



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

CSO Order on Consent
Quarterly Progress Report
Second Quarter 2020
(April 1st – June 30th)

July 30, 2020

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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 **April 1, 2020** and **June 30, 2020**. 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 **June 10, 2020** for the **first** quarter of 2020 and is scheduled to hold a Quarterly Progress Meeting on **September 16, 2020** to discuss issues related to the Order and review milestones met during the **second** quarter of **2020**.

On March 19, 2020, DEP submitted a Notice of Force Majeure for the CSO Order due to the COVID-19 pandemic. As a direct result of the economic impacts of COVID-19 on New York City finances and the ongoing uncertainty of long term impacts, DEP has had to reduce the budget for the fiscal year 2021 that started July 1, 2020. This budget reduction has forced DEP to take a hard look at the funding for mandated projects that do not have an impact on DEP’s core operations to meet WRRF SPDES permit requirements and achieve compliance with effluent limits. In order to maintain DEP’s critical function of treating wastewater, these funding constraints may impact future compliance with the milestones covered in this Quarterly Report. DEP is making best efforts to mitigate any delays.

Reportable Activity This Quarter

Date	Location	Event Description
April 20, 2020	Citywide Green Infrastructure	DEP submitted a Request for Modification to Green Infrastructure Annual Report submittal date and potential impacts to Green Infrastructure construction
May 26, 2020	All Locations	Appendix A, Multiple Milestones - DEP updated the FM regarding the COVID-19 outbreak
May 28, 2020	Citywide	Appendix A, XIV. Open Waters/Citywide LTCP – DEP requested a further extension of the milestone for submittal of the Open Waters/Citywide Long-Term Control Plan (“LTCP”) from May 30, 2020 until September 30, 2020 due to impacts of the COVID-19 FM.
June 2, 2020	Westchester Creek	Appendix A, IX. Westchester Creek CSO B. Pugsley Creek Parallel Interceptor 4. Construction Completion– DEC accepts DEP’s Certificate of Construction Completion
June 10, 2020	Westchester Creek	Appendix A, IX. Westchester Creek CSO, A. Modifications to CSO-29/29A, 4. Construction Completion – DEC responds to DEP’s FM request
June 29, 2020	Citywide Green Infrastructure	DEP requested to extend informal negotiations until October 1, 2020 to resolve issues related to the June 25, 2019 claim of a Force Majeure event
June 30, 2020	Citywide	2019 Annual GI Report -DEP submitted Annual GI report to DEC and posted report on DEP website
June 30, 2020	Jamaica Tributaries	Appendix A, VI. Jamaica Tributaries CSO, C. Bergen Basin 18-Inch Sewer 4. - Construction Completion - DEP certified construction completion

Milestone Actions This Quarter

Location	Item Description	Milestone Date	Action Required	Status
Citywide	Open Waters/East River LTCP	May 2020	Submit LTCP	FM and Mod Request Submitted for Sept 2020 submittal
Westchester Creek	Pugsley Creek Parallel Interceptor	Jun 2020	Construction Completion	Certified completion on Feb 26, 2020

Milestone Actions Next Quarter

Location	Item Description	Milestone Date	Action Required	Status
Westchester Creek	Modifications to CSO-29 and CSO-29A	July 9, 2020	Construction Completion	FM submitted due to COVID-19

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

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Jamaica Bay	26 th Ward HLSS Phase II	<ul style="list-style-type: none"> DEP submitted FM 5/14/18 DEP provided additional info on 3/11/19 DEC acknowledged valid FM on 06/05/19 	Force Majeure - NYCHA Steam pipe interferences	Dec 2020 (Construction Completion)	Full extent of the delay has not yet been identified and DEP will keep DEC apprised. DEP intends to request a modification once the full extent of delays are identified.
Jamaica Bay	26 th Ward HLSS Phase III	<ul style="list-style-type: none"> DEP submitted MR 3/1/19 DEP provided additional info on 8/14/19 	Force Majeure - Buckeye Fuel Pipe Interferences, Cover Issues	Mar 2019 (Design Completion)	Full extent of the delay has not yet been identified and DEP will keep DEC apprised. DEP intends to request a modification once the full extent of delays are identified.
Bowery Bay/EROW	Area-wide ROW Green Infrastructure in BB-005 CSO Tributary Area	<ul style="list-style-type: none"> DEP submitted FM 6/26/19 	No awardable bids received	December 2020 (NTP)	DEC denied FM claim. DEP and DEC are in negotiations concerning the DEC determination.
Jamaica Bay	Rockaway WPCP 2xDDWF	<ul style="list-style-type: none"> DEP submitted NTP modification request 11/1/17 DEC responded 11/10/17 DEC issued NOV on 4/3/18 		Dec 2017	Discussions with DEC to resolve NOV are ongoing

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Jamaica Bay	26 th Ward PSTs 1-5	<ul style="list-style-type: none"> • DEP submitted FM on 12/20/19 • DEC responded on 1/13/20 and requested additional information • DEP submitted additional information on 3/13/20 • DEP submitted an additional FM on 3/19/20 • DEC responded on 3/26/20 requested additional information • DEP submitted additional information on 5/26/20 	<p>Force Majeure-deteriorated expansion joints in PST-4 and other PSTs</p> <p>Force Majeure - COVID-19 – and related delays</p>	Jan 2021 (Construction Completion)	Modified milestone will be needed due to FMs. DEP intends to request a modification once the full extent of the delays has been identified.
Citywide	Open Waters/ Citywide LTCP	<ul style="list-style-type: none"> • DEP submitted an additional FM on 3/19/20 • DEC responded on 3/26/20 requested additional information • DEP requested a milestone modification on 5/26/20 	Force Majeure - COVID-19 and related delays	May 2020	Modification of milestone requested by DEP to September 2020

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Westchester Creek	Modifications to CSO-29 and CSO-29A	<ul style="list-style-type: none"> • DEP submitted FM on 3/11/19 on differing bedrock elevations at CSO-29 • DEC acknowledged valid FM 7/1/19 • DEP submitted updated FM on 1/31/20 with a delay and request of 121 additional days. • DEC responded to request on 3/2/20 and granted a 136-day extension to 7/9/20 	Force Majeure - unanticipated differing bedrock elevations delays	July 9, 2020 (Construction Completion)	Modified milestone will be needed due to FMs
		<ul style="list-style-type: none"> • DEP submitted an additional FM on 3/19/20 • DEC responded on 3/26/20 requested additional information DEP submitted additional information on 5/26/20 • DEC responded to FM delay on 6/10/20 and requested additional information 	Force Majeure - COVID-19 and related delays		

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
All Locations	All open/active milestones	<ul style="list-style-type: none"> • DEP submitted a FM notice on 3/19/20 for all active/open milestones • DEC responded to FM notice on 3/23/20 and requested further review in 60 days by DEP to assess impacts. 	Force Majeure COVID-19 - with potential delays due to ongoing pandemic	Multiple	Full extent of the delay has not yet been identified and DEP will keep DEC apprised on a project by project basis
<ul style="list-style-type: none"> • 					



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⁾
Jamaica Bay Tributaries	Bergen Basin 18" Sanitary Sewer	Jan 2019	Oct 2021	Sep 2020	71%	64%
Westchester Creek	Modifications to CSO-29 & 29A	Dec 2015	Jul 9, 2020	Nov 2020	99%	89%

Location	Item Description	Notice to Proceed	Construction Completion Milestone	Projected Completion	% of Time Elapsed	% of Construction Completed⁽¹⁾
	Pugsley Creek Parallel Interceptor	Dec 2016	Jun 2020	Jan 2020	100%	100%
Jamaica Bay	26th Ward HLSS Phase 1	Mar 2016	Dec 2018	Dec 2018	100%	100%
	26th Ward HLSS Phase 2A	Sept 2017	Dec 2020	Sept 2020	81%	55%
	26th Ward HLSS Phase 2B	Sept 2017	Dec 2020	Sept 2020	93%	95%
	26th Ward HLSS Phase 3	Mar 2020	Dec 2022	Dec 2022	-	-
	26th Ward PSTs 1-5	Jan 2016	Jan 1, 2021	Jan 2022	106%	84%
	Rockaway WRRF Conveyance		Dec 2017	Pending Mod Request and negotiation resolution	-	-

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



3. Alley Creek CSO

Alley Creek LTCP Approved on March 7, 2017

Alley Creek CSO Schedule

Alley Creek CSO	DEC Approved Milestones⁽¹⁾	Status
1. Initiate Final Design	Sept 2018	Certified by DEP Oct 2, 2017
2. Design Completion	Sept 2021	Design in Progress 10% design
3. Notice to Proceed to Construction	Sept 2022	TBD Pending Design Completion
4. Construction Completion	Sept 2024	TBD Pending Design Completion

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



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.
- **DEP has completed a project to mitigate foam from the Gowanus Canal Flushing tunnel as of January 3, 2020.**



5. 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.

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 WRRF. 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>Construction Cost</i>	TBD	\$5,610,000	\$28,959,345	\$37,560,000
<i>Status</i>	Next scheduled survey in 2022	Certified Complete on 9/11/2017	Certified Complete on 6/8/2018	Dredging Complete on 7/10/17 – Construction completed on 8/16/18. Currently in 2-year maintenance period.

Design Activity Summary

	This Quarter	Next Quarter
Divert Low-Lying Sewers / Raise Weir BB-R02	<ul style="list-style-type: none"> • Complete 	
Regulator Modifications	<ul style="list-style-type: none"> • Complete 	

Construction Activity Summary

	This Quarter	Next Quarter
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"> • Certified completion on 6/8/2018 	
Environmental Dredging	<ul style="list-style-type: none"> • Certified completion on 8/16/2018. Continue with 2-year maintenance period • DEC accepted Certificate of Construction Completion on 10/29/2018 	

Flushing Bay LTCP Approved on March 7, 2017

Flushing Bay CSO Schedule

Flushing Bay CSO	DEC Approved Milestones ⁽¹⁾	Status
1. Initiate Final Design	Jul 2021	DEP released RFP
2. Design Completion	Jun 2025	TBD Pending Design Start
3. Notice to Proceed to Construction	Jul 2026	TBD Pending Design Completion
4. Construction Completion	June 2035	TBD Pending Design Completion

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

Flushing Creek CSO Schedule

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	Design in progress 21% design
3. Notice to Proceed to Construction	Sept 2023	TBD Pending Design Completion
4. Construction Completion	Dec 2025	TBD Pending Design Completion

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



6. Jamaica Tributaries CSO

The Jamaica Tributaries CSO Facility Planning area includes the drainage area of the Jamaica WRRF 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	Bergen Basin 18" Sewer
<i>Contract ID</i>	CS-JA-BBS	CS-JA-BWR	SEQ002714
<i>Plan Elements</i>	Parallel 48-inch Sewer	Bending Weirs	18-inch Sanitary Sewer
<i>Location</i>	Belt Parkway Queens	Regulator J6 on the East Interceptor and regulators J3 and J14 on the West Interceptor	150 th Ave between 126 and 129 Streets
<i>Construction Cost</i>	\$20,256,909	\$6,853,955	\$4,990,000
<i>Status</i>	Completed	Completed	In-Construction
<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 an existing 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 new 18" sanitary sewer is completed.</p>		

Design Activity Summary

This Quarter		Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul style="list-style-type: none"> Complete 	
Bergen Basin 18" Sewer	<ul style="list-style-type: none"> Complete 	

Construction Activity Summary

This Quarter		Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul style="list-style-type: none"> Certified completion on 2/28/17 	
18-inch Sanitary Sewer in 150 th Avenue	<ul style="list-style-type: none"> Contractor completed setting up dewatering system Contractor completed installation of all water mains Contractor has placed the sewer and backfilled 	<ul style="list-style-type: none"> DEC Checklist will be completed, as per DEC request Final Restoration will commence



7. 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.

Construction Contracts

	Enhanced Aeration 2	Bending Weirs / Floatables Control
<i>Contract ID</i>	CSO-NC-3	CS-NC-REG & FLO
<i>Plan Elements</i>	Enhanced Aeration	Floatable Controls and Overflow Reduction
<i>Location</i>	East Branch and Upper Newtown Creek	Dutch Kills, Maspeth Creek, English Kills and East Branch
<i>Construction Cost</i>	\$16,704,250 (G+E+H Contract amounts together)	\$43,763,292
<i>Status</i>	Certified Complete – 6/9/18	Certified Complete – 11/22/2017
<i>Other Issues</i>		

Design Activity Summary

	This Quarter	Next Quarter
Enhanced Aeration 2	<ul style="list-style-type: none">• Complete	
Bending Weirs / Floatables Control	<ul style="list-style-type: none">• Complete	

Construction Activity Summary

	This Quarter	Next Quarter
Enhanced Aeration 2	<ul style="list-style-type: none">• Complete	
Bending Weirs / Floatables Control	<ul style="list-style-type: none">• DEP submitted Post Construction Monitoring on 8/19/2019	

Newtown Creek LTCP Approved on June 27, 2018

Newtown Creek CSO Schedule

Borden Ave Pumping Station Expansion	DEC Approved Milestones	Status
1. Initiate Final Design	Jul 2021	DEP released RFP
2. Design Completion	Dec 2024	TBD Pending Design Start
3. Notice to Proceed to Construction	Sept 2025	TBD Pending Design Completion
4. Construction Completion	Sep 2029	TBD Pending Design Completion

CSO Storage Tunnel	DEC Approved Milestones	Status
1. Initiate Final Design	Jun 2025	DEP preparing RFP
2. Design Completion	May 2028	TBD Pending Design Start
3. Notice to Proceed to Construction	Aug 2030	TBD Pending Design Completion
4. Construction Completion	Jun 2042	TBD Pending Design Completion



8. Westchester Creek CSO

The Westchester Creek CSO Facility Planning area includes a portion of the Hunts Point WRRF 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 WRRF	Reduce CSO discharges to Pugsley Creek, which would otherwise <i>increase</i> because of the conveyance improvements in Eastchester Road
<i>Location</i>	Eastchester Road, Bronx	Classon Point, Bronx
<i>Construction Cost</i>	\$18.9 Million	\$85.1 Million
<i>Status</i>	In Construction	In Construction
<i>Other Issues</i>	Contractor stopped work on 3/18/20 due to COVID-19 impacts.	DEP is working to mitigate impact on project schedule due to condition of existing diversion chamber at HP-06 regulator.

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"> Provide DSDC services 	<ul style="list-style-type: none"> Continue to provide DSDC services

Construction Activity Summary

	This Quarter	Next Quarter
Modifications to CSO-29 and CSO-29A	<ul style="list-style-type: none"> Continuation of site restoration of Eastchester Road and Morris Park Ave at CSO-29A Continuation of installation of reinforcing steel and concrete for overflow expansion at CSO-29. 	<ul style="list-style-type: none"> Completion of site restoration of Eastchester Road and Morris Park Ave. at CSO-29A. Continuation of installation of reinforcing steel and concrete for overflow expansion, installation of FRP Weirs and precast roof panels at CSO-29.
Pugsley Creek Parallel Interceptor Start from CSO-24	<ul style="list-style-type: none"> Contract work completed for the diversion chamber Contractor completed all sewer work 75 days ahead of construction completion milestone date 	<ul style="list-style-type: none"> <p>Consent Order Work Completed</p>



9. Bronx River CSO

Bronx River LTCP Approved on March 7, 2017

Bronx River CSO Schedule

Bronx River CSO	DEC Approved Milestones ⁽¹⁾	Status
1. Initiate Final Design	Sept 2018	Design Initiated 8/27/2018
2. Design Completion	Sept 2022	Design in progress 10% design
3. Notice to Proceed to Construction	Sept 2023	TBD Pending Design Completion
4. Construction Completion	Sept 2026	TBD Pending Design Completion

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



10. Hutchinson River CSO

Hutchinson River LTCP Approved on March 7, 2017

Hutchinson River CSO Schedule

Hutchinson River CSO	DEC Approved Milestones ⁽¹⁾	Status
1. Initiate Final Design	Sept 2018	Design Initiated 8/15/2018
2. Design Completion	Sept 2022	Design in progress <5% design
3. Notice to Proceed to Construction	Sept 2023	TBD Pending Design Completion
4. Construction Completion	Mar 2026	TBD Pending Design Completion
1. Initiate Final Design	Sept 2022	Design Initiated 8/15/2018
2. Design Completion	Mar 2026	Design in progress <5% design
3. Notice to Proceed to Construction	Mar 2027	TBD Pending Design Completion
4. Construction Completion	Mar 2030	TBD Pending Design Completion

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



11. Jamaica Bay CSO

The Jamaica Bay CSO Facility Planning area includes the drainage areas of the 26th Ward, Coney Island, and Rockaway WRRFs 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>	Achieve 2xDDWF at WWTP	Remove storm water contribution from 285 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	\$58 million for Phase 1A \$90.6 million for Phases 2A and 2B 235.5 million for Phases 3A and 3B (estimated)	LLMSP \$7.6 million 26W-21 \$17.3 million 26W-20 \$145 million
<i>Status</i>	Project not yet initiated. In discussions with DEC.	Phase 1A construction completed, with variance from approved design Phase 2 is in construction Phase 3 is in preliminary design	Completed (LLMSPs) Completed (26W-21) In Construction (26W-20)
<i>Other Issues</i>		For Phase 2B (SE855): NYCHA steam pipes were discovered during construction that interfere with storm/high level storm sewers in four locations.	

DEP and DDC hired consultant to perform design for NYCHA steam pipes offset. For Phase 3A (SE856): it was previously identified interferences with Buckeye Pipelines in four locations. Preliminary design around Buckeye Fuel Lines is prepared by DDC and submitted to Buckeye Partners, L.P. Buckeye requested that DDC include their existing utility locations on the design drawings. **DEP review of the preliminary design drawings is complete. DDC is incorporating DEP comments and will then submit revised drawings for Buckeye review.** For Phase 3B (SE857): low cover issues have been addressed and a preliminary design review has been completed by DEP.

Design Activity Summary

	This Quarter	Next Quarter
26 th Ward High Level Sewer Separation	<ul style="list-style-type: none"> Design support for Phase 2B to resolve NYCHA Steam Pipe Interferences Continue design of Phase 3 	<ul style="list-style-type: none"> Continue/Complete design for Phase 2B associated with NYCHA Steam Pipe Interferences Continue design of Phase 3
26 th 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
26 th Ward High Level Sewer Separation	<ul style="list-style-type: none"> Phase 2A (SE853) Completed work in Q2: - 	<ul style="list-style-type: none"> Phase 2A (SE853) Complete installation of stelcor piles in Louisiana

This Quarter	Next Quarter
<ul style="list-style-type: none"> - Outfall Work Completed 6/24/2020 - Trunk Water Main work on Williams Avenue and Flatlands Avenue completed - - Completed installation of the 12" Combined Sewer in the intersection of Flatlands Avenue and Alabama Avenue - Continued installation of stelcor piles and Single Barrel (SB) Storm Sewer in Louisiana Avenue between Glenwood Road and Wortman Avenue - - Completed installation of 5'-6" x 2'6" Double Barrel (DB) Storm Sewer in Louisiana Avenue between Glenwood Road and Flatlands Avenue <ul style="list-style-type: none"> • Commenced work in Q2: <ul style="list-style-type: none"> - Commenced installation of Chamber No. 3 in the intersection of Louisiana Avenue and Glenwood Road - - <p><u>Phase 2B (SE855)</u></p> <ul style="list-style-type: none"> • DEP continues to explore options to resolve the NYCHA Steam Pipe Issue. • DEP and DDC are evaluating feasibility of NYCHA steam facilities relocation. The lack of records and age of the infrastructure makes this particularly challenging. • Continue work on 13'Wx4'H SB Storm Sewer in East 108th Street between Flatlands Avenue and Stanley Avenue and on Stanley Avenue between East 108th Street and Snediker Avenue • Continue work on 53"Wx34"H Storm Sewer on Stanley Avenue between Snediker Avenue and Williams Avenue • 	<p>Avenue between Glenwood Road and Wortman Avenue</p> <ul style="list-style-type: none"> • Complete installation of Chamber No. 3 in the intersection of Louisiana Avenue and Glenwood Road • Continue Installation of SB Storm Sewer in Louisiana Avenue between Glenwood Road and Wortman Avenue • Commence spot repair for the 15" Sanitary Sewer in Stanley Avenue between Malta Street and Louisiana Avenue • <p><u>CPhase 2B (SE855)</u></p> <ul style="list-style-type: none"> • DEP and DDC evaluation of the NYCHA steam pipe relocations. <ul style="list-style-type: none"> • Road Restoration Sitewide • Installation of 15" Storm Sewer spur in intersection of Stanley Avenue and Hinsdale Street • Installation of 12" Water Main in intersection of Snediker Avenue and Stanley Avenue • Catch Basin and Chute Connection installation in various locations • •

This Quarter	Next Quarter
<ul style="list-style-type: none"> Continue installation of 8" and 20" Water Mains in Snediker Avenue between Stanley Avenue and Dewitt Avenue 	
<p data-bbox="162 1102 422 1249">26th Ward Preliminary Treatment Reliability Improvements</p> <p data-bbox="544 378 779 409"><u>PST work (26W-20):</u></p> <ul style="list-style-type: none"> Completed demolition and cleaning out existing expansion joints in PST-4 under Change Order #103. Started installation of Physzite (water stop joint seal) and completed up to 90% including rebuilding the concrete joint face at all expansion joint locations in PST-4. Prepared PST-3 expansion joints for repair. Continued PST-3 rehabilitation work. Continued 42" RS piping for PST-3. Encased 42" RS pipe between FDS and PSG for PST-4. Completed installation of PST-4 and PST-5 hand rails. Continued pulling wire to equipment in PSG. Completed installation and encased 48" Primary Effluent pipe between PST-5 effluent channel and AT-3 influent channel. Started 28 day run test of HVAC equipment in P&BH, IGB and MCC-25. Continued installation of permanent 78" FM pipe. Installed 26 piles for 36" RS, 48" RS and 2 curb inlets. Started and completed installing the coping stone on the parapet wall for the MCC-25 Building. Continued installation of curtain wall around the MCC-25 Building. Installed davit cranes at the FDS and IGB. Continued 5KV conduit installation to BNR Building. Completed first floor Locker Rooms and Showers in Personnel areas of P&BH. 	<p data-bbox="1128 378 1364 409"><u>PST work (26W-20):</u></p> <ul style="list-style-type: none"> CO-103 work: Completerehabilitation of expansion joints in PST-4. Complete demolition of existing expansion joints in PST-3. Start installation of Physzite (water stop joint seal) in PST-3 including rebuilding the concrete joint face at all expansion joint locations in PST-3. Perform dry run of PST-4. Perform clean water test and bring PST-4 on-line with sewage. Drop and clean PST-2. Start demolition of existing collector system, begin concrete rehabilitation work, begin CO-103 demolition of existing expansion joints. Continue rehab of PST-3 and installation of sludge collection equipment in PST-3. Troubleshoot IGB start-up issues. Complete start-up of sludge pumps 4, 5 and 6 (pending CO# 103 expansion joints repair). <p data-bbox="1031 1648 1429 1711">Completed 2nd floor Supervisor's Personnel area work.</p> <ul style="list-style-type: none"> Continue to install permanent 78" FM pipe. Complete 5KV conduit installation to BNR Building. Complete concrete pour of precast concrete cover of

This Quarter	Next Quarter
<ul style="list-style-type: none">• Continued 2nd floor Supervisor's Personnel area work.	<p>Meter Vault 2 and Valve Vault 2.</p> <ul style="list-style-type: none">• Complete 28 day run test on HVAC system.



12. Wards Island WRRF Headworks Wet Weather Improvements

The Wards Island WRRF Headworks Wet Weather Improvements consist of work done at the WRRF 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

	MSP Reconstruction	Bar Screen Replacement
<i>Contract ID</i>	WI - 288(R)	WI – 280
<i>Plan Elements</i>	Reconstruction of Six (6) MSPs	Replace Bar Screens at Bronx and Manhattan Grit Chambers
<i>Location</i>	Wards Island WRRF	Wards Island WRRF
<i>Status</i>	Completed	Completed
<i>Construction Cost</i>	\$5,292,653	\$13,715,000
<i>Other Issues</i>	None	None

Design Activity Summary

This Quarter		Next Quarter
MSP Replacement	<ul style="list-style-type: none"> Complete 	
Bar Screen Replacement	<ul style="list-style-type: none"> Complete 	

Construction Activity Summary

This Quarter		Next Quarter
MSP Replacement	<ul style="list-style-type: none"> Completed reconstruction of the 6th MSP (MSP#3 on July 24, 2019) 	DEC inspection of replacement work
Bar Screen Replacement		



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: Monitoring Complete

Invoiced to Date: \$555,161.



➤ **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: Monitoring Ongoing

Invoiced to Date: \$625,225



➤ **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, discussion with NYC Parks to take over maintenance.

Status: Monitoring Complete

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: Monitoring Complete

Invoiced-to-Date: \$528,631



➤ **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: Monitoring Complete

Invoiced to Date: \$497,263



➤ **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.

Status: Monitoring Complete

Invoiced to Date: \$814,599





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. 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 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



Curbside Rain Garden (Bioswale)



Stormwater Greenstreet

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 **Second** Quarter of **2020**, 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 Assets and Greened Acres

Watershed	Total Green Infrastructure Assets	Total Greened Acres
Alley Creek	0	0
Bronx River	474	59
Coney Island Creek	2	1
East River / Open Waters	883	195
Flushing Bay	764	78
Flushing Creek	1,654	165
Gowanus Canal	116	13
Hutchinson River	213	42
Jamaica Bay & Tributaries	4,224	514
Newtown Creek	1,476	141
Westchester Creek	226	21
Total	10,032	1,230

Status of Green Infrastructure 1.5% Contingency Plan Projects¹

Waterbodies	Area-Wide ROW Project	Status as of June 2020		Projected Substantial Construction Completion Date as of June 2020	Projected Completion Date as of June 2020
		Number of Bids	Reported Substantial Construction Completion Date [1]		
Flushing Creek	TI-011	Construction Bid 1	Jun-16	Dec-19	Jun-17
		Construction Bid 2	Sep-18		Jun-20
Newtown Creek	BB Cluster	Construction Bid 1	Jan-17	Dec-19	Mar-19
		Construction Bid 2	Aug-19		Dec-20
Jamaica Bay	JAM-003	Construction Bid 1	Aug-16	Dec-19	Dec-17
		Construction Bid 2	Jan-19		Jul-20
		Construction Bid 3	Jul-19		Jun-20
		Construction Bid 4	TBD		TBD
		Construction Bid 5	Dec-19		TBD
EROW/Wallabout	NCB-014	Construction Bid 1	TBD	Dec-20	Dec-19
		Construction Bid 2	TBD		Dec-20
EROW/Bowery Bay	BB-005	Construction Bid 1	Sep-20	Dec-20	TBD
		Construction Bid 2	Nov-20		TBD
Westchester Creek	HP-014/033/016	Construction Bid 1	Jul-19	Dec-20	Jul-20
		Construction Bid 2	Jul-19		
Flushing Creek	TI-010	Construction Bid 1	Sep-19	Dec-20	Dec-20
		Construction Bid 2	TBD		TBD
		Construction Bid 3	Dec-19		TBD
		Construction Bid 4	Dec-19		TBD
		Construction Bid 5	Jun-20		TBD
		Construction Bid 6	Dec-19		Dec-20
Bronx River	HP-007/004/002	Construction Bid 1	Nov-19	Dec-20	TBD
		Construction Bid 2	Nov-19		
Jamaica Bay	26W-005/004	Construction Bid 1	Dec-19	Dec-20	TBD

¹ The information in the above Table is correct as of June 29, 2020.

		Construction Bid 2	Dec-19		
		Construction Bid 3	Dec-19		
		Construction Bid 4	Dec-19		
		Construction Bid 5	Dec-19		

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



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

Due to the COVID-19 pandemic, DEP did not have any LTCP specific public meetings in Quarter 2. A virtual public meetings was held on the MS4 Program's Annual Report on May 22nd and another virtual meeting on DEP's GIS mapping of NYC's impervious area was held on June 23rd. In both cases, DEP answered multiple questions related to the LTCP Program.

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.



16. Key DEP Personnel

Planning Area	Project	DEP Responsible Personnel		
		Bureau	PM	AM
Alley Creek	CSO-AC-DF-DES: Alley Creek CSO Disinfection	BEDC	Osit	Romano
Inner Harbor	CSO-GC: Flushing Tunnel	BEDC	Clarke	Joseph
	CSO-GC: Gowanus PS	BEDC	Clarke	Joseph
Flushing Bay	CSO-DRDG: Dredging	BEDC	Tysvaer	Sewgobind
	CS-FB-LLD: Low-Lying Sewers	BWSO	Gordon	Dopson
	CS-FB-LLD R2 Weir	BWT	TBD	TBD
	CS-FB-BWR: Regulators	BEDC	Tysvaer	Gordon
	CSO-FC-FB-DES: Flushing CSO Floatables Control	BEDC	Tysvaer	Betemit
	CSO-FC-DF-DES: Flushing CSO Disinfection Facility	BEDC	Tysvaer	Betemit
	CSO-FB-TUN: Flushing Bay CSO Storage Tunnel	BEDC	Osit	Liu
Jamaica Tributaries	18" Sanitary Sewer in 150th Avenue	BWSO	Gordon	Dopson
Newtown Creek	CSO-NC-4: Dutch Kills, Lower Newtown	BEDC	Tysvaer	Ekhlas
	CSO-NC-3: East Branch, Upper Newtown	BEDC	Tysvaer	Ekhlas
	CSO-NC-2: Enhanced Aeration Lower English Kills	BEDC	Tysvaer	Adabi
	CS-NC-REG&FLO: Regulators / Floatables Control	BEDC	Tysvaer	Ekhlas
Westchester Creek	CS-ER-WCM: Modifications to CSO-29 / 29A	BEDC	Tysvaer	Betemit
	CS-ER-WCP: Pugsley Creek Parallel Interceptor	BWSO	Proscia	DeGrace
Bronx River	CSO-BXR-DES: Bronx River LTCP	BEDC	Solimando	Lochner
Hutchinson River	CSO-HR-DF-DES: Hutchinson River Disinfection	BEDC	Tysvaer	Szeto
Jamaica Bay	CS-FB-SEW: 26th Ward / Fresh Creek HLSS	BWSO	Gordon	Dopson
	26W-20: 26th Ward Wet Weather Stabilization	BEDC	Solimando	Heim
	26W-21: 26th Ward High Level MSPs	BEDC	Solimando	Heim
Wards Island	Reconstruction of MSP	BWT	Anderson	Anderson
EBP	Environmental Benefit Projects	BEPA	McLaughlin	Chen
GI	Green Infrastructure	BEPA	Enoch	Kocovic



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	Approved 4/4/18
8	Flushing Bay	December 2016	Approved 3/7/17
9	Newtown Creek	June 2017	Approved 6/27/18
10	Jamaica Tributaries & Bay ¹	June 2018	DEC provided supplemental comments document 10/11/19
11	Citywide/Open Waters ²	May 2020	Underway

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. Additional Modification Request for an extension of Citywide/Open Waters LTCP to May 30, 2020 approved by DEC on March 23, 2020

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 ¹⁰	Citywide/ Open Waters
LTCP Due Date	June 2013	Jun 2014	Sept 2014	Dec 2014	Jun 2015	Jun 2015	Jun 2016	Dec 2016	Jun 2017	Jun 2018	Mar 2020
Waterbody Startup											
Sampling											
Modeling											
Alternatives Development											
LTCP Development											
Public Participation											
Approval Date	Mar 2017	Aug 2017	Mar 2017	Mar 2017	Mar 2017	Mar 2017	Apr 2018	Mar 2017	Jun 2018	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.

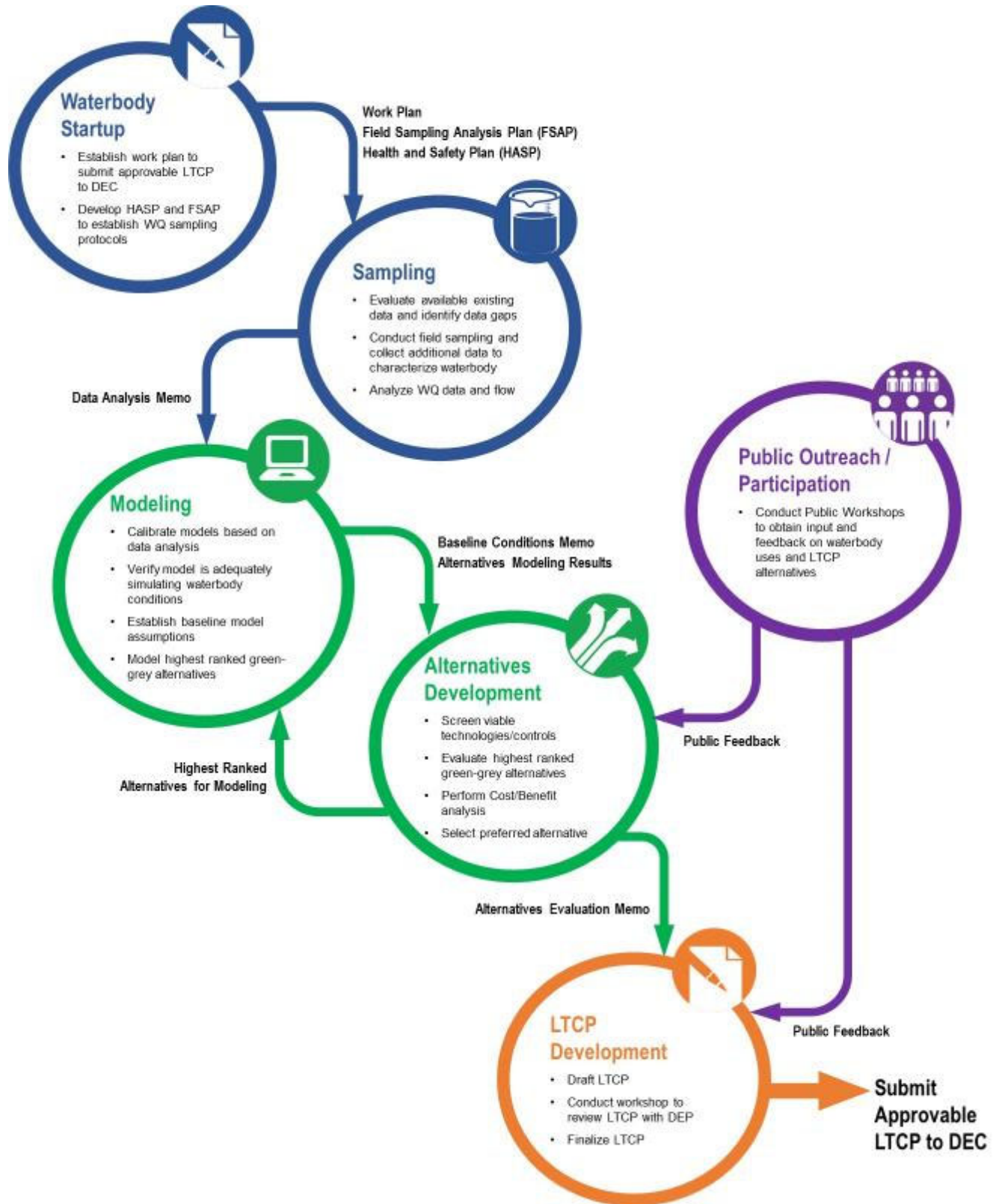
⁷Final Coney Island Creek LTCP submitted to DEC in June 30, 2016. DEC Comments Letter received August 17, 2016. Response Letter submitted September 16, 2016. DEC Comments Letter received April 6, 2017. Response Letter submitted October 2, 2017. DEP issued letter to DEC on December 5, 2017 based on discussions during October 18, 2017 DEC/DEP Technical Meeting. DEC Comments Letter received December 8, 2017. DEP submitted response letter on February 2, 2018.

⁸Final Flushing Bay LTCP submitted to DEC in December 31, 2016.

⁹Final Newtown Creek LTCP submitted to DEC in June 30, 2017. DEC Comments Letter received November 4, 2017. DEP submitted response letter January 8, 2018.

¹⁰Jamaica Bay and Tributaries LTCP submitted June 30, 2018. DEC Comment Letter dated December 21, 2018. Response Letter submitted March 1, 2019. Supplemental Documentation submitted August 14, 2019. DEC Comment Letter dated October 11, 2019.

LTCP Work Plan Flow Chart





19. LTCP Progress Update

CSO Watershed	LTCP Milestone	Progress Update
Jamaica Tributaries and Bay	June 2018	<ul style="list-style-type: none"> ➤ DEP submitted Jamaica Bay and Tributaries LTCP Supplemental Documentation on August 14, 2019. ➤ DEC Comment Letter was received on October 11, 2019. DEP and DEC held a Technical Meeting on October 30, 2019 to discuss the comments. ➤ DEP is preparing a DEC Comment Response Letter.
Citywide/ Open Waters	May 2020	<ul style="list-style-type: none"> ➤ Selected the Citywide/Open Waters LTCP Retained Alternatives and released the Citywide/Open Waters LTCP Retained Alternatives Summary. ➤ Continued the development and evaluation of Citywide/Open Waters LTCP Retained Alternatives



20. Citywide/Open Waters LTCP Update

At this time, there are no Quarter Two updates for this section. DEP continues to work towards finalizing the Citywide/Open Waters LTCP.