



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

As of March 31, 2022

For questions, please contact:

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Table of Contents

Introduction	1
Capital Delivery - Cost Summaries and Analysis	3
Capital Delivery - Executive Summaries.....	3
Construction Work-in-Progress	5
A1 - Water - Summary Construction Work-in-Progress Rollforward by Jurisdiction.....	5
A2 - Wastewater - Summary Construction Work-in-Progress Rollforward by Jurisdiction	6
B1 - Water - Detailed Construction Work-in-Progress Rollforward.....	8
B2 - Wastewater - Detailed Construction Work-in-Progress Rollforward	14
C1 - Water - FY 2022 Project Amendment Summary.....	20
C2 - Wastewater - FY 2022 Project Amendment Summary.....	21

June 24, 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 March 31, 2022. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2022–2026 Capital Improvement Plan (CIP) and look to inform decision makers as we evaluate the draft FY 2023–2027 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 2022 – 2026 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, 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 2022-2026 and related CIP Plan for FY 2022 were based on anticipation of FY 2022 activity resulting in 75% of planned spend. The Water System spend for the period ending March 31, 2022, is 88.0% of the FY 2022 board approved CIP, 87.6% of the FY 2022 board approved CIP with project amendments, and 117.3% of the FY 2022 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2022 Board Approved CIP was amended from \$179,210,481 to \$179,978,262 is provided in the subsequent Project Amendment Summary appendix of this report.

The Wastewater System spend for the period ending March 31, 2022, is 61.1% of the FY 2022 board approved CIP, 64.5% of the FY 2022 board approved CIP with project amendments, and 81.5% of the FY 2022 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2022 Board Approved CIP was amended from \$106,050,041 to \$100,479,614 is provided in the subsequent Project Amendment Summary appendix of this report.

Water System Projects		FY 2021	FY 2021 Activity	FY 2021 Percentage	FY 2022	FY 2022 Prorated (Nine Months)	FY 2022 Activity (Unaudited)	FY 2022 Percentage
FY 2021 Board Approved CIP	\$	147,564,000	\$	131,687,819	89.2%			
FY 2021 Board Approved CIP With Project Amendments		149,084,720		131,687,819	88.3%			
FY 2021 Capital Spend Rate Assumption (SRA)		110,673,000		131,687,819	119.0%			
FY 2022 Board Approved CIP					\$ 179,210,481	\$ 134,407,861	\$ 118,275,638	88.0%
FY 2022 Board Approved CIP With Project Amendments					179,978,262	\$ 134,983,697	118,275,638	87.6%
FY 2022 Capital Spend Rate Assumption (SRA)					134,407,861	\$ 100,805,896	118,275,638	117.3%

Wastewater System Projects		FY 2021	FY 2021 Activity	FY 2021 Percentage	FY 2022	FY 2022 Prorated (Nine Months)	FY 2022 Activity (Unaudited)	FY 2022 Percentage
FY 2021 Board Approved CIP	\$	110,638,000	\$	85,051,935	76.9%			
FY 2021 Board Approved CIP With Project Amendments		110,180,582		85,051,935	77.2%			
FY 2021 Capital Spend Rate Assumption (SRA)		82,978,500		85,051,935	102.5%			
FY 2022 Board Approved CIP					\$ 106,050,041	\$ 79,537,530	\$ 48,595,801	61.1%
FY 2022 Board Approved CIP With Project Amendments					100,479,614	\$ 75,359,711	48,595,801	64.5%
FY 2022 Capital Spend Rate Assumption (SRA)					79,537,530	\$ 59,653,148	48,595,801	81.5%

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

The purpose of the construction work-in-progress (CWIP) summary rollforward by jurisdiction is to provide a high-level overview of the financial status of the projects identified within the current board approved CIP by their jurisdiction. Within the FY 2022 – 2026 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.

\$297.4 million is in CWIP as of March 31, 2022 as shown for the Water System in A1.

\$191.6 million is in CWIP as of March 31, 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 2022 Rollforward Summary By Jurisdiction
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Jurisdiction	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	CWIP Balance March 31, 2022
City of Detroit	\$ 603,366,840	\$ 58,438,128	\$ 37,084,101	\$ 37,329,200	\$ 43,236,833	\$ 99,996,727
Lapeer County	5,937,124	1,154,458	3,962,267	3,962,267	175,389	1,329,847
Mutiple Counties	386,207,886	40,301,434	17,176,543	16,130,562	20,324,958	45,738,524
Oakland County	276,954,686	19,579,122	55,618,942	55,539,197	18,415,886	37,995,008
Saint Clair County	199,416,920	13,545,671	10,660,756	11,633,756	3,431,115	8,109,683
Wayne County - Outside Detroit	881,825,559	71,834,216	54,707,871	55,383,280	32,691,456	104,248,655
Grand Total	\$ 2,353,709,015	\$ 204,853,029	\$ 179,210,481	\$ 179,978,262	\$ 118,275,638	\$ 297,418,444

Great Lakes Water Authority

Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward Summary By Jurisdiction

Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Jurisdiction	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	CWIP Balance March 31, 2022
City of Detroit	\$ 1,311,840,369	\$ 165,620,802	\$ 73,893,106	\$ 70,000,156	\$ 34,086,651	\$ 154,109,111
Mutiple Counties	422,491,975	24,943,729	32,156,934	30,479,458	14,381,075	37,342,738
Wayne County - Outside Detroit	47,820,767	555,754	-	-	128,075	138,429
Grand Total	\$ 1,782,153,110	\$ 191,120,285	\$ 106,050,041	\$ 100,479,614	\$ 48,595,801	\$ 191,590,278

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 2022 3rd quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
111007	1803823	LHWTP: Raw Sludge Clarifier & Pumping
211004	1903449	CP-789/CON-250: Weiss: Pump and Grid Station #1
212004	CON-238	Chlorination and Dechlorination Process Improvements
214001	1803776	CON-280: IWC Laboratory Operation Construction

\$297.4 million is in CWIP as of March 31, 2022, as shown for the Water System in B1.

\$191.6 million is in CWIP as of March 31, 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 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ 57,178,250	\$ 1,897,571	\$ 1,962,266	1,962,266	\$ 867,150	\$ -	\$ 2,764,720	\$ 2,764,720	5%
111002	LHWTP Backflow Replacement	8,705,313	-	-	-	-	8,717,768	-	8,717,768	100%
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	3,892,689	-	-	-	-	3,892,299	-	3,892,299	100%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	16,789,745	1,273,880	5,196,046	5,196,046	4,861	-	1,278,741	1,278,741	8%
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	9,181,107	8,448,408	184,222	184,222	418,696	8,867,103	-	8,867,103	97%
111008	LHWTP Architectural Programming - Lab	1,196,283	-	-	-	-	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	30,480,734	1,726,061	1,061,103	1,061,103	842,265	-	2,568,327	2,568,327	8%
111010	Lake Huron Water Treatment Plant - Filtration and Pretreatment Improvements	42,206,783	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	3,247,998	198,694	1,719,487	1,719,487	1,006,586	-	1,205,280	1,205,280	37%
111012	LHWTP-Flocculation Improvements	26,538,016	1,057	537,632	1,510,632	291,558	-	292,615	292,615	1%
112002	Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	1,172,880	-	-	-	-	1,169,962	-	1,169,962	100%
112003	NE WTP High Lift Pumping Electrical	71,545,621	223,875	173,058	173,058	220,996	-	444,870	444,870	1%
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	1,088,655	937,879	4,892	4,892	-	937,879	-	937,879	86%
112006	Northeast Water Treatment Plant Flocculator Replacements	11,316,013	254,450	2,521,861	2,521,861	19,682	-	274,132	274,132	2%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	-	-	-	20,182	171,079	20,182	191,262	0%
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	6,728,375	-	501,031	501,031	-	5,798,535	-	5,798,535	86%
113003	Replacement of Butterfly Valves	21,811,953	110	-	-	(110)	-	-	-	0%
113006	SW WTP Chloring Scrubber	7,330,660	204,126	4,683,170	2,805,737	1,426,131	-	1,630,257	1,630,257	22%
113007	Architectural and Building Mechanical	3,167,022	-	-	-	-	-	-	-	0%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	80,828,071	-	-	-	-	99,764,892	-	99,764,892	123%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	224,221,541	12,944,042	16,546,006	16,546,006	8,126,579	-	21,070,620	21,070,620	9%
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	8,155,919	0	-	-	-	8,167,884	0	8,167,884	100%
114005	Springwells WTP Admin Building Improvements	9,259,571	1,178,639	3,660,252	3,660,252	18,538	-	1,197,177	1,197,177	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	4,020,591	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	13,923,254	11,142,286	2,484,952	2,484,952	213,929	-	11,356,215	11,356,215	82%
114010	Yard Piping Improvements	200,471,687	531,529	1,568,415	1,568,415	985,050	-	1,516,578	1,516,578	1%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	25,540,354	18,464,648	5,373,516	5,373,516	5,257,513	277,017	23,445,143	23,722,160	93%
114012	Springwells Water Treatment Plant 1930 Filter Building-Roof Replacement	3,911,148	-	-	-	-	3,911,148	-	3,911,148	100%
114013	Springwells Reservoir Fill Line Improvements	4,923,914	-	-	-	-	4,706,751	-	4,706,751	96%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	2,280,781	428,322	566,115	901,115	1,012,839	-	1,441,160	1,441,160	63%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	12,358,115	189,943	370,545	370,545	521,826	-	711,769	711,769	6%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	1,544,706	-	80,013	80,013	-	-	-	-	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	54,815,232	5,749,771	6,321,527	6,808,728	4,842,767	-	10,592,539	10,592,539	19%
115003	Comprehensive Condition Assessment at Waterworks Park WTP	514,004	-	-	-	-	-	-	-	0%
115004	Water Works Park WTP Chlorine System Upgrade	6,892,656	9,563	-	-	-	6,957,032	9,563	6,966,596	101%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
115005	WWP WTP Building Ventilation Improvements	4,923,595	563,444	522,778	522,778	201,071	-	764,514	764,514	16%
115006	Water Works Park Site/Civil Improvements	5,881,718	-	-	-	-	-	-	-	0%
115007	Water Works Park High Lift Pumping Station Modernization	88,946,247	-	280,105	280,105	-	-	-	-	0%
116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on	94,880,203	25,947,664	8,359,585	8,359,585	19,324,034	4,685,231	45,271,698	49,956,930	53%
116005	Belle Isle Seawall Rehabilitation	1,831,677	-	318,843	76,741	702	-	702	702	0%
116006	Belle Isle Intake System Rehabilitation and Improvements	350,000	-	-	-	-	-	-	-	0%
122003	New Waterworks Park to Northeast Transmission Main	143,217,044	21,324,515	14,593,187	14,593,187	11,855,964	740,355	32,440,124	33,180,479	23%
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	144,852,077	9,673,781	2,576,909	4,776,651	3,797,442	-	13,471,222	13,471,222	9%
122005	Replacement Schoolcraft Watermain	15,325,893	6,260,526	7,606,560	7,606,560	8,434,676	-	14,695,202	14,695,202	96%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	22,419,614	17,132,964	4,773,529	5,322,561	4,517,066	-	21,650,030	21,650,030	97%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	22,154,359	1,805	26,909	26,909	(1,805)	-	-	-	0%
122011	Park-Merriman Water Main-Final Phase	9,600,066	295,202	7,836	7,836	418,997	6,435,948	714,199	7,150,147	74%
122012	36-inch Water Main in Telegraph Road	9,870,398	-	-	-	-	9,986,284	-	9,986,284	101%
122013	Lyon Township Transmission Main Extension Project	105,180,009	9,960,713	37,593,404	37,513,658	10,157,914	357,808	20,118,627	20,476,435	19%
122016	Downriver Transmission Loop	37,067,100	1,620,310	664,877	664,877	723,284	-	2,343,594	2,343,594	6%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,188,759	1,454,251	1,943,731	1,943,731	4,283,266	-	5,737,516	5,737,516	10%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	54,102,536	-	1,530,061	1,530,061	956,233	-	956,233	956,233	2%
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	1,961,708	-	-	-	-	1,742,479	-	1,742,479	89%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	3,363,699	-	-	-	1,731	3,226,045	1,731	3,227,776	96%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,187,314	927,112	3,962,267	3,962,267	175,389	-	1,102,502	1,102,502	21%
132008	Needs Assessment Study for all Water Booster Pumping Stations	1,675,441	-	-	-	-	-	-	-	0%
132010	West Service Center/Duval Rd Division Valve Upgrades	45,142,158	9,058,202	17,149,461	17,149,461	8,249,751	-	17,307,953	17,307,953	38%
132012	Ypsilanti PS Improvements	35,393,046	515,125	584,384	584,384	117,990	-	633,115	633,115	2%
132014	Adams Road Booster Pumping Improvements	52,864,694	83,262	203,019	203,019	-	-	83,262	83,262	0%
132015	Newburgh BPS	45,044,000	444,073	733,037	733,037	27,865	-	471,937	471,937	1%
132016	North Service Center BPS Improvements	68,255,116	363,478	673,058	673,058	8,221	-	371,700	371,700	1%
132018	Schoolcraft BPS	47,317	47,317	-	-	-	-	47,317	47,317	100%
132019	Wick Road BPS - Switchgear	9,358,231	56,912	-	-	-	-	56,912	56,912	1%
132020	Franklin BPS - Isolation Gate Valves	2,544,535	93,160	-	-	-	-	93,160	93,160	4%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	749,810	227,346	-	-	-	-	227,346	227,346	30%
132022	Joy Road BPS - Replace Reservoir Pumps	39,613,214	71,380	276,909	276,909	-	-	71,380	71,380	0%
132025	Northwest Booster Station Yard Piping Improvements	-	20,306	-	-	-	-	20,306	20,306	0%
132026	Franklin Pumping Station Valve Replacement	1,006,467	-	-	-	-	975,327	-	975,327	97%
170102	Water Production Plant Flow Mettering Improvements at NE, SP & SW WTP	372,374	373,640	-	-	-	-	373,640	373,640	100%
170109	Inspection of Raw Water Intakes and Tunnels	1,656,069	-	-	-	-	-	-	-	0%
170120	Phosphoric Acid Feed System Improvements at Southwest WTP	1,625	-	-	-	-	634,509	-	634,509	39047%
170200	As Needed Construction Materials, Environmental Media and Special Allowance	1,427,227	-	146	146	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	13,249,000	9,000	6,151,000	4,482,191	(9,000)	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	-	1,755,142	1,755,142	0%
170302	SW WTP SCADA Improvements	9,000,000	74,413	3,605,928	5,274,737	869,177	-	943,589	943,589	10%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
170303	WWP WTP Power Monitoring Installation	1,700,000	203,628	514,474	514,474	1,360,407	-	1,564,034	1,564,034	92%
170304	WWP WTP SCADA Upgrade	-	13,947	-	-	171,711	-	185,658	185,658	0%
170400	Water Transmission Improvement Program	33,171,211	-	1,033,961	1,033,961	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station	1,661,231	-	-	-	-	2,633,282	-	2,633,282	159%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	5,350,164	-	232,066	42,066	-	-	-	-	0%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	10,071,663	2,110,241	1,304,975	1,304,975	1,033,517	-	3,143,757	3,143,757	31%
170504	Repair of WTM, Valves, & Priority Repair Water Transmission Main Asset	-	-	-	190,000	8,311,798	-	8,311,798	8,311,798	0%
170600	Assessment Program	8,438,215	-	24,218	24,218	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	23,827,344	-	321,527	321,527	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	15,090,049	11,457,639	463,000	573,000	5,380,104	7,184,856	9,652,888	16,837,743	112%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	40,718,957	-	1,159,000	1,159,000	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	10,616,499	8,531,114	2,838,297	1,151,383	765,053	7,703,013	1,593,154	9,296,167	88%
170902	Brownstown Meter Pit Rehabilitation	1,245,254	219,873	593,887	593,887	-	-	219,873	219,873	18%
171500	Roof Replacement - Var Facilities Program	22,710,989	-	10,764	10,764	-	-	-	-	0%
171501	Roof Replacements - Var Facilities Program	3,484,352	-	-	-	-	3,354,843	-	3,354,843	96%
331003	Masonry Replacement and Rehabilitation	25,000,000	-	-	-	-	-	-	-	0%
341001	Security Infrastructure Improvements	9,169,807	8,139,352	567,392	567,392	1,046,045	1,138,691	9,185,398	10,324,089	113%
351001	Water Facility Lighting Renovations	699,523	6,667	37,632	37,632	-	-	6,667	6,667	1%
380600	General Engineering Services Allowance	55,126	-	-	-	-	-	-	-	0%

Great Lakes Water Authority
 Water System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
 Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity Through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	2,130,722	-	455,655	455,655	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	2,623,926	-	-	-	-	-	-	-	0%
Grand Total		\$ 2,353,709,015	\$ 204,853,029	\$ 179,210,481	179,978,262	\$ 118,275,638	\$ 287,530,097	\$ 297,418,444	\$ 584,948,542	25%
Project Amendments:					767,781					

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

		Total Project Plan		FY 2022		FY 2022 Board		Life to Date		Life to Date	
		Estimate from	CWIP Balance	Board	Approved CIP	Activity through	Capitalization /	CWIP Balance	Life to Date	Activity /	
Project	Project Name	FY 2022-2026 CIP	July 1, 2021	Approved CIP	With Project Amendments	March 31, 2022	Expense Through March 31, 2022	March 31, 2022	March 31, 2022	Total Project Plan Estimate	
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	\$ 54,061,159	\$ -	\$ -	\$ -	\$ -	\$ 54,748,738	\$ -	\$ 54,748,738		101%
211002	Pump Station No. 2 Pumping Improvmnts	3,340,152	2,517,234	-	-	42,022	-	2,559,256	2,559,256		77%
211004	Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	23,295,382	27,865,682	-	-	29,318	27,895,001	(0)	27,895,001		120%
211005	Pump Station No. 2 Improvements	13,797,096	2,176	-	-	642	-	2,818	2,818		0%
211006	Pump Station No. 1 Improvements	68,709,404	3,491,519	3,060,848	3,060,848	688,482	-	4,180,002	4,180,002		6%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	76,228,576	1,509,443	2,303,172	2,303,172	2,263,589	-	3,773,032	3,773,032		5%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	11,387,944	1,870,766	5,358,083	7,431,083	2,382,848	-	4,253,614	4,253,614		37%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	13,007,908	39,674	476,043	476,043	1,721	-	41,395	41,395		0%
211010	Rehabilitation of Sludge Processing Complexes A and B	13,934,471	94,270	-	-	67	-	94,337	94,337		1%
211011	WRRF PS1 Screening and Grit Improvements	93,303,153	-	-	-	-	-	-	-		0%
212003	Aeration System Improvements	14,643,450	-	-	-	-	16,524,875	-	16,524,875		113%
212004	ProjectChlorination/Dechlorination Process Equipment Improvements	5,742,203	5,642,328	-	-	8,173	5,652,101	(1,600)	5,650,501		98%
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	43,788,731	-	-	-	-	43,788,731	-	43,788,731		100%
212007	Rehabilitation of the Secondary Clarifiers	49,871,040	2,247	9,900	9,900	-	-	2,247	2,247		0%
212008	WRRF Rehabilitation of Intermediate Lift	81,931,310	583,363	2,566,737	2,566,737	211,176	-	794,540	794,540		1%
212009	WRRF Aeration Improvements 3 and 4	73,588,564	-	-	-	-	-	-	-		0%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,765,452	-	-	-	-	-	-	-		0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	4,489,934	194,357	342,468	342,468	81,477	-	275,834	275,834		6%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	22,162,273	20,120,012	2,499,064	3,349,064	1,582,131	-	21,702,143	21,702,143	98%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	8,432,039	151,058	295,324	295,324	-	-	151,058	151,058	2%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	12,651,082	11,949,799	-	-	68,124	14,300,183	0	14,300,183	113%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	6,645,397	3,070,854	75,940	293,860	1,976,649	-	5,047,503	5,047,503	76%
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	23,874,377	1,038,944	558,406	1,243,856	2,368,216	-	3,407,160	3,407,160	14%
216007	DTE Primary Electric 3rd Feed Supply Line to the WRRF	4,544,429	3,380,783	393,514	393,514	37,387	543,500	3,418,170	3,961,670	87%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	40,820,651	262,035	906,386	906,386	706,251	-	968,287	968,287	2%
216009	Logistics & Material Facility	164,904	-	-	-	-	-	-	-	0%
216010	WRRF Facility Optimization	10,270,771	-	57,420	57,420	-	-	-	-	0%
216011	WRRF Structural Improvements	12,333,080	-	2,051,568	2,051,568	8,582	-	8,582	8,582	0%
216012	WRRF Research Facility	-	-	-	-	10,547	10,547	-	10,547	0%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,397,144	475,416	790,559	1,453,944	1,015,313	-	1,490,729	1,490,729	3%
222002	Detroit River Interceptor Evaluation and Rehabilitation	72,775,106	37,097,586	11,191,618	3,456,645	3,239,354	-	40,336,940	40,336,940	55%
222004	Collection System Valve Remote Operation Structures Improvements	-	4,246	-	-	-	-	4,246	4,246	0%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	40,073,406	30,371,550	12,781,009	10,696,662	7,453,304	-	37,824,854	37,824,854	94%
232002	Freud and Connor Creek Pump Station Improvements	229,278,758	4,582,109	3,357,420	3,357,420	5,063,062	6,000,596	9,622,402	15,622,998	7%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	257,420	-	-	-	-	-	-	-	0%
233003	Rouge River In-system Storage Devices	46,317,488	-	-	-	-	-	-	-	0%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	53,748,897	-	-	-	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	32,282,349	10,587,039	1,479,167	1,479,167	4,290,058	18,542,127	14,877,097	33,419,224	104%
260202	Conveyance System Interceptor Rehab	-	1,904	-	-	-	-	1,904	1,904	0%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	52,157,408	943,846	11,646,299	10,305,439	596,296	-	1,540,141	1,540,141	3%
260205	NWI Outfall Rehabilitation	10,937,891	267,139	5,045,936	5,045,936	56,265	-	323,404	323,404	3%
260206	Conveyance System Rehabilitation - Interceptors	47,821,376	22,180	7,045,936	7,045,936	186,552	-	208,732	208,732	0%
260207	Rehabilitation of Woodward Sewer System	-	1,229,440	-	-	1,377,457	-	2,606,897	2,606,897	0%
260500	CSO Outfall Rehab	5,000,000	-	832,953	832,953	-	-	-	-	0%
260504	Rehabilitation of Outfalls - Phase II	5,051,112	-	-	-	22,843	4,900,746	22,843	4,923,589	97%
260505	Rehabilitation of Outfalls - Phase IV	5,718,385	4,938,825	640,637	640,637	770,399	-	5,709,224	5,709,224	100%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	0%
260508	B-39 Outfall Rehab	568,620	150,000	180,517	4,004,869	48,217	-	198,217	198,217	35%
260509	B-40 Outfall Rehab	88,500	77,621	-	-	4,687	-	82,308	82,308	93%
260510	Conveyance System Rehabilitation - Outfalls	48,863,036	34,594	7,709,560	3,885,208	690,106	-	724,700	724,700	1%
260600	CSO Facilities Improvements	126,400,000	-	1,000,000	-	-	-	-	-	0%
260601	Oakwood Drain Valve Improvements	864,218	-	-	-	-	804,574	-	804,574	93%
260602	CSO Fire Alarm System Improvements	997,619	-	-	-	-	997,619	-	997,619	100%
260603	Conner Creek CSO Basin Rehab	7,898,362	7,518,411	-	-	136,059	-	7,654,471	7,654,471	97%
260606	Puritan Fenkell Roof Replacement	346,540	-	-	-	-	346,540	-	346,540	100%
260607	Lieb SDF Electrical Improvements	1,032,687	(0)	-	-	-	1,032,508	(0)	1,032,508	100%
260608	Seven Mile RTB - Roof Replacement	496,699	-	-	-	-	496,699	-	496,699	100%
260609	Seven Mile RTB - Parking Lot / Sitework	416,597	-	-	-	-	429,557	-	429,557	103%
260610	Baby Creek MAU Replacement	275,151	-	-	-	-	275,151	-	275,151	100%
260611	HVAC Improvements At Lieb SDF	395,615	-	-	-	-	412,590	-	412,590	104%
260613	Baby Creek HVAC Improvements	587,628	529,906	-	-	15,494	545,401	-	545,401	93%
260614	CSO Facilities Structural Improvements	13,794,118	2,352,725	4,422,021	4,422,021	2,941,571	54,741	5,239,554	5,294,296	38%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	801,140	382,407	199,240	199,240	199,366	-	581,773	581,773	73%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Total Project Plan Estimate from FY 2022-2026 CIP	CWIP Balance July 1, 2021	FY 2022 Board Approved CIP	FY 2022 Board Approved CIP With Project Amendments	FY 2022 Activity through March 31, 2022	Life to Date Capitalization / Expense Through March 31, 2022	CWIP Balance March 31, 2022	Life to Date Activity through March 31, 2022	Life to Date Activity / Total Project Plan Estimate
260616	Baby Creek SCO Anchor & Wedge Improvements	782,863	-	-	-	-	770,114	-	770,114	98%
260617	St. Aubin Chemical Disinfection Improvements	6,966,364	417,052	387,420	387,420	1,838	-	418,891	418,891	6%
260618	Oakwood HVAC Improvements	3,966,512	370,525	3,235,005	5,335,005	2,478,569	-	2,849,094	2,849,094	72%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	116,179	62,766	-	-	-	-	62,766	62,766	54%
260620	Baby Creek Roof Replacement	640,500	25,848	-	-	21,402	-	47,249	47,249	7%
260621	Connor Creek Berm Improvements	-	284,034	-	-	1,814,478	-	2,098,511	2,098,511	0%
260622	CSO Facilities Emergency Generator Improvements	-	893	-	-	52,708	-	53,600	53,600	0%
260623	Baby Creek Screen Rehabilitation	-	-	-	-	15,186	-	15,186	15,186	0%
260700	Sewer System Infrastructure Improvements & Pumping Stations	35,901,492	-	3,660,745	3,660,745	-	-	-	-	0%
260701	Conveyance System Infrastructure Improvements	4,586,079	1,384,239	1,356,302	1,356,302	678,762	-	2,063,001	2,063,001	45%
260702	Pump Station Assets Updates	669,000	-	-	-	-	-	-	-	0%
260901	Rehab. Hazmat Facility at WRRF	-	131,014	-	-	81,599	-	212,613	212,613	0%
260902	WRRF Renovation of 4th Floor	-	49,160	-	-	456	-	49,615	49,615	0%
270001	Pilot CSO Netting Facility	9,573,092	235	13,420	13,420	-	-	235	235	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	5,839,631	-	8,580	8,580	-	-	-	-	0%
270003	Long Term CSO Control Plan	9,267,841	5,596	3,798,606	3,798,606	1,706,550	1,712,146	-	1,712,146	18%
270004	Oakwood Lieb CSO Facility Improvement	-	3,564	-	-	42,349	-	45,913	45,913	0%
273001	Hubbell Southfield CSO Facility Improvement	-	-	-	-	91,179	-	91,179	91,179	0%
274001	Leib Improvements for Meldrum Diversion	10,941,804	-	254,232	254,232	-	-	-	-	0%
277001	Baby Creek Outfall Improvements Project	18,825,761	19,228	1,807,420	1,807,420	428,679	33,653	414,255	447,907	2%
278001	Oakwood Improvements for NWI Diversion	10,225,804	-	251,772	251,772	-	-	-	-	0%
331002	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	8,888,476	-	1,276,569	1,276,569	-	1,123,056	-	1,123,056	13%

Great Lakes Water Authority
Wastewater System Construction Work-in-Progress (CWIP) FY 2022 Rollforward
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

		Total Project Plan	CWIP Balance	FY 2022	FY 2022 Board	FY 2022	Life to Date		Life to Date	Life to Date
		Estimate from		Board	Approved CIP	Activity through	Capitalization /	CWIP Balance	Activity through	Activity /
Project	Project Name	FY 2022-2026 CIP	July 1, 2021	Approved CIP	With Project	March 31, 2022	Expense Through	March 31, 2022	March 31, 2022	Total Project
341001	Security Infrastructure Improvements	-	-	-	-	-	-	-	-	0%
341002	Security Infrastructure Improvements	3,533,510	2,934,004	722,226	722,226	406,243	181,525	3,158,722	3,340,248	95%
Grand Total		\$ 1,782,153,110	\$ 191,120,285	\$ 106,050,041	\$ 100,479,614	\$ 48,595,801	\$ 394,950,404	\$ 191,590,278	\$ 586,540,682	33%
Project Amendments:					\$ (5,570,426)					

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 2022 Capital Improvement Plan.

\$767,781 of Capital Reserve project amendments have been prepared as of March 31, 2022, as shown for the Water System in C1 with project amendments detailing the assignment of funding within Program and Allowance accounts.

\$5,570,426 of Capital Reserve project amendments have been prepared as of March 31, 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 March 31st, 2022

Project	Project Name	Capital Reserve	Program / Allowance	Grand Total
111012	LHWTP-Flocculation Improvements	\$ 973,000	\$	973,000
113006	SW WTP Chloring Scrubber	(1,877,433)		(1,877,433)
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	335,000		335,000
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	487,201		487,201
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	549,032		549,032
122013	Lyon Township Transmission Main Extension Project	(79,745)		(79,745)
170300	Water Treatment Plant Automation Program		(1,668,809)	(1,668,809)
170302	SW WTP SCADA Improvements		1,668,809	1,668,809
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program		(190,000)	(190,000)
170504	Repair of WTM, Valves, & Priority Repair		190,000	190,000
170801	Reservoir Inspection, Design and Rehabilitation	110,000		110,000
116005	Belle Isle Seawall Rehabilitation	(242,102)		(242,102)
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	(1,686,914)		(1,686,914)
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	2,199,742		2,199,742
Grand Total		\$ 767,781	\$ -	\$ 767,781

Great Lakes Water Authority
Wastewater System Project Amendment Summary
Unaudited Activity For the Fiscal Quarter Ended March 31st, 2022

Project	Project Name	Capital Reserve	Program / Allowance	Grand Total
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	\$ 2,073,000		\$ 2,073,000
260508	B-39 Outfall Rehab		3,824,352	3,824,352
260510	Conveyance System Rehabilitation - Outfalls		(3,824,352)	(3,824,352)
260600	CSO Facilities Improvements		(1,000,000)	(1,000,000)
260618	Oakwood HVAC Improvements	1,100,000	1,000,000	2,100,000
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	850,000		850,000
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	217,920		217,920
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	685,450		685,450
222002	Detroit River Interceptor Evaluation and Rehabilitation	(7,734,973)		(7,734,973)
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	(2,084,347)		(2,084,347)
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	663,385		663,385
260204	Energy Services for Rehabilitation of Conveyance Sewer System	(1,340,861)		(1,340,861)
Grand Total		\$ (5,570,426)	\$ -	\$ (5,570,426)