



## Financial Services Audit Committee Communication

**Date:** December 16, 2022

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

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

**Re:** FY 2023 Q1 Construction Work-in-Progress Report through September 30, 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 Q1 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 September 30, 2022**

**For questions, please contact:**

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**December 16, 2022****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 September 30, 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 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 September 30, 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.

## 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. Effective July 1, 2022, GLWA Board of Directors amended a capital spending ratio (SRA) of 100% for the Water system and 100% for the Wastewater system.

The Water System spend for the period ending September 30, 2022, is 90.7% of the FY 2023 board approved CIP, 89.8% of the FY 2023 board approved CIP with project amendments, 113.4% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 90.7% of the FY 2023 Amended Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2023 Board Approved CIP was amended from \$194,375,536 to \$196,481,075 is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending September 30, 2022, is 50.8% of the FY 2023 board approved CIP, 47.8% of the FY 2023 board approved CIP with project amendments, 67.7% of the FY 2023 Approved Capital Spending Rate Assumption (SRA) and 50.8% of the FY 2023 Amended Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2023 Board Approved CIP was amended from \$125,932,245 to \$133,735,233 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 (Three 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	\$	48,593,884	\$	44,092,858	90.7%
FY 2023 Board Approved CIP With Project Amendments						196,481,075		49,120,269		44,092,858	89.8%
FY 2023 Capital Spend Rate Assumption (SRA) - Approved						155,500,429		38,875,107		44,092,858	113.4%
FY 2023 Capital Spend Rate Assumption (SRA) - Amended						194,375,536		48,593,884		44,092,858	90.7%
Wastewater System Projects		FY 2022	FY 2022 Activity	FY 2022 Percentage	FY 2023	FY 2023 Prorated (Three 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	\$	31,483,061	\$	15,988,526	50.8%
FY 2023 Board Approved CIP With Project Amendments						133,735,233		33,433,808		15,988,526	47.8%
FY 2023 Capital Spend Rate Assumption (SRA) - Approved						94,449,184		23,612,296		15,988,526	67.7%
FY 2023 Capital Spend Rate Assumption (SRA) - Amended						125,932,245		31,483,061		15,988,526	50.8%

## **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.

**\$317.0** million is in CWIP as of September 30, 2022 as shown for the Water System in A1.

**\$208.9** million is in CWIP as of September 30, 2022 as show for the Wastewater System in A2.

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

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward Summary By Jurisdiction**  
**Unaudited Activity For the Fiscal Quarter Ended September 30, 2022**

<b>Jurisdiction</b>	<b>Total Project Plan Estimate from FY 2023-2027 CIP</b>	<b>CWIP Balance July 1, 2022</b>	<b>FY 2023 Board Approved CIP</b>	<b>FY 2023 Board Approved CIP With Project Amendments</b>	<b>FY 2023 Activity through September 30, 2022</b>	<b>CWIP Balance September 30, 2022</b>
City of Detroit	\$ 556,220,042	\$ 81,436,384	\$ 63,482,209	\$ 64,489,409	\$ 12,488,623	\$ 93,925,007
Lapeer County	115,188	1,332,496	115,188	115,188	972	1,333,468
Mutiple Counties	583,538,636	50,555,675	37,374,236	37,374,236	5,888,513	56,444,188
Oakland County	230,617,369	56,921,561	46,824,890	46,824,890	18,359,130	75,280,691
Saint Clair County	201,862,493	9,935,379	14,840,398	14,840,398	677,138	10,612,517
Wayne County - Outside Detroit	814,313,380	72,772,563	31,738,615	32,836,954	6,678,483	79,451,047
<b>Grand Total</b>	<b>\$ 2,386,667,108</b>	<b>\$ 272,954,060</b>	<b>\$ 194,375,536</b>	<b>\$ 196,481,075</b>	<b>\$ 44,092,858</b>	<b>\$ 317,046,918</b>



**Great Lakes Water Authority  
Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward Summary By Jurisdiction  
Unaudited Activity For the Fiscal Quarter Ended September 30, 2022**

Jurisdiction	Total Project Plan		FY 2023 Board		FY 2023	
	Estimate from FY 2023-2027 CIP	CWIP Balance July 1, 2022	FY 2023 Board Approved CIP	Approved CIP With Project Amendments	Activity through September 30, 2022	CWIP Balance September 30, 2022
City of Detroit	\$ 1,157,158,082	\$ 155,664,232	\$ 63,607,797	\$ 65,510,785	\$ 9,798,445	\$ 165,462,676
Mutiple Counties	1,429,049,779	36,400,308	61,791,748	67,691,748	5,813,641	42,026,676
Wayne County - Outside Detroit	84,893,787	1,035,923	532,700	532,700	376,440	1,412,363
<b>Grand Total</b>	<b>\$ 2,671,101,648</b>	<b>\$ 193,100,463</b>	<b>\$ 125,932,245</b>	<b>\$ 133,735,233</b>	<b>\$ 15,988,526</b>	<b>\$ 208,901,716</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 1st 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

**\$317.0** million is in CWIP as of September 30, 2022, as shown for the Water System in B1.

**\$208.9** million is in CWIP as of September 30, 2022, as shown for the Wastewater System in B2.

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

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended September 30, 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 September 30, 2022	Life to Date Capitalization / Expense through September 30, 2022	CWIP Balance September 30, 2022	Life to Date Activity Through September 30, 2022	Life to Date Activity / Total Project Plan Estimate
	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ 65,910,582	\$ 2,918,249	\$ 1,600,000	\$ 1,600,000	\$ 104,327	\$ -	\$ 3,022,576	\$ 3,022,576	5%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements	24,600,000	1,281,522	600,000	600,000	324	-	1,281,846	1,281,846	5%
111008	LHWTP Architectural Programming - Lab	856,479	-	-	-	-	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	19,303,396	3,035,092	9,021,435	9,021,435	467,038	-	3,502,129	3,502,129	18%
111010	Lake Huron Water Treatment Plant -Filtration and Pretreatment Improvements	58,432,846	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	1,617,809	2,236,714	1,506,378	1,506,378	102,756	-	2,339,470	2,339,470	145%
111012	LHWTP-Flocculation Improvements	31,141,381	463,802	2,112,585	2,112,585	2,694	-	466,496	466,496	1%
112003	NE WTP High Lift Pumping Electrical	71,748,677	536,340	1,000,000	1,000,000	6,358	-	542,699	542,699	1%
112006	Northeast Water Treatment Plant Flocculator Replacements	13,800,000	333,817	2,760,000	2,760,000	1,260,647	-	1,594,464	1,594,464	12%
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	21,811,843	-	-	-	-	-	-	-	0%
113006	SW WTP Chloring Scrubber	4,397,583	2,482,713	4,397,583	4,397,583	1,184,789	-	3,667,502	3,667,502	83%
113007	Architectural and Building Mechanical	1,000,112	-	-	-	-	-	-	-	0%
113008	Water Supply Pumping Assessment Study	45,000,001	-	-	-	-	-	-	-	0%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	254,491,128	22,467,665	12,000,000	13,098,339	420,109	-	22,887,774	22,887,774	9%
114005	Springwells WTP Admin Building Improvements	8,280,000	1,211,635	-	-	6,350	-	1,217,984	1,217,984	15%
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	4,020,591	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells	125	11,753,925	125	125	24,340	-	11,778,265	11,778,265	9437712%
114010	Yard Piping Improvements	194,585,907	1,705,045	-	-	99,464	-	1,804,509	1,804,509	1%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	807,907	23,945,367	807,907	807,907	223,290	-	24,168,658	24,168,658	2992%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	-	15,260	-	-	(15,991)	1,566,470	(731)	1,565,739	0%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	19,940,000	895,893	660,000	660,000	76,694	-	972,588	972,588	5%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	2,305,000	-	55,000	55,000	-	-	-	-	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	37,502,196	12,037,016	11,790,097	11,790,097	5,632,071	-	17,669,087	17,669,087	47%
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	10,600,000	764,514	5,400,000	6,407,200	20,857	-	785,371	785,371	7%
115006	Water Works Park Site/Civil Improvements	5,881,717	-	-	-	-	-	-	-	0%
115007	Water Works Park High Lift Pumping Station Modernization	96,750,000	-	-	-	-	-	-	-	0%
115009	Water Works Park Sedimentation Basins Structural Upgrades	18,339,223	-	-	-	-	-	-	-	0%
116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on	54,689,961	51,427,985	13,663,132	13,663,132	2,551,167	4,685,231	53,979,152	58,664,383	107%
116005	Belle Isle Seawall Rehabilitation	2,300,000	702	600,000	600,000	-	-	702	702	0%
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	119,355,002	5,165,736	23,903,829	23,903,829	1,373,204	29,790,267	6,538,940	36,329,207	30%
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	241,635,895	16,072,467	15,000,000	15,000,000	2,170,277	148,741	18,242,744	18,391,485	8%
122005	Replacement Schoolcraft Watermain	-	640,821	-	-	1,072,454	13,656,834	1,713,275	15,370,109	0%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	-	1,756,084	-	-	1,491,940	20,751,264	3,248,024	23,999,287	0%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	22,152,553	-	-	-	-	-	-	-	0%
122011	Park-Merriman Water Main-Final Phase	-	725,309	-	-	7,917	6,435,948	733,226	7,169,175	0%
122013	Lyon Township Transmission Main Extension Project	74,074,537	28,177,042	29,635,560	29,635,560	10,731,650	357,808	38,908,692	39,266,500	53%
122016	Downriver Transmission Loop	59,114,882	2,450,853	7,500,000	7,500,000	42,282	-	2,493,135	2,493,135	4%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	58,251,433	6,046,322	1,023,269	1,023,269	887,348	-	6,933,670	6,933,670	12%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	51,939,352	1,381,474	1,998,892	1,998,892	611,657	-	1,993,132	1,993,132	4%
122019	Jefferson Main Replacement	29,045,043	-	827,195	827,195	-	-	-	-	0%

**Great Lakes Water Authority**  
**Water System Construction Work-in-Progress (CWIP) FY 2023 Rollforward**  
**Unaudited Activity For the Fiscal Quarter Ended September 30, 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 September 30, 2022	Life to Date Capitalization / Expense through September 30, 2022	CWIP Balance September 30, 2022	Life to Date Activity Through September 30, 2022	Life to Date Activity / Total Project Plan Estimate
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	115,188	1,105,151	115,188	115,188	972	-	1,106,123	1,106,123	960%
132010	West Service Center/Duval Rd Division Valve Upgrades	17,131,290	28,175,975	16,689,330	16,689,330	7,626,965	-	35,802,940	35,802,940	209%
132012	Ypsilanti PS Improvements	35,980,000	659,128	200,000	200,000	1,642,376	-	2,301,504	2,301,504	6%
132014	Adams Road Booster Pumping Improvements	52,792,189	83,262	-	-	-	-	83,262	83,262	0%
132015	Newburgh BPS	44,096,217	493,886	-	-	30,000	-	523,886	523,886	1%
132016	North Service Center BPS Improvements	81,900,000	371,816	500,000	500,000	515	-	372,331	372,331	0%
132018	Schoolcraft BPS	24,421,349	47,317	-	-	-	-	47,317	47,317	0%
132019	Wick Road BPS - Switchgear	24,603,967	56,912	-	-	-	-	56,912	56,912	0%
132020	Franklin BPS - Isolation Gate Valves	4,719,353	93,160	-	-	-	-	93,160	93,160	2%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	-	227,346	-	-	-	-	227,346	227,346	0%
132022	Joy Road BPS - Replace Reservoir Pumps	39,613,215	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	68,000	-	68,000	68,000	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	23,248,999	-	-	-	-	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	-	1,755,142	1,755,142	0%
170302	SW WTP SCADA Improvements	4,000,000	1,140,911	4,000,000	4,000,000	372,467	-	1,513,379	1,513,379	38%
170303	WWP WTP Power Monitoring Installation	876,000	1,716,628	438,000	438,000	104,680	-	1,821,308	1,821,308	208%
170304	WWP WTP SCADA Upgrade	117,661	261,142	77,795	77,795	40,633	-	301,775	301,775	256%
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	32,048,610	-	-	-	-	-	-	-	0%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	5,050,585	-	276,826	276,826	-	-	-	-	0%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	6,574,799	3,163,184	1,314,960	1,314,960	1,062,083	-	4,225,267	4,225,267	64%
170504	Repair of WTM, Valves, & Priority Repair	6,250,000	8,514,195	1,250,000	1,250,000	-	-	8,514,195	8,514,195	136%
170600	Water Transmission Main Asset Assessment Program	242,054	-	9,854	9,854	-	-	-	-	0%
170601	Linear System Integrity Program	7,266,454	-	1,815,370	1,815,370	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	114,613	-	12,727	12,727	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	7,295,000	10,894,420	6,830,000	6,830,000	899,312	7,184,856	11,793,732	18,978,588	260%
170802	Reservoir Inspection, Design	41,000,000	-	8,000,000	8,000,000	1,344,970	-	1,344,970	1,344,970	3%
170803	Reservoir Inspection, Design, and Construction Mangement Services Phase III	93,916,000	-	-	-	-	-	-	-	0%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	40,000,000	-	-	-	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	-	2,312,410	-	-	411,497	7,703,013	2,723,908	10,426,920	0%
170902	Brownstown Meter Pit Rehabilitation	545,000	219,873	545,000	545,000	-	-	219,873	219,873	40%
171500	Roof Replacement - Var Facilities Program	15,908,438	-	-	-	-	-	-	-	0%
171502	Lake Huron and Southwest Roof Replacement	2,703,038	-	-	-	-	-	-	-	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	2,623,926	-	566,991	566,991	-	-	-	-	0%
383300	Masonry Replacement and Rehabilitation Program	25,000,001	-	-	-	-	-	-	-	0%
<b>Grand Total</b>		<b>\$ 2,386,667,108</b>	<b>\$ 272,954,060</b>	<b>\$ 194,375,536</b>	<b>\$ 196,481,075</b>	<b>\$ 44,092,858</b>	<b>\$ 352,426,302</b>	<b>\$ 317,046,918</b>	<b>\$ 669,473,220</b>	<b>28%</b>
				<b>Project Amendments:</b>	<b>2,105,539</b>					

**Great Lakes Water Authority  
Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward  
Unaudited Activity For the Fiscal Quarter Ended September 30, 2022**

Project	Project Name	Total Project Plan		FY 2023 Board		FY 2023 Board		Life to Date		Life to Date	
		Estimate from FY 2023 - 2027 CIP	CWIP Balance July 1, 2022	Approved CIP	With Project Amendments	Activity through September 30, 2022	Capitalization / Expense Through September 30, 2022	CWIP Balance September 30, 2022	Activity Through September 30, 2022	Activity / Total Project Plan Estimate	
211002	Pump Station No. 2 Pumping Improvements	\$ -	\$ 2,634,214.71	\$ -	\$ -	\$ 4,513.15	\$ -	\$ 2,638,727.86	\$ 2,638,727.86	0%	
211005	Pump Station No. 2 Improvements	66,999,999	14,864	-	-	-	-	35,727	35,727	0%	
211006	Pump Station No. 1 Improvements	65,949,998	6,014,644	8,100,000	8,189,860	(2,319)	-	6,012,325	6,012,325	9%	
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	84,261,425	5,318,275	2,461,426	2,461,426	298,065	-	5,616,340	5,616,340	7%	
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	2,506,271	5,488,309	2,506,271	2,522,271	1,388,490	-	6,876,799	6,876,799	274%	
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	21,500,000	201,653	1,000,000	1,000,000	312,844	-	514,497	514,497	2%	
211010	Rehabilitation of Sludge Processing Complexes A and B	19,799,999	94,337	-	-	-	-	94,337	94,337	0%	
211011	WRRF PS1 Screening and Grit Improvements	93,000,001	-	-	-	-	-	-	-	0%	
212008	WRRF Rehabilitation of Intermediate Lift	73,301,001	968,407	-	-	49,259	-	1,017,667	1,017,667	1%	
212009	WRRF Aeration Improvements 3 and 4	66,982,999	-	-	-	-	-	-	-	0%	
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,456,001	-	-	-	-	-	-	-	0%	
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	6,500,001	297,000	750,000	750,000	2,967	-	299,966	299,966	5%	
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	-	21,788,969	-	-	218,685	-	22,007,654	22,007,654	0%	
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	6,200,000	151,058	-	-	-	-	151,058	151,058	2%	
213009	Phosphorous Recovery Facility at the WWRf	180,000,002	-	-	-	-	-	-	-	0%	
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	-	6,338,791	-	-	361,005	-	6,699,796	6,699,796	0%	
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	19,863,200	3,761,533	2,963,200	4,760,328	596,422	-	4,357,954	4,357,954	22%	
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	38,463,960	1,665,007	2,509,960	2,509,960	444,330	-	2,109,337	2,109,337	5%	
216011	WRRF Structural Improvements	11,399,998	25,011	400,000	400,000	26,431	-	51,442	51,442	0%	
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	51,808,793	1,812,691	1,181,929	1,181,929	410,314	-	2,223,005	2,223,005	4%	
222002	Detroit River Interceptor Evaluation and Rehabilitation	29,614,223	42,278,907	9,415,401	9,415,401	2,972,273	-	45,251,180	45,251,180	153%	
222004	Collection System Valve Remote Operation Structures Improvements	-	4,246	-	-	-	-	4,246	4,246	0%	
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	38,292	38,787,010	38,292	38,292	678,009	-	39,465,018	39,465,018	103063%	
232002	Freud and Connor Creek Pump Station Improvements	248,458,530	9,045,858	10,753,379	10,753,379	310,427	6,000,596	9,356,286	15,356,882	6%	
233003	Rouge River In-system Storage Devices	46,317,487	-	-	-	-	-	-	-	0%	
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	60,934,786	-	6,603,863	6,603,863	-	-	-	-	0%	
260201	Conveyance System Interceptor Rehab	3,050,766	16,407,136	3,050,766	3,050,766	2,421,384	18,542,127	18,828,520	37,370,647	1225%	
260202	Conveyance System Interceptor Rehab	-	1,904	-	-	-	-	1,904	1,904	0%	
260204	Energy Services for Rehabilitation of Conveyance Sewer System	47,833,293	1,923,103	11,168,334	11,168,334	34,138	-	1,957,241	1,957,241	4%	
260205	NWI Outfall Rehabilitation	10,074,425	334,750	5,044,122	5,044,122	243,578	-	578,328	578,328	6%	
260206	Conveyance System Rehabilitation - Interceptors	30,099,091	395,678	2,149,139	2,149,139	57,612	-	453,290	453,290	2%	
260207	Rehabilitation of Woodward Sewer System	14,559,187	3,576,770	4,848,636	4,848,636	1,298,694	-	4,875,464	4,875,464	33%	
260208	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	34,697	-	-	1,350	-	36,047	36,047	0%	
260209	Sewer Repair Contract - As Needed	12,200,000	3,836	4,504,389	4,504,389	357	-	4,193	4,193	0%	
260210	Linwood/Lonyo/Ashland/2nd Ave/Shiawassee	-	209	-	-	929	-	1,139	1,139	0%	
260500	CSO Outfall Rehab	9,858,428	-	1,641,572	1,641,572	-	-	-	-	0%	
260504	Rehabilitation of Outfalls - Phase II	-	22,843	-	-	-	4,900,746	22,843	4,923,589	0%	
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	0%	
260508	B-39 Outfall Rehab	5,391,594	873,311	5,391,594	5,391,594	879,227	-	1,752,538	1,752,538	33%	
260509	B-40 Outfall Rehab	-	82,308	-	-	30,283	-	112,591	112,591	0%	
260510	Conveyance System Rehabilitation - Outfalls	34,934,963	902,646	1,340,350	1,340,350	426,030	-	1,328,676	1,328,676	4%	
260600	CSO Facilities Improvements	1,044,500,000	-	1,500,000	1,500,000	-	-	-	-	0%	
260603	Conner Creek CSO Basin Rehab	-	65,894	-	-	5,826	7,675,407	71,720	7,747,126	0%	
260614	CSO Facilities Structural Improvements	7,952,100	6,908,490	3,100,700	3,100,700	1,349,110	50,908	8,206,692	8,257,600	104%	
260617	St. Aubin Chemical Disinfection Improvements	5,774,800	-	274,800	274,800	-	-	-	-	0%	
260618	Oakwood HVAC Improvements	498,000	4,850,407	498,000	498,000	46,050	-	4,896,457	4,896,457	983%	
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	5,455,958	62,766	2,116,286	2,116,286	-	-	62,766	62,766	1%	

Great Lakes Water Authority  
Wastewater System Construction Work-in-Progress (CWIP) FY 2023 Rollforward  
Unaudited Activity For the Fiscal Quarter Ended September 30, 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	FY 2023 Activity through September 30, 2022	Life to Date	CWIP Balance September 30, 2022	Life to Date	Life to Date
					Approved With Project Amendments		Capitalization / Expense Through September 30, 2022		Activity Through September 30, 2022	Activity / Total Project Plan Estimate
260620	Baby Creek Roof Replacement	-	610,931	-	-	372,390	-	983,321	983,321	0%
260621	Connor Creek Berm Improvements	-	2,218,752	-	-	24,755	-	2,243,507	2,243,507	0%
260622	CSO Facilities Emergency Generator Improvements	2,020,000	95,455	1,220,000	1,220,000	118,027	-	213,481	213,481	11%
260623	Baby Creek Screen Rehabilitation	2,155,000	22,933	1,077,500	1,077,500	10,152	-	33,085	33,085	2%
260700	Sewer System Infrastructure Improvements & Pumping Stations	451,186	-	75,129	75,129	-	-	-	-	0%
260701	Conveyance System Infrastructure Improvements	48,472,812	2,241,437	15,638,605	21,538,605	29,068	-	2,270,505	2,270,505	5%
260702	Pump Station Assets Updates	2,000,000	-	-	-	-	-	-	-	0%
260800	WRRF Roof Replacement Program	5,000,001	-	1,891,192	1,891,192	-	-	-	-	0%
260802	2022 WRRF Roof Improvements Project	-	44,637	-	-	34,009	-	78,646	78,646	0%
260900	WRRF Facility Optimization Program	428,948	-	-	-	-	-	-	-	0%
260901	Rehab. Hazmat Facility at WRRF	1,273,978	227,002	1,273,978	1,273,978	13,071	-	240,072	240,072	19%
260902	WRRF Renovation of 4th Floor	2,671,406	65,149	2,671,406	2,671,406	221,413	-	286,562	286,562	11%
260903	WRRF Front Entrance Rehab.	1,004,587	136,823	1,004,587	1,004,587	91,207	-	228,030	228,030	23%
260904	WRRF 3rd Floor Renovation	-	2,752	-	-	1,766	-	4,517	4,517	0%
260905	WRRF Plumbing Shop Rehab	-	-	-	-	2,378	-	2,378	2,378	0%
261000	WRRF Rehabilitation of Secondary Clarifiers	46,827,030	-	-	-	-	-	-	-	0%
261001	Rehabilitation of Secondary Clarifiers	4,030,155	2,986	-	-	99	-	3,085	3,085	0%
270001	Pilot CSO Netting Facility	6,198,950	329	-	-	362	-	692	692	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,839,632	-	-	-	-	-	-	-	0%
270003	Long Term CSO Control Plan	2,957,491	-	2,519,339	2,519,339	123,019	123,019	-	123,019	4%
270004	Oakwood Lieb CSO Facility Improvement	17,000,000	69,908	1,250,000	1,250,000	201	-	70,109	70,109	0%
270005	CSO Safety Improvements & Building Rehab	6,481,200	-	122,200	122,200	-	-	-	-	0%
270006	Control System Upgrades - Baby Creek/Belle	1,915,600	477,215	93,200	93,200	24,091	-	501,306	501,306	26%
270007	Disinfection System Improvements at CSO	8,216,300	285	-	-	-	-	285	285	0%
270008	Flushing System Improvements at Conner Creek and St. Aubin CSO Facilities	7,006,500	-	-	-	-	-	-	-	0%
270009	Site Improvements at St. Aubin, Belle Isle, and Baby Creek CSO Facilities	1,377,500	-	-	-	-	-	-	-	0%
270010	HVAC Improvements at Puritan Fenkell and Seven Mile CSO Facilities	1,508,590	-	-	-	-	-	-	-	0%
270011	HVAC Improvements at Conner Creek and Belle Isle CSO Facilities	383,600	-	-	-	-	-	-	-	0%
	Control System Upgrades at Conner Creek, Oakwood, and Puritan Fenkell CSO Facilities									
270012		5,921,080	-	-	-	-	-	-	-	0%
270013	Facility Improvements at Puritan Fenkell and Seven Mile CSO Facilities	894,020	-	-	-	-	-	-	-	0%
270014	Convert to Complete Capture Basin CSO Fa	4,442,170	-	-	-	-	-	-	-	0%
273001	Hubbell Southfield CSO Facility Improvement	38,576,300	424,992	532,700	532,700	4,050	-	429,042	429,042	1%
273002	CSO Hubbell Southfield VR-8 Gate Improvements	1,769,780	-	-	-	-	-	-	-	0%
276002	Replacement Make-up Air Unit at CON	-	8,172	-	-	4,273	-	12,444	12,444	0%
277001	Baby Creek Outfall Improvements Project	12,000,000	37,444	1,250,000	1,250,000	23,288	393,646	47,386	441,032	4%
277002	Baby Creek CSO Facility Influent Flushing System	738,260	-	-	-	-	-	-	-	0%
341002	Security Infrastructure Improvements	-	3,197,089	-	-	3,762	-	3,200,851	3,200,851	0%
<b>Grand Total</b>		<b>2,671,101,648</b>	<b>193,100,463</b>	<b>125,932,245</b>	<b>133,735,233</b>	<b>15,988,526</b>	<b>\$ 412,112,770</b>	<b>208,901,716</b>	<b>621,014,486</b>	<b>23%</b>
				<b>Project Amendments:</b>	<b>7,802,988</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.

**\$2,105,539** of Capital Reserve project amendments have been prepared as of September 30, 2022, as shown for the Water System in C1 with project amendments detailing the assignment of funding within Program and Allowance accounts.

**\$7,802,988** of Capital Reserve project amendments have been prepared as of September 30, 2022, as shown for the Wastewater system in C2 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  
 Water System Project Amendment Summary  
 Unaudited Activity For the Fiscal Quarter Ended September 30, 2022**

<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>Grand Total</b>		<b>\$ 2,105,539</b>	<b>\$ 2,105,539</b>



**Great Lakes Water Authority  
Wastewater System Project Amendment Summary  
Unaudited Activity For the Fiscal Quarter Ended September 30, 2022**

<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>Grand Total</b>		\$	<b>7,802,988</b>	<b>\$ 7,802,988</b>