



FY 2026 – FY 2030
Capital Improvement Plan
Discussion Draft #1 -
Cost Pool Allocation Report
As of November 7, 2024
for the
Water System

Compiled by: Charges Outreach & Modeling Team

Matt Lane, Manager

Guy Belew, Management Professional

Table of Contents

Introduction.....	2
Water System New CIP Projects This Year.....	2
Next Steps	2
APPENDIX	3
Appendix 1 - Schedule of Water CIP Cost Pool Allocations.....	4
Appendix 2 – GLWA Charges Manual Excerpt – “CIP Cost Pool Allocation Factors Overview”	7

Introduction

The Capital Improvement Plan (CIP) Discussion Draft 1 for FY 2026 to FY 2030 was presented to Member Partners at Charges Rollout Meeting #1 on October 17, 2024. This *Cost Pool Allocation Factor Report* is a companion communication that identifies the cost pool allocations related to the new projects in CIP Draft 1. For reference, the [Capital Improvement Plan Discussion Draft 1 for FY 2026 to FY 2030](#) is now available online. It includes detailed information for each project. The GLWA Capital Improvement Planning team has also recently launched the online and interactive [CIP Dashboard](#) in addition to a geographic information system based [GLWA Capital Projects Viewer](#).

This companion report provides a further level of information by assigning a cost allocation pool category to each project in the CIP. The importance of this information is to convey GLWA's recommended cost allocation early in the CIP process to provide a transparent opportunity for Member Partner feedback and engagement.

Water System New CIP Projects This Year

As presented at Charges Rollout #1 on October 17, 2024, there are seven (7) new water system projects added this year.

CIP #	Description	Cost Pool
122020	Concord and Nevada Flow Control Valves	Delivery
122021	Grosse Pointe Woods – Harper Woods (HW) 24" Main	Delivery
122023	Adams Road Transmission Main	Delivery
170603	84"/72" Transmission Main Condition Assessment	Delivery
170604	96-inch Transmission Main Condition Assessment	Delivery
170906	Repurpose abandoned meter pits	Delivery
170907	GLWA New Water Master Meter FL-01 Vault Upgrade and Rightsizing	Delivery

Next Steps

Given the implementation of the simplified water charges methodology for FY 2025, there is no further action required by GLWA or Member Partners related to this report. The reason is because ALL water costs (both operating *and* capital) are now allocated based on 10% to Commodity, 50% to Max Day, and 40% to Peak Hour. The level of detail in the table above is no longer relevant to annual charge setting. For the purposes of record keeping, however, the asset records will continue to record a cost pool assignment that differentiates assets acquired and/or constructed for water treatment or delivery purposes.

Should there be any questions or comments, please contact us at outreach@glwater.org

APPENDIX

Appendix 1 - Schedule of Water CIP Cost Pool Allocations

The Schedule of Water CIP Cost Pool Allocations on the next page is scaled to fit an 11x17 inch page setup.

FY 2026-2035 Schedule of Water CIP Cost Pool Allocations

CIP #	New to CIP?	Description	Primary Cost Pool	FY 2026 - 2035 (Ten Year) CIP											Ten Year CIP Total	
				Current Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		2035
111001	No	Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvem	Treatment	1,443,400	13,183,900	18,619,100	28,101,700	30,978,900	27,944,100	20,245,200	1,607,200	-	-	-	140,680,100	
111006	No	Lake Huron WTP, Filter Instrumentation and Raw Water Flow Metering Improvem	Treatment	13,386,400	21,203,700	20,599,700	12,126,900	8,131,600	-	-	-	-	-	-	62,061,900	
111008	No	Lake Huron WTP, Architectural Programming for Laboratory and Admin Building Im	Treatment	-	-	-	-	-	-	-	-	-	782,100	-	782,100	
111009	No	Lake Huron WTP - High Lift Pumping, Water Production Flow Metering and Yard Pipi	Treatment	12,339,600	6,714,000	1,661,400	-	-	-	-	-	-	-	-	8,375,400	
111010	No	Lake Huron WTP Filtration Improvement	Treatment	-	-	-	1,217,000	1,217,000	1,185,200	11,434,500	16,353,300	15,970,300	11,098,900	162,400	58,638,600	
111011	No	Lake Huron WTP Pilot Plant	Treatment	77,400	-	-	-	-	-	-	-	-	-	-	0	
111012	No	LHWTP-Flocculation Improvements	Treatment	2,029,500	3,809,300	9,790,100	12,753,500	11,628,400	8,209,000	-	-	-	-	-	46,190,300	
111013	No	Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements	Treatment	-	-	-	-	-	-	710,800	2,514,900	3,879,500	2,945,600	-	10,050,800	
112003	No	Northeast Water Treatment Plant High-Lift Pumping Station Improvements	Treatment	-	-	-	-	-	-	2,800,400	2,808,100	9,079,800	9,684,700	12,402,000	36,775,000	
112006	No	Northeast Water Treatment Plant Flocculator Replacements	Treatment	3,305,800	2,548,500	1,372,700	-	-	-	-	-	-	-	-	3,921,200	
112007	No	NEWTP-Structural Repairs	Treatment	418,300	2,165,800	2,589,200	1,273,200	-	-	-	-	-	-	-	6,028,200	
112008	No	Northeast Water Treatment Plant Filter Replacement	Treatment	3,504,900	3,504,900	20,731,000	31,051,600	26,428,200	9,306,200	-	-	-	-	-	91,021,900	
113003	No	Southwest Water Treatment Plant Low- and High lift Pumping station Improvements	Treatment	-	-	-	-	-	-	1,863,700	1,868,800	1,863,700	1,863,700	21,361,000	28,820,900	
113007	No	Southwest Water Treatment Plant Architectural and Building Mechanical Improveme	Treatment	-	-	-	-	-	-	-	-	-	349,500	27,300	376,800	
113009	No	SW Flight and Chain Upgrades	Treatment	2,048,300	-	-	-	-	-	-	-	-	-	-	0	
113010	No	Southwest Water Treatment Plant Flocculation Improvements	Treatment	-	1,192,500	1,192,500	1,857,200	5,818,000	7,194,800	4,954,200	-	-	-	-	22,209,200	
114002	No	Springwells Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improve	Treatment	13,726,400	19,302,600	13,546,500	10,566,400	17,799,300	18,577,500	15,871,400	24,070,100	30,946,000	33,602,000	30,946,000	215,227,800	
114005	No	Springwells WTP, Administration Building Improvements & Underground Fire Protec	Treatment	-	-	-	-	-	-	1,727,200	2,363,400	1,727,200	-	-	5,817,800	
114008	No	Springwells WTP 1930 Sedimentation Basin Sluice Gates, Guides & Hoists Improveme	Treatment	-	-	-	-	-	-	-	-	-	-	-	0	
114010	No	Springwells Water Treatment Plant, Yard Piping and High-Lift Header Improvements	Treatment	-	-	-	-	-	-	9,750,500	12,184,200	25,281,900	36,493,700	40,787,100	124,497,400	
114011	No	Springwells WTP Steam, Condensate Return, and Compressed Air Piping Improveme	Treatment	1,397,700	-	-	-	-	-	-	-	-	-	-	0	
114017	No	Springwells Water Treatment Plant Flocculator Drive Replacements	Treatment	6,883,500	7,313,000	4,914,100	-	-	-	-	-	-	-	-	12,227,100	
114018	No	Springwells WTP - Service Building Electrical Substation and Miscellaneous Improver	Treatment	-	-	-	133,300	1,791,500	415,800	-	-	-	-	-	2,340,600	
115001	No	Water Works Park Water Treatment Plant Yard Piping, Valves and Venturi Meters Re	Treatment	11,615,800	2,229,500	-	-	-	-	-	-	-	-	-	2,229,500	
115005	No	WWP WTP Building Ventilation Improvements	Treatment	3,590,100	-	-	-	-	-	-	-	-	-	-	0	
115006	No	Water Works Park Site/Civil Improvements	Treatment	-	-	-	-	-	-	381,100	1,657,500	2,213,800	1,643,200	-	5,895,600	
115007	No	Water Works Park High Lift Pumping Station Modernization	Treatment	-	-	-	-	-	-	614,700	742,400	1,427,600	2,014,400	10,458,700	15,257,800	
115009	No	Water Works Park Sedimentation Basins Structural Upgrades	Treatment	-	-	-	1,416,000	5,076,700	6,662,800	3,690,500	-	-	-	-	16,846,000	
116002	No	Pennsylvania and Springwells Raw Water Supply Tunnel Improvements	Treatment	10,431,100	7,269,200	-	-	-	-	-	-	-	-	-	7,269,200	
116005	No	Belle Isle Seawall Rehabilitation	Treatment	1,582,000	-	-	-	-	-	-	-	-	-	-	0	
116006	No	Belle Isle Intake System Rehabilitation and Improvements	Treatment	-	-	-	711,900	706,400	401,800	401,800	-	-	-	-	2,221,900	
116007	No	System Electrical Power Improvements	Treatment	3,072,300	937,800	-	-	-	-	-	-	-	-	-	937,800	
122003	No	Water Works Park to Northeast Transmission Main	Delivery	-	-	-	-	-	-	-	-	-	-	-	-	
122004	No	96-inch Water Transmission Main Relocation and Isolation Valve Installations	Delivery	31,534,400	27,761,300	45,912,900	37,104,700	4,693,000	-	-	-	-	-	-	115,471,900	
122006	No	Wick Road Water Transmission Main	Delivery	-	-	-	-	-	-	-	-	-	-	-	-	
122007	No	Merriman Road Water Transmission Main Loop	Delivery	-	193,400	2,291,800	2,752,100	746,500	746,500	3,251,800	4,449,300	5,134,600	4,435,600	3,214,300	27,215,900	
122013	No	14 Mile Transmission Main Loop	Delivery	7,289,400	-	-	-	-	-	-	-	-	-	-	0	
122016	No	Downriver Transmission Main Loop	Delivery	43,200	5,006,000	14,650,600	17,609,900	11,728,100	43,200	5,695,800	8,043,800	13,061,800	10,945,900	7,409,200	94,194,300	
122017	No	7 Mile/Nevada Transmission Main Rehab	Delivery	46,300	-	-	-	-	-	-	-	-	-	-	0	
122019	No	Jefferson Main Replacement Project	Delivery	-	-	-	20,957,500	20,892,600	-	-	-	-	-	-	41,850,100	
122020	Yes	Concord and Nevada Flow Control Valves	Delivery	-	781,100	3,899,400	3,913,000	-	-	-	-	-	-	-	8,593,500	
122021	Yes	Grosse Pointe Woods - Harper Woods (HW) 24" Main	Delivery	-	775,600	3,145,100	3,156,200	-	-	-	-	-	-	-	7,076,900	
122023	Yes	Adams Road Transmission Main	Delivery	-	836,600	4,628,600	4,644,800	-	-	-	-	-	-	-	10,110,000	
132007	No	Energy Management	Delivery	34,100	-	-	-	-	-	-	-	-	-	-	0	
132010	No	West Service Center Pumping Station - Reservoir, Reservoir Pumping, and Division V	Delivery	1,836,100	-	-	-	-	-	-	-	-	-	-	0	
132012	No	Ypsilanti Booster Pumping Station Improvements	Delivery	-	-	-	-	-	-	698,300	837,900	7,300,500	16,544,700	13,353,700	38,735,100	
132014	No	Adams Road Pumping Station Improvements	Delivery	-	-	-	1,264,000	1,260,600	1,260,600	6,575,500	13,055,800	15,202,700	13,639,400	9,416,700	61,675,300	
132015	No	Newburgh Road Booster Pumping Station Improvements	Delivery	283,400	7,010,000	9,922,700	11,620,500	9,923,500	6,755,900	1,300	1,300	1,300	-	-	45,236,500	
132016	No	North Service Center Pumping Station Improvements	Delivery	3,159,100	9,991,200	26,279,100	28,724,400	22,222,400	19,237,000	20,848,500	27,202,600	44,024,200	33,055,700	2,710,700	234,295,800	
132018	No	Schoolcraft Pumping Station Improvements	Delivery	-	-	-	-	-	-	-	-	-	1,900	706,400	708,300	
132019	No	Wick Road Pumping Station Improvements	Delivery	-	-	-	-	-	2,249,000	2,249,000	1,196,800	9,973,700	9,037,200	17,800	24,723,500	
132020	No	Franklin Pumping Station Improvements	Delivery	-	-	-	-	-	714,500	510,400	12,244,700	27,086,700	20,268,300	-	60,824,600	
132021	No	Imlay Pumping Station Improvements	Delivery	-	-	-	-	-	-	13,681,200	17,757,400	17,708,900	17,708,900	17,708,900	84,565,300	
132022	No	Joy Road Pumping Station Improvements	Delivery	-	-	-	-	-	-	-	-	-	240,400	997,300	1,237,700	
170300	No	Water Treatment Plant Automation Program	Treatment	-	-	-	24,300	6,174,200	6,775,600	6,775,600	3,446,200	24,300	24,300	24,300	23,268,800	
170302	No	SW SCADA System Upgrade	Treatment	1,885,700	-	-	-	-	-	-	-	-	-	-	0	
170305	No	WWP SCADA Network Upgrade	Treatment	-	-	-	-	4,965,700	2,576,300	-	-	-	-	-	7,542,000	
170306	No	SPW SCADA PLC Network Upgrade	Treatment	2,025,200	3,824,900	930,100	-	-	-	-	-	-	-	-	4,755,000	
170400	No	Water Transmission Improvement Program	Delivery	-	-	200	560,400	573,300	556,000	556,000	557,500	556,000	2,328,100	13,225,600	18,913,100	
170500	No	Transmission System Valve Rehabilitation and Replacement Program	Delivery	2,666,300	2,666,300	2,666,300	5,178,400	5,164,200	5,164,200	5,164,200	5,178,400	5,164,200	5,164,200	2,523,700	44,034,100	

FY 2026-2035 Schedule of Water CIP Cost Pool Allocations

CIP #	New to CIP?	Description	Primary Cost Pool	FY 2026 - 2035 (Ten Year) CIP										Ten Year CIP Total		
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		2035	
170503	No	Transmission Mains Valves and Urgent Repairs Contract 2	Delivery	(342,200)	31,900	-	-	-	-	-	-	-	-	-	-	31,900
170504	No	Transmission Mains Valves and Urgent Repairs Contract 1	Delivery	4,694,400	3,330,200	764,500	-	-	-	-	-	-	-	-	-	4,094,700
170506	No	Water Transmission, Valve, Emergency and Other Urgent Repairs	Delivery	2,075,100	3,228,500	3,905,100	3,417,500	2,357,700	181,100	-	-	-	-	-	-	13,089,900
170600	No	Linear System Integrity Program	Delivery	34,600	3,191,200	580,200	1,453,000	1,449,000	12,489,200	12,489,200	12,523,400	10,560,800	-	-	-	54,736,000
170601	No	Linear System Integrity Program - Contract 1	Delivery	9,561,300	42,700	21,500	21,500	21,500	9,940,500	21,500	21,500	312,000	312,000	5,833,200	-	16,547,900
170602	No	36-inch 24 Mile Road Transmission Main Condition Assessment	Delivery	5,217,100	19,100	912,800	-	-	-	-	-	-	-	-	-	931,900
170603	Yes	84"/72" Transmission Main Condition Assessment	Delivery	980,400	6,096,600	-	-	-	-	-	-	-	-	-	-	6,096,600
170604	Yes	96-inch Transmission Main Condition Assessment	Delivery	-	-	3,757,300	8,374,700	-	-	-	-	-	-	-	-	12,132,000
170800	No	System-Wide Finished Water Reservoir Inspection, Design and Rehabilitation	Delivery	-	-	-	-	-	-	-	-	-	-	-	-	-
170801	No	Reservoir Inspection, Design & Construction Project at Imlay Station, Lake Huron WT	Delivery	183,000	-	-	-	-	-	-	-	-	-	-	-	0
170802	No	Reservoir Inspection, Design, and Construction Management Services Phase II	Delivery	8,590,800	10,843,700	9,983,400	7,330,600	111,000	-	-	-	-	-	-	-	28,268,700
170803	No	Reservoir Inspection, Design, and Construction Management Services Phase III	Delivery	-	-	-	-	6,121,300	9,300,100	12,112,800	14,972,100	14,930,000	12,112,800	9,300,100	-	78,849,200
170900	No	Suburban Water Meter Pit Rehabilitation and Meter Replacement	Delivery	-	-	2,027,400	4,027,400	3,545,400	3,545,400	3,545,400	3,555,200	3,545,400	5,023,900	5,023,900	-	33,839,400
170904	No	Wholesale Water Meterpit Rehabilitation and Meter Upgrade - Phase II	Delivery	3,412,600	4,091,200	3,670,000	2,620,200	613,700	-	-	-	-	-	-	-	10,995,100
170906	Yes	Repurpose abandoned meter pits	Delivery	-	-	1,257,800	1,262,200	-	-	-	-	-	-	-	-	2,520,000
170907	Yes	GLWA New Water Master Meter FL-01 Vault Upgrade and Rightsizing	Delivery	2,500,500	19,500	-	-	-	-	-	-	-	-	-	-	19,500
171500	No	Roof Replacement at WWP, SP, LH, NE, SW, NSC, Orion, Franklin, and Conner Creek Fa	Treatment	-	-	-	-	382,200	514,000	1,728,300	1,730,600	2,754,900	2,754,900	1,519,800	-	11,384,700
171502	No	Lake Huron and Southwest Roof Replacement	Treatment	-	-	-	-	-	-	940,700	1,095,800	673,300	-	-	-	2,709,800
380700	No	As-Needed Geotechnical and Related Engineering Services	Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-
381000	No	Power Quality	Treatment	-	-	-	-	-	9,700	1,681,800	1,686,500	1,681,800	1,681,800	1,681,800	-	8,423,400
383300	No	Masonry Replacement and Rehabilitation Program	Treatment	-	-	-	-	-	-	2,583,700	2,590,800	2,583,700	2,583,700	2,583,700	2,583,700	12,925,600
Primary Cost Pool Summary																
			Treatment	94,763,400	95,199,600	95,946,400	101,233,000	121,098,100	89,772,800	88,156,100	76,719,800	100,107,800	107,522,500	121,954,100	-	997,710,200
			Delivery	83,799,900	85,916,100	140,276,700	165,993,000	91,423,800	72,183,200	87,400,900	121,597,700	174,562,800	150,819,000	91,441,500	-	1,181,614,700
			Total	178,563,300	181,115,700	236,223,100	267,226,000	212,521,900	161,956,000	175,557,000	198,317,500	274,670,600	258,341,500	213,395,600	-	2,179,324,900

Appendix 2 – GLWA Charges Manual Excerpt – “CIP Cost Pool Allocation Factors Overview”

What are cost pools and how do they impact charges for GLWA services?

A basic definition of a **cost pool** is a group of similar expenses. A **cost pool allocation factor** is related *data* that informs *how to allocate expenses* to achieve an equitable distribution of charges among Member Partners.

When, and how, does a project in the CIP begin to impact charge allocation?

There is no impact until after the first dollar is spent on the project. Even then, there is a timing delay because the asset is first recorded in accounting records. Then, those records are used, after the year-end close is completed, as a data source for the subsequent year’s cost of service study. So, CIP expenditures in year one (e.g. FY 2025) initially impact charges in year three (e.g. FY 2027) and continue to do so for the remaining life of the asset.

Costs that are allocated among Member Partners based on the asset record data include debt service payments and funds set aside in the improvement and extension funds for future pay-as-you-go funding.

Water System - Capital Improvement Plan & Cost Allocation

During much of calendar years 2023 and 2024, a working group of Member Partners and GLWA set out to simplify the water charges methodology. The resulting simplified methodology established an allocation of ALL water costs (both operating and capital) of 10% to Commodity, 50% to Max Day, and 40% to Peak Hour. That simplified approach to allocate shares of water system budgeted costs was implemented with the FY 2025 charges. Core analysis supported that 10/50/40 allocation based on historic and forecasted data. The allocation categories are defined below.

Commodity is determined based on the amount of water a member uses – this element is primarily related to utilities, chemicals and other purchased commodities, and not to capital investments.

Max Day is the maximum amount of water the member is expected to use on the day that the regional system, in aggregate, is using the most water. Being able to meet Max Day demands is a driver of the **Treatment** function’s operating and capital budget needs and a high priority service delivery performance measure.

Peak Hour is the maximum amount of water the member might use during the hour that the system as a whole is using the most water. Like Max Day, being able to meet Peak Hour demands, is a driver of **Delivery** function’s operating and capital budget needs and a high priority service delivery performance measure.

Historically, the *default cost pools were* Treatment and Delivery and are defined below.

Treatment costs are associated with treating raw water at the five GLWA water treatment plants.

Delivery costs are associated with transporting water to each member partner, including transmission mains and booster pump stations.

The bottom line is that water system cost pool designation of individual CIP projects no longer impacts charges. That being said, GLWA's underlying asset records will continue to assign a cost pool to support future analysis.

Sewer System - Capital Improvement Plan & Cost Allocation

In 2019, the sewer "SHARES Think Tank Group" proposed a simplification of the Wastewater Charge methodology to move away from a complex allocation approach that included "strength of flow" to determine charges. The resulting charge methodology, implemented for FY 2022 charges identifies three basic cost pools of WRRF, Conveyance and CSO 83/17, and allocates costs based on contributed wastewater volumes.

WRRF: All costs associated with wastewater treatment at the Water Resource Recovery Facility (WRRF). 50% of these costs are allocated to Member Partners based on total contributed volume and 50% based on contributed sanitary volume.

Conveyance: All costs associated with conveyance of wastewater to the WRRF to be treated. All of these costs are allocated to Member Partners based on total contributed wastewater flow.

CSO 83/17: The costs associated with specific combined sewer overflow (CSO) facilities identified in legal settlement agreements. Eighty-Three (83%) of these costs are assigned to the City of Detroit and seventeen (17%) to wholesale member partners based on these contractual agreements.