



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

As of June 30, 2020

For questions, please contact:

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October 16, 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 June 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 June 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 2020-2024 and related CIP Plan for FY 2020 were based on anticipation of FY 2020 activity resulting in 75% of planned spend. The Water System spend for the period ending June 30, 2020 is 53.4% of the FY 2020 board approved CIP, 61.3% of the FY 2020 board approved CIP with project amendments, and 71.2% of the FY 2020 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2020 Board Approved CIP was amended from \$143,247,000 to \$124,916,757 is provided in the subsequent Project Amendment Summary section of this report.

Water System Projects		FY 2019 CIP	FY 2019 Activity	FY 2019 Percentage	FY 2020 CIP	FY 2020 Activity (Unaudited)	FY 2020 Percentage
FY 2019 Board Approved CIP	\$	66,038,000	\$	61,583,574	93.3%		
FY 2019 Board Approved CIP With Project Amendments		72,348,044		61,583,574	85.1%		
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%

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. Capitalization of project cost occurred in the FY 2020 4th quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
111004	CON-288	Electrical Tunnel Rehab
114001	SP-563	Springwells 1958 Filter Rehabilitation
115004	CON-208	WWP Chlorine System Upgrade
132001	DWS-858	Wick Road Pumping Station
132003	CON-270	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station
170104	CON-225	Orion and Newburgh Pumping Stations Improvements
170502	CON-181	Emergency Transmission Main Repairs

\$126.2 million is in CWIP as of June 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 2020 Rollforward
Unaudited Activity For the Fiscal Quarter Ended June 30, 2020

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

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 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	\$ 14,083	\$ 401,000	\$ 493,500	\$ 197,950	\$ -	\$ 212,034	\$ 212,034	0%
111002	LHWTP Backflow Replacement	9,004,000	6,836,980	1,882,000	1,882,000	1,692,825	155,348	8,529,804	8,685,152	96%
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	4,136,000	2,768,607	4,296,000	1,275,214	1,124,082	3,892,299	390	3,892,689	94%
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	16,626,000	777,960	3,333,000	3,533,468	295,505	-	1,073,466	1,073,466	6%
111007	LHWTP Architectural Programming - Lab	8,937,000	639,986	4,660,000	4,230,554	5,247,665	-	5,887,651	5,887,651	66%
111008	Lake Huron WTP-35 MGD HLP, Flow Meters	1,299,000	-	-	-	110	-	110	110	0%
111009	Lake Huron WTP-35 MGD HLP, Flow Meters	29,226,000	35,864	9,030,000	9,030,000	80,890	-	116,755	116,755	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%
112002	Low Lift Pumping Plant Caisson Rehabilitation at Northeast WTP	1,345,000	1,134,767	203,000	203,000	38,112	1,169,962	2,918	1,172,880	87%
112003	NE WTP High Lift Pumping Electrical	57,565,000	-	-	-	5,785	-	5,785	5,785	0%
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	1,393,000	13,356	166,000	310,000	425,107	-	438,463	438,463	31%
112006	Northeast Water Treatment Plant Flocculator Replacements	7,111,000	2,891	1,356,000	1,356,000	183,382	-	186,274	186,274	3%
113001	Southwest Water Treatment Plant, Sludge Treatment & Waste Wash water Treatment Facility	-	-	-	-	341,324	-	341,324	341,324	100%
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	5,886,000	2,479,490	2,876,000	3,028,000	2,792,741	-	5,272,232	5,272,232	90%
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	-	380,000	380,000	1,822	853,219	1,822	855,041	104%
113006	SW WTP Chloring Scrubber	4,753,000	-	-	-	129,973	-	129,973	129,973	3%
113007	Architectural and Building Mechanical	98,000	-	-	-	-	-	-	-	0%
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	101,968,000	73,955,623	-	1,255,609	3,070,813	99,764,892	-	99,764,892	98%
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	174,835,000	2,080,861	5,985,000	6,308,877	3,415,254	-	5,496,115	5,496,115	3%
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	8,482,000	6,331,921	80,000	713,282	1,853,607	-	8,185,528	8,185,528	97%
114005	Springwells WTP Admin Building Improvements	8,696,000	10,555	413,000	527,664	933,417	-	943,973	943,973	11%
114006	Replacement of Rapid Mix Units at Springwells WTP 1958 Process Train	1,031,000	0	61,000	61,000	9,390	1,021,039	9,390	1,030,429	100%

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

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

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
114007	Powder Activated Carbon Systems	4,188,000	-	-	-	-	-	-	-	0%
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	14,241,000	195,644	4,153,000	2,185,000	3,186,265	-	3,381,909	3,381,909	24%
114009	Springwells Water Treatment Plant Service Area Redundancy Study	311,000	-	-	-	-	-	-	-	0%
114010	Yard Piping Improvements	112,613,000	3,947	-	-	237,189	-	241,135	241,135	0%
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	23,898,000	2,373,087	5,392,000	5,453,373	7,710,647	-	10,083,734	10,083,734	42%
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	2,829,864	1,551,000	1,551,000	756,192	-	3,586,056	3,586,056	74%
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	802	206,000	206,000	94,061	-	94,862	94,862	5%
114017	Springwells Water Treatment Plant Flocculator Drive Replacement	9,296,000	-	-	-	1,071	-	1,071	1,071	0%
114018	Springwells Water Treatment Plant - Service Building Electrical Substation and Miscellaneous Improvements	1,508,000	-	-	-	-	-	-	-	0%
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	72,019,000	1,758,683	17,333,000	17,464,500	1,080,444	-	2,839,127	2,839,127	4%
115003	Comprehensive Condition Assessment at Waterworks Park WTP	582,000	513,538	153,000	-	(513,538)	-	(0)	-	0%
115004	Water Works Park WTP Chlorine System Upgrade	7,440,000	6,685,754	2,047,000	2,068,500	271,279	6,957,032	-	6,957,032	94%
115005	WWP WTP Building Ventilation Improvements	10,141,000	-	507,000	507,000	1,126	-	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	13,302,850	5,467,000	5,467,000	5,210,819	-	18,513,669	18,513,669	30%
122001	Replacement of Five (5) PRV Pits of Treated Water Transmission System	33,246,000	33,241,721	-	-	-	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	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	157,526,000	2,615,193	871,000	658,233	2,574,953	-	5,190,146	5,190,146	3%
122004	Replacement Schoolcraft Watermain	144,871,000	1,787,389	5,000,000	2,314,936	28,915	-	1,816,305	1,816,305	1%
122005	Transmission System Water Main Work-Wick Road	18,106,000	141,171	8,100,000	2,328,644	1,240,607	-	1,381,778	1,381,778	8%
122006	Parallel Water Main	22,338,000	416,882	18,028,000	8,401,361	5,486,039	-	5,902,921	5,902,921	26%

Great Lakes Water Authority
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122007	Design and Construction of a new Newburgh Road 24" Main along Newburgh Road between Ch	21,457,000	783	-	-	1,022	-	1,805	1,805	0%
122009	Water System Improvements in Joy Road from Southfield Road to Trinity	149,000	106,881	-	-	-	106,881	-	106,881	72%
122011	Park-Merriman Water Main-Final Phase	7,625,000	986,024	4,737,000	3,937,000	4,235,897	-	5,221,921	5,221,921	68%
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	637,635	751,000	2,628,978	3,005,269	-	3,642,904	3,642,904	5%
122016	Downriver Transmission Loop	37,744,000	24,251	297,000	820,965	200,658	-	224,909	224,909	1%
122017	7 Mile/Nevada Transmission Main Rehab and Carrie/Nevada Flow Control Station	60,577,000	-	1,040,000	1,040,000	3,414	-	3,414	3,414	0%
122018	Garland, Hurlbut, Bewick Water Transmission System Rehabilitation	44,577,000	-	-	-	-	-	-	-	0%
132001	Wick Road Station Rehabilitation	135,000	135,073	-	-	-	135,073	-	135,073	100%
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	1,979,000	247,754	490,000	1,522,316	1,496,437	1,742,479	1,712	1,744,191	88%
132004	Hydraulic Surge Control for North Service Center Pumping Station	215,000	214,771	-	-	-	214,771	-	214,771	100%
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	3,279,000	289,594	2,515,000	2,399,138	1,594,308	-	1,883,902	1,883,902	57%
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	5,199,000	97,185	592,000	472,742	70,480	-	167,665	167,665	3%
132008	Needs Assessment Study for all Water Booster Pumping Stations	1,838,000	1,838,406	-	-	(1,838,406)	-	-	-	0%
132010	West Service Center/Duval Rd Division Valve Upgrades	37,705,000	607,504	2,620,000	600,000	1,852,528	-	2,460,032	2,460,032	7%
132012	Ypsilanti PS Improvements	31,617,000	20,539	585,000	510,490	313,050	-	333,589	333,589	1%
132014	Adams Road Booster Pumping Improvements	27,536,000	-	-	-	83,262	-	83,262	83,262	0%
132015	Newburgh BPS	30,677,000	2,811	16,000	458,245	347,643	-	350,454	350,454	1%
132016	North Service Center BPS Improvements	45,342,000	-	-	-	266,392	-	266,392	266,392	1%
132017	North Service Center BPS - On-Site & Off	-	-	6,000	6,000	-	-	-	-	100%
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	971	-	-	19,183	-	20,155	20,155	2015%
132026	Franklin Pumping Station Valve Replacement	1,411,000	-	-	-	782,409	-	782,409	782,409	55%
170100	Allowance: WTP/Pump Station	70,164,000	-	3,000,000	3,000,000	-	-	-	-	0%
170102	Water Production Plant Flow Metering Improvements at NE, SP & SW WTP	-	359,259	-	-	13,115	-	372,374	372,374	100%
170103	Belle Isle Water Supply Intake and Ice Boom Improvements	-	3,278	-	-	-	286,596	3,278	289,874	100%

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

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

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
170104	Orion and Newburgh Pumping Stations Improvements	-	170,664	-	-	7,846	2,086,335	(0)	2,086,335	100%
170110	Raw Water Sampling Improvements	-	2,926	-	-	(2,926)	-	-	-	100%
170121	Franklin PS Valve Rehab	-	38,681	-	-	-	-	38,681	38,681	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	-	572,000	572,000	-	-	-	-	0%
170201	Construction & Environmental Testing	-	63,443	-	-	(63,443)	-	-	-	100%
170300	Water Treatment Plant Automation Program	18,728,000	-	1,561,000	1,561,000	-	-	-	-	0%
170301	Water Plant Automation	-	1,657,645	-	-	97,497	-	1,755,142	1,755,142	100%
170400	Water Transmission Improvement Program	28,157,000	-	1,500,000	1,500,000	-	-	-	-	0%
170401	Emergency Bypass Around Ypsilanti Station	-	1,643,165	-	-	19,450	-	1,662,615	1,662,615	100%
170500	Transmission System Valve Assessment and Rehabilitation/Replacement Program	26,469,000	-	4,000,000	4,000,000	-	-	-	-	0%
170502	Transmission System Valve Assessment and Rehabil	-	0	-	-	2,386,195	6,363,896	2,051,843	8,415,739	100%
170503	Transmission System Valve Assessment and Rehabil	-	-	-	-	393,559	-	393,559	393,559	100%
170600	Water Transmission Main Asset Assessment Program	30,753,000	-	3,000,000	3,000,000	-	-	-	-	0%
170800	Reservoir Inspection, Design and Rehabilitation Program	59,076,000	-	5,128,000	632,000	-	-	-	-	0%
170801	Reservoir Inspection, Design and Rehabilitation	-	456,574	-	4,513,500	2,158,996	-	2,615,570	2,615,570	100%
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	10,301,000	-	4,000,000	925,000	-	-	-	-	0%
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	-	1,237,565	-	3,075,000	3,292,318	-	4,529,883	4,529,883	100%
170902	Brownstown Meter Pit Rehabilitation	-	-	-	-	76,390	-	76,390	76,390	100%
171500	Roof Replacement - Var Facilities Program	23,673,000	-	2,657,000	-	-	-	-	-	0%
171501	Roof Replacements - Var Facilities Program	-	119,283	-	3,125,489	3,013,352	360,430	2,772,205	3,132,635	100%
341001	Security Infrastructure Improvements	10,650,000	962,673	-	1,173,179	3,014,738	-	3,977,412	3,977,412	37%
351001	Water Facility Lighting Renovations	556,000	6,211	250,000	250,000	457	-	6,667	6,667	1%
361002	Data Center Reliability/Availability Improvements	-	16,080	-	-	-	16,080	-	16,080	100%
380600	General Engineering Services Allowance	56,000	-	-	-	-	-	-	-	0%
380601	General Engineering Services Allowance	-	674	-	-	(674)	-	-	-	100%
380700	As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services Allowance	2,130,000	-	-	-	-	-	-	-	0%
381000	Energy Management: Electric Metering Improvement Program	3,435,000	-	-	-	-	-	-	-	0%
Grand Total		\$ 1,970,283,000	\$ 175,031,084	\$ 143,247,000	\$ 124,916,757	\$ 76,542,465	\$ 207,438,850	\$ 126,197,522	\$ 333,636,372	17%
Project Amendments		\$ (18,330,243)								

FY 2020 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 2020 Capital Improvement Plan.

\$18.3 million of Capital Reserve project amendments have been prepared as of June 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 June 30, 2020

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

Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
111001	Energy Management: Lake Huron Water Treatment Plant Low Lift Pumping Improvements	\$ -	\$ 92,500	\$ 92,500
111004	Electrical Tunnel Rehabilitation at Lake Huron WTP	-	(3,020,786)	(3,020,786)
111006	Replacement of Filter Instrumentation and Raw Water Flow Metering Improvements at Lake	-	200,468	200,468
111007	Lake Huron WTP-Raw Sludge Clarifier and Raw Sludge Pumping System Improvements	-	(429,446)	(429,446)
112005	Northeast Water Treatment Plant - Replacement of Covers for Process Water Conduits	-	144,000	144,000
113002	High Lift Pump Discharge Valve Actuators Replacement at Southwest WTP	-	152,000	152,000
114001	Springwells Water Treatment Plant 1958 Filter Rehabilitation and Auxiliary Facilities	-	1,255,609	1,255,609
114002	Springwells Water Treatment Plant - Low Lift and High Lift Pump Station	-	323,877	323,877
114003	Water Production Flow Metering Improvements at NE, SW, and SPW WTP	-	633,282	633,282
114005	Springwells WTP Admin Building Improvements	-	114,664	114,664
114008	1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improvements at Springwells WTP	-	(1,968,000)	(1,968,000)
114011	Steam, Condensate Return, and Compressed Air Piping Improvements at Springwells WTP	-	61,373	61,373
115001	Yard Piping, Valves and Venturi Meters Replacement at Water Works Park	131,500	-	131,500
115003	Comprehensive Condition Assessment at Waterworks Park WTP	(153,000)	-	(153,000)
115004	Water Works Park WTP Chlorine System Upgrade	21500	0	21500
122003	New Waterworks Park to Northeast Transmission Main	-	(212,767)	(212,767)
122004	96-inch Main Relocation, Isolation Valves Installations, and New Parallel Main	-	(2,685,064)	(2,685,064)
122005	Replacement Schoolcraft Watermain	-	(5,771,356)	(5,771,356)
122006	Transmission System Water Main Work-Wick Road Parallel Water Main	-	(9,626,639)	(9,626,639)
122011	Park-Merriman Water Main-Final Phase	-	(800,000)	(800,000)
122013	Lyon Township Transmission Main Extension Project	-	1,877,978	1,877,978
122016	Downriver Transmission Loop	-	523,965	523,965
132003	Isolation Gate Valves for Line Pumps for West Service Center Pumping Station	-	1,032,316	1,032,316
132006	Pressure and Control Improvements at the Electric, Ford Road, Michigan, and West Chica	-	(115,862)	(115,862)
132007	Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station	-	(119,258)	(119,258)
132010	West Service Center/Duval Rd Division Valve Upgrades	-	(2,020,000)	(2,020,000)
132012	Ypsilanti PS Improvements	-	(74,510)	(74,510)
132015	Newburgh BPS	-	442,245	442,245
170800	Reservoir Inspection, Design and Rehabilitation Program	(4,496,000)	-	(4,496,000)
170801	Reservoir Inspection, Design and Rehabilitation	4,496,000	17,500	4,513,500
170900	Suburban Water Meter Pit Rehabilitation and Meter Replacement Program	(3,075,000)	-	(3,075,000)
170901	Suburban Water Meter Pit Rehabilitation and Meter Replacement	3,075,000	-	3,075,000
171500	Roof Replacement - Var Facilities Program	-	(2,657,000)	(2,657,000)
171501	Roof Replacements - Var Facilities Program	-	3,125,489	3,125,489
341001	Security Infrastructure Improvements	-	1,173,179	1,173,179
Grand Total		\$ -	\$ (18,330,243)	\$ (18,330,243)

WASTEWATER SYSTEM

Executive Summary

The rate of spend is a key performance indicator. The development of the FY 2020-2024 and related CIP Plan for FY 2020 were based on anticipation of FY 2020 activity resulting in 75% of planned spend. The Water System spend for the period ending June 30, 2020 is 45.7% of the FY 2020 board approved CIP, 47.1% of the FY 2020 board approved CIP with project amendments, and 61% of the FY 2020 Capital Spending Rate Assumption (SRA). Detailed analysis of the projects for which FY 2020 Board Approved CIP was amended from \$161,480,000 to \$156,884,005 is provided in the subsequent Project Amendment Summary section of this report.

Wastewater System Projects		FY 2019 CIP	FY 2019 Activity	FY 2019 Percentage	FY 2020 CIP	FY 2020 Activity (Unaudited)	FY 2020 Percentage
FY 2019 Board Approved CIP	\$	105,183,000	82,133,532	78.1%			
FY 2019 Board Approved CIP With Project Amendments		100,264,934	82,133,532	81.9%			
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%

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. Capitalization of project cost occurred in the FY 2020 4th quarter for the following projects:

<u>Project</u>	<u>Contract</u>	<u>Description</u>
212006	PC-797	Rouge River Outfall Disinfection
260201	CON-149	Detroit River Interceptor
260203	SCP-CS-068	Conveyance System Interceptor Rehab
260601	CON-254	Oakwood Drain Valve Improvements
260610	1803113	Baby Creek MAU Replacement

\$177 million is in CWIP as of June 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
Wastewater System Construction Work-in-Progress (CWIP) FY 2020 Rollforward
Unaudited Activity For the Fiscal Quarter Ended June 30, 2020

Wastewater System
Construction Work-in-Progress Quarterly Report
As of June 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
171501	Roof Replacements - Var Facilities Program	\$ -	\$ -	\$ -	\$ 83,000	\$ 83,000	\$ 83,000	\$ -	\$ 83,000	100%
211001	Rehabilitation of Primary Clarifiers Rectangular Tanks, Drain Lines, Electrical/Mechanical Building and Pipe Gallery	55,069,000	45,368,717	7,982,000	7,982,000	7,517,734	-	52,886,451	52,886,451	96%
211002	Pump Station No. 2 Pumping Improvments	3,772,000	1,911,850	1,222,000	1,222,000	102,106	-	2,013,956	2,013,956	53%
211004	Pump Station 1 Rack & Grit and MPI Sampling Station 1 Improvements	28,273,000	26,502,582	869,000	869,000	1,102,991	-	27,605,573	27,605,573	98%
211005	Pump Station No. 2 Improvements	34,050,000	1,002	-	-	(1,002)	-	0	-	0%
211006	Pump Station No. 1 Improvements	26,776,000	6,307	1,803,000	1,803,000	1,277,523	-	1,283,830	1,283,830	5%
211007	Replacement of Bar Racks and Grit Collection System at Pump Station No. 2	76,596,000	628	269,000	269,000	4,548	-	5,176	5,176	0%
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	10,825,000	200,048	2,950,000	3,950,000	1,429,629	-	1,629,677	1,629,677	15%
211009	Rehabilitation of the Circular Primary Clarifier Scum Removal System	13,249,000	30	-	-	2,705	-	2,734	2,734	0%
211010	Rehabilitation of Sludge Processing Complexes A and B	14,039,000	-	-	-	42,231	-	42,231	42,231	0%
211011	WRRF PS1 Screening and Grit Improvements	100,747,000	-	-	-	-	-	-	-	0%
212002	Study, Design, & Construction, Management Services for Modified Detroit River Outfall No. 2 - WRRF	-	10,821,153	-	-	(1,853)	10,819,300	(0)	10,819,300	100%
212003	Aeration System Improvements	16,492,000	16,356,789	-	-	168,086	16,524,875	-	16,524,875	100%
212004	Project Chlorination/Dechlorination Process Equipment Improvements	5,766,000	192,917	2,345,000	2,903,000	3,610,223	-	3,803,140	3,803,140	66%
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	44,440,000	41,691,377	4,583,000	4,731,155	2,097,354	43,788,731	-	43,788,731	99%
212007	Rehabilitation of the Secondary Clarifiers	30,141,000	-	-	-	330	-	330	330	0%
212008	WRRF Rehabilitation of Intermediate Lift	81,514,000	-	229,000	229,000	16,175	-	16,175	16,175	0%
212009	WRRF Aeration Improvements 3 and 4	73,763,000	-	-	-	-	-	-	-	0%

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

Wastewater System
Construction Work-in-Progress Quarterly Report
As of June 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
212010	WRRF Conversion of Disinfection of all Flow to Sodium Hypochlorite and Sodium Bisulfite	5,986,000	-	-	-	-	-	-	-	0%
213002	Rehabilitation of Central Offload Facility	-	-	7,696,000	7,696,000	-	-	-	-	100%
213005	Complex I Incinerators Decommissioning and Reusability	-	369,648	-	-	22	369,671	-	369,671	100%
213006	Improvements to Sludge Feed Pumps at Dewatering Facilities	4,651,000	4,856	-	-	894	-	5,750	5,750	0%
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	19,946,000	10,809,195	8,711,000	9,011,000	6,069,307	-	16,878,502	16,878,502	85%
213008	Rehabilitation of the Wet and Dry Ash Handling Systems	18,543,000	85	111,000	111,000	111,251	-	111,335	111,335	1%
213009	Phosphorous Recovery Facility at the WRRF	-	(99)	-	-	99	-	-	-	100%
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	14,001,000	17,017	7,567,000	8,367,000	8,284,771	2,282,260	8,301,788	10,584,048	76%
216004	Rehabilitation of Various Sampling Sites and PS# 2 Ferric Chloride System at WWTP	5,729,000	814,368	3,921,000	3,921,000	823,148	-	1,637,516	1,637,516	29%
216006	Rehabilitation of the Screened Final Effluent (SFE) Pump Station and Secondary Water System	24,512,000	17,581	323,000	323,000	55,893	-	73,474	73,474	0%
216007	DTE Primary Electric 3rd Feed Supply Line to the WRRF	5,823,000	2,194,169	1,381,000	1,381,000	160,827	543,500	2,354,996	2,898,496	50%
216008	Rehabilitation of Screened Final Effluent (SFE) Pump Station	24,954,000	-	1,091,000	1,091,000	5,671	-	5,671	5,671	0%
216009	Logistics & Material Facility	2,768,000	-	-	-	164,904	-	164,904	164,904	6%
216010	WRRF Facility Optimization	10,338,000	-	-	-	4,312	-	4,312	4,312	0%
222001	Intercommunity Relief Sewer Modifications in Detroit Oakwood District	53,512,000	-	-	-	-	-	-	-	0%
222002	Detroit River Interceptor Evaluation and Rehabilitation	81,676,000	10,611,644	10,000,000	4,049,445	9,539,452	-	20,151,096	20,151,096	25%
222003	North Interceptor East Arm (NIEA) Evaluation and Rehabilitation	-	-	15,000,000	15,000,000	-	-	-	-	100%
222004	Collection System Valve Remote Operation Structures Improvements	41,126,000	4,246	3,500,000	3,500,000	464,622	-	468,867	468,867	1%
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	37,276,000	3,475,448	18,000,000	16,265,405	10,798,158	-	14,273,606	14,273,606	38%

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

Wastewater System
Construction Work-in-Progress Quarterly Report
As of June 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
232002	Freud and Connor Creek Pump Station Improvements	222,099,000	5,573,334	17,029,000	17,229,000	1,711,297	57,734	7,284,631	7,342,366	3%
232003	Northeast Pump Station Improvements	-	-	7,000,000	7,000,000	-	-	-	-	100%
232004	CONDITION ASSESSMENT AT BLUE HILL PUMP STATION	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%
251002	Wastewater System Wide Instrumentation & Controls Software and Hardware Upgrade	-	71	-	-	(71)	-	-	-	100%
260100	Water Resource Recovery Facility (WRRF), Lift Station & Wastewater Collection System Allowance	-	-	1,100,000	1,100,000	-	-	-	-	100%
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	154,643,000	-	15,000,000	6,550,048	-	-	-	-	0%
260201	Conveyance System Interceptor Rehab	-	4,810,116	-	7,400,000	5,515,906	18,542,127	960,448	19,502,575	100%
260202	Conveyance System Interceptor Rehab	-	17,031	-	-	6,840	-	23,871	23,871	100%
260203	Conveyance System Interceptor Rehab	-	4,642,133	-	-	-	4,642,133	-	4,642,133	100%
260204	Energy Services for Rehabilitation of Conveyance Sewer System	-	133	-	1,049,952	912,609	-	912,742	912,742	100%
260205	NWI Outfall Rehabilitation	-	-	-	-	79,226	-	79,226	79,226	100%
260500	CSO Outfall Rehab	64,406,000	-	15,102,000	10,302,925	-	-	-	-	0%
260503	Collection System Backwater Gates	-	760	-	-	-	-	760	760	100%
260504	Rehabilitation of Outfalls - Phase II	-	-	-	3,000,000	2,202,000	-	2,202,000	2,202,000	100%
260505	Rehabilitation of Outfalls - Phase IV	-	-	-	1,799,075	1,586,323	-	1,586,323	1,586,323	100%
260506	Pilot Regulator Orifice Expansion	-	-	-	-	78,641	-	78,641	78,641	100%
260508	B-39 Outfall Rehab	-	-	-	-	498	-	498	498	100%
260509	B-40 Outfall Rehab	-	-	-	-	66,293	-	66,293	66,293	100%
260600	CSO Facilities Improvements	152,943,000	-	5,604,000	2,940,613	-	-	-	-	0%
260601	Oakwood Drain Valve Improvements	-	539,857	-	33,000	141,778	655,436	26,199	681,635	100%
260602	CSO Fire Alarm System Improvements	-	812,407	-	-	185,211	997,619	-	997,619	100%
260603	Conner Creek CSO Basin Rehab	-	4,404,704	-	1,255,387	2,651,663	-	7,056,367	7,056,367	100%
260605	CSO Facilities CA	-	16,914	-	-	(16,914)	-	-	-	100%
260606	Puritan Fenkell Roof Replacement	-	1,944	-	-	344,596	346,540	-	346,540	100%

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

Wastewater System
Construction Work-in-Progress Quarterly Report
As of June 30, 2020

Project	Project Name	Total Project Plan Estimate from FY 2021 - 2025 CIP	CWIP Balance July 1, 2019	FY 2020 Board Approved CIP	FY 2020 Board Approved CIP With Project Amendments	FY 2020 Activity through June 30, 2020	Life to Date Capitalization Through June 30, 2020	CWIP Balance June 30, 2020	Life to Date Activity Through June 30, 2020	Life to Date Activity / Total Project Plan Estimate
260607	Lieb SDF Electrical Improvements	-	241,513	-	450,000	791,174	1,032,508	179	1,032,687	100%
260608	Seven Mile RTB - Roof Replacement	-	12,451	-	300,000	484,248	496,699	-	496,699	100%
260609	Seven Mile RTB - Parking Lot / Sitework	-	23,197	-	400,000	346,362	-	369,559	369,559	100%
260610	Baby Creek MAU Replacement	-	1,773	-	-	273,378	275,151	-	275,151	100%
260611	HVAC Improvements At Lieb SDF	-	5,283	-	225,000	90,603	-	95,887	95,887	100%
260613	Baby Creek HVAC Improvements	-	76	-	-	51,262	-	51,338	51,338	100%
260614	CSO Facilities Structural Improvements	-	335,143	-	-	(31,349)	-	303,795	303,795	100%
260615	PF & Lieb CSO Facilities Site & Drainage Improvements	-	-	-	-	109,660	-	109,660	109,660	100%
260616	Baby Creek SCO Anchor & Wedge Improvements	-	-	-	-	666,495	-	666,495	666,495	100%
260617	St. Aubin Chemical Disinfection Improvements	-	-	-	-	250,348	-	250,348	250,348	100%
260618	Oakwood HVAC Improvements	-	-	-	-	75,672	-	75,672	75,672	100%
260619	Control System Upgrade At St. Aubin, Lieb and 7 Mile	-	-	-	-	61,593	-	61,593	61,593	100%
270001	Pilot CSO Netting Facility	7,769,000	-	-	-	-	-	-	-	0%
270002	Meldrum Sewer Diversion and VR-15 Improvements	6,079,000	-	-	-	-	-	-	-	0%
270003	Long Term CSO Control Plan	5,794,000	-	-	-	3,545	-	3,545	3,545	0%
277001	Baby Creek Outfall Improvements Project	2,237,000	-	-	-	2,283	-	2,283	2,283	0%
331002	Roofing Systems Replacement at GLWA Wastewater Treatment Plant, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	9,745,000	802,470	1,092,000	1,092,000	320,586	1,123,056	-	1,123,056	12%
341001	Security Infrastructure Improvements	-	102,924	-	-	930,283	-	1,033,207	1,033,207	100%
341002	Security Infrastructure Improvements	2,630,000	-	-	-	-	-	-	-	0%
380600	General Engineering Services Allowance	(51,000)	-	-	-	-	-	-	-	0%
380601	General Engineering Services Allowance	-	632	-	-	(632)	-	-	-	100%
381000	Energy Management: Electric Metering Improvement Program	3,435,000	-	-	-	-	-	-	-	0%
Grand Total		\$ 1,645,165,000	\$ 193,716,659	\$ 161,480,000	\$ 156,884,005	\$ 73,826,521	\$ 278,196,946	\$ 177,022,887	\$ 455,219,833	28%
Project Amendments					\$ (4,595,995)					

FY 2020 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 2020 Capital Improvement Plan.

\$4.6 million of Capital Reserve project amendments have been prepared as of June 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 June 30, 2020

Wastewater System
Construction Work-in-Progress Quarterly Report
 As of June 30, 2020

Project	Project Name	Program / Allowance	Capital Reserve	Grand Total
171501	Roof Replacements - Var Facilities Program	\$ -	\$ 83,000	\$ 83,000
211008	Rehabilitation of Ferric Chloride Feed systems at the Pump Station -1 and Complex B Sludge Lines	-	1,000,000	1,000,000
212004	ProjectChlorination/Dechlorination Process Equipment Improvements	-	558,000	558,000
212006	PC-797 Rouge River Outfall Disinfection and CS-1781 Oversight Consulting Services Contract	-	148,155	148,155
213007	Construction of the Improved Sludge Conveyance and Lighting System at the WWTP	-	300,000	300,000
214001	Relocation of Industrial Waste Division and Analytical Laboratory Operations	-	800,000	800,000
222002	Detroit River Interceptor Evaluation and Rehabilitation	-	(5,950,555)	(5,950,555)
232001	Fairview Pumping Station - Replace Four Sanitary Pumps	-	(1,734,595)	(1,734,595)
232002	Freud and Connor Creek Pump Station Improvements	-	200,000	200,000
260200	Sewer and Interceptor Evaluation and Rehabilitation Program	(8,449,952)	-	(8,449,952)
260201	Conveyance System Interceptor Rehab	7,400,000	-	7,400,000
260204	Energy Services for Rehabilitation of Conveyance Sewer System	1,049,952	-	1,049,952
260500	CSO Outfall Rehab	(4,799,075)	-	(4,799,075)
260504	Rehabilitation of Outfalls - Phase II	3,000,000	-	3,000,000
260505	Rehabilitation of Outfalls - Phase IV	1,799,075	-	1,799,075
260600	CSO Facilities Improvements	(2,663,387)	-	(2,663,387)
260601	Oakwood Drain Valve Improvements	33,000	-	33,000
260603	Conner Creek CSO Basin Rehab	1,255,387	-	1,255,387
260607	Lieb SDF Electrical Improvements	450,000	-	450,000
260608	Seven Mile RTB - Roof Replacement	300,000	-	300,000
260609	Seven Mile RTB - Parking Lot / Sitework	400,000	-	400,000
260611	HVAC Improvements At Lieb SDF	225,000	-	225,000
Grand Total		\$ -	\$ (4,595,995)	\$ (4,595,995)