

City of New York
Department of Environmental Protection
Bureau of Wastewater Treatment

CSO Order on Consent
DEC Case # CO2-20110512-25, Modification to CO2-20000107-8

QUARTERLY PROGRESS REPORT

First Quarter 2015
(January 1 to March 31, 2015)

April 30, 2015

Table of Contents

| | |
|--|-------------|
| Table of Contents | i |
| List of Tables | ii |
| 1.0 Executive Summary | 1-1 |
| 2.0 Construction Contracts | 2-1 |
| 3.0 Detailed Description of Work Performed | 3-1 |
| 3.1. <i>Inner Harbor CSO</i> | <i>3-1</i> |
| 3.2. <i>Flushing Bay CSO</i> | <i>3-3</i> |
| 3.3. <i>Jamaica Tributaries CSO.....</i> | <i>3-6</i> |
| 3.4. <i>Newtown Creek CSO</i> | <i>3-8</i> |
| 3.5. <i>Westchester Creek CSO</i> | <i>3-10</i> |
| 3.6. <i>Jamaica Bay CSO.....</i> | <i>3-12</i> |
| 3.7. <i>Wards Island WWTP Headworks Wet Weather Improvements</i> | <i>3-15</i> |
| 3.8. <i>Environmental Benefits Projects</i> | <i>3-16</i> |
| 3.9. <i>Green Infrastructure Program Implementation.....</i> | <i>3-19</i> |
| 4.0 Community Relations | 4-1 |
| 5.0 Key Personnel Changes | 5-1 |
| 6.0 Other Issues | 6-1 |
| 7.0 Status of LTCP Development..... | 7-1 |

List of Tables

| | |
|---|------|
| Table 1 – Milestones Certified This Quarter (Jan – Mar 2015) | 1-3 |
| Table 2 – Milestones Next Quarter (Apr – Jun 2015)..... | 1-3 |
| Table 3 – Outstanding Modification Requests and Force Majeure Notices..... | 1-4 |
| Table 4 – Completed Construction Contracts..... | 2-1 |
| Table 5 – Ongoing and Upcoming Construction Contracts and their Status | 2-2 |
| Table 6 – Inner Harbor CSO Projects | 3-2 |
| Table 7 – Flushing Bay CSO Projects..... | 3-5 |
| Table 8 – Jamaica Tributaries CSO Projects | 3-7 |
| Table 9 – Newtown Creek CSO Projects | 3-9 |
| Table 10 – Westchester Creek CSO Projects | 3-11 |
| Table 11 – Jamaica Bay CSO Projects..... | 3-14 |
| Table 12 – Wards Island WWTP Projects..... | 3-15 |
| Table 13 – 2008 Modified CSO Consent Order Environmental Benefits Projects | 3-18 |
| Table 14 – Constructed Green Infrastructure Practices | 3-20 |
| Table 15 –Community Outreach Email Correspondences This Quarter (Jan – Mar 2015)..... | 4-2 |
| Table 16 – Key DEP Personnel for Contracts Subject to the CSO Consent Order | 5-1 |
| Table 17 – Action Items from Quarterly Progress Meeting | 6-1 |

1.0 Executive Summary

The City of New York (City), the New York City Department of Environmental Protection (DEP), and the New York State Department of Environmental Conservation (DEC) entered into the Combined Sewer Overflow Order on Consent (DEC Case # CO2-20000107-8) on January 14, 2005, as modified April 14, 2008, September 3, 2009, March 8, 2012, and March 26, 2015 (collectively, the “CSO Order”). Pursuant to the Order, the City is required to submit quarterly status reports to DEC (Quarterly Reports) describing actions taken toward achieving compliance with the Order during the prior three-month period. This Quarterly Report reports on DEP’s actions taken between January 1, 2015 and March 31, 2015 toward complying with the Order’s milestones. **Critical Events This Quarter**

The following critical events occurred this quarter:

1. **On January 06, 2015 DEP sent notification that sampling in the Hutchinson River will be reintroduced using previous LTCP sampling locations.**
2. **DEP issued the Invitation for Bid for the Enhanced Aeration in East Branch and Upper Newtown Creek contract (CSO-NC-3, East Branch Aeration) on February 23, 2015. The pre-bid conference was held on March 16, 2015.**
3. **On January 7, 2015 DEP notified DEC that \$3,002,958 of Environmental Benefits Program funds for green infrastructure has been committed over the past three years. In a January 9, 2015 letter, DEC notified DEP that the requirement had been satisfied.**
4. **On January 21, 2015 DEP issued the revised Green Infrastructure PCM report based on comments from DEC dated October 6, 2014.**
5. **On January 21, 2015 DEC concluded that requirements had been met for construction completion for the Flushing Bay Whitestone Interceptor project.**
6. **On January 23, 2015 and February 26, 2015, DEP responded to comments from DEC in a December 23, 2014 letter regarding the partial design submittal for the Environmental Dredging of Flushing Bay. On March 2, 2015 DEC approved DEP’s revised work plan.**
7. **On January 26, 2015, DEP proposed a modification request to exchange due dates for the Jamaica Bay/Tribs LTCP and the Flushing Bay LTCP due to the additional time needed to perform the extensive field data collection program associated with the Jamaica Bay/Tribs LTCP. The modification request was approved by DEC on February 23, 2015. The new milestone date for the Flushing Bay LTCP is now June 2016, and for Jamaica Bay/Tribs, June 2017.**
8. **On January 26, 2015 DEC issued review comments on DEP’s December 5, 2014 letter regarding the Final Design Plans and Specifications for the Regulator Modifications for the Flushing Bay CSO. DEP issued responses on March 11, 2015 which DEC approved on March 20, 2015.**
9. **On February 27, 2015, DEP requested a 45-day extension (to April 14, 2015) for resubmittal of the Hutchinson River LTCP and the Westchester Creek LTCP so as to fully address DEC’s January 14, 2015 detailed technical and to review/evaluate ongoing technical discussions with DEC.**

10. On February 27, 2015, DEP certified the construction completion of the Gowanus Flushing Tunnel Modernization and Pump Station Reconstruction, meeting the modified milestone date of February 28, 2015.
11. On March 5, 2015, DEP requested a 45-day extension (to April 22, 2015) for resubmittal of the Alley Creek LTCP so as to fully address DEC's January 23, 2015 detailed technical comments and to review/evaluate ongoing technical discussions with DEC.
12. On March 10, 2015, DEP responded to DEC's February 9, 2015 comments regarding the design completion for 26th Ward preliminary treatment reliability improvements. On March 20, 2015 DEC approved the Final Design Plans and Specifications for 26th Ward WWTP Preliminary Treatment Reliability Improvements and 26th Ward WWTP High Level Main Sewage Pump Improvements.
13. On March 11, 2015 DEP requested an extension, to May 1, 2015, for response to scope of work for the Spring Creek CSO chlorination demonstration project.
14. On March 19, 2015, DEP submitted the Coney Island LTCP Field Sampling and Analysis Plan to DEC.
15. On March 20, 2015, DEC approved the Final Design Plans and Specification for the Enhanced Aeration in East Branch and Upper Newtown Creek.
16. On March 26, 2015 DEC issued comments on the Flushing Creek LTCP.
17. On March 31, 2015 DEP certified the completion for the design of the 26th Ward High Level Sewer Separation.
18. On March 31, 2015 DEP certified the Notice to Proceed to Construction for Main Sewage Pumps replacement at Wards Island WWTP.
19. On March 9, 2015, DEP submitted a permit modification request to DEC and a permit (NWP) re-verification request to USACE for the Flushing Bay Dredging project, as required by the DEC draft permit.

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 required by the Order, DEP and DEC held a Quarterly Progress Meeting on **March 6, 2015** at **DEP's offices in Kingston, NY**, 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, DEP submitted timely written notification to DEC.

Major Actions Next Quarter

The following major actions are expected to occur between **April** and **June 2015**:

Hold the next Quarterly Progress Meeting between DEC and DEP on **May 29, 2015** at **Hazen and Sawyer's offices in New York, NY**. Table 2 presents the status of the milestones for next quarter and Table 3 provides a list of outstanding modification requests and force majeure notices.

Table 1 – Milestones Certified This Quarter (Jan – Mar 2015)

| LOCATION / PROJECT AREA | ITEM DESCRIPTION | MILESTONE DATE | ACTION REQUIRED | STATUS |
|-------------------------|---------------------------------------|----------------|--|------------------------------------|
| Inner Harbor | Gowanus Flushing Tunnel Modernization | Feb 2015 | Construction Completion | Certified Feb 27, 2015 |
| Inner Harbor | Gowanus PSPS Reconstruction | Feb 2015 | Construction Completion | Certified Feb 27, 2015 |
| Flushing Bay | Dredging | Mar 2015 | Submittal of Final Dredge Designs and Modification Request | Work Plan Approved Mar 2, 2015 |
| Paerdegat Basin | Dredging | Mar 2015 | Dredging Completion | Certification Accepted Dec 1, 2014 |
| Jamaica Bay | 26 th Ward HLSS | Mar 2015 | Phase 1 – Design Completion | Certified Mar 31, 2015 |
| Wards Is WWTP | Reconstruction of Main Sewage Pumps | Mar 2015 | Notice to Proceed to Construction | Certified Mar 31, 2015 |

Table 2 – Milestones Next Quarter (Apr – Jun 2015)

| LOCATION / PROJECT AREA | ITEM DESCRIPTION | MILESTONE DATE | ACTION REQUIRED | STATUS |
|-------------------------|---|----------------|-----------------------------------|---|
| Jamaica Bay | 26 th Ward Low Level MSP | Apr 2015 | Construction Completion | On Schedule |
| Jamaica Bay | 26 th Ward HLSS Phase 2 | Apr 2015 | Final Design Initiation | On Schedule |
| Green Infrastructure | Submit Annual Report | Apr 2015 | Submittal | On Schedule |
| Newtown Creek | Bending Weirs/Floatables Control | May 2015 | Notice to Proceed to Construction | On Schedule |
| Newtown Creek | Enhanced Aerations Dutch Kills / Lower NC | Jun 2015 | Final Design Completion | On Schedule |
| Newtown Creek | Enhanced Aeration East Branch / Upper NC | Jun 2015 | Notice to Proceed to Construction | Modification request to be submitted by April 30, 2015. |
| Westchester Creek | Pugsley Creek Parallel Sewer | Jun 2015 | Final Design Completion | Modification request to be submitted by April 30, 2015. |
| Inner Harbor | Submit Approvable LTCP for Gowanus Canal | Jun 2015 | Submittal | On Schedule |
| Bronx River | Submit Approvable LTCP for Bronx River | Jun 2015 | Submittal | On Schedule |
| Jamaica Bay | 26 th Ward High Level MSP | Jun 2015 | Notice to Proceed to Construction | On Schedule |

Table 3 – Outstanding Modification Requests and Force Majeure Notices

| LOCATION/ PROJECT AREA | ITEM DESCRIPTION | ACTION(S) | REASON FOR ACTION(S) | MILESTONE DATE | STATUS |
|------------------------------|---|--|--|---------------------------------------|--|
| Inner Harbor | Gowanus Canal Dredging | Notice of Force Majeure Mar 7, 2014 | Gowanus Canal Superfund Record of Decision and analytical data | NTP and Construction Completion | Force Majeure granted on Apr 11, 2014. Final decision as to completion date pending |
| Jamaica Bay | 26 th Ward WW Stabilization | Modification Request Mar 1, 2013 | Delay incurred related to procurement of designer | April 2013 | Relevant Order on Consent executed by DEC Mar 26, 2015 |

Changes from the previous reporting period are shown in **bold**.

2.0 Construction Contracts

The CSO Order contains milestones and schedules governing the planning, design and construction of DEP’s Citywide CSO Program. Numerous CSO-related facilities will be constructed to reduce combined sewage discharges to the receiving waters surrounding the City. Table 4 below lists the construction contracts set forth in Appendix A of the 2012 modification of the Order that have been completed in fulfillment of its requirements. Table 5 below identifies, by percentage, the estimated amount of construction that has been performed on projects that are in progress.

Table 4 – Completed Construction Contracts

| WATERBODY | ITEM DESCRIPTION | NOTICE TO PROCEED | CONSTRUCTION COMPLETION | CERTIFIED COMPLETION |
|---------------------|---|-------------------|-------------------------|----------------------|
| Alley Creek | CSO Retention Facility | Dec 2006 | Dec 2009 | Mar 2011 |
| Paerdegat Basin | Structures and Equipment | Sep 2005 | May 2011 | May 2011 |
| | Dredging of Paerdegat Basin | Mar 2013 | Mar 2015 | Nov 2014 |
| Jamaica Tributaries | Destratification Facility | Sep 2010 | Mar 2012 | Mar 2012 |
| Coney Island Creek | Avenue V Pumping Station Upgrade | Nov 2005 | Jun 2012 | Jun 2012 |
| | Avenue V Force Mains | Jul 2007 | Jun 2012 | Jun 2012 |
| Newtown Creek | Enhanced Aeration Lower English Kills | Apr 2013 | Mar 2014 | Recertified May 2014 |
| | GI Demonstration | Oct 2012 | May 2013 | May 2013 |
| Bronx River | Floatables Control | Jun 2009 | Oct 18 2012 | Oct 2012 |
| Hutchinson River | GI Demonstration | Aug 2012 | Apr 2013 | Apr 2013 |
| Jamaica Bay | Hendrix Creek Dredging | Feb 2010 | Feb 2012 | Oct 2011 |
| | GI Demonstration 26 th Ward | Jun 2012 | Dec 2012 | Dec 2012 |
| Flushing Bay | Tallman Island – Whitestone Interceptor | Dec 2011 | July 2015 | Dec 2014 |
| Inner Harbor | Gowanus Flushing Tunnel Modernization | Feb 2010 | Feb 2015 | Feb 2015 |
| | Gowanus Pumping Station Reconstruction | Feb 2010 | Feb 2015 | Feb 2015 |

Note: Changes from the previous reporting period are shown in **bold**.

Table 5 – Ongoing and Upcoming Construction Contracts and their Status

| WATERBODY | ITEM DESCRIPTION | NOTICE TO PROCEED | CONSTRUCTION COMPLETION | PROJECTED COMPLETION | % OF TIME ELAPSED | % OF CONSTRUCTION COMPLETED ⁽¹⁾ |
|---------------------|---|--------------------------|-----------------------------|-------------------------|-------------------|--|
| Inner Harbor | Dredging of Gowanus Canal | TBD ⁽²⁾ | TBD ⁽²⁾ | TBD ⁽²⁾ | - | - |
| Flushing Bay | Flushing Interceptor | TBD | TBD | - | - | - |
| | Divert Low-Lying Sewers | Dec 2014 | Dec 2016 | Dec 2016 | 13% | 0% |
| | Raise Weir BB-R02 | Jun 2014 | Dec 2016 | Dec 2016 | 30% | 0% |
| | Regulator Modifications | Dec 2015 | Jun 2018 | Jun 2018 | - | - |
| | Flushing Bay Dredging | Mar 2016 | TBD ⁽³⁾ | TBD ⁽³⁾ | - | - |
| Jamaica Tributaries | Parallel 48-Inch Interceptor | Aug 2014 | Feb 2017 | Feb 2017 | 23% | 10% |
| | Bending Weirs | Dec 2014 | Jun 2016 | Jun 2016 | 17% | 0% |
| Newtown Creek | Enhanced Aeration East Branch, Upper Newtown Cr | Jun 2015 | Jun 2018 | Jun 2018 | - | - |
| | Enhanced Aeration Dutch Kills, Lower Newtown Cr | Dec 2016 | Dec 2019 | Dec 2019 | - | - |
| | Bending Weirs/Floatables Control | May 2015 | Dec 2017 | Dec 2017 | - | - |
| Westchester Creek | Modifications to CSO-29 & 29A | Dec 2015 | Dec 2019 | Dec 2019 | - | - |
| | Pugsley Creek Parallel Interceptor | Jun 2016 | Dec 2019 | Dec 2019 | - | - |
| Jamaica Bay | 26 th Ward HLSS Phase 1 | Mar 2016 | Dec 2018 | Dec 2018 | - | - |
| | 26 th Ward HLSS Phase 2 | Mar 2018 | Dec 2020 | Dec 2020 | - | - |
| | 26 th Ward HLSS Phase 3 | Mar 2020 | Dec 2022 | Dec 2022 | - | - |
| | 26 th Ward Low Level MSPs | Aug 2012 | Apr 2015 ⁽⁴⁾ | Apr 2015 | 97% | 100% |
| | 26 th Ward , High Level MSP | June 2015 ⁽⁴⁾ | July 2018 ⁽⁴⁾ | Aug 2018 ⁽⁴⁾ | 25% | - |
| | 26 th Ward PSTs 1-5 | Jan 2016 ⁽⁴⁾ | Jul 19, 2020 ⁽⁴⁾ | Nov 2019 ⁽⁴⁾ | - | - |
| | Rockaway WWTP Conveyance | | Dec 2017 | Dec 2017 | - | - |
| WI WWTP | MSP Replacement | Mar 2015 | Jun 2017 | Jun 2017 | 0% | 0% |
| | Bar Screen | Dec 2014 | June 2018 | | | |

Note: Changes from the previous reporting period are shown in **bold**.

- (1) Percentage Construction Completion is tracked based on cost incurred.
- (2) **By letter dated April 11, 2014, DEC agreed that the dredging project posed the potential to conflict with the proposed Superfund remedy outlined in the USEPA's Record of Decision for the Gowanus Canal. As such, while it determined that DEP was entitled to a Force Majeure Extension of the milestone for Submittal of All Dredging Permit Applications (III.H.1 of Appendix A to the 2012 Consent Order), DEC nevertheless deferred a final decision on the City's request to modify the Consent Order with respect to the dredging-related milestones.**
- (3) Dredging; completion milestone to be submitted as part of the final JAP permit modification request (per the DEC DRAFT JAP permit).
- (4) Modifications to the CSO Order related to the Wards Island and 26th Ward WWTPs are **memorialized in a Consent Order executed by DEC and made effective March 26, 2015.**
- (5) Milestone Dates for both the Flushing Tunnel and Pump Station Milestones were modified to February 28, 2015.

3.0 Detailed Description of Work Performed

3.1. Inner Harbor CSO

The Inner Harbor CSO Facility Planning area consists of the drainage areas of the North River, Newtown Creek, and Red Hook 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. Excluding projects already completed and milestones met, the Consent Order contemplates the following:

- Environmental dredging in approximately 825 feet of the head end of Gowanus Canal to a final water depth of 3.0 feet below mean lower low water.
- Gowanus Pumping Station reconstruction to improve operational reliability and redirect flow directly to the Columbia Street Interceptor via a new force main constructed within the Flushing Tunnel.
- Rehabilitation of the Gowanus Canal Flushing Tunnel System with the installation of a new pumping system with redundant, interchangeable pumps that will eliminate shutdowns during low tide and improve maintenance operations.
- **The work in Inner Harbor CSO Facility Planning area also includes Area-wide green infrastructure contracts in Gowanus CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. The Green Infrastructure Program is discussed in Section 3.9, below.**

Gowanus Canal was added to the US EPA Superfund National Priorities List (NPL) on March 2, 2010. On September 27, 2013, EPA issued the Record of Decision, which describes the factual and legal basis for the selected remedy for the contaminated sediments and source controls at the site.

Anticipated Design Activities for Next Quarter

- Environmental Dredging
 - No activities in the next quarter due to Force Majeure Extension of the milestone based upon DEC's determination that the project posed the potential to conflict with the proposed Superfund remedy outlined in the USEPA's Record of Decision for the Gowanus Canal.

Construction Work Performed During This Quarter

- Gowanus Pumping Station and Flushing Tunnel Modernization
 - Interim Oxygen Transfer System (OTS) - There have been 109 anchors removed to date. G Contractor still needs to remove approximately 70 anchors remaining south of Carroll Street Bridge. No work was performed during this period. **There is a hold on work currently until March 2015 due to USEPA installation of a DTS System cable down the center of the Canal which prohibits any activities that could potentially disturb**

the canal bottom sediment. Additionally, NYC DOT had indicated that the 3rd Street Bridge will be inoperable until March 31, 2015. Removal of remaining anchors recommenced on April 27, 2015.

- Certified construction completion on February 27, 2015.

Table 6 – Inner Harbor CSO Projects

| | <i>Dredging of Gowanus Canal</i> | <i>Gowanus Canal Pumping Station and Flushing Tunnel</i> |
|--------------------------|---|--|
| <i>Contract ID</i> | CSO-DRDG/DRG-GC | CSO-GC |
| <i>Plan Elements</i> | Dredging Gowanus Canal Head End | Rehabilitation of Pumping Station and Flushing Tunnel |
| <i>Location</i> | Gowanus Canal | Gowanus Pumping Station Property Brooklyn |
| <i>Actions</i> | Dredging in Gowanus Canal | Wastewater Pumping Station and Flushing Tunnel Pumping System upgrades |
| <i>Construction Cost</i> | \$13,100,000 (based on concept design) | \$160,334,214 |
| <i>Status</i> | Design on hold | Complete |
| <i>Other Issues</i> | Design on Hold | |

Changes from the previous reporting period are shown in **bold**.

3.2. Flushing Bay CSO

The Flushing Bay CSO Facility Planning area includes the portions of the Tallman Island WWTP and the High Level Interceptor of the Bowery Bay WWTP drainage areas, associated sewers, and pumping stations that discharge to Flushing Bay and Flushing Creek in Queens. The Consent Order projects are constructed under contracts TI-WW-1, EE-DSGN-4, CS-FB-LLD, CS-FB-BWR, and CSO-DRDG, which respectively include the following items:

- ◆ Tallman Island Whitestone Interceptor – **certified complete on December 12, 2014**
- ◆ Tallman Island Flushing Interceptor
- ◆ Diversion of low-lying sewers and raising of the weir at BB-R02
- ◆ Regulator Modifications
- ◆ Environmental dredging of Flushing Bay

The work in Flushing Bay CSO Facility Planning area also includes Area-wide green infrastructure contracts in Flushing Bay CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. For more details on the Green Infrastructure Program, see Section 3.9, below.

Design Work Performed During This Quarter

- Tallman Island Flushing Interceptor
 - **Conceptual Design - the conceptual design draft report was reviewed, finalized, submitted to DEC on March 23, 2015.**
 - **Structural Assessment- D&B evaluated the inspection projects performed by SewerVue to date and submitted a letter recommending that DEP not to move ahead with the structural assessment of the Ulmer Interceptor by SewerVue. This letter was forwarded to DEC on March 23, 2015.**
- Divert Low-Lying Sewers
 - **Contract registered January 9, 2015.**
- Regulator Modifications
 - **Addressed DEC's January 26, 2015 review comments in a letter sent by DEP on March 11, 2015.**
- Environmental Dredging
 - The final design phase of the project continued, including:
 - **DEP submitted the partial design for Flushing Bay Dredging on November 26, 2014 per the DEC permit Condition No. 4; DEC provided comments on December 23, 2014. DEP responded to the comments on February 26, 2015 and DEC accepted DEP's responses on March 6, 2015.**

- **DEP submitted to DPR a permit application to Perform Work on DPR Property on March 25, 2015.**
- **On March 9, 2016, as required by the DEC draft permit, DEP submitted a permit modification request to DEC and a permit (NWP) re-verification request to USACE for the Flushing Bay Dredging project.**
- **DEC comments on the Water Quality Monitoring Plan (WQMP), to be implemented during construction, were received by DEP on February 5, 2015. Responses were incorporated into the WQMP and sent to DEC on February 26, 2015. The DEC accepted DEP's responses on March 2, 2015.**
- Potential issue: NTP date could be affected by several potential risks in finalizing the design, including, but not limited to, DEC's comments on the final dredge designs, USACE resubmission of NWPs due to changes in design, and other stakeholder requirements (i.e. PANYNJ and DPR). As requested by DEC during the June 2014 Quarterly Meeting, DEP sent a letter to DEC on September 23, 2014 to clarify these concerns.

Construction Work Performed During This Quarter

- Tallman Island Whitestone Interceptor
 - Continued landscaping work at Powell's Cove Park
 - Maintained erosion and sediment control measures in wetland and adjacent areas.
 - **DEP certified construction completion on December 12, 2014. DEC inspected the site on January 13, 2015 and accepted the certification on January 21, 2015.**

Anticipated Design Activities for Next Quarter

- Tallman Island Flushing Interceptor
 - **A CCTV/Sonar inspection will be performed to determine whether there has been any further structural deterioration of the pipe.**
- Divert Low-Lying Sewers
 - **Design services during construction (DSDC) to continue at DDC.**
- Regulator Modifications
 - **Advertise construction contract.**
- Environmental Dredging
 - **Respond to DEC and USACE comments on the permit modification request/final design submission.**
 - **Prepare bid package for the Construction and Construction Management Contracts.**

Anticipated Construction Activities for Next Quarter

- **Divert Low-Lying Sewers**
 - **Contractor to start mobilization.**

Table 7 – Flushing Bay CSO Projects

| | <i>Tallman Island Whitestone Interceptor</i> | <i>Tallman Island Flushing Interceptor</i> | <i>Divert Low- Lying Sewers / Raise Weir BB- R02</i> | <i>Regulator Modifications</i> | <i>Environmental Dredging of Flushing Bay</i> |
|----------------------|--|--|--|--|--|
| <i>Contract ID</i> | TI-WW-1 | TBD | CS-FB-LLD | CS-FB-BWR | CSO-DRDG DRG-FB |
| <i>Plan Elements</i> | New section of Whitestone Interceptor; Regulators 10, 10A and 13 | Address Flushing Interceptor sag in Ulmer Street | Divert Low Lying sewers in the vicinity of Bowery Bay WWTP. Raise the weir at regulator BB - 02 | Bowery Bay High Level Interceptor regulator modifications at 10 regulators | Environmental Dredging |
| <i>Location</i> | From existing junction chamber at 11 th Ave / 130 th St to the WWTP, College Point, Queens | From MH 45 at Whitestone Expressway to MH 29 at Ulmer Street and 25 th Avenue | Regulator BB-02. Berrian Blvd and 19 th Ave between 43 rd St. and 45 th St. | Five of ten regulators along 108 th street, Ditmars Blvd and the LaGuardia Airport site | Proximate to CSO Outfalls BB006 and BB008 |
| <i>Actions</i> | | | | | Dredge bottom sediments to final depth of 4 ft. below MLLW |
| <i>Cost</i> | \$22,071,512 | TBD | \$5,610,000 | \$41,400,000 | \$38,800,000 (based on 100% Design) |
| <i>Status</i> | Construction Completed | TOC (PW-088-03) issued for potential design activities described above | In Design | In Design | In Design |
| <i>Other Issues</i> | FM submitted Nov 19 2012 (Superstorm Sandy) | | | | None |

Changes from the previous reporting period are shown in **bold**.

3.3. Jamaica Tributaries CSO

The Jamaica Tributaries CSO Facility Planning area includes the drainage area of the Jamaica WWTP and its associated sewers and pumping stations. The receiving waters of the study area are Bergen, Thurston, Shellbank, and Hawtree Basins, which are located along the eastern shore of Jamaica Bay on either side of JFK International Airport. The Consent Order projects are constructed under contracts CSO-JT-SB, CS- JA-BBS, and CS-JA-BWR, which include the following items, respectively:

- ◆ The Destratification Facility, a permanent diffused-air bubble mixing system at Shellbank Basin designed to eliminate temperature stratification during the summer season which leads to poor water quality conditions in the basin, odors and marine life kills.
 - DEP Certified Construction Completion of the Destratification Facility on March 20, 2012, and DEC accepted the certification on July 23, 2012.
- ◆ A Parallel 48-inch sewer under the Belt Parkway to complement the existing 36-inch double barrel Belt Parkway crossing in the West interceptor.
- ◆ Bending Weirs at regulators J3 and J14 in the West Interceptor and J6 in the East Interceptor drainage area.

The work in Jamaica Tributaries CSO Facility Planning area also includes Area-wide green infrastructure contracts in Jamaica Tributaries CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. For more details on the Green Infrastructure Program, see Section 3.9, below.

Design Work Performed During This Quarter

- Parallel 48-inch Siphon/Interceptor
 - Continued design services during construction (DSDC).
- Bending Weirs
 - Commenced DSDC.

Construction Work Performed During This Quarter

- Parallel 48-inch Siphon/Interceptor
 - Continued mobilization, site preparation and obtaining necessary approvals.
 - Bending Weirs
 - NTP issued December 4, 2014. Contractor obtaining necessary approvals, review of contractor submittals and necessary paperwork to commence construction.

Anticipated Design Activities for Next Quarter

- Parallel 48-inch Siphon/Interceptor
 - Continue DSDC.
- Bending Weirs
 - Continue DSDC.

Anticipated Construction Activities for Next Quarter

- Parallel 48-inch Siphon/Interceptor
 - Continue contractor mobilization and commence construction work.
- Bending Weirs
 - Contractor mobilization.

Table 8 – Jamaica Tributaries CSO Projects

| | <i>Destratification Facility</i> | <i>Parallel 48-inch Siphon / Interceptor</i> | <i>Bending Weirs</i> |
|--------------------------|---------------------------------------|--|---|
| <i>Contract ID</i> | CSO-JT-SB | CS-JA-BBS | CS-JA-BWR |
| <i>Plan Elements</i> | Destratification | Parallel 48-inch Sewer | Bending Weirs |
| <i>Location</i> | Shellbank Basin Queens | Belt Parkway Queens | Regulator J6 on the East Interceptor and regulators J3 and J14 on the West Interceptor |
| <i>Actions</i> | Construct Permanent Facility | Design and construct system upgrades | Design and construct system upgrades |
| <i>Construction Cost</i> | \$2,776,054 | \$20,256,909 | \$6,853,955 |
| <i>Status</i> | Complete | Construction | Construction |
| <i>Other Issues</i> | Certification Accepted Jul 23 2012 | | Contractor NTP Issued |

Changes from the previous reporting period are shown in **bold**.

3.4. Newtown Creek CSO

The Newtown Creek CSO Facility Planning area includes the portions of the Newtown Creek WWTP and the Low Level Interceptor of the Bowery Bay WWTP drainage areas that discharge to Newtown Creek, English Kills, Dutch Kills, Whale Creek, Maspeth Creek and the East Branch along the Brooklyn-Queens border. The Consent Order projects are constructed under contracts CSO-NC-2, CSO-NC-3, CSO-NC-4, CS-NC-REG & FLO, GBNC15-05, which include the following items:

- ◆ Enhanced Aeration in the Lower English Kills
 - DEP certified complete and DEC accepted certification May 13, 2014
- ◆ Enhanced Aeration in East Branch and Upper Newtown Creek
- ◆ Enhanced Aeration in Dutch Kills and Lower Newtown Creek
- ◆ Bending Weirs / Floatables Control
- ◆ Green Infrastructure Demonstration project in the Newtown Creek drainage area
 - Updates on the GI Demonstration Project are discussed in the Green Infrastructure Section of this report, below.

The work in Newtown Creek CSO Facility Planning area also includes Area-wide green infrastructure contracts in Newtown Creek CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. For more details on the Green Infrastructure Program, see Section 3.9.

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

Design Work Performed During This Quarter

- Enhanced Aeration
 - **DEP issued the Invitation for Bid for the Enhanced Aeration in East Branch and Upper Newtown Creek contract (CSO-NC-3, East Branch Aeration) on February 23, 2015. The pre-bid conference was held on March 16, 2015.**
 - **Completed 60% design and continued the design of the project toward 90% completion for the Enhanced Aeration in Dutch Kills and portions of Newtown Creek project (NC-4).**
- Bending Weirs and Floatables Control
 - **Continued procurement phase which included review of received bids and issuing Notice of Award letter to Skanska USA, Civil Northeast, Inc. Contract is currently**

being registered with the Comptroller's office. Work continued on development of the Public Outreach Program.

Anticipated Design Activities for Next Quarter

- Enhanced Aeration
 - **Review bid results received on April 13, 2015 and award the construction contract for the Enhanced Aeration in East Branch and Upper Newtown Creek contract (CSO-NC-3, East Branch Aeration)**
 - Continue seeking **ULURP approval from City Planning Commission and City Council (if necessary)** for East Branch. **Construction contract procurement is underway.**
 - **Complete the design for the Enhanced Aeration in Dutch Kills and Lower Newtown Creek Aeration (NC-4) project.**
- Bending Weirs and Floatables Control
 - Continue procurement phase activities to include evaluation of received bids, contractor selection and **registration** of construction contract.

Table 9 – Newtown Creek CSO Projects

| | <i>Enhanced Aeration 1</i> | <i>Enhanced Aeration 2</i> | <i>Enhanced Aeration 3</i> | <i>Bending Weirs / Floatables Control</i> |
|--------------------------|-------------------------------------|--|---|---|
| <i>Contract ID</i> | CSO-NC-2 | CSO-NC-3 | CSO-NC-4 | CS-NC-REG & FLO |
| <i>Plan Elements</i> | Enhanced Aeration | Enhanced Aeration | Enhanced Aeration | Floatables Controls and Overflow Reduction |
| <i>Location</i> | Lower English Kills | East Branch and Upper Newtown Creek | Dutch Kills and Lower Newtown Creek | Dutch Kills, Maspeth Creek, English Kills and East Branch |
| <i>Actions</i> | Certification accepted May 13, 2014 | The design of the blower building and aeration system submitted June 30, 2014. | The design of the blower building and aeration system continues | Design of bending weirs and baffles, to reduce overflows/floatables |
| <i>Construction Cost</i> | \$1,769,000 | \$14,676,445 | \$26,147,164 | \$41,900,419 |
| <i>Status</i> | Construction | Design | Design | Initiated Procurement Phase |
| <i>Other Issues</i> | | Potential delay to NTP if approval of design is not timely provided by NYC Public Design Commission and/or City Planning | | Milestone for NTP modified to May 2015. |

Changes from the previous reporting period are shown in **bold**.

3.5. Westchester Creek CSO

The Westchester Creek CSO Facility Planning area includes the portion of the Hunts Point WWTP drainage area, its associated sewers, and pumping stations that discharges to Westchester Creek and Pugsley Creek in the Bronx. The Consent Order projects are constructed under contracts CS-ER-WCM and CS-ER-WCP, which respectively include the following items:

- ◆ Modifications to CSO-29 and CSO-29A to increase conveyance to the WWTP and reduce discharges from Outfall HP-014
- ◆ Pugsley Creek Parallel Interceptor to increase conveyance to the WWTP and reduce discharges from Outfall HP-013

The work in Westchester Creek CSO Facility Planning area also includes Area-wide green infrastructure contracts in Westchester Creek CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. For more details on the Green Infrastructure Program, see Section 3.9, below.

Design Work Performed During This Quarter

- Modifications to CSO-29 and 29A
 - **Discussions between DEP and Con Edison legal staffs were held during which it was agreed that the natural gas and electric utilities in Morris Park Avenue which are owned by Con Edison are to be relocated, replaced and protected in accordance with typical Section U and EP-7 requirements.**
 - **Continued procurement of Construction Contract.**
 - **Discussions continued with Albert Einstein College of Medicine (AECM) personnel to finalize the Construction License which will allow for the temporary occupancy of AECM property by the selected construction contractor to allow for the performance of the work.**
- Pugsley Creek Parallel Interceptor
 - **Alignment meeting was held on March 18, 2015 Final Design is approximately 40% complete.**
 - **Modification request for this milestone to be submitted.**

Anticipated Design Activities for Next Quarter

- Modifications to CSO-29 and 29A
 - **Initiate Procurement Phase activities.**
 - **Finalize Construction License with AECM**
- Pugsley Creek Parallel Interceptor
 - **Final Design to continue.**

Table 10 – Westchester Creek CSO Projects

| | <i>Modifications to CSO-29 and CSO-29A</i> | <i>Pugsley Creek Parallel Interceptor start from CSO-24</i> |
|--------------------------|---|---|
| <i>Contract ID</i> | CS-ER-WCM | CS-ER-WCP |
| <i>Plan Elements</i> | Improve flow control structures in sewers to convey more flow to the Hunts Point WWTP | Add capacity to convey more flow to the Hunts Point WWTP |
| <i>Location</i> | Eastchester Road, Bronx | Classon Point, Bronx |
| <i>Actions</i> | Design | Continue Design at DDC |
| <i>Construction Cost</i> | \$15.3 Million | \$65.8 Million (Estimated) |
| <i>Status</i> | Final Design completed and approved by DEC | Design underway |
| <i>Other Issues</i> | | Design delays due to underground infrastructure requiring redesign |

Changes from the previous reporting period are shown in **bold**.

3.6. Jamaica Bay CSO

The Jamaica Bay CSO Facility Planning area includes the drainage areas of the 26th Ward, Coney Island, and Rockaway WWTPs and their associated sewers and pumping stations. The receiving waters of the study area include Fresh Creek, Hendrix Creek, Spring Creek, and the open waters of Jamaica Bay. The Consent Order projects are constructed under contracts CSO-DRG and CSO-GCER, which include the following items:

- Interim dredging of the head-end of Hendrix Creek
 - o Completed
- Improving conveyance to the Rockaway WWTP
- 26th Ward High Level Sewer Separation (HLSS)
- 26th Ward Preliminary Treatment Reliability Improvements

The work in Jamaica Bay CSO Facility Planning area also includes Area-wide green infrastructure contracts in Jamaica Bay CSO Tributary Drainage Area (TDA), which will saturate the area with as many green infrastructure practices as possible to meet the milestones as outlined in the Order. For more details on the Green Infrastructure Program, see Section 3.9, below.

In addition, the 26th Ward Green Infrastructure Demonstration Project was performed under a separate contract. Updates on the GI Demonstration Project are discussed in the Green Infrastructure Section of this report.

Design Work Performed During This Quarter

- 26th Ward High Level Sewer Separation
 - **Final Design has been completed for Phases 1a and 1b. Certification letter from DEC received on April 1, 2015.**
 - **Survey received for Phase 2a. Awaiting survey for Phase 2b.**
 - **Survey for Phases 3a and 3b have been received.**
- 26th Ward Preliminary Treatment Reliability Improvements
 - On December 2014, certified proposed milestone XII.K.5, as revised by Appendix A to the 2015 Order modifying the CSO Order.
 - **NOV related to April 2013 milestone for initiation of design was resolved by Consent Order modifying the CSO Order executed and made effective by DEC March 26, 2015. (2015 Order)**
 - PST work (26W-20) **Advertised, bids due 5/29/15.**
 - HLMSPP work (26W-21) **Awarded to Jett Industries, pending registration and NTP.**

Construction Work Performed During This Quarter

- Hendrix Street Canal Dredging
 - **Initiated work on preparation of Draft Post Dredge Monitoring Report No. 5.**

- 26th Ward Preliminary Treatment Reliability Improvements
 - Continued with the replacement of Pump #5.

Anticipated Design Activities for Next Quarter

- 26th Ward High Level Sewer Separation
 - **Phases 1a and 1b will be sent to Law and ACCO's office for approval.**
 - Survey is expected to be received for **Phase 2b. Preliminary Design to continue for Phases 2a, 3a, and 3b.**

Anticipated Construction Activities for Next Quarter

- Hendrix Street Canal Dredging
 - **Complete and submit Draft Post Dredge Monitoring Report No. 5 to DEP for Review.**
 - **Upon receipt of DEP approval, submit Post Dredge Monitoring Report No. 5 to DEC.**
 - **Perform Benthic and Bathymetric surveys to be used to prepare Post Dredge Monitoring Report No. 6.**
- 26th Ward Preliminary Treatment Reliability Improvements
 - Complete startup and testing of Pump #5.
 - **Certify construction completion.**

Table 11 – Jamaica Bay CSO Projects

| | <i>Hendrix Creek Dredging</i> | <i>Rockaway WWTP Conveyance Improvements</i> | <i>26th Ward HLSS</i> | <i>26th Ward Wet Weather Stabilization</i> |
|--------------------------|--|--|--|--|
| <i>Contract ID</i> | CSO-HC | Project not yet initiated | CS-FB-SEW | 26W-21 (CO 128) 26W-20 |
| <i>Plan Elements</i> | Removal of CSO sediment mounds from the head end of the Hendrix Street Canal | Improve collection system and WWTP capacity to achieve 2DDWF | | Low Level MSPs High Level MSPs PST#5 PST1-4 Stabilization |
| <i>Location</i> | Hendrix Creek, Brooklyn | Rockaway WWTP, Queens | Fresh Creek, Brooklyn | 26 th Ward WWTP, Brooklyn |
| <i>Actions</i> | None | None | None | - |
| <i>Construction Cost</i> | \$13.2 million | TBD | \$50 million for Phases 1a and 1b (estimated) \$51 million for Phases 2a and 2b (estimated). \$63 million for Phases 3a and 3b (estimated) | LLMSP \$7.6 million 26W-21 \$15 million 26W-20 \$126.4 million |
| <i>Status</i> | Construction Complete | Project not yet initiated | CPIs for all 3 phases have been sent to DDC. | In Construction (LLMSPs) In Procurement (26W-21) In Procurement (26W-20) |
| <i>Other Issues</i> | | | | Modifications to Consent Order and milestones for this project were effective Mar 26, 2015. |

Changes from the previous reporting period are shown in **bold**.

3.7. Wards Island WWTP Headworks Wet Weather Improvements

The Wards Island WWTP Headworks Wet Weather Improvements consist of work done at the WWTP to increase its' wet weather handling capacity. Effective March 26, 2015, the CSO Consent Order was modified on consent in parts relevant to the 26th Ward WWTP (DEC Case No. CO2-20140314-01). The projects are constructed under contracts WI-288(R) and WI-280, which include the following items:

- Reconstruction of Main Sewage Pumps (MSP)
- Bar Screen Replacement

Design Work Performed During This Quarter

- Bar Screen Replacement at Manhattan and Bronx River Grit Chambers
 - Certified milestone XV.B.1 Submit Basis of Design Report December 23, 2014.

Construction Work Performed During This Quarter

- MSP Replacement at Wards Island WWTP
 - **Certified milestone XV.A.1. Notice to Proceed to Construction March 31, 2015**

Anticipated Construction Activities for Next Quarter

- MSP Replacement at Wards Island WWTP
 - **Contractor to start mobilization.**
- Bar Screen Replacement at Manhattan and Bronx River Grit Chambers
 - **Contractor to start mobilization.**

Table 12 – Wards Island WWTP Projects

| | <i>MSP Reconstruction</i> | <i>Bar Screen Replacement</i> |
|--------------------------|--|---|
| <i>Contract ID</i> | WI - 288(R) | WI - 280 |
| <i>Plan Elements</i> | Reconstruction of Six (6) Main Sewage Pumps | Replace Bar Screens at Bronx and Manhattan Grit Chambers |
| <i>Location</i> | Wards Island WWTP | Wards Island WWTP |
| <i>Actions</i> | Certification of Notice to Proceed to Construction sent on March 31, 2015 | Certification of Notice to Proceed to Construction sent on December 23, 2014 |
| <i>Construction Cost</i> | \$3,689,000 | \$13,229,000 |
| <i>Status</i> | MSPs and Suction Knife Gates on site. MSP replacement will begin when the first existing MSP is released for construction. | Shop witness schedule first week of July 2015 for one screen for each chamber. |
| <i>Other Issues</i> | The MSP Discharge Sluice Gate replacement project is currently delayed due to contractor replacement. MSP Discharge Sluice Gate replacement must be completed prior to first MSP replacement. | Jett requested additional cost to installed BGC bar screen. |

Changes from the previous reporting period are shown in bold.

3.8. Environmental Benefits Projects

DEP has undertaken these projects 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 Environmental Benefit Projects (EBPs) are funded by DEP and are designed to abate CSOs and/or address wet weather water quality impacts from CSOs and to benefit the waters in and around New York City.

In addition to the EBPs discussed below, the 2012 Order requires that \$2 million in EBP funding be allocated toward the Hutchinson River and Newtown Creek Neighborhood Demonstration Areas. **The funding commitment has been met and the Demonstration Area projects are now complete.**

2008 CSO EBP Grants

The 2008 Modification to the CSO Consent Order requires not less than \$4 million worth of DEP-funded Environmental Benefit Projects (EBPs) designed to abate CSOs and/or address wet weather water quality impacts from CSOs and to benefit the waters in and around New York City.

- **Manhattan College**

The installation of approximately 14,666 sq. ft. of a modular green roof project on New York Hospital in Queens was completed in November 2012 and monitoring of flow data continues and is in year **three** of the three year monitoring period.

The total project value is \$660,440; **\$390,725 has been invoiced through July 2014. Currently in discussion with Manhattan College and New York Hospital to increase the scope of this project by installing and monitoring an additional green roof using existing funds. The goal of this new roof would be to test the shade tolerance of the plantings and determine the baseline light requirement beyond which green roof plantings would not survive.**

- **NYC Audubon Society**

A Greenstreets stormwater capture system in Rego Park that will retrofit an impervious surface and replace it with permeable pavement and vegetation to capture runoff from a three acre-watershed. A topographical survey of the site was conducted. 90% construction designs are in the process of being updated **following discussion with NYC DOT to ensure the project conforms with updated pedestrian and traffic calming features.** Alternative drainage conveyance into the sewer system will not be required.. The total project value is \$448,803; \$75,000 has been invoiced to date as startup fund and subsequent bills have been deducted from the fund. **\$2,340.57** remains available in Audubon's startup fund.

- **Regional Plan Association**

Two Sponge Park™ bioretention basins were completed in June 2013 and monitoring equipment were installed shortly after.. **Equipment testing and data collection testing began in Spring 2014. Ice formation during the winter of 2014-2015 caused minor damage to some aboveground equipment which will be reinstalled prior to resumption of monitoring in Spring 2015. Equipment calibration tests scheduled for**

April to test new sensors which were added since Spring 2014. The total project value is \$600,000; \$430,594 has been invoiced through June 2014.

Gowanus Canal Conservancy

The 6th Street Green Corridor Project **built** a series of curbside swales ranging from 400 square feet to 1,200 square feet along 6th Street and 2nd Avenue in Brooklyn.. Construction began in April **2014** and all major structures for the eleven bioswales were completed by June. Trees and herbaceous plants were installed in early June and are currently being maintained by the Conservancy and the contractor. Installation of tree guards and other aesthetic details has been completed and the sites are ready to receive monitoring equipment. **The site sustained some damage during winter 2014-2015 and will be evaluated and repaired by the contractors. Monitoring equipment is slated to be installed in May and data collection will begin immediately after.** The total project value is \$583,470 (\$873,470 including EPA Grant); **\$300,065** has been billed through **June 2014**.

- **Unisphere, Inc.**

Installation of a treatment wetland and rain garden for treating stormwater entering Meadow Lake. This project will receive runoff from approximately 3.26 acres consisting of portions from a parking area at the southwestern edge of Meadow Lake in Flushing Meadows Corona Park. eDesign Dynamics entered into a contract agreement with Excav Services and construction began on May 20, 2013. Construction was halted due to the discovery of contaminated soil. Construction resumed in 2014 with the segregation and removal of the differing soil. Site grading progressed and is soon ready to receive inbound soils. **Construction is to be completed in spring 2015 and installation of wetland planting and upland vegetation will be completed immediately after.** The total project value is \$504,340; **\$310,679** was invoiced through **December 2014**.

- **Drexel University**

Project was to design, construct, monitor, evaluate, report on and maintain a variety of green infrastructure stormwater capture technologies that also promote ecosystem services in the Bronx River watershed. Due to high bedrock and low infiltration rate, the proposed location at Stratford Ave is being dropped as a viable site. **Alternative sites at the Bronx High School of Science and Flushing International High School was submitted as an alternate site and was approved by DEC to proceed with full design.** The total project value is \$893,493; \$205,108 has been invoiced through September 2014.

Table 13 – 2008 Modified CSO Consent Order Environmental Benefits Projects

| <i>Plan Elements:</i> | <i>Bronx River</i> | <i>Flushing Bay and Creek</i> | <i>Gowanus Canal</i> | <i>DEC US Forestry Service Grant</i> |
|-----------------------|--|--|--|--|
| <i>Location:</i> | HP-009 Service Area | Multiple Areas | 6th St / 2nd Ave, Brooklyn | Bronx River and Newtown Creek CSO Areas |
| <i>Description:</i> | 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 (\$504,340); NYC Audubon Rego Park Green Streets (\$448,803) | 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. |
| <i>Cost:</i> | Budget: \$850,000 JTD : \$205,108 This Qtr: \$130,108 Next Qtr: \$100,000 | Budget: \$2,213,583 JTD: \$1,206,998 This Qtr: \$44,914 Next Qtr: \$100,000 | Budget: \$583,470 JTD: \$300,065 This Qtr: \$3,602 Next Qtr: \$100,000 | Budget: \$250,000 JTD: \$223,244 This Qtr: \$0 Next Qtr: \$0 |
| <i>Status:</i> | Alternative BMP site location selected Design underway | Manhattan College and RPA completed construction and is in the monitoring phase. Construction at Unisphere is ongoing. NYC Audubon is updating 90% designs to reflect new DOT Standards | Construction completed July 2014. Monitoring of installations to begin and continue for three years. | Contracts expired Jun 30 2013 |
| <i>Other Issues:</i> | Subsurface Drainage | None | None | Working with Riverkeeper to close out their contract. |

Changes from the previous reporting period are shown in **bold**.

2012 Order - EBP Green Infrastructure Grant Program Projects

The 2012 Order required DEP to extend its existing Green Infrastructure Grant Program and commit to spending no less than \$3 million of EBP funds to expand the GI Grant Program over a three year period from 2012-2014. **On January 7, 2015 DEP notified DEC that \$3,002,958 of Environmental Benefits Program funds for green infrastructure has been committed**

over the past three years. In a January 9, 2015 letter, DEC notified DEP that the requirement was satisfied.

3.9. Green Infrastructure Program Implementation

This section of the quarterly report provides the status of Green Infrastructure Program implementation required by paragraph IV.C of the 2012 CSO Consent Order. **The Order sets forth schedule and stormwater capture targets, and other requirements for the program to reduce runoff and CSO through the use of green infrastructure.**

Additionally, the Order contains completion milestones for three Green Infrastructure Demonstration projects and set forth financial **requirements including the requirement to spend no less than \$2M of EBP funds on the implementation of two Green Infrastructure Demonstration areas, which has been achieved.**

To meet the green infrastructure goals of the Order, DEP has identified Priority Areas based on several criteria, such as annual CSO volume, frequency of CSO events, as well as projected benefits of projects constructed through DEP's Waterbody/Watershed Facility Plans or other system improvements planned for the future. DEP also notes outfalls in close proximity to existing and future public access locations. DEP continues to review and expand the Priority Areas to ensure sufficient green infrastructure implementation to meet the 2030 goal set forth in the Order.

The identification of Priority Areas has enabled DEP to focus resources on specific CSO tributary areas, to analyze all potential opportunities, to saturate these areas with green infrastructure as much as possible, and to achieve efficiencies in design and construction.

DEP has initially focused primarily on the Area-wide right-of-way contracts building Right-of-way bioswales, Stormwater Greenstreets, Right-of-way Rain Gardens, and porous paving. DEP's standardized designs and procedures have been critical to supporting the systematic implementation of green infrastructure at a wide scale. DEP expects to continue green infrastructure implementation using an expanding array of tools. As right-of-way implementation continues and reaches its fullest extent over the long term, DEP will increasingly rely on other, more site-specific opportunities on public and private property. Over time, the proportion of program resources devoted to implementation will shift from right-of-way to public property retrofits and other types of green infrastructure tools.

During the First Quarter of 2015, design and construction work continued in three Green Infrastructure Program initiatives and are generally summarized below. **DEP plans to continue this work for the next quarter.**

- **Ongoing Area-wide green infrastructure contracts design and build thousands of Right-of-way Bioswales, Right-of-way Rain Gardens and Stormwater Greenstreets (ROWBs, ROWRGs and SGSs). Design and construction contracts are being implemented in multiple phases.**
- **Ongoing siting, design and construction of public property retrofits in coordination with City agency and non-profit partners.**

- Ongoing design and construction of Green Infrastructure Grant Program projects on private property.

Below is a summary of constructed green infrastructure practices by CSO Tributary Drainage Area (TDA), as of the publish date of this report. The table is cumulative and updated each quarter. It includes only practices installed by DEP’s Office of Green Infrastructure through the Area-wide right-of-way projects, public property retrofits, and grant green infrastructure projects.

Table 14 – Constructed Green Infrastructure Practices

| <i>CSO Tributary Drainage Area</i> | <i>Constructed GI Practices</i> |
|------------------------------------|---------------------------------|
| <i>Bronx River</i> | 35 |
| <i>East River</i> | 39 |
| <i>Flushing Bay</i> | 55 |
| <i>Flushing Creek</i> | 13 |
| <i>Gowanus Canal</i> | 17 |
| <i>Hutchinson River</i> | 22 |
| <i>Jamaica Bay</i> | 58 |
| <i>Newtown Creek</i> | 27 |
| <i>Westchester Creek</i> | 3 |
| <i>Total</i> | 269 |

4.0 Community Relations

DEP's public participation plan was released to the public on June 26, 2012 and describes the multipronged tools and activities DEP will utilize to inform and involve diverse stakeholders and the broader public throughout the LTCP process.

The purpose of the public participation plan is to create a framework for communicating with and soliciting input from interested stakeholders and the broader public on water quality and the challenges and opportunities for CSO controls. The public participation plan is designed to keep important stakeholder issues associated with the LTCP program before the public and ratepayers throughout the life of the program.

DEP will report quarterly to DEC on completed public participation activities outlined in the public participation plan as part of this and all future CSO Quarterly Reports. All updates to the Public Participation Plan implemented as a result of public comments received and quarterly reviews of public participation activities by DEC will be posted annually to DEP's website.

During the **First Quarter of 2015** DEP completed several community relations-related tasks and provided several LTCP-related updates and education materials to the public. All tasks, efforts and updates are described in this Quarterly Report.

Green Infrastructure Meetings

January 7, 2015: Chinese Community Center of Flushing GI Tour (5 attendees)

January 14, 2015: Meeting with Brooklyn CB 8 staff (1 attendee)

January 15, 2015: Queens CB 3 meeting (50 attendees)

January 28, 2015: Automotive Realty Group meeting (3 attendees)

February 24, 2015: Presentation to Brooklyn CB 8 & Prospect Heights Neighborhood Council (25 attendees)

February 26, 2015: CCNY Presentation (20 attendees)

March 3, 2015: Open Sewer Atlas meeting (3 attendees)

March 4, 2015: Meeting with Brooklyn CB 8 staff (1 attendee)

March 11, 2015: Meeting with administrators at Brooklyn School for Global Studies, P.S. 39, and John Jay High School (4 attendees)

March 17, 2015: Presentation to East Brooklyn BID (40 attendees)

March 24, 2015: Presentation to Bronx CB 12 (3 attendees)

April 1, 2015: Presentation to Brooklyn CB 2 (20 attendees)

April 3, 2015: Meeting with Brooklyn CB 8 staff (1 attendee)

April 8, 2015: Presentation to Queens CB 5 (35 attendees)

April 14, 2015: Presentation to Queens CB 4 (50 attendees)

LTCP Education and Outreach Activities

- **January 22, 2015: DEP presented to the Bronx BP's Combined Borough Board and Borough Services meeting on the Bronx River LTCP. Approximately 50 attendees from the Bronx Community Boards and Council members were present.**

- **February 12, 2015: DEP held the Bronx River LTCP Kick-Off at Casita Maria, 928 Simpson Street, Bronx, NY 10459. The meeting was advertised in local newspapers, posted on the DEP LTCP website and e-mailed to stakeholders. In attendance were approximately 78 stakeholders from 36 different non-profit, community, planning, environmental, economic development, governmental organizations and the broader public attended the event, and 3 media representatives.**

Planned Activities Not Conducted During This Quarter

- DEP conducted all planned activities this quarter.

Summary of Comments Received

DEP received comments (via e-mail) on the Bronx River meeting from the following: Bronx River Alliance, Bronx Community Charter School (Testimonies from students) and Councilmember Andrew Cohen. One e-mail inquired on the status of the Westchester Creek LTCP.

Table 15 is a summary of all e-mails received during the first quarter of 2015.

Table 15 –Community Outreach Email Correspondences This Quarter (Jan – Mar 2015)

| <i>Correspondence Type</i> | <i>Jan</i> | <i>Feb</i> | <i>Mar</i> | <i>Total</i> |
|------------------------------|------------|------------|------------|--------------|
| <i>RSVP to LTCP Meeting</i> | 1 | 4 | 0 | 5 |
| <i>Request to be Added</i> | 1 | 2 | 0 | 3 |
| <i>Request to be Deleted</i> | 0 | 0 | 0 | 0 |
| <i>Press Inquiries</i> | 0 | 1 | 0 | 1 |
| <i>Public Comment</i> | 1 | 4 | 2 | 7 |
| <i>General Information</i> | 3 | 2 | 3 | 8 |
| <i>Totals</i> | 6 | 13 | 5 | 24 |

5.0 Key Personnel Changes

The table below provides key personnel as of the **First Quarter of 2015**.

Table 16 – Key DEP Personnel for Contracts Subject to the CSO Consent Order

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

Changes from the previous reporting period are shown in **bold**.

6.0 Other Issues

Action Items generated during the **March 6, 2015** CSO Quarterly Meeting are summarized below.

Table 17 – Action Items from Quarterly Progress Meeting

| <i>Planning Area</i> | <i>Responsible Party</i> | <i>Required Action</i> | <i>Status</i> |
|----------------------|--------------------------|---|---------------|
| Inner Harbor | DEP | <ul style="list-style-type: none"> Send letter to decommission inflatable dams Decide on implementation of Gowanus Canal dredging project | In Progress |
| | DEC | | Completed |
| Newtown Creek | DEC | <ul style="list-style-type: none"> Provide feedback on wetlands permit application for enhanced aeration in East Branch and upper Newtown Creek | Completed |
| Flushing Bay/Creek | DEP | <ul style="list-style-type: none"> Submit conceptual design for replacement of sagging section of Flushing interceptor when completed. Submit letter explaining inability to conduct physical inspection of Flushing Interceptor Discuss fulfillment of requirements of Milestone V.I.5 | In Progress |
| | DEP | | In Progress |
| | DEP/DEC | | In Progress |
| Jamaica Bay/Tribs | DEP | <ul style="list-style-type: none"> Request extension for submittal of scope of work for Spring Creek disinfection pilot project Reevaluate HLSS and propose alternative by June 2015 | Completed |
| | DEP | | In Progress |
| Westchester Creek | DEP | <ul style="list-style-type: none"> Submit Modification Request for Pugsley Creek Parallel Interceptor Design Completion Milestone | In Progress |
| EBPs | DEC | <ul style="list-style-type: none"> Follow up with J McLaughlin on National Audubon Society EBP | In Progress |
| Misc | DEP | <ul style="list-style-type: none"> Confirm if approval letter on GI PCM report is needed Provide sampling plans for Coney Island Creek, Jamaica Bay and other waterbodies recently or currently being sampled for development of LTCPs Provide flow monitoring and influent sampling data from LTCP sampling efforts Conduct quarterly technical meetings on city-wide GI implementation, commencing with the 2014 annual GI report in April Inform Paul Kenline when new construction I&T meetings commence | In Progress |
| | DEP | | In Progress |
| | DEP | | Completed |
| | DEP/DEC | | Completed |
| | DEP | | In Progress |

7.0 Status of LTCP Development

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

- Alley Creek LTCP: June 2013
 - **DEC comments received on January 23, 2015**
 - **Response due to DEC May 6, 2015.**
- Westchester Creek LTCP: June 2014 (modified date)
 - LTCP was submitted on June 30, 2014 in accordance with the requirements of the Order. DEC comments received on September 22, 2014. DEP responded on November 24, 2014.
 - **Additional DEC comments received on January 14, 2015.**
 - **Response due to DEC April 14, 2015**
- Hutchinson River LTCP: September 2014
 - LTCP was submitted on September 30, 2014 in accordance with the requirements of the Order. **DEC comments received on January 14, 2015.**
 - **Response due to DEC April 14, 2015**
- Flushing Creek LTCP: December 2014
 - LTCP was submitted on December 30, 2014 in accordance with the requirements of the Order. **DEC comments received on March 23, 2015.**
 - **Response due to DEC May 22, 2015**
- Bronx River LTCP: June 2015
 - **On schedule for June 2015 submittal.**
- Gowanus Canal LTCP: June 2015
 - **On schedule for June 2015 submittal.**
- Coney Island Creek LTCP: June 2016 (modified date)
- Flushing Bay LTCP: **June 2016 (modified date)**
- Jamaica Tributaries and Bay LTCP: **June 2017 (modified date)**
- Newtown Creek LTCP: June 2017
- Citywide LTCP: December 2017