

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF ENGINEERING DESIGN & CONSTRUCTION DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1

# **Combined Sewer Overflow Order on Consent**

# **Quarterly Progress Report – Second Quarter 2010**



June 2010



Caswell F. Holloway Commissioner

Kathryn Mallon, P.E. Deputy Commissioner Bureau of Engineering Design & Construction kmallon@dep.nyc.gov

96-05 Horace Harding Expressway Corona, NY 11368 T: (718) 595-6183 F: (718) 595-5999 Mr. Joseph DiMura, P.E. Director Bureau of Water Compliance New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Re: Order on Consent (CSO Order) DEC Case # CO2-20070101-1 Citywide CSO Program - Quarterly Report

Dear Mr. DiMura,

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In accordance with Section IV, Paragraphs A-C of the above-referenced Consent Order, the New York City Department of Environmental Protection hereby submits the Citywide CSO Quarterly Report for the period of April 1 through June 30, 2010. The next Quarterly Meeting is scheduled for September 20, 2010 at a location to be determined.

Should you require further information, please contact me at (718) 595-6208.

Sincerely,

Roy Tysvaer, P.E. Director Wastewater Treatment and Water Quality

c: Kevin Clarke, Chief, BEDC Matthew Osit, Chief, BEDC Reza Marandi, Chief, BEDC Ray Meshkati, Chief, BEDC Diane Hammerman, Director, BWT Arthur Spangel, Director, BWT Marcella Eckels, Deputy General Counsel, Legal Heather Donnelly, Assistant Counsel, Legal Keith Mahoney, Chief, BEDC

July 28, 2010

bc: Dorothy Chao, Executive Project Manager, BEDC

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#### Copy to:

James DeZolt Director Division of Water New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Gary E. Kline, P.E. NYSDEC, Division of Water 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Robert Elburn, P.E. Regional Water Engineer Division of Water, Region 2 New York State Department of Environmental Conservation 47-40 21<sup>st</sup> Street Long Island City, NY 11101

Robyn Adair, Esq. Water Compliance Counsel New York State Department of Environmental Conservation Division of Environmental Enforcement 625 Broadway, 14<sup>th</sup> Floor Albany, NY 12233-5500

,

William Plache, Esq. Assistant Corporation Counsel New York City Law Department 100 Church Street New York, NY 10007

Timothy Burns, P.E. New York State Environmental Facilities Corporation 625 Broadway Albany, NY 12207 City of New York Department of Environmental Protection Bureau of Engineering Design & Construction

CSO Order on Consent DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1

# QUARTERLY PROGRESS REPORT

# SECOND QUARTER 2010 (April 1 – June 30)

July 30, 2010

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# **1.0 Executive Summary**

The Combined Sewer Overflow "CSO" Order on Consent, DEC Case # CO2-20070101-1 (the "Order"); was entered into by the City of New York ("City") and the New York State Department of Environmental Conservation ("DEC") on January 14, 2005 and modified on April 14, 2008 and on September 3, 2009. Pursuant to Section IV, Paragraph A of the Order, the City shall submit quarterly status reports to DEC ("Quarterly Reports"). The Quarterly Reports shall describe the actions that have been taken toward achieving compliance with this Order during the past three-month period. This Quarterly Report sets forth the status of and progress by the New York City Department of Environmental Protection ("DEP") in complying with the milestones set forth in the Order during the period from **April 1, 2010 to June 30, 2010**.

#### **Critical Events This Quarter:**

The following critical events occurred this quarter:

1) On May 5, 2010 DEP submitted an omnibus request for modification to multiple projects and their associated milestones. The "omni letter" was submitted as part of ongoing discussions between DEP and DEC concerning the scope of the City's CSO program, of which the new DEP Commissioner has ordered a comprehensive internal review to maximize green infrastructure and other elements as an integral part of the Long Term Control Plans. In addition to a general request to modify LTCP submittal dates to achieve this integration, specific modification requests were made for the following:

a) Expansion of Wet Weather Capacity of Jamaica WWTP (VI.D) – DEP requested that the milestones related to the wet weather expansion be replaced with new milestones related to a parallel sewer and bending weirs. Originally submitted in 2008, the request attached to the May 5, 2010 omni letter was the final version of the request related to these milestones.

b) Westchester Creek Phase I Influent Sewers (IX.C) – DEP requested that the June 30, 2010 milestone for completion of design for the influent sewers to a CSO storage facility be modified to September 2010 to allow time to complete analyses associated with a sewer concept that would supplement the plan proposed in the June 2007 WWFP. DEP also committed to submitting a subsequent modification request along with a detailed justification 60 days prior to the requested milestone extension date.

c) Hutchinson River CSO (XI.A.2 through XI.E) – DEP requested modification of the June 30, 2010 milestone for completion of final design for a CSO storage facility for the Hutchinson River, and proposed eliminating the requirement to submit a WWFP and proceed directly to the development of an LTCP. DEP requested that a waste load allocation analysis be performed that would be used to finalize the LTCP. The request was based on discussions between DEC and DEP technical staff surrounding the influence of Westchester County on water quality in the New York City portion of the Hutchinson River. d) 26th Ward Wet Weather Expansion (XII.F) – DEP requested that the June 30, 2010 milestone for final design completion be deferred until December 2010 to provide more time to develop alternate wet weather and sewer optimization strategies and to complete designs associated with portions of the wet weather expansion that have other operational benefits. DEP also committed to submitting a subsequent modification request along with a detailed justification 60 days prior to the requested milestone extension date.

DEC Responded to these requests on June 28, 2010, saying DEC would exercise enforcement discretion in relation to the Newtown Creek, Westchester Creek, and Hutchinson River modification requests, and conditionally approving the modification request related to the Jamaica wet weather expansion.

2) DEC responded to DEP's February 8, 2010 Alley Creek CSO Retention Facility Force Majeure Notice on April 9, 2010 requesting additional information. DEP provided supplemental information on April 30, 2010. The Force Majeure related to a job action by Electrical Union Local 3 from January 20 through 22, 2010.

3) DEP submitted a Request for Modification and Notice of Force Majeure for the Construction Completion Milestones for the Outer Harbor, Inner Harbor, and Jamaica Tributaries Regulator Improvements (Automation) on April 30, 2010. The delays were due to a number of factors, including rescheduling of work by the telephone company after extreme weather, unexpected site conditions, and change order registration. The new date requested for the Construction Completion milestone was December 31, 2010. DEC acknowledged receipt of the Force Majeure Notice on June 21, 2010 and directed DEP to provide more information.

4) DEC responded to DEP's February 26, 2010 Inner Harbor Flushing Tunnel Modernization Force Majeure Notice on April 9, 2010 by requesting additional information. DEP provided supplemental information on April 30, 2010. The Force Majeure related to unanticipated property access limitations.

5) DEC responded to DEP's February 12, 2010 Force Majeure Notice related to the Paerdegat Basin Structures and Equipment project on April 9, 2010 by requesting additional information. DEP provided supplemental information on April 30, 2010. The Force Majeure was related to the January 25, 2010 work stoppage by the 4B contract surety and the potential impact of associated delays on the Structures and Equipment contract.

6) DEC formally established milestones for the environmental dredging in Paerdegat Basin on April 9, 2010 based on the date of issuance of the DEC permit (March 19, 2010).

7) DEC provided comments on the June 2009 Flushing Bay WWFP on April 8, 2010. On June 7, 2010, DEP requested an extension for responding to these comments and resubmitting the WWFP to December 31, 2010.

8) DEP certified Construction Completion of the 26th Ward Drainage Area Sewer Cleaning and Evaluation on May 17, 2010.

#### Major Actions This Quarter:

DEP continued to make progress in the planning, design and construction of its CSO facilities during this quarter, as documented in this report. Table 1 presents the milestones that occurred this quarter. For each milestone listed in Table 1 below, either met or postponed, written notification was submitted by DEP to DEC. Table 2 presents those milestones from this quarter that are under consideration for potential modification.

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	STATUS
Alley Creek	Drainage Basin Specific LTCP	Apr 2010	Submit Approvable Drainage Basin Specific LTCP for Alley Creek	Modification Request submitted 2/26/10
Outer Harbor	Regulator Improvements – Automation	Jun 2010	Construction Completion	Modification Request submitted 4/30/10
Inner Harbor	Regulator Improvements – Automation	Jun 2010	Construction Completion	Modification Request submitted 4/30/10
Jamaica Tributaries	Expansion of Wet Weather Capacity of Jamaica WWTP	Jun 2010	Submit Form 2A SPDES Application	Modification Request submitted 5/5/10; Response 6/28/10
Jamaica Tributaries	Regulator Improvements – Automation	Jun 2010	Construction Completion	Modification Request submitted 4/30/10
Newtown Creek	Aeration Zone II	Jun 2010	Final Design Completion Including CPM Analysis	Modification Request submitted 3/31/10 and 5/5/10
Newtown Creek	Relief Sewer / Regulator Modification	Jun 2010	Notice to Proceed to Construction	Modification Request submitted 3/31/10 and 5/5/10
Westchester Creek	Phase I (Influent Sewers)	Jun 2010	Final Design Completion Including CPM Analysis and Submit Form 2A SPDES Application	Modification Request submitted 5/5/10 and supplemented 6/29/10.
Hutchinson River	Phase I (Storage Facility)	Jun 2010	Final Design Completion Including CPM Analysis and Submit Form 2A SPDES Application	Modification Request submitted 5/5/10 and supplemented 6/29/10.
Jamaica Bay	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2010	Construction Completion	Completed; Certified 5/17/10
Jamaica Bay	26th Ward Wet Weather Expansion	Jun 2010	Final Design Completion Including CPM Analysis	Modification Request submitted 5/5/10 and supplemented 6/29/10.

#### Table 1 – Milestones This Quarter (Apr 2010 - Jun 2010)

As stipulated by the Order, DEP and DEC held a Quarterly Progress Meeting on May 6, 2010. The meeting was held at the 26<sup>th</sup> Ward WWTP in Brooklyn to discuss issues related to the Order and review milestones met during the last quarter.

	Table 2 – Milestones this Quarter to be Considered for Potential Modification							
LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	<b>REASON FOR MODIFICATION</b>				
Outer Harbor Inner Harbor Jamaica Tributaries	Regulator Improvements – Automation	Jun 2010	Construction Completion	Delays by service provider resulting from extreme weather, unexpected site conditions, change order registration				
Jamaica Tributaries	Expansion of Wet Weather Capacity of Jamaica WWTP	Jun 2010	Submit Form 2A SPDES Application	Cost-effective alternative identified				
Newtown Creek	Aeration Zone II	Jun 2010	Design Completion	Cost-effective alternative identified				
Newtown Creek	Relief Sewer / Regulator Modification	Jun 2010	Notice to Proceed to Construction	Cost-effective alternative identified				
Westchester Creek	Facility Plan Development	Jun 2010 as modified	Submit Form 2A SPDES application	Requested modification of milestone for design completion, which is necessary for 2A				
Westchester Creek	Phase I (Influent Sewers)	Jun 2010	Design Completion	Cost-effective alternative identified				
Hutchinson River	Facility Plan Development	Jun 2010 as modified	Submit Form 2A SPDES application	Requested modification of milestone for design completion, which is necessary for 2A				
Hutchinson River	Phase I (Storage Facility)	Jun 2010	Design Completion	Waste load allocation analysis necessary due to Westchester County influence on water quality				
Jamaica Bay	26th Ward Wet Weather Expansion	Jun 2010 as modified	Submit Form 2A SPDES application	Requested modification of milestone for design completion, which is necessary for 2A				
Jamaica Bay	26th Ward Wet Weather Expansion	Jun 2010	Design Completion	Provide time to develop alternate wet weather and sewer optimization strategies and to complete certain designs associated with wet weather operational benefits				

Table 2 – Milestones this Quarter to be Considered for Potential Modification

#### **Major Actions Next Quarter:**

Table 3 shows milestones to be met next quarter. The following major actions are expected to occur between **July 2010 and September 2010**:

- Schedule and hold the next Quarterly Progress Meeting between DEC and DEP on September 20, 2010 at a location to be determined.
- Certify Construction Completion of In-Line Storage for Inner Harbor
- Submit Notice to Proceed to Construction for the Destratification Facility for Jamaica Tributaries

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	STATUS
Inner Harbor	In-Line Storage	Aug 2010	Construction Completion	99% Complete
Paerdegat Basin	Dredging	Sep 2010	Initiate Final Design	On Schedule
Jamaica Tributaries	Destratification Facility	Sep 2010	Notice to Proceed to Construction	On Schedule

#### Table 3 – Milestones Next Quarter (Jul 2010 - Sep 2010)

Tab	Table 4 – Milestones with Force Majeures and Modification Requests Outstanding								
LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION(S)	REASON FOR ACTION(S)	MILESTONE DATE	STATUS				
Alley Creek	Drainage Basin Specific LTCP	Modification Request	LTCP process to be defined	Submittal Apr 2010	Modification Request submitted				
Alley Creek	CSO Retention Facility	Force Majeure and Modification Request	Deteriorated Sewer; Job action by Electrical Union	Construction Completion Dec 2009	Notice of Force Majeure and Modification Request submitted; Construction in progress				
Inner Harbor	In-Line Storage	Force Majeure	Unmapped Utilities; Discontinued Equipment Manufacturer	Construction Completion Aug 2010	Notice of Force Majeure submitted; Construction in progress				
Inner Harbor	Flushing Tunnel Modernization	Force Majeure	Property access limitations	Construction Completion Dec 2014	Notice of Force Majeure submitted; Construction in progress				
Jamaica Tributaries	Expansion of Wet Weather Capacity of Jamaica WWTP	Modification Request	Cost- Effective Alternative	Initiate Design Jun 2009	Modification Request conditionally approved by DEC 6/28/2010				
Newtown Creek	Aeration Zone II Sewer Modifications Throttling Facility Storage Facility	Modification Request	Cost- Effective Alternative	Jun 2010* Jun 2009* Jun 2009* Nov 2010*	Modification Request submitted				

\*Next upcoming Milestone date for each item, i.e.: Final Design Completion for Aeration Zone II and Sewer Modifications; Notice to Proceed to Construction for the Throttling Facility; and Initiate Final Design for the Storage Facility.

# 2.0 Construction Contracts

The 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 provides a list of construction contracts, identified in Appendix A of the Order, necessary to fulfill the requirements of the Order. This table identifies, by percentage, the estimated amount of construction that has been completed.

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED <sup>(1)</sup>
Alley	Outfall and Sewer System Improvements	Dec 2002	Dec 2006	Completed	100%	100%
Creek	CSO Retention Facility	Dec 2006	Dec 2009 <sup>(2)</sup>	Nov 2010	100%	90%
	Regulator Improvements – Fixed Orifices	Feb 2006	Jul 2008	Completed	100%	100%
Outer Harbor	Regulator Improvements – Automation	Nov 2007	Jun 2010	Dec 2011	100%	89%
	Port Richmond Throttling Facility	Jun 2006	Nov 2009 as modified	Completed	100%	100%
	Regulator Improvements – Fixed Orifices	Feb 2003	Apr 2006	Completed	100%	100%
	Regulator Improvements – Automation	Nov 2007	Jun 2010	Dec 2011	100%	89%
Inner	In-Line Storage	Aug 2007	Aug 2010	Aug 2010	94%	99%
Harbor	Gowanus Flushing Tunnel Modernization	Feb 2010	Sep 2014	Sep 2014	7%	10%
	Gowanus Pump Station Reconstruction	Feb 2010	Sep 2014	Sep 2014	7%	10%
	Dredging of Gowanus Canal	TBD <sup>(3)</sup>	TBD <sup>(3)</sup>	TBD <sup>(3)</sup>	-	-
	Influent Channel	Feb 1999	Feb 2002	Completed	100%	100%
Paerdegat	Foundations and Substructures	Jun 2002	Dec 2009	Completed	100%	<b>99%</b> <sup>(4)</sup>
Basin	Structures and Equipment	Sep 2005	May 2011	Apr 2011	84%	87%
	Dredging of Paerdegat Basin	TBD <sup>(3)</sup>	TBD <sup>(3)</sup>	TBD <sup>(3)</sup>	-	-
	Reroute and Construct Effluent Channel	Jun 1995	Jun 1996	Completed	100%	100%
	Relocate Ball fields	Apr 1995	Aug 1995	Completed	100%	100%
Flushing Bay	Storage Tank	Jul 1997	Aug 2001	Completed	100%	100%
-	Mechanical Structures	Mar 2002	Sep 2009	Completed	100%	100%
	Tide Gates	Dec 2000	Apr 2002	Completed	100%	100%

#### Table 5 – Construction Contracts and their Status

New York City Department of Environmental Protection

Quarterly Progress Report

DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1 Second Quarter, 2010

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED <sup>(1)</sup>
	Manual Sluice Gates	Feb 2004	Jun 2005	Completed	100%	100%
	Tallman Island WWTP Conveyance Improvements	Dec 2011	Jul 2015	Jul 2015	-	-
	Meadowmere & Warnerville DWO Abatement	Jun 2006	Jul 2009 as modified	Completed	100%	99% <sup>(4)</sup>
Jamaica	Expansion of Wet Weather Capacity of Jamaica WWTP	Jun 2012	Jun 2015	TBD <sup>(5)</sup>	-	-
Tributaries	Destratification Facility	Sep 2010	Mar 2012	Mar 2012	-	-
	Regulator Automation	Nov 2007	Jun 2010	Dec 2011	100%	89%
Coney Island	Avenue V Pumping Station Upgrade	Nov 2005	Apr 2011	Sep 2011	85%	56%
Creek	Avenue V Force Main	Jul 2007	Jun 2012	Mar 2011	59%	87%
	Aeration Zone I	Dec 2005	Dec 2008	Completed	100%	100%
	Aeration Zone II	Jun 2011	Jun 2014	TBD <sup>(5)</sup>	-	-
Newtown Creek	Relief Sewer / Regulator Modification	Jun 2010	Jun 2014	TBD <sup>(5)</sup>	-	-
	Throttling Facility	Jun 2009	Dec 2012	Jun 2010	29%	85%
	CSO Storage Facility	Dec 2015	Dec 2022	TBD <sup>(5)</sup>	-	-
Westchester	Phase I (Influent Sewers)	Jun 2011	Jun 2015	TBD <sup>(5)</sup>	-	-
Creek	CSO Storage Facility	Dec 2015	Dec 2022	TBD <sup>(5)</sup>	-	-
Bronx River	Floatables Control	Jun 2009	Jun 2012	Jun 2012	33%	8%
Hutchinson	Phase I of the Storage Facility	Jun 2011	Jun 2015	TBD <sup>(5)</sup>	-	-
River	Future Phases	Dec 2016	Dec 2023	TBD <sup>(5)</sup>	-	-
	Spring Creek AWPCP Upgrade	Mar 2003	Apr 2007	Completed	100%	100%
	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2008	Jun 2010	Dec 2009	100%	100%
Jamaica Bay	Hendrix Creek Dredging	Feb 2010	Feb 2012	Sep 2011	17%	0%
5	26th Ward Wet Weather Expansion	Jun 2011	Dec 2015	TBD <sup>(5)</sup>	-	-
Notes: (1) Per	Rockaway WWTP Conveyance Improvements		Dec 2017	Dec 2017	-	-

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

(2) A modification to the completion date from 12/31/2009 to 11/10/2010 was submitted to DEC on 10/30/2009.

(3) Dredging NTP 3 years from effective date of permit; completion within 5 years of EDP.

(4) CSO Consent Order elements completed and a Certification of Construction Completion has been submitted.

(5) Item to be replaced or enhanced through Modification Request Process.

# **3.0** Detailed Description of Work Performed

# 3.1. Alley Creek CSO

The Alley Creek CSO Facilities Planning area consists of the drainage area of CSO Outfall TI-008, which discharges into Alley Creek at a location just south of Northern Boulevard on the west bank of Alley Creek. Little Neck Bay and Alley Creek receive discharges from 31 stormwater outfalls, as well as CSO Outfall TI-008; however, discharges from CSO Outfall TI-008 were determined to be the primary cause of water quality degradation within Alley Creek. CSO Outfall TI-008 serves a drainage area of approximately 1,975 acres within the Tallman Island Wastewater Treatment Plant (WWTP) service area in the Borough of Queens. The Alley Creek Drainage Area Improvements/CSO Abatement Facilities Project, which has been designated as Phase I of the comprehensive Alley Creek CSO Abatement Facilities Plan, is being constructed in two stages:

- 1. Alley Creek Drainage Area Improvements (Phase I, Stage 1, Contract ER-AC1) and,
- 2. Alley Creek CSO Abatement Facilities (Phase I, Stage 2, Contract ER-AC2)

This section reports on the progress of Phase I, Stages 1 and 2 of the Alley Creek CSO Abatement Facilities Plan.

Phase I, Stage 1 (Contract ER-AC1) includes the construction of additional water mains, stormwater sewers and combined sewers, a double-barrel outfall sewer, an outfall structure, and a 5 million gallon CSO storage facility to substantially reduce street flooding and sewer surcharging; and to abate CSO discharges into Alley Creek within the CSO Outfall TI-008 drainage area.

Phase I, Stage 2 (Contract ER-AC2) includes activation of the 5 MG CSO storage facility, upgrading the Old Douglaston Pumping Station to enhance the station's reliability to pump the captured combined sewage to the interceptor system for conveyance to the Tallman Island WWTP for treatment, rehabilitation of the CSO Outfall TI-008 structure, and restoration of a 1.51-acre area surrounding CSO Outfall TI-008 to include restoration/creation of wetlands and replacement of invasive vegetation with indigenous plantings as mitigation for the area disturbed as a result of rehabilitation of the outfall structure.

# Work Performed During This Quarter

- Alley Creek CSO Abatement Facilities Phase I, Stage 2, Contract ER-AC2
  - Activities continued for Contract ER-AC2. The principal work included the installation of the Air Treatment Unit, Start up testing of all equipment, installation of the flow meter chamber, installation of the Instrumentation and Control equipment at the ODPS and at the Tallman Island WWTP and Operations walkthru for acceptance of the facility. The Start Up Testing for DEP acceptance of the Old Douglaston Pumping Station (ODPS) began in late June. Construction of Contract ER-AC2 is currently 90 percent complete.

- The DEP and CM have been coordinating with the Contractor to the remaining work to help recover time and update the CPM accordingly. The DEP continues to work with the Contractor, the CM, and the designer on recovering time. The Electrical Contractor is currently working overtime, as needed, on select items to accelerate progress during the Start Up phase of the project.
- The Contractor activated the Interim Pumping Station (IPS) on May 26, 2009 and shut down the Old Douglaston Pumping Station (ODPS). All equipment has been installed in the renovated ODPS and preliminary testing of each piece of equipment within the ODPS is ongoing.
- Construction progress meetings were held on April 2, 2010, May 7, 2010 and June 4, 2010 at the Engineer's Field Office for Contract ER-AC2.
- Issues and Tasks meetings were held on April 23, 2010, June 4, 2010 and June 24, 2010 at the Engineer's Field Office for Contract ER-AC2.
- DEP submitted a Notice of Force Majeure for the Alley Creek CSO Retention Facility on February 8, 2010 related to a job action by Electrical Union Local 3 from January 20 through 22, 2010. DEC responded to DEP's Force Majeure Notice on April 9, 2010, requesting additional information. DEP provided supplemental information as requested on April 30, 2010.

## Missed/Modified Milestones

The DEP submitted a request to the DEC on October 30, 2009 for a modification to the existing Milestone Date of December 31, 2009 to a new proposed Milestone Date of November 30, 2010. The basis of this request, the unexpectedly deteriorated condition of the influent sewer to the Old Douglaston Pumping Station, was reported to DEC in a Force Majeure letter dated November 20, 2007 and updated on August 20, 2008 and February 3, 2009. Technical discussions remain ongoing, and DEC has not issued a determination on the Modification Request as of the end of the quarter.

# **Anticipated Activities for Next Quarter**

- Alley Creek CSO Retention Facilities Phase I, Stage 2, Contract ER-AC2
  - Construction under Contract ER-AC2 will continue, primarily focusing on activating the Old Douglaston Pump Station and the CSO Facility. Other activities will include start up, adjusting instrumentation and controls settings along with developing Standard Operating Procedures.
  - Monthly construction progress and Issues and Tasks meetings will be held on the first and fourth Friday of the month respectively at the Engineer's field office.
  - Change orders to Contract ER-AC2 will continue to be prepared and processed. Shop drawings, RFIs, etc. will be submitted and responses provided.

#### • DEP will submit a letter defining items required for certification of Construction Completion along with a CPM schedule

	Table 6 – Alley Creek CSO Projects							
	Phase I, Stage 1	Phase I, Stage 2						
Plan Elements:	Alley Creek Drainage Area Improvements	Alley Creek CSO Abatement Facilities						
Location:	46th Avenue, 53rd Avenue, 56th Avenue, Bell Boulevard, Luke Place, 214th Street, 215th Street, 216th Street, 217th Street, Springfield Boulevard, Cloverdale Boulevard, Cross Island Parkway, Northern Boulevard and Alley Park in Bayside, Queens	Northern Boulevard and Alley Park in Bayside, Queens						
Actions:	Construction of additional water mains, stormwater and combined sewers, catch basins, outfall sewer and outfall structure to effect improved drainage in areas upstream of CSO Outfall TI-008 in Bayside, Queens; construction of 5 MG CSO storage facility for CSO abatement within Alley Creek	Design and construction of modifications to the Old Douglaston Pumping Station including air treatment facilities to treat air exhausted from the CSO storage facility and the pumping station; design and construction of hydraulic control structures and facilities to activate the 5 MG CSO storage facility constructed under Phase I, Stage 1; rehabilitation of the CSO Outfall TI-008 structure; restoration of a 2.5- acres of wetland/upland area surrounding CSO Outfall TI-008. The wetland/upland restoration work has been transferred to Contract ER-AC3						
Cost:	\$98,850,487.61	\$33,721,220.89						
		<b>90%</b> complete with construction activities						
Status:	Construction completed.	Notice of Force Majeure submitted to DEC in November 2007. A modification request was submitted on October 30, 2009.						
		Notice of Force Majeure submitted to DEC on February 8, 2010						

# Table 6 – Alley Creek CSO Projects

# **3.2.** Outer Harbor CSO

The Outer Harbor CSO Facility Planning area consists of the drainage areas of the Port Richmond, Oakwood Beach, Owls Head and Coney Island (separately sewered area) Wastewater Treatment Plants (WWTPs) and their associated sewers and pumping stations. The receiving waters of the study area include the New York limits of the Raritan Bay, Arthur Kill and Kill Van Kull, Upper New York Bay waters to the boundary of the Inner Harbor CSO Project, the Narrows, Gravesend Bay, Lower New York Bay, Richmond Creek and Lemon Creek. This section reports on the progress for Phase I – Regulator Improvements (Fixed Orifices) and Phase II – Throttling Facility. In addition, the automation of key regulators will be accomplished under the Citywide SCADA Project (Contract REG-026) that addresses the milestones for regulator automation under Outer Harbor, Inner Harbor, and Jamaica Tributaries.

Phase I will provide improvements to 32 regulators in the Outer Harbor study area. Phase II entails the construction of a throttling facility in the Port Richmond east interceptor, which will provide the ability to store up to 5 MG upstream of the Port Richmond WWTP. The Citywide SCADA Project will automate regulators in Outer Harbor.

# Work Performed During This Quarter

- Regulator Automation
  - Construction activities continued during this quarter. The Contractor is conducting contract work at regulator sites, performing **start-up and cut over of SCADA panel sites, testing and acceptance of sluice gates and actuators,** obtaining necessary permits and performing change/modification work.
  - Weekly construction meetings occurred on April 8, 15, 22, May 7, 20, 27, June 3, 10, 17 and 24, 2010. Monthly Progress Meetings occurred on April 15 and May 20, 2010.
  - CPM Schedule Update 22 was received on June 10, 2010 and showed a substantial completion date of February 6, 2011 due to the Change Order Number 14 registration period. However the Contractor has continued with the work and is expected to have Substantial Completion by December 2010.
- Phase I Regulator Improvements
  - Construction complete. The certification of construction completion was submitted to DEC and a final inspection was completed by DEC. In a letter dated June 30, 2008, DEC certified compliance with the construction completion milestone
- Phase II Throttling Facility
  - DEP certified Construction Completion of the Port Richmond throttling facility on November 20, 2009 in compliance with the modified milestone.

- Hands-on training for BWT operators and NYS DEC certification inspection was held on April 6, 2010.
- Site meetings were held on May 10 and June 16 to review field related punch list items. This included a Port Richmond WWTP walk through to review as-built information and to revisit the positioning of the ultrasonic sensor in the forebay.

#### **Missed/Modified Milestones**

 DEP submitted a Request for Modification and Notice of Force Majeure for the Construction Completion Milestones associated with the Regulator Improvements – Automation to DEC on April 30, 2010. The basis for this request was due to a number of factors, including delays in scheduling work by the telephone company after extreme weather, unanticipated field conditions encountered by the contractor, limited site access to perform work, change in equipment to meet classified conditions, and the change order registration. The new date requested for the Construction Completion milestone was December 31, 2010. DEC acknowledged receipt of the Force Majeure Notice on June 21, 2010 and directed DEP to provide more information.

#### **Anticipated Activities for Next Quarter**

- Regulator Automation
  - Construction activities will continue. The Contractor will conduct contract work and perform site visits at multiple sites; obtaining and maintaining necessary permits and **continuing** start up and cut-over services.
- Phase II Throttling Facility
  - The contractor will complete training and O&M activities.
  - Project close-out.

	Phase I	Phase II	Citywide SCADA
Plan Elements:	Regulator Improvements – Fixed Orifices	Throttling Facility	Regulator Improvements – Automation
Location:	32 regulator sites throughout Brooklyn and Staten Island	Port Richmond WWTP	Regulator sites throughout Brooklyn and Staten Island
Actions:	Conversion to manually operated sluice gates, replacement of stop plank guides, manhole steps, standardization of manhole cover sizes	Installation of throttling facility and sluice gate in Port Richmond east interceptor sewer	Conversion to automated regulators
Construction Cost:	\$4,390,100	\$ 5,704,481.02	\$15,721,000*
Status:	Construction Complete	Construction Complete	Construction 89% Complete
Other Issues:	-	DEC granted Modification Request; revised Construction Completion date November 20, 2009 was met.	Although schedule was accelerated, delays to project due to unanticipated change order registration will extend construction

# Table 7 – Outer Harbor CSO Projects

\*Construction cost represents original contract amount for REG-026

# **3.3.** Inner Harbor CSO

The Inner Harbor CSO Facility Planning area consists of the drainage areas of the North River, Newtown Creek, and Red Hook Wastewater Treatment Plants (WWTPs) and their associated sewers and pumping stations. The receiving waters of the study area include the Lower East River, Hudson River, Upper New York Bay, and Gowanus Canal and Bay. This section reports on the progress of Phase I (Regulator Improvements), Phase II (In-Line Storage), and the automation of key regulators to be accomplished under the Citywide SCADA Project. In addition, the proposed elements of the August 2008 Gowanus Canal Waterbody / Watershed Facility Plan (as amended April 2009) became enforceable under the CSO Consent Order by reference upon approval by DEC, which was granted on July 14, 2009.

Phase I provides improvements to 72 regulators in the Inner Harbor study area. Phase II provides for in-line storage at two inflatable dam locations in the study area. The Citywide SCADA Project will automate regulators in Inner Harbor.

The key components include the rehabilitation of the Gowanus Canal Flushing Tunnel, reconstruction of the Gowanus Pumping Station, floatables controls at major CSOs, and environmental dredging at the head end of Gowanus Canal. Rehabilitating the Flushing Tunnel will eliminate shutdowns during low tide and many maintenance operations with the installation of a new pumping system with redundant, interchangeable pumps. The Gowanus Pumping Station reconstruction includes major improvements to operational reliability and the replacement of the force main to convey pumped flow directly to the Columbia Street Interceptor via a new force main to be constructed within the Flushing Tunnel. CSO screens will be retrofitted to RH-034 at the upstream side of the Gowanus Pumping Station. Environmental dredging in the upper 750 feet of the Gowanus Canal to a final water depth of 3.0 feet below mean lower low water will reduce exposure of CSO sediment mounds, thereby improving aesthetic conditions.

Gowanus Canal was added to the US EPA Superfund National Priorities List (NPL) on March 2, 2010. According to EPA, placing the Gowanus Canal on the list allows the Agency to further investigate contamination at the site and develop an approach to address the contamination.

# Work Performed During This Quarter

#### Design

- In-line Storage
  - DEP submitted a Notice of Force Majeure in December 2007 to DEC due to unanticipated subsurface conditions and discontinuation of equipment by the specified dam manufacturer. DEP has not yet determined the impact of these events on compliance with the construction completion milestone date. An update on this Force Majeure event was submitted in a letter dated August 29, 2008.
  - Review of shop drawings, responses to RFIs and meetings continued this quarter.

- Preparation of plan of operations and Operating and Maintenance Manual continued this quarter.
- Gowanus Canal
  - The Gowanus Canal Waterbody / Watershed Facility Plan and the Gowanus Canal Facilities Upgrade Plans and Specifications were submitted to DEC in August 2008 and approved on July 14, 2009 as amended.

- Regulator Automation
  - Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.
- Regulator Improvements
  - Work is complete on the construction of Phase I, which was broken up into two contracts: Brooklyn Regulator Improvements (32 regulators) and Manhattan Regulator Improvements (40 regulators). The certification of construction completion was submitted to DEC on January 24, 2006 and the final inspection was completed by DEC. In a letter dated March 20, 2006, DEC certified compliance with the construction completion milestone.
- In-line Storage
  - Site activity complete at the B-6 site. Waiting for personnel training to initiate operation of the Dam.
  - At the R-20 site, site activity is complete. Training is being scheduled with Newtown Creek and Red Hook staff and BWT for the operation and maintenance of the dam.
- Gowanus Canal Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - A Notice to Proceed to Construction (NTP) was issued to the G contractor for the Gowanus Facilities Upgrades on September 14, 2009. DEP certified compliance with the NTP milestone on October 2, 2009 in a letter to DEC. The milestone date for the NTP in the Order is February 2010.
  - Construction continued during this quarter. The interim oxygen transfer system has been installed. Testing of the system will start approximately July 12, 2010. The interim electrical system has been installed and energized. The interim pumping station is currently being installed. The shutdown of the flushing tunnel has a tentative date of July 19, 2010.
  - DEP has signed an agreement between American Stevedoring, Inc. and the Port Authority of NY/NJ in order to access part of the Flushing Tunnel for dewatering the tunnel and other construction.

#### Missed/Modified Milestones

 Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for missed or modified milestones related to this project.

#### Anticipated Activities for Next Quarter

- Regulator Automation
  - Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being executed under a single construction contract REG-026. Refer to Section 3.2 for an update on the status of this project.
- In-line Storage
  - ♦ Scheduling training for operating personnel. Training is scheduled for July 13 15, 2010.
  - Certify construction completion of In-Line Storage in August 2010 in compliance with the CSO Consent Order.
- Gowanus Canal Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - Construction activities will continue.

#### New York City Department of Environmental Protection

Quarterly Progress Report

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Table 8 – Inner Harbor CSO Projects							
	Phase I	Phase II	Citywide SCADA	Gowanus Canal Pumping Station and Flushing Tunnel	Dredging		
Plan Elements:	Regulator Improvements – Fixed Orifices	In-Line Storage	Regulator Improvements – Automation	Rehabilitation of Pumping Station and Flushing Tunnel	Dredging Gowanus Canal Head End		
Location:	72 regulator sites in Manhattan and Brooklyn	Upstream of regulators B- 6 and R-20 in Brooklyn	Regulator sites in Manhattan and Brooklyn	Gowanus Pumping Station Property, Brooklyn	Gowanus Canal		
Actions:	Conversion to fixed orifices	Installation of two inflatable dams in the combined sewer systems	Conversion to automated regulators	NTP Issued	Prepare and Submit Dredging Permit Application		
Construction Cost:	\$9,500,000	\$15,754,128	Note 1	\$136,437,568	TBD		
Status:	Construction Complete	99% complete	Note 1	Under construction. 10% complete	Design Contract procurement in progress		
Other Issues:		Force Majeure submitted to DEC in December 2007	Note 1	Force Majeure submitted to DEC in February 2010 related to site access at Flushing Tunnel intake.			

Note 1: Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.

# 3.4. Paerdegat Basin CSO

The Paerdegat Basin CSO Retention Facility is located in southeastern Brooklyn, at the intersection of Flatlands and Ralph Avenues. The facility will receive combined sewer overflows from outfalls CI –004, CI-005, and CI-006, a drainage area of approximately 6,000 acres in the Coney Island WWTP service area. Once constructed, the facility will consist of a four (4) bay underground storage tank and operations buildings. The stored CSO will be pumped back to the Coney Island WWTP for treatment after each rain event. This section reports on the progress of Phase IA – Influent Channels, Phase II – Foundations and Substructures, and Phase III – Structures and Equipment.

Phase IA includes construction of a major portion of the influent channels and the relief weir. Phase II includes construction of the CSO tank and building foundations and dredging of the basin. Phase III entails construction of the aboveground structures including Pump Back Building, Odor Control Building, Screening Building and Collection Facilities Building; also completion of the influent channels and reconstruction of the outfalls, installation of all mechanical equipment and start-up of the CSO facility.

# Work Performed During This Quarter

Planning

- Submitted to DEC and EFC the Paerdegat Basin Drainage Specific LTCP report in November 2005, in compliance with the milestone date in the CSO Consent Order. Transmitted a response to DEC comments and revised LTCP on June 30, 2006.
- DEC approved the Paerdegat Basin LTCP in a letter dated February 1, 2007.
- The Joint Application Permit to allow for dredging of CSO sediments at the head-end of Paerdegat Basin and to improve the navigational channel at the mouth of the basin was submitted in the 4<sup>th</sup> Quarter of 2008 in accordance with the approved LTCP. DEC Region 2 noticed the completed application in the February 17, 2010 Environmental Notice Bulletin (ENB). The public comment period closed on March 4, 2010, and DEC issued a permit on March 19, 2010. On April 9, 2010, DEC forwarded the dredging permit along with CSO Order milestone dates, and the initiation of final design milestone was incorrectly stated as June 19, 2010. DEC issued a correction letter on June 7, 2010 in which the date provided for this milestone was September 19, 2010.
- An update to the Form 2A SPDES Application has been scheduled. DEP submitted the Form 2A Application in April 2002 and received comments from DEC in October 2008. The form was updated and resubmitted at the end of October 2008. Based on discussions between DEP and DEC, a final version of the form is to be submitted six months prior to the facility coming online.

#### Design

 Design of Phase I A – Influent Channels, Phase II – Foundations and Substructures, and Phase III – Superstructures and Equipment is 100% complete

- Phase I A Influent Channels
  - Construction completed in 2002.
- Phase II Foundations and Substructures
  - Construction work had ceased at approximately 97% complete due to the default of the contractor on December 6, 2007 by the Department pursuant to Articles 48.1.3, 48.1.4, 48.1.9, 48.1.10, 48.1.11 and 48.1.12 of the Contract. Construction of 4B items critical to operation of the Paerdegat Basin CSO Facility was certified as 100% complete on January 5, 2010. DEC performed the post-construction inspection on March 23, 2010.
  - The surety abandoned the project on January 26, 2010, and ceased performing all punch list work. The DEP and surety negotiated a global settlement which was signed in March 2010. The surety returned to work coordinating all remaining punch list work activities to avoid conflicts and delays to the CSO-5 contract completion. The surety completing contractors have removed the northern section of the slurry wall left over from the removal of the north access roadway, continued working on punch list items, and completed 99% of all identified punch list items.
- Phase III Superstructures and Equipment
  - Construction work has continued and is approximately **87 percent** complete. The CSO-5 contractors are proceeding at their own risk on unregistered change orders, which is not reflected in the percentage of work completed.
  - The 5G Contractor has:
    - continued installation of the CSO pump-back pumps, grit pumps and sump pumps in the Pump Back Building (PBB);
    - o continued testing of the sluice and slide gates in the screenings building;
    - continued installation of the ornamental fences and gates around the perimeter of the property;
    - began testing of panels and local control panels for various pieces of mechanical equipment including the odor control vessel exhaust stacks and exhaust fans;
    - began testing of the various components of the odor control system;
    - continued installation of the vehicle fueling station island, pumps and fire suppression system;
    - continued construction of the Bergen Avenue roadway, sidewalk, lighting and tree pits;
    - continued disposal of contaminated soil from Area 3 of the shoreline and Bergen Avenue roadway;

- o continued installation of odor control vessel stacks and silencers;
- continued construction of the 5-barrel influent channel and outfall structure utilizing the new MOPO;
- completed planting and began maintenance of the transition and Newtown Creek wetlands area; and
- continued the mandated monitoring program for wetland plants on the north and south sides of the basin.
- The 5E Contractor has:
  - o continued installing conduit and supports for the Vehicle Fueling Station;
  - continued pulling cable and wire to various pieces of equipment in the PBB, OCB and SB;
  - continued terminating conductors for power, control and fire alarm in the PBB, OCB and SB;
  - continued installation of duct banks on the west side of the Pump Back Building, Odor Control Building and Screenings Building;
  - begun installation of light poles in the yard
  - continued pulling and terminating wires to sensors and devices throughout the process buildings and CSO tanks;
  - continued installation of conduits, duct banks and manholes for level sensors and samplers at the 5-barrel influent channel and outfall; and
  - continued preparation for fire alarm inspection of the pump back, odor control and screenings buildings.
- The 5H Contractor has:
  - continued installation of stainless steel ductwork, plenums and seismic hangers in the process buildings;
  - o continued pulling and terminating control wiring in the PBB, OCB and SB;
  - completed troubleshooting fuel oil line for the hot water boilers;
  - continued completion of punch list items identified by the NYCDOB in preparation for re-inspection of hot water boilers; and
  - begun preparation work for air balancing of ductwork throughout the process buildings and the CSO Tanks.
- The 5P Contractor has:
  - continued performing remedial work in the CFS Building;
  - continued performing punch list work in the pump back, odor control and screenings buildings;

- continued hydrostatic pressure testing of various pipe in the pump back, odor control and screenings buildings;
- completed installation of pipe penetrations through the roof of the pump back, odor control and screenings buildings; and
- $\circ~$  completed installation of roof drains in the odor control and screenings buildings.

#### Missed/Modified Milestones

• DEP issued a Notice of Force Majeure on February 12, 2010 related to the January 25, 2010 Notice of Claim and Appeal issued by the 4B contract surety and the potential impact of associated delays on the Structures and Equipment contract. DEC responded to DEP's Notice on April 9, 2010 requesting additional information, which DEP provided on April 30, 2010.

#### Anticipated Activities for Next Quarter

- Phase II Foundations and Substructures
  - The completing contractor will:
    - Complete all remaining punch list work activities.
- Phase III Superstructures and Equipment
  - Work will continue on the construction in order to meet the modified milestone date for Construction Completion Date of May 2011.
  - The 5G Contractor will continue punch list work in the CFS Building, phased construction of the 5-barrel influent channel, and installation and commissioning of other facilities related to CSO tank operation and flow control. Other systems to be installed, commissioned, and/or tested include: the odor control system in the OCB; the 42-inch CSO force main; fencing and security system equipment; bridge crane in the Existing Pump Station; structural steel and concrete.
  - The 5G Contractor will complete classroom training and begin field training of DEP personnel on various pieces of equipment throughout the CSO Facility.
  - The 5E Contractor will continue punch list work in the CFS and CB buildings, and will continue pulling, testing and terminating cable and wire to local control panels for various pieces of equipment in the PBB, OCB, SB, and 5 Barrel outfall area. In addition, electrical equipment that will be installed, commissioned and/or tested includes: emergency generators; RGS conduit and conduit racks for pumps in the PBB; security systems; Community Board signage; site lighting; ductbanks for site lighting, security, and flow monitoring and control.

- The 5E Contractor will continue training of DEP personnel on equipment in the CFS and Process Buildings.
- The 5E Contractor will Continue requesting inspections by the FDNY and NYCDOB.
- The 5H Contractor will complete field testing and agency inspections of the permanent hot water boilers, and will complete installation of exhaust fans EF-7304 and EF-7305 in the SB.
- The 5H Contractor will complete classroom training and begin field training of DEP personnel on various pieces of equipment and systems.
- In addition to ongoing punch list work, remedial work, and testing, the 5P Contractor will Complete classroom training and begin field training of DEP personnel on various pieces of equipment and systems.
- Paerdegat Basin Environmental Dredging
  - DEC formally established milestones for Final Design and Construction Completion on April 9, 2010 based on the date of issuance of the DEC permit (March 19, 2010). The USACE Permit is expected the third Quarter of 2010.

	Phase IA	Phase II	Phase III	Dredging
Construction Phase:	Influent Channels	Foundations and Substructures	Structures and Equipment	Environmental Restoration
Location:	Flatlands and Ralph Avenues, Brooklyn, NY	West Shore of Paerdegat Basin	West Shore of Paerdegat Basin	Head end of Paerdegat Basin
Actions:	Construction of the influent channels to the CSO facility	Underground structural elements	Aboveground buildings and equipment	Dredge bottom sediments to finish depth of 3 ft below MLLW
Cost:	\$9,000,000	\$118,273,790	\$ 198,504,484	TBD
Status:	Construction completed.	Construction 99% complete.*	NTP issued on 9/26/05. Construction <b>87%</b> complete.	DEC Permit issued 3/19/10
Other Issues:	-	The Contractor was held in default in December 2007. Issues related to the surety and completion of outstanding work added substantial time to all schedules. A sand bar identified as a navigational hazard delayed the dredging work related to the 4B contract. The sand bar was removed in October 2009.	Construction work continued; contractors proceeding at risk on unregistered change orders (not reflected in completion percentage)	DEC established milestone dates based on issuance of DEC permit on 3/19/2010; however, USACE permit not yet issued.

# Table 9 – Paerdegat Basin CSO Projects

\*CSO Consent Order elements completed and a Certification of Construction Completion has been submitted

# **3.5.** Flushing Bay CSO

## Flushing Bay CSO Retention Facility

The Flushing Bay CSO Retention Facility is an underground storage tank, which has a storage capacity of 43 million gallons, 28 MG in the tank and 15 MG in the upstream sewers. The project was constructed in phases to provide abatement in the Tallman Island WWTP drainage area at CSO Outfall TI-010 which discharges to the head of Flushing Creek. The elements of the facility include:

- Relocation of ball fields in Kissena Corridor
- Rerouting of Park Drive East CSO line inside the construction site and construction of the effluent channel
- Phase 1 construction of the underground structural elements of the tank
- Phase 2 construction of the mechanical and above-ground portion of the facility
- Construction of tide gates on the tank outfall sewer and construction of two (2) soccer fields

A written Notice of a Force Majeure Event was submitted to DEC on September 24, 2004. This event affected compliance with the Construction Completion milestone date of December 2004 for the Flushing Bay CS4-4 (Mechanical Structures) in the Order.

On September 8, 2004, rainfall at LaGuardia Airport was recorded by the National Weather Service at three inches in a three hour time period. This torrential rain event caused flooding in the basement of the Flushing Bay facility due to a breach in a temporary construction bulkhead in the influent sewer line to the facility. Water levels reached seven to eight feet above the basement floor at the CSO facility which caused damage to various mechanical, HVAC and electrical equipment.

DEC requested that DEP provide additional information in a formal report concerning the force majeure event and resultant impact upon the facility and construction status. DEP submitted such report on April 1, 2005.

DEP submitted a Construction Completion certification letter to DEC on May 31, 2007 for the CSO Retention Facility. The DEC issued a Notice of Violation (NOV) on July 15, 2008 for failure to meet the conditions of the Construction Completion Milestone for CS4-4 (V.F.4 of the CSO Consent Order). This NOV was resolved and a construction completion date of September 2009 was included in the 2009 Modification to Order on Consent (DEC Case # CO2-20090318030).

# Tallman Island Wet Weather Maximization

The 2008 Modification to Order on Consent included a date modification for the Flushing Bay CS4-4 milestone, as well as the addition of item V.J. "Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent at or above twice the plant's design flow during any storm event." The project was transferred from the 1999

Omnibus IV Consent Order to the CSO Consent Order and includes a new interceptor to parallel the Main Interceptor; and modifications at Regulators 10, 10A, 10B and 13.

# Work Performed During This Quarter

## Design

Flushing Bay CSO Retention Facility

# Design completed.

Tallman Island Wet Weather Maximization

Attended the Value Engineering (VE) Implementation Meeting at the offices of the NYC Office of Management and Budget (OMB) on June 4, 2010.

Based upon the recommendations of the VE team and the results of BWT's review of the 30% complete documents, the need for a new throttling facility was reviewed. It has been determined that a new dedicated throttling facility is not required to meet the terms of the Consent Order and that the Plant will throttle flows as they do presently, by utilizing the four (4) existing influent gates. As a result of this change in methodology, DEP is reviewing the proposed modifications at each regulator to ensure that the project goal of maximizing flow is being met. Once finalized, DEP will draft a letter to DEC to document the project components and any deviations from the 2005 Facility Plan.

Submitted 60% complete design documents in June 2010, including: drawings, specifications; class 2 cost estimate; QA/QC review documentation; listing of manufacturers; list of specifications not included.

Continued coordination with NYCDPR regarding property encroachments along the proposed route of the new Whitestone Interceptor.

Continued coordination with BEPA and NYCDPR regarding post-construction restoration of Powell's Cove Park. A meeting was held on May 26, 2010 at the offices of DEP, and a follow up site visit was held on June 9, 2010.

Continued work on the Joint Application for Permit and supporting documentation.

Initiated work on the presentation to gain NYC Public Design Commission approval for the parkland restoration work.

Submitted Draft #2 of the EAS and received comments back from BEPA.

Made contact with utilities that will be affected by the interceptor installation.

Initiated coordination with BWSO regarding changes to the City's drainage plan and relocations of storm sewers.

Initiated work on the 90% complete design submittal.

# Construction

Flushing Bay CSO Retention Facility

DEP submitted revised flow metering methodology on March 5, 2010 in response to comments received from DEC. Included in this submittal was a description of the installation of meters in the effluent channel of the facility and the use of storm events to confirm that the measurement system is accurate. The temporary meters were installed in March, and have collected data for two substantial storm events.

A summary report was submitted on May 18, 2010, and DEP and DEC conducted a meeting to discuss the flow metering methodology on May 20, 2010. Evaluations are ongoing.

Tallman Island Wet Weather Maximization

Construction has not commenced.

#### **Anticipated Activities for Next Quarter**

#### Design

Tallman Island Wet Weather Maximization

# Submit letter to DEC documenting the final project components and any deviations from the 2005 Facility Plan.

#### Continue work on the 90% complete design package.

- Continue work on project permitting, most notably: the applicable NYCDPR permits; the DEC/USACE Joint Application Permit; NYCDOT detour plans; and the NYC Public Design Commission.
- Submit final version of the EAS to DEP BEPA.
- Continue coordinating with affected utilities.
- Continue coordination with BWSO.
- Continue addressing legal issues with property encroachment along proposed Whitestone alignment.

- Flushing Bay CSO Retention Facility
  - Contractor to continue punch list activities.

	Flushing Bay CSO Tank	TI Wet Weather Maximization
Plan Elements:	Flushing Bay CSO Retention Facility	Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent at or above twice the plant's design flow during any storm event
Location:	Intersection of College Point Boulevard and Avery Avenue, Queens	New section of the Whitestone Interceptor from the existing Junction Chamber at the intersection of 11 <sup>th</sup> Avenue and 130 <sup>th</sup> Street to the WWTP, College Point, Queens Regulators 10, 10A, 10B and 13
Actions:	Design and construction of a 43 MG storage facility, which includes a 28 MG, underground storage tank and 15 MG in-line storage in upstream sewers. The facility collects flow from the system tributary to the TI-010 outfall.	Design and construction of a new interceptor; and modifications to regulators 10, 10A, 10B, and 13
Cost:	\$291,000,000	\$40,000,000
Status:	Construction Completion certified on 5/31/07; DEC issued NOV 7/15/2008; Consent Order Modification 9/3/09 established new Construction Completion date of September 2009. Flow metering methodology currently in validation process.	Design 60% complete
Other Issues:	2009 Consent Order Modification included required corrective actions at the Flushing Bay CSO Retention Facility	

# Table 10 – Flushing Bay CSO Projects

# 3.6. Jamaica Tributaries CSO

The Jamaica Tributaries project area includes the Jamaica WWTP sewer shed area and the tributaries, which receive the wet weather discharges from the drainage area. These tributaries include Bergen, Thurston, Shellbank, and Hawtree Basins, which are located in the northeast portion of Jamaica Bay. There are several recommendations that are being advanced in this facility plan which include:

- Meadowmere & Warnerville DWO Abatement Construction of a new pumping station, force main, and sanitary sewer collection system in southeast Queens, NY, to convey flows from the communities of Meadowmere and Warnerville into the Jamaica drainage area collection system, for treatment at the Jamaica WWTP. This project will eliminate the dry weather discharge that is currently occurring in these two communities, which are not connected to NYC's collection system.
- Expansion of Wet Weather Capacity of Jamaica WWTP An additional 50 MGD of wet weather flow will be treated at the Jamaica WWTP to reduce the CSO discharges to Bergen Basin. Recent analyses indicate that this element has limited water quality benefits. Alternative actions have been analyzed and included in the Waterbody/ Watershed plan that was submitted to DEC in June 2007.
- Destratification Facility Installation of a permanent diffused-air bubble mixing system at Shellbank Basin. The system is designed to eliminate temperature stratification during the summer season, which leads to poor water quality conditions in the basin, odors and marine life kills. This element currently has an operating pilot facility, which has produced positive water and air quality results for the past **10** summer seasons.
- Laurelton and Springfield Blvd. Drainage Plan A drainage plan for 7,000 acres in southeast Queens is being developed to address flooding and to construct high-level storm sewers in a 1,450 acre CSO drainage area tributary to Thurston Basin. The drainage plan identifies the necessary capital sewer projects to alleviate flooding and convert the aforementioned CSO area to a high-level storm sewer system.
- Regulator Automation Automation of key regulators was recommended in response to the 1988 State Pollution Discharge Elimination System (SPDES) permit requirements that called for telemetry in the regulators to detect dry weather overflows. It was recommended at those regulators contributing the largest flows to the treatment plants, specifically Regulators 2, 3, and 14 in the Jamaica WWTP drainage area. The Citywide Collection Facilities Supervisory Control and Data Acquisition (SCADA) System Project will automate key regulators in the City by installing electro-hydraulic actuators capable of controlling flows to the sewer interceptor.

#### Work Performed During This Quarter

#### Design

- Expansion of Wet Weather Capacity of the Jamaica WWTP
  - DEC conditionally approved a Modification Request from DEP on June 28, 2010 that would replace all milestones related to the wet weather expansion with new milestones related to a parallel sewer and bending weirs.
- Destratification Facility
  - The final design was approved in April 2008.

#### Construction

- Meadowmere/Warnerville
  - The G contractor continued addressing punch list items.
  - No Monthly Construction I&T meetings were held during this quarter. Project update conference calls to discuss outstanding field items were held on May 5, May 12, and June 10.
- Destratification Facility
  - DEP registered the G Contract on 6/29/2010.
  - The E Contract was advertised for rebid on March 22, 2010. Ten (10) bids for the E contract were received and opened on April 7, 2010. The apparent low bid was \$253,918. A bid analysis was performed and summarized in correspondence dated and sent to the DEP on April 21, 2010. DEP has commenced with the contract award process with the low E contractor. A pre-award EHS with DEP and the contractor was held on May 7, 2010.
  - Work to obtain DOB permit to construct continued. A meeting with BWSO was held on June 9, 2010. A site connection application was submitted on June 16, 2010.
- Regulator Automation
  - Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.

#### **Missed/Modified Milestones**

Expansion of Wet Weather Capacity of Jamaica WWTP may be modified pending further negotiations in August 2010. DEP submitted a revised Request for Modification of project and milestones associated with the expansion of the wet weather capacity of the Jamaica WWTP to DEC on November 14, 2008. The basis of the original Request for Modification was the identification of an alternative approach that is expected to result in a greater degree of CSO reduction. The June 2007 Jamaica Bay and CSO Tributaries WWFP proposed replacing the expansion with more cost-effective sewer modifications projected to achieve greater CSO capture. Numerous meetings between DEP and DEC technical staff occurred, during which schedule, additional alternatives, and field measurements were discussed. A final proposed modification was included in the May 5, 2010 "omni letter" submitted by DEP that included a specific modification request for the June 30, 2010 milestone for submittal of the form 2A SPDES Application and a request to replace the remaining milestones related to the wet weather expansion with new milestones related to a parallel sewer and bending weirs. DEC conditionally approved this request June 28, 2010.

 Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for missed or modified milestones related to this project.

#### **Anticipated Activities for Next Quarter**

### Design

- Destratification Facility
  - DSDC activities will commence.

### Construction

- Meadowmere/Warnerville
  - G and E contractors to complete punch list items, continue on remaining change order work, and continue with training and O&M activities.
- Destratification Facility
  - The Contract E low bidder will be awarded the contract, and construction will commence.
- Regulator Automation
  - Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being executed under a single construction contract REG-026. Refer to Section 3.2 for an update on the status of this project.

DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1 Second Quarter, 2010

Plan Elements:	Meadowmere & Warnerville DWO Abatement	Expansion of Wet Weather Capacity of Jamaica WWTP	Destratification	Laurelton and Springfield Blvd. Drainage Plan	Regulator Automation
Location:	Meadowmere and Warnerville – Queens, New York	Bergen Basin	Shellbank Basin	Jamaica WWTP Drainage Area	Regulators 2,3 and 14
Actions:	Construction of a Pumping Station, Sewer Collection System, and Dual Force Main	Provide an additional 50 mgd of wet weather capacity at the Jamaica WWTP.	Conduct Demonstration Construct Permanent Facility	Develop drainage plan for storm sewer build out	Provide automated regulators
Construction Cost:	\$37,637,569	\$120 million	\$2,621,918	To be determined	Note 1
Status:	Construction 99% complete. Construction Completion Milestone met.	Project to be replaced with a parallel sewer and bending weirs, pending August 2010 Consent Order negotiations per DEC 6/28/2010 correspondence	Contract for G to be awarded to low bidders. Two items remaining to obtain DOB construction approval.	Drainage planning complete.	Note 1

### Table 11 – Jamaica Tributaries CSO Projects

Note 1: Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.

### 3.7. Coney Island Creek CSO

The recommended plan for the Coney Island Creek CSO Facility Planning Project is to increase the wet weather pumping capacity of the Avenue V Pumping Station. The Avenue V Pumping Station tributary area encompasses 2,900 acres, of which 2,056 acres are separately sewered and 844 acres have combined sewers. The Avenue V Pumping Station capacity will be increased to capture 85 percent, by volume, of the current CSO discharge from outfall OH-021 to Coney Island Creek. The capacity of the pumping station will be increased from approximately 30 MGD to 80 MGD in two construction contracts, a pumping station upgrade phase and a force main construction phase.

### Work Performed During This Quarter

### Design

- Avenue V Pumping Station Upgrade
  - DSDC activities continued, including:
    - Shop drawing review
    - Coordination drawing review
    - Change Order preparation
    - Main Building structural inspection.
    - Architectural Terra Cotta inspection.
- New Force Mains
  - DSDC activities continued, including:
    - SPDES preparation
    - LI Well permit preparation
    - Shop drawing review
    - Change Order preparation

### Construction

- Avenue V Pumping Station Upgrade
  - Work during the quarter included:
    - Operation and maintenance of the Temporary Pumping System.
    - Operation and maintenance of Dewatering System.
    - Disconnected Deep Well #3 & 4.
    - Completed demolition of existing roof of the Main Building.
    - Commenced Wet Well Construction

- Completed mini piles installation at Wet Well and Generator Building areas.
- Commenced mini pile installation at Network Protection Structure location.
- Completed mini pile load test at Generator Building area.
- Completed parapet wall and ring beam section of the Main Building
- Commenced structural steel work at roof of the Main Building.
- Commenced backfilling behind west wall of new Wet Well.
- Con Ed disconnected the remaining 120V service and electric meter from Main Building.
- Provided Electrical Maintenance at the Pump Station site.
- Completed roof drain downspout piping.
- Completed core drilling and installed wall sleeves for drain pipes at existing Main Building south wall.
- Continued the removal of excessive soil from pump Station.
- Avenue V Pumping Station Force Mains Upgrade
  - Construction activities during this quarter included:
    - Final Leakage Tests
      - 42"/48" The second of three final leakage tests was completed for approximately 4,000 LF of each force main from 20<sup>th</sup> Avenue to Pit M. To date 21,548 LF (76.79%) of the total 28,061 LF of force main has successfully passed the final leakage test.
    - Open Cut Pipe installation (Approximately 92% complete)
      - This period the Contractor completed installation of the FM on 27<sup>th</sup> Avenue and commenced installation along Avenue V. Force main connections and repairs were also completed along the Belt Parkway and started in Pit O on Cropsey Avenue. A total of 889 LF of 42" DIP force main and 932 LF of 48" DIP force main was installed during this period.
        - 42" Total: 14,454 out of 15,530 LF (93.1%)
        - 48" Total: 8,130 out of 8,943 LF (90.9%)
    - Jacked casing pipe installation (100% Complete)
      - 66" casing pipe with 42" DIP carrier pipe Total: 1,366 LF.
      - 66" casing with 48" DIP carrier pipe Total: 547 LF.
    - Microtunneling pipe installation (100% Complete)
      - 60" casing pipe with 48" HOBAS carrier pipe. Total: 3,040 LF
      - 60" casing pipe with 42" HOBAS carrier pipe. Total: 1,690 LF

- Completed installation of air valve access manholes and blowoff valves.
- Commenced construction of 48" Discharge Chamber at Bay 16<sup>th</sup> St. and Bath Avenue.
- Commenced cleaning of SE-133 from MH 18 to 10.
- Performed preliminary Leakage tests at previously installed force main on 27<sup>th</sup> Avenue.
- Performed dewatering as required as per DEC permits.
- Completed tree installation along Belt Parkway.
- Commenced topsoil and temporary seeding installation along Belt Parkway.

#### **Missed/Modified Milestones**

• There are no missed milestones.

#### **Anticipated Activities for Next Quarter**

Design

DSDC Activities

#### Construction

- Avenue V Pumping Station Upgrade
  - Operation and maintenance of temporary pumping system.
  - Operation and maintenance of dewatering system.
  - Continue construction of new wet well.
  - Continue installation of network protection structure mini-piles.
  - Continue installation of new concrete roof.
  - Commence reconstruction/repair of structural components in Main Building /mechanical equipment room.
  - Continue installation of electrical conduit and concrete duct banks.
  - General site maintenance.
- New Force Mains
  - Continue tree/landscape remediation activities.
  - Landscape restoration (permanent seeding) from Verrazano Bridge to Bay 40<sup>th</sup> Street.

- Continue open cut force main installation (42"/48" DIP) on Avenue V from West 12<sup>th</sup> St. to West 11<sup>th</sup> St.
- Commence open cut force main installation (42"/48" DIP) at the Stillwell Avenue. intersection. Supervision to be provided by NYCT for elevated subway.
- Commence open cut force main installation at intersection of 27<sup>th</sup> Avenue and Cropsey Avenue.
- Repair 42" Hobas pipe between Pits M & N.
- Continue installation and removal of steel sheeting as necessary.
- Continue leakage tests for installed pipe.
- Clean and inspect SE-133.
- Relocate water and sewer lines as required throughout the project.
- Continue construction of 48" discharge chamber at Bay 16<sup>th</sup> Street & Bath Avenue.

	Contracts	Contract
	PS-79G, H, P, E	<i>PS</i> -79 <i>F</i>
Plan Elements:	Upgrade Avenue V Pumping Station	New Force Mains
Location:	Avenue V PS (Avenue V and West 11th Street)	42-inch to SE-133 (Shore Pkwy. Vic. Verrazano Bridge); 48-inch to vic. Reg. 9A
Actions:	Comprehensive upgrade to automate and increase station capacity to 80 mgd; Lower Wet Well operating level to reduce sewer surcharges; Network Protector Structure to reliably transform utility power; Generator system to improve station reliability; Architectural restoration of Main Building to 1915 appearance	New force mains to convey DWF and WWF
Cost:	\$72,482,063	\$102,612,044
Status:	Notice to Proceed issued on 12/16/05. Construction is 56% complete.	Notice to Proceed issued on 7/23/07. <b>Construction is 87% complete.</b>

#### Table 12 – Coney Island Creek CSO Projects

### 3.8. Newtown Creek CSO

The Newtown Creek CSO Facility Planning area consists of the areas in Brooklyn and Queens from which wet weather runoff drains to the Newtown Creek waterbody and its branches: English Kills, Dutch Kills, Whale Creek, Maspeth Creek and the East Branch. For this CSO planning area, the Waterbody/Watershed Facility Plan, still under review by the DEC, proposes some modifications to the consent order milestones that will ultimately achieve better CSO capture and result in improved water quality, as permitted in the Order in Section III, Paragraph A, Section 3.

This section reports on the progress of facility planning and design of the existing CSO plan, subject to modifications by the Waterbody/Watershed Facility Plan, and includes 1) maximizing flow through the Morgan Avenue Interceptor, 2) the construction of in-stream aeration facilities (Zone I & II) and 3) the construction of an off-line storage tank.

Maximizing flow through the Morgan Avenue Interceptor will include raising the overflow weir in Regulator B1; increasing the sluice gate openings to the interceptor; providing a relief sewer from the St. Nicholas weir to Regulator B1; and providing a throttling gate on the Kent Avenue Interceptor. The Aeration Facilities (Zone I) includes construction of a landside compressor station and installation of an air header in the creek bottom of the Upper English Kills. Based upon the performance evaluation of the Zone I aeration testing, Zone II aeration may be implemented to expand in-stream aeration to include the Lower English Kills, the East Branch and Dutch Kills. The off-line storage facility will control CSO discharge to the English Kills and will include a 9 million gallon tank, a pumping station, and a new gravity drain to drain the tank for treatment at the Newtown Creek WWTP.

Subsequent to the Newtown Creek WB/WS Facility Plan submittal of June 2007, the DEP analyzed additional alternatives to reduce CSOs to Newtown Creek and the East River, including control measures beyond those listed in the 2007 Plan. Based on these analyses and on ongoing discussions between DEP and DEC, DEP proposed to modify the mandated elements currently in the CSO Consent Order constructing a much larger relief sewer in the Newtown Creek drainage area, bending weirs at targeted regulators, and additional floatables controls at targeted regulators and outfalls. In addition, the goals of the Zone II Aeration project have been realigned towards higher dissolved oxygen levels. The projects included in the Modification Request are expected to contribute to improved water quality in a cost-effective manner.

The Modification Request was submitted by DEP to DEC in April 30, 2009. DEC granted a 60day milestone extension to August 31, 2009 for items VIII.E.2 and VIII.F.3 on June 24, 2009, and further extended the milestone dates to October 31, 2009 on August 27, 2009. DEP responded to these, and on October 30, 2009 requested an additional extension of time for items VIII.E.2 and VIII.F.3 to February 1, 2010, at which time DEP committed to submitting reports related to the Zone I Aeration data collection and analysis. **DEP resubmitted the Modification Request on March 31, 2010. The biological and water quality data reports related to Aeration Zone I were provided to DEC on February 1, 2010.** 

#### Work Performed During This Quarter

### Planning

- Off-line Storage Tank
  - No actions to report this quarter.

### Design

- Maximize Flow to Morgan Ave. Interceptor
  - Kent Avenue Throttling Facility design has been completed.
- Phase 1 Aeration Facility
  - Design completion was certified December 2008 and accepted February 2009. Start-up of the facility first occurred on June 25, 2009. Sampling for the First Year Post-Operational Habitat Monitoring was performed.
  - The aeration system for the Upper English Kills was activated for the season on June 1, 2010. There have not been any problems reported with the system.
  - The DEP Harbor Survey program is monitoring Newtown Creek on a regular basis; however, the two continuous-recording data sondes used to monitor and record dissolved oxygen concentrations and water temperatures in the Upper English Kills were removed from Newtown Creek on May 12, 2010 for redeployment in Gowanus Canal.
- Phase 2 Aeration Facilities
  - The 90% design completion Contract Drawings and Specifications for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the lower English Kills was started.

#### Construction

- Phase 1 Aeration Facilities
  - Construction of the Phase I Aeration Facilities was complete as of December 2008.
- Kent Avenue Throttling Facility
  - DEP certified that the Notice to Proceed to Construction for the Kent Avenue Throttling Facility had occurred prior to the June 2009 milestone in a letter dated September 29, 2009. The construction is occurring under Newtown Creek WWTP contract NC-36.
  - Work continued on the Throttling Gate. Internal concrete work in the manhole was performed; the guide rails for the gate and the throttling gate have been installed; the hydraulic actuator has been installed.

#### **Missed/Modified Milestones**

• DEP submitted a Modification Request on April 30, 2009 to eliminate certain elements and replace with more cost-effective elements that achieve similar or greater water

quality benefits. A revised Modification Request was submitted on March 31, 2010. Biological and water quality data reports related to Aeration Zone I were provided to DEC on February 1, 2010 in support of this request.

### Anticipated Activities for Next Quarter

#### Design

- Maximize Flow to Morgan Ave. Interceptor
  - Continue design of the Regulator B-1 Modifications.
  - Continue design of St. Nicholas Avenue Weir to Regulator B-1 Relief Sewer.
- Phase 1 Aeration Facility
  - Continue seasonal operation of facility.
  - Commence sampling for the Second Year Post-Operational Habitat Monitoring in August 2010.
- Phase 2 Aeration Facilities
  - Investigate properties that may be used for the East Branch and the northern portion of Newtown Creek and Dutch Kills and the lower southern portion of Newtown Creek; this will decrease the amount of property that be required.
  - Continue evaluation of alternative properties identified for require blower buildings.
  - Continue working on obtaining properties along the East Branch and Dutch Kills for the construction of Aeration Systems for the corresponding waterbodies.
  - Continue design of Aeration Systems for the East Branch and Dutch Kills waterbodies.
  - Continue design on third blower installation in the Phase I Aeration Facility building for the Lower English Kills.
  - Evaluate aeration technologies to be used as an alternative to the positive displacement blower, air header and diffuser system installed in Phase I.
  - Begin preparation of Damage and Acquisition Maps for proposed aeration facility locations along the Dutch Kills and East Branch.
  - Finish the 60 percent design completion of the third blower installation in the Phase I Aeration Facility building for the Lower English Kills.
  - Finish the 90 percent design completion of the third blower installation in the Phase I Aeration Facility building for the Lower English Kills.

#### Construction

- Phase 1 Aeration Facility
  - Turn over Facility to Bureau of Water Treatment

### Kent Avenue Throttling Facility

 Remaining work includes electrical duct banks; backfill; manhole top and cover; and start-up.

	Maximize flow through Morgan Ave. Interceptor	Throttling Facility	Phase 1 - Aeration Facilities	Phase 2 - Aeration Facilities	Off-line Storage Tank
Location:	Regulator B1 and WWTP throttling chamber	Kent Avenue Interceptor upstream from Morgan Avenue Interceptor	Head end of English Kills, south of Grand Street	Lower English Kills, Dutch Kills, East Branch and Newtown Creek	Sewers tributary to CSO outfall discharging to English Kills
Actions:	Raise overflow weir in R-B1; increase sluice gate openings to interceptor; provide relief sewer from St. Nicholas weir to R-B1	Continued Construction	Provide aeration to raise DO to a goal of 3.0 mg/l; includes landside compressor station, air header, and diffuser assembly.	Provide aeration to raise DO to a goal of 3.0 mg/l; includes landside compressor station, air header, and diffuser assembly.	Design facility, including tank, pumping station, and gravity drain for treatment at the Newtown Creek WWTP.
Cost:	\$10,000,000	\$1,000,000		000,000 for both)	TBD
Status:	Throttling gate at the WWTP is 100% complete; B-1 overflow weir and relief sewer are proposed to be replaced by new elements in 3/31/2010 Modification Request	Throttling gate at Kent Avenue 85% Complete	Construction 100% complete: DEP certified 12/31/08; DEC approved 2/25/09. Operated during 2009 summer season. <b>Restarted</b> 6/1/10.	Continue design and site selection of the Aeration Systems for the Lower English Kills, Dutch Kills, East Branch and Newtown Creek under Contract NC- EK-IV.	On hold pending submission and approval of Newtown Creek Modification Request
Other Issues:	Requires coordination with WWTP planning and design requirements As allowed by the Order, currently subject to modification by the WWFP		Water quality and habitat monitoring data reports submitted to DEC		Site approval (ULURP) and acquisition of property required. As allowed by the Order, currently subject to modification by the WWFP

#### Table 13 – Newtown Creek CSO Projects

### 3.9. Westchester Creek CSO

The Westchester Creek CSO Facilities Planning area consists of the drainage area of CSO Outfall HP-014, which discharges at the head end of the Creek. Westchester Creek receives discharges from five CSO outfalls; however, discharges from CSO Outfall HP-014 were determined to be the primary cause of water quality degradation in the Creek. CSO Outfall HP-014 serves a drainage area of approximately 2,321 acres within the Hunts Point WWTP service area in the Borough of the Bronx. For this CSO planning area, the **June 2007** Waterbody / Watershed Facility Plan DEC **reviewed and provided comment in January 2010** analyzes cost effective CSO control measures for this waterbody and proposes modifications to the scope of the existing CSO facilities plan, as permitted in the Order in Section III, Paragraph A, Section 3.

The current Westchester Creek CSO Abatement Facilities Plan, subject to modifications by the Waterbody/Watershed Facility Plan recommendations, will be constructed in two phases with Phase I consisting of the facilities to divert the combined sewage to the CSO storage tank, as well as rehabilitation of an existing tide gate chamber, and Phase II consisting of the CSO storage tank. This section reports on the progress of Phases I and II of the Westchester Creek CSO Abatement Facilities Plan.

Phase I includes construction of the diversion chamber in Eastchester Road, construction of the 2 MG CSO supply/storage conduit along Waters Place between the diversion chamber and the 10 MG CSO storage tank, and rehabilitation of the existing tide gate chamber located at CSO Outfall HP-014. Phase II includes construction of the 10 MG CSO storage tank in the southwest section of the BPC Campus, including an operations building to house operational units, and installation of the required fencing at the site.

### Work Performed During This Quarter

#### Planning

#### Design

- Phase I Influent Sewers
  - The DEP submitted the Westchester Creek Waterbody/Watershed Facility Plan in June 2007 that recommended replacing this element in Appendix A of the Order. Comments on the plan were received from DEC on January 20, 2010.
- Phase II CSO Storage Facility
  - The DEP submitted the Westchester Creek Waterbody/Watershed Facility Plan in June 2007 that recommended replacing this element in Appendix A of the Order. Comments on the plan were received from DEC on January 20, 2010.

#### Construction

• Construction has not yet been initiated.

#### **Missed/Modified Milestones**

 The May 5, 2010 modification request submitted by DEP included a specific request to defer the June 30, 2010 milestone for completion of design for the Westchester Creek Phase I Influent Sewers to September 2010. The June 2007 Westchester Creek WWFP proposed replacing the facility with weir modifications at the head end of Westchester Creek and floatables control at Pugsley Creek. DEC provided comments on this WWFP on January 20, 2010, raising an issue regarding the additional CSO flow that would be discharged to the tidal mud flats at Pugsley Creek. Discussions between DEP and DEC technical staff during the first and second quarters of 2010 indicated that a new parallel sewer from regulator structure CSO-24 to a downstream location in the existing collection system could relocate CSO away from the head end of Pugsley Creek, and DEP requested that the milestone be modified to September 2010 to allow time to complete analyses associated with this sewer concept. DEP also committed to submitting a subsequent modification request along with a detailed justification 60 days prior (i.e., July 31, 2010). DEC Responded to this request on June 28, 2010, stating that it would exercise enforcement discretion.

#### **Anticipated Activities for Next Quarter**

- Phase I Influent Sewers
  - DEP will submit a Modification Request for completion of final design of the Phase I Influent Sewers at the end of July 2010.

Plan Elements:       Westchester Creek CSO Supply/Storage Conduit, CSO Sand Little League Amenities			
Location:	Bronx Psychiatric Center Campus, and along Eastchester Road and Waters Place in the Bronx		
Actions:	Design and construction of an underground CSO storage tank with a capacity of 12 MG (including the storage capacity within the supply/storage conduit) to provide abatement at CSO Outfall HP-014 on Westchester Creek; design and construction of an operations building;		
Cost:	Under Revision		
Status:	Negative Declaration issued for project; ULURP Application approved; design underway for CSO supply/storage conduit, CSO storage tank		
Other Issues:	Site needs to be acquired by DEP from the State of New York; NYC Building Permit Application, as well as other permit applications, needs to be processed As allowed by the Order, the current plan is subject to modifications by the Waterbody/Watershed Facility Plan		

# Table 14 – Westchester Creek CSO Project

### 3.10. Bronx River CSO

The modified CSO facilities plan for the Bronx River recommends that floatables control facilities be provided at CSO Outfalls HP-004, HP-007 and HP-009, within the Hunts Point WWTP drainage area, to minimize the discharge of unsightly floatable material. This modified plan eliminated the previously proposed 4 MG CSO storage facility due to limited benefits in the improvement of water quality in the Bronx River.

For CSO Outfall HP-004, which is located on the west bank of the Bronx River just north of the Cross Bronx Expressway and serves a drainage area of approximately 582 acres, the recommended floatables control facility consists of providing in-line netting within a new conduit located upstream of the outfall along West Farms Road. For CSO Outfall HP-007, which is located on the east bank of the Bronx River just north of the Sheridan Expressway and serves a drainage area of approximately 1,693 acres, the recommended floatables control facility consists of providing mechanical screens within Regulators 27 and 27A located upstream of the outfall. For CSO Outfall HP-009, which is located on the east bank of the Bronx River and serves a drainage area of approximately 436 acres, the recommended floatables control facility consists of providing in-line netting within Regulator 13, located within Soundview Park upstream of the outfall.

### **Work Performed During This Quarter**

#### Design

• Design completion was certified in May 2009.

#### Construction

- Construction commenced on January 15, 2010.
- DEC issued a Notification of No Jurisdictional Determination for Bronx Park Avenue (CSO-27A) and Bronx Zoo (CSO-27) on May 13, 2010.
- Completed relocation of Telemetry Box at Soundview Park (CSO-13).
- Completed repairs at Soundview Park HP-009 Headwall.
- Acquired NYSDOT Highway Work Permit on June 24, 2010, for work on West Farm Road (CSO-28/HP-004).

#### **Missed/Modified Milestones**

• There are no missed milestones.

#### **Anticipated Activities for Next Quarter**

- Planning
  - No activities to report.
- Construction
  - Commence excavation for regulator expansions at Soundview Park and Bronx Zoo.
  - Obtain DEP Sewer Connection permit for dewatering system discharge at Soundview Park, **Bronx Zoo and West Farm Road.**
  - Set up and install dewatering system at Soundview Park (CSO-13/HP-009) and West Farm Road (CSO-28/HP-004).
  - Commence excavation for the work at West Farm Road (CSO-28/HP-004).
  - Relocation of gas utilities and overhead wires at Bronx Park Av. (CSO-27A) by Consolidated Edison of New York.

Plan Elements:	Floatables Control Facilities at CSO Outfalls HP-004, HP-007 and HP-009
Location:	New conduit (West Farms Road) upstream of CSO Outfall HP-004, Regulator 27 (Bronx Park Avenue) and Regulator 27A (Bronx Zoo) upstream of CSO Outfall HP- 007, and Regulator 13 (Soundview Park) upstream of CSO Outfall HP-009
Actions:	Design and construction of floatables control facilities for CSO Outfalls HP-004, HP- 007 and HP-009
Cost:	\$26,473,401
Status:	Construction of the Bronx River Floatables Control Facilities Project is ongoing
Other Issues:	

### Table 15 – Bronx River CSO Project

### 3.11. Hutchinson River CSO

The Hutchinson River CSO Facilities Planning area consists of the drainage areas of CSO Outfalls HP-023 and HP-024 in the Hunts Point WWTP drainage area. The Hutchinson River receives discharges from five CSO outfalls; however, discharges from CSO Outfalls HP-023 and HP-024 were determined to be the primary cause of water quality degradation in the River. CSO Outfall HP-023, which is located on the west bank of the Hutchinson River near the southern end of Conner Street, serves a drainage area of approximately 300 acres. CSO Outfall HP-024, which is located on the west bank of the Hutchinson River near the intersection of Boston Road and 233<sup>rd</sup> Street, serves a drainage area of approximately 1,100 acres. For this CSO planning area, the Waterbody/Watershed Facility Plan, currently under review by the DEC, analyzes cost effective CSO control measures for this waterbody and proposes modifications to the scope of the existing CSO facilities plan, as permitted in the Order in Section III, Paragraph A, Section 3.

The current Hutchinson River CSO Abatement Facilities Plan, subject to modifications by the Waterbody/Watershed Facility Plan, will be constructed in two phases with Phase I consisting of a 4 MG CSO storage tank to provide abatement at CSO Outfall HP-023 and Phase II a 3 MG CSO storage tank to provide abatement at CSO Outfall HP-024. This section reports on the progress of Phases I and II of the Hutchinson River CSO Abatement Facilities Plan.

Phase I includes construction of a southern 4 MG CSO storage tank to be located adjacent to the Hutchinson River wholly within the boundary limits of Public Place Site, which is land near the southern end of Conner Street currently controlled by the DPR. Phase II includes construction of a northern 3 MG CSO storage tank to be located adjacent to the Hutchinson River along Hutchinson Avenue on land currently owned by Pascap Export, Inc.

DEC issued a letter to DEP date May 22, 2009 that prompted a series of discussions on the proposed Hutchinson River Waterbody/Watershed Facility Plan, and on July 31, 2009, DEP submitted a proposed sampling plan for the Hutchinson River that DEC approved. Sampling occurred during August and October 2009, and was presented to DEC on October 1 and December 10, 2009.

Based on conversations with DEC, the DEP retracted the existing WWFP to better identify causes of impairment based on a more robust sampling program and to further evaluate cost effective alternatives consistent with the EPA CSO Policy. DEC provided comments to the June 2007 WWFP on May 22, 2009, in response to which DEP agreed to conduct water quality sampling. On January 4, 2010 DEC directed DEP to submit a letter outlining its strategy and timeline for submitting an approvable WWFP subsequent to that sampling effort. A conference call was convened by DEP and DEC on January 29, 2010, and on February 1, 2010 DEP responded. On February 19, 2010, DEC acknowledged the February 1 DEP letter and reaffirmed its direction for DEP to submit a water quality sampling plan and scoping document. **DEP submitted the water quality sampling plan to DEC on May 24, 2010**.

#### Work Performed During This Quarter

### Design

- Phase I 4 MG CSO Storage Tank
  - DEP received comments from the DEC on the June 2007 Hutchinson River Waterbody/Watershed Facility Plan which includes modifications to the elements included in Appendix A of the Order on May 22, 2009. Alternative CSO abatement technologies are under consideration.
- Phase II 3 MG CSO Storage Tank
  - DEP received comments from the DEC on the June 2007 Hutchinson River Waterbody/Watershed Facility Plan which includes modifications to the elements included in Appendix A of the Order on May 22, 2009. Alternative CSO abatement technologies are under consideration.

#### Construction

• Construction has not yet been initiated.

#### **Missed/Modified Milestones**

On May 5, 2010 DEP requested a modification of the June 30, 2010 milestone for completion of final design for a CSO storage facility for the Hutchinson River, as well as all other outstanding Hutchinson River CSO milestones (XI.A.2 through XI.E). The influence of Westchester County water quality has been the subject of discussions between DEC and DEP technical staff, and DEP requested that a waste load allocation analysis be performed that can be used as a basis to finalize the LTCP for the Hutchinson River. In addition, DEP proposed eliminating the requirement to submit a WWFP and proceed directly to the development of an LTCP as suggested by DEC. DEC Responded to these requests on June 28, 2010, stating that it would exercise enforcement discretion.

**Anticipated Activities for Next Quarter** 

- Respond to any DEC comments on the proposed water quality sampling plan
- Initiate water quality sampling.

# Table 16 – Hutchinson River CSO Project

Plan Elements:	Hutchinson River CSO Storage Facilities
Location:	City-owned property at southern end of Conner Street adjacent to Hutchinson River; privately-owned property along Hutchinson Avenue adjacent to Hutchinson River
Actions:	Design and construction of a 4 MG CSO storage tank and a 3 MG CSO storage tank to provide abatement at CSO Outfalls HP-023 and HP-024, respectively; rehabilitation of existing CSO Outfalls HP-023 and HP-024
Cost:	Under Revision
Status:	Alternatives under consideration
Other Issues:	DEC comments on WB/WS Facility Plan received May 22, 2009

### 3.12. Jamaica Bay CSO

The Jamaica Bay CSO Abatement Facility Plan addresses CSOs in the 26<sup>th</sup> Ward WWTP drainage area, specifically the CSO discharges to Fresh Creek, Hendrix St. Canal and Spring Creek, as well as other tributary waters with CSO discharges to Jamaica Bay. The phased plan for the 26th Ward tributaries includes: Phase I includes cleaning of sewers in the 26<sup>th</sup> Ward drainage area and interim dredging of the head-end of Hendrix St Canal. Subsequent phases include development of waterbody/watershed plans for the 26th Ward tributaries under the Citywide Long Term Control Plan for CSO and expansion of the wet weather capacity of the 26<sup>th</sup> Ward WWTP by 50 MGD.

In addition to the facility plan recommendations, the existing Spring Creek Auxiliary WWTP has been upgraded. The project was developed under another program, but was subsequently listed as a recommended project in the Jamaica Bay CSO Abatement Facility Plan. The Spring Creek AWPCP is a CSO facility that receives flow from the Autumn Avenue Regulator in Brooklyn and the 157th Avenue Regulator in Queens. The flow is conveyed to the plant through six barrels and is distributed to six basins. If stored flow reaches an elevation of 1.0, the 24 effluent sluice gates at the effluent end of each of the basins open, allowing flow to be discharged to Spring Creek.

The key components of the Spring Creek AWPCP upgrade include lowering the roof and providing enhanced HVAC and odor control systems, improved chemical systems, and new basin wash down systems.

In order to resolve remaining outstanding requirements of the omnibus Order on Consent dated June 18, 1999 (#R2-0045-93-05, the "Omni IV Order"), DEP and DEC agreed to include the Rockaway Omni IV Order in the 2008 modification to the 2005 CSO Consent. This requires the design of flow upgrades and construction of all necessary facilities to ensure that the Rockaway WWTP and associated sewer system is capable of delivering accepting, and treating influent at or above twice the plant's design flow during any storm event.

### **Work Performed During This Quarter**

Design

- Expansion of 26th Ward WWTP Capacity
  - DEP has requested modification of the milestone for final design completion to December 2010 to allow more time to develop alternative wet weather and sewer optimization strategies.

#### Construction

- Spring Creek AWPCP Upgrade
  - The certification of construction completion was sent to DEC in April 2007 in satisfaction with the milestone.
- 26<sup>th</sup> Ward Drainage Area Sewer Cleaning and Evaluation

- DEP Certified Construction Completion of the 26<sup>th</sup> Ward Drainage Area Sewer Cleaning on May 17, 2010. A Final Inspection meeting was held with DEC personnel on June 28, 2010.
- Hendrix Street Canal Dredging
  - Shop drawing submittals, including the Environmental Health and Safety Plan were reviewed.
  - A meeting was held with Community Board No. 5 officials on June 10, 2010 to discuss the project.

### **Missed/Modified Milestones**

- Dredging
  - The Notice to Proceed to Construction milestone was modified to February 2010 and the Construction Completion milestone to February 2012 for the Hendrix Street Canal Interim Dredging Project.
- Expansion of 26th Ward WWTP Capacity
  - On May 5, 2010 DEP request a modification of the the Wet Weather Expansion (XII.F) and associated milestones, deferring the next milestone (final design completion, June 30, 2010) until December 2010. Regulatory, constructability, and cost issues may render the expansion infeasible. DEP requested the deferral to provide more time to develop alternative wet weather and sewer optimization strategies and to complete designs associated with portions of the wet weather expansion that have other operational benefits. DEP also committed to submitting an updated modification request along with a detailed justification 60 days prior to the requested milestone extension date – October 31, 2010. DEC Responded to this request on June 28, 2010, stating that it would exercise enforcement discretion.

### Anticipated Activities for Next Quarter

- Dredging
  - Dredging contractor mobilization and initiation of dredging activities within the Hendrix Street Canal.
- Expansion of 26<sup>th</sup> Ward WWTP Capacity
  - DEP to present alternatives to plant wet weather expansion to DEC at the September CSO technical meeting.

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	Table 17 – Jamaica Bay CSO Projects				
Plan Elements:	Dredging	26 <sup>th</sup> Ward Drainage Area Sewer Cleaning and Evaluation	Expansion of 26 <sup>th</sup> Ward WWTP Capacity	Spring Creek Upgrade	Rockaway WWTP Conveyance Improvements
Location:	Phase I- Interim Dredging of Hendrix Street Canal	Phase I-Portions of sewers in Williams, Hegeman and Flatlands Avenues	Phase IV- 26 <sup>th</sup> Ward WWTP, Brooklyn	Spring Creek, Brooklyn	Rockaway WWTP, Brooklyn
Actions:	Removal of CSO sediment mounds from the head end of the Hendrix Street Canal	Contractor initiated work August 2008	Increase wet weather capacity by 50 mgd	Upgrade of existing CSO facility	Improve collection system and WWTP capacity to achieve 2DDWF
Project Cost:	\$13.2 million	\$3.88 million		\$87 million	TBD
Status:	Construction 20% complete	100% Complete	Alternative approaches under evaluation	100% complete	Construction Completion in December 2017
Other Issues:	Notice to Proceed to Construction and Construction Complete Milestones dates have been modified by the DEC to February 2010 and February 2012, respectively.	-	Design and construction of elements necessary for 50 MGD wet weather capacity expansion are under review for feasibility	-	Construction Completion in December 2017

### 3.13. Citywide Comprehensive Floatables Plan

### Work Performed During This Quarter

- The floatables monitoring program completed its transition from a pilot phase to a full scale program as of February 2008. In the second quarter of 2010, floatables-monitoring activities have continued as part of the following ongoing programs:
  - (1) Harbor Water Quality Survey: Floatables monitoring was incorporated into existing cruise schedules to cover active sites.
  - (2) Public Participation: The Public Participation component is conducted by the New York City Beach Floatables Survey Program (Survey Program), a volunteer group that has been performing counts of beach floatables for several years.
  - (3) Long Term Control Plan post construction compliance monitoring (PCM): Floatables monitoring is conducted as part of the PCM for the LTCP facilities that are on line (i.e., Flushing Bay and Spring Creek CSO retention facilities).
- During previous reporting periods, CSO LTCP Waterbody/Watershed reports incorporated general language describing the floatables-monitoring program and the inclusion of floatables monitoring as part of the post-construction monitoring program for relevant LTCP waterbodies.

#### Missed/Modified Milestones

• There are no missed milestones.

### Anticipated Activities for Next Quarter

• Continue floatables-monitoring program activities, including monitoring at all active Harbor Water Quality Survey sites.

### 3.14. Environmental Benefits Projects

These projects were undertaken in connection with the settlement of an enforcement action taken by New York State and DEC for violations of New York State law and DEC regulations. The 2008 Modification to the CSO Consent Order requires not less than four million dollars (\$4,000,000) worth of DEP-funded Environmental Benefit Projects (EBPs) designed to abate CSOs and/or address wet weather water quality impacts of CSOs and to benefit the waters in and around New York City. The 2008 Order further stipulates that the Quarterly Reports required by Section IV of the 2005 CSO Order shall include a report on the status of these EBPs and funds expended on the EBPs during the prior quarter, including a detailed EBP status and cost accounting of all funds expended, and general estimates of the costs expected to be incurred during the following quarter.

DEP submitted an approvable CSO EBP Plan to DEC in March 2008 that included the implementation of a suite of stormwater management techniques for the Bronx, Flushing, and Gowanus watersheds. The status of these programs is summarized below. The March 2008 EBP Plan was approved April 28, 2008.

#### Work Performed During This Quarter

Bronx River

- Draft Contract for EDesign Dynamics remains under review by Drexel University legal department. When complete, DEP Legal will review for consistency with Nitrogen Consent Order EBP contracts.
- Screening selection for potential landscape subcontractors to install stormwater BMPs continued. A stormwater BMP contractor used under the Nitrogen Consent Order stormwater BMP installation will likely be selected for this work. Construction costs for this contractor are consistent with other bidders used on this project.

#### Flushing Creek

- Grant proposal review committee consisting of DEC and DEP representatives completed their review of the proposals. Scoring sheets were developed according to requirements of original grant proposal were tallied and the five highest scoring proposals were selected for funding.
- A total of \$2,036,178 in grants was awarded within the Flushing watershed. The following proposals have been selected for funding:
  - Manhattan College: \$660,440 for the installation of a modular green roof project on New York Hospital. It will be designed to control runoff from a 1" to 1.5" rainfall on a 0.5 acre roof.
  - Columbia University: \$389,187 for a Greenstreets stormwater capture system in Rego Park that will remove nearly 2,500 square feet of impervious

surface and replace it with permeable pavers and vegetation to capture runoff from a three acre watershed.

- Regional Plan Association: \$600,000 for Sponge Park <sup>TM</sup> bioretention basins under the Long Island Expressway near the Van Wyck Expressway. One is 1,963 square feet and has the capacity to store approximately 34,000 gallons from a 2" rain event, and the second is approximately 9,900 square feet and has the capacity to store approximately 170,000 gallons.
- Unisphere, Inc.: \$386,551 for treatment wetlands and rain gardens for treating stormwater entering Meadow Lake. This project will construct two 5,000 square feet treatment wetlands that will receive runoff from two one acre portions of a parking area at the southwestern edge of Meadow lake in Flushing Meadow Corona Park. Each treatment system is deigned to capture over 36,000 gallons for each 1" to 1.5" rain event or a total of over 72,000 gallons for each event.
- All grant winners were notified by letter on June 25, 2010 that their proposal was selected for funding.

### Gowanus Canal

- Grant proposal review committee consisting of DEC and DEP representatives completed their review of the proposals. Scoring sheets were developed according to requirements of original grant proposal were tallied and the five highest scoring proposals were selected for funding.
- Gowanus Canal Conservancy was selected for \$583,470 in funding for the 6<sup>th</sup> Street Green Corridor Project that will build seven curbside swales ranging in size from 400 square feet to 1,200 square feet along 6<sup>th</sup> Street and 2<sup>nd</sup> Avenue in Brooklyn. The project will capture approximately 40% of the runoff generated within the seven swale area, which is over 45,000 square feet of street and sidewalk surfaces.
- The grant winner was notified by letter on June 25, 2010 that their proposal was selected for funding.

### DEC US Forestry Service Grant

- No progress has been made on the Bronx tree pits installations this quarter.
- Drexel has completed the LIDRA model, posted it to their open source website and is continuing to make refinements as they test it. Drexel graduate student presented the LIDRA model at a national conference in Rhode Island in May 2010.
- Riverkeeper has not selected a property for this project yet. NYC Parks Dept. did not approve a second property and Riverkeeper has been directly to find a third site.

#### **Anticipated Activities for Next Quarter**

#### Bronx River

- Continue to finalize proposed contract with EDesign Dynamics.
- Continue screening landscape subcontractors.

#### Flushing Creek

• Work with selected grant winners to develop draft contracts.

#### Gowanus Canal

• Work with selected grant winners to develop draft contracts.

#### DEC US Forestry Service Grant

- Riverkeeper will select a final location and GI for the Newtown Creek project. Design work will begin.
- Gaia will complete the design for the tree pits in the HP-009 CSO Shed, obtain permits, prepare the bidding package and solicit bids.
- Drexel will continue to test and refine the model. This work should be completed by September 30, 2010.

Plan Elements:	Bronx River	Flushing Bay and Creek	Gowanus Canal	DEC US Forestry Service Grant
Location:	HP-009 service area	HP-009 service area	6th St / 2nd Ave, Brooklyn	Bronx River and Newtown Creek CSO- Sheds
Description:	Stormwater BMP evaluations	Manhattan College New York Hospital green roof (\$660,440); Columbia University Rego Park greenstreets (\$389,187); RPA bioretention basins under the LIE (\$600,000); Unisphere treatment wetlands and rain gardens for Meadow Lake (\$386,551)	Gowanus Canal Conservancy 6th Street Green Corridor Project	Evaluation of three tree pit types in the HP-009 area in the Bronx; Green infrastructure installation in Newtown Creek CSO shed; Training and open source access for Drexel University's LIDRA model; Education and stewardship activities in the HP-009 area.
Cost:	Budget: \$850,000 Cost to date: \$0 This Qtr: \$0 Next Qtr: \$0	Budget: <b>\$2,036,178</b> Cost to date: \$0 This Qtr: \$0 Next Qtr: \$0	Budget: <b>\$583,470</b> Cost to date: \$0 This Qtr: \$0 Next Qtr: \$0	Budget: \$250,000 Cost to date: \$158,493 This Qtr: \$8,607 Next Qtr: \$45,000
Status:	Continue companion project tasks for inclusion into development of proposed BMPs and LIDs under this proposal.	Selected proposal winners will be called in to go over their grant and development of contracts.	Selected proposal winners will be called in to go over their grant and development of contracts.	LIDRA model completed; Tree pit design ongoing; Newtown Creek CSO-Shed GI site selection ongoing.
Other Issues:				All letter agreements are in place with Gaia, Riverkeeper, Drexel and YMPJ.

### Table 18 – 2008 Modified CSO Consent Order Environmental Benefits Projects

# 4.0 Compliance Status

#### 4.1. Unresolved Delays

See Section 7.0, Other Issues.

#### 4.2. Compliance Charts

The following table summarizes the milestone dates developed in the draft Consent Order and updates available through **June 2010**:

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
I. Alley Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Approvable Additional Modified Facility Plan Report	-	Feb 2004	100
3. Submit Form 2A SPDES Application	-	Jun 2003	100
B. Comprehensive Watershed Planning	l	1	
1. Submit Approvable Alley Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
2. Submit Approvable East River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Outfall and Sewer System Improvements	I		
1. Initiate Final Design	May 1996	-	100
2. Final Design Completion Including CPM Analysis	-	Mar 2002	100
3. Notice to Proceed to Construction	Dec 2002	-	100
4. Construction Completion	-	Dec 2006	100
D. CSO Retention Facility	<u> </u>	1	
1. Initiate Final Design	May 1996	-	100
2. Final Design Completion Including CPM Analysis	-	Dec 2005	100
3. Notice to Proceed to Construction	Dec 2006	-	100
4. Construction Completion	-	Dec 2009 <sup>(1)</sup>	90
E. Drainage Basin Specific LTCPs	<u> </u>	1	1
1. Submit Approvable Drainage Basin Specific LTCP for	-	Apr 29 2010	50

#### Table 19 – Consent Order Milestone Dates

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TEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
Alley Creek			
2. Submit Approvable Drainage Basin Specific LTCP for East River	-	6 mos. after approval of <b>II.B.1.</b>	50
I. Outer Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
3. Comprehensive Watershed Planning			I
1. Submit Approvable Open Waters Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Regulator Improvements - Fixed Orifices		1	1
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Apr 2005	100
3. Notice to Proceed to Construction	Feb 2006	-	100
4. Construction Completion	-	Jul 2008	100
D. Regulator Improvements – Automation			I
1. Initiate Final Design	Feb 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Nov 2007	-	100
4. Construction Completion	-	Jun 2010	89
E. Port Richmond Throttling Facility			
1. Initiate Final Design	Jun 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Aug 2005	100
3. Notice to Proceed to Construction	Jun 2006	-	100
4. Construction Completion	-	Nov 2009	100
F. Submit Approvable Drainage Basin Specific LTCP for Open Waters	-	6 mos. after approval of II.B.1.	50
II. Inner Harbor CSO		·	·
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Gowanus Canal Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Regulator Improvements - Fixed Orifices			
1. Initiate Final Design	Mar 2000	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 2002	100
3. Notice to Proceed to Construction	Feb 2003	-	100
4. Construction Completion	-	Apr 2006	100
D. Regulator Improvements – Automation			
1. Initiate Final Design	Feb 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Nov 2007	-	100
4. Construction Completion	-	Jun 2010	89
E. In-Line Storage			
1. Initiate Final Design	Jul 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Aug 2007	-	100
4. Construction Completion	-	Aug 2010	99
F. Submit Approvable Drainage Basin Specific LTCP for Gowanus Canal	-	Jan 2011	50
G. Flushing Tunnel Modernization			
1. Notice to Proceed to Construction	Feb 2010	-	100
2. Construction Completion	-	Sep 2014	10
H. Gowanus Pump Station Reconstruction			
1. Notice to Proceed to Construction	Feb 2010	-	100
2. Construction Completion	-	Sep 2014	10
I. Dredging of Gowanus Canal			
1. Submittal of All Dredging Permit Applications	Dec 2010		-
2. Notice to Proceed with Dredging		TBD <sup>(2)</sup>	-

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Complete Dredging		TBD <sup>(2)</sup>	-
V. Paerdegat Basin CSO	<u> </u>		
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
3. Submit Form 2A SPDES Application	-	Jul 2002	100
B. Comprehensive Watershed Planning	11		1
1. Submit Approvable Paerdegat Basin Waterbody / Watershed Facility Plan Report	-	Mar 2003	100
C. Influent Channel			1
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Mar 1997	100
3. Notice to Proceed to Construction	Feb 1999	-	100
4. Construction Completion	-	Feb 2002	100
D. Foundations and Substructures	11		1
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Aug 2001	100
3. Notice to Proceed to Construction	Jun 2002	-	100
4. Construction Completion	-	Dec 2009	<b>99</b> <sup>(3)</sup>
E. Structures and Equipment	<u> </u>		1
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2004	100
3. Notice to Proceed to Construction	Sep 2005	-	100
4. Construction Completion	-	May 2011	87
F. Submit Approvable Drainage Basin Specific LTCP for Paerdegat Basin	-	Nov 2005	100
Dredging of Paerdegat Basin			
Submit Joint Application Permit to USACE and DEC to associated with dredging at the head-end and mouth of Paerdegat Basin	-	Dec 2008	100
1. Initiate Final Design	Sep 19, 2010	-	-

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ITE	M DESCRIPTION	START DATE	DUE DATE	% COMPLET		
	2. Complete Final Design	-	Sep 19, 2011	-		
	3. Notice to Proceed with Dredging	Mar 19, 2015	-	-		
	4. Complete Dredging	-	Mar 19, 2015	-		
V.	Flushing Bay CSO					
A.	Facility Plan Development					
	1. Submit Modified Facility Plan Report	-	Completed	100		
	2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100		
	3. Submit Form 2A SPDES Application	-	Jun 2003	100		
B.	Comprehensive Watershed Planning					
	1. Submit Approvable Flushing Bay Waterbody / Watershed Facility Plan Report	-	Jun 2007	100		
	<ol> <li>Submit Approvable Flushing Creek Waterbody / Watershed Facility Plan Report</li> </ol>	-	Jun 2007	100		
C.	CS4-1 Reroute and Construct Effluent Channel					
	1. Initiate Final Design	Oct 1992	-	100		
	2. Final Design Completion Including CPM Analysis	-	Sep 1994	100		
	3. Notice to Proceed to Construction	Jun 1995	-	100		
	4. Construction Completion	-	Jun 1996	100		
D.	CS4-2 Relocate Ballfields					
	1. Initiate Final Design	Oct 1992	Sep 19, 2011         -         Mar 19, 2015         Mar 19, 2015         Completed         Feb 2004         Jun 2003         Jun 2007         Jun 2007         Sep 1994         -	100		
	2. Final Design Completion Including CPM Analysis	-		100		
	3. Notice to Proceed to Construction	Apr 1995	-	100		
	4. Construction Completion	-	Aug 1995	100		
E.	CS4-3 Storage Tank					
	1. Initiate Final Design	Dec 1993	-	100		
	2. Final Design Completion Including CPM Analysis	-	Sep 1996	100		
	3. Notice to Proceed to Construction	Jul 1997	-	100		
	4. Construction Completion	-	Aug 2001	100		
F.	CS4-4 Mechanical Structures - Initiate Final Design		<u> </u>	<u> </u>		
	1. Initiate Final Design	Dec 1993	-	100		

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE		
2. Final Design Completion Including CPM Analysis	-	Feb 2000	100		
3. Notice to Proceed to Construction	Mar 2002	-	100		
4. Construction Completion	-	Sep 2009	100		
G. CS4-5 Tide Gates					
1. Initiate Final Design	Aug 1998	-	100		
2. Final Design Completion Including CPM Analysis	-	Nov 1999	100		
3. Notice to Proceed to Construction	Dec 2000	-	100		
4. Construction Completion	-	Apr 2002	100		
H. CD-8 Manual Sluice Gates					
1. Final Design Completion Including CPM Analysis	-	May 2003	100		
2. Notice to Proceed to Construction	Feb 2004	-	100		
3. Construction Completion	-	Jun 2005	100		
I. Drainage Basin Specific LTCPs	Drainage Basin Specific LTCPs				
1. Submit Approvable Drainage Basin Specific LTCP for Flushing Bay	-	6 mos. after apprvl. of V.B.1.	50		
2. Submit Approvable Drainage Basin Specific LTCP for Flushing Creek	-	6 mos. after apprvl. of V.B.2.	50		
J. Tallman Island WWTP and associated sewer system are capa at or above twice the plant's design flow during any storm event	Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent or above twice the plant's design flow during any storm event				
1. Initiate Final Design	Dec 2007	-	100		
2. Final Design Completion including CPM Analysis	-	Dec 2010	60		
3. Notice to Proceed to Construction	Dec 2011	-	-		
4. Construction Completion	-	Feb 2000 - Sep 2009 - Nov 1999 - Apr 2002 May 2003 - Jun 2005 6 mos. after apprvl. of V.B.1. 6 mos. after apprvl. of V.B.1. 6 mos. after apprvl. of V.B.2. accepting and tr - Dec 2010 - Jul 2015 Jul 2009 Within 60 days of DEC	-		
B1. Flow Meters (2009 Modification, Appendix B)					
a) Submit flow metering protocols	-	Jul 2009	100		
b) Include effluent overflow volumes in monthly reports	-		-		
B2. Odor Control System (2009 Modification, Appendix B)					
a) Apply to register CBS & for inspection variance	-	Sep 2009	100		

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TEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
b) Certify completion of start-up and testing	-	Jun 2009	100
c) Demonstrate system to DEC using water	-	Sep 2009	100
d) Certify construction completion	-	Sep 2009	100
33. Bar Screens (2009 Modification, Appendix B)			
a) Report on repairs and modifications	-	Jun 2009	100
b) Demonstrate full operation to DEC	-	Sep 2009	100
34. Tallman Island Regulator 9 (2009 Modification, Appendix B)	)		
a) Submit report describing telemetry/SCADA systems	-	May 2009	100
VI. Jamaica Tributaries CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
3. Comprehensive Watershed Planning			
1. Submit Approvable Bergen Basin Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
2. Submit Approvable Thurston Basin Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Meadowmere & Warnerville DWO Abatement			
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	May 2005	100
3. Notice to Proceed to Construction	Jun 2006	-	100
4. Construction Completion	-	Jul 2009	99 <sup>(3)</sup>
D. Expansion of Wet Weather Capacity of Jamaica WWTP			
1. Initiate final Design	Jun 2009	-	-
2. Submit Form 2A SPDES Application	-	Jun 2010	-
3. Final Design Completion Including CPM Analysis	-	Jun 2011	-
4. Notice to Proceed to Construction	Jun 2012	-	-
5. Construction Completion	-	Jun 2015	-
E. Destratification Facility			
1. Initiate Final Design	Jan 2006	-	100

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Final Design Completion Including CPM Analysis	-	Dec 2007	100
3. Notice to Proceed to Construction	Sep 2010	-	-
4. Construction Completion	-	Mar 2012	-
F. Laurelton and Springfield Blvd.			
<ol> <li>Submit Drainage Plan for Storm Sewer Build-out (extension granted by DEC letter, 2/29/08)</li> </ol>	-	May 2008	100
G. Regulator Automation			
1. Initiate Final Design	Feb 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Nov 2007	-	100
4. Construction Completion	-	Jun 2010	89
H. Drainage Basin Specific LTCPs	1		
1. Submit Approvable Drainage Basin Specific LTCP for Bergen Basin	-	Aug 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Thurston Basin	-	Aug 2012	50
VII. Coney Island Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
B. Comprehensive Watershed Planning	1		
1. Submit Approvable Coney Island Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Avenue V Pumping Station Upgrade		- Mar 2012 May 2008 - Nov 2006 - Jun 2010 Aug 2012 Aug 2012 Aug 2012	
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion including CPM Analysis	-	Jan 2005	100
3. Notice to Proceed to Construction	Nov 2005	-	100
4. Construction Completion	-	Apr 2011	56
D. Avenue V Force Main			
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 2006	100
3. Notice to Proceed to Construction	Jul 2007	-	100
4. Construction Completion	-	Jun 2012	87

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
E. Submit Approvable Drainage Basin Specific LTCP for Coney Island Creek	-	Jan 2011	50
VIII. Newtown Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Oct 2003	100
B. Comprehensive Watershed Planning	I		
1. Submit Approvable Newtown Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Aeration Zone I			
1. Initiate Final Design	Mar 2001	Jun 2007 - Dec 2004 - Dec 2008 - Jun 2010 - Jun 2014	100
2. Final Design Completion Including CPM Analysis	-	Dec 2004	100
3. Notice to Proceed to Construction	Dec 2005	-	100
4. Construction Completion	-	Dec 2008	100
D. Aeration Zone II	I		
1. Initiate Final Design	Jun 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	20
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2014	-
E. Relief Sewer / Regulator Modification			
1. Initiate Final Design	Jun 2007	Jan 2011 Oct 2003 Jun 2007 - Dec 2004 - Dec 2008 - Jun 2010 -	100
2. Final Design Completion Including CPM Analysis	-		10
3. Notice to Proceed to Construction	Jun 2010		-
4. Construction Completion	-	Jun 2014	-
F. Throttling Facility			
1. Initiate Final Design	Dec 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2008	100
3. Notice to Proceed to Construction	Jun 2009	-	100
4. Construction Completion	-	Dec 2012	40
G. CSO Storage Facility	<u> </u>		
1. Initiate Final Design	Nov 2010	-	-

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ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Form 2A SPDES Application	-	Nov 2013	-
3. Final Design Completion Including CPM Analysis	-	Nov 2014	-
4. Notice to Proceed to Construction	Dec 2015	-	-
5. Construction Completion	-	Dec 2022	-
H. Submit Approvable Drainage Basin Specific LTCP for Newtown Creek	-	Feb 2016	50
X. Westchester Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
2. Submit Form 2A SPDES Application	-	Submit with final design plans & specs <sup>(4)</sup>	-
3. Comprehensive Watershed Planning		-	
<ol> <li>Submit Approvable Westchester Creek Waterbody / Watershed Facility Plan Report</li> </ol>	Jul 2004	Jun 2007	100
C. Phase I (Influent Sewers)		1	
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	20
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2015	-
D. CSO Storage Facility		-	
1. Notice to Proceed to Construction	Dec 2015	-	-
2. Construction Completion	-	Dec 2022	-
E. Submit Approvable Drainage Basin Specific LTCP for Westchester Creek	-	Feb 2016	50
X. Bronx River CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Sep 2003	100
2. Submit Additional Modified Facility Plan Report	-	Mar 2004	100
3. Comprehensive Watershed Planning			
1. Submit Approvable Bronx River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
		1	l

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Second Quarter, 2010

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
C. Floatables Control	L		I
1. Initiate Final Design	Jan 2006	-	100
2. Final Design Completion Including CPM Analysis	-	Jul 2008	100
3. Notice to Proceed to Construction	Jun 2009	-	100
4. Construction Completion	-	Jun 2012	5
D. Submit Approvable Drainage Basin Specific LTCP for Bronx River	-	6 mos. after approval of X.B.1.	50
XI. Hutchinson River CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Jul 2003	100
2. Submit Form 2A SPDES Application	-	Submit with final design plans & specs <sup>(4)</sup>	-
3. Comprehensive Watershed Planning			I
<ol> <li>Submit Approvable Hutchinson River Waterbody / Watershed Facility Plan Report</li> </ol>	-	Jun 2007	100
C. Phase I of the Storage Facility			I
1. Initiate Final Design	Apr 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	10
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2015	-
D. Future Phases		1	L
1. Notice to Proceed to Construction	Dec 2016	-	-
2. Construction Completion	-	Dec 2023	-
E. Submit Approvable Drainage Basin Specific LTCP for Hutchinson River	-	Feb 2017	50
XII. Jamaica Bay CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec 2003	100
B. Comprehensive Watershed Planning		1	1
1. Submit Approvable Jamaica Bay Waterbody / Watershed Facility Plan Report	-	Jun 2007	100

Quarterly Progress Report

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Second Quarter, 2010

TEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Approvable Spring Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
3. Submit Approvable Fresh Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
<ol> <li>Submit Approvable Hendrix Creek Waterbody / Watershed Facility Plan Report</li> </ol>	-	Jun 2007	100
C. Spring Creek AWPCP Upgrade			
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Feb 2002	100
3. Submit Form 2A SPDES Application	-	Jun 2003	100
4. Notice to Proceed to Construction	Mar 2003	-	100
5. Construction Completion	-	Apr 2007	100
D. 26th Ward Drainage Area Sewer Cleaning and Evaluation			
1. Initiate Final Design	Jan 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2007	100
3. Notice to Proceed to Construction	-	Jun 2008	100
4. Construction Completion	-	Jun 2010	100
E. Hendrix Creek Dredging			
1. Initiate Final Design	Jan 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2007	100
3. Notice to Proceed to Construction	Feb 2010	-	100
4. Construction Completion	-	Feb 2012	0
F. 26th Ward Wet Weather Expansion			
1. Initiate Final Design	Jun 2006	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	15
3. Submit Form 2A SPDES Application	-	Submit with final design plans & specs <sup>(4)</sup>	-
4. Notice to Proceed to Construction	Jun 2011	-	-
5. Construction Completion	-	Dec 2015	-
G. Drainage Basin Specific Long Term Control Plans			
1. Submit Approvable Drainage Basin Specific LTCP for	-	Aug 2012	50

Quarterly Progress Report

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START DATE	DUE DATE	% COMPLETE
-	Aug 2012	50
-	Aug 2012	50
-	Aug 2012	50
	Dec 2017	-
-	Dec 2004	100
-	Dec 2017	-
	START DATE	-       Aug 2012         -       Aug 2012         -       Aug 2012         -       Aug 2012         Dec 2017

Notes: (1) A modification to the completion date from 12/31/2009 to 11/10/2010 was submitted to DEC on 10/30/ 2009. (2) Dredging NTP 3 years from effective date of permit; completion within 5 years of EDP. (3) CSO Consent Order elements completed and a Certification of Construction Completion has been submitted. (4) A modification request to the submittal date of Form 2A was submitted to DEC on 6/29/2010.

# 5.0 Community Relations

No public meetings were held during the second Quarter of 2010.

# 6.0 Key Personnel Changes

There were no Key Personnel Changes during the second Quarter of 2010.

## 7.0 Other Issues

The following action items were identified during the May 6, 2010 CSO Quarterly Meeting:

	Action Item	Response	Target Date	Status
1	Alley Creek – DEP to submit letter defining Consent Order Construction Completion and include CPM completion dates, dates of BWT training and facility takeover	DEP is developing this submittal. Expected to be provided first week of July.	7/1/2010	Under Development
2	Inner Harbor – DEP to notify DEC Region 2 of Gowanus Flushing Tunnel shutdown 2 to 3 weeks in advance	Forecast to be shutdown on July 23, 2010. Notification expected first week of July.	7/1/2010	DEP Will Comply
3	Inner Harbor – DEC Legal to submit letter requesting clarification for regulator automation force majeure	DEP submitted Force Majeure notice 4/30/2010	7/1/2010	Resolved 6/21/2010
4	Outer Harbor – DEC to retransmit certification of construction completion letter on Port Richmond Throttling Facility	DEP certified Construction Completion 11/20/2009; DEC inspection occurred	No Target Date	
5	Paerdegat Basin – DEP to submit Form 2A SPDES Application and variance	DEP is developing these items.	Summer 2010	Under Development
6	Paerdegat Basin – DEC to retransmit certification of construction completion letter on Contract 4B	DEP certified Construction Completion 1/5/2010	No Target Date Established	DEC retransmitted
7	Paerdegat Basin – DEC to transmit corrected letter on dredging milestones	4/9/2010 letter based dates on DEC permit; USACE permit not complete	No Target Date Established	DEC transmitted on 6/7/2010
8	Flushing Bay – DEP and DEC to conduct meeting to discuss flow methodology	Meeting held on 5/20/2010. Summary report submitted on 5/18/2010.	5/16/2010	Ongoing evaluations
9	Coney Island Creek – DEP to submit Modification Request to align completion milestones for Ave V PS and FM to June 2012	DEP is developing a modification request.	2/28/2011	Under Development

Quarterly Progress Report

DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1 Second Quarter, 2010

	Action Item	Response	Target Date	Status
10	Bronx River – DEP to submit revised final WWFP and Responsiveness Summary and responses to DEC		7/15/2010	On Schedule
11	Jamaica Bay – DEP to certify completion of 26 <sup>th</sup> Ward sewer cleaning	DEP certified Construction Completion 5/17/2010	6/30/2010	Resolved
12	Miscellaneous – DEC Legal to evaluate mechanisms for transferring funds to HRF and provide copy of draft agreement		No Target Date Established	Under Development
13	Miscellaneous – DEP and DEC to set up legal/technical staff meeting to discuss revised milestones for LTCPs	Conference call held on 6/3/2010, follow-up required by 7/21/2010	6/15/2010	Ongoing discussions
14	Miscellaneous – DEP to submit .pdf version of Quarterly meeting presentation via email; DEC to provide feedback on revised Quarterly meeting presentation	DEP to develop and present at next Quarterly Meeting	No Target Date Established	Under Development

## 8.0 Status of LTCP Development

According to the Order, the reporting on the progress of the Drainage Basin Specific LTCP and Waterbody/Watershed Plan development shall be included in the first and third quarterly reports of each calendar year beginning in the year 2005 and continuing until all Appendix A requirements have been completed and approved.

APPENDIX A CONSENT ORDER CERTIFICATION LETTERS



Caswell F. Holloway Commissioner

Kathryn Mallon, P.E. Deputy Commissioner of Engineering, Design & Construction kmallon@dep.nyc.gov

59-17 Junction Boulevard Flushing, NY 11373 T: (718) 595-6183 F: (718) 595-5999 Mr. Joseph DiMura, P.E. Director Bureau of Water Compliance New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233

 Re: Order on Consent (CSO Order)
 DEC Case #CO2-20070101-1
 Appendix A, XII. Jamaica Bay CSO, D. 26<sup>th</sup> Ward Drainage Area Sewer Cleaning and Evaluation

May 17, 2010

Dear Mr. DiMura,

In accordance with Section III.F of the above referenced Consent Order for Combined Sewer Overflow (the Order), this letter is to certify the compliance with a milestone contained in the Order by the New York City Department of Environmental Protection. Specifically, the sewer cleaning activities for the 26<sup>th</sup> ward Drainage area were completed on December 9, 2009, in conformance with Milestone XII.D.4 of Appendix A. Attached, please find a copy of the certification memorandum from the construction manager.

Please contact me at (718) 595-6208 if you have any questions regarding this certification.

Sincerely.

Roy Tysvaer, P.E.

c: Heather Donnelly, DEP Assistant Counsel, BLA Reza Marandi, DEP Chief, BEDC Keith Mahoney, DEP Chief, BEDC Dorothy Chao, DEP Executive Project Manager, BEDC Peter Young, Hazen and Sawyer Copy:

James DeZolt Director Division of Water New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3500

Gary E. Kline, P.E. Division of Water New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Robert Elburn, P.E. Regional Water Engineer Division of Water, Region 2 New York State Department of Environmental Conservation 47-40 21<sup>st</sup> Street Long Island City, NY 11101

Robyn Adair, Esq. Water Compliance Counsel New York State Department of Environmental Conservation Division of Environmental Enforcement 625 Broadway, 14<sup>th</sup> Floor Albany, NY 12233-5500

William Plache, Esq. Assistant Corporation Counsel New York City Law Department 100 Church Street New York, NY 10007

Timothy Burns, P.E. New York State Environmental Facilities Corporation 625 Broadway Albany, NY 12207 Environmental Protection

## **MEMORANDUM**

TO:	Reza Marandi, P.E. Chief, Water Quality Construction
FROM:	Warren Gordon, P.E. Executive Construction Manager
DATE:	May 3, 2010
RE:	Certification of Construction Completion Contract CSO-FC: Improvement of Flow to Fresh Creek CSO

This memorandum provides certification that as of December 9, 2009, the sewer cleaning activities under the CSO-FC contract were completed in accordance with the plans and specifications approved by the New York State Department of Environmental Conservation on August 27, 2007.



c: Keith Mahoney Dorothy Chao

U (Sign)

Gordon WARREN (Print)

(Date)

Kathryn Mallon, P.E. Deputy Commissioner of Engineering, Design & Construction kmallon@dep nyc gov

**Caswell F. Holloway** Commissioner

59-17 Junction Boulevard Flushing, NY 11373 T: (718) 595-6183 F: (718) 595-5999

## APPENDIX B NYSDEC COMMENTS ON PREVIOUS QUARTERLY REPORT

## New York State Department of Environmental Conservation Division of Water

Bureau of Water Compliance, 4<sup>th</sup> Floor 625 Broadway, Albany, New York 12233-3506 Phone: (518) 402-8177 • FAX: (518) 402-8082 Website: www.dec.ny.gov



Alexander B. Grannis Commissioner

May 5, 2010

Mr. Roy Tysvaer, P.E. Director, Wastewater Treatment and Water Quality Bureau of Engineering Design and Construction NYC Department of Environmental Protection 59-17 Junction Boulevard Flushing, New York 11373-5108

Re: Order on Consent (CSO Order) DEC Case #CO2-20000107-8 1<sup>st</sup> Quarter CSO Quarterly Progress Report

Dear Mr. Tysvaer:

Please find attached comments on the 1<sup>st</sup> Quarter CSO Quarterly Progress Report. If you have any questions regarding this letter, please contact Linda Allen, P.E. at 518-402-8234.

Sincerely,

Gary E. Kline, P.E. Section Chief NYC Municipal Compliance Section

Attachment as stated

cc:	DEP:	K. Mahoney, D. Chao
	DEC:	S. McCormick, R. Adair
	NEIWPCC:	L. Allen, P. Kenline

### NYS DEC Comments Quarterly Report 1<sup>st</sup> Quarter 2010

### 1. Transmittal of CSO Quarterly Report:

- In the future, transmit hard copies of the CSO Quarterly Report as follows:
  - o 4 copies to Gary Kline, DEC
  - o 1 copy to Robyn Adair, DEC
  - o 1 copy to Tim Burns, EFC
  - o 1 copy to Robert Elburn, Region 2, DEC

### 2. Section 1.0, Executive Summary

- **Page 1-1, Item 4:** The bullet should indicate that the Force Majeure pertains to Paerdegat Basin Contract 4B Foundations and Substructures.
- Page 1-3, 1<sup>st</sup> bullet: The DEP has already submitted a modification request for the Wet Weather Expansion of Jamaica WPCP in 2008; the referenced submittal will be a final modification request.
- 3. Section 2.0, Construction Contracts:
  - Page 2-2, Table 5: The percent complete for Paerdegat Basin Structures and Equipment went from 86% last quarter to only 85% this quarter, however progress was made during the quarter. Please clarify why the percent complete decreased.
- 4. Section 3.2, Outer Harbor (same comments for Inner Harbor and Jamaica regulator automation):
  - Page 3-5: Provide a complete description of the causes of the delay for the regulator automation (SCADA). The Quarterly Report indicates that the delay is due to change order registration while the Request for Modification and Force Majeure letter submitted by the DEP on May 3, 2010 indicates the delay is due to an extreme weather event and unexpected site conditions as well as change order registration. For each source of delay, indicate the corresponding duration of the delay.
  - Table 7-6 and Table 2-2: The reported percent complete for this quarter and last quarter for the regulator automation (SCADA) are the same at 76%. Clarify why there was no progress made in completion of the project.
- 5. Section 3.3, Inner Harbor:
  - Pages 3-9 and 3-10: For the In-Line Storage project, provide information on the dates for operator training and turnover to DEP operating bureau for both sites.

#### 6. Paerdegat Basin (section not numbered):

- Page 3-12: Include dredging dates in the next Quarterly Report: Initiate Final Design = 9/19/10; Complete Final Design = 9/19/11; NTP = 3/19/13; and Construction End Date = 3/19/15.
- 7. Section 3.4, Flushing Bay:
  - **Page 3-21**: The flow metering methodology submitted by DEP on March 5, 2010 was reviewed and comments were sent by DEC on March 16, 2010.
- 8. Section 3.7, Newtown Creek:
  - Page 3-32, last paragraph and Page 3-34, Missed/Modified Milestones: Provide additional update on the modification request. On February 1, 2010, DEP submitted a request for extension for milestone VIII.E.2 until March 31, 2010, which was granted by the DEC on March 4, 2010. On March

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## NYS DEC Comments Quarterly Report 1<sup>st</sup> Quarter 2010

31, 2010, the DEP submitted a revised Modification Request and supporting documents, including a receiving water quality model recalibration report and aeration system preliminary design report.

- Page 3-34, Work Performed this Quarter, Maximize Flow to Morgan Ave. Interceptor, 3<sup>rd</sup>
   Bullet: Clarify if the inspection requested was by DEC or NEIWPCC IEM. If the inspection is a routine site visit under by a NEIWPCC IEM, there is no need to report in the Quarterly Report.
- Page 3-34, Anticipated Activities, Phase I Aeration Facility: Confirm that the activities discussed under this item are correct, as the sampling for FSAP for 2009 has already been concluded and the first year post-operational habitat monitoring report has already been completed.
- Page 3-35, Construction, Phase I Aeration Facility: The previous quarterly report indicated that the facility would be turned over to BWT in Q1, but this quarterly report indicates that it will now be turned over in Q2. Explain the reasons for the delay in turnover. Also confirm if the problems with power supply to the blower facility have been resolved.
- Page 3-36, Table 13, Phase I Aeration Facility: The data summary reports for habitat and water quality monitoring were submitted to the DEC on February 10, 2010.

9. Section 3.8, Westchester Creek:

• Page 3-37, Background Section: The DEC transmitted comments on the Westchester Creek WWFP on January 20, 2010.

10. Section 3.10, Hutchinson River:

 Page 3-43: Anticipated Activities Next Quarter: DEP to submit water quality sampling plan for 2010 sampling and DEP to submit modification request for Phase I (Storage Facility) Final Design Completion milestone.

11. Section 3.11, Jamaica Bay:

 Page 3-46, Anticipated Activities, 26<sup>th</sup> Ward Expansion: DEP to submit modification request for Final Design Completion milestone.

12. Section 4, Compliance Status:

- Table 19, I. Alley Creek, E.2.: Due date should be 6 months after approval of II.B.1 (not I.B.1) for the East River to match due date for Open Waters WWFP.
- **Table 19, IV. Paerdegat Basin**: Include dates for dredging: Initiate Final Design = 9/19/10; Complete Final Design = 9/19/11; NTP = 3/19/13; and Construction End Date = 3/19/15.

#### 13. Section 7, Other Issues:

- Missing Action Items 1 and 2:
  - o Alley Creek: submit mod request for LTCP milestone extension by 2/28/2010
  - o Outer Harbor: conduct final inspection of Port Richmond throttling facility on 2/24/2010
- Action Item 12 has not been resolved, but is still pending.

#### 14. Section 8, Status of LTCP Development:

- Bronx River WWFP: DEC sent final comments on the WWFP to DEP on 2/3/2010.
- Jamaica Bay WWFP: DEC sent comment on the WWFP to DEP on 4/8/2008.

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