



DEC Case# CO2-20110512-25, Modification to CO2-20000107-8

CSO Order on Consent
Quarterly Progress Report
Fourth Quarter 2023
(October 1st – December 31st)

January 30, 2024

Table of Contents

1. Executive Summary.....	3
2. Baseline CSO LTCP Projects	6
3. Overview of LTCP Program	8
3.1 Alley Creek CSO	9
3.2 Inner Harbor CSO	11
3.3 Flushing Bay CSO.....	12
3.4 Jamaica Bay and Tributaries CSO.....	15
3.5 Newtown Creek CSO	19
3.6 Bronx River CSO	21
3.7 Hutchinson River CSO.....	22
3.8 Citywide/Open Waters CSO	23
4. Appendix C State of Good Repair	25
5. Green Infrastructure Program.....	28
6. Community Relations	32
7. Key DEP Personnel	33



1. Executive Summary

The City of New York (the “City”), the New York City Department of Environmental Protection (DEP), and the New York State Department of Environmental Conservation (DEC) entered into the Combined Sewer Overflow Order on Consent (DEC Case # CO2-20000107-8) on January 14, 2005, which has been modified several times since 2005 including, April 14, 2008, September 3, 2009, March 8, 2012, March 26, 2015, and June 29, 2023 (collectively, the “CSO Order”). Pursuant to the CSO Order, the City is required to submit quarterly status reports to DEC (“Quarterly Reports”) describing actions taken toward achieving compliance with the CSO Order during the prior three-month period.

This Quarterly Report summarizes DEP’s actions and activities toward complying with the CSO Order’s milestones between **October 1, 2023** and **December 31, 2023**. DEP continued to make progress in the planning, design, and construction of its CSO facilities during this quarter, as documented in this report. As required by the CSO Order, DEP and DEC held a Quarterly Progress Meeting on **December 20, 2023** for the **third** quarter of **2023**.

Reportable Activity This Quarter

Date	Location	Event Description
10/10/23	Bronx River	Order To Commence Work at Bronx River Hydraulic Relief at HP-007 and HP-009, Bending Weir and Baffle at HP-011, NTP
12/2023	Flushing Bay	25 MG CSO Storage Tunnel, Submit Approvable Engineering Design Report
12/2023 (Modified to 3/2024)	Flushing Bay	Submit Rikers Island Feasibility Study and Decision Matrix for Use of Rikers Island for Construction of New WRRF milestones
12/11/23	Flushing Creek	NOV issued for milestones V.F.2, V.F.3, and V.F, TI-010 Disinfection at Flushing Creek CSO

Date	Location	Event Description
		Retention Tank and Diversion Chamber 5 and TI-011 Outfall Disinfection, Floatables Control at TI-R09 and Diversion Chamber 3.

Milestone Actions This Quarter (October 1 – December 31, 2023)

Location	Item Description	Milestone Date	Action	Status
Flushing Bay	Engineering Design Report	12/2023	Submit	Submitted
Flushing Bay	Reconstruction of North River Primary Settling Tanks	12/2023	BODR	Submitted
Flushing Bay	Rikers Island Feasibility Study	3/2023	Submit	Underway, On schedule
Flushing Bay	Decision Matrix for Rikers Island Use	3/2023	Submit	Underway, On schedule

Milestone Actions Next Quarter (January 1 – March 31, 2024)

Location	Item Description	Milestone Date	Action Required	Status
Alley Creek	Wetlands Monitoring and Design	2/2024	Submit Wetlands Monitoring Progress Report	On schedule
SOGR Appendix C	Reconstruction of Primary Settling Tanks at Bowery Bay WRRF	3/2024	NTP	Possible Force Majeure impact
SOGR Appendix C	Reconstruct tide gates/effluent chambers at the Spring Creek CSO Retention Facility	3/2024	Construction Completion	DEP to submit construction completion milestone modification request by 1/31/2024.

Pending Modification Requests (MR) and Open Force Majeure Event Claims (FM)

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Bronx River	Conveyance Improvements	DEP submitted a modification request on October 30, 2020 to eliminate a portion of the design scope of work and DEC responded on 12/4/2020 requesting additional data.	During design DEP determined that the HP-007 element of the proposed project would result in only minor CSO reductions.	Design Completion: 9/30/2022 HP-009, HP-011 Informal discussions extended to 1/31/2024	DEP to resubmit modification request to eliminate HP-007. DEC requested that DEP provide a schedule to develop a plan to quantify causes of non-attainment in freshwater section.
Flushing Bay	25 MG CSO Storage Tunnel	Submit Rikers Island Feasibility Study	3-month extension of milestone	12/2023	Approved extension to 3/2024
Flushing Bay	25 MG CSO Storage Tunnel	Submit Decision Matrix for Use of Rikers Island for Construction of New WRRF	3-month extension of milestone	12/2023	Approved extension to 3/2024
Flushing Creek	Disinfection and floatables control project	Split the approved Flushing Creek LTCP project for floatables control and disinfection into 2 separate projects and set of milestones	DEP has identified three properties that DEP must acquire prior to completion of design for the disinfection facilities to accommodate both disinfection and dechlorination at the Flushing Bay CSO Retention Facility.	Design Completion: 9/30/2022	On 12/12/2023, DEC sent a Determination denying DEP's modification request and an NOV for design completion of the disinfection project. DEP responded on 12/15/2023 requesting informal discussions in accordance with the dispute resolution provision of the Order and an extension of time to file an Article 78 was granted on 12/19/2023 extending informal discussions until 3/11/2024.



2. Baseline CSO LTCP Projects

The CSO Order contains milestones and schedules governing the planning, design and construction of DEP's Citywide CSO Program. Appendix A of the CSO Order includes schedules for construction projects that were identified as part of earlier CSO Waterbody/Watershed Facilities Planning, and were included in the baseline conditions for the subsequent waterbody-specific and Citywide/Open Waters LTCP that were approved by DEC. Those baseline projects have all been completed. The baseline projects and their certified construction completion dates are presented in the table below.

Baseline CSO LTCP Grey Projects - Completed

Location	Item Description	Construction Completion Certification Date	Project Cost
V. Flushing Bay	V.A.4 Whitestone Interceptor	12/12/2014	\$22.0M
	V.A.9 Flushing Interceptor	Deleted	N/A
	V.B.4 Divert Low Lying Sewers/Raise Weir BB-R02	10/10/2017	\$5.6M
	V.C.5 Regulator Modifications	6/8/2018	\$28.9M
	V.D.3 Environmental Dredging of Flushing Bay	3/30/2017	\$37.5M
VI. Jamaica Tributaries	VI.A.4 Parallel 48-inch Siphon/Interceptor	2/24/2017	\$20.2M
	VI.B.4 Bending Weirs	5/26/2016	\$6.8M

Location	Item Description	Construction Completion Certification Date	Project Cost
VIII. Newtown Creek	VIII.A.4 Enhanced Aeration in East Branch and Upper Newtown Creek	6/8/2018	\$16.7M
	VIII.B.4 Enhanced Aeration in Dutch Kills and Lower Newtown Creek	1/19/2014	\$26.1M
	VIII.C.4 Bending Weirs/Floatables Control	11/9/2017	\$43.7M
IX. Westchest er Creek	IX.A.4 Modifications to CSO-29 and CSO-29A	8/28/2020	\$18.9M
	IX.B.4 Pugsley Creek Parallel Interceptor start from CSO-24	1/23/2020	\$85.1M
XII. Jamaica Bay	XII.A.1 Rockaway WWTP Deliver/Treat 2XDDWF	Modified	N/A
	XII.B.5 26 th Ward HLSS Phase 1	11/26/2018	\$58M
	XII.B.5 26 th Ward HLSS Phase 2A	10/31/2021	\$90.6M
	XII.B.5 26 th Ward HLSS Phase 2B	10/31/2021	
	XII.C.3 26 th Ward WPCP Low Level Main Sewage Pumps	4/3/2015	\$7.6M
	XII.C.7 26 th Ward WPCP High Level Main Sewage Pumps	9/1/0/2018	\$17.3M
	XII.C.9 26 th Ward WPCP Improvements to PSTs 1-4 and Construction of PST 5	10/27/2021	\$155.8M
XIV. Wards Island	XIV.A.2 Reconstruction of Main Sewage Pumps	8/16/2019	\$5.2M
	XIV.B.3 Bar Screen Replacement	1/6/2017	\$13.7M

3. Overview of LTCP Program

The 10 Waterbody-Specific LTCPs and the one Citywide/Open Waters LTCP included in Appendix A of the Consent Order have all been completed and approved by DEC. The submittal dates and DEC approval dates are summarized in the table below. The following sub-sections present the status of implementation of the LTCPs.

CSO LTCP Milestones

	CSO Watershed	LTCP Submittal	Status
1	Alley Creek	June 2013	Approved 3/7/2017*
2	Westchester Creek	June 2014	Approved 8/1/2017
3	Hutchinson River	September 2014	Approved 3/7/2017*
4	Flushing Creek	December 2014	Approved 3/7/2017*
5	Bronx River	June 2015	Approved 3/7/2017*
6	Gowanus Canal	June 2015	Approved 3/29/2017
7	Coney Island Creek	June 2016	Approved 4/4/2018
8	Flushing Bay	December 2016	Approved 3/7/2017*
9	Newtown Creek	June 2017	Approved 6/27/2018
10	Jamaica Tributaries & Bay	June 2018	Approved 1/31/2023
11	Citywide/Open Waters 1,2	May 2020	Approved 7/10/2023

* DEP disputed approval on 4/10/2017 due to the inclusion of terms in approval letters not consistent with LTCPs as submitted to DEC; DEC issued clarifying letter dated 5/9/2017 that resolved the dispute.

- 1) Citywide/Open Waters include Harlem River, Hudson River, East River, and Upper and Lower New York Bay. Modification Request for extension of Citywide/Open Waters LTCP to December 31, 2018 approved by DEC on June 27, 2017.
- 2) Additional Modification Request for an extension of Citywide/Open Waters LTCP to May 30, 2020 approved by DEC on March 23, 2020.



3.1 Alley Creek CSO

Alley Creek LTCP, Alley Creek CSO Retention Facility Disinfection System, Approved on March 7, 2017

Design is on hold while DEP evaluates alternatives to disinfection based on additional facility planning for the disinfection facility. DEP submitted a modification request on January 31, 2022 and subsequent amendments to the modification request with the latest in June 2023 while also engaging in extensive discussions with DEC concerning that modification request and evaluation and identification of an appropriate alternative to disinfection. DEP has proposed deferring construction of the disinfection facilities to allow additional time to assess an Oakland Lake stormwater diversion and constructed wetlands as potential substitute projects to disinfection. The proposed modified milestones were publicly noticed in the ENB on June 14, 2023 and DEC approved on July 18, 2023.

Alley Creek CSO Retention Facility Disinfection System

Alley Creek CSO	DEC Approved Milestones	Status
1. Initiate Final Design	Sept 2018	Certified by DEP on 10/2/2017
2. Design Completion	Mar 2022 Mar 2026	Revised Milestone approved
3. Notice to Proceed to Construction	Sept 2022 Mar 2024	Revised Milestone approved
4. Construction Completion	Sept 2024 Mar 2029	Revised Milestone approved

Alley Creek Status of Non-construction Projects

Alley Creek Wetlands Monitoring:

The installation of the water quality instrumentation began in October 2022. Preliminary monitoring and calibration of the instrumentation was completed in Spring 2023. Official data collection, including water, sediment and groundwater sampling started July 1, 2023, and continued for two to three times a month through September 2023 (May through September is growing season). Monitoring is monthly during October and November 2023. At least half of the water and sediment quality samples were taken within 24 to 48-hours of a wet-weather event.

Alley Creek Wetlands Monitoring

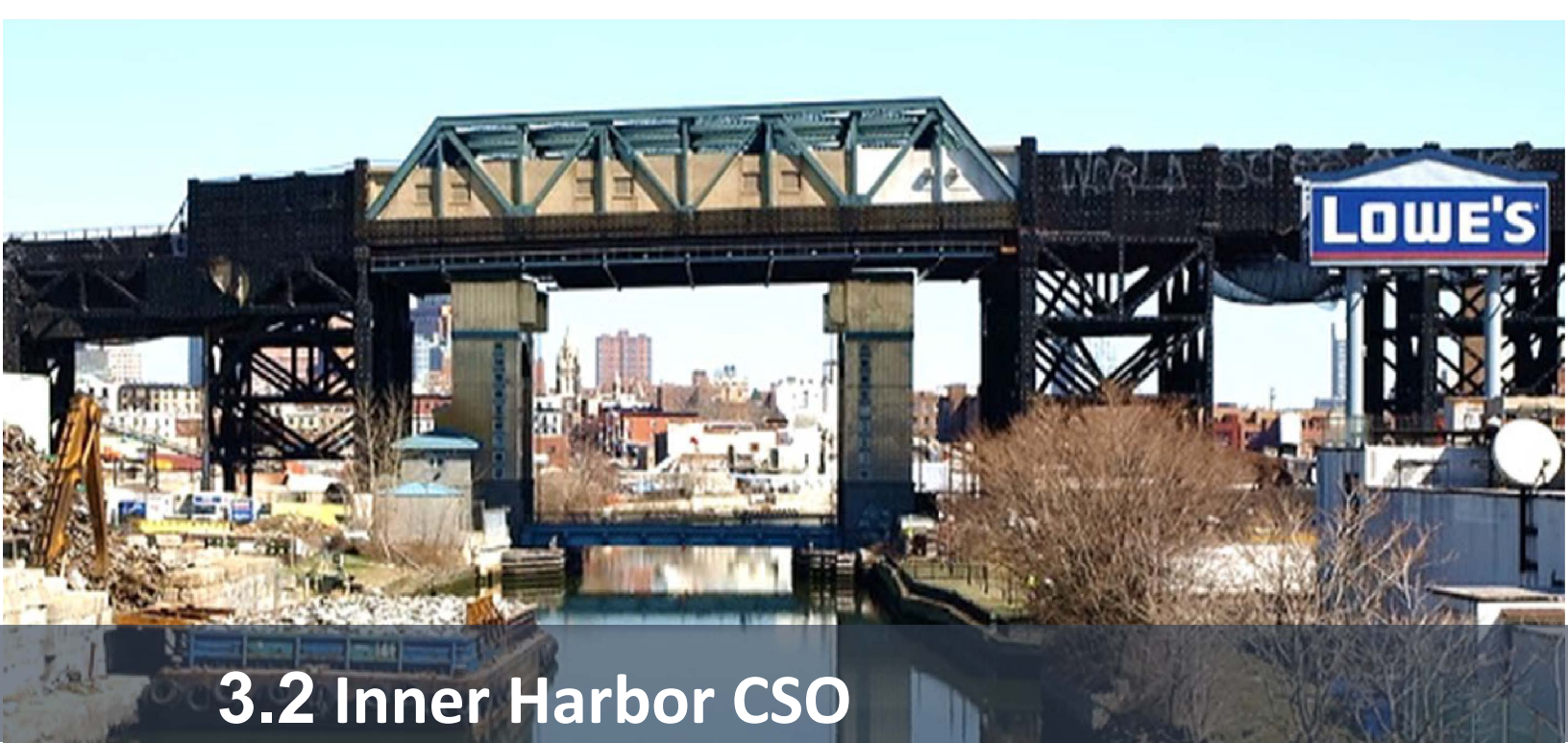
Alley Creek CSO	DEC Approved Milestones ⁽¹⁾	Status
Submit Literature Review	Nov 2022	Completed
Start Wetlands Monitoring	Jul 2023	Completed
Submit Wetlands Monitoring Progress Reports	Feb 2024	
Submit Approvable Wetlands BODR	Nov 2024	
Submit Wetlands Monitoring Final Report	Feb 2025	

Alley Creek Stormwater Diversion Feasibility Study:

The Alley Creek stormwater diversion study is currently underway and DEP has completed site investigations, refinements to the InfoWorks models based on data collected, flow monitoring and landside model calibration, and preliminary alternative analysis. DEP has conducted internal workshops and have had some internal meetings with parks department to discuss the viability of this project and impacts to Oakland Lake and Ravine. DEP submitted the flow monitoring and model validation report in October 2023 and has discussed with DEC. **DEP is conducting some additional water quality modeling to compare water quality attainment for the approved LTCP disinfection projects to the Oakland Lake Daylighting proposed modification.**

Alley Creek Oakland Ravine Daylighting Feasibility Study

Alley Creek CSO	DEC Approved Milestones	Status
Start Technical Feasibility Study	Nov 2022	Completed
Submit Approvable Technical Feasibility Study	Nov 2024	Underway, On schedule



3.2 Inner Harbor CSO

Gowanus Canal CSO LTCP Approved on March 29, 2017

- No projects were recommended in the LTCP.
- Under the EPA Superfund Program, CSO storage tanks are being implemented for outfalls RH-034 and OH-007.

3.3 Flushing Bay CSO

The Flushing Bay CSO Facility Planning area includes the portions of the Tallman Island WRRF and the High Level Interceptor of the Bowery Bay WRRF drainage areas, associated sewers, and pumping stations that discharge to Flushing Bay and Flushing Creek in Queens.

Flushing Bay LTCP, Flushing Bay 25 MG CSO Storage Tunnel, Approved on March 7, 2017

The draft of the Conceptual Engineering Report for the Flushing Bay CSO Storage Tunnel on schedule to be submitted to DEC by 12/31/2023. The report includes an assessment of necessary property acquisition needs, review of geotechnical investigation, project layout schematics, including potential locations of dewatering pump station and tunnel alignment, and basis for cost estimate and schedule.

Flushing Bay CSO Schedule, CSO-FB-TUN

Flushing Bay CSO	DEC Approved Milestones	Status
1. Initiate Design	7/31/2022	Complete
1a. Submit Approvable Engineering Design Report	12/31/2023	Complete
1b. Submit Rikers Island Feasibility Study	3/28/2024	Mod request approved by DEC on 12/19/2023
1c. Submit Decision Matrix for use of Rikers Island for construction of new WRRF	3/28/2024	Mod request approved by DEC on 12/19/2023
1d. Provide final decision for use of Rikers Island for construction of new WRRF	12/31/2024	12/31/2024

2. Design Completion	Jun 2025 ⁽¹⁾	TBD Pending Design Start
3. Notice to Proceed to Construction	Jul 2026 ⁽¹⁾	TBD Pending Design Completion
4. Construction Completion	June 2035 ⁽¹⁾	TBD Pending Design Completion

⁽¹⁾ Milestone dates may be subject to revision by DEC upon its approval of the Engineering Design Report (Item V.G.2)

Flushing Creek LTCP, TI-010 Outfall Disinfection at CSO Retention Tank and Diversion Chamber 5, TI-011 Outfall Disinfection, Floatables Control at TI-R09 and Division Chamber 3, Approved on March 7, 2017

Floatables Control construction was bid on 7/28/23. The lowest bidder withdrew on 9/11/23 and DEP moved forward with awarding the Contract to the 2nd Lowest Bidder, Northeast Remsco. On 09/29/23, DEP notified DEC that this is a 45-day force majeure delay to the NTP milestone. Flushing Creek Disinfection is progressing towards 60% Design as discussed at the Technical Meeting held with DEC on September 18, 2023. **DEC accepted this force majeure but said a formal determination of delays can't be made until an NTP is issued. The NTP for the floatables control was issued on 11/30/23.**

DEC issued a DEC Determination denying DEP's prior modification request and issued an NOV on 12/12/2023 and DEP responded on 12/15/2023 to initiate dispute resolutions and requested an extension of the time for informal discussions and to file an Article 78 that DEC granted on 12/19/2023 to continue informal discussions and extend the time to file an Article 78 to 3/11/2024.

Flushing Creek CSO Schedule, CSO-FC-FB-DES

Flushing Creek CSO	DEC Approved Milestones ⁽¹⁾	Status
1. Initiate Final Design	Dec 2018	Certified by DEP on Feb 8, 2019
2. Design Completion	Sept 2022	Modification request submitted proposing to break project into two (2) separate projects with modified milestone schedule for disinfection. DEC has issued an NOV and both parties agreed to initiate dispute resolutions prior to 3/11/2024
3. Notice to Proceed to Construction	Sept 2023	Floatables Control issued an NTP on 11/30/2023 and disinfection designs are still underway.
4. Construction Completion	Dec 2025	Floatables on schedule but disinfection is TBD

⁽¹⁾ Milestone dates may be subject to revision by DEC based on additional facility planning.

3.4 Jamaica Bay and Tributaries CSO

The Jamaica Bay and Tributaries CSO Facility Planning area includes the drainage areas of the Jamaica, 26th Ward, Coney Island, and Rockaway WRRFs and their associated sewers and pumping stations. The receiving waters of the study area include Bergen, Thurston, Shellbank, and Hawtree Basins, Fresh Creek, Hendrix Creek, Spring Creek, and the open waters of Jamaica Bay.

The modified order became effective as of May 25, 2021 and was executed on June 23, 2021.

On July 16, 2021, DEP submitted the Outfall Removal letter to DEC. DEC acknowledged receipt and approved the letter on July 19, 2021. On November 19, 2021, DEP submitted an inspection report documenting inspections conducted of the outfalls and diversions and regulators/tide gate chambers. DEC plans to formally accept this inspection report once the last tide gate chamber (D-3) has been sealed and inspected by DEC. On June 17, 2022, DEP submitted a certification letter stating that the Outfall Removal letter and Inspection Report were previously submitted to DEC and that the outfalls have been changed in the new SPDES permits. DEC acknowledged receipt of the certification letter on June 27, 2022.

Rockaway WRRF - Consent Order Modification Outfall Removal, Closure, Reclassification

Jamaica Bay CSO Modification	DEC Approved Milestones	Status
3. Complete an inflow and infiltration study (2020 Rockaway I&I) and submit the results of the study to DEC (I&I Report)	May 25, 2025	Due 4 years from effective date of the Order
4. Evaluate the maximum amount of flow that can be processed through full treatment at the WRRF. Submit an updated Wet Weather Operating Plan (WWOP)	May 25, 2024	Due 3 years from effective date of the Order
5. Permanently seal tide gate chambers connected to active stormwater outfalls	May 25, 2024	Last tide gate chamber (D-3) to be sealed by milestone due date

Jamaica Bay and Tributaries LTCP, Dredging of Bergen Basin, Installation of Ribbed Mussels in Bergen and Thurston Basin, Jamaica Bay and Tributaries Wetlands and Marsh Island Restoration, Approved on January 31, 2023

Funding in the amount of \$1.1M has been provided to the United States Army Corps of Engineers (USACE) for the City’s cost share for the Design of Stony Creek Marsh Island. \$4.5M has also been provided as the City’s cost share for the construction of the USACE’s perimeter Spring Creek North Wetland project. In addition, Design Agreements in the amount of \$1.225M for Duck Point Marsh Island and the Fresh Creek perimeter wetland in the amount of \$1.750M are currently under review by the Law Department.

Currently there are five mussel string installations within Bergen Basin. For the mussel count, approximately 2,800 are in situ within Bergen and another 1,500 are staged at nearby Inwood Marina, that are scheduled to be moved to Bergen Basin in early November. Another 5,120 are in spat collectors, currently in Bergen Basin, Inwood Marina and Paerdegat Basin. These are scheduled to be transferred to Bergen Basin in late Fall/early Winter as the collectors are analyzed. A total of approximately 9,420 mussels are currently available. It’s reasonable to assume that a total of 10K mussels will be in situ in Bergen Basin by the end of the calendar year. Additional mussels will be installed in spring 2024.

Jamaica Bay and Tributaries Schedule

E. Dredging of Bergen Basin	DEC Approved Milestones	Status
1. Initiate Final Design	Jul 2025	
2. Final Design Completion with CPM Analysis	Jan 2027	
3. Notice to Proceed to Construction	Jul 2028	
4. Construction Completion	Jan 2031	

F. Installation of Ribbed Mussels in Bergen and Thurston Basin	DEC Approved Milestones ⁽¹⁾	Status
1. Thurston Basin		
a. Initiate Final Design	Jan 2025	

F. Installation of Ribbed Mussels in Bergen and Thurston Basin	DEC Approved Milestones⁽¹⁾	Status
b. Final Design Completion with CPM Analysis	Jan 2027	
c. Notice to Proceed to Construction	Jul 2028	
d. Submit Approvable Maintenance Plan	Jan 2031	
e. Construction Completion	Jul 2031	
2. Bergen Basin		
a. Initiate Final Design	Jul 2029	
b. Final Design Completion with CPM Analysis	Jul 2031	
c. Notice to Proceed to Construction	Jan 2033	
d. Submit Approvable Maintenance Plan	Jul 2035	
e. Construction Completion	Jan 2036	

G. Jamaica Bay and Tributaries Wetlands and Marsh Island Restoration	DEC Approved Milestones⁽¹⁾	Status
1. Construction Completion¹ of 25 Equivalent Acres of Wetlands Restoration Projects funded by DEP	Dec 2030 ²	
2. Submit Interim Review and Approvable Contingency Plan³	Jun 2036	
3. Construction Completion⁴ of 50 Equivalent Acres of Wetlands Restoration Projects funded by DEP	Dec 2040	

1. Construction Completion for this milestone shall be determined by the Wetlands Restoration Projects that have been constructed, are currently under construction or will be constructed under a contract that has been issued an notice to proceed to construction (or USACE equivalent).
2. An Approvable Contingency Plan shall be submitted by the City by June 2031 if Appendix A milestone XII.G.1 is not met. The Contingency Plan shall include a schedule for completion of Wetlands Restoration Projects to ensure achievement of Appendix A milestone XII.G.3.
3. An Approvable Contingency Plan shall be submitted by the City if the Interim Review determines that a minimum of 50 equivalent acres of Wetlands Restoration Projects will not be completed by December 2040.
4. Construction Completion is defined under the CSO Order, Paragraph III.H.



3.5 Newtown Creek CSO

The Newtown Creek CSO Facility Planning area includes the portions of the Newtown Creek WRRF and the Low Level Interceptor of the Bowery Bay WRRF drainage areas that discharge to Newtown Creek, English Kills, Dutch Kills, Whale Creek, Maspeth Creek and the East Branch along the Brooklyn-Queens border.

Newtown Creek LTCP, Borden Avenue Pump Station Expansion, 62.5% CSO Storage Tunnel, Approved on June 27, 2018

Design of the Borden Avenue Pump Station Expansion and new forcemain from Borden Avenue Pump station to Newtown Creek is advancing. The tunneling design has identified two preferred routes and currently identifying property acquisition for the drop shafts and have had some preliminary discussions with DSNY,

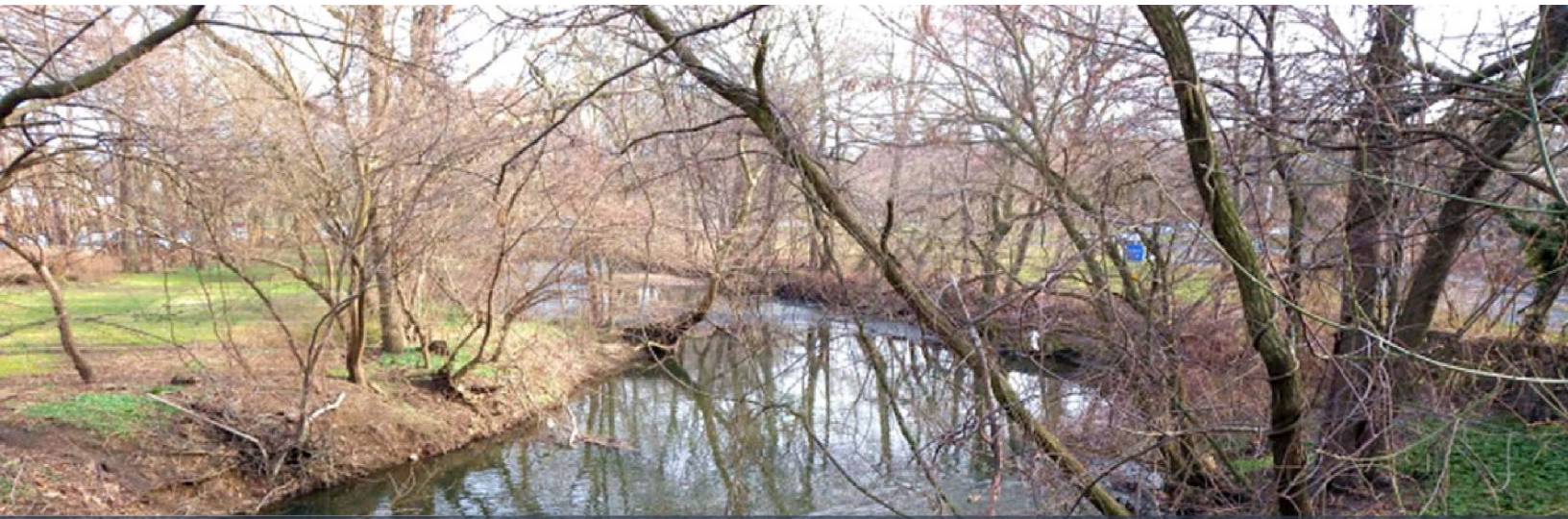
Newtown Creek CSO Schedule

Borden Ave Pumping Station Expansion	DEC Approved Milestones⁽¹⁾	Status
1. Initiate Final Design	Jul 2021	Complete 7/29/2021
2. Design Completion	Dec 2024	Design In Progress
3. Notice to Proceed to Construction	Sept 2025	TBD Pending Design Completion
4. Construction Completion	Sep 2029	TBD Pending Design Completion

(1) Milestone dates may be subject to revision by DEC based on additional facility planning.

CSO Storage Tunnel	DEC Approved Milestones⁽¹⁾	Status
1. Initiate Final Design	Aug 2022	Design initiated on 8/30/2022
2. Design Completion	Dec 2028	TBD Pending Design Progress
3. Notice to Proceed to Construction	Dec 2029	TBD Pending Design Completion
4. Construction Completion	Dec 2040	TBD Pending Design Completion

(1) Milestone dates may be subject to revision by DEC based on additional facility planning.



3.6 Bronx River CSO

Bronx River LTCP, Bronx River Hydraulic Relief at HP-007 and HP-009, Bending Weir and Baffle at HP-011, Approved on March 7, 2017

Construction NTP for HP-011 was issued on September 29, 2023 to Railroad Construction Co. Construction NTP for HP-009 was issued on September 29, 2023 to JR Cruz Corp. **DEC requested that DEP resubmit modification request to eliminate HP-007 scope of the project and include a proposed schedule to seek to quantify causes of non-attainment in the freshwater section of the Bronx River and as warranted and commit to corrective actions depending on the outcome of the study.**

Bronx River CSO Schedule, CSO-BXR-DES

Bronx River CSO	DEC Approved Milestones ⁽¹⁾	Status ⁽²⁾
1. Initiate Final Design	Sept 2018	Design Initiated 8/27/2018
2. Design Completion	Sept 2022	DEP submitted modifications to design scope on 10/30/2020 and milestone modification request - Under DEC review. Certified design completion for HP-009 and HP-011.
3. Notice to Proceed to Construction	Sept 2023	Both NTP for HP-009 and HP-011 were issued on 9/29/2023 and discussions ongoing to eliminate HP-007.
4. Construction Completion	Sept 2026	TBD

⁽¹⁾ Milestone dates may be subject to revision by DEC based on additional facility planning.

⁽²⁾ Pending modification request to eliminate a portion of the approved scope of work.



3.7 Hutchinson River CSO

Hutchinson River LTCP, CSO Outfall HP-024 2.8 MG Storage Conduit with Floatables Control, Approved on March 20, 2023

60% design ongoing.

Hutchinson River CSO Schedule, CSO-HR-DF-DES

Hutchinson Rive CSO	DEC Approved Milestones	Status
1. Initiate Final Design	Sept 2018	Design Initiated, 8/15/2018
2. Design Completion	March 2027	Design In Progress
3. Notice to Proceed to Construction	August 2028	TBD Pending Design Completion
4. Construction Completion	July 2033	TBD Pending Design Completion



3.8 Citywide/Open Waters CSO

Citywide/Open Waters LTCP, CSO Outfalls NR-040, NR-038, NR-046, RH-005, RH-014, TI-003, TI-023, and OH-015 regulator modifications/hydraulic capacity enhancements; CSO Outfall PR-013 Hannah Street Pump Station bypass connection. Approved on July 7, 2023.

Citywide/Open Waters CSO Schedule

Optimization and/or Modification of Regulators for CSO Outfalls 040, NR-038, NR-046, RH-005, RH-014, TI-003, TI-023, and OH-015 ¹	DEC Approved Milestones	Status
1. Initiate Final Design	July 2025	
2. Final Design Completion with CPM Analysis	July 2028	TBD Pending Design Initiation
3. Notice to Proceed to Construction	January 2030	TBD Pending Design Completion
4. Construction Completion	January 2033	TBD Pending Design Completion

¹Per the July 2023 LTCP Supplemental Documentation, Table 8.8-1, the optimizations or modifications to be completed shall include: increased orifice sizes for regulators NR-26A, NR-28, and NR-029A, increased orifice size and enlargement of branch interceptor downstream of regulator TI-10B, bending weir for regulator TI-13, weir modification for regulator RH-20A, weir modification, increased orifice size, and enlarging branch interceptor connection at regulator RH-13, and automated control gate for regulator OH-9C.

Installation of Hannah Street Pump Station Bypass	DEC Approved Milestones	Status
1. Initiate Final Design	July 2025	
2. Final Design Completion with CPM Analysis	July 2028	TBD Pending Design Initiation
3. Notice to Proceed to Construction	January 2030	TBD Pending Design Completion
4. Construction Completion	January 2033	TBD Pending Design Completion



4. Appendix C State of Good Repair

Appendix C: State of Good Repair Projects (Flushing Bay CSO Order Modification), Approved on September 22, 2022

State of Good Repair Project Schedule

Project	DEC Approved Milestones	Status
A. Reconstruction of Primary Settling Tanks at Bowery Bay WRRF (BB-216)		
1. Submit Approvable BODR	12/2022	Completed
2. Design Completion	12/2021	12/2021
3. NTP Construction	3/2024	TBD
4. Construction Completion	1/2029	TBD
B. Replacement of Existing Emergency Generators at Bowery Bay WRRF (BB-220)		
1. Submit Approvable BODR	12/2026	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
C. Replacement of Digesters at Hunts Point WRRF (HP-238)		
1. Submit Approvable BODR	12/2022	Completed
2. Design Completion	6/2021	Completed
3. NTP Construction	4/2022	Completed
4. Construction Completion	8/2028	TBD
D. Reconstruction of Sludge Handling Equipment at Hunts Point WRRF		
1. Submit Approvable BODR	12/2025	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
E. Reconstruction of Primary Settling Tanks at North River WRRF (NR-111)		
1. Submit Approvable BODR		Completed
2. Design Completion		

Project	DEC Approved Milestones	Status
3. NTP Construction 4. Construction Completion		
F. Rehabilitation of North River WRRF Influent and Effluent Gates and Bar Screens (NR-129)		
1. Submit Approvable BODR	12/2027	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	

Appendix C: State of Good Repair Projects (Jamaica Tributaries CSO LTCP), Approved on September 22, 2022

State of Good Repair Project Schedule

Project	DEC Approved Milestones	Status
G. Reconstruct tide gates/effluent chambers at the Spring Creek CSO Retention Facility WRRF (26W-149)		
1. Submit Approvable BODR	9/2022	Complete
2. Design Completion	10/2017	Complete
3. NTP Construction	5/2021	Complete
4. Construction Completion	3/2024	Delayed
H. Replace main sewage pumps at the Rockaway WRRF		
1. Submit Approvable BODR	6/2025	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
I. Reconstruct fender and bulkhead at the Rockaway WRRF		
1. Submit Approvable BODR	12/2026	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
J. Reconstruct heating system and greenhouse gas reduction at the Coney Island WRRF		
1. Submit Approvable BODR	12/2026	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
K. Install 13 new centrifuges at the 26th Ward WRRF		
1. Submit Approvable BODR	12/2026	
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion	TBD	
L. Reconstruct power distribution equipment at the Rockaway WRRF		
1. Submit Approvable BODR	12/2025	
	TBD	

Project	DEC Approved Milestones	Status
2. Design Completion	TBD	
3. NTP Construction	TBD	
4. Construction Completion		



5. Green Infrastructure Program

Program Overview

The 2023 Citywide Green Infrastructure Modification to the CSO Consent Order (Modified CO: CO 2-20230228-38), effective June 29, 2023, sets forth schedule, capture targets, expenditure targets and other requirements for the program to reduce CSO volume in combined sewer areas with green infrastructure and to construct green infrastructure assets citywide to manage stormwater.

DEP has identified Priority Areas based on several criteria, such as annual CSO volume, frequency of CSO events, and projected benefits of projects constructed through DEP’s Waterbody/Watershed Facility Plans or other system improvements planned. DEP also notes outfalls in close proximity to existing and future public access locations. DEP continues to review and expand the Priority Areas to ensure sufficient green infrastructure implementation to meet the **2040** goal set forth in the Order.

The identification of Priority Areas has enabled DEP to focus resources on specific CSO tributary areas, to analyze all potential opportunities, to saturate these areas with green infrastructure as much as possible, and to achieve efficiencies in design and construction.

DEP’s initial efforts focused primarily on the Area-wide right-of-way contracts building curbside rain gardens, infiltration basins, Stormwater Greenstreets, and porous pavement. DEP’s standardized designs and procedures have been critical to supporting the systematic implementation of green infrastructure at a wide scale. DEP expects to continue green infrastructure implementation using an expanded array of tools. While right-of-way implementation has been the greatest focus of the first decade of the Program, DEP is making significant advancements into other implementation areas as well, expanding public on-site retrofits on schools, parks, and housing properties, implementing new and enhanced stormwater regulations, exploring daylighting opportunities in the Bronx, and implementing stormwater recovery and reuse projects.

The table below provides the total assets, Greened Acres, and CSO volume reductions by waterbody as reported in the 2022 Annual Report. The next update to this table will be published in the 2023 Annual Report.

Watershed	Total Green Infrastructure Assets	Total Greened Acres*
Alley Creek	4	1

Bronx River	438	134
Coney Island Creek	55	13
East River / Open Waters	2,337	678
Flushing Bay	848	103
Flushing Creek	2,186	278
Gowanus Canal	149	29
Hutchinson River	209	33
Jamaica Bay & Tributaries	4,670	787
Newtown Creek	1,650	213
Westchester Creek	235	31
Total	12,781	2,299

*Greened acres = an area equivalent to one acre of impervious surface covered by one-inch of stormwater for distributed ROW assets (rain gardens, infiltration basins, stormwater greenstreets) and tributary drainage area for ROW porous pavement and all other assets

Implementation Update

During Quarter 4 of 2023, planning, design, and construction work continued in several Green Infrastructure (GI) Program initiatives and are summarized below:

- ROW - Ongoing Area-wide GI contracts to design and build thousands of curbside rain gardens, infiltration basins, stormwater greenstreets, and porous pavements in NYC’s streets and sidewalks. Design and construction contracts are being implemented in multiple phases.
- Public Property Retrofits - Ongoing siting, design and construction of public property retrofits in coordination with City agency and non-profit partners.
- Large-scale Medians - Ongoing siting and design by DEP’s in-house green infrastructure design team, which focuses on large-volume capture opportunities within public medians with the added benefit of localized flooding alleviation; construction is also ongoing.
- Stormwater Reuse – Ongoing design for Central Park and Prospect Park stormwater reuse projects that reduce potable demand and CSOs
- Private Property Initiatives
 - Green Infrastructure Grant Program - Ongoing design and construction of GI Grant Program projects on private property.
 - Private Incentives Retrofit Program - Branded as Resilient NYC Partners, program seeks to implement green infrastructure on private property to manage 200 greened acres over five years. Property owner engagement is ongoing.
- Stormwater Regulations – projects constructed by public and private property owners in compliance with Chapters 31 and 19.1 of Title 15 of the Rules of the City of New York (RCNY), including the 2022

Unified Stormwater Rule and New York City Stormwater manual published as effective on February 15, 2022.

- Daylighting – Ongoing design for Tibbetts Brook daylighting project, anticipated to be the Program’s largest green infrastructure project to-date providing significant CSO reduction and community benefits; additional project updates provided below.

Tibbetts Brook Daylighting Update

- CSX Acquisition
 - The City and CSX continue working toward a closing date by August 2024
- Phase 1 Improvements
 - Contract being registered and work is anticipated to begin in Spring 2024.
- Phase 2 Design and Engagement
 - NYC DEP and Parks received unanimous preliminary approval from Public Design Commission after public presentation on August 14, 2023.
 - Interagency comments on 75% Design milestone being addressed and integrated as part of 100% Design (anticipated Summer 2024).
 - Construction Management Contractor selected and Certificate to Proceed Request submitted to OMB.

Projects Toward Next CSO Volume Milestone

The table below provides the status of projects currently underway and contributing to the CSO volume reduction milestone of 668 million gallons per year (mgp) by December 31, 2025.

Waterbody Drainage Area	Project	Current Status	Anticipated Construction Completion Date
EROW	OH-015 Areawide ROW – Phase 1	75% design	December 31, 2025
EROW	OH-015 Areawide ROW – Phase 3	75% design	December 31, 2025
EROW	TI-03/23 Areawide ROW	In construction	December 31, 2025
Jamaica Bay	CI-005 Areawide ROW – Phase 1	In construction	December 31, 2025
Coney Island Creek, EROW, Gowanus, Jamaica Bay	Expanded Public Onsite – GI-CONS-01	In construction	December 31, 2025
Alley Creek, EROW, Gowanus, Jamaica Bay	Expanded Public Onsite – GI-CONS-02	NTP	December 31, 2025
Various	Private Incentives Retrofit Program – “Resilient NYC Partners” – Phase 1	Ongoing	December 31, 2025
EROW	Central Park Stormwater Recovery and Reuse	50% design	December 31, 2025
EROW	Prospect Park Stormwater Recovery and Reuse	In construction procurement	December 31, 2025



6. Community Relations

**Public Participation Plan meeting photo taken prior to 3/2020, pre-COVID-19 distancing requirements.*

*DEP's Public Participation Plan was released to the public on **June 26, 2012** and describes the multi-pronged tools and activities DEP will utilize to inform and involve diverse stakeholders and the broader public throughout the LTCP process. The Plan provides a framework for communicating with and soliciting input from interested stakeholders on water quality and the challenges and opportunities for CSO controls.*

DEP will report quarterly to DEC on completed public participation activities outlined in the public participation plan as part of this and all future CSO Quarterly Reports. All updates to the Public Participation Plan implemented as a result of public comments received and quarterly reviews of public participation activities by DEC will be posted annually to DEP's website.

LTCP and Green Infrastructure Education & Outreach Meetings

Outreach Meeting	Date	Outreach Type	No. of Attendees
Green Infrastructure Grant Program Winter Workshop	December 11, 2023	Virtual	27

Updates on the LTCP Program including the submission of the Open Waters/Citywide LTCP are being shared with the public through the DEP website at nyc.gov/dep/ltcp.



7. Key DEP Personnel

DEP Bureau and corresponding Portfolio Manager and Accountable Manager.

Planning Area	Project	DEP Responsible Personnel		
		Bureau	PM	AM
Alley Creek	CSO-AC-DF-DES: Alley Creek CSO Disinfection	BEDC	Osit	-
Flushing Bay	CSO-FC-FB-DES: Flushing CSO Floatables Control	BEDC	Tysvaer	Harvey
	CSO-FC-DF-DES: Flushing CSO Disinfection Facility	BEDC	Tysvaer	Harvey
	CSO-FB-TUN: Flushing Bay CSO Storage Tunnel	BEDC	Osit	Liu
Newtown Creek	CS-NC-CST: CSO Storage Tunnel	BEDC	Tysvaer	Edden
	CS-NC-BAP: Borden Ave PS Expansion	BEDC	Tysvaer	Harvey
Bronx River	CS-BXR-009, CS-BXR-011: Hydraulic Relief at HP-009, Bending Weir and Baffle at HP-011	BEDC	Solimando	Sadat
Hutchinson River	CSO-HR-DF: Hutchinson River 2.5MG Conduit and Floatables Control	BEDC	Tysvaer	Szeto
Jamaica Bay	CS-JB-MUS: Ribbed Mussels	BEPA	McLaughlin	TBD
	CS-JB-WET: Wetland Restorations	BEPA	McLaughlin	TBD
	BB-DRDG: Bergen Basin Dredging	TBD	TBD	TBD
GI	Green Infrastructure	BEPA	Enoch	Kocovic
Flushing Bay SOGR	BB-216: Reconstruction of Primary Settling Tanks at Bowery Bay WRRF	BEDC	M. Osit	C. Szlaien
	BB-220: Replacement of Existing Emergency Generators at Bowery Bay WRRF	BEDC	M. Osit	C. Szlaien
	HP-238: Replacement of Digesters at Hunts Point	BEDC	M. Osit	L. Joseph
	HP-239: Reconstruction of Sludge Handling Equipment at Hunts Point WRRF	BEDC	M. Osit	
	NR-111: Reconstruction of Primary Settling Tanks at North River WRRF	BEDC	M. Osit	F. Giardina
	NR-129: Rehabilitation of North River WRRF Influent and Effluent Gates and Bar Screens	BEDC	M. Osit	F. Giardina

Jamaica Bay SOGR	26W-149: Reconstruct tide gates and effluent chambers at the Spring Creek CSO Retention Facility WRRF	BWT	J. Hoffman	A. Garuba
	RO-2: Replace main sewage pumps at the Rockaway WRRF	BEDC	N. Shah	Y. Ma
	R-151: Reconstruct fender and bulkhead at the Rockaway WRRF			
	CI-124: Reconstruct heating system and greenhouse gas reduction at the Coney Island WRRF	BWT	J. Hoffman	A. Garuba
	26W-144: Install 13 new centrifuges at the 26th Ward WRRF	BEDC	D. Solimando	R. D'Attile
	R-156: Reconstruct power distribution equipment at the Rockaway WRRF	BEDC	N. Shah	S. Joseph