



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

CSO Order on Consent
Quarterly Progress Report
Third Quarter 2017
(July 1st – September 30th)

October 30, 2017

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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 was modified April 14, 2008, September 3, 2009, March 8, 2012, and March 26, 2015 (collectively, the “CSO Order”). Pursuant to the Order, the City is required to submit quarterly status reports to DEC (“Quarterly Reports”) describing actions taken toward achieving compliance with the Order during the prior three-month period.

This Quarterly Report summarizes DEP’s actions and activities toward complying with the Order’s milestones between **July 1st, 2017** and **September 30th, 2017**. 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 Order, DEP and DEC held a Quarterly Progress Meeting on **September 27th, 2017 at Hazen and Sawyer’s New York City Office** to discuss issues related to the Order and review milestones met during the second quarter of 2017.

Reportable Activity This Quarter

Date	Location	Event Description
July 5, 2017	Citywide	Section IV. Green Infrastructure Metrics Report. DEC approved report.
July 5, 2017	Citywide	Section IV. Green Infrastructure Contingency Plan. DEC approved report
July 10, 2017	Flushing Bay	V.L.3. Flushing Bay Dredging. DEP certified construction completion of dredging activities. On 9/12/2017, DEC rejected the certification. As a result, DEP will continue to report on the shoreline revetment.
July 11, 2017	Westchester Creek	IX.G. Westchester Creek CSO Submit Approvable Drainage Basin Specific LTCP for Westchester Creek. DEP responded to DEC comments on LTCP
September 20, 2017	Flushing Bay	V.J.4. Flushing Bay Low Lying Sewers. DEP certified construction completion milestone.
July 27, 2017	Jamaica Bay	XII.I.3. Jamaica Bay 26th Ward HLSS Phase 2. DEP certified design completion milestone
July 31, 2017	Jamaica Bay	VI.H.4 Jamaica Bay Parallel 48" inch Siphon/New Sanitary Sewer. DEP certified completion of proposed milestone in "mini-mod" for initiation of design of a new sanitary sewer
August 1, 2017	Westchester Creek	IX.G. Westchester Creek CSO Submit Approvable Drainage Basin Specific LTCP for Westchester Creek. DEC approved the Westchester LTCP report.
August 7, 2017	Alley Creek	Alley Creek CSO LTCP: Retention Facility Disinfection System – DEP initiated design.
August 16, 2017	Jamaica Bay	XII.L. Jamaica Bay CSO Submit Approvable Drainage Basin Specific LTCP for Jamaica Bay Tributaries. DEC approves modification request for June 2018 submittal following public comment period.
August 24, 2017	Citywide	XIV.A.1. Citywide CSO Submit Approvable Drainage Basin Specific LTCP for Open Waters– DEC approves modification request for December 2018 following public comment period.
September 13, 2017	Flushing Bay	V.J.4. Divert Low Lying Sewers/Raise Weir BB-R02 – Construction completion of new sanitary sewers and raising of weir at BB-02.

Milestone Actions This Quarter

Location	Item Description	Milestone Date	Action Required	Status
Jamaica Bay	Lateral Sewer and Removal of Homes from Intercepting Sewer	July 2017	Design Initiation	Pending certification

Milestone Actions Next Quarter

Location	Item Description	Milestone Date	Action Required	Status
Newtown Creek	Bending Weirs/Floatables Control	Dec 2017	Construction Completion	Construction ongoing
Newtown Creek	Enhanced Aeration in Dutch Kills and Lower Creek	Dec 2017	Construction NTP	Modification request to be submitted
Jamaica Bay	Rockaway WPCP Conveyance	Dec 2017	Construction Completion	Modification request to be submitted
Wards Island	Wards Island WWTP Headworks Improvements Reconstruction of MSPs	Dec 2017	Construction Completion	Modification request to be submitted

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

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Flushing Bay	Low Lying Sewers/Raise Weir at BB-R02	<ul style="list-style-type: none"> • DEP submitted FM (groundwater conditions) and MR (precast manhole) 11/14/16 • DEC requested additional information relating to FM 01/11/17 • DEP supplemented its FM claim and MR 06/27/2017 	<ul style="list-style-type: none"> • Unexpected groundwater conditions at excavation site caused 125-day delay (FM) • Contractor's use of precast manhole caused 211-day delay (MR) 	Dec 2016	<p>Construction Complete 9-2017</p> <p>Pending mod request for 12/2017</p>
Newtown Creek	VIII.K.4 Bending Weir / Floatables Control	<ul style="list-style-type: none"> • DEP submitted FM 10/9/15 • DEC accepted FM claim 11/2/15 and requested updates 	<ul style="list-style-type: none"> • Subsurface obstructions at Q-1 regulator site that were not identified during design phase 	Dec 2017	Construction ongoing
Newtown Creek	VIII.K.4 Bending Weir / Floatables Control	<ul style="list-style-type: none"> • DEP Submitted FM 2/2/17 • DEC accepted FM 3/21/17 • DEP to update on extent of delays and mitigation efforts 	<ul style="list-style-type: none"> • Extensive structural repairs are required to the diversion chamber to install baffles 	Dec 2017	Construction ongoing
Jamaica Bay	XII.K.8 26 th Ward WWTP Preliminary Treatment Reliability Improvements	<ul style="list-style-type: none"> • DEP submitted FM 12/30/15 • DEC accepted FM 2/29/16 • DEP to update on extent of delays and mitigation efforts 	<ul style="list-style-type: none"> • Discovery of a void in a portion of an abandoned outfall structure 	Jul 2018	Construction ongoing
Jamaica Bay	XII.K.9 26 th Ward WWTP Preliminary Treatment Reliability Improvements to PSTs #1 and PST #4, and construction of PST #5	<ul style="list-style-type: none"> • DEP submitted FM 8/17/16 • DEC accepted FM 12/9/16 • DEP to update on extent of delays and mitigation efforts 	<ul style="list-style-type: none"> • Unexpected rupture of sludge line during a routine operation 	XII.K.9 Jul 2020	Construction Ongoing

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Jamaica Bay	XII.K.9 26 th Ward WWTP Preliminary Treatment Reliability Improvements to PSTs #1 and PST #4, and construction of PST #5	<ul style="list-style-type: none"> • DEP submitted FM 1/9/17 • DEC accepted FM 1/17/17 • DEP to update on extent of delays and mitigation efforts 	<ul style="list-style-type: none"> • Conflicting Pipes obstruct planned work 	Jul 2020	Construction Ongoing
Jamaica Bay	XII.K.9 26 th Ward WWTP Preliminary Treatment Reliability Improvements to PSTs #1 and PST #4, and construction of PST #5	<ul style="list-style-type: none"> • DEP submitted FM 3/21/17 • DEC accepted FM 6/27/17 • DEP to update on extent of delays and mitigation efforts 	<ul style="list-style-type: none"> • Hazardous materials were found on pipes that need to be demolished. 	Jul 2020	Construction Ongoing
Westchester Creek	IX.E.4. Modification to CSO-29 and CSO-29A, Construction Completion	<ul style="list-style-type: none"> • DEP submitted FM 3/21/17 	<ul style="list-style-type: none"> • Unknown underground concrete structure found that will interfere with installation of soldier piles 	Dec 2019	Construction ongoing
Wards Island	Wards Island WWTP Headworks Improvements Reconstruction of Main Sewage Pumps	<ul style="list-style-type: none"> • DEP submitted FM 5/31/16; additional requested information submitted 11/11/16 • DEP submitted FM 3/21/17 based on failure of MSP Motor Nos. 2 and 6 	<ul style="list-style-type: none"> • DEC accepted FM claim on 8/29/16 • DEC requested additional info on 6/27/17 	Dec 2017	Construction ongoing



2. Construction Contracts

The CSO Order contains milestones and schedules governing the planning, design and construction of DEP's Citywide CSO Program. Numerous CSO-related facilities will be constructed to reduce combined sewage discharges to the receiving waters surrounding the City. The table below identifies, by percentage, the estimated amount of construction that has been performed on projects that are in progress.

Location	Item Description	Notice to Proceed	Construction Completion Milestone	Projected Completion	% of Time Elapsed	% of Construction Completed ⁽¹⁾
	Flushing Interceptor	TBD	TBD	-	-	-
	Divert Low-Lying Sewers/Raise BB-R02	Dec 2014	Dec 2016	Dec 2017	164%	100%
	Regulator Modifications	Dec 2015	Jun 2018	Jun 2018	78%	73%
	Flushing Bay Dredging	Sep 2016	Mar 2019	Mar 2019	50%	100%
	Enhanced Aeration East Branch, Upper Newtown Cr	Oct 2015	Jun 2018	Jun 2018	62%	61%
	Enhanced Aeration Dutch Kills, Lower Newtown Creek	Dec 2017	Dec 2020	Dec 2020	-	-
	Bending Weirs/Floatables Control	May 2015	Dec 2017	Dec 2017	80%	76%
	Modifications to CSO-29 & 29A	Dec 2015	Dec 2019	Dec 2019	40%	31%
	Pugsley Creek Parallel Interceptor	Dec 2016	Dec 2020	Dec 2020	17%	2%

Location	Item Description	Notice to Proceed	Construction Completion Milestone	Projected Completion	% of Time Elapsed	% of Construction Completed⁽¹⁾
Jamaica Bay	26th Ward HLSS Phase 1	Mar 2016	Dec 2018	Dec 2018	45%	51%
	26th Ward HLSS Phase 2	Mar 2018	Dec 2020	Dec 2020	-	-
	26th Ward HLSS Phase 3	Mar 2020	Dec 2022	Dec 2022	-	-
	26th Ward High Level MSP	Jun 2015⁽²⁾	Jul 2018⁽²⁾	May 2018	77%	67%
	26th Ward PSTs 1-5	Jan 2016⁽²⁾	Jul 2020⁽²⁾	Oct 2020	39%	37%
	Rockaway WWTP Conveyance		Dec 2017	Pending Mod RRequest	-	-
	MSP Replacement	Mar 2015	Dec 2017	Dec 2018	91%	48%
	Bar Screen	Dec 2014	Jun 2018	Jun 2018	80%	91%

(1) Percentage Construction Completion is tracked based on cost incurred.

(2) Modifications to the CSO Order related to the Wards Island and 26th Ward WWTPs are memorialized in a Consent Order effective March 26, 2015.



3. Alley Creek CSO

Alley Creek LTCP Approved on March 7, 2017

Alley Creek CSO Schedule

Alley Creek CSO	DEC Approved Milestones ⁽¹⁾	DEP Projected Schedule ⁽²⁾
Permanent Disinfection Facility for Outfall TI-025		
1. Initiate Final Design	Sept 2018	August 2017
2. Design Completion	Sept 2021	Apr 2021
3. Notice to Proceed to Construction	Sept 2022	Jun 2022
4. Construction Completion	Sept 2024	Jul 2024

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

⁽²⁾ DEP projected dates are based upon our best available information and includes a qualitative risk analysis. These schedules will continue to be refined as design and construction progress and associated risks can be more accurately quantified and reflected in the schedules.

CSO-AC-DF-DES: Design and Design Services During Construction for Alley Creek CSO Disinfection Project

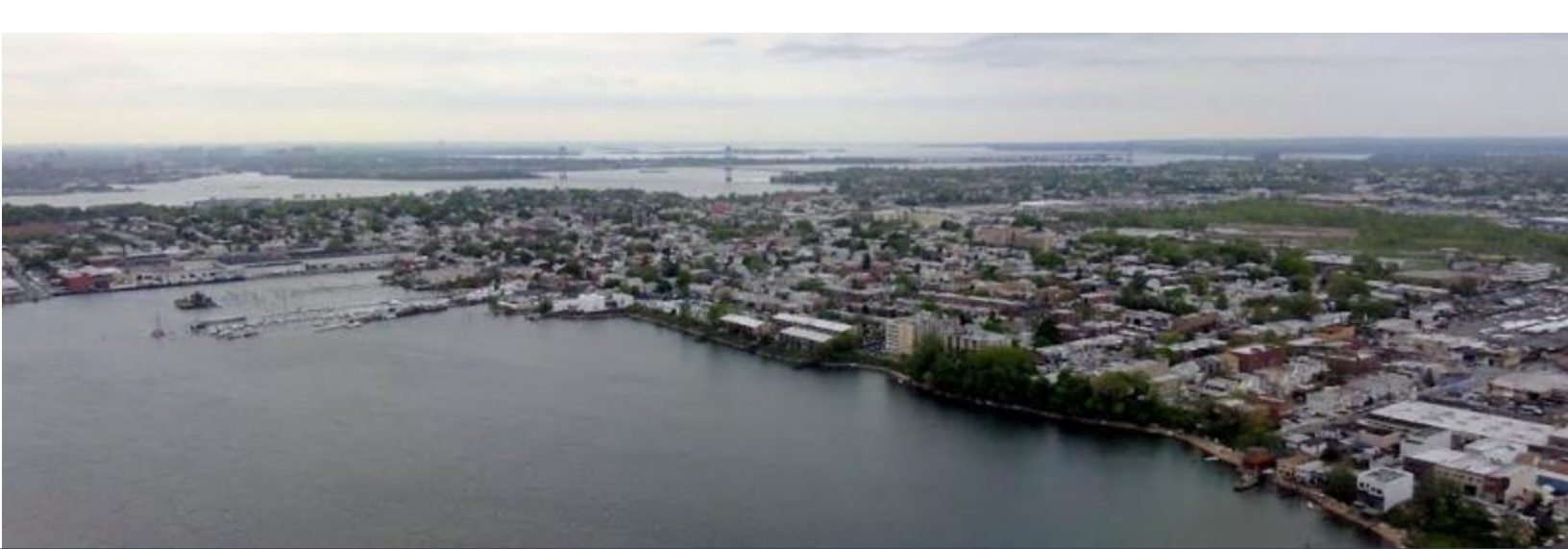
- Order to Commence Work was issued on August 4, 2017 to O’Brien & Gere Engineers, Inc.



4. Inner Harbor CSO

Gowanus Canal LTCP Approved on March 29, 2017

- February 27, 2015 - DEP certified construction completion of the Flushing Tunnel Modernization and Pump Station Reconstruction as of December 24, 2014 and June 20, 2014 respectively.
- April 13, 2015 – DEC accepted DEP’s certification of construction completion in accordance with the CSO Order.
- DEP continues to operate the Flushing Tunnel in accordance with its operational plan and is proceeding with a project expected to mitigate foam generated from the Flushing Tunnel.



5. Flushing Bay CSO

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

Construction Contracts

	Tallman Island Flushing Interceptor	Divert Low-Lying Sewers / Raise Weir BB-R02	Regulator Modifications	Environmental Dredging
<i>Contract ID</i>	TBD	CS-FB-LLD	CS-FB-BWR	CSO-DRDG DRG-FB
<i>Plan Elements</i>	Monitor Flushing Interceptor sag in Ulmer Street and address if periodic monitoring indicates necessity	Divert Low Lying sewers in vicinity of Bowery Bay WWTP. Raise weir at regulator BB-02	Bowery Bay High Level Interceptor regulator modifications at ten regulators	Environmental Dredging of Flushing Bay
<i>Location</i>	From MH 45 at Whitestone Expressway to MH 29 at Ulmer Street and 25 th Avenue	Regulator BB-02. Berrian Blvd and 19 th Ave between 43 rd St. and 45 th St.	Five of ten regulators along 108 th street, Ditmars Blvd and the LaGuardia Airport site	Proximate to CSO Outfalls BB-006 and BB-008
<i>Cost</i>	TBD	\$5,610,000	\$28,820,000	\$34,720,000
<i>Status</i>	No construction activity	Certified Complete on 9/11/2017	In Construction	Dredging Complete on 7/12/17 – Proceeding with shoreline revetment.

Design Activity Summary

	This Quarter	Next Quarter
Tallman Island Flushing Interceptor	<ul style="list-style-type: none"> A survey of the manhole rim and pin elevations was performed. The interceptor elevation remains unchanged. 	<ul style="list-style-type: none"> CCTV/Sonar inspection to be performed to monitor structural integrity.
Divert Low-Lying Sewers / Raise Weir BB-R02	<ul style="list-style-type: none"> Complete 	
Regulator Modifications	<ul style="list-style-type: none"> DSDC 	<ul style="list-style-type: none"> Continue with DSDC.

Construction Activity Summary

	This Quarter	Next Quarter
Tallman Island Flushing Interceptor	<ul style="list-style-type: none"> No construction activity 	<ul style="list-style-type: none"> No construction activity
Divert Low-Lying Sewers / Raise Weir BB-R02	<ul style="list-style-type: none"> Certified completion on 9/11/2017 	
Regulator Modifications	<ul style="list-style-type: none"> At BB-R10, placed concrete for roof. Removed temporary roadway decking and placed concrete roadbase. Installed access hatch. . At BB-R09, completed demolition of west barrel, excavate to subgrade and subsequent placement of concrete for west base slab and west wall of chamber expansion. Installed access hatch and completed modifications to existing dry weather channel and flume at BB-R06. Completed access vault staircase, installation of access hatch. Began installation of stop log guides. . 	<ul style="list-style-type: none"> At BB-R10 begin installation of stop log guides and site restoration. At BB-R09, complete demolition of east barrel and excavate to subgrade. Install reinforcement and place concrete for east base slab and east wall of chamber expansion. At BB-R06 begin site restoration on east side. Switch work area to west side for installation of new access hatch. Plug existing siphon and install dissipation blocks at BB-R05. At BB-R04, complete installation of stop logs and topping slab in overflow channel. Final site restoration and returning of site to Port Authority.
Environmental Dredging	<ul style="list-style-type: none"> Continue with shoreline revetment in accordance with permit. 	<ul style="list-style-type: none"> Continue with shoreline revetment in accordance with permit.

Flushing Bay LTCP Approved on March 7, 2017

Flushing Bay CSO Schedule

Flushing Bay CSO	DEC Approved Milestones ⁽¹⁾	DEP Projected Schedule ⁽²⁾
1. Initiate Final Design	Jul 2021	Jan 2019
2. Design Completion	Jun 2025	Dec 2025
3. Notice to Proceed to Construction	Jul 2026	Feb 2027 (Phase I)
4. Construction Completion	June 2035	Jul 2035 (Phase II)

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

⁽²⁾ DEP projected dates are based upon our best available information and includes a qualitative risk analysis. These schedules will continue to be refined as design and construction progress and associated risks can be more accurately quantified and reflected in the schedules.

Flushing Bay CSO LTCP

- Request for Proposals being developed.

Flushing Creek CSO Schedule

Flushing Creek CSO	DEC Approved Milestones ⁽¹⁾	DEP Projected Schedule ⁽²⁾
Disinfection Facilities for TI-010 and TI-011 and Floatables Control		
1. Initiate Final Design	Sept 2018	Oct 2018
2. Design Completion	Sept 2022	Dec 2022 (Floatables) Aug 2023 (Disinfection)
3. Notice to Proceed to Construction	Sept 2023	Feb 2025 (Disinfection) Dec 2023 (Floatables)
4. Construction Completion	Dec 2025	May 2026 (Floatables) Nov 2028 (Disinfection)

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

⁽²⁾ DEP projected dates are based upon our best available information and includes a qualitative risk analysis. These schedules will continue to be refined as design and construction progress and associated risks can be more accurately quantified and reflected in the schedules.

CSO-FC-FB-DES: Design and Design Services During Construction for the Construction of the Flushing Creek CSO Floatables Control Facility

- Preparing to advertise Request for Proposals in the next Quarter

CSO-FC-DF-DES: Design and Design Services During Construction for the Construction of the Flushing Creek CSO Disinfection Facility

- Preparing to advertise Request for Proposals in the next Quarter



6. Jamaica Tributaries CSO

The Jamaica Tributaries CSO Facility Planning area includes the drainage area of the Jamaica WWTP and its associated sewers and pumping stations. The receiving waters of the study area are Bergen, Thurston, Shellbank, and Hawtree Basins, which are located along the eastern shore of Jamaica Bay on either side of JFK International Airport.

Construction Contracts

	Parallel 48-inch Siphon / Interceptor	Bending Weirs
<i>Contract ID</i>	CS-JA-BBS	CS-JA-BWR
<i>Plan Elements</i>	Parallel 48-inch Sewer	Bending Weirs
<i>Location</i>	Belt Parkway Queens	Regulator J6 on the East Interceptor and regulators J3 and J14 on the West Interceptor
<i>Construction Cost</i>	\$20,256,909	\$6,853,955
<i>Status</i>	Construction	Completed
<i>Other Issues</i>	<p>The interceptor was activated on February 24, 2017, meeting the consent order milestone date. Due to Hydraulic Grade Line issues associated with a 10” sanitary sewer connected to the interceptor, the sluice gate at regulator JA-3 was lowered to limit flow and CSO capture. The interceptor will run at partial capacity temporarily until downstream sewer work associated with the 10” sanitary sewer is completed. Proposed schedule for 10” sanitary sewer included in proposed modification to Order.</p> <p>DEC accepted DEP’s Force Majeure event claim in November 2015</p>	

Design Activity Summary

	This Quarter	Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul style="list-style-type: none"> Continued design services during construction (DSDC) 	<ul style="list-style-type: none"> Continue DSDC
18-inch Sanitary Sewer in 150th Avenue	<ul style="list-style-type: none"> Certified design initiation 7/31/2017 	<ul style="list-style-type: none"> Continue design
Bending Weirs	<ul style="list-style-type: none"> Continued DSDC 	<ul style="list-style-type: none"> Continue DSDC

Construction Activity Summary

	This Quarter	Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul style="list-style-type: none"> Contract was substantially completed. The new interceptor was activated (see above) Completed demobilization and began punch-list work. 	<ul style="list-style-type: none"> Activate the new sewer line as noted above in "issues" Continue/Complete punch-list work
18-inch Sanitary Sewer in 150th Avenue	<ul style="list-style-type: none"> In design 	<ul style="list-style-type: none"> In design
Bending Weirs	<ul style="list-style-type: none"> Performed punch-list work 	<ul style="list-style-type: none"> Close out project



7. Newtown Creek CSO

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

Construction Contracts

	Enhanced Aeration 2	Enhanced Aeration 3	Bending Weirs / Floatables Control
<i>Contract ID</i>	CSO-NC-3	CSO-NC-4	CS-NC-REG & FLO
<i>Plan Elements</i>	Enhanced Aeration	Enhanced Aeration	Floatables Controls and Overflow Reduction
<i>Location</i>	East Branch and Upper Newtown Creek	Dutch Kills and Lower Newtown Creek	Dutch Kills, Maspeth Creek, English Kills and East Branch
<i>Construction Cost</i>	\$16,704,250 (G+E+H Contract amounts together)	\$31,695,425	\$43,763,292
<i>Status</i>	Construction	Procurement	Construction
<i>Other Issues</i>	Expanded scope of work	To be reconsidered pending DEC review of NC LTCP	

Design Activity Summary

	This Quarter	Next Quarter
Enhanced Aeration 2	<ul style="list-style-type: none"> Continued to provide DSDC 	<ul style="list-style-type: none"> Continue providing DSDC
Enhanced Aeration 3	<ul style="list-style-type: none"> No activity – Contract procurement is on hold 	<ul style="list-style-type: none"> Procurement of the construction contract is expected to remain on hold
Bending Weirs / Floatables Control	<ul style="list-style-type: none"> Continued to provide DSDC 	<ul style="list-style-type: none"> Continue to provide DSDC

Construction Activity Summary

	This Quarter	Next Quarter
Enhanced Aeration 2	<ul style="list-style-type: none"> Continued construction activities including installation of blowers, piping connections, and installation of electrical and HVAC equipment. Completed masonry work. 	<ul style="list-style-type: none"> Continue all other work (electrical & mechanical) inside and outside the two structures. Continue HVAC work Complete blowers and piping installation. Commence startup and test. Commence site restoration.
Enhanced Aeration 3	<ul style="list-style-type: none"> No activity 	<ul style="list-style-type: none"> No activity
Bending Weirs / Floatables Control	<ul style="list-style-type: none"> Site restoration completed at BB-026 and NC-077. Completed Fluming removal, completed construction of Counter Weight Roof and began site restoration at NC-015. Complete construction of the Baffle Walls for the 180' sewer, complete construction of the Drop Chamber and continue electrical installation at NC-083. 	<ul style="list-style-type: none"> Complete modifications in the Baffle Chamber, Drop Chamber and Counter Weight Chamber and complete site restoration at NC-083. Complete system startup and site restoration.



8. Westchester Creek CSO

The Westchester Creek CSO Facility Planning area includes a portion of the Hunts Point WWTP drainage area, its associated sewers, and pumping stations that discharge to Westchester Creek and Pugsley Creek in the Bronx.

Construction Contracts

	Modifications to CSO-29 and CSO-29A	Pugsley Creek Parallel Interceptor Start from CSO-24
<i>Contract ID</i>	CS-ER-WCM	CS-ER-WCP
<i>Plan Elements</i>	Improve flow control structures in sewers to convey more flow to the Hunts Point WWTP	Reduce CSO discharges to Pugsley Creek, which would otherwise <i>increase</i> as a result of the conveyance improvements in Eastchester Road
<i>Location</i>	Eastchester Road, Bronx	Classon Point, Bronx
<i>Construction Cost</i>	\$14.5 Million	\$81.5 Million
<i>Status</i>	In Construction	Began work at Chamber 1. Excavation for sewer work has started North of Chamber 1.
<i>Other Issues</i>		Delays due to utility relocation at O'Brien Avenue and White Plains Road

Design Activity Summary

	This Quarter	Next Quarter
Modifications to CSO-29 and CSO-29A	<ul style="list-style-type: none"> • Provide DSDC services 	<ul style="list-style-type: none"> • Continue to provide DSDC services.
Pugsley Creek Parallel Interceptor Start from CSO-24	<ul style="list-style-type: none"> • Final Design completed 	<ul style="list-style-type: none"> • Continue design support through construction

Construction Activity Summary

	This Quarter	Next Quarter
Modifications to CSO-29 and CSO-29A	<ul style="list-style-type: none"> • Continued construction activities associated with excavation for overflow chamber extension and combined sewer modifications 	<ul style="list-style-type: none"> • Continue construction activities for excavation for overflow chamber extension and combined sewer modifications, including utility relocations of Con Edison facilities.
Pugsley Creek Parallel Interceptor Start from CSO-24	<ul style="list-style-type: none"> • Utility relocation still in progress • Contractor began work at Chamber #1 and excavation for sewers running North on White Plains Road. 	<ul style="list-style-type: none"> • Utility relocation and water main installation will continue • Continue work at Chamber 1 and begin sewer installation North on White Plains Road • Awaiting utility relocation to begin work at regulator 6



9. Bronx River CSO

Bronx River LTCP Approved on March 7, 2017

Bronx River CSO Schedule

Bronx River CSO	DEC Approved Milestones ⁽¹⁾	DEP Projected Schedule ⁽²⁾
Hydraulic Relief at HP-007 and HP-009, Bending Weir and Baffle at HP-011		
1. Initiate Final Design	Sept 2018	Oct 2018
2. Design Completion	Sept 2022	Nov 2023
3. Notice to Proceed to Construction	Sept 2023	Aug 2025
4. Construction Completion	Sept 2026	Aug 2028

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

⁽²⁾ DEP projected dates are based upon our best available information and includes a qualitative risk analysis. These schedules will continue to be refined as design and construction progress and associated risks can be more accurately quantified and reflected in the schedules.

CSO-BXR -DES: Design Services and Design Services During Construction for the Bronx River Long Term Control Plan

- Request for Proposals (PIN#82618WP01425) was advertised on 8/28/2017
- Proposals are due on 10/11/2017



10. Hutchinson River CSO

Hutchinson River LTCP Approved on March 7, 2017

Hutchinson River CSO Schedule

Hutchinson River CSO	DEC Approved Milestones ⁽¹⁾	DEP Projected Schedule ⁽²⁾
New Outfall and Floatables Control		
1. Initiate Final Design	Sept 2018	Oct 2018
2. Design Completion	Sept 2022	Dec 2024
3. Notice to Proceed to Construction	Sept 2023	Nov 2026
4. Construction Completion	Mar 2026	Jun 2030
New Outfall Disinfection		
1. Initiate Final Design	Sept 2022	Oct 2018
2. Design Completion	Mar 2026	Dec 2024
3. Notice to Proceed to Construction	Mar 2027	Nov 2026
4. Construction Completion	Mar 2030	Jun 2030

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

⁽²⁾ DEP projected dates are based upon our best available information and includes a qualitative risk analysis. These schedules will continue to be refined as design and construction progress and associated risks can be more accurately quantified and reflected in the schedules.

CSO-HR-DF-DES: Design and Design Services During Construction for the Hutchinson River Disinfection Facility

- Request for Proposals (Pin#82618WP01427) was advertised on 8/15/2017
- Proposals are due on 9/26/2017



11. Jamaica Bay CSO

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

Construction Contracts

	Rockaway WWTP Conveyance Improvements	26 th Ward High Level Sewer Separation	26 th Ward Wet Weather Stabilization
<i>Contract ID</i>	Project not yet initiated	CS-FC-SEW	26W-12(CO 128) 26W-21, 26W-20
<i>Plan Elements</i>	Improve collection system and WWTP capacity to achieve 2xDDWF	Remove storm water contribution from 443 acres from the combined sewer system	Low Level MSPs High Level MSPs PST#5 PST1-4 Stabilization
<i>Location</i>	Rockaway WWTP, Queens	Fresh Creek, Brooklyn	26 th Ward WWTP, Brooklyn
<i>Construction Cost</i>	TBD	\$57 million for Phase 1a \$71 million for Phases 2a and 2b (estimated). \$63 million for Phases 3a and 3b (estimated)	LLMSP \$7.6 million 26W-21 \$17.4 million 26W-20 \$137 million
<i>Status</i>	Project not yet initiated	Phase 1 is in construction Phase 2 design complete Phase 3 in preliminary design	Complete (LLMSPs) In Construction (26W-21) In Construction (26W-20)
<i>Other Issues</i>		Phase 1 Utility Relocation Phase 2 Outfall Under Review Phase 3 design interferences with Bucket Pipeline	

Design Activity Summary

	This Quarter	Next Quarter
26th Ward High Level Sewer Separation	<ul style="list-style-type: none"> Phase 2 outfall size under review. Procure contractor and REI services for Phase 2. Re-evaluate design for Phase 3 to avoid Buckeye Pipelines 	<ul style="list-style-type: none"> Issue NTP for Phase 2 Continue design of Phase 3.
26th Ward Preliminary Treatment Reliability Improvements	<ul style="list-style-type: none"> Continued DSDC 	<ul style="list-style-type: none"> Continuation of DSDC

Construction Activity Summary

	This Quarter	Next Quarter
26th Ward High Level Sewer Separation	<ul style="list-style-type: none"> Phase I construction progressed. Approx. 19,934 of 20,510 ft of water main installed. 1036 of 847 ft of sanitary sewer installed 905 of 1067 ft of combined sewer installed 3142 of 10,146 ft of storm sewer installed 5 of 13 storm sewer chambers installed Awaiting National Grid to retire existing 24" gas main in Flatlands Avenue between E98th Street and E108th Street. Contractor found a direct interference with National Grid gas main at E103rd Street and Avenue J that was deeper than expected. 	<ul style="list-style-type: none"> Continue installation of water main and sewer Continue relocation of high pressure gas main Continue installation storm sewer chambers
26th Ward Preliminary Treatment Reliability Improvements	<p><u>PST work (26W-20):</u></p> <ul style="list-style-type: none"> Completed 24 hour individual testing of new Blowers 1-4 and 30 day acceptance testing. Completed installation and 24 hour testing of new Blower 5. 	<p><u>PST work (26W-20):</u></p> <ul style="list-style-type: none"> Demolish existing Blower 3 and associated structure and piping. Install remaining Stelcor Piles in PST-5 and

This Quarter	Next Quarter
<ul style="list-style-type: none"> • Completed concrete pours for PST-5 cross collector channel, tank drain sump, Meter Vault MV1, MH D6, Primary Sludge Gallery (PSG) slab and one third portion of PST-5 slab. Installed rebar for PST-5 wall column 17 and PST-5 slab on the NW corner. • Completed majority of installation of Temporary Pump Around System (TPAS) for Plant Drain tie-in. • Demolished Interim Blower Building and completed installation of Soldier Piles as part of Support of Excavation for Flow Division Structure (FDS). Began excavation and lagging for FDS. • Began installing conduits for 5 kV permanent route in Pump & Blower (P&B) House and investigated MCC-25 conduit re-route. • Continued installing ductwork and HVAC equipment in Personnel areas of Pump & Blower House. • Continued punch list work in IGB including roll up doors. <p><u>HLMSP work (26W-21):</u></p> <ul style="list-style-type: none"> • Completed upgrade of 5kV Switchgear in preparation for start-up of HLMSP #1. • Continued installation of electrical conduits and pulling wire for HLMSP #2 and #3. • Began installing conduits and wire under Change Order #13 for secondary protection of the HLMSPs. • Completed testing of the Seal Water System. 	<p>complete concrete pours for PST-5 & PSG walls and slab.</p> <ul style="list-style-type: none"> • Complete TPAS, tie-in Plant Drain and activate Tank Drain. • Continue to excavate and install lagging for FDS. Remove the 48" Reinforced Concrete Pipe (RCP) in the FDS excavation (continuation of 1/9/17 Force Majeure). • Install temporary conduits for MCC-5NE and 5NW and demolish the duct bank in the FDS excavation. • Complete 5 kV permananet route. • Begin change orders associated with Milestone acceptance of the IGB and continue work on punch list items. • Continue to work on masonry and HVAC duct in Personnel areas. <p><u>HLMSP work (26W-21):</u></p> <ul style="list-style-type: none"> • Continue to work on Change Order #13 – Conduits and wire for secondary protection of HLMSPs. • Complete third party testing of switchgear upgrade. • Begin start-up and testing of HLMSP #1.



12. Wards Island WWTP Headworks Wet Weather Improvements

The Wards Island WWTP Headworks Wet Weather Improvements consist of work done at the WWTP to increase its wet weather handling capacity. The projects described in this section 3.7 were added to the 2012 CSO Order through a modification effective March 26, 2015 (DEC Case No. CO2-20140314-01).

Construction Contracts

	Main Sewage Pump Reconstruction	Bar Screen Replacement
<i>Contract ID</i>	WI - 288(R)	WI – 280
<i>Plan Elements</i>	Reconstruction of Six (6) Main Sewage Pumps	Replace Bar Screens at Bronx and Manhattan Grit Chambers
<i>Location</i>	Wards Island WWTP	Wards Island WWTP
<i>Status</i>	In Construction	In Close-out
<i>Construction Cost</i>	\$5,292,653	\$13,229,000
<i>Other Issues</i>	Main Sewage Pump (MSP) Motor No. 6 failed. Repairs of the No. 6 MSP Motor are currently in progress. During acceptance testing of the No. 2 MSP in April 2017, its motor failed. Evaluation of damage and repairs in progress.	None

Design Activity Summary

	This Quarter	Next Quarter
Main Sewage Pump Replacement	<ul style="list-style-type: none"> • Complete 	<ul style="list-style-type: none"> • Complete
Bar Screen Replacement	<ul style="list-style-type: none"> • Complete 	<ul style="list-style-type: none"> • Complete

Construction Activity Summary

	This Quarter	Next Quarter
Main Sewage Pump Replacement	<ul style="list-style-type: none"> • Continued repairs of the No. 6 MSP Motor • Continued investigating damage and repairs for the No. 2 Motor and existing MSP Motors 	<ul style="list-style-type: none"> • Complete repairs of No. 6 MSP Motor • Conclude investigation of No. 2 MSP Motor failures and existing MSP Motors • Complete commissioning of 3rd MSP • Start reconstruction of the 4th MSP
Bar Screen Replacement	<ul style="list-style-type: none"> • Closeout and punchlist activities 	<ul style="list-style-type: none"> • Continue Closeout and punchlist activities



13. Environmental Benefit Projects

DEP has undertaken these projects in connection with the settlement of a New York State and DEC enforcement action. The Environmental Benefit Projects (EBPs) are funded by DEP and designed to abate CSOs and/or address wet weather water quality impacts from CSOs and to benefit the waters in and around New York City.

The 2008 modifications to the CSO Consent Order require not less than \$4 million worth of DEP-funded Environmental Benefit Projects (EBPs) designed to abate CSOs and/or address wet weather water quality impacts from CSOs and to benefit the waters in and around New York City. In addition to the EBPs summarized below, the 2012 Order requires that \$2 million in EBP funding be allocated toward the Hutchinson River and Newtown Creek Neighborhood Demonstration Areas. That funding commitment was met and the Demonstration Area projects are now complete.

➤ **New York Hospital Green Roof**

Manhattan College

\$660,440 for the installation of a 14,666-sq- ft modular green roof project. It will be designed to control runoff from a 1 to 1.5-inch rainfall on a half-acre roof.

Status: Year 3 of three-year monitoring period

Invoiced to Date: \$541,009.



➤ **Rego Park Green Streets**

NYC Audubon Society

\$580,245 for Green Street stormwater capture system that will retrofit an impervious surface and replace it with permeable pavement and vegetation to capture runoff from 7,753-sq-ft tributary area.

Status: **Obtaining construction permit**

Invoiced to Date: \$128,414



➤ **Two Sponge Park™ Bioretention Basins**

Regional Plan Association

\$600,000 for bioretention basins under the Long Island Expressway near the Van Wyck Expressway. One basin has the capacity to treat 1,280 gallons, and the second basin has the capacity to treat 2,460 gallons of runoff. Monitoring at this site **has ended** and site is being prepared for decommissioning.

Status: Year 2 of two-year monitoring period

Invoiced-to-Date: **\$481,215**



➤ **6th Street Green Corridor Project**

Gowanus Canal Conservancy

\$583,470 to build 11 curbside swales ranging from 400 to 1,200 sf along 6th St from 2nd Ave to 4th Ave in Brooklyn. The project will capture one inch storm runoff generated within the eleven-swale area, which consists of over 35,400 sf of street and sidewalk surfaces.

Status: Year 2 of three-year monitoring period

Invoiced-to-Date: **\$451,840**



➤ **Treatment Wetland and Rain Garden**

City Parks Foundation

\$504,340 for treatment wetlands and rain gardens for treating stormwater entering Meadow Lake. This project will construct a 10,000-sf treatment wetland that will receive runoff from two one-acre portions of a parking area in Flushing Meadows Corona Park. The treatment wetland is designed to capture over 76,000 gallons of water generated by each 1.2 -inch rainstorm.

Status: Year 2 of 3-year monitoring period

Invoiced to Date: **\$465,894**



➤ **Green Infrastructure**

Drexel University

\$893,493 to design, construct and monitor a variety of green infrastructure stormwater capture technologies that also promote ecosystem services in the Bronx River watershed. Project construction completed at Bronx High School of Science and Flushing International High School. Monitoring **ongoing**.

Status: **Year 1 of 2 year monitoring period**

Invoiced to Date: **\$674,063**





14. Green Infrastructure Program

The 2012 CSO Consent Order sets forth schedule and stormwater capture targets and other requirements for the program to reduce runoff and CSO through the use of green infrastructure.

Program Implementation

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 for the future. 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 2030 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 has initially focused primarily on the Area-wide right-of-way contracts building curbside rain gardens, Stormwater Greenstreets, and porous paving. DEP's standardized designs and procedures have been critical to supporting the systematic implementation of green



Curbside Rain Garden (Bioswale)



Playground Retrofit

infrastructure at a wide scale. DEP expects to continue green infrastructure implementation using an expanding array of tools. As right-of-way implementation continues and reaches its fullest extent over the long term, DEP will increasingly rely on other, more site-specific opportunities on public and private property. Over time, the proportion of program resources devoted to implementation will shift from right-of-way to public property retrofits and other types of green infrastructure tools.

During the **Third** Quarter of **2017**, planning, design and construction work continued in three Green Infrastructure (GI) Program initiatives and are generally summarized below.

- Ongoing Area-wide GI contracts to design and build thousands of curbside rain gardens and Stormwater Greenstreets. Design and construction contracts are being implemented in multiple phases.
- Ongoing siting, design and construction of public property retrofits in coordination with City agency and non-profit partners.
- Ongoing design and construction of GI Grant Program projects on private property.



Status of Green Infrastructure Practices and Impervious Area Managed

CSO Tributary Drainage Area	Total Green Infrastructure Practices	Total Impervious Area Managed (acres)
Bronx River	102	26
East River / Open Waters	91	35
Flushing Bay	999	113
Flushing Creek	169	19
Gowanus Canal	134	14
Hutchinson River	208	27
Jamaica Bay	1,123	119
Newtown Creek	1,384	119
Paerdegat Basin	4	0
Westchester Creek	33	3
Total*	4,247	473**

* May not sum to total due to rounding.

**The 473 acres represent 0.6% of the total impervious area in combined sewer areas to be managed.

Status of Green Infrastructure 1.5% Contingency Plan Projects

Waterbodies	Area-Wide ROW Project	Status as of September 30, 2017	Reported Construction Completion Date ¹	Projected Construction Completion Date ²
Flushing Creek	TI-011	60% Design – partial delay for one of three packages ³	December 2019	February 2020
Newtown Creek	BB Cluster	60% Design – on schedule	December 2019	December 2019
Jamaica Bay*	JAM-003	60% Design – partial delay for six of seven packages	December 2019	July 2020
EROW/Wallabout	NCB-014	60% Design – on schedule	December 2020	December 2020
EROW/Bowery Bay	BB-005	60% Design – on schedule	December 2020	December 2020
Westchester Creek	HP-014	90% Design – on schedule	December 2020	December 2020
Westchester Creek	HP-033	90% Design – on schedule	December 2020	December 2020
Flushing Creek	TI-010	Geotech – partial delay for four of 12 packages	December 2020	
Bronx River	HP-007	Geotech – on schedule	December 2020	
Bronx River	HP-004/-002	Geotech - delayed	December 2020	
Jamaica Bay	26W-005/-004	Geotech – on schedule	December 2020	

¹ The Anticipated Construction Completion date as reported in the June 27, 2016 Contingency Plan

² Projected construction completion dates only shown for projects that have entered design phase

³ “Packages” are the anticipated number of construction bids per design area and are subject to change based on final designs



15. Community Relations

*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

Date	Community Member(s)	Type of Outreach	Attendees
July			
26	100 Resilient Cities – OneNYC Panel – CSO Program Overview	Conference	20
27	Hunts Point Resiliency Project Collaboration Lab	Meeting	35
August			
8	Green Playground Ground-breaking for TPL Playground JHS 189Q (Flushing)	Ceremony	25

10	STEM Institute Teacher Training on CSO Program and GI	Conference	20
September			
13	Green Infrastructure Grant Program Workshop	Presentation	33
13	Evergreen: North Brooklyn Buisness Exchange	Meeting	20
19	South Ozone Park Civic Association West Meeting	Presentation	30
26	Brooklyn Community Board 6, Parks Recreation/Env. Protection Committee Meeting	Presentation	15
28	Green Playground Ribbon-Cutting with Trust for Public Land at P.S. 120Q, Flushing NY	Ceremony	75



16. Key DEP Personnel

Planning Area	Project	DEP Responsible Personnel		
		Bureau	PM	AM
Inner Harbor	CSO-DRDG: Gowanus Dredging	BEDC	Tysvaer	TBD
	CSO-GC: Flushing Tunnel	BEDC	Clarke	Joseph
	CSO-GC: Gowanus PS	BEDC	Clarke	Joseph
Flushing Bay	CSO-DRDG: Dredging	BEDC	Tysvaer	Novotny
	PW-088 Assn. 2B: Flushing Interceptor	BWT	TBD	TBD
	CS-FB-LLD: Low-Lying Sewers	BWSO	DeLillo	Gordon
	CS-FB-LLD R2 Weir	BWT	TBD	TBD
	CS-FB-BWR: Regulators	BEDC	Tysvaer	Gordon
TI-WW-1: Whitestone Interceptor	BEDC	Solimando	Sadat	
Jamaica Tributaries	CS-JA-BWR: Bending Weirs	BEDC	Tysvaer	Novotny
	CS-JA-BBS: 48-Inch Sewer	BEDC	Tysvaer	Meshkati
Newtown Creek	CSO-NC-4: Dutch Kills, Lower Newtown	BEDC	Tysvaer	Meshkati
	CSO-NC-3: East Branch, Upper Newtown	BEDC	Tysvaer	Meshkati
	CSO-NC-2: Enhanced Aeration Lower English Kills	BEDC	Tysvaer	Adabi
	CS-NC-REG&FLO: Regulators / Floatables Control	BEDC	Tysvaer	Meshkati
Westchester Creek	CS-ER-WCM: Modifications to CSO-29 / 29A	BEDC	Tysvaer	Betemit
	CS-ER-WCP: Pugsley Creek Parallel Interceptor	BWSO	DeLillo	Garin
Jamaica Bay	CS-FB-SEW: 26th Ward / Fresh Creek HLSS	BWSO	DeLillo	Gordon
	CO 26W-128: Low Level Main Sewage Pumps	BEDC	Solimando	Kharivala
	26W-20: 26th Ward Wet Weather Stabilization	BEDC	Solimando	Heim
	26W-21: 26th Ward High Level Main Sewage Pumps	BEDC	Solimando	Heim
Wards Island	Reconstruction of Main Sewage Pumps (MSP)	BWT	J.Olewnicki	I.Anderson
	Bar Screen Replacement	BEDC	Moriarty	N. Shah



17. Overview of LTCP Program

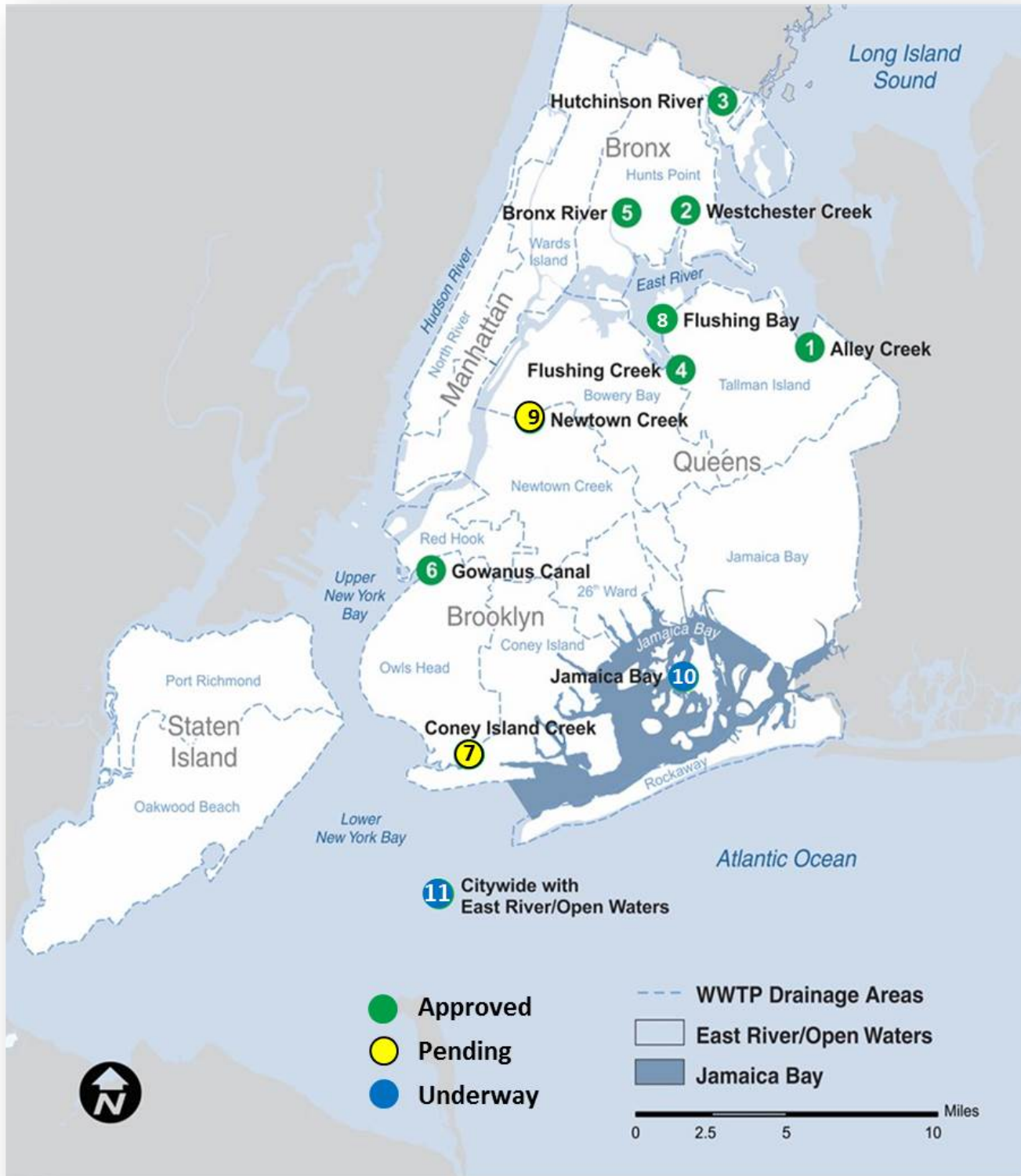
The goal of each Long-Term Control Plan (LTCP) is to identify appropriate CSO controls necessary to achieve waterbody-specific quality standards, consistent with EPA's 1994 CSO Policy and subsequent guidance.

LTCP Milestones

	CSO Watershed	LTCP Milestone	Status
1	Alley Creek	June 2013	Approved 3/7/17
2	Westchester Creek	June 2014	Approved 8/1/17
3	Hutchinson River	September 2014	Approved 3/7/17
4	Flushing Creek	December 2014	Approved 3/7/17
5	Bronx River	June 2015	Approved 3/7/17
6	Gowanus Canal	June 2015	Approved 3/29/17
7	Coney Island Creek	June 2016	Pending DEC Review
8	Flushing Bay	December 2016	Approved 3/7/17
9	Newtown Creek	June 2017	Pending DEC Review
10	Jamaica Tributaries & Bay ¹	June 2018	Underway
11	Citywide ²	December 2018	Underway

1) DEC approved the modification request to extend Jamaica Bay LTCP submission milestone to June 2018, after public advertisement ending August 16, 2017.
 2) DEC approved DEP's Modification Request to extend Citywide LTCP submission milestone to December 31, 2018 by letter dated June 27, 2017.

New York City CSO Watersheds





18. Status of LTCP Development

The status of all Long-Term Control Plan development is described below.
 All Waterbody/Watershed Facility Plans (WWFPs) have been approved.

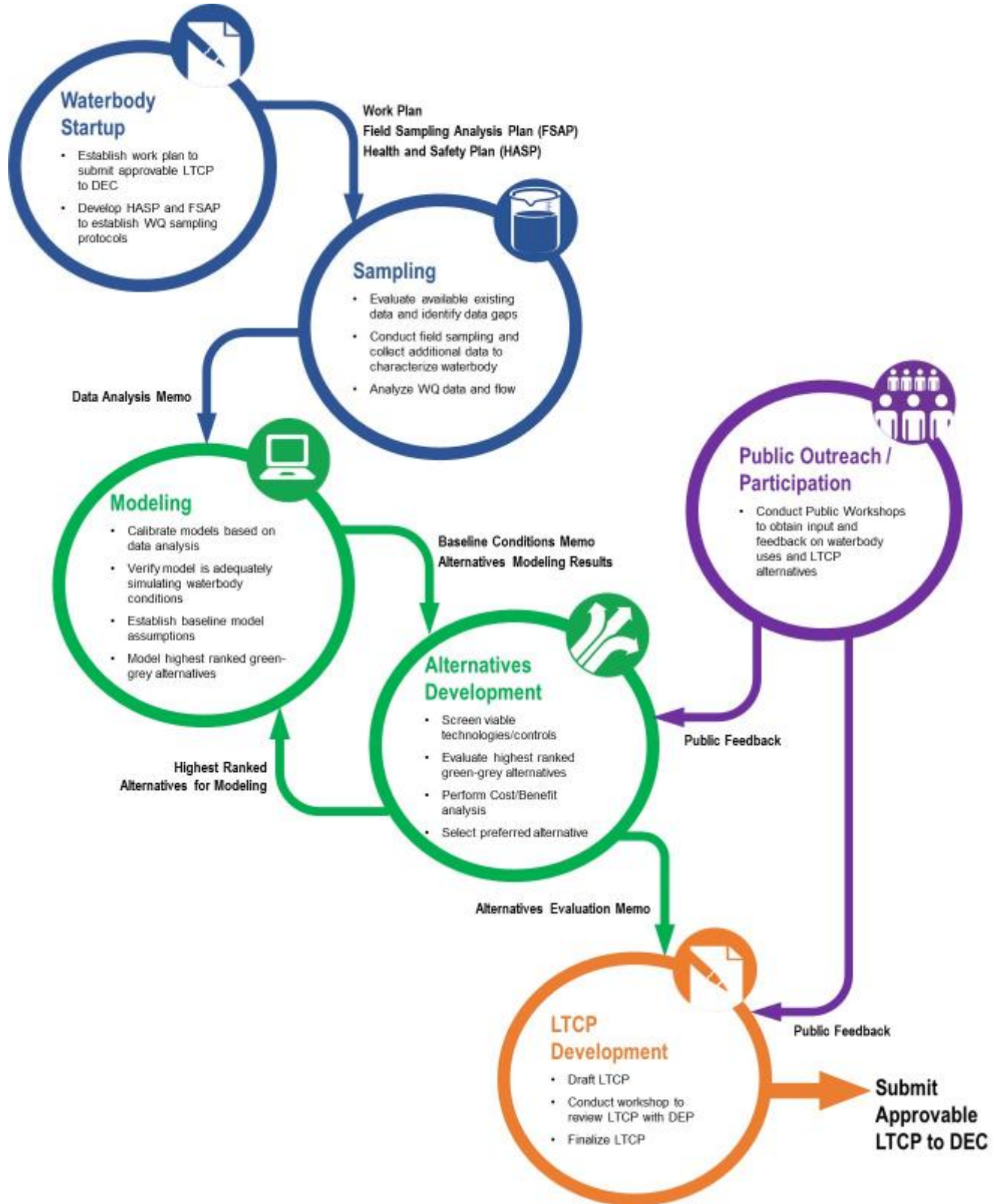
LTCP Activity Status

CSO Watershed	Alley Creek ¹	Westchester Creek ²	Hutchinson River ³	Flushing Creek ⁴	Bronx River ⁵	Gowanus Canal ⁶	Coney Island ⁷	Flushing Bay ⁸	Newtown Creek ⁹	Jamaica Bay	Citywide
LTCP Due Date	June 2013	Jun 2014	Sept 2014	Dec 2014	Jun 2015	Jun 2015	Jun 2016	Dec 2016	Jun 2017	Jun 2018	Dec 2018
Waterbody Startup											
Sampling											
Modeling											
Alternatives Development											
LTCP Development											
Public Participation ¹⁰											
Approval Date	Mar 2017	Aug 2017	Mar 2017	Mar 2017	Mar 2017	Mar 2017	Pending	Mar 2017	Pending		

LEGEND: = Completed = In Progress = Not Initiated

¹Final Alley Creek LTCP previously submitted to DEC June 30, 2013. Received DEC Determination Letter in December 12, 2013. DEP filed Article 78 proceeding on February 21, 2014. LTCP resubmitted to DEC on June 30, 2014. DEC Comments Letter received January 23, 2015. Supplemental Documentation submitted May 6, 2015.
²Final Westchester Creek LTCP submitted to DEC in June 30, 2014. DEC Comments Letter received September 22, 2014. Response Letter submitted November 24, 2014. Additional DEC Comments Letter received January 14, 2015. Response Letter and Supplemental Documentation submitted April 14, 2015. DEC Comment Letter received June 6, 2017. Response Letter submitted July 11, 2017.
³Final Hutchinson River LTCP submitted to DEC in September 30, 2014. DEC Comments Letter received January 14, 2015. Supplemental Documentation submitted April 14, 2015.
⁴Final Flushing Creek LTCP submitted to DEC in December 30, 2014. DEC Comments Letter received January 23, 2015. Supplemental Documentation submitted May 22, 2015.
⁵Final Bronx River LTCP submitted to DEC in June 30, 2015. DEC Comments Letter received August 24, 2015. Supplemental Documentation submitted September 23, 2015.
⁶Final Gowanus Canal LTCP submitted to DEC in June 30, 2015. DEC Comments Letter received August 5, 2015. Supplemental Documentation submitted September 8, 2015.
⁷Final Coney Island Creek LTCP submitted to DEC in June 30, 2016. DEC Comments Letter received August 17, 2016. Response Letter submitted September 16, 2016. DEC Comments Letter received April 6, 2017.
⁸Final Flushing Bay LTCP submitted to DEC in December 31, 2016.
⁹Final Newtown Creek LTCP submitted to DEC in June 30, 2017.
¹⁰Pending 3rd public meeting presenting LTCP Recommendations. DEC determined Gowanus Canal public participation requirements have been met.

LTCP Work Plan Flow Chart





19. LTCP Progress Update

WB No.	CSO Watershed	LTCP Milestone	Progress Update
2	Westchester Creek	June 2014	<ul style="list-style-type: none"> ➤ DEP submitted LTCP on 6/30/14. ➤ DEC comments received on 9/22/14. DEP responded on 11/24/14. ➤ Additional DEC comments received on 1/14/15. DEP submitted Supplemental Documentation & Response to Comments on 4/14/15. ➤ Additional DEC comments received on 6/6/2017. DEP responded on 7/11/2017 ➤ DEC approved LTCP on August 1, 2017.
7	Coney Island Creek	June 2016	<ul style="list-style-type: none"> ➤ DEP submitted LTCP on 6/30/16. ➤ Comments from DEC received on 8/17/16. DEP responded to comments on 9/16/16. ➤ DEP submitted the Supplemental Fecal Testing Findings Memorandum on 3/17/17. ➤ Additional DEC comments received on 4/6/2017. ➤ Response to DEC comments expected to be submitted in October
10	Newtown Creek	June 2017	<ul style="list-style-type: none"> ➤ DEP submitted LTCP on 6/30/2017.
9	Jamaica Tributaries and Bay	June 2018	<ul style="list-style-type: none"> ➤ DEP continued to establish the baseline conditions to be used for the development of the LTCP. ➤ DEP continued LTCP IW and WQ modeling efforts. ➤ DEP continued to develop potential alternatives. ➤ DEC approved Modification Request for LTCP Milestone Extension to June 30, 2018. ➤ Community meeting scheduled for October 19, 2017

WB No.	CSO Watershed	LTCP Milestone	Progress Update
11	Citywide	December 2018	<ul style="list-style-type: none"> ➤ DEC approved Milestone Extension for Citywide LTCP to December 2018. ➤ As discussed with the DEC, DEP may require additional time beyond December 2018 to incorporate all of the flow monitoring and ambient sampling, but is seeking to streamline its overall program to avoid any further delays. ➤ DEP completed data analysis for Phase I (Harlem and Hudson Rivers) Sampling Programs. ➤ DEP completed Phase II (East River and Long Island Sound) Sampling Program. ➤ DEC approved the Field Sampling and Analysis Plan (FSAP) for Phase III (New York Harbor) on August 24, 2017. ➤ DEP initiated Phase III (New York Harbor) Sampling Program.



20. Jamaica Bay LTCP Progress

DEC approved DEP's Milestone Modification Request to Swap Consent Order Milestone for Jamaica Bay and Tributaries LTCP with Flushing Bay LTCP on February 23, 2015. The Consent Order Milestone for Jamaica Bay LTCP DEC has approved DEP's request to extend the LTCP submission to June 30, 2018.

Last 30-Day Progress Highlights








Activity	September 2017 Progress Highlights
Waterbody Management	<ul style="list-style-type: none"> • Continue to refine delivery schedule for June 30, 2018 LTCP submittal • Provided monthly progress updates as well as updates in the Quarterly Reports to DEC, consistent with commitments in DEP's June 21, 2017 letter.
Sampling	<ul style="list-style-type: none"> • No new activity
Modeling	<ul style="list-style-type: none"> • Continued meetings and coordination with BEPA/BWSO on SEQ synergies • Defined elements of Baseline Conditions model • Incorporated updated MS4 subcatchments from BWSO into the IW model • Updated IW model to incorporate more detailed piping network for SEQ • Continued model runs for Interceptor and Bergen Basin • Updated IW baseline model and updated IW CSO control results • Updated WQ Baseline and Performance Gap
Alternatives Development	<ul style="list-style-type: none"> • Continued development of potential CSO control alternatives • Continued developing Preliminary Shortlist of Retained Alternatives for each tributary • Continued brainstorming potential synergies with BWSO storm sewer build-out program
LTCP Development	<ul style="list-style-type: none"> • No new activity
Public Participation	<ul style="list-style-type: none"> • Drafted project status updated presentation for October meeting, including updates for SE Queens projects

90-Day Look Ahead

October 2017 to December 2017

Activity	Projected Completion	Status / 90-Day Look Ahead
Waterbody Management	Jun 2018	<ul style="list-style-type: none"> Continue to track delivery schedule for June 30, 2018 LTCP Submittal Provide monthly progress reports to DEC for all tasks, consistent with commitments in DEP's June 21, 2017 letter. Continue to update delivery schedule for Jamaica Bay LTCP due June 30, 2018,
Sampling	Feb 2017	<ul style="list-style-type: none"> No new activity
Modeling	May 2018	<ul style="list-style-type: none"> Continue to incorporate MS4 catchment areas and more detailed piping network for SEQ Refine IW and WQ baseline model runs and performance gap, as necessary Finalize Baseline Conditions Memo Continue IW and WQ modeling to support alternatives development Continue meetings and coordination with BEPA/BWSO on SEQ synergies
Alternatives Development	May 2018	<ul style="list-style-type: none"> Continue development of alternatives and prepare for internal alternatives review meetings Perform cost estimates for range of CSO control levels Prepare for and conduct DEP Alternatives Workshops
LTCP Development	Jun 2018	<ul style="list-style-type: none"> Developing Jamaica Bay LTCP report sections
Public Participation	June 2017	<ul style="list-style-type: none"> Prepare for Public Status Update Meeting

Schedule Milestone Status

	Sampling Program Completed	Data Sent to DEC	Baseline Conditions Established	WQ Performance Gap	Potential Alternatives Presented	Retained Alternatives Selected	Recommended Plan Selected
Target Date	Jan 2016	Aug 2016	Aug 2017	Sept 2017	Jan 2018	Apr 2018	May 2018
Status							

LEGEND:  = Completed  = Under DEP Review  = In Progress  = Not Initiated