115,461	-	1,832,089	1,832,089	81%
170304	WWP WTP SCADA Upgrade	319,000	261,142	77,795	77,795	124,800	-	385,942	385,942	121%
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%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,000,000	3,163,184	1,314,960	1,314,960	4,712,591	-	7,875,775	7,875,775	79%
170504	Repair of WTM, Valves, & Priority Repair	7,500,000	8,514,195	1,250,000	1,250,000	487,601	-	9,001,796	9,001,796	120%
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	2,419,652	7,184,856	13,314,072	20,498,927	83%
170802	Reservoir Inspection, Design	41,500,000	-	8,000,000	8,000,000	2,067,536	-	2,067,536	2,067,536	5%
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	-	-	1,057,908	7,703,013	3,370,318	11,073,331	104%
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%
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	\$ 199,160,596	\$ 104,186,160	\$ 352,478,972	\$ 377,087,550	\$ 729,566,522	26%
				Project Amendments:		4,785,060				

Construction Work-in-Progress Quarterly Report

As of December 31, 2022

Great Lakes Water Authority

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

Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

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					
		FY 2023 - 2027 CIP	July 1, 2022	Approved CIP	With Project	Activity through	Capitalization /	December 31, 2022	December 31, 2022	Activity /
					Amendments	December 31, 2022	Expense Through			Total Project
										Plan Estimate
211002	Pump Station No. 2 Pumping Improvments	\$ 3,463,000.00	\$ 2,634,214.71	\$ -	\$ -	\$ 8,795.88	\$ -	\$ 2,643,010.59	\$ 2,643,010.59	76%
211005	Pump Station No. 2 Improvements	67,002,000	14,864	-	-	41,581	-	56,445	56,445	0%
211006	Pump Station No. 1 Improvements	70,042,000	6,014,644	8,100,000	8,189,860	1,127,983	-	7,142,627	7,142,627	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	1,378,336	-	6,696,611	6,696,611	8%
	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B									
211008	Sludge Lines	12,644,000	5,488,309	2,506,271	2,522,271	2,186,604	-	7,674,913	7,674,913	61%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	21,790,000	201,653	1,000,000	1,000,000	313,798	-	515,451	515,451	2%
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	-	-	-	-	-	-	-	0%
212008	WRRF Rehabilitation of Intermediate Lift	73,884,000	968,407	-	-	146,472	-	1,114,880	1,114,880	2%
212009	WRRF Aeration Improvements 3 and 4	66,983,000	-	-	-	-	-	-	-	0%
	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium									
212010	Bisulfite	5,456,000	-	-	-	-	-	-	-	0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	7,094,000	297,000	750,000	750,000	12,087	-	309,086	309,086	4%
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	23,810,000	21,788,969	-	-	707,219	-	22,496,189	22,496,189	94%
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	-	-	-	-	-	-	-	0%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	5,281,000	6,338,791	-	-	805,713	-	7,144,504	7,144,504	135%
	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water									
216006	System	21,108,000	3,761,533	2,963,200	4,760,328	1,063,461	-	4,824,994	4,824,994	23%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,226,000	1,665,007	2,509,960	2,509,960	1,236,855	-	2,901,862	2,901,862	7%
216011	WRRF Structural Improvements	11,400,000	25,011	400,000	400,000	255,042	-	280,053	280,053	2%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,466,000	1,812,691	1,181,929	1,181,929	671,321	-	2,484,011	2,484,011	5%
222002	Detroit River Interceptor Evaluation and Rehabilitation	77,184,000	42,278,907	9,415,401	9,415,401	5,603,872	-	47,882,779	47,882,779	62%
222004	Collection System Valve Remote Operation Structures Improvements	-	4,246	-	-	-	-	4,246	4,246	0%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	39,756,000	38,787,010	38,292	38,292	2,774,581	-	41,561,590	41,561,590	105%
232002	Freud and Connor Creek Pump Station Improvements	262,798,000	9,045,858	10,753,379	10,753,379	1,549,814	6,000,596	10,595,672	16,596,269	6%
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	3,368,807	18,542,127	19,775,943	38,318,070	100%
260202	Conveyance System Interceptor Rehab	-	1,904	-	-	-	-	1,904	1,904	0%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	50,053,000	1,923,103	11,168,334	11,168,334	2,950,168	-	4,873,271	4,873,271	10%
260205	NWI Outfall Rehabilitation	10,379,000	334,750	5,044,122	5,044,122	791,628	-	1,126,378	1,126,378	11%
260206	Conveyance System Rehabilitation - Interceptors	35,270,000	395,678	2,149,139	2,149,139	132,880	-	528,558	528,558	1%
260207	Rehabilitation of Woodward Sewer System	19,160,000	3,576,770	4,848,636	4,848,636	3,176,146	-	6,752,916	6,752,916	35%
260208	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	34,697	-	-	5,681	-	40,378	40,378	0%
260209	Sewer Repair Contract - As Needed	12,200,000	3,836	4,504,389	4,504,389	941,313	-	945,149	945,149	8%
260210	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	209	-	-	3,032	-	3,241	3,241	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%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	0%
260508	B-39 Outfall Rehab	8,755,000	873,311	5,391,594	5,391,594	2,756,301	-	3,629,612	3,629,612	41%
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	607,550	-	1,510,196	1,510,196	4%
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	-	-	6,885	7,675,407	72,778	7,748,185	95%
260614	CSO Facilities Structural Improvements	13,590,000	6,908,490	3,100,700	3,100,700	2,421,625	113,727	9,216,388	9,330,115	69%
260617	St. Aubin Chemical Disinfection Improvements	6,456,000	-	274,800	274,800	-	-	-	-	0%

Construction Work-in-Progress Quarterly Report

As of December 31, 2022

Great Lakes Water Authority

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

Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

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					
		FY 2023 - 2027 CIP	July 1, 2022	Approved CIP	With Project	Activity through	Capitalization /	December 31, 2022	December 31, 2022	Activity /
					Amendments	December 31, 2022	Expense Through	December 31, 2022	December 31, 2022	Total Project
										Plan Estimate
260618	Oakwood HVAC Improvements	6,091,000	4,850,407	498,000	1,094,000	690,915	-	5,541,322	5,541,322	91%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	7,635,000	62,766	2,116,286	2,116,286	343,021	-	405,786	405,786	5%
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	476,706	49,370	522,791	572,161	28%
260623	Baby Creek Screen Rehabilitation	2,175,000	22,933	1,077,500	1,077,500	16,307	-	39,240	39,240	2%
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	3,310,152	-	5,551,590	5,551,590	10%
260702	Pump Station Assets Updates	2,000,000	-	-	-	-	-	-	-	0%
260800	WRRF Roof Replacement Program	5,000,000	-	1,891,192	1,891,192	-	-	-	-	0%
260802	2022 WRRF Roof Improvements Project	-	44,637	-	-	153,365	-	198,002	198,002	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	35,599	-	262,601	262,601	19%
260902	WRRF Renovation of 4th Floor	2,721,000	65,149	2,671,406	2,671,406	858,403	-	923,552	923,552	34%
260903	WRRF Front Entrance Rehab.	1,005,000	136,823	1,004,587	1,004,587	97,553	-	234,376	234,376	23%
260904	WRRF 3rd Floor Renovation	-	2,752	-	-	3,934	-	6,685	6,685	0%
260905	WRRF Plumbing Shop Rehab	-	-	-	-	8,608	-	8,608	8,608	0%
261000	WRRF Rehabilitation of Secondary Clarifiers	46,827,000	-	-	-	-	-	-	-	0%
261001	Rehabilitation of Secondary Clarifiers	4,030,000	2,986	-	-	1,619	-	4,605	4,605	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	972,710	1,334,598	(361,888)	972,710	12%
270004	Oakwood Lieb CSO Facility Improvement	17,004,000	69,908	1,250,000	1,250,000	760,814	-	830,722	830,722	5%
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	45,503	-	522,718	522,718	27%
270007	Disinfection System Improvements at CSO	8,216,000	285	-	-	-	-	285	285	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	-	-	-	-	-	-	-	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	5,773	-	430,766	430,766	1%
273002	CSO Hubbell Southfield VR-8 Gate Improvements	1,770,000	-	-	-	-	-	-	-	0%
276002	Replacement Make-up Air Unit at CON	-	8,172	-	-	293,388	-	301,560	301,560	0%
277001	Baby Creek Outfall Improvements Project	13,287,000	37,444	1,250,000	1,250,000	43,115	406,787	54,071	460,858	3%
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%
Grand Total		3,015,528,000	193,100,463	125,932,245	134,331,233	45,597,173	\$ 413,449,680	237,173,454	650,623,133	22%
				Project Amendments:	8,398,988					

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.

\$4,785,060 of Capital Reserve project amendments have been prepared as of December 31, 2022, 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.

\$8,398,988 of Capital Reserve project amendments have been prepared as of December 31, 2022, 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.

Great Lakes Water Authority
C1 - Water System Project Amendment Summary
Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

Construction Work-in-Progress Quarterly Report
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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
Grand Total		\$ 4,785,060	\$ 4,785,060

Construction Work-in-Progress Quarterly Report

As of December 31, 2022

Great Lakes Water Authority

C2 - Wastewater System Project Amendment Summary

Unaudited Activity For the Fiscal Quarter Ended December 31, 2022

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
Grand Total		\$	8,398,988	\$ 8,398,988