NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTEWATER TREATMENT
CSO Order on Consent
DEC Case #CO2-20000107-8; DEC Case #CO2-2007-0101-1; DEC Case #CO2-20090318-30; DEC Case #CO2-20110512-25

Combined Sewer Overflow Order on Consent

Quarterly Progress Report – Third Quarter 2011

October 2011

City of New York
Department of Environmental Protection
Bureau of Engineering Design & Construction

CSO Orders on Consent
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QUARTERLY PROGRESS REPORT

THIRD QUARTER 2011
(July 1 to September 30)

October 30, 2011

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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 **July 1, 2011 to September 30, 2011**.

Critical Events This Quarter:

The following critical events occurred this quarter:

1) DEP Certified Design Completion for the Paerdegat Basin Environmental Dredging on September 19, 2011. A copy of the certification letter is attached.

2) DEP issued a Notice of Force Majeure related to the Paerdegat Basin Environmental Dredging Project on July 28, 2011, citing the changing spatial extent of the CSO sediment mound resulting in a higher quality sediment and larger dredge area. DEC issued a Determination on August 3, 2011 stating that the event was not a Force Majeure and directing DEP to proceed with the project as defined and pursue sediment sampling and permit modifications for the newly identified dredging on a parallel track.

3) DEP submitted four (4) Waterbody/Watershed Facility Plan Reports. The updated Westchester Creek and Newtown Creek WWFPs were submitted on June 30, 2011 as per DEC's April 29, 2011 letter.

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. As stipulated by the Order, DEP and DEC held a Quarterly Progress Meeting on **July 24, 2011** at the **Hunts Point WWTP** to discuss issues related to the Order and to review milestones met during the last quarter.

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 milestones from the reporting quarter that are under consideration for potential modification.

Major Actions Next Quarter:

The following major actions are expected to occur from **October 2011 through December 2011**:

Hold the next Quarterly Progress Meeting between DEC and DEP on **December 2, 2011 at the 26th Ward WWTP**.

Table 1 – Milestones This Quarter (July 2011 – September 2011)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	STATUS
Paerdegat Basin	**Environmental Dredging**	**Sep 19, 2011**	**Final Design Completion Including CPM Analysis**	**Certified 9/19/11**

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

LOCATION / PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	REASON FOR MODIFICATION
There are no Milestones this quarter to be considered for potential modification				

Table 3 – Milestones Next Quarter

Table 3 has been removed pending ongoing CSO Consent Order negotiations. The amended Order is expected to be publicly noticed during the 4th Quarter.

Table 4 – Force Majeure Notifications and Outstanding Modification Requests

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION(S)	REASON FOR ACTION(S)	MILESTONE DATE	STATUS
Paerdegat Basin	**Environmental Dredging**	**Notice of Force Majeure**	**Change in spatial extent of dredge**	**NTP Mar 19, 2013**	**Noticed 7/28/11; DEC responded 8/3/11**

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.

Table 5 – Construction Contracts and their Status

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED[1]
Alley Creek	Outfall and Sewer System Improvements	Dec 2002	Dec 2006	Completed	100%	100%
	CSO Retention Facility	Dec 2006	Dec 2009[2]	Completed	100%	100%
Outer Harbor	Regulator Improvements – Fixed Orifices	Feb 2006	Jul 2008	Completed	100%	100%
	Regulator Improvements – Automation	Nov 2007	Jun 2010[6]	Completed	100%	100%
	Port Richmond Throttling Facility	Jun 2006	Nov 2009 as modified	Completed	100%	100%
Inner Harbor	Regulator Improvements – Fixed Orifices	Feb 2003	Apr 2006	Completed	100%	100%
	Regulator Improvements – Automation	Nov 2007	Jun 2010[6]	Completed	100%	100%
	In-Line Storage	Aug 2007	Aug 2010	Completed	100%	100%
	Gowanus Flushing Tunnel Modernization	Feb 2010	Sep 2014	Sep 2014	36%	**38%**
	Gowanus Pump Station Reconstruction	Feb 2010	Sep 2014	Sep 2014	36%	**38%**
	Dredging of Gowanus Canal	TBD[3]	TBD[3]	TBD[3]	-	-
Paerdegat Basin	Influent Channel	Feb 1999	Feb 2002	Completed	100%	100%
	Foundations and Substructures	Jun 2002	Dec 2009	Completed	100%	100%[4]
	Structures and Equipment	Sep 2005	May 2011	Completed	100%	100%[4]
	Dredging of Paerdegat Basin	3/19/2013	3/19/2015	3/19/2015	-	-
Flushing Bay	Reroute and Construct Effluent Channel	Jun 1995	Jun 1996	Completed	100%	100%
	Relocate Ball fields	Apr 1995	Aug 1995	Completed	100%	100%
	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%

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED(1)
	Manual Sluice Gates	Feb 2004	Jun 2005	Completed	100%	100%
	Tallman Island WWTP Conveyance Improvements	Dec 2011	Jul 2015	**Dec 2014**	-	-
Jamaica Tributaries	Meadowmere & Warnerville DWO Abatement	Jun 2006	Jul 2009 as modified	Completed	100%	100%(4)
	Expansion of Wet Weather Capacity of Jamaica WWTP	Jun 2012	Jun 2015	TBD(5)	-	-
	Destratification Facility	Sep 2010	Mar 2012	Mar 2012	**72%**	**50%**
	Regulator Automation	Nov 2007	Jun 2010(6)	Completed	100%	100%
Coney Island Creek	Avenue V Pumping Station Upgrade	Nov 2005	Apr 2011	Apr 2012	100%	**72%**
	Avenue V Force Main	Jul 2007	Jun 2012	Aug 2011	**86%**	**99%**
Newtown Creek	Aeration Zone I	Dec 2005	Dec 2008	Completed	100%	100%
	Aeration Zone II	Jun 2011	Jun 2014	TBD(5)	-	-
	Relief Sewer / Regulator Modification	Jun 2010	Jun 2014	TBD(5)	-	-
	Throttling Facility	Jun 2009	Dec 2012	Dec 2012	**67%**	90%
	CSO Storage Facility	Dec 2015	Dec 2022	TBD(5)	-	-
Westchester Creek	Phase I (Influent Sewers)	Jun 2011	Jun 2015	TBD(5)	-	-
	CSO Storage Facility	Dec 2015	Dec 2022	TBD(5)	-	-
Bronx River	Floatables Control	Jun 2009	Jun 2012	Jun 2012	**78%**	**75%**
Hutchinson River	Phase I of the Storage Facility	Jun 2011	Jun 2015	TBD(5)	-	-
	Future Phases	Dec 2016	Dec 2023	TBD(5)	-	-
Jamaica Bay	Spring Creek AWPCP Upgrade	Mar 2003	Apr 2007	Completed	100%	100%
	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2008	Jun 2010	Completed	100%	100%
	Hendrix Creek Dredging	Feb 2010	Feb 2012	**Oct 2011**	**83%**	**64%**
	26th Ward Wet Weather Expansion	Jun 2011	Dec 2015	TBD(5)	-	-
	Rockaway WWTP Conveyance Improvements		Dec 2017	Dec 2017	-	-

Notes:
(1) Percentage Construction Completion is tracked based on cost incurred.
(2) A modification to the completion date from 12/31/2009 to 11/30/2010 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.
(6) A request for modification to the completion date from 06/30/2010 to 12/31/2010 was submitted to DEC on 04/30/2010.

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

Construction

- Alley Creek CSO Abatement Facilities – Phase I, Stage 2, Contract ER-AC2
  - DEP Certified Construction Completion of the Alley Creek CSO Facility on June 27, 2011. The facility was certified as being operational as of March 11, 2011.

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, February 3, 2009, and July 1, 2010.

- 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. DEP issued a letter to DEC defining items required for certification of Construction Completion along with a CPM schedule on July 1, 2010.
- Due to the flooding condition, DEP issued a letter to the DEC dated September 30, 2010 requesting that the Consent Order milestone date be extended to February 28, 2011. On October 18, 2010, DEC requested additional technical information on the September 30, 2010 modification request. DEP responded to the DEC request on November 22, 2010.
- DEC requested additional information related to the Alley Creek CSO Retention Facility Request for Modification of Milestone Date on March 1, 2011. A response was sent on March 15, 2011.

Anticipated Activities for Next Quarter

Construction

- Alley Creek CSO Abatement Facilities – Phase I, Stage 2, Contract ER-AC2
  - None. The facility was certified as being operational as of March 11, 2011.

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:	$98,850,488	$35,629,594
Status:	Construction Completed	Construction Completed

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

Construction

- Regulator Automation
  - ♦ Construction complete. The Certification of Construction Completion was submitted to DEC on December 30, 2010, and a final inspection was completed.
- 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.

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. DEP provided additional information on July 12, 2010.

Anticipated Activities for Next Quarter

Construction

- Regulator Automation
  - **Project close-out.**
- Phase II Throttling Facility
  - None

Table 7 – Outer Harbor CSO Projects

	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 Complete
Other Issues:	-	-	-

*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 2008Gowanus 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
  - **Selected uninterrupted power supply (UPS) device for the B-6 to replace failed equipment.**
  - **Submitted revised Standard Operating Procedures**.
  - **Wrote subcontract agreement for Fixed Asset Survey work**.
- 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.

- Gowanus Canal Dredging
  - **Continued work on the Permit for the Gowanus CSO Dredging Permit.**
  - **Continued work on Concept design for Gowanus Dredging.**

Construction

- Regulator Automation
  - Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted. Refer to section 3.2 for details.
- 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 (ILS)
  - DEP certified construction completion of ILS in August 2010**.**
  - **Continued work on B-6 site to resolve power issues, inspection and testing of UPS.**
  - **Awaiting DEC final inspection report.**
- Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - **Construction continued during this quarter. The interim oxygen transfer system remained in operation. Work within the flushing tunnel continues which includes sediment, force main piping, and concrete removals.**
  - **The E contractor installed the subgrade conduits for the main electrical service. There is no available work for the H and P contractors to perform until the Service Building starts to get erected, work will open for all three contractors.**
  - **The G contractor completed the base contract work for the jet grouting operations in the Court Yard, Flushing Tunnel Building and the Wastewater Pump Station.**
  - **The auger cast piles for the Service Building is complete.**
  - **The G Contractor is installing the Service Building pile caps.**
  - **The G Contractor continues with the work in the flushing tunnel by removing the existing force main, sediment removal and concrete cradle removal.**

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.
- 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.

Anticipated Activities for Next Quarter

Design

- In-Line Storage
  - Coordinate the monitoring of the dam with the Citywide SCADA project manager.

Construction

- Regulator Automation
  - **Project Close-out**
- In-line Storage
  - **Continue monitoring dam operation.**
  - **Monitor replacement of UPS at B-6 site.**
  - **Finalize fixed asset survey for both facilities.**
- Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - **Continue with the operation of the Oxygen Transfer System and the Interim Wastewater Pump System.**
  - **Continue work on the clean out chamber and perform the micro tunneling between the clean out and exit chambers.**
  - **Continue with the Service Building pile caps.**
  - **Continue with the demolition of the existing force main piping in the flushing tunnel.**
  - **Perform additional jet grouting operations for the court yard chamber/flushing tunnel building on the pump station site.**
  - **Start the construction of the Service Building.**

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	$15,836,084	Note 1	$136,437,568	TBD
Status:	Construction Complete	Construction Complete	Note 1	Under construction. **38% complete**	Design Contract procurement in progress initiated 9/20/2010
Other Issues:			Note 1	Force Majeure submitted to DEC in February 2010 related to site access at Flushing Tunnel intake.	Modification Request submitted 12/15/2010 due to Superfund listing

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

- Paerdegat Basin LTCP report was submitted November 2005, and was approved by DEC in February 2007 as amended June 2006.
- The USACE permit was issued May 10, 2011. The final design initiation milestone was certified complete September 20, 2010.
- The updated Form 2A SPDES Application and Wet Weather Operating Plan (WWOP) were submitted to DEC on May 21, 2010. DEC provided comments on the NY-2A and WWOP on August 13, 2010, and the WWOP and NY-2A were resubmitted to DEC October 22, 2010.

Design

- **Certified Completion of Final Design for the Paerdegat Basin Environmental Dredging on Sept 19, 2011. A copy of the certification letter is attached.**

Construction

- Phase I A – Influent Channels
  - Construction completed in 2002.
- Phase II – Foundations and Substructures
  - Construction completed in January 2010. DEC performed the post-construction inspection on March 23, 2010.
- Phase III - Structures and Equipment

- **Construction work continued and remains 100 percent complete on all consent order related items and is approximately 97 percent complete on various other contract items. The CSO-5 contractors are proceeding at their own risk on over two million dollars-worth of unregistered change orders, which is not fully reflected in the percentage of work completed. All contractors are coordinating inspections and certifications to transition from conditional operation permits to final permits with the FDNY, NYCDOB and NYCDSBS regulatory agencies. All contract work was found to be substantially completed on August 5, 2011 with only punchlist and warranty repairs remaining.**
- **The 5G contractor was involved in a structural inspection of the outfall that identified certain immediate repairs that were subsequently made. Contractor also continued warranty work on various pieces of equipment that malfunctioned. Contractor also continued finishing work including placing asphalt at the Five Barrel and process Buildings, installation of equipment signage and tagging, underground tank spill prevention pads, security system installation and ornamental fence repairs. Contractor also began preparatory work to complete Avenue K Sewer pipe in advance of change order registration.**
- **The 5E Contractor performed troubleshooting of various pieces of equipment during the initial operational period. Contractor replaced lighting and ballast that malfunctioned in the CB Building and investigated the root cause of the failure. Contractor also completed installation of ductbanks for yard lighting near to the Five Barrel Outfall as well as sensors throughout the facility. Contractor also continued finishing work on various items including sealing and waterproofing manholes on the west side of the yard area and sealing conduits in the process building.**
- **The 5H contractor performed troubleshooting of various pieces of equipment during the initial operational period. Contractor completed installation, began initial startup, and preliminary testing of Air-Handling Units and CRAC Unit in the Existing Pumping Station. Contractor also performed troubleshooting of HVAC equipment in the Community Board and began replacement of malfunctioning VFDs and circuit boards.**
- **The 5P contractor continued punch list work in the PBB, OCB, and SB, including supplying hot water heaters in the Pump Back Building.**

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

Construction

- Phase II - Foundations and Substructures
  - None. Construction is complete
- Phase III - Superstructures and Equipment
  - **Work will continue on items not required under the CSO Order.**
  - **The 5G contractor will complete punch list work in the Process Buildings, and construction of the Avenue K Sewer Piping. Additionally, the 5G contractor will continue to provide technical support to BWT personnel during the initial year of operation of the process buildings. Contractor will also complete installation of the security system and begin closeout documentation as available.**
  - **The 5E contractor will complete punch list work in the Process Buildings. Additionally, the 5E contractor will continue to provide technical support to BWT personnel during the initial operation of the process buildings. Contractor will also complete installation of the security system and integration of the power and control system in the Existing Pumping station and begin closeout documentation as available.**
  - **The 5H contractor will complete punch list work in the Process Buildings. The contractor will also complete installation of the Existing Pump Station ductwork upon registration of related change orders to CSO-5G; complete removal of PCB contaminated materials. Contractor will also complete preliminary testing of new HVAC equipment and begin commissioning and integration with existing systems in coordination with NYC BWT. Additionally, the 5H contractor will continue to provide technical support to BWT personnel during the initial operation of the process buildings and begin closeout documentation as available.**
  - **The 5P contractor will continue punch list activities and replacement of incorrect hot water heater. Contractor will also begin closeout documentation as available.**
- Environmental Dredging
  - **Begin procurement process for environmental dredging.**

Table 9 – Paerdegat Basin CSO Projects

	Phase IA	*Phase II*	*Phase III*	*Dredging*
Construction Phase	Influent Channels	Foundations and Substructures	Structures and Equipment	Environmental Dredging
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	$123,905,101	$ 204,419,065	TBD
Status:	Construction completed.	Construction 100% complete.*	Construction 100% complete.*	DEC Permit issued 3/19/10; USACE issued 5/10/11
Other Issues:	-	-	**Registration proceeding; contractors have begun mobilization to perform change order work.**	DEC established milestone dates based on issuance of DEC permit on 3/19/2010.

*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 through the 2009 Modification to Order on Consent (DEC Case # CO2-20090318030).

The revised Flushing Bay Waterbody/Watershed Facility Plan Report was submitted to DEC on December 30, 2010.

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, and 13.

Work Performed During This Quarter

Design

- Flushing Bay CSO Retention Facility
  - ♦ No activities this reporting period.
- Tallman Island Wet Weather Maximization
  - ♦ **Reviewed Contractor bids, completed bid analysis, and initiated award of the construction contract.**
  - ♦ **Continued preparation of drainage calculations and revisions to the NYC Drainage Map.**
  - ♦ **Completed and distributed the Conformed Documents.**
  - ♦ **Continued the development of a Memorandum of Understanding (MOU) between DEP and DPR.**
  - ♦ **Work on the following permits was performed:**
    - o **Submitted application to NYC Public Design Commission and received approval on September 12th, 2011.**
    - o **Submitted Jurisdictional Determination (JD) Request related to the discharge of dewatered groundwater to Powell's Cove, to NYSDEC on July 7th, 2011.**
    - o **Prepared Joint Permit Application (JPA) and submitted to NYSDEC, USACE, NYS DOS, and NYC DCP on July 27th, 2011. Received comments from USACE and responded to comments with a revised submittal on September 20th, 2011.**
    - o **Prepared Department of Buildings Small Business Services construction phase permits and submitted them on September 20th, 2011.**
    - o **Prepared Sewer Connection Permit Application for discharge of dewatered groundwater into the storm sewer system and submitted to BWSO on September 13th, 2011.**
    - o **Began preparation of NYCDEP Wastewater Quality Control Application for discharge of groundwater dewatering to the interceptor sewer, sanitary sewer and head of the Tallman Island WWTP.**
- **Flushing Bay Environmental Dredging**
  - ♦ **Commenced permitting for Flushing Bay Environmental Dredging**
  - ♦ **Bathymetric survey of existing conditions carried out**

Construction

- Flushing Bay CSO Retention Facility
  - Construction is complete.
- Tallman Island Wet Weather Maximization
  - Construction has not commenced.

Anticipated Activities for Next Quarter

Design

- **Award construction contract.**
- Continue work on project permitting as required, most notably:
  - The applicable NYCDPR permits;
  - The JPA package for construction
  - The JD request related to discharging dewatered groundwater from the proposed excavation;
  - The MOU between DEP and NYCDPR.
  - **NYCDEP Wastewater Quality Control Permit.**
  - **NYCDEP Sewer Connections Permit**
  - **NYC DOB SBS Waterfront Work Permits.**

Table 10 – Flushing Bay CSO Projects

	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 11th Avenue and 130th Street to the WWTP, College Point, Queens Regulators 10, 10A 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.	New section of the Whitestone Interceptor from the existing Junction Chamber at the intersection of 11th Avenue and 130th Street to the WWTP, College Point, Queens Regulators 10, 10A and 13
Cost:	$291,000,000	**$22,821,513**
Status:	Construction Complete	**Processing construction contract**
Other Issues:	-	100% design complete

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. The alternate actions are collection system upgrades designed to increase total CSO volume treated without expanding capacity. The upgrades include the installation of bending weirs at three regulators: J3 and J14 in the West Interceptor, and J6 in the East Interceptor, and a new 48-inch parallel sewer to complement the existing double barrel 36-inch Belt Parkway crossing in the West Interceptor.

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 11 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.

Construction

- Meadowmere/Warnerville
  - ♦ No work during this quarter. Construction is substantially complete.
- Destratification Facility
  - ♦ **Construction I&T meetings were held on 7/13, 8/10 and 9/14.**
  - ♦ **The G and E contractors continued to submit vendor approvals, shop drawings and RFIs.**
  - ♦ **The G contractor (Primer Construction) completed the following work during this reporting period: Installation of all underground structures on site including pipe access vault, catch basins, sewer piping, carrier pipe into waterbody; concrete slab; erection and welding of steel tube frame building superstructure; site restoration of public walkway; removal of demonstration facility air lines from Shellbank Basin.**
  - ♦ **The E contractor (Arco Electrical) installed the grounding system.**
- Regulator Automation
  - ♦ Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted. Refer to section 3.2 for details.

Missed/Modified Milestones

- ♦ On June 28, 2010, DEC acknowledged that certain proposed sewer system modifications in the Jamaica WWTP service area are technically acceptable alternatives that can be adopted in lieu of the 50 MGD wet weather expansion of the Jamaica WWTP. 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.

- On February 28, 2011, DEP provided clarification to the Jamaica Wet Weather Expansion Modification Request submitted under the May 5, 2010 "Omni" letter. A bending weir will be retrofit to regulator J6 but not J7 as noted in certain parts of the submittal.

Anticipated Activities for Next Quarter

Design

- No anticipated activities for next quarter.

Construction

- Meadowmere/Warnerville
  - **Contract closeout. Storm sewer repair issue will be addressed under a different contract.**
- Destratification Facility
  - The G and E contractors will continue construction activities, including ongoing shop drawing and RFI submissions.
  - **Upcoming construction activities include routing of electrical power to the site, installation of air lines into Shellbank Basin, and completion of all above-grade site, building, structural, architectural, electrical, mechanical, plumbing and HVAC work.**
- Regulator Automation
  - **Project Close-out**

Table 11 – Jamaica Tributaries CSO Projects

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 100% 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	Construction is underway.	Drainage planning complete.	Note 1

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, and inspection.
- New Force Mains
  - **DSDC is completed.**

Construction

- Avenue V Pumping Station Upgrade
  - **Work was initiated on the following: air conditioning units for the mechanical equipment room and the control room, louvers installation, Main Building Control Room repairs, fire sprinkler system, cast iron restoration work, conduit/wire installation; perimeter wall; tie in piping for final maintenance of facility operations.**
  - **Work continued on the following: Main Building terra cotta work, pipe supports, Wet Well cleaning; installation of the force mains on Avenue V from W. 11th Street to the pump station.**
  - **Work was completed on the following: Main Building platform concrete floors, painting in mechanical equipment room area, Areaway structural steel, Areaway concrete fill, concrete pads for panels in the Control Room, variable frequency drives (VFD's), FST vault; Wet Well sewage pumps, grinders; NPS wall construction and waterproofing membrane (east side), decommissioning of dewatering well #9; Main Building domestic hot/cold water system. installation of duct bank from manhole M11-6 to manholes 1&2 to Main Building, Low Voltage Switchgear, MCC and building generator, core drilling for power & control conduits, conduit encasement, ATS 1 pull boxes, Electric Unit Heaters, conduit installation for Wet Well Grinders, ACC-3, Electric Fan (EF-1), and Unit heater (EUH-4).**
  - **EH&S Inspection took place**

- New Force Mains
  - **Completed demolition of the bulkheads at MH 18 and 1 of SE-133.**
  - **Completed: road base restoration at Bay 16th Street and Bath Avenue intersection, Pit O (on Cropsey Avenue from 26th Avenue to Bay 43rd Street), Pit P (Cropsey Avenue and 27th Avenue intersection), Stillwell Avenue intersection and Avenue V (Stillwell Avenue to W. 11th Street); restoration of curbs and sidewalks on Avenue V from West 12th Street to West 11th Street, Pit P, Pit O and Pit N (Bay 40th Street and Cropsey Avenue Intersection).**
  - **Continued maintenance of trees and landscape along the Belt Parkway.**
  - **Commenced punch list activities.**

Missed/Modified Milestones

- On February 28, 2011, DEP submitted a modification request for the construction completion milestone of the Avenue V Pumping Station Upgrade to align the completion date with that of the Force Main upgrade that is June 30, 2012.

Anticipated Activities for Next Quarter

Design

- DSDC Activities
  - **Shop drawing review and equipment testing.**

Construction

- Avenue V Pumping Station Upgrade
  - **The construction/installation of the Main Building and MER floor mechanical and electrical installation is in progress. Installation of terra cotta work is proceeding.**
  - **The construction of the Network Protection Building roof. Con Edison equipment installation, Generator Building walls and roofing work. Interior Generator Equipment Installation.**
  - **Wet Well sewage grinders and permanent pump electrical connections.**
  - **Continued installation of the new Main Building electrical and HVAC work. interior discharge piping and appurtenances, roof and terra cotta work, interior glazed tile restoration; MER bathroom painting, repairs and HVAC equipment installation; switchgear, MCC, VFD electrical connections, fuel storage tank (FST) installation & piping work, Main Building plumbing work. Site work, perimeter wall and fence installation.**

- **The construction of the Network Protection Building roof and walls. Con Edison equipment installation and electrical work, Generator Building walls and roofing work. Outdoor generator installation.**
- **Connect the 42 inch force mains to the Avenue V Pump Station.**

- New Force Mains
  - **Punch list activities.**

Table 12 – Coney Island Creek CSO Projects

	Contracts *PS-79G, H, P, E*	*Contract* *PS-79F*
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:	**$77,682,643**	$ 114,692,767
Status:	**NTP 12/16/05 Construction is 72% complete**	**NTP 7/23/07. Construction is 99% complete**

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 60-day 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.

Newtown Creek was added to the US EPA Superfund National Priorities List (NPL) on September 29, 2010. According to EPA, placing Newtown Creek 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

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 Second Year Post-Operational Habitat Monitoring was performed and a report prepared.
- Phase 2 Aeration Facilities
  - **Bids were received for the construction project for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the Lower English Kills.**
  - The Final 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 completed in accordance with the technically accepted Modification Request item referred to as "Enhanced Aeration – Lower English Kills."
  - Coordination is ongoing with the NYC Department of City-Wide Administrative Services (DCAS) to locate an aeration facility for the "Enhanced Aeration – East Branch and Portions of Newtown Creek" item referenced in the technically accepted Modification Request.

Construction

- Phase 1 Aeration Facilities
  - Construction of the Phase 1 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.
  - ♦ The remaining work has not been scheduled yet but is expected to be completed before milestone date. The work is 90% complete.

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.
- On January 7, 2011, DEC determined that the Newtown Creek Modification Request submitted as part of the May 5, 2010 "Omni" letter and updated on December 14, 2010 was technically acceptable.

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
  - Prepare for commencement of seasonal operation.
- Phase 2 Aeration Facilities
  - **Award construction contract CSO-NC-2 for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the Lower English Kills.**
  - Complete final design of third blower installation in the Phase I Aeration Facility building for the Lower English Kills.
  - Advertise Contract CSO-NC-2 for the installation of the third blower in the existing English Kills blower building, which would serve the Lower English Kills.
  - Survey and perform environmental audits on the DCAS property proposed for the aeration facility that would serve the East Branch and portions of Newtown Creek.

Construction

- Phase 1 Aeration Facility
  - Bureau of Wastewater Treatment takeover.
- Kent Avenue Throttling Facility
  - The remaining electrical work has not been scheduled yet but is expected to be completed before milestone date.

Table 13 – Newtown Creek CSO Projects

	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 per the technically accepted Modification Request; 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	$7,503,000	$26,000,000	TBD
Status:	Throttling gate at the WWTP is 100% complete; B-1 overflow weir and relief sewer to be replaced by new elements in Modification Request	Throttling gate at Kent Avenue 90% Complete	Construction 100% complete: DEP certified 12/31/08; DEC approved 2/25/09. Operated during 2009 and 2010summer season.	Continue design and site selection of the Aeration Systems for the Dutch Kills, East Branch and Newtown Creek under Contract NC-EK-IV. **Bid construction project for the aeration system for the Lower English Kills.**	Project to be replaced by new elements in Modification Request
Other Issues:	Technical Acceptance of Modification Request received January 7, 2011.	Remaining work not scheduled but expected to be completed by milestone date.	Water quality and habitat monitoring data reports submitted to DEC	Technical acceptance of Modification Request received January 7, 2011.	Technical acceptance of Modification Request received January 7, 2011.

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

Design

- Phase I – Influent Sewers
  - The DEP submitted the revised Westchester Creek Waterbody/Watershed Facility Plan Report in November 2010 that recommended replacing this element in Appendix A of the Order.
- Phase II – CSO Storage Facility
  - The DEP submitted the revised Westchester Creek Waterbody/Watershed Facility Plan Report in November 2010 that recommended replacing this element in Appendix A of the Order.

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. On August 25, 2010 DEC determined that the proposed cost-effective sewer improvements were technically acceptable alternatives to the 12 MG CSO storage facility in the CSO Consent Order.

Anticipated Activities for Next Quarter

- Phase I – Influent Sewers
  - DEP submitted a Modification Request for completion of final design of the Phase I Influent Sewers on July 30, 2010.

Table 14 – Westchester Creek CSO Project

Plan Elements:	Westchester Creek CSO Supply/Storage Conduit, CSO Storage Tank and 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:	On August 25, 2010 DEC determined that certain cost-effective sewer improvements proposed by DEP were technically acceptable alternatives to the 12 MG CSO storage facility.
Other Issues:	

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 near the confluence with the East 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.
- **Continued excavation and installation of steel sheeting for the support of excavation at the Bronx Park Avenue site (CSO-27A).**
- **Completed electrical and control systems installation for the bar screen and completed site restoration at the Bronx Zoo site (CSO-27).**
- **Completed connection of existing outfall to the new netting facility at the Soundview Park site (CSO-13/HP-009).**
- **At the West Farms Road site (CSO-28/HP-004): completed Chamber No. 1 construction and backfilling; formed and place concrete for new sidewalks along West Farm Road; commenced restoration of School (PS-214) courtyard; commenced restoration of NYSDOT property**.

Missed/Modified Milestones

- There are no missed milestones.

Anticipated Activities for Next Quarter

- *Planning*
  - No activities to report.
- *Construction*
  - **Complete all construction activities and test floatable control systems.**

Table 15 – Bronx River CSO Project

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:	$**27,785,659**
Status:	Construction is **75**% complete.
Other Issues:	

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 233rd 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 that was rejected by DEC on July 2, 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.
- ♦ DEP submitted a revised sampling plan on October 15, 2010, as well as an updated modification request on the same date. DEC commented on the revised sampling plan on November 19, 2010, and DEP responded to these comments on December 20, 2010.
- ♦ DEC sent additional comments on the proposed Hutchinson River sampling plan on March 25, 2011.

Anticipated Activities for Next Quarter

- ♦ **DEP submitted to DEC a field sampling and analysis plan on September 15, 2011.**
- ♦ **Respond by November 9, 2011 to DEC comments sent on September 23, 2011 on the proposed field sampling and analysis plan.**
- ♦ **Based on delays in Westchester County's confirmation of participation and funding issues, the water quality sampling plan will commence in the spring of 2012.**

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:	Water quality sampling plan under negotiation, and may require coordination with Westchester County.

3.12. Jamaica Bay CSO

The Jamaica Bay CSO Abatement Facility Plan addresses CSOs in the 26th 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 26th 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 26th 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.
  - ♦ DEP made a presentation related to this modification during the September 2010 CSO Technical Meeting.
  - ♦ On October 1, 2010 DEC issued a Notice of Violation on the milestone for the 26th Ward Wet Weather Expansion, Final Design, Submit Form 2A SPDES Application. DEP responded to the NOV on October 8, 2010.

- ♦ On December 30, 2010 DEP submitted a feasibility plan for the wet weather expansion in accordance with the commitment made in the May 5, 2010 "Omni" modification request letter. DEP proposed replacing the wet weather expansion with a combination of high level sewer separation and green infrastructure. A technical memo was provided evaluating these alternatives.

Construction

- Spring Creek AWPCP Upgrade
  - ♦ The certification of construction completion was sent to DEC in April 2007 in satisfaction with the milestone.
- 26th Ward Drainage Area Sewer Cleaning and Evaluation
  - ♦ DEP Certified Construction Completion of the 26th Ward Drainage Area Sewer Cleaning on May 17, 2010. A Final Inspection meeting was held with DEC personnel on June 28, 2010. A follow-up inspection occurred on October 5, 2010, and DEC accepted the Certificate of Construction Completion on December 13, 2010.
- Hendrix Street Canal Dredging
- **The contractor completed dredging within Acceptance Area Nos.1 through 5.**
- The contractor performed placement of the sand cap as part of the pilot demonstration on May 3, 2011. Based upon a review of cores of the sand cap collected following sand cap placement, it was determined that the method used by the contractor to construct the sand cap did not result in a cap achieving the requirements included within the Contract Documents. A meeting was held with the Contractor on June 16, 2011 to review the results of the sand cap cores at which time the Contractor agreed to revise the sand placement method. **A subsequent sand cap pilot placement demonstration was performed by the Contractor on July 12 and 13 and a review of the sand cores collected showed that the cap achieved the requirements included within the Contract Documents. As of September 30, 2011, the Contractor has completed sand capping within Acceptance Area Nos.1 and 2.**

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 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. DEP submitted a feasibility plan for the wet weather expansion in accordance with this commitment on December 30, 2010.

Anticipated Activities for Next Quarter

- Dredging
  - **Completion of sand capping activities and the initiation of contract closeout activities.**
- Expansion of 26th Ward WWTP Capacity
  - ♦ Continue to develop an alternate, cost-effective strategy for increasing wet weather capture at 26th Ward.

Table 17 – Jamaica Bay CSO Projects

Plan Elements:	Dredging	26th Ward Drainage Area Sewer Cleaning and Evaluation	Expansion of 26th 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- 26th Ward WWTP, Brooklyn	Spring Creek, Brooklyn	Rockaway WWTP, Queens
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 **64%** 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 Feb 2010 and Feb 2012, respectively.	-	Feasibility Plan submitted to DEP 12/30/10	-	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 First Quarter of 2011, floatables-monitoring activities have continued as part of the following ongoing programs:
    - Harbor Water Quality Survey: DEP continued floatables monitoring incorporated into existing cruise schedules at roughly 50 sites.
    - 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 during the warm-weather season for several years. During this quarter, the public participation coordinator identified and contacted potential volunteers for monitoring assignments at roughly 50 sites for the upcoming warm-weather season.
    - 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). DEP summarizes collected floatables information for these facilities in monthly reports that are provided to the State.
    - Environmental Benefit Shoreline Cleanup Program –This program was 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 Nitrogen Consent Judgment). No activities occurred related to this warm-weather program during the First Quarter of 2011.
- The CY2010 Floatables Monitoring Program Progress Report was completed during the first quarter of 2010 and submitted to the NYSDEC on April 1, 2011.

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.
- Recruitment of volunteers and ongoing planning for the continuing public-participation element of the Floatables Monitoring program for the 2010 bathing season.

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

After the completion of the calibration of the monitoring equipment implementation of this monitoring plan at most locations under the Nitrogen EBP began in late spring 2011 with the remaining locations having equipment installed by the middle of July, 2011.

Bronx River

- **Monitoring equipment to determine baseline sewer flow within the project area is currently underway. Field investigations to collect , soil and bedrock information was completed using Ground Penetrating Radar equipment. Ground-penetrating radar (GPR) was successfully used to chart the depth to serpentinite bedrock in areas of Wotalfs and Todthill soils on Staten Island. The radar data will be used to improve interpretations and document the composition of soil map units. In addition, GPR was used to locate buried utility lines, identify different subsurface layers of anthropogenic materials, and ascertain the presence and depth to bedrock in the Bronx. The survey was carried out by the Soil Conservation Service, United States Department of Agriculture. Start-up funds were requested and distributed during this period.**

Flushing Creek

- **Designs for modular green roof proposed under the Manhattan College grant have started. Site visits with hospital personnel are underway. Grantee is expected to receive bid proposals for construction of the modular green roof shortly. Start-up funds were distributed during this period.**
- **Unisphere has let contracts to gather topographic information and the digital survey information. Preliminary designs are currently underway. Hand auger soil boring information has been collected and soils characterized. Designs are currently underway. Start-up funds have been distributed during this period.**

- **Regional Plan Association has collected hand auger soil boring information and characterized onsite soils. Early development and discussion of proposed monitoring plan is currently underway.**
- **Columbia University has selected a replacement team member for the project. . The revised project budget has been reviewed and accepted by DEP and DEC. Columbia is currently reviewing contract information expects to have signed contract by next Quarter.**

Gowanus Canal

- **Grantee has developed and issued a site survey contract. Using information from this survey, schematic bioswale layout is currently being developed. Property owner permission forms are currently being prepared. Start-up funds have been distributed during this period.**

DEC US Forestry Service Grant

- **Curb cuts were constructed for both tree pits on Stratford Avenue on August 26th. The Gaia institute still needs to hook up monitoring equipment. USFS is currently reviewing a draft contract with the Gaia Institute for matching funds. An invoice is being prepared by the Gaia institute.**
- **Riverkeeper and their consultant continued working on the design. USFS is currently reviewing a draft contract with Riverkeeper for the matching funds.**

Anticipated Activities for Next Quarter

Bronx River

- **Using soil and topographic information, preliminary 30% designs will be developed.**

Flushing Creek

- **Manhattan College, RPA and Unisphere will continue to develop designs and collect additional field information as required.**

Gowanus Canal

- **Gowanus Canal Conservancy will continue to develop designs and collect additional field information as required.**

DEC US Forestry Service Grant

- **The Gaia institute will complete their invoice paperwork and hook up monitoring equipment.**
- **Riverkeeper will proceed with design development and community involvement.**

Table 18 – 2008 Modified CSO Consent Order Environmental Benefits Projects

Plan Elements:	*Bronx River*	*Flushing Bay and Creek*	*Gowanus Canal*	*DEC US Forestry Service Grant*
Location:	HP-009 service area	Multiple areas	6th St / 2nd Ave, Brooklyn	Bronx River and Newtown Creek CSO Areas
Description:	Stormwater BMP evaluations	Manhattan College New York Hospital Green roof ($660,440); RPA bioretention basins under the LIE ($600,000); Unisphere treatment wetlands and rain gardens for Meadow Lake ($386,551); Columbia University Rego Park Green Streets ($389,187);	Gowanus Canal Conservancy 6th Street Green Corridor Project	Enhanced tree pit evaluation in HP-009 service area; Green infrastructure installation in Newtown Creek CSO shed; 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: $75,000	Budget: $2,036,178 **Cost to date:$300,000** **This Qtr: $150,000** **Next Qtr: $150,000**	Budget: $583,470 Cost to date: $75,000 This Qtr: $75,000 Next Qtr: **$10,000**	Budget: $250,000 Cost to date: $161,751 **This Qtr: $1,800** **Next Qtr: ~$15,000**
Status:	**Flow monitoring underway; soil and bedrock field investigations completed by SCS using GPR; start-up funds were requested and distributed.**	**Designs for Manhattan College, Unisphere, and RPA underway; soil boring and topographic information being collected for each location.**	**Site survey contract has been issued; schematic bioswale layout is underway based on survey; property owner permission forms being developed.**	**LIDRA model completed; tree pits installed; GI site selected and design underway.**
Other Issues:		Intellectual property issues with RPA subcontractor has been resolved; Columbia University selected a new team member and submitted a revised budget proposal for review and approval.		**Gaia Institute is behind on submitting invoices. USFS contracts under review.**

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 **September 2011**:

Table 19 – Consent Order Milestone Dates

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			
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			
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			
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(1)	100
E. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for	-	Apr 29 2010	50

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
Alley Creek			
2. Submit Approvable Drainage Basin Specific LTCP for East River	-	6 mos. after approval of II.B.1.	50
II. 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
B. Comprehensive Watershed Planning			
1. Submit Approvable Open Waters Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Regulator Improvements - Fixed Orifices			
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			
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	100
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
III. Inner Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100

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	100
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	100
F.	Submit Approvable Drainage Basin Specific LTCP for Gowanus Canal	-	Nov 2015	50
G.	Flushing Tunnel Modernization			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	**38**
H.	Gowanus Pump Station Reconstruction			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	**38**
I.	Dredging of Gowanus Canal			
	1. Submittal of All Dredging Permit Applications		Feb 2, 2012	-
	2. Notice to Proceed with Dredging		TBD[(2)]	-

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Complete Dredging		TBD[2]	-
IV. Paerdegat Basin 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	-	Jul 2002	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Paerdegat Basin Waterbody / Watershed Facility Plan Report	-	Mar 2003	100
C. Influent Channel			
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			
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	100[3]
E. Structures and Equipment			
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	100[3]
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	-	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Complete Final Design	-	Sep 19, 2011	**100**
3. Notice to Proceed with Dredging	Mar 19, 2013	-	-
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
2. Submit Approvable Flushing Creek Waterbody / Watershed Facility Plan Report	-	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	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 1994	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			
1. Initiate Final Design	Dec 1993	-	100

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			
1. Submit Approvable Drainage Basin Specific LTCP for Flushing Bay	-	6 mos. after approval of V.B.1.	50
2. Submit Approvable Drainage Basin Specific LTCP for Flushing Creek	-	6 mos. after approval of V.B.2.	50
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			
1. Initiate Final Design	Dec 2007	-	100
2. Final Design Completion including CPM Analysis	-	Dec 2010	100
3. Notice to Proceed to Construction	Dec 2011	-	-
4. Construction Completion	-	Jul 2015	-
B1. Flow Meters (2009 Modification, Appendix B)			
a) Submit flow metering protocols	-	Jul 2009	100
b) Include effluent overflow volumes in monthly reports	-	Within 60 days of DEC approval of 1(a)	-
B2. Odor Control System (2009 Modification, Appendix B)			
a) Apply to register CBS & for inspection variance	-	Sep 2009	100

ITEM 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
B3. Bar Screens (2009 Modification, Appendix B)			
a) Report on repairs and modifications	-	Jun 2009	100
b) Demonstrate full operation to DEC	-	Sep 2009	100
B4. 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
B. 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	100
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

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	-	100
4. Construction Completion	-	Mar 2012	**50**
F. Laurelton and Springfield Blvd.			
1. Submit Drainage Plan for Storm Sewer Build-out (extension granted by DEC letter, 2/29/08)	-	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	100
H. Drainage Basin Specific LTCPs			
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. Submit Approvable Coney Island Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Avenue V Pumping Station Upgrade			
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	**72**
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	**99**

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
E. Submit Approvable Drainage Basin Specific LTCP for Coney Island Creek	-	Jun 2014	50
VIII. Newtown Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Oct 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Newtown Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Aeration Zone I			
1. Initiate Final Design	Mar 2001	-	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			
1. Initiate Final Design	Jun 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010[4]	100[4]
3. Notice to Proceed to Construction	Dec 2012	-	-
4. Construction Completion	-	Dec 2013	-
E. Relief Sewer / Regulator Modification			
1. Initiate Final Design	Jun 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2009	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	90
G. CSO Storage Facility			
1. Initiate Final Design	Nov 2010	-	-

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
IX. 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[5]	-
B. Comprehensive Watershed Planning			
1. Submit Approvable Westchester Creek Waterbody / Watershed Facility Plan Report	Jul 2004	Jun 2007	100
C. Phase I (Influent Sewers)			
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
B. Comprehensive Watershed Planning			
1. Submit Approvable Bronx River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
C. Floatables Control			
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	**75**
D. Submit Approvable Drainage Basin Specific LTCP for Bronx River	-	Jun 2014[6]	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[5]	-
B. Comprehensive Watershed Planning			
1. Submit Approvable Hutchinson River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Phase I of the Storage Facility			
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. 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. Submit Approvable Jamaica Bay Waterbody / Watershed Facility Plan Report	-	Jun 2007	100

ITEM 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
	4. Submit Approvable Hendrix Creek Waterbody / Watershed Facility Plan Report	-	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	**64**
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[(5)]	-
	4. Notice to Proceed to Construction	Jun 2011	-	-
	5. Construction Completion	-	Dec 2015	-
G. Drainage Basin Specific Long Term Control Plans				

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
1. Submit Approvable Drainage Basin Specific LTCP for Jamaica Bay	-	Aug 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Spring Creek	-	Aug 2012	50
3. Submit Approvable Drainage Basin Specific LTCP for Fresh Creek	-	Aug 2012	50
4. Submit Approvable Drainage Basin Specific LTCP for Hendrix Creek	-	Aug 2012	50
H. Rockaway WWTP Conveyance Improvements		Dec 2017	-
XIII. Citywide Comprehensive Floatables Plan			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec 2004	100
XIV. Submit Approvable City-Wide LTCP			
	-	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 (EDP); completion within 5 years of EDP. (3) CSO Consent Order elements completed and a Certification of Construction Completion has been submitted. (4) Date reflects Consent Order Milestone; completion reflects progress on technically accepted Modification Request. (5) A modification request to the submittal date of Form 2A was submitted to DEC on 6/29/2010. (6) A modification was requested to extend the completion date from 11/31/11 to 6/30/14 on 11/29/10.

5.0 Community Relations

No public meetings were held during the Third Quarter of 2011.

6.0 Key Personnel Changes

Mayor Bloomberg appointed Carter H. Strickland, Jr. as the new Commissioner of the NYC Department of Environmental Protection in August 2011.

7.0 Other Issues

The following action items were identified during the **July 24, 2011** CSO Quarterly Meeting:

	Action Item	Response	Target Date	Status
1	**Gowanus Canal – DEP to provide information on the upcoming Gowanus Canal Superfund meeting.**	***Meeting Held***	**9/27/2011**	**Complete**

8.0 Status of LTCP Development

According to the Order, the reporting on the progress of the Drainage Basin Specific Long Term Control Plan (LTCP) and Waterbody/Watershed Facility Plan (WWFP) 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. The Order specifies that the following elements shall be addressed: (1) Characterization, Monitoring, and Modeling of the Combined Sewer System; (2) Public Participation; (3) Consideration of Sensitive Areas; (4) Evaluation of Alternatives; (5) Cost/Performance Considerations; (6) Operational Plan; (7) Maximizing Treatment at the Existing WPCP Treatment Plant; (8) Implementation Schedule; and (9) Post Construction Compliance Monitoring.

DEP has submitted all of the required WB/WS Plans to DEC for review. Following is the status of each:

- The June 2009 Alley Creek WWFP was approved by DEC on October 29, 2009. **Based on continued discussions between DEP and DEC, the Alley Creek LTCP milestone will be June 2013.**
- The June 2010 Bronx River WWFP was approved by DEC on July 27, 2010. **Based on continued discussions between DEP and DEC, the Bronx River LTCP milestone will be June 2015.**
- The June 2009 Coney Island Creek WWFP was approved by DEC July 15, 2009, as amended. **Based on continued discussions between DEP and DEC, the Coney Island Creek LTCP milestone will be June 2014.**
- The combined Flushing Bay and Creek WWFP was submitted to DEC June 2007. DEC comments on the plan included the recommendation that the Plan be split into two distinct planning areas and documents, i.e., one for Flushing Creek and one for Flushing Bay.
- The Flushing Bay WWFP was submitted to DEC June 2009, and an updated WWFP was submitted December 2010. DEC provided comments on the December 2010 Flushing Bay WWFP on February 14, 2011, and **the Flushing Bay WWFP was resubmitted August 2011. Based on continued discussions between DEP and DEC, the Flushing Bay LTCP milestone will be June 2017.**
- The Flushing Creek WWFP was submitted to DEC in March 2009. DEC provided comments on March 25, 2011. **DEP resubmitted the Flushing Creek WWFP in May 2011 then again in August 2011. Based on continued discussions between DEP and DEC, the Flushing Creek LTCP milestone will be December 2014.**
- The August 2008 Gowanus Canal WWFP was approved by DEC on July 14, 2009, as amended. **Based on continued discussions between DEP and DEC, the Gowanus Canal LTCP milestone will be June 2015.**
- The Hutchinson River WWFP was submitted to DEC June 2007. DEC provided comments to this report on May 22, 2009. Subsequent negotiations resulted in an

agreement in principle to eliminate the WWFP and for DEP to conduct water quality sampling in support of the development of a TMDL for the waterbody. **Based on continued discussions between DEP and DEC, the Hutchinson River WWFP will be deleted and the LTCP milestone will be September 2014.**

- The Jamaica Bay and CSO Tributaries WWFP was submitted to DEC June 2007, encompassing Jamaica Bay, Fresh Creek, Hendrix Creek, Spring Creek, Bergen Basin, and Thurston Basin. **DEC provided comments to this report on April 8, 2008. DEP will be submitting the updated WWFP on October 31, 2011. Based on continued discussions between DEP and DEC, the combined Jamaica Bay and CSO Tributaries LTCP milestone will be June 2016.**
- The Newtown Creek WWFP was submitted to DEC June 2007. Comments were received from DEC on September 30, 2010. **A new version of the Newtown Creek WWFP was submitted April 2011 and revised June 2011. Based on continued discussions between DEP and DEC, the Newtown Creek LTCP milestone will be June 2017.**
- The June 2006 Paerdegat Basin LTCP was approved by DEC on February 1, 2007.
- The Westchester Creek WWFP was submitted to DEC in June 2007. Comments were received from DEC on January 20, 2010. **DEP resubmitted the WWFP in November 2010 and DEC provided comments on February 14, 2011. DEP resubmitted the Westchester Creek WWFP in June 2011. Based on continued discussions between DEP and DEC, the Westchester Creek LTCP milestone will be June 2016.**
- The East River Open Waters WWFP was submitted to DEC June 2007. **Based on continued discussions between DEP and DEC, the East River and Open Waters LTCPs will be combined with the City-wide LTCP with a milestone of December 2017.**

APPENDIX A

CONSENT ORDER CERTIFICATION LETTERS

NYC Environmental Protection

Caswell F. Holloway
Commissioner

Vincent Sapienza, P.E.
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September 19, 2011

Mr. Joseph DiMura, P.E.
Director, Bureau of Compliance
New York State Department of
Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, NY 12233-3506
(1 Hard Copy)

Re: Order on Consent (2005 CSO Consent Order)
DEC Case #CO2-20000107-8
Appendix A, IV. Paerdegat Basin CSO, F. Long Term Control Plan,
Dredging of Paerdegat Basin - Final Design Completion
Certification of Completion

Dear Mr. DiMura:

In accordance with Paragraphs III. F. of the CSO Order, the New York City Department of Environmental Protection (DEP) hereby certifies completion of the above referenced milestone which was an element of the Paerdegat Basin Long Term Control Plan that was approved on February 1, 2007. The New York State Department of Environmental Conservation (DEC) subsequently approved the dredging permit application on March 19, 2010 and in accordance with the approved LTCP; the new enforceable milestone date to complete final designs associated with this dredging project became September 19, 2011 (18 months from Effective Date of Permit). The DEP hereby certifies compliance with this final design completion milestone.

Should you have any additional questions, please feel free to contact me at (718) 595-5045.

Sincerely,

Anthony Maracic, P.E.
Director Capital Planning & Asset Management
Bureau of Wastewater Treatment

Copy With Attachments:
Cheryle Webber, P.E.
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(1 Hard Copy)

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DEP: J. Mueller, A. Maracic, R. LaGrotta, K. Mahoney, L. Lee, K. Donnelly, R. Tysvaer, D. Chao, H. Donnelly
H&S: P. Young, File

APPENDIX B
NYSDEC COMMENTS ON PREVIOUS QUARTERLY REPORT

NYS DEC Comments
Quarterly Report
2nd Quarter 2011

Comments on Quarterly Report:

Section 3.2: The DEC performed final inspections.

Questions/Comments for Quarterly Meeting:

1. Alley Creek
    a. DEP needs to provide notification when facility is ready for inspection.

2. Outer Harbor, Inner Harbor, Jamaica Tribs
    a. DEC needs to complete final inspection for SCADA.

3. Inner Harbor
    a. DEC needs to complete final inspection for In-Line Storage.
    b. DEP provide update on design for Gowanus Canal dredging.
    c. DEC reviewing SPDES discharge limit for mercury for dewatering at Gowanus Canal flushing tunnel project

4. Paerdegat Basin
    a. DEP needs to provide notification when facility is ready for inspection.
    b. DEC determination on dredging force majeure.
    c. DEP provide information on Paerdegat Basin storage facility first month of operation.
    d. DEC provide update on permit variance application.

5. Flushing Bay
    a. DEC reviewing permit applications for Tallman Island Whitestone interceptor improvements.
    b. DEP provide update on contract award for Tallman Island Whitestone interceptor.

6. Jamaica Tribs
    a. DEP discuss causes for delay of construction and strategies for recovering lost time for Shellbank Basin destratification facility.

7. Coney Island
    a. DEP confirm completion of force main in August 2011.

8. Newtown Creek
    a. DEC to provide comments on lower English Kills aeration project final design.
    b. DEC reviewing permit for lower English Kills aeration project.

9. Hutchinson River
    a. DEP confirm sampling to start in spring 2012 and sampling plan due in September 2011.

10. Jamaica Bay
    a. DEP confirm completion of Hendrix Creek dredging in October 2011.

11. GI Demonstration Projects
    a. Provide update on site selection and initial evaluation.