



Financial Services Audit Committee Communication

Date: December 18, 2020

To: Great Lakes Water Authority Audit Committee

From: Andrew Sosnoski, Manager, Construction Accounting & Financial Reporting

Re: FY 2021 Q1 Construction Work-in-Progress Report through September 30, 2020
(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 2021 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, 2020

For questions, please contact:

Andrew Sosnoski, CCIFP

Construction Accounting and Financial Reporting Manager

Phone: 313.999.2585

Email: Andrew.Sosnoski@glwater.org

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December 18, 2020**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, 2020. The information in this report presents a detailed snapshot and is important as we track the execution of the FY 2021–2025 Capital Improvement Plan (CIP) and look to inform decision makers as we draft the FY 2022–2026 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

This report is divided into two sections: one for the Water System and one for the Wastewater System as identified in the table of contents. Each section includes analysis and reporting of the following:

Executive Summary: Presentation of spend information is necessary to report our progress on CIP projects.

Construction Work-in-Progress Rollforward: This table provides a list of all projects in the CIP along with financial activity. This table may be used to revisit priorities, workload, and phasing.

Project Amendment Summary: 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, 2020. 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.

WATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2021-2025 and related CIP Plan for FY 2021 were based on anticipation of FY 2021 activity resulting in 75% of planned spend. The Water System spend for the period ending September 30, 2020 is 74.4% of the FY 2021 pro-rated board approved CIP, 74.3% of the pro-rated FY 2021 board approved CIP with project amendments, and 99.2% of the FY 2021 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2021 Board Approved CIP was amended from \$147,564,000 to \$147,705,782 is provided in the subsequent Project Amendment Summary section of this report.

Water System Projects		FY 2020	FY 2020 Activity	FY 2020 Percentage	FY 2021 Prorated (Three Months)	FY 2021 Activity (Unaudited)	FY 2021 Percentage
FY 2020 Board Approved CIP	\$ 143,247,000	\$ 76,542,465		53.4%			
FY 2020 Board Approved CIP With Project Amendments	124,916,757	76,542,465		61.3%			
FY 2020 Capital Spend Rate Assumption (SRA)	107,435,250	76,542,465		71.2%			
FY 2021 Board Approved CIP					\$ 147,564,000	\$ 36,891,000	\$ 27,452,121 74.4%
FY 2021 Board Approved CIP With Project Amendments					147,705,782	\$ 36,926,446	27,452,121 74.3%
FY 2021 Capital Spend Rate Assumption (SRA)					110,673,000	\$ 27,668,250	27,452,121 99.2%

Construction Work-in-Progress Rollforward

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. Although no projects were capitalized during FY 2021 Q1 a number of projects are anticipated to be capitalized in FY 2021 Q2 and will be identified in subsequent reports.

\$153.6 million is in CWIP as of September 30, 2020 as shown in the table beginning on the next page.

The order of the report on the subsequent pages is in ascending order by CIP project number.

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended September 30, 2020

Water System
Construction Work-in-Progress Quarterly Report
 As of September 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	55,090,000	212,034	1,636,000	1,636,000	387,208	-	599,242	599,242	1%
111002	LHWTP Backflow Replacement	9,004,000	8,529,804	41,000	41,000	28,426	155,348	8,558,230	8,713,578	97%
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	4,136,000	390	-	-	(390)	3,892,299	-	3,892,299	94%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	16,626,000	1,073,466	235,000	235,000	4,175	-	1,077,641	1,077,641	6%
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	8,937,000	5,887,651	3,392,000	3,392,000	961,538	-	6,849,189	6,849,189	77%
111008	LHWTP Architectural Programming - Lab	1,299,000	110	-	-	(110)	-	-	-	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	29,226,000	116,755	1,856,000	1,856,000	6,411	-	123,166	123,166	0%
111010	Lake Huron Water Treatment Plant -Filtration and Pretreatment Improvements	5,632,000	-	-	-	-	-	-	-	0%
111011	Lake Huron WTP Pilot Plant	1,794,000	-	-	-	-	-	-	-	0%
112001	Yard Piping Replacement at Northeast Water Treatment Plant	-	-	-	-	155	-	155	155	100%
112002	Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	1,345,000	2,918	-	-	(2,918)	1,169,962	-	1,169,962	87%
112003	NE WTP High Lift Pumping Electrical	57,565,000	5,785	-	-	3,331	-	9,116	9,116	0%
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	1,393,000	438,463	1,096,000	1,096,000	44,662	-	483,125	483,125	35%
112006	Northeast Water Treatment Plant Flocculator Replacements	7,111,000	186,274	2,773,000	2,773,000	31,880	-	218,154	218,154	3%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facilit	-	341,324	-	-	-	-	341,324	341,324	100%
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	5,886,000	5,272,232	1,094,000	1,094,000	373,226	-	5,645,458	5,645,458	96%
113003	Replacement of Butterfly Valves	14,314,000	110	-	-	-	-	110	110	0%
113004	Residual Handling Facility's Decant Flow Modifications at Southwest WTP	822,000	1,822	-	-	-	853,219	1,822	855,041	104%
113006	SW WTP Chloring Scrubber	4,753,000	129,973	260,000	260,000	27,450	-	157,423	157,423	3%
113007	Architectural and Building Mechanical	98,000	-	-	-	-	-	-	-	0%
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	101,968,000	-	-	-	-	99,764,892	-	99,764,892	98%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	174,835,000	5,496,115	7,113,000	7,113,000	793,704	-	6,289,818	6,289,818	4%
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	8,482,000	8,185,528	-	-	21,233	-	8,206,761	8,206,761	97%
114005	Springwells WTP Admin Building Improvements	8,696,000	943,973	2,302,000	2,302,000	100,342	-	1,044,315	1,044,315	12%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended September 30, 2020

Water System
Construction Work-in-Progress Quarterly Report
 As of September 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	1,031,000	9,390	-	-	-	1,021,039	9,390	1,030,429	100%
114007	Powder Activated Carbon Systems	4,188,000	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	14,241,000	3,381,909	10,327,000	10,327,000	3,042,695	-	6,424,604	6,424,604	45%
114009	Springwells Water Treatment Plant Service Area Redundancy Study	311,000	-	-	-	-	-	-	-	0%
114010	Yard Piping Improvements	112,613,000	241,135	1,000	1,000	68,729	-	309,864	309,864	0%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	23,898,000	10,083,734	6,932,000	6,932,000	2,628,904	-	12,712,638	12,712,638	53%
114012	Springwells Water Treatment Plant 1930 Filter Building-Roof Replacement	3,911,000	-	-	-	-	3,911,148	-	3,911,148	100%
114013	Springwells Reservoir Fill Line Improvements	4,821,000	3,586,056	-	-	124,809	-	3,710,866	3,710,866	77%
114015	Emergency Grating Replacement at Springwells WTP	3,366,000	-	-	-	-	3,365,903	-	3,365,903	100%
114016	Springwells Water Treatment Plant 1958 Settled Water Conduits Concrete Pavement Replacement	1,764,000	94,862	1,663,000	1,663,000	8,203	-	103,065	103,065	6%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	9,296,000	1,071	315,000	456,782	3,562	-	4,633	4,633	0%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	1,508,000	-	-	-	697	-	697	697	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	72,019,000	2,839,127	5,462,000	5,462,000	8,121	-	2,847,248	2,847,248	4%
115003	Comprehensive Condition Assessment at Waterworks Park WTP	582,000	-	-	-	-	-	-	-	0%
115004	Water Works Park WTP Chlorine System Upgrade	7,440,000	-	-	-	9,563	6,957,032	9,563	6,966,596	94%
115005	WWP WTP Building Ventilation Improvements	10,141,000	1,126	1,999,000	1,999,000	-	-	1,126	1,126	0%
115006	Water Works Park Site/Civil Improvements	5,643,000	-	-	-	-	-	-	-	0%
116002	Pennsylvania, Springwells and Northeast Raw Water Supply Tunnel Improvements based on Parallel 42-Inch Main in 24 Mile Road from Rochester Station to Romeo Plank Road	61,245,000	18,513,669	14,138,000	14,138,000	1,325,509	-	19,839,178	19,839,178	32%
122001	Replacement of Five (5) PRV Pits of Treated Water Transmission System	33,246,000	-	-	-	-	33,241,721	-	33,241,721	100%
122002	New Waterworks Park to Northeast Transmission Main	2,790,000	-	-	-	-	2,785,001	-	2,785,001	100%
122003		157,526,000	5,190,146	11,703,000	11,703,000	1,941,844	-	7,131,989	7,131,989	5%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended September 30, 2020

Water System
Construction Work-in-Progress Quarterly Report
 As of September 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	144,871,000	1,816,305	5,267,000	5,267,000	1,733,640	-	3,549,945	3,549,945	2%
122005	Replacement Schoolcraft Watermain	18,106,000	1,381,778	13,141,000	13,141,000	947,426	-	2,329,204	2,329,204	13%
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	22,338,000	5,902,921	9,975,000	9,975,000	4,170,264	-	10,073,185	10,073,185	45%
122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	21,457,000	1,805	-	-	-	-	1,805	1,805	0%
122009	Water System Improvements in Joy Road from Southfield Road to Trinity	149,000	-	-	-	-	106,881	-	106,881	72%
122011	Park-Merriman Water Main-Final Phase	7,625,000	5,221,921	2,163,000	2,163,000	1,514,280	-	6,736,201	6,736,201	88%
122012	36-inch Water Main in Telegraph Road	9,959,000	-	-	-	-	9,986,284	-	9,986,284	100%
122013	Lyon Township Transmission Main Extension Project	73,941,000	3,642,904	1,194,000	1,194,000	868,164	-	4,511,068	4,511,068	6%
122016	Downriver Transmission Loop	37,744,000	224,909	1,748,000	1,748,000	381,627	-	606,536	606,536	2%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,577,000	3,414	1,794,000	1,794,000	3,888	-	7,302	7,302	0%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	44,577,000	-	1,717,000	1,717,000	-	-	-	-	0%
132001	Wick Road Station Rehabilitation	135,000	-	-	-	-	135,073	-	135,073	100%
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	1,979,000	1,712	65,000	65,000	28,189	1,742,479	29,901	1,772,380	90%
132004	Hydraulic Surge Control for North Service Center Pumping Station	215,000	-	-	-	-	-	-	-	0%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	3,279,000	1,883,902	987,000	987,000	502,510	-	2,386,412	2,386,412	73%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,199,000	167,665	4,211,000	4,211,000	173,044	-	340,709	340,709	7%
132008	Needs Assessment Study for all Water Booster Pumping Stations	1,838,000	-	-	-	-	-	-	-	0%
132010	West Service Center/Duval Rd Division Valve Upgrades	37,705,000	2,460,032	4,323,000	4,323,000	594,574	-	3,054,606	3,054,606	8%
132012	Ypsilanti PS Improvements	31,617,000	333,589	846,000	846,000	56,862	-	390,452	390,452	1%
132014	Adams Road Booster Pumping Improvements	27,536,000	83,262	-	-	-	-	83,262	83,262	0%
132015	Newburgh BPS	30,677,000	350,454	973,000	973,000	30,643	-	381,098	381,098	1%
132016	North Service Center BPS Improvements	45,342,000	266,392	-	-	11,416	-	277,808	277,808	1%
132018	Schoolcraft BPS	-	47,317	-	-	-	-	47,317	47,317	100%
132019	Wick Road BPS - Switchgear	2,940,000	56,912	-	-	-	-	56,912	56,912	2%
132020	Franklin BPS - Isolation Gate Valves	2,442,000	93,160	-	-	-	-	93,160	93,160	4%
132021	Imlay BPS - Replace VFDs, Pumps & Motors	13,000	227,346	-	-	-	-	227,346	227,346	1749%
132022	Joy Road BPS - Replace Reservoir Pumps	55,000	71,380	-	-	-	-	71,380	71,380	130%
132025	Northwest Booster Station Yard Piping Improvements	1,000	20,155	-	-	152	-	20,306	20,306	2031%
132026	Franklin Pumping Station Valve Replacement	1,411,000	821,090	613,000	613,000	151,053	-	972,143	972,143 ⁷	69%

Great Lakes Water Authority
Water System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
Unaudited Activity For the Fiscal Quarter Ended September 30, 2020

Water System
Construction Work-in-Progress Quarterly Report
 As of September 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
170100	Allowance: WTP/Pump Station	70,164,000	-	1,499,000	1,499,000	-	-	-	-	0%
170102	Water Production Plant Flow Metering Improvements at NE, SP & SW WTP	-	372,374	-	-	1,266	-	373,640	373,640	100%
170103	Belle Isle Water Supply Intake and Ice Boom Improvements	-	3,278	-	-	-	286,596	3,278	289,874	100%
170122	Meter Pit at Brownstown Township	-	133,306	-	-	-	-	133,306	133,306	100%
170200	As Needed Construction Materials, Environmental Media and Special Allowance	1,815,000	-	685,000	685,000	-	-	-	-	0%
170300	Water Treatment Plant Automation Program	18,728,000	-	5,440,000	5,440,000	-	-	-	-	0%
170301	Water Plant Automation	-	1,755,142	-	-	-	-	1,755,142	1,755,142	100%
170302	#N/A	-	-	-	-	41,654	-	41,654	41,654	100%
170303	#N/A	-	-	-	-	8,514	-	8,514	8,514	100%
170400	Water Transmission Improvement Program	28,157,000	-	1,776,000	1,776,000	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station	-	1,662,615	-	-	200	-	1,662,815	1,662,815	100%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	26,469,000	-	1,177,000	1,177,000	-	-	-	-	0%
170502	Transmission System Valve Assessment and Rehabilitation/Replacement A	-	2,051,843	-	-	367,895	6,363,896	2,419,738	8,783,634	100%
170503	Transmission System Valve Assessment and Rehabilitation/Replacement B	-	393,559	-	-	256,451	-	650,010	650,010	100%
170600	Water Transmission Main Asset Assessment Program	30,753,000	-	54,000	54,000	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	59,076,000	-	6,087,000	6,087,000	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	-	2,615,570	-	-	1,924,792	-	4,540,362	4,540,362	100%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	10,301,000	-	2,535,000	2,535,000	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	-	4,529,883	-	-	378,374	-	4,908,256	4,908,256	100%
170902	Brownstown Meter Pit Rehabilitation	-	76,390	-	-	-	-	76,390	76,390	100%
171500	Roof Replacement - Var Facilities Program	23,673,000	-	173,000	173,000	-	-	-	-	0%
171501	Roof Replacements - Var Facilities Program	-	2,772,205	-	-	197,238	360,430	2,969,444	3,329,873	100%
341001	Security Infrastructure Improvements	10,650,000	3,977,412	4,018,000	4,018,000	1,165,045	-	5,142,457	5,142,457	48%
351001	Water Facility Lighting Renovations	556,000	6,667	50,000	50,000	-	-	6,667	6,667	1%
380600	General Engineering Services Allowance	56,000	-	-	-	-	-	-	-	0%
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	2,130,000	-	715,000	715,000	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	3,435,000	-	-	-	-	-	-	-	0%
Grand Total		\$ 1,970,283,000	\$ 126,197,522	\$ 147,564,000	\$ 147,705,782	\$ 27,452,121	\$ 210,640,773	\$ 153,649,643	\$ 364,290,416	18%
				Project Amendments	\$ 141,782					

FY 2021 Project Amendment Summary

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 2021 Capital Improvement Plan.

\$141,782 of Capital Reserve project amendments have been prepared as of September 30, 2020 as shown in the table on the next page along with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of the report on the subsequent page is in ascending order by CIP project number.

Great Lakes Water Authority
Water System Project Amendment Summary
Unaudited Activity For the Fiscal Year Ended September 30, 2020

Water System
Construction Work-in-Progress Quarterly Report
 As of September 30, 2020

Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	-	141,782	141,782
Grand Total		\$ -	\$ 141,782	\$ 141,782

WASTEWATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2021-2025 and related CIP Plan for FY 2021 were based on anticipation of FY 2021 activity resulting in 75% of planned spend. The Wastewater System spend for the period ending September 30, 2020 is 64.6% of the prorated FY 2021 board approved CIP, 64.1% of the prorated FY 2021 board approved CIP with project amendments, and 86.1% of the FY 2021 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2021 Board Approved CIP was amended from \$110,638,000 to \$111,444,137 is provided in the subsequent Project Amendment Summary section of this report.

Wastewater System Projects		FY 2020	FY 2020 Activity	FY 2020 Percentage	FY 2021	FY 2021 Prorated (Three Months)	FY 2021 Activity (Unaudited)	FY 2021 Percentage
FY 2020 Board Approved CIP	\$	161,480,000	\$	73,826,521	45.7%			
FY 2020 Board Approved CIP With Project Amendments		156,884,005		73,826,521	47.1%			
FY 2020 Capital Spend Rate Assumption (SRA)		121,110,000		73,826,521	61.0%			
FY 2021 Board Approved CIP					\$	110,638,000	\$	27,659,500
FY 2021 Board Approved CIP With Project Amendments						111,444,137		27,861,034
FY 2021 Capital Spend Rate Assumption (SRA)						82,978,500		20,744,625
							\$	17,866,023
								64.6%
								64.1%
								86.1%

Great Lakes Water Authority
 Wastewater System Construction Work-in-Progress (CWIP) FY 2021 Rollforward
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Wastewater System
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Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	55,069,000	52,886,451	3,775,000	3,775,000	969,635	-	53,856,086	53,856,086	98%
211002	Pump Station No. 2 Pumping Improvments	3,772,000	2,013,956	-	-	8,010	-	2,021,966	2,021,966	54%
211004	Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	28,273,000	27,605,573	-	-	12,578	-	27,618,150	27,618,150	98%
211005	Pump Station No. 2 Improvements	34,050,000	-	-	-	-	-	-	-	0%
211006	Pump Station No. 1 Improvements	26,776,000	1,283,830	645,000	645,000	197,123	-	1,480,953	1,480,953	6%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	76,596,000	5,176	3,098,000	3,098,000	1,126	-	6,302	6,302	0%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	10,825,000	1,629,677	5,522,000	5,522,000	46,420	-	1,676,097	1,676,097	15%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	13,249,000	2,734	313,000	313,000	524	-	3,258	3,258	0%
211010	Rehabilitation of Sludge Processing Complexes A and B	14,039,000	42,231	-	-	48,431	-	90,663	90,663	1%
211011	WRRF PS1 Screening and Grit Improvements	100,747,000	-	-	-	-	-	-	-	0%
212003	Aeration System Improvements	16,492,000	-	-	-	-	16,524,875	-	16,524,875	100%
212004	ProjectChlorination/Dechlorination Process Equipment Improvements	5,766,000	3,803,140	1,850,000	1,850,000	875,406	-	4,678,546	4,678,546	81%
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	44,440,000	-	-	-	-	43,788,731	-	43,788,731	99%
212007	Rehabilitation of the Secondary Clarifiers	30,141,000	330	-	-	1,312	-	1,642	1,642	0%
212008	WRRF Rehabilitation of Intermediate Lift	81,514,000	16,175	4,612,000	4,612,000	97,063	-	113,239	113,239	0%
212009	WRRF Aeration Improvements 3 and 4	73,763,000	-	-	-	-	-	-	-	0%
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,986,000	-	-	-	-	-	-	-	0%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	4,651,000	5,750	174,000	174,000	849	-	6,599	6,599	0%
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	19,946,000	16,878,502	2,258,000	2,258,000	381,904	-	17,260,406	17,260,406	87%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	18,543,000	111,335	1,338,000	1,338,000	5,498	-	116,834	116,834	1%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	14,001,000	8,301,788	1,331,000	1,331,000	2,576,148	2,282,260	10,877,936	13,160,196	94%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	5,729,000	1,637,516	1,300,000	2,106,137	296,312	-	1,933,827	1,933,827	34%

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Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2020	FY 2021 Board Approved CIP	FY 2021 Board Approved CIP With Project Amendments	FY 2021 Activity through September 30, 2020	Life to date Capitalization Through September 30, 2020	CWIP Balance September 30, 2020	Life to date Activity Through September 30, 2020	Life to date Activity / Total Project Plan Estimate
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	24,512,000	73,474	4,291,000	4,291,000	35,719	-	109,193	109,193	0%
216007	DTE Primary Electric 3rd Feed Supply Line to the WRRF	5,823,000	2,354,996	1,296,000	1,296,000	10,440	543,500	2,365,435	2,908,935	50%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	24,954,000	5,671	1,362,000	1,362,000	436	-	6,108	6,108	0%
216009	Logistics & Material Facility	2,768,000	164,904	253,000	253,000	(18,498)	-	146,406	146,406	5%
216010	WRRF Facility Optimization	10,338,000	4,312	14,000	14,000	890	-	5,202	5,202	0%
216012	WRRF Research Facility	-	-	-	-	6,513	6,513	-	6,513	100%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,512,000	-	975,000	975,000	1,088	-	1,088	1,088	0%
222002	Detroit River Interceptor Evaluation and Rehabilitation	81,676,000	20,151,096	23,634,000	23,634,000	2,788,352	-	22,939,449	22,939,449	28%
222004	Collection System Valve Remote Operation Structures Improvements	41,126,000	468,867	2,701,000	2,701,000	116,428	-	585,295	585,295	1%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	37,276,000	14,273,606	5,336,000	5,336,000	3,498,937	-	17,772,543	17,772,543	48%
232002	Freud and Connor Creek Pump Station Improvements	222,099,000	7,284,631	6,445,000	6,445,000	447,728	57,734	7,732,359	7,790,094	4%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	286,000	-	286,000	286,000	-	-	-	-	0%
233002	Collection System In System Storage Devices (ISDs) Improvements	-	235	-	-	-	-	235	235	100%
233003	Rouge River In-system Storage Devices	46,797,000	-	-	-	-	-	-	-	0%
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	154,643,000	-	12,976,000	12,976,000	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	-	960,448	-	-	1,391,623	18,542,127	2,352,070	20,894,197	100%
260202	Conveyance System Interceptor Rehab	-	23,871	-	-	1,904	-	25,775	25,775	100%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	-	912,742	-	-	337,969	-	1,250,711	1,250,711	100%
260205	NWI Outfall Rehabilitation	-	79,226	-	-	31,085	-	110,311	110,311	100%
260500	CSO Outfall Rehab	64,406,000	-	11,706,000	11,706,000	-	-	-	-	0%
260503	Collection System Backwater Gates	-	760	-	-	(760)	-	(0)	-	100%
260504	Rehabilitation of Outfalls - Phase II	-	2,202,000	-	-	1,295,905	-	3,497,906	3,497,906	100%
260505	Rehabilitation of Outfalls - Phase IV	-	1,586,323	-	-	1,057,041	-	2,643,364	2,643,364	100%
260506	Pilot Regulator Orifice Expansion	-	78,641	-	-	-	-	78,641	78,641	100%
260508	B-39 Outfall Rehab	-	498	-	-	29,502	-	30,000	30,000	100%
260509	B-40 Outfall Rehab	-	66,293	-	-	1,570	-	67,863	67,863	100%
260600	CSO Facilities Improvements	152,943,000	-	7,492,000	7,492,000	-	-	-	-	0%
260601	Oakwood Drain Valve Improvements	-	26,199	-	-	122,939	655,436	149,138	804,574	100%
260603	Conner Creek CSO Basin Rehab	-	7,056,367	-	-	303,948	-	7,360,316	7,360,316	100%
260607	Lieb SDF Electrical Improvements	-	179	-	-	(179)	1,032,508	(0)	1,032,508	100%
260609	Seven Mile RTB - Parking Lot / Sitework	-	369,559	-	-	50,385	-	419,944	419,944	100%

Great Lakes Water Authority
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Wastewater System
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 As of September 30, 2020

Project	Project Name	Total Project Plan Estimate from	CWIP Balance	FY 2021 Board	FY 2021 Board Approved CIP With Project	FY 2021 Activity through	Life to date Capitalization Through	CWIP Balance	Life to date Activity Through	Life to date Activity / Total Project
		FY 2021 - 2025 CIP	July 1, 2020	Approved CIP	Amendments	September 30, 2020	September 30, 2020	September 30, 2020	September 30, 2020	Plan Estimate
260611	HVAC Improvements At Lieb SDF	-	95,887	-	-	22,167	-	118,054	118,054	100%
260613	Baby Creek HVAC Improvements	-	51,338	-	-	221,275	-	272,613	272,613	100%
260614	CSO Facilities Structural Improvements	-	303,795	-	-	1,564	-	305,359	305,359	100%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	-	109,660	-	-	35,025	-	144,685	144,685	100%
260616	Baby Creek SCO Anchor & Wedge Improvements	-	666,495	-	-	112,947	-	779,442	779,442	100%
260617	St. Aubin Chemical Disinfection Improvements	-	250,348	-	-	52,072	-	302,420	302,420	100%
260618	Oakwood HVAC Improvements	-	75,672	-	-	15,465	-	91,137	91,137	100%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	-	61,593	-	-	1,085	-	62,678	62,678	100%
270001	Pilot CSO Netting Facility	7,769,000	-	20,000	20,000	-	-	-	-	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	6,079,000	-	-	-	-	-	-	-	0%
270003	Long Term CSO Control Plan	5,794,000	3,545	2,796,000	2,796,000	54,418	52,909	5,054	57,963	1%
277001	Baby Creek Outfall Improvements Project	2,237,000	2,283	1,251,000	1,251,000	312,142	311,910	2,515	314,425	14%
331002	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	9,745,000	-	91,000	91,000	-	1,123,056	-	1,123,056	12%
341001	Security Infrastructure Improvements	-	1,033,207	-	-	8,559	-	1,041,766	1,041,766	100%
341002	Security Infrastructure Improvements	2,630,000	-	1,051,000	1,051,000	-	-	-	-	0%
380600	General Engineering Services Allowance	(51,000)	-	-	-	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	3,435,000	-	446,000	446,000	-	-	-	-	0%
Grand Total		\$ 1,645,165,000	\$ 177,022,887	\$ 110,638,000	\$ 111,444,137	\$ 17,866,023	\$ 278,568,278	\$ 194,517,578	\$ 473,085,856	29%
				Project Amendments		\$ 806,137				

FY 2021 Project Amendment Summary

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 2021 Capital Improvement Plan.

\$806,137 of Capital Reserve project amendments have been prepared as of September 30, 2020 as shown in the table on the next page along with project amendments detailing the assignment of funding within Program and Allowance accounts.

The order of the report on the subsequent page is in ascending order by CIP project number.

Great Lakes Water Authority
Wastewater System Project Amendment Summary
Unaudited Activity For the Fiscal Year Ended September 30, 2020

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Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	-	806,137	806,137
Grand Total		\$ -	\$ 806,137	\$ 806,137