



- Innovation
- Conceptual WW MP
- Water MP Right Sizing
- Reliability/Redundancy
- NEWTP Repurposing

**Project Status** Future Planned

**CIP Type** Project

**Project New To CIP**

**Project Engineer/Manager** Chris Nastally

**Director** Chris Nastally

**Managing Dept** CSO

**Date Original Business Case Prepared** 8/20/2019

**Year Project Added to CIP** 2019

PERMIT NO. MD022802  
**STATE OF MICHIGAN**  
 DEPARTMENT OF ENVIRONMENT, GREAT LAKES,  
 AND ENERGY  
 AUTHORIZATION TO DISCHARGE UNDER THE  
 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
 In compliance with the provisions of the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., as  
 amended, and the Michigan Water Pollution Control Act, PA 207, MCL 325.1 et seq., as  
 amended, and the Michigan Sanitary Code, Part 33, Sanitary Standards, of the RSEPA, and Michigan Executive  
 Order 2011-1,  
 City of Detroit Water and Sewerage Department  
 172 River Road  
 Detroit, MI 48226  
 Great Lakes Water Authority  
 1725 Monument  
 Detroit, MI 48226

**Budget** Wastewater  
**Class Lvl 1** Wastewater  
**Class Lvl 2** CSO Facilities  
**Class Lvl 3** Multiple CSO Facilities  
**Location** Multiple Counties  
**Fund and Cost Center**

**Problem Statement**

The NPDES permit which governs CSO Discharges for GLWA requires GLWA to provide for prohibition, elimination, or adequate treatment of combined sewer discharges containing raw sewage. The current plans of 2008 and 2010 were approved by the EGLE (formerly MDEQ) and are the current plans of record. The new NPDES permit issued in July of 2019 opened the door for GLWA to refresh the Long Term Plan and submit to EGLE for review and approval by 11/15/2022. There are 56 total untreated outfalls operated by GLWA that require control in accordance with the NPDES permit language. The language allows for flexibility in terms of which outfalls GLWA shall address first, second & last, but nonetheless requires all of them to be addressed.

**Scope of Work / Project Alternatives**

This project will be a predecessor project to executing a long term CSO control plan, as required by the NPDES permit. This project will include evaluation of the requirements and work done under the 2008 and 2010 current plans of record, evaluation of elements within the Wastewater Masterplan aimed at CSO Control, evaluation of affordability, evaluation and siting of specific projects to be executed, and evaluation and programming of recommended projects to address affordability. The RFP for this project is presently being drafted.

**Other Important Info**

The wastewater masterplan, currently in draft format, has identified in it elements that are a part of the Long Term Plan, including a new storage conduit on the west-side for first flush capture, in-system storage dams, system diversions, and some netting facilities locations strategically selected. These will need to be evaluated and further fleshed out under this project and also evaluated against current system requirements, and former Long Term requirements and plans set forth in 2008 and 2010.

**Related Project**

Wastewater Masterplan - provides some inputs to this project, Former LT CSO Control 2008/2010 plans

**Primary Driver**

3 - Regulatory



GLWA FY 2021-2025 CIP

**Long Term CSO Control Plan**

270003 CIP#

**Driver Explanation**

The NPDES permit requires GLWA to provide for prohibition, elimination, or adequate treatment of combined sewer discharges containing raw sewage.

**PM Weighted  
Score**

**59.6**

Criteria	Score	Comment
Operations and Maintenance	1	This project will increase O&M requirements ul
Condition	1	This really doesn't apply.
Efficiency and Innovation	2	I scored this a 2 because elements of the plan
Performance (Service Level/Reliability)	3	This project will result in less untreated CSO Dis
Public Health and Safety	4	By controlling remaining untreated CSO discha
Financial	3	The development of the plan is relatively inexpe
Public Benefit	3	By reducing trash put into the river(s) during ur
Regulatory (Environmental/Legal)	5	This plan is required by regulatory NPDES perm

**RC Weighted  
Score**

**59.6**

Criteria	Score	Comment
Performance (Service Level/Reliability)	3	
Condition	1	
Public Benefit	3	
Regulatory (Environmental/Legal)	5	
Financial	3	
Operations and Maintenance	1	
Efficiency and Innovation	2	
Public Health and Safety	4	

**Phase** Study

**Contract** TBD

**Status** Future Planned Start

**Title** Long Term CSO Control Plan Development (study phase)

This phase will develop the LT CSO Control Plan, submit to the EGLE for approval, and program out projects. From this study/project, plans for design and construction will be developed with the purpose of executing the roadmap laid out for long term CSO control as defined by this plan and as required by the NPDES permit.

**Phase Budget** Wastewater

**Cost Allocation** CSO 83/17

**Phase Status** Future Planned Start

**Funding Source** Revenue Financed Capital

**Start Date**

**Fund** I&E/Bond

**End Date**

**Useful Life >20Yrs?** Yes

**Cost Estimation Information**

5 Cost Est. Class

8/20/2019 Cost Est. Date

CSO Manager Cost Est. Source

CSO Manager Cost Est. Prepared By

**Tot. Federal Loan Amount** \$0

**Program/Allowance Task Information**

**Project Manager** Chris Nastally

**CIP Number**

**Description**

This project will contain an allowance, however, the amount and what for is not determined.

Cost Type	Fiscal Year	Expense	Fringe	Benefit	NonPersonne	Comment
Engineering Services	FY21	\$2,710				2021 CIP
Engineering Services	FY22	\$2,134				2021 CIP
Engineering Services	FY23	\$656				2021 CIP

**Phase Total Expenses By FY (All figures are in \$1,000's)**

Prior Yr Actual	FY20	FY21	FY22	FY23	FY24	FY25	FY26+	Total	5-Yr Total
0	0	2,710	2,134	656	0	0	0	5,500	5,500

**Phase Task Dates**

Phase Task Name	Start Date	End Date	Duration
Pre-Procurement	9/15/2019	2/28/2020	166



Phase Task Name	Start Date	End Date	Duration
Procurement	2/29/2020	8/27/2020	180
Project Execution	8/28/2020	11/15/2022	809
Project Closeout	11/16/2022	2/14/2023	90

**Phase** GLWA Employees Project management

**Contract** NA

**Status** Future Planned Start

**Title** GLWA Salries

**Phase Budget** Wastewater

**Phase Status** Future Planned Start

**Start Date**

**End Date**

**Cost Allocation** CSO 83/17

**Funding Source** Revenue Financed Capital

**Fund** Improvement & Extension Fun

**Useful Life >20Yrs?** Yes

**Cost Estimation Information**

**Cost Est. Class**

**Cost Est. Date**

**Cost Est. Source**

**Cost Est. Prepared By**

**Tot. Federal Loan Amount**

**Program/Allowance Task Information**

**Project Manager**

**CIP Number**

**Description**

Cost Type	Fiscal Year	Expense	Fringe	Benefit	NonPersonne	Comment
GLWA Salaries CIP2021	FY20	\$68				2021 CIP
GLWA Salaries CIP2021	FY21	\$86				2021 CIP
GLWA Salaries CIP2021	FY22	\$86				2021 CIP
GLWA Salaries CIP2021	FY23	\$54				2021 CIP

**Phase Total Expenses By FY (All figures are in \$1,000's)**

Prior Yr Actual	FY20	FY21	FY22	FY23	FY24	FY25	FY26+	Total	5-Yr Total
0	68	86	86	54	0	0	0	294	226

**Phase Task Dates**



Long Term CSO Control Plan

**Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)**

CIP Alias	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total	5-Yr Total
2021	0	0	0	0	68	2,796	2,220	710	0	0	0	5,794	5,726

**Description of CIP Changes**

2019 - This project is new to the CIP. I was formerly pulled out of the unallocated amount in the CSO Control Program 260600 of previous CIP version.