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Joseph DiMura, P.E.
Director, Bureau of Water Compliance
New York State Department of Environmental Conservation
625 Broadway, 4<sup>th</sup> Floor
Albany, New York 12233-3506

Re: CSO Order on Consent (DEC Case No. CO2-20110512-25,

modification to DEC Case No. CO2-20000107-8 Citywide CSO Program – Quarterly Report

Dear Mr. DiMura:

In accordance with the above named CSO Order on Consent, the New York City Department of Environmental Protection hereby submits the Citywide CSO Quarterly Report for the period of January 1 through March 31, 2017. The next Quarterly Meeting is to be determined.

Should you require further information, please contact me at (718) 595-5972.

Sincerely,

Keith Mahoney, P.E.

Acting LTCP Program Manager

#### Copy to:

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

# CSO Order on Consent

# **Quarterly Progress Report**

First Quarter 2017

(January 1st – March 31st)

April 30, 2017

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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 **January 1, 2017** and **March 31, 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 **March 22, 2016** at **Hazen and Sawyer's New York City Office** to discuss issues related to the Order and review milestones met during the fourth quarter of 2016.

On March 7, 2017 DEC approved the Alley Creek, Flushing Creek, Flushing Bay, Hutchinson River and Bronx River LTCPs. On March 29, 2017 DEC approved the Gowanus Canal LTCP. DEP will begin reporting on the status of the approved LTCP projects in the next quarterly report due July 30, 2017.

### **Critical Events This Quarter**

Date	Location	Event Description
Jan 5, 2017	Flushing Bay	V.M.1 Long Term Control Plan – DEC acknowledged receipt of the Flushing Bay LTCP
Jan 9, 2017	Jamaica Bay	XII.K.9 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvements to PSTs #1 and PST #4, and Construction of PST #5, DEP Submitted a Notice of Force Majeure Event (FM)(Conflicting Pipes)
Jan 11, 2017	Flushing Bay	V.J.3 Divert Low Lying Sewers/Raise Weir BB-R02 – Construction Completion; DEC responded to FM and Modification Request (MR)
Jan 25, 2017	Wards Island	XV.B.3.Construction Completion for Bar screen Replacement at Manhattan and Bronx Grit Chambers – DEC Accepted Certification of Construction Completion
Feb 2, 2017	Newtown Creek	VIII.K.4 Bending Weir / Floatables Control; Construction Completion, DEP Submitted FM
Feb 8, 2017	Jamaica Bay	XII.K.8 26 <sup>th</sup> Ward Construction Completion for High Level Main Sewage Pumps, FM – DEP responded to DEC Comments
Feb 28, 2017	Jamaica Bay	VI. Jamaica Tributaries CSO, H. Parallel 48-inch Siphon/Interceptor, 4. Construction Completion; DEP Certified Completion
Mar 7, 2017	Alley Creek	I.E.1. Long Term Control Plan – DEC approved LTCP
Mar 7, 2017	Bronx River	X.E. Long Term Control Plan – DEC approved LTCP
Mar 7, 2017	Flushing Bay	V.M.1 Long Term Control Plan – DEC approved LTCP
Mar 7, 2017	Flushing Creek	V.M.2 Long Term Control Plan – DEC approved LTCP
Mar 7, 2017	Hutchinson River	XI.G. Long Term Control Plan – DEC approved LTCP
Mar 21, 2017	Newtown Creek	VIII.K.4 Bending Weir / Floatables Control; Construction Completion; DEC responded to FM
Mar 21, 2017	Jamaica Bay	XII.K.8 26 <sup>th</sup> Ward Construction Completion for High Level Main Sewage Pumps, FM – DEC responded to DEP follow-up Response
Mar 21, 2017	Citywide	XIV.A Submit Approvable City-Wide LTCP, Modification Request; DEC determined the request warranted and will publicly notice the extension
Mar 21, 2017	Jamaica Bay	XII.K.9 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvements to PSTs #1 and PST #4, and Construction of PST #5, DEP submitted FM (Hazardous Material)
Mar 21, 2017	Westchester Creek	IX.E.4. Modification to CSO-29 and CSO-29A, Construction Completion; DEP submitted FM
Mar 27, 2017	Wards Island	Paragraph V.C. Hydraulic Analysis of the Capability of the Wards Island WWTP to Maximize Flows and Treat an Average of 2Xddwf; DEP submitted the Hydraulic Analysis
Mar 29, 2017	Gowanus Canal	III.I. Long Term Control Plan – DEC approved LTCP
Mar 30, 2017	Wards Island WWTP	XV. Wards Island WWTP Headworks Wet Weather Improvements, A. Reconstruction of Main Sewage Pumps (MSP), 2. Construction Completion for MSP replacement at Wards Island WWTP;DEP submitted FM(No. 6 MSP Motor failure)

Date	Location	Event Description
Mar 31, 2017	Jamaica Bay	XII.I.7 26 <sup>th</sup> Ward Construction Completion for High Level Sewer Separation, Phase 2- Design Completion; DEP Certified Completion

# **Major Actions This Quarter**

Location	Item Description	Milestone Date	Action Required	Status
James'as Davi	Parallel 48-inch	Feb 2017	Construction	Completed
Jamaica Bay	Siphon/Interceptor	reb 2017	Completion	Feb 28, 2017
Wards Island	Hydraulic Analysis	Mar 2017	Submit Report	Completed
vvarus isialiu	nyuraulic Alialysis	IVIAI 2017	Submit Report	Mar 27, 2013
Jamaica Bay	26 <sup>th</sup> Ward HLSS Phase II	Mar 2017	Design	Completed
JaillalCd Ddy	Zo Waru nLSS Phase II		Completion	Mar 31, 2017

### **Major Actions Next Quarter**

Location	Item Description	Milestone Date	Action Required	Status
Newtown Creek	Long Term Control Plan	June 2017	Submit Final LTCP	In Progress
Jamaica Bay	Long Term Control Plan	June 2017	Submit Final LTCP	In Progress

# Outstanding Modification Requests (MR) and Notices of Force Majeure Events (FM)

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
Flushing Bay	Low Lying Sewers/Raise Weir at BB- R02	<ul> <li>DEP submitted FM and MR 11/14/16 (2 FM events)</li> <li>DEC requested additional information relating to the unexpected ground conditions 01/11/17</li> </ul>	<ul> <li>Unexpected ground dewatering conditions at excavation</li> </ul>	Dec 2016	Construction Ongoing
Jamaica Tributaries	VI.H Parallel 48" Siphon / Interceptor	<ul> <li>DEP submitted FM 10/13/15</li> <li>DEC accepted FM 11/2/2015 and requested updates</li> </ul>	<ul> <li>Work embargo by National Grid during low temperatures (&lt;25°F)</li> </ul>	Feb 2017	Construction Certified 2/28/2017
Newtown Creek	VIII.K.4 Bending Weir / Floatables Control	<ul> <li>DEP submitted FM 10/9/15</li> <li>DEC accepted FM claim 11/2/15 and requested updates</li> </ul>	<ul> <li>Subsurface         obstructions at Q-         1 regulator site         that were not         identified during</li> </ul>	Dec 2017	Construction ongoing

Location	Item Description	Action(s)	Reason for Action(s)	Milestone Date	Status
			design phase		
Newtown Creek	VIII.K.4 Bending Weir / Floatables Control	<ul> <li>DEP Submitted FM 2/2/17</li> <li>DEC responded to FM 3/21/17</li> </ul>	<ul> <li>Extensive structural repairs are required to the diversion chamber to install baffles</li> </ul>	Dec 2017	Construction ongoing
Newtown Creek	VIII.J.3 & VIII.J.4  NC Enhanced Aeration in Dutch Kills and Lower Newtown Creek	<ul> <li>EP submitted MR 3/31/16</li> <li>DEC approved MR 8/28/16</li> </ul>	<ul> <li>To align with Newtown Creek LTCP submittal and availability of data</li> </ul>	VIII.J.3 Dec 2017 & VIII.J.4 Dec 2020	In Procurement (on hold)
Jamaica Bay	XII.K.8 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvement S	<ul> <li>DEP submitted FM 12/30/15</li> <li>DEC accepted FM 2/29/16 and requested updates</li> </ul>	Discovery of a void in a portion of an abandoned outfall structure	Jul 2018	Construction ongoing
Jamaica Bay	XII.K.8 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvement	<ul> <li>DEP submitted FM 10/20/16</li> <li>DEC requested additional information 12/9/16</li> <li>DEP responded to DEC Comments 2/8/17</li> <li>DEC denied FM but granted 4-day extension</li> </ul>	Test failure of three HLMSP castings	Jul 2018	Construction ongoing
Jamaica Bay	XII.K.9 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvement s to PSTs #1 and PST #4, and construction of PST #5	<ul> <li>DEP submitted FM 8/17/16</li> <li>DEC accepted FM 12/9/16</li> </ul>	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 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvement s to PSTs #1 and PST #4, and construction of PST #5	• DEP submitted FM 2/9/17	Conflicting Pipes obstruct planned work	Jul 2020	Construction Ongoing
Jamaica Bay	XII.K.9 26 <sup>th</sup> Ward WWTP Preliminary Treatment Reliability Improvement s to PSTs #1 and PST #4, and construction of PST #5	• DEP submitted FM 3/21/17	<ul> <li>Hazardous materials were found on pipes that need to be demolished.</li> </ul>	Jul 2020	Construction Ongoing
City-Wide	LTCP Submittal	<ul> <li>DEP submitted MR 6/24/16</li> <li>DEC agreed to 360-day extension and has publicly noticed</li> </ul>	<ul> <li>Large geographical area, requires extensive sampling to support LTCP</li> </ul>	<del>Dec 2017</del> Dec 2018	
Wards Island WWTP	Headworks Improvement s, Reconstructi on of MSPs	<ul> <li>DEP submitted FM 5/31/16</li> <li>DEC accepted FM 8/29/16</li> <li>DEP sent police report and update of no schedule impact on 11/11/16</li> </ul>	<ul> <li>05/11/16, damage to 4 stored MSPs due to vandalism discovered</li> </ul>	Dec 2017	Construction Ongoing
Westchest er Creek	IX.E.4. Modification to CSO-29 and CSO-29A, Construction Completion	• DEP submitted FM 3/21/17	<ul> <li>Unknown underground concrete structure found that will interfere with installation of soldier piles</li> </ul>	Dec 2019	Construction ongoing



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	Projected Completion	% of Time Elapsed	% of Construction Completed <sup>(1)</sup>
	Flushing Interceptor	TBD	TBD	-	-	-
Flushing	Divert Low-Lying Sewers/Raise BB-	Dec 2014	Dec 2016	December 2017	151%	47%
Вау	Regulator Modifications	Dec 2015	Jun 2018	Jun 2018	56%	54%
	Flushing Bay Dredging	Sep 2016	Mar 2018	Mar 2018	33%	37%
Jamaica	Parallel 48-Inch Interceptor	Aug 2014	Feb 2017	Feb 2017	100%	98%
Tributaries	<b>Bending Weirs</b>	Dec 2014	Jun 2016	Jun 2016	100%	100%
	Enhanced Aeration East Branch, Upper	Oct 2015	Jun 2018	Jun 2018	53%	47%
Newtown Creek	Enhanced Aeration Dutch Kills, Lower	Dec 2017	Dec 2020	Dec 2020	-	-
	Bending Weirs/ Floatables Control	May 2015	Dec 2017	Dec 2017	71%	65%
Westchester	Modifications to CSO-29 & 29A	Dec 2015	Dec 2020	Dec 2020	25%	23%
Creek	Pugsley Creek Parallel Interceptor	Dec 2016	Dec 2019	Dec 2019	6%	0%

Location	Item Description	Notice to Proceed	Construction Completion	Projected Completion	% of Time Elapsed	% of Construction Completed <sup>(1)</sup>
	26 <sup>th</sup> Ward HLSS Phase 1	Mar 2016	Dec 2018	Dec 2018	30%	37%
	26 <sup>th</sup> Ward HLSS Phase 2	Mar 2018	Dec 2020	Dec 2020	-	-
	26 <sup>th</sup> Ward HLSS Phase 3	Mar 2020	Dec 2022	Dec 2022	-	-
Jamaica Bay	26 <sup>th</sup> Ward Low Level MSPs	Aug 2012	Apr 2015 <sup>(2)</sup>	Apr 2015	97%	100%
	26 <sup>th</sup> Ward High Level MSP	Jun 2015 <sup>(2)</sup>	Jul 2018 <sup>(2)</sup>	May 2018	64%	61%
	26 <sup>th</sup> Ward PSTs 1-5	Jan <b>2016<sup>(2)</sup></b>	Jul 2020 <sup>(2)</sup>	Nov 2020	29%	28%
	Rockaway WWTP Conveyance		Dec 2017	Dec 2017	-	-
WI WWTP	MSP Replacement	Mar 2015	Dec 2017	Apr 2018	64%	29%
	Bar Screen	Dec 2014	Jun 2018	Jun 2018	80%	91%

<sup>(1)</sup> Percentage Construction Completion is tracked based on cost incurred.

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



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
Contract ID	TBD	CS-FB-LLD	CS-FB-BWR	CSO-DRDG DRG-FB
Plan Elements	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 10 regulators	Environmental Dredging of Flushing Bay
Location	From MH 45 at Whitestone Expressway to MH 29 at Ulmer Street and 25 <sup>th</sup> Avenue	Regulator BB-02. Berrian Blvd and 19 <sup>th</sup> Ave between 43 <sup>rd</sup> St. and 45 <sup>th</sup> St.	Five of ten regulators along 108 <sup>th</sup> street, Ditmars Blvd and the LaGuardia Airport site	Proximate to CSO Outfalls BB-006 and BB-008
Cost	TBD	\$5,610,000	\$28,820,000	\$34,720,000
Status	No construction activity	In Construction	In Construction	In Construction

# **Design Activity Summary**

	This Quarter	Next Quarter
Tallman Island Flushing Interceptor	<ul> <li>No design activity</li> </ul>	<ul> <li>A CCTV/Sonar inspection to be performed in late 2017 to monitor structural integrity of pipe.</li> </ul>
Divert Low-Lying Sewers / Raise Weir BB-R02	In Construction	<ul> <li>Design services during construction (DSDC) to continue at DDC.</li> </ul>
Regulator Modifications	• DSDC	Continue with DSDC.

# **Construction Activity Summary**

	This Quarter	Next Quarter
Tallman Island Flushing Interceptor	No construction activity	No construction activity
Divert Low-Lying Sewers / Raise Weir BB-R02	<ul> <li>10" and 18" sanitary sewers installed at Manhole #1. Manhole #2 has reached final depth of 43ft; 22 ft of pre-cast manhole sections have been installed.</li> </ul>	<ul> <li>Restore roadway at manhole #1.</li> <li>Install remaining pre-cast manhole sections, drop pipes and sanitary sewer</li> </ul>
Regulator Modifications	<ul> <li>Contractor completed excavation for chamber expansion at BB-R10. Temporary roadway decking at BB-R09installed; contractor completed excavation to the top of double barrel combined sewer.</li> <li>Access vault stairs installed at BB-R06 and initial demolition of the existing dry weather channel and flume began.</li> </ul>	<ul> <li>Place concrete for base slabs and new walls for chamber expansion and access vault at BB-R10, including new section of weir wall.</li> <li>Install new drag struts and tie beams for chamber expansion at BB-R09. Install dewatering system and begin demolition of west-side barrel of existing double barrel.</li> <li>Complete modifications to existing dry weather channel and flume at BB-R06.</li> <li>Plug existing siphon and install dissipation blocks at BB-R05.</li> <li>Install access vault staircase, demo existing sluice gate and place lightweight fill and topping slab in overflow channel at BB-R04.</li> </ul>
Environmental Dredging	<ul> <li>Contractor mobilized.         Deteriorated Pier 2 and piles         removed. Dredging initiated on         1/25 and near completion.     </li> </ul>	Commence Sand Cap and backfill.



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
Contract ID	CS-JA-BBS	CS-JA-BWR
Plan Elements	Parallel 48-inch Sewer	Bending Weirs
Location	Belt Parkway Queens	Regulator J6 on the East Interceptor and regulators J3 and J14 on the West Interceptor
Construction Cost	\$20,256,909	\$6,853,955
Status	Construction	Completed
Other Issues	The interceptor was activated on February 24, 2017 meeting the consent order milestone date of Feb. 2017. 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. DEP proposed schedule for downstream sewer work to DEC.	Force Majeure accepted November 2015

# **Design Activity Summary**

	This Quarter	Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul> <li>Continued design services during construction (DSDC)</li> </ul>	Continue DSDC
Bending Weirs	Continued DSDC	Continue DSDC

## **Construction Activity Summary**

	This Quarter	Next Quarter
Parallel 48-inch Siphon/Interceptor	<ul> <li>Contract was substantially completed. The new interceptor was activated (see above)</li> <li>Completed demobilization and began punch-list work.</li> </ul>	<ul> <li>Activate the new sewer line as noted above in "issues"</li> <li>Continue/Complete punch-list work</li> </ul>
Bending Weirs	<ul> <li>Completed regulator modification work at JA-3, JA-14, and JA-6 and the completion of the work was certified in June 2016 meeting the consent order milestone date.</li> </ul>	Complete punch-list work



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**

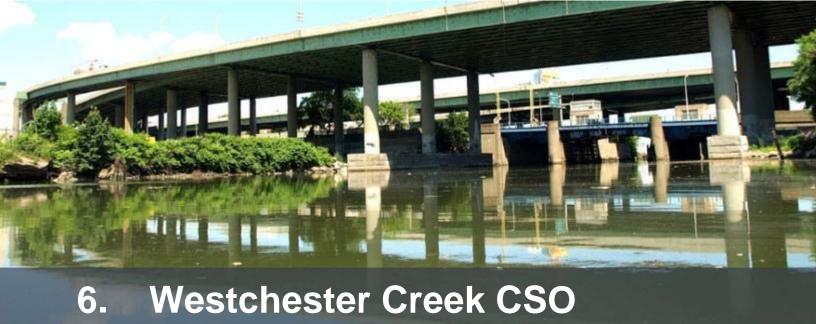
	Enhanced Aeration 2	Enhanced Aeration 3	Bending Weirs / Floatables Control
Contract ID	CSO-NC-3	CSO-NC-4	CS-NC-REG & FLO
Plan Elements	Enhanced Aeration	Enhanced Aeration	Floatables Controls and Overflow Reduction
Location	East Branch and Upper Newtown Creek	Dutch Kills and Lower Newtown Creek	Dutch Kills, Maspeth Creek, English Kills and East Branch
Construction Cost	\$16,704,250 (G+E+H Contract amounts together)	<b>\$</b> 31,695,425	\$42,895,573
Status	Construction	Procurement	Construction
Other Issues	Expanded scope of work	On hold pending result of Superfund-related water sampling and LTCP	

# **Design Activity Summary**

	This Quarter	Next Quarter
Enhanced Aeration 2	Continued to provide DSDC	Continue providing DSDC
Enhanced Aeration 3	<ul> <li>No activity – Contract procurement is on hold</li> </ul>	<ul> <li>Procurement of the construction contract is expected to remain on hold</li> </ul>
Bending Weirs / Floatables Control	Continued to provide DSDC	Continue to provide DSDC

# **Construction Activity Summary**

	This Quarter	Next Quarter
<ul> <li>Continued construction activities including installation of structural steel installation for Blower and Storage Shed Building. Installation of electrical duct banks.</li> <li>Continued fabrication and delivery of materials.</li> </ul>		<ul> <li>Complete masonry work for the Blower Building.</li> <li>Continue all other work (electrical &amp; mechanical) inside and outside the two structures.</li> <li>Deliver and install blowers.</li> </ul>
Enhanced Aeration 3	No activity	No activity
Bending Weirs / Floatables Control	<ul> <li>Continued construction         activities including the         installation of bending weir         gates and baffle guides at NC-         077 and NC-083</li> <li>Completed installation of         bending weirs at NC-077, BB-         026 and NC-077.</li> <li>Continued installation of sluice         gates at NC-015 and BB-026</li> </ul>	<ul> <li>Continue construction activities including structural modification at NC-83 and NC-77 and installation of bending weirs and other related equipment</li> <li>Commence installation of instrumentation at all sites.</li> </ul>



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
Contract ID	CS-ER-WCM	CS-ER-WCP
Plan Elements	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
Location	Eastchester Road, Bronx	Classon Point, Bronx
Construction Cost	\$14.5 Million	\$81.5 Million
Status	In Construction	NTP Awarded December 19, 2016 Contractor in the process of submitting construction documents and establishing field office
Other Issues		Field conditions

# **Design Activity Summary**

	This Quarter	Next Quarter
Modifications to CSO-29 and CSO-29A	Provide DSDC services	Continue to provide DSDC services.
Pugsley Creek Parallel Interceptor Start from CSO-24	Final Design completed	<ul> <li>Continue design support through construction</li> </ul>

# **Construction Activity Summary**

	This Quarter	Next Quarter
Modifications to CSO-29 and CSO-29A	<ul> <li>Continued construction activities associated with excavation for overflow chamber extension and combined sewer modifications</li> </ul>	<ul> <li>Continue construction activities for excavation for overflow chamber extension and combined sewer modifications, including utility relocations of Con Edison facilities.</li> </ul>
Pugsley Creek Parallel Interceptor Start from CSO-24	<ul> <li>Contractor submitted Health and Safety Plan, Materials Handling Plan, Soil Sampling Plan, shop drawings for box sewer, and Contaminated Water Handling Plan</li> <li>Contractor signed lease for field office</li> </ul>	Utility relocation and water main installation



The Jamaica Bay CSO Facility Planning area includes the drainage areas of the 26<sup>th</sup> 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 <sup>th</sup> Ward High Level Sewer Separation	26 <sup>th</sup> Ward Wet Weather Stabilization
Contract ID	Project not yet initiated	CS-FC-SEW	26W-12(CO 128) 26W-21, 26W-20
Plan Elements	Improve collection system and WWTP capacity to achieve 2DDWF	Remove storm water contribution from 443 acres from the combined sewer system	Low Level MSPs High Level MSPs PST#5 PST1-4 Stabilization
Location	Rockaway WWTP, Queens	Fresh Creek, Brooklyn	26 <sup>th</sup> Ward WWTP, Brooklyn
Construction Cost	TBD	\$57 million for Phases 1a \$71 million for Phases 2a and 2b (estimated). \$63 million for Phases 3a and 3b (estimated)	LLMSP \$7.6 million 26W-21 \$16.3 million 26W-20 \$134.4 million
Status	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)
Other Issues		Utility Relocation	

# **Design Activity Summary**

	This Quarter	Next Quarter
26 <sup>th</sup> Ward High Level Sewer Separation	Design is complete for Phase 2.	<ul> <li>Procurement for Phase 2. Design initiation for Phase 3.</li> </ul>
26 <sup>th</sup> Ward Preliminary Treatment Reliability Improvements	<ul> <li>Continued design services during construction (DSDC)</li> </ul>	Continuation of DSDC

# **Construction Activity Summary**

	This Quarter	Next Quarter
26 <sup>th</sup> Ward High Level Sewer Separation	<ul> <li>Phase I construction progressed.         Approx. 19,809 of 20,510 ft of water main installed.     </li> <li>788 of 847 ft of sanitary sewer installed</li> <li>790 of 1067 ft of combined sewer installed</li> <li>1450 of 10,146 ft of storm sewer installed</li> </ul>	<ul> <li>Continue installation of water main and sewer</li> <li>Relocated utility</li> <li>Install storm sewer chamber</li> </ul>
26 <sup>th</sup> Ward Preliminary Treatment Reliability Improvements	<ul> <li>PST work (26W-20):</li> <li>Completed erecting and encasing columns and slab deck for Blowers 5 &amp; 6. Continued installation of process air piping. Continued bus duct, communication and power conduits between blower switchgear and transformers.</li> <li>Completed remaining soldier piles for the Support of Excavation (SOE) of PST-5, Meter Vault, and manhole MH-D6. Continued to excavate and install SOE lagging between soldier piles on south side for PST-5 and north side for MH-D6 and Meter Vault MV-1.</li> <li>Started abatement of hazardous materials in the PST-5 south and north excavation.</li> <li>Completed installation of slab and erection of steel for Interim Grit Building (IGB). Began installing sludge piping and external panels in IGB.</li> </ul>	<ul> <li>PST work (26W-20):</li> <li>Complete switchgear upgrade, blower switchgear and transformer testing.         Complete process air piping for Blowers 1–4. Start-up of Blowers 1-4. Install Blower 5.</li> <li>Complete SOE and hazardous materials abatement in PST-5 excavation.</li> <li>Activate the dewatering system and install Stelcor piles for PST-5, new 30" Plant Drain, MV-1, MH-M5, and MH-D6.</li> <li>Complete construction of IGB including installation of classifiers, cyclones, and associated piping and electric.</li> </ul>

This Quarter	Next Quarter
<ul> <li>HLMSP work (26W-21):</li> <li>Continued to install electrical conduits between switchgear, pumps and the Secondary Resistor Controls (SRC).</li> <li>Completed installation of HLMSP #1, motor and SRC.</li> <li>Continued to install Seal Water System piping.</li> </ul>	<ul> <li>HLMSP work (26W-21):</li> <li>Continue to install conduit and wire and upgrade switchgear in preparation for HLMSP #1 start-up.</li> <li>Start-up and testing of HLMSP #1.</li> </ul>



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
Contract ID	WI - 288(R)	WI – 280
Plan Elements	Reconstruction of Six (6) Main Sewage	Replace Bar Screens at Bronx and
	Pumps	Manhattan Grit Chambers
Location	Wards Island WWTP	Wards Island WWTP
Status	In Construction	Certification of Notice to Proceed to
		Construction sent on
		December 23, 2014
Construction Cost	\$5,292,653	\$13,229,000
Other Issues	Main Sewage Pump (MSP) No. 6 failed.	None
	Evaluation of damage and repairs in	
	progress. During commissioning of MSP	
	No. 2, in March 2017, its motor failed.	
	Evaluation of damage and repairs in	
	progress.	

Design Activity Summary

	This Quarter	Next Quarter
Main Sewage Pump Replacement	• Complete	• Complete
Bar Screen Replacement	<ul> <li>Start preparation of final documentation</li> </ul>	<ul> <li>Continue to prepare Final Documents</li> </ul>

# **Construction Activity Summary**

	This Quarter	Next Quarter
Main Sewage Pump Replacement	• Commissioned 3 <sup>rd</sup> pump	<ul> <li>Repair damaged motors (#2 and #6)</li> <li>Complete commissioning of 3<sup>rd</sup> pump</li> <li>Start reconstruction of 4<sup>th</sup> pump</li> </ul>
Bar Screen Replacement	Issued Substantial Completion	<ul> <li>Continue Closeout and punchlist activities</li> </ul>



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*: \$519,934.

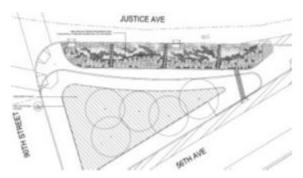
#### Rego Park Green Streets

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: Construction Bidding Invoiced to Date: \$128,414





#### > Two Sponge Park<sup>TM</sup> 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 of runoff from a tributary area of 1,800 sq ft, and the second basin has the capacity to treat 2,460 gallons of runoff from 3,465-sq-ft impervious area. Monitoring at this site is ending and site is being prepared for decommissioning.

Status: Year 2 of (two-year?) monitoring period

Invoiced-to-Date: \$464,212

#### **▶** 6<sup>th</sup> 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 4<sup>th</sup> 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: \$434,629



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: \$453,951

#### 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 to start in late summer/early fall.

Status: Construction Completed Invoiced to Date: \$343,756











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 rightof-way contracts building Right-of-way Bioswales, Rightof-way 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 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 **First** 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 design and build thousands of Right-of-way Bioswales, Right-of-way 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**

<sup>\*</sup> May not sum to total due to rounding. \*\*The 473 acres represent 0.6% of the total impervious are in combined sewer areas to be managed. This table is cumulative and updated each quarter.



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.

#### **Green Infrastructure Meetings**

Date	Community Member(s)	Type of Outreach	Attendees
January			
17	Auburndale Improvement Association	Presentation	30
	Community Board 4, Transportation &		
19	Infrastructure Subcommittee	Presentation	20
25	SWIM Steering Committee	Meeting	12
Februar	1		
1	-	-	-
March			
22	BCEQ Workshop	Presentation	45
24	Newtown Creek Alliance/Riverkeeper	Meeting	7
27	Queens College Course	Presentation	20
31	Gowanus Canal Conservancy/CCNY MLArch	Tour	15

### **LTCP Public Meetings**

Date	CSO Watershed	Meeting Topic	Attendees
January			
-	-	-	-
February			
21	Newtown Creek	LTCP Public Meeting	28
March			
-	-	-	-

### **Community Outreach Email Correspondence this Quarter**

	January	February	March	Sub-Totals
RSVP to LTCP Meeting	0	47	0	47
Request to be Added	3	5	2	10
Request to be Deleted	0	0	0	0
Press Inquiries	0	0	0	0
Public Comment	0	0	0	0
General Information	0	0	5	5
Sub-Totals	3	12	7	22

#### Other LTCP Education and Outreach Activities

- > January 25, 2017 DEP met with the SWIM Steering Committee to provide an update on the NYC Green Infrastructure Program.
- > January 26, 2017: DEP attend the SWIM Coalition's Public Meeting.
- > January 31 2017: DEP met with Congressman Crowley's Office to provide an update on Flushing Bay dredging.



		DEP Responsible Personnel		<u>ersonnel</u>
Planning Area	Project	Bureau	Chief	APM
	CSO-DRDG: Gowanus Dredging	BEDC	Tysvaer	Chao
Inner Harbor	CSO-GC: Flushing Tunnel	BEDC	Clarke	Joseph
	CSO-GC: Gowanus PS	BEDC	Clarke	Joseph
	CSO-DRDG: Dredging	BEDC	Tysvaer	Novotny
	PW-088 Assn. 2B: Flushing Interceptor	BWT	TBD	TBD
Flushing	CS-FB-LLD: Low-Lying Sewers	BWSO	DeLillo	Gordon
Bay	CS-FB-LLD R2 Weir	BWT	TBD	TBD
	CS-FB-BWR: Regulators	BEDC	Tysvaer	Gordon
	TI-WW-1: Whitestone Interceptor	BEDC	Solimando	Sadat
Jamaica	CS-JA-BWR: Bending Weirs	BEDC	Tysvaer	Novotny
Tributaries	CS-JA-BBS: 48-Inch Sewer	BEDC	Tysvaer	Meshkati
	CSO-NC-4: Dutch Kills, Lower Newtown	BEDC	Tysvaer	Meshkati
Newtown	CSO-NC-3: East Branch, Upper Newtown	BEDC	Tysvaer	Meshkati
Creek	CSO-NC-2: Enhanced Aeration Lower English Kills	BEDC	Tysvaer	Adabi
	CS-NC-REG&FLO: Regulators / Floatables Control	BEDC	Tysvaer	Meshkati
Westchester	CS-ER-WCM: Modifications to CSO-29 / 29A	BEDC	Tysvaer	Betemit
Creek	CS-ER-WCP: Pugsley Creek Parallel Interceptor	BWSO	DeLillo	Garin
	CSO-HC: Hendrix Creek Dredging	BEDC	Tysvaer	N. Shah
Jamaica	CS-FB-SEW: 26th Ward / Fresh Creek HLSS	BWSO	DeLillo	Gordon
	CO 26W-128: Low Level Main Sewage Pumps	BEDC	Solimando	Kharivala
Bay	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	Lochan	A. Parada
vvarus island	Bar Screen Replacement	BEDC	Moriarty	N. Shah



## Action Items from December 12, 2016 CSO Quarterly Progress Meeting

Planning Area	Responsible Party		Required Action	Status
	DEC	•	DEC to review force majeure on low-lying sewer diversion	Complete
Flushing Bay	DEP	•	DEP to review letter on EBP in Flushing Meadows recently sent to DEC	In Progress
	DEP	•	DEP to respond to DEC request for additional information for force majeure on low-lying sewer diversion	In Progress
	DEC	•	DEC to consider inserting TBDs for the NC-4 NTPC and CC milestones in new CSO Order Appendix A	In Progress
Newtown	DEC	•	DEC to coordinate with EPA to set up workshop on NC LTCP	Complete
Creek	DEP	•	DEP to submit data analysis got NC LTCP 2 weeks prior to public meeting	In Progress
Coney Island Creek	DEP	•	DEP to submit report on lab interference for CIC water quality sampling	In Progress
	DEP	•	DEP to respond to DEC's final comments on Pugsley Creek	Complete
Westchester			Interceptor Final Design	
Creek	DEC	•	DEC to provide clarification on comments on Pugsley Creek interceptor final design	Complete
Wards Island	DEP	•	DEP to confirm the CC date for Wards Island MSPs	In Progress
	DEP	•	DEP to submit revised schedule for 26W interim limits and update relevant sections of WWOP	Complete
Jamaica Bay	DEP	•	DEP to confirm status of NTP for 26th Ward HLSS Phase 1	Complete
/ Tributaries	DEP	•	DEP to provide time impacts for 26 <sup>th</sup> Ward WWTP sludge line rupture on PST work	Complete
	DEC	•	DEC to have Gowanus Canal and Bronx River LTCPs undergo further review by their upper management	In Progress
LTCPs	DEP	•	DEP and DEC legal/technical to conduct a separate meeting on approvals of LTCPs	In Progress
Misc	DEP	•	Provide flow monitoring and influent sampling data from LTCP sampling efforts (ongoing)	In Progress

Planning Area	Responsible Party		Required Action	Status
	DEP	•	DEP to provide 12-month look ahead for LTCPs	In Progress
	DEP	•	DEP to discuss internally approach to meeting Rockaway WWTP conveyance improvements milestone	In Progress



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
2	Westchester Creek <sup>1</sup>	June 2014	Pending
3	Hutchinson River	September 2014	Approved
4	Flushing Creek	December 2014	Approved
5	Bronx River	June 2015	Approved
6	Gowanus Canal	June 2015	Approved
7	Coney Island Creek <sup>1</sup>	June 2016	Pending
8	Flushing Bay <sup>2,3</sup>	December 2016	Approved
9	Jamaica Tributaries & Bay <sup>2</sup>	June 2017	Underway
10	Newtown Creek	June 2017	Underway
11	Citywide <sup>4</sup>	December 2018	Underway

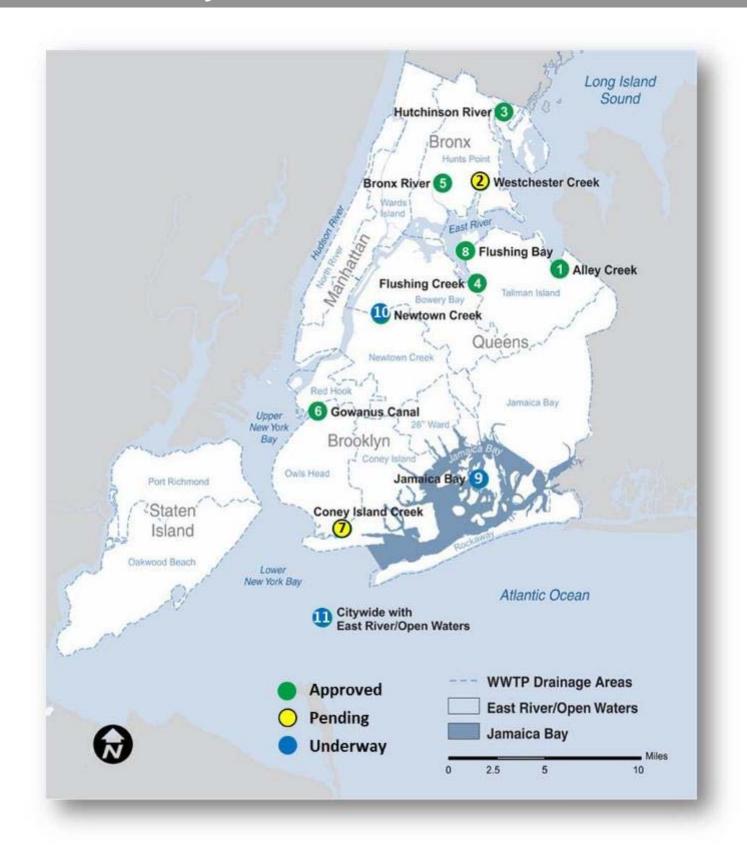
<sup>1)</sup> Final approval from DEC to swap Westchester Creek LTCP to June 30, 2014 and Coney Island Creek LTCP to June 30, 2016 received on April 11, 2014.

<sup>2)</sup> Final approval from DEC to swap Flushing Bay LTCP to June 30, 2016 and Jamaica Tributaries & Bay LTCP to June 30, 2017 received on February 23, 2015.

A Modification Request to extend Flushing Bay LTCP to December 31, 2016 was approved by DEC May 17, 2016.

<sup>4)</sup> DEC approved Mod Request for Citywide LTCP extension to December 2018.

# **New York City CSO Watersheds**





The status of all Long-Term Control Plan development is described below. Where only the planning area and a LTCP due date are shown, work has not yet been initiated as of the reporting quarter. All Waterbody/Watershed Facility Plans (WWFPs) have been approved

### LTCP Activity Status

CSO Watershed	Alley Creek¹	Westchester Creek <sup>2</sup>	Hutchinson River <sup>3</sup>	Flushing Creek <sup>4</sup>	Bronx River <sup>5</sup>	Gowanus Canal <sup>6</sup>	Flushing Bay	Coney Island	Jamaica Bay	Newtown Creek	Citywide
LTCP Due Date	June 2013	Jun 2014	Sept 2014	Dec 2014	Jun 2015	Jun 2015	Dec 2016	Jun 2016	Jun 2017	Jun 2017	Dec 2017
Waterbody Startup	<b>()</b>			<b>⊘</b>		<b>O</b>	<b>O</b>			<b>O</b>	
Sampling											
Modeling	<b></b>	<b>⊘</b>				<b>O</b>			0	0	
Alternatives Development		<b>O</b>				<b>O</b>	<b>O</b>		0	0	
LTCP Development	<b></b>	<b>⊘</b>				<b>O</b>				0	
Public Participation <sup>7</sup>	<b>O</b>	0	<b>⊘</b>	<b>O</b>	0	<b>O</b>	0	0	0	0	0
Approval Date	Mar 2017	Pending	Mar 2017	Mar 2017	Mar 2017	Mar 2017	Pending	Mar 2017			

<sup>&</sup>lt;sup>1</sup>Final Alley Creek LTCP previously submitted to DEC June 30, 2013. Received DEC Determination Letter in December 12, 2013. DEP submitted Article 78 to DEC on February 21, 2014. Resubmitted to DEC on June 30, 2014. DEC Comments Letter received January 23, 2015. Supplemental Documentation submitted May 6, 2015.

<sup>&</sup>lt;sup>2</sup> Final Westchester Creek LTCP submitted to DEC in June 30, 2014. DEC Comments Letter received January 14, 2015. Supplemental Documentation submitted April 14, 2015.

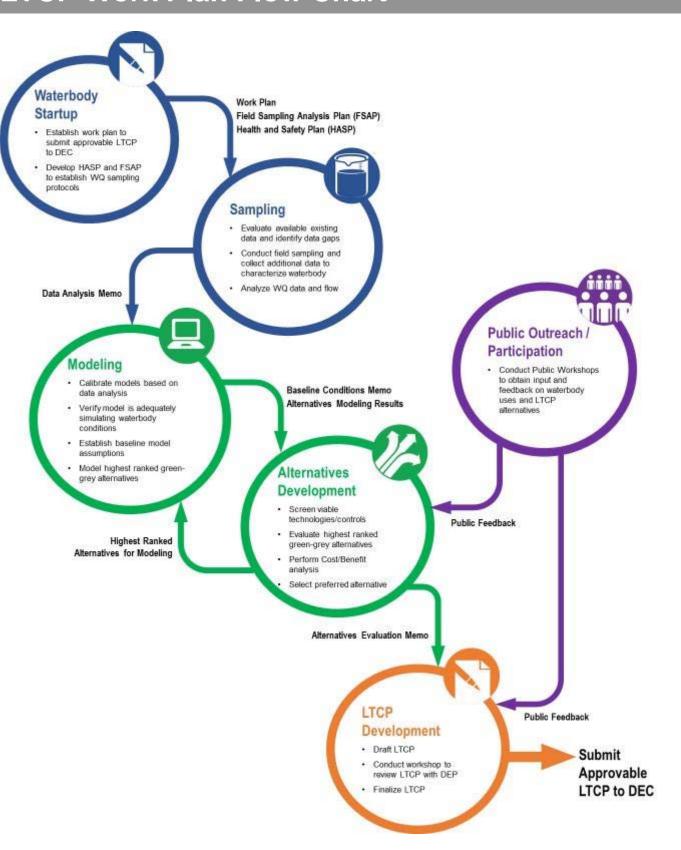
<sup>&</sup>lt;sup>3</sup>Final Hutchinson River LTCP submitted to DEC in September 30, 2014. DEC Comments Letter received January 14, 2015. Supplemental Documentation submitted April 14, 2015.

<sup>&</sup>lt;sup>4</sup>Final Flushing Creek LTCP submitted to DEC in December 30, 2014. DEC Comments Letter received January 23, 2015. Supplemental Documentation submitted May 22, 2015.

<sup>&</sup>lt;sup>5</sup>Final Bronx River LTCP submitted to DEC in June 30, 2015. DEC Comments Letter received August 24, 2015. Supplemental Documentation submitted September 23, 2015. <sup>6</sup>Final Gowanus Canal LTCP submitted to DEC in June 30, 2015. DEC Comments Letter received August 5, 2015. Supplemental Documentation submitted September 8, 2015.

<sup>&</sup>lt;sup>7</sup>Pending 3<sup>rd</sup> public meeting presenting LTCP Recommendations. DEC indicated Gowanus Canal public participation requirements have been met.

# LTCP Work Plan Flow Chart





	CSO Watershed	LTCP Milestone	Progress Update		
1	1 Alley Creek June 2013		<ul> <li>DEP submitted LTCP on 7/2/2013. DEC provided comments on 9/12/13.</li> <li>DEP submitted a revised LTCP on 11/12/13. DEC disapproved LTCP on 12/12/13.</li> <li>DEP resubmitted the LTCP 6/30/14.</li> <li>DEC comments on LTCP received on 1/23/15. DEP submitted Supplemental Documentation &amp; Reponses to Comments on 5/6/15.</li> <li>DEC sent comments regarding Spring Creek demo on 6/4/15. DEP replied on 8/4/15. DEP submitted follow-up responses on 10/14/15.</li> <li>DEC approved Alley Creek LTCP on 3/7/17</li> <li>DEP will begin reporting on the status of the approved LTCP in the next quarterly report.</li> </ul>		
2	Westchester Creek	June 2014	<ul> <li>DEP submitted LTCP on 6/30/14.</li> <li>DEC comments received on 9/22/14. DEP responded on 11/24/14.</li> <li>Additional DEC comments received on 1/14/15. DEP submitted Supplemental Documentation &amp; Response to Comments on 4/14/15.</li> </ul>		
3	Hutchinson River	September 2014	<ul> <li>DEP submitted LTCP on 9/30/14.</li> <li>DEC comments received on 1/14/15. DEP submitted Supplemental Documentation &amp; Response to Comments on 4/14/15.</li> <li>DEC sent additional comments on 6/10/15. DEP responded on 8/7/15.</li> <li>DEC approved Hutchinson River LTCP on 3/7/17</li> <li>DEP will begin reporting on the status of the approved LTCP in the next quarterly report.</li> </ul>		
4	Flushing Creek	December 2014	<ul> <li>DEP submitted LTCP on 12/30/14.</li> <li>DEC comments received on 3/23/15. DEP submitted Supplemental Documentation &amp; Response to Comments on 5/22/15.</li> </ul>		

	CSO Watershed	LTCP Milestone	Progress Update
			<ul> <li>DEC sent additional comments on 6/10/15. DEP responded on 8/7/15.</li> <li>DEC approved Flushing Creek LTCP on 3/7/17.</li> <li>DEP will begin reporting on the status of the approved LTCP in the next quarterly report.</li> </ul>
5	Bronx River	June 2015	<ul> <li>DEP submitted LTCP on 6/30/15.</li> <li>DEC comments received on 8/24/15. DEP responded on 9/23/15.</li> <li>DEC approved Bronx River LTCP on 3/7/17</li> </ul>
6	Gowanus Canal	June 2015	<ul> <li>DEP submitted LTCP on 6/30/15.</li> <li>DEC comments received on 8/5/15. DEP submitted Supplemental Documentation &amp; Response to Comments on 9/8/15.</li> <li>1/6/16 DEP submitted Gowanus Canal LTCP and Superfund Modeling Peer Review Report.</li> <li>DEC approved Gowanus Canal LTCP on 3/29/17.</li> <li>DEP will begin reporting on the status of the approved LTCP in the next quarterly report.</li> </ul>
7	Coney Island Creek	June 2016	<ul> <li>DEP submitted LTCP on 6/30/16.</li> <li>Comments from DEC received on 8/17/16. DEP responded to comments on 9/16/16.</li> <li>DEP submitted the Supplemental Fecal Testing Findings Memorandum on 3/17/17.</li> </ul>
8	Flushing Bay	December 2016	<ul> <li>DEP requested a modification for additional 6 months extension to December 2016. DEC approved DEP's request on 5/14/16.</li> <li>DEP submitted LTCP on 12/30/16.</li> <li>DEC approved Flushing Bay LTCP on 3/7/17.</li> <li>DEP will begin reporting on the status of the approved LTCP in the next quarterly report.</li> </ul>
9	Jamaica Tributaries and Bay	June 2017	<ul> <li>DEP completed data analysis.</li> <li>DEP continued to establish the baseline conditions to be used for the development of the LTCP</li> <li>DEP continued LTCP IW and WQ modeling efforts.</li> <li>DEP continued to develop potential alternatives.</li> <li>DEP held a technical meeting with DEC on March 30, 2017 to review preliminary baseline modeling assumptions, water quality gap analysis and LTCP alternatives screening.</li> <li>DEP anticipates requesting a modification for the submittal of this LTCP.</li> </ul>
10	Newtown Creek	June 2017	<ul> <li>DEP continued LTCP IW and WQ modeling efforts; continued WQ modeling Peer Review.</li> <li>DEP continued to develop and evaluate potential alternatives.</li> <li>DEP presented water quality sampling results, investments to date,</li> </ul>

	CSO Watershed	LTCP Milestone	Progress Update	
			baseline modeling and WQS attainment; CSO Control alternatives and siting; and the LTCP development schedule during the February 16, 2017 DEP-DEC-EPA meeting.  DEP conducted public data-sharing meeting on February 21, 2017.	
11	Citywide	December 2018	<ul> <li>Includes Harlem River, Open Waters and East River LTCPs.</li> <li>In June 2016 DEP requested a modification for a 12 months extension, to December 2018; DEC approved request on 4/26/17. The public comment period is from 4/26/17 through 5/26/17.</li> <li>As discussed with the DEC since the modification request was submitted in June 2016, DEP may require additional time beyond December 2018 to incorporate all of the flow monitoring and ambient sampling previously proposed to NYSDEC into the Citywide LTCP scope of work but DEP is evaluating streamlining its overall program to meet this December 2018 milestone.</li> <li>DEP continued data analysis for Phase I (Harlem and Hudson Rivers) Sampling Programs.</li> </ul>	
			DEP initiated Phase II (East River and Long Island Sound) Sampling Program.	