Environmental Protection

SPDES PERMIT FOR THE 14 WASTEWATER TREATMENT PLANTS

BEST MANAGEMENT PRACTICES

ANNUAL REPORT

FOR THE PERIOD JANUARY 1, 2014 - DECEMBER 31, 2014

CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTEWATER TREATMENT

APRIL 2015

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Executive Summary

In an effort to reduce Combined Sewer Overflows (CSOs) into local waterways, the New York City (NYC or "the City") Department of Environmental Protection (DEP) has implemented several initiatives focused on reducing stormwater runoff from entering the City's combined sewer system. DEP has introduced a Green Infrastructure program to retain stormwater using natural systems, such as swales, green roofs and porous surfaces. DEP has also implemented Best Management Practices (BMPs) to optimize existing facilities, in order to deliver more combined sewage to the City's wastewater treatment plants (WWTPs) and to keep street debris out of waterways.

Section VIII of the State Pollutant Discharge Elimination System (SPDES) permits for the City's WWTPs lists 13 BMPs that build upon EPA's federal CSO Control Policy's Nine Minimum Control Measures. This twelfth Annual Report describes DEP's ongoing CSO BMP program. The Report is divided into 13 sections, one for each of the BMPs in the SPDES permits. Each section of this Report describes ongoing DEP programs, provides statistics for Calendar Year 2014 initiatives, and discusses overall environmental improvements.

In general, implementation of the BMPs has resulted in notable improvements. Because of these initiatives, in conjunction with other DEP programs, the waterways surrounding NYC are cleaner than they have been in a century. The City has also invested more than $1.8 billion in other CSO measures, such as storage tanks and inflatable dams, which are termed grey infrastructure. Additional major capital investments in green and grey infrastructure are being developed by DEP in Waterbody/Watershed Facility Plans and in Long Term Control Plans (LTCPs). Over the next 10 years, New York City has allocated significant additional funds totaling $953 million for grey infrastructure work and $736 million for green infrastructure projects.

Notable CSO BMP achievements during 2014 included:

- DEP's Interceptor Improvement Program completed the second cycle of inspection and cleaning in 2014. Citywide 8,355 cubic yards of sediment were removed from the intercepting sewers and 145,668 feet were inspected. 2683 cubic yards of sediment was removed from non-interceptor assets such as pump stations, regulators, etc. Three capital contracts for intercepting sewer rehabilitation were bid at a total cost of $42.6M.

- Tide gate operability on the CSO outfall chambers was improved, to reduce seawater infiltration into the combined sewer system, a condition that was reducing available holding capacity for storm flows.

During the summer months, DEP works closely with the NYC Department of Health &

Metal Hygiene (DOHMH), which oversees bathing water quality at City beaches. DOHMH has an extensive beach monitoring program, through which wet-weather advisories can be posted if local waterways are affected by CSOs. DOHMH's 2014 Beach Surveillance and Monitoring report can be found online at:

***http://www.nyc.gov/html/doh/downloads/pdf/beach/beach-report-2014.pdf*.**

DEP continues to discuss with the New York State Department of Environmental Conservation (DEC) and the U.S. Environmental Protection Agency (EPA) the City's long-term CSO program to further improve the quality of local water bodies and sewersheds. Many of the initiatives have been memorialized in an Order on Consent. As federal and state funding for such initiatives has all but evaporated, DEP has been strategically tailoring actions that will achieve national goals while keeping water and sewer rates manageable for most NYC residents.

1. CSO Maintenance and Inspection Program

(a) *"The permittee shall develop and implement a written maintenance and inspection program for all CSOs listed beginning on page 3 of this permit. This program shall include all regulators tributary to these CSOs. This is to insure that no discharge or leakage occurs during dry weather and that the maximum amount of wet weather flow is conveyed to the WPCP for treatment. This program shall consist of scheduled inspections with required repair, cleaning and maintenance performed as needed to prevent dry weather overflow and leakage and ensure maximum wet weather flow is conveyed in accordance with CSO BMP # 4. Inspection reports shall contain a record of visual inspections, any observed flow, incidence of rain or snowmelt, condition of equipment and work required."*

The CSO Maintenance and Inspection Program was submitted to DEC on August 14, 2003. See Appendix 1, Exhibit 1.

A summary of preventive and corrective maintenance performed during 2014 on all regulators tributary to each treatment plant is attached as Attachment A under separate cover. The table shows the regulator number, the date when preventive maintenance (PM) was performed at each site and whether any corrective actions were completed (designated on the table by an 'x').

PM of a regulator consists of a physical inspection of the regulator and diversion chambers as well as of the branch interceptors or drop pipes. It also includes any exercising or lubrication of sluice gates and anything else not considered corrective.

Corrective Maintenance (CM) of a regulator includes the clearing or cleaning of all blockages within diversion chamber, regulator, branch interceptor or drop pipe. It also consists of any replacement of manhole rungs and the cleaning of all sensors within the chambers.

One location was not inspected during 2014-BBHL-27, Union Turnpike & Park Avenue, Queens due to major construction on the Grand Central Parkway ramp. In lieu of those inspections, Operations personnel inspected every month, the first manhole upstream and downstream of the regulator.

Beach Protection

During the Enhanced Beach Protection period from May 15 through September 30, inspections of beach sensitive regulators are performed twice per day using telemetry. Shift engineers from Collection Facilities Operations (CFO) monitor these locations at the beginning of their shifts and at the end of their shifts; when telemetry is inoperable, field crews perform site inspections until the telemetry is corrected. As a result of numerous complaints of dry weather bypassing from outfall OH-015 (17th Avenue & Upper Bay), all regulators tributary to this outfall (OH-9, OH-9A, OH-9B, OH-9C, and OH-9D) were physically inspected throughout the entire beach season period even though telemetry was operational. In fact, these locations were inspected every day up to the end of the year (December 31). See Attachment A for locations that were inspected due to the telemetry being inoperable (designated by an 'x' in the column EBPP).

(b) *"The permittee shall include in the maintenance and inspection program a plan to maintain CSO tidegates to prevent infiltration of seawater into the collection system such that the WPCP influent concentration of chlorides does not exceed a twelve-month rolling average of 400 mg/l. The maintenance and inspection program shall specify corrective actions to be taken within twelve months of the influent chloride excedance of 400 mg/l."*

Treatment plant and process personnel notify CFO if elevated chloride levels and flow are measured at their respective treatment plants. The elevated chloride levels and extra flow initiate a chloride run by CFO personnel. A chloride run is defined as a visual inspection of the tide gates within the drainage area experiencing the high chlorides (and the subsequent closing of any gates found opened). Chloride inspections are performed in addition to the standard regulator maintenance and inspection of regulators. Please refer to Attachment A for the results of those inspections (table column designated Cl). The following chloride runs were performed during 2014: Bowery Bay drainage area in March, April, May, June, July, August, September and October; Newtown Creek-Manhattan in September and October; Wards Island-Manhattan in September; Tallman Island in October; Port Richmond in May, August, and October and Owls Head in May, August, September, October, and December .

Attachment A contains a summary of PM and CM performed during 2014on all tide gates tributary to each treatment plant. The table sets forth the Regulator Numbers, the dates when PM was performed at the corresponding site (designated by an 'x' in the column TG PM) and whether any corrective actions were completed (designated on the table by an 'x' in the column TG CM).

PM of a tide gate consists of the physical inspection and exercising of the tide gate as well as any other maintenance not considered corrective.

CM of a tide gate includes removal of debris from the gate, cleaning of the rubber seals and rebuilding and refurbishing all hardware as well as the flap itself (which includes stop planking, gate removal, hardware cleaning, tap and chase adjusting bolts and new seals if required).

The following tide gates were completely refurbished by Operations personnel during 2014: NCM-43B-FDR Drive & E. 38th Street; NCM45- E.41st Street east of Regulator NCM44; NCM51B – FDR Drive & E. 70thStreet; WIB55- Lincoln Avenue south of 132nd Street; MH3- Broadway & 22th Street; HP11- Emerson Avenue & Schurz Avenue (two gates) and NR14- W. 216thStreet & Harlem River.

Tide gates from Regulator D-3 to D-12 in Rockaway were removed when the sewers were separated thereby eliminating the regulator location.

Analysis of calendar year 2014 shows that the following seven WWTPs exceeded the twelve month rolling average of influent chlorides concentrations of 400 mg/l:

Wards Island, Coney Island, Newtown Creek, Red Hook, Bowery Bay, Rockaway and Port Richmond.

For more information regarding chloride levels at all 14 WWTPs see Appendix 1, Table 1.

Comparative yearly analysis of CY 2013 and CY 2014 average tidal inflow (Appendix 1, Table 2) indicates:

A decrease in estimated tidal inflow occurred at nine plants:

Wards Island, North River, 26th Ward, Newtown Creek, Red Hook, Rockaway and Oakwood Beach.

An increase in estimated tidal inflow occurred at five plants:

Hunts Point, Coney Island, Owls Head, Jamaica, Tallman Island, Bowery Bay, and Port Richmond.

(c) *"The permittee shall include in the maintenance and inspection program a schedule for telemetering regulators and a plan to report the telemetering results. Within six months after completion of the telemetering of regulators required in the NYSDEC/NYCDEP Omnibus IV Consent Order Compliance Schedule (as noted in the outfall description page), the permittee shall record and report the number and duration of events that cause a discharge at an outfall during dry weather conditions."*

The installation of the telemetering equipment at 102 regulators was completed in May 2001 pursuant to the Compliance Schedule set for in the Omnibus IV Consent Order, DEC Case # R2-0045-93-05. At present, the upgraded system at 101 regulators is maintained through a service contract. The contractor is responsible for all maintenance issues and for providing monthly reports detailing all significant events.

The successful implementation of the regulator telemetry system has had a significant impact on the reduction of raw sewage bypasses. The system has allowed Collection Facilities field personnel to respond to problems in a timely manner and to reduce or prevent dry weather bypassing.

In calendar year 2014, Collections Operations field personnel responded to a total of 341 pump station and regulator related alarms sent by the SCADA Telemetry System.

Nine regulator and two pump station dry weather bypasses were confirmed to have occurred and were reported to DEC.

All other alarms that resulted in call-outs were either false or resulted in elimination of a bypass event.

(d) *"CSO maintenance and inspection program reports shall be available for DEC review no later than 9 AM on the day following the day the inspection was conducted and shall be available for DEC review at the associated WWTP no later than 30 days following the inspection."*

The CSO maintenance and inspection program reports, log sheets and inspection forms are kept at each respective crew quarters and are available for DEC review upon request.

2. Maximum Use of Collection System for Storage

"The permittee shall optimize the collection system by operating and maintaining it to minimize the discharge of pollutants from CSOs. It is intended that the maximum amount of in system storage capacity be used (without causing service backups) to minimize CSOs and convey the maximum amount of combined sewage to the treatment plant in accordance with Item 4 below. This shall be accomplished by an evaluation of the hydraulic capacity of the system but should also include a program of flushing or cleaning to prevent deposition of solids and the adjustment of regulators and weirs to maximize storage. "

In-line Storage in Interceptors – Interceptors that deliver wet weather flow to the WWTP's have the ability to provide in-line storage during wet weather. This storage is induced when (a) the influent wet weather flow exceeds the WWTP capacity and the facility must throttle, (b) the WWTP wet well operates above the invert of the influent sewers, and (c) other site-specific circumstances occur. Generally, in these cases, in-line storage of a few hundred thousand to a few million gallons (MG) will be induced in the system.

The SPDES permits also contain management practices for maximizing use of the collection system to reduce CSOs. In May 2011, a pilot program was initiated in which the SEE at Flushing Bay CSO Retention Facility monitors approaching storms and notifies the plant Operations SEEs to begin reducing their wet-well elevations immediately prior to the onset of rain. This action will help to increase available capacity in the interceptor, which can reduce CSO volumes. Each plant has established low-well elevation set points for impending rain events that are documented in its Wet Weather Operating Plan (WWOP).

- Red Hook WWTP WWOP – During previous CSO Facility Planning, DEP identified excess capacity of 4 MG in the Red Hook Interceptor that provides potential storage within the interceptor simply by operation of the existing manual throttling gate. The WWOP for the Red Hook WWTP submitted to DEC in February 2005 describes operations to induce such storage. The WWOP was approved by DEC in January 2006. DEP has been operating this WWTP in accordance with the WWOP. In addition, a bending weir has been installed at regulator RH R-2 to enable additional in-line storage.

In-line storage upstream of CSO Control Facilities induces storage within the barrels upstream from the CSO facilities when operated in accordance with their WWOPs as described below.

- Paerdegat Basin CSO Retention Facility – Construction of this facility was certified complete in May 2011 in accordance with the CSO Order, and the facility was placed into service at that time. The Paerdegat Basin CSO retention facility was projected to induce 10 MG of in-line storage in the influent sewers and another 20 MG in the upstream combined sewers.

- Gowanus Canal CSO Facilities Upgrade – Upgrades to this facility were certified complete in February 2015 pursuant to the CSO Order. The RH-034 CSO outfall screens include a

combination of fixed weirs and hydraulically operated outfall gates that will not only direct flow through the CSO screens but will induce inline storage within the combined sewers upstream of the outfall. DEP estimates, using InfoWorks models, that this inline storage will reduce CSOs by about 16 MG/yr.

CSO Order Projects – The Inner Harbor In–line Storage Facilities, Port Richmond WWTP Throttling Facilities and Citywide Collection System Supervisory Control and Data Acquisition (SCADA) projects were constructed in accordance with the CSO Order on Consent entered into by NYC and DEC on January 14, 2005, modified on April 14, 2008, and amended on March 8, 2012. DEP provides quarterly updates to DEC on the status of these and other projects in the CSO Quarterly Report and at the Consent Order quarterly meetings. Although these projects are considered CSO Long Term Control Planning issues, DEP references these projects as part of the BMP Annual Report because these collection system projects will improve conveyance and storage of wet weather flows.

Inner Harbor In-line Storage Facilities – Construction at the two inflatable dam sites was completed during 2010 in accordance with the CSO Order. The inflatable dam at Regulator RH-20 was out of service for most of 2014 due to major failure of the PLC. Several attempts were made to re-program the PLC with little success. Toward the end of 2014, the PLC was successfully reprogrammed. However, several premature inflations during dry weather forced DEP to take it off-line. The inflatable dam at Regulator NCB-6 was operational for the most part throughout 2014. Port Richmond Throttling Facilities – The throttling facility was constructed on the west interceptor of the Port Richmond WWTP and was placed into service in 2009.

Flushing Creek CSO Retention Facility – As per the July 2010 Form NY-2A Permit Application for the Flushing Bay CSO Retention Facility, the capacity is 44.1 MG with 28.7 MG in the tank and 15.3 MG in inline storage. DEP has been operating this facility in accordance with the July 2010 WWOP approval.

Spring Creek CSO Retention Facility – As per the July 2007 Form NY-2A Permit Application for the Spring Creek CSO Retention Facility, the capacity is 20 MG with 13.8 MG in the tank and 6.2 MG in inline storage.

SCADA/Collection Facilities Telemetry System Project

DEP's Bureau of Wastewater Treatment (BWT) completed the upgrade work on the SCADA project in 2013. The overall project involved the upgrade of the SCADA software, communication hardware to dual wireless and installation of additional instrumentation for the computerized data collection system. On February 18, 2013 DEP declared the Citywide Collection Facilities SCADA System (CCFISS) upgrade contract REG-027 "substantially complete" at all Pump Stations, 101 regulators and CSO Overflow facilities.

During 2014, DEP and its maintenance contractor continued making programming changes to reduce the number of false alarms, improve communication uptimes and automate the reporting as much as possible for a more robust and reliable monitoring system. As per the May 2014 Consent Order, monthly CSO Discharge reports were submitted to DEC using the data from the telemetry system at key regulators

List of regulators under the SCADA project is found in Appendix 2 (DEP BWT), Table 1.

Tide Gates

A program is in place to repair defective tide gates in order to prevent tidal waters from entering the system. Below is an update of tide gate locations completed and those in the process of being reconstructed:

Regulator/Tide Gate Report Status

Reg. #	Status	Schedule	Scope	Comments
NR-34	Complete	August 2012	New Gate	Contract REG-025L
NC(M)-48	Complete	9/28/2011	New Gate	Contract REG-025L
NC(M)-21	Complete	9/28/2011	New Gate	Contract REG-025L
NC(M)-23	Complete	9/28/2011	New Gate	Contract REG-025L
NC(M)-33	Complete	9/28/2011	New Gate	Contract REG-025L
WI(M)-24	Contract Awarded	Scheduled Completion 4/13	New pull box	Contract REG-025L
Oakwood Beach Flume	Canceled			DEC instructed not to install this gate
BBLL1,3,4,8, 9,11,17,18,21,22, 23,30, HL-2	In Design	Estimated Completion April 2016	21 New Gates	JOC Contract
NCB-1,6,7,9,14	Complete	1/ 2/ 2013	15 New Gates	JOC Contract
RH-9,11,15	Complete	1/2/2013	4 New Gates	JOC Contract
PR-9E,11E,13E, 16E,36	Complete	2/22/2013	8 New Gates	JOC Contract

WIM-14,15,16,50	Complete	3/ 14/ 2013	4 New Gates	JOC Contract
NCM-18,31,51A	Complete	2/ 26 / 2013	3 New Gates	JOC Contract
WIB-67	Complete	2 /22 / 2013	4 New Gates	JOC Contract
JAM-14	Complete	9 /5/ 2013	4 New Gates	JOC Contract
26W- 01	In design	Estimated completion – April 2016	6 New Gates	JOC Contract
26W-02	In Design	Estimated completion - April 2016	16 New Gates	JOC Contract
WIB -68	In Design	Estimated completion - December 2015	2 New Gates	JOC Contract
TI-1,2,4, & 5	In Design	Estimated completion – February 2016	4 New Gates	JOC Contract
HP-14	To be initiated	Estimated completion – June 2016	1 New Gate	JOC Contract

Interceptor Improvement Program

In 2014 the Bureau of Wastewater Treatment continued with its intercepting sewer inspection and cleaning program.

Scope of Work Completed in 2014

In 2014 , 145,668 linear feet of intercepting sewers were inspected Citywide and 8,355 cubic yards of sediment were removed. A breakdown by drainage area, of the length inspected and the volume of sediment removed is provided in Table 1 below. Volume of sediment removed from non-interceptor assets was 2,683 cubic yards, which is detailed by asset in Appendix 2 (Table 2).

Table 1: Length of pipe inspected and sediment removed by drainage area

Drainage Area	Inspected Length (feet)	Sediment Removed (CY cubic yards)
26 Ward	5,225	198
Bowery Bay	13,344	422
Coney Island	7395	5,968
Hunts Point	13,990	306
Jamaica	6,005	209
Newtown Creek	5,280	278
North River	434	47
Oakwood Beach	9,530	102
Owls Head	5,156	115
Port Richmond	19,206	548
Red Hook	5,732	21
Rockaway	18,199	880
Tallman Island	14,202	569
Wards Island	21,969	1,375
Totals	**145,668**	**11,038**

Sewer Cleaning and Inspection

Introduction:

DEP maintains its sewers through inspections and cleaning. Inspections are done either in person or via camera (CCTV, Zoom Camera, or Push cams). Sewer cleaning methods include hydraulic (flushing), mechanical (e.g., dragging, rodding, and vactoring) and chemical (degreasing) procedures. This work is done by DEP personnel as well as by various contractors. Cleaning activities performed in 2014 are summarized in Table 2-1. Maps of the cleaning activities for the

CMOM Section and NYC Department of Design and Construction (DDC) have been printed by Community Board and are in Appendix 2, (DEP BWSO)

Sewer Maintenance Complaint Inspection and Response:

DEP's Bureau of Water & Sewer Operations (BWSO) Division of Field Operations has personnel including construction laborers, supervisors, and technical staff whose primary function is operation, maintenance, and repair of the sewer collection system and water distribution system. For the sewer collection system, this Division performs investigations and responds to all sewer complaints received by the City's 311 call center, including sewer back-ups, catch basin flooding, and street flooding. They also perform programmatic work involving sewer cleaning, and catch basin survey inspections and cleaning. They work in conjunction with the Bureau of Wastewater Treatment's (BWT) Industrial Waste section to investigate grease conditions, to perform programmatic degreasing to ensure proper operations, and to perform routine inspections with the engineering-based CMOM section. Maintenance and repair yard facilities are located throughout the five boroughs of NYC. They are equipped with heavy duty and light duty construction vehicles, including truck-mounted crane vehicles (catch basin cleaning trucks), power jet flushing vehicles, power rodding auger trucks, and combined flusher/vacuum trucks.

During CY 2014, there were 12,622 customer service requests that resulted in sewer inspections. Of those requests, 9,415 were determined to be unrelated to the DEP infrastructure. In response to each request, the sewer maintenance division performed an initial inspection. This initial inspection includes inspecting the downstream and upstream manholes nearest the complaint location and collecting all data relevant to the incident. If the manhole inspection determines that the complaint was unconfirmed, meaning that the sewer was functioning as designed, crews are directed to perform hydraulic cleaning for at least two sections of sewer. If the sewer complaint is confirmed, meaning that there was evidence that the sewer was overtaxed, the crews are directed to initially perform hydraulic cleaning; if hydraulic cleaning does not alleviate the condition, crews perform mechanical cleaning to remove material obstructing flow in the sewer in order to resolve the condition. In response to these complaints, DEP's in-house forces cleaned over 189.20 miles of sewer. This number either represents actual footage, or represents an estimate of 150 linear feet between 2two manholes when an actual footage was not reported. As indicated, the inspections and cleanings were performed as a result of service requests, and some of the footages may overlap with requests made at different times.

Sewer Maintenance Proactive Inspection and Response

BWSO performs proactive sewer inspections and response through a program we DEP started in 2011 called Sewer Operations and Analysis Program (SOAP). Quarterly, areas of the city with recurring confirmed sewer back-up (SBU) complaints are assigned to each of the sewer yards for inspection.

Using our Geospatial Information System, the City is segmented into over 157,700 sewer segments. A sewer segment is defined as a City block, street center line to street center line. Our analysis has shown that approximately 0.94% of our overall sewer segments experienced a confirmed SBU, while only 0.38% of our overall sewer segments experienced more than 1 SBU event. Locations

with recurring service issues are the focal point of the SOAP program. Under the SOAP program, in-house staff inspects/investigates each street segment. The inspections may lead to cleaning, as warranted, spot repair, if necessary, or referral for capital replacement, as appropriate.

BWSO, working jointly with BWT, has improved its program to address Fats, Oils and Grease (FOG). DEP manages FOG issues of varying severity individually to ensure effective resolution and future maintenance. Recurring FOG conditions are added to our Programmatic Degreasing List. These locations are then tracked, visited and mechanically, hydraulically, or chemically cleaned according to an established programmatic schedule. During CY 2014, 219.92 miles of sewer were proactively cleaned under this program. Some of these footages may overlap depending on the frequency warranted by the FOG condition.

CMOM Sewer Inspections

At times, field crews identify sewer conditions that require cleaning beyond their capabilities to address. For example the size and condition of the sewer or a record of recent repeated cleanings may limit the crew's ability to take effective action. In these instances, the work is transferred to DEP's CMOM (formerly Sewer Analysis) Section. The CMOM staff then delineates the specific needs and boundaries of the work via more robust field inspection by DEP's CMOM Investigation Unit. Once the scope is defined, it can be assigned to DEP's City-Wide contractors for cleaning and debris removal. Table 2-1 and, in more detail, Table 2-2 show the activities of the CMOM Section for CY 2014. The locations are listed and shown in Appendix 2. The activities have also been mapped by Community Board, including details of the areas and associated dates of cleaning activities in Appendix 2.

DEP's CMOM Section is also tasked with the responsibility for performing internal visual inspections of sewers. The majority of the areas that require inspection are identified by field crew initial responders. The balance of the inspection work is identified by other agencies, such as NYCDOT and DDC, when it is required to support capital planning work. DEP's CMOM Section, through in-house personnel and citywide contracting, inspected 401,816 linear feet (or 76.1 miles) of sewers at 755 locations throughout the city during CY 2014. Some of this footage overlaps with areas addressed by field crews. As explained above and further below, this overlap occurs because the visual inspection is done prior to cleaning activities as it is necessary to determine the extent of cleaning needed. Post-cleaning inspections are also conducted to verify that the contractor has completed the work in an acceptable manner.

City-Wide Sewer Cleaning Contracts

As discussed above, after DEP inspects the sewers to determine the scope of cleaning required, the work is assigned to a contractor who performs the work for DEP at various locations city-wide. The contractor has equipment capable of cleaning sewers with diameters up to and including 204." Using the City-wide sewer cleaning contractor resources, DEP cleaned 287,192 linear feet or approximately 54.39 miles of sewers in CY 2014, as shown in the Table 2-2**.** The cost of this work was about $3,508,921.

Sewer Cleaning for Lining and Guniting Activities

DEP also rehabilitates sewers with the use of lining and guniting methods. For both lining and guniting, the first step is to clean and remove all debris, grease, and silt from within the sewer. Upon completion of the rehabilitation, the sewers are either TV-inspected or visually inspected.
In CY 2014, DEP lined 28,623 linear feet (or 5.42 miles) of sewer at a cost of $2,906,770.
In CY 2014, DEP gunited12,106 linear feet(or 2.29 miles) of sewers at a cost of $6,153,247.

Sewer Cleaning and Inspection: Capital Project Design

DDC also performed sewer maintenance work associated with its capital project design program. Specifically, when capital work is planned for a specific location, the sewer infrastructure in the street is inspected via TV camera and then cleaned as necessary. DDC inspected and cleaned 122,898 linear feet or 23.28 miles, as shown in detail in Appendix 2. (See Table 2-1)

Table 2-1: Summary of Sewers Inspected & Cleaned by DEP BWSO & DDC in CY 2014

METHOD	INSPECTED (miles)	CLEANED (miles)
In-House (Reactive)	189.20	189.20
In-House (Proactive)	539.00	539.00
CMOM Unit*	76.10	54.43
Lining	5.42	5.42
Guniting	2.29	2.29
Inspections & Cleaning (DDC)	23.28	23.28
TOTALS:	**835.55**	**813.58**

*See Table 2-2 for further break downs of CMOM Unit figures.

Table 2-2: Summary of Sewers Inspected & Cleaned by DEP BWSO CMOM Unit in CY 2014

METHOD	INSPECTED (miles)	CLEANED (miles)	COST ($)
CMOM Sewer Investigations	21.71	0.04	N/A
City-Wide Contract Inspection & Cleaning	54.39	54.39	$3,508,921
TOTALS:	**76.10**	**54.43**	**$3,508,921,**

3. Maximize Flow to POTW

"Factors cited in Item 2 above shall also be considered in maximizing flow to the POTW. Maximum delivery to the POTW is particularly critical in treatment of "first-flush" flows. The treatment plant shall be physically capable of receiving the peak design hydraulic loading rates for all process units. The treatment plant shall be physically capable of: receiving a minimum of 2 x DDWF (Design Dry Weather Flow) through the plant headworks; a minimum of 2 x DDWF through the primary treatment works (and disinfection works if applicable; and a minimum of 1.5 x DDWF through the secondary treatment works during wet weather. The actual process control set points may be established by the Wet Weather Operating Plan required in BMP #4. The sewer collection system, regulating devices and head works must be capable of delivering these flows during wet weather. If the wet weather operating plan (WWOP) identifies any physical limitations, such as the secondary bypass channel, the permittee shall submit a capital compliance schedule within 6 months of DEC approval of the WWOP."

New York City's (the City) wastewater treatment plants (WWTP's) and associated interceptor sewers have been constructed to be large enough to deliver and treat approximately two times dry-weather flow. In order to protect the biological process at the WWTP which ensures effective treatment, as well as to guard against homes' being flooded during wet weather events, conveyance structures called "regulators" were incorporated into the City's combined sewer system to regulate the flows that reach the interceptors and the WWTPs. As the City's sewer system was constructed over the last 90 years, almost five hundred regulators were constructed to regulate the flow to 135 miles of interceptors and 14 WWTPs. Regulators allow all dry-weather sewage and some stormwater runoff to enter the interceptor. During times when the amount of wet weather exceeds the design capacity of the sewer system, combined sewage spills over a fixed weir inside the regulator, and into a local water body. These discharges, subject to certain conditions, are permitted under DEP's SPDES permits.

Most of the regulators are located along waterways. The outfall pipes from the regulators are only a short distance from the waterbody, while the tributary WWTP may be miles away. Consequently, depending on the length and/or intensity of the wet weather event, and consistent with the design of the collection system, overflows from regulators during storms can occur at outfall pipes some distance from the WWTP and long before the wastewater in a regulator's catchment area reaches the WWTP.

DEP has taken a number of steps to reduce the amount of wet weather flow that discharges as combined sewer overflows (CSOs) including implementation of certain best management practices (BMPs) to reduce CSO discharges, expansion of certain of its WWTPs, regulator improvements, construction of CSO tanks, installation of green infrastructure and many other initiatives, all totaling billions of dollars in investments.

Key Regulator Monitoring

Building on these investments and system improvements, and pursuant to the 2014 CSO BMP Order on Consent (DEC Case No. R2-20140203-112) (Order) between the New York State Department of Environmental Conservation (DEC) and DEP, DEP began undertaking the Key Regulator Monitoring Program. Beginning with June 2014, DEP began submitting monthly reports of all known or suspected CSO discharges from key regulators outside the period of a critical wet weather event. These monthly reports provide itemized lists of such CSO discharges, the approximate start time and end time for each discharge, the corresponding WWTP flow rate, and the start time and end time of the critical wet weather event. Table 1summarizes the observations of Key Regulators during the seven months of analysis, which includes data from June through December 2014. Included in Appendix #3.1 is the Key Regulators Monitoring Report – CY2014 Summary which includes the details reported in the monthly reports sorted by regulator. Additionally, DEP has begun submitting quarterly engineering analyses of the cause(s) for each discharge and an analysis of options to reduce or eliminate similar future events. Quarterly report submittals are required for the first year after the effective date of the Order and then will be filed for each calendar year with the Annual CSO BMP Report. The first three quarterly reports have been submitted:

- Quarterly Engineering Report #1 For the Second Quarter of 2014 (June Only)
- Quarterly Engineering Report #2 For the Third Quarter of 2014
- Quarterly Engineering Report #3 For the Fourth Quarter of 2014

Quarterly Engineering Report #4 For the First Quarter of 2015 is due to be submitted on June 30, 2015. As noted above, after submission of Quarterly Engineering Report #4, future engineering analyses will be submitted as part of the CSO BMP Annual Report.

Table 2: Key Regulators with Potential CSO Discharges Outside the Period of a Critical Wet Weather Event, June through December 2014

Key Regulator	Number of Occurrences, Jun-Dec 2014								Total Duration (hr)	Results Category
	Jun	Jul*	Aug	Sep	Oct	Nov	Dec	To Date		
26W-01	1	0	0	0	0	0	1	2	1.00	A,B
26W-02	4	0	1	0	0	1	4	10	12.75	A
BBH-02	2	0	4	2	1	5	0	14	21.75	A
BBH-06	1	0	1	0	3	1	2	8	1.25	A
BBL-04	1	0	4	1	3	2	2	13	10.50	A
BBL-22	1	0	3	0	2	1	1	8	3.75	C
HP-05	4	0	4	0	1	2	3	14	21.75	A
HP-10	0	0	4	1	1	3	1	10	9.00	C
HP-13	0	0	0	0	0	0	1	1	1.75	B
JA-03	3	1	4	4	5	5	6	28	106.25	A
NCB-01	0	0	1	0	1	0	0	2	0.25	A,B
NCB-04	2	0	1	0	3	0	0	6	1.25	B
NCM-47	0	0	1	0	2	0	0	3	1.75	B

NR-16	0	0	2	0	1	1	0	4	1.75	B
NR-23	0	0	1	0	1	0	1	3	2.25	B
NR-33	3	0	0	0	2	0	0	5	3.50	B
OH-01	2	1	2	2	0	2	2	11	10.25	C
OH-06	0	0	2	0	0	2	0	4	5.00	B
PR-06W	0	1	3	1	4	2	5	16	30.00	C
PR-13E	3	1	3	2	3	4	5	21	62.75	C
RH-02	0	0	0	0	0	0	0	0	0.00	B
RH-20	0	0	0	0	0	0	0	0	0.00	B
TI-09	4	1	4	1	4	3	4	21	86.75	A
TI-10A	0	0	0	0	0	0	0	0	0.00	B
WIB-53	0	0	2	2	1	1	1	7	8.25	A
WIB-67	0	0	0	0	0	0	0	0	0.00	B
WIM-23	0	0	0	0	0	0	0	0	0.00	B
Count**	13	5	19	9	17	15	15	22		

*July 19 through July 31 only due to failure of SCADA historian that affected stored telemetry data and backups.

**Count of regulators with at least one event

***Analysis Category

A. Key Regulators that may be influenced by planned capital improvements (Projects are currently in design or construction that may result in CSO reductions and additional wet weather capture);
B. Key Regulators averaging less than one potential discharge outside the period of a critical wet weather event per month
C. All other Key Regulators with an average of one or more potential discharge outside the period of a critical wet weather event per month

Critical Wet Weather Events

The Order defines a critical wet weather event as "a wet weather event which causes or would cause the influent flow at the WWTP to exceed the wet weather flow identified in the associated SPDES permit." Generally, the wet weather flow identified in the associated SPDES permit of the WWTP is two times the design dry weather flow (2xDDWF), but it may be less than 2xDDWF under certain operational limitations (e.g., when critical equipment has been reported to be out of service and a reduced capacity request has been submitted to DEC). CSO discharges from key regulators that occurred outside of a critical wet weather event were determined based on inference from synoptic data collected from the city telemetry system, meteorological and tidal observations, and plant operational data. Analysis of mitigation strategies to reduce the occurrence of discharges outside the critical wet weather periods is being performed using InfoWorks CS models of the city's collection systems.

Included in Appendix #3.2 is the CY2014 Critical Wet Weather Event Summary for each plant (January to December.) The summary tables include details related to the critical wet weather events for each plant, including: the event-specific wet weather capacity, plant throttling information, and the start and end times of the critical event with its corresponding maximum and average flows.

Also included in the summary tables are references, where applicable, to Bypass Item Nos. or Wet Weather Item Nos. for additional information on these events. Prior to June 1, 2014, all wet weather throttling events that averaged less than 2xDDWF were included in the Wet Weather Quarterly Report and were given Wet Weather Item Nos. Effective June 2014, the information provided in the Wet Weather Quarterly Report is based on the requirements set forth in Appendix B.2 (b) of the Order – Maximize Flow at WWTP – which requires that for the entire duration of each critical wet weather event, the WWTPs shall be operated to receive and treat, through primary treatment and disinfection works, an average flow at least equal to the wet weather flow requirement in the applicable SPDES permit.

Additionally, DEP began reporting, within the required two-hour time frame, events in which the WWTP throttled but never achieved the applicable SPDES permitted wet weather capacity at any point during the period the WWTP throttled, except in instances when the WWTP was at reduced capacity with prior approval by the DEC. These events were reported with Bypass Item Nos.

Critical Equipment Notifications

As per the Order, DEP began notifying DEC whenever critical equipment is anticipated to be, or is out-of service for necessary repair or maintenance for more than 48 hours or under a DEC approved schedule. Upon receipt of such notice, and on a case-by-case basis, DEC may adjust the flow required to be passed through the WWTP in consideration of the recommendations contained within an approved Wet Weather Operating Plan (WWOP.) DEP based all subsequent required reporting, including determination of critical wet weather events, on the reduced wet weather capacity levels submitted in these requests.

WWTP Engineering Analysis

As per the Order, DEC submitted to DEC engineering analyses of WWTP influent flow throttling operations on August 6, 2014. These analyses provided specific recommendations for initiation and cessation of wet weather flow throttling operations designed to maximize flow through the WWTP. Based on comments received from DEC, DEP submitted supplements to the WWTP Engineering Analyses on December 12, 2014. These supplements included a brief summary of throttling protocol set points and indicators used to determine how and when throttling occurs at each WWTP.

Combined Sewer Overflows Annual Report Checklist Part III – CSO BMP's

Checklist Part III, Section 4, Maximize Flow to POTW, Question 3asks whether a plan and schedule have been submitted to DEC for addressing any inability during the past year of the headworks, primary treatment works, secondary treatment works and disinfection works to pass the flows specified in the permit for all wet weather flows. DEP submitted engineering analyses of WWTP influent flow throttling operations and updated Wet Weather Operating Plans pursuant to Appendix B, sections 2 and 4 of the CSO BMP 2014Order which provide recommendations for maximizing flow through the WWTPs. In addition, for Wards Island WWTP, a pending modification to the CSO Order, Revised Appendix A, Section XV, includes headworks wet weather improvement projects: specifically reconstruction of the main sewage pumps and replacement of the bar screens at the Manhattan and Bronx Grit Chambers.

Combined Sewage and Floatables Percent Capture at NYC WWTP's

DEP uses a calibrated InfoWorks Hydraulic Model in conjunction with NOAA rain gauge data and plant operating information to calculate the annual percent wet weather capture. A detailed report on Combined Sewage and Floatables Percent Capture at DEP WWTPs' is included in Appendix 3.

4. Wet Weather Operating Plan

> *"The permittee shall maximize treatment during wet weather events. This shall be accomplished by having a wet weather operating plan containing procedures so as to operate unit processes, including any regional CSO treatment/retention facilities listed in this permit, to treat maximum flows while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The wet weather operating plan will establish process control procedures and set points to maintain the stability and efficiency of Biological Nitrogen Removal (BNR) process, if required, for the host WPCP. The wet weather operating plan shall be written in accordance with the NYSDEC publication, Wet Weather Operations & Wet Weather Operating Plan Development for WWTPs, and submitted to the Region 2 Office for review and approval."*

Wet Weather Operating Plans (WWOPs) are required for each WWTP and CSO retention facility. Appendix 4 summarizes the latest dates that WWOPs for each WWTP were submitted to DEC. In accordance with the 2014 CSO BMP Order on Consent, Appendix B.4(a), WWOPs for each WWTP were resubmitted to DEC in December 2014.

Combined Sewer Overflows Annual Report Checklist

To the second question in Section 5 of the Wet Weather Operating Plan (WWOP), "In the past year, did treatment of wet weather flows cause any effluent violations or destabilize treatment upon return to normal service?" DEP answered "Yes." In the past year, effluent violations have been reported for parameters such as daily maximum total suspended solids (TSS) concentrations, 7-day maximum fecal coliform geometric mean, and daily maximum cyanide loading, at various WWTPs. Elevated flows due to wet weather can result in solids washout from the final clarifiers which can contribute to elevated fecal coliform counts or effluent TSS concentrations. Additionally, high flow values due to wet weather can result in high loadings values (e.g., for cyanide) due to the calculation of loadings which multiplies the concentration by flow and a conversion factor. Please refer to the monthly Discharge Monitoring Report submittals for specific information.

The seventh question in Section 5 of the WWOP is, "Does the plant identify the maximum flows through preliminary, primary, secondary treatment, tertiary, and disinfection units?" DEP answered "No." The WWOPs identify the minimum flow rates through the treatment units, not the maximum flow.

5. Prohibition of Dry Weather Overflow

"Dry weather overflows from the combined sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC Region 2 Office within 24 hours. A written report shall also be submitted within fourteen (14) days of the time the permittee becomes aware of the occurrence. Such reports shall contain the information listed in the General Conditions (Part II), Section 5(b) of the SPDES permit."

DEP's goal is to eliminate dry weather bypasses. As a result of DEP's continuing efforts in this regard, in calendar year 2014 pump station and regulator bypasses remained at low levels.

The occurrence of any dry weather overflow is promptly abated and reported to the DEC Region 2 Office within 24 hours. A written report is also submitted within five (5) days of the confirmed time of occurrence.

Bypasses from the New York City collection system during the reporting period totaled13.56 MG, and are listed in Appendix 5.

A yearly comparison of regulators, pump stations and WWTP's dry weather bypassing is attached in Appendix 5.

In 2014 dry weather bypasses from pump stations and regulators was 0.003% (11.58 MG) of total dry flow (419,614MG) treated by NYC's 14 WWTPs.

Pump station and regulator failures that resulted in bypassing during the calendar year 2014 were categorized by cause and grouped by cause code. Major causes were further sub-coded and identified in more detail. These bypasses were analyzed for trends at particular locations and, as a result, specific locations are being studied for improvements or modifications to reduce future bypassing.

Pump Station Dry Weather Bypassing and Analysis

An evaluation of pumping stations revealed two major causes for bypassing events:

- Electrical Utility and Equipment Failures
- Mechanical Equipment Failures

Electrical Utility and Equipment Failures: (Cause code 2A)

On January 9, 2014 at 8:15 am there was a dry weather bypass at the Conner St. pump station due to a power failure when one of the Consolidated Edison feeders was not working properly. In order to stop the bypass, temporary pumps were used to pump the water, but these pumps were not large enough to stop the entire bypass. The bypass did not completely stop until Consolidated Edison returned power to the feeders at 4:30 pm. Collections workers were notified of the problem by the PS201 Telemetry system. This incident caused the total bypass of 0.367 MG.

Mechanical Equipment Failure: (Cause code 4C)

On February 14, 2014, there was an additional wet weather CSO event due to a pump failure at the Avenue V Pumping Station. The main sewage pumps (MSPs) failed to start due to a fault in the Variable Frequency Drives caused by high temperature readings. The computer room air conditioning (CRAC) units that cool the Variable Frequency Drives were unavailable as the fresh air louver for the CRAC units failed to open. The pump failure at Avenue V Pumping Station resulted in additional wet weather CSO being released from Regulator OH-11 following a rain event with snow melt. Upon discovery of the pump failure, BEDC personnel were alerted and contacted the responsible contractor. The contractor attempted to remedy the situation remotely via a computerized telemetry system. When that effort was unsuccessful the contractor travelled to the site and restored the first MSP to service at 5:30 AM; the two other available MSPs were restored to service at 10 AM. The discharge through Regulator OH-11 ceased at 11:05 AM. BEDC is evaluating the CRAC unit controls and interlocks, including the louver components, to determine if any changes are needed to improve the reliability of the VFD cooling system. BWT first noticed the overflow via the regulator monitoring program and contacted BEDC. The contractor also received a High Wet Well Level alarm notification at 2AM.This incident caused the total bypass of 10.7 MG.

Regulators Dry Weather Bypassing and Analysis

An evaluation of the regulator system revealed that a large percentage of total bypassing was caused by seven events of blockages at regulators and branch interceptors. A recurring reason for bypassing is flooding in regulators, but that accounted for a small percentage of the total bypassing volume.

Regulator Dry Weather Bypassing is categorized as follows:

- Blockages-Regulator, Branch Interceptor
- Flooding, Other
- Miscellaneous. Contractor Error

Blockages remain the most common cause of bypasses from regulators, but because of alarms from the telemetry system, operations personnel is able to respond quickly, keeping the bypass amounts very small.

Blockages: (Cause code 6A,C)

- Six bypass events were caused by blockages as reported to DEC on 01/07/2014,04/09/2014,05/02/2014, 05/21/2014, 08/20/2014, and 11/25/2014, causing bypassing of 0.140 MG.

- One bypass event of 0.006MG was caused by blockage in the Newtown Creek Drainage Area Regulator No.B-05A Branch Interceptor, as reported to DEC on 06/03/2014.

Additional details on the blockages events are listed in **Appendix 5**.

Flooding: Other: (Cause code 8C)

On March 3, 2014, Regulator WIB-67 had a dry weather bypass due to excess water from an open fire hydrant in the drainage area. BWT Communication Center (BWTCC) received a dry weather bypass alarm from the telemetry system at the Regulator WIB-67. BWTCC and contacted the Collections Facilities North (CFN) engineer who traveled to the regulator and confirmed the bypass. An assessment by the engineer revealed extra water coming into the regulator. BWSO was notified and confirmed an open fire hydrant in the area; the hydrant was then closed. BWT and BWSO re-inspected the regulator and confirmed the bypass was abated. A bypass total of 0.338MG was reported to DEC.

Miscellaneous: (Cause code 9B)

On October 16, 2014 a contractor was modifying Regulator TI-13and left two submersible pumps, hydraulic lines and discharge hoses in the regulator chamber causing a blockage. DEP personnel removed the submersible pumps, hoses and debris that were causing the blockage thereby ending the bypass. The BWT CC received an alarm of a possible dry weather bypass and alerted CFN personnel. CFN personnel confirmed the bypassing condition. A total of 0.029MG bypass was reported to DEC on 10/16/2014.

Other Locations Dry Weather Bypassing and Analysis

On January 12, 2014, a DDC contractor (Entech) working on re-lining a section of interceptor downstream of Regulator #HP-2 caused a dry weather bypass into the East River from that regulator. A total of 0.027MG bypass was reported to DEC on 01/17/2014.

On March 13, 2014, Regulator WI-67 had a raw sewage bypass into the Harlem River that was confirmed by CFN personnel. The inspection revealed the branch interceptor has 30% sedimentation in the pipe, the same amount of sediment that was found during the initial inspection of the interceptors performed in November 2011.The incident was discovered by an alarm from the telemetry system. A total of 0.94MG was reported to DEC on 03/18/2014.

On August 14, 2014 there was a raw sewage bypass at Regulator NCB-05Adue to an obstruction in the line between the regulator chamber and the drop-pipe. Collection Facility South (CFS) personnel inspected and found a blockage in the branch interceptor from Regulator NCB-5A.This incident was discovered during normal routine inspections .A bypass total of 0.0058MG was reported to DEC on 08/19/2014.

On August 22, 2014, there was a raw sewage bypass at Regulator NCB-05Adue to a blockage between the regulator chamber and drop pipe. Bypass Item Nos. 5336, 5337, and 5339 are believed to have been caused by debris allowed to enter the sewer system at a nearby construction site. This incident was discovered by Collection Facilities South (CFS) personnel performing a follow-up inspection. A bypass total of 0.0019MG was reported to DEC on 08/27/2014.

Additional details on the events, yearly comparisons and Reports of Non-Compliance Event are listed in **Appendix 5**.

6. Industrial Pretreatment

"The approved Industrial Pretreatment Program shall consider the impacts of discharges of toxic pollutants from unregulated, relocated, or new SIUs tributary to CSOs that were not identified in the report entitled, CSO Abatement in the City of New York: Report on Meeting the Nine Minimum CSO Control Standards. @ The approved Industrial Pretreatment Program shall consider CSOs in the calculation of local limits for indirect discharges. Discharge of persistent toxics upstream of CSOs will be in accordance with guidance under (NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.3.8, New Discharges to POTWs. For industrial operations characterized by use of batch discharge, consideration shall be given to the feasibility of a schedule of discharge during conditions of no CSO. For industrial discharges characterized by continuous discharge, consideration must be given to the collection system capacity to maximize delivery of waste to the treatment plant. Non-contact cooling water should be excluded from the combined system to the maximum extent practicable. Direct discharges of cooling water must apply for a SPDES permit. To the maximum extent practicable, consideration shall be given to maximize the capture of industrial waste containing toxic pollutants and this wastewater should be given priority over residential/commercial service areas for capture and treatment by the POTW. These factors shall be considered in the location and siting of new industrial users with preference to service by areas not tributary to CSOs or having sufficient capacity to deliver all industrial wastewater during all conditions to the POTW. "

This program continues as described in last year's report. Attached in Appendix 6 Exhibit 1 is the letter to industrial users amending permit number and a graph of trends in metals loading to New York City WWTPs. In 2014 the average total metals discharged by all regulated industries to the NYC Wastewater Treatment Plants (WWTPs) was 12.2lb/day. The total amount of metals being discharged by regulated IUs remains very low. If the same percentage of CSO bypass (1.5%) from the CSO report is applied to the current data, then on average, approximately0.18lb/day of total metals from year 2014 regulated industries was included in CSO bypasses. Over the years, the total amount of metals being discharged by regulated IUs has declined. It should be noted that in Appendix 6, the total metals loading for 1997 – 2009 and 2012 were calculated based on monthly metal sampling and the remaining years were calculated based on annual priority pollutant scans. A list of regulated IU's, average daily wastewater discharge flows and average pollutant loadings are summarized in the 2014 IPP Progress Report.

7. Control of Floatable and Settleable Solids

The discharge of floating solids, oil and grease, or solids of sewage origin which cause deposition in the receiving waters, is a violation of the NYS Narrative Water Quality Standards. The permittee shall implement the following best management practices in order to eliminate or minimize the discharge of these substances:

7a. ***Catch Basin Repair and Maintenance*** *- The permittee shall inspect each catch basin in the tributary collection system a minimum of once every 36 months in accordance with a schedule to be outlined in the first annual CSO BMP report. Catch basins will be cleaned as required based on these inspections and in accordance with the permittee's criteria for catch basin cleaning. The permittee shall replace missing or damaged catch basin hoods within 90 days after the date of inspection for basins known to be hooded upon completion of the catch basin hooding program. For catch basins that have been identified during the catch basin hooding program, and that shall be listed in the annual report as needing extensive repairs before a hood can be installed, the permittee shall repair the catch basin and install a hood. The permittee shall maintain a schedule of repairing and installing hoods at a minimum of 1,000 catch basins per year and all 7,000 catch basins identified as requiring repair and hoods shall be completed by January 1, 2010. For all future basins found by inspection to require extensive repairs before a hood can be installed, the permittee shall repair and install a hood within 24 months.*

7b. ***Catch Basin Retrofitting*** *- For catch basins that have been designed without a hood or which have been identified as unsuitable for installation of a hood, the permittee shall retrofit the basin with a device to effectively reduce the incidence of street litter from entering the combined sewer. The retrofitting may include replacement of street grating, restriction or elimination of curb cuts, installation of an outlet "90 degree elbow" catch basin sieves, or other device to limit street litter from entering the combined sewer system as approved by the Department.*

Catch basin hooding – an important element of NYC's CSO floatables control program and one of EPA's Nine Minimum Controls can significantly reduce the discharge of street litter to combined sewers, storm sewers and receiving waters. Between 1996 and 1999, DEP conducted an initial catch basin program, including inspection, mapping, cleaning and hooding, where possible, of all catch basins in the City. The program was required for certain areas of the City as prescribed in a 1992 CSO Consent Order but was voluntarily extended by DEP as a City-wide program. This program identified approximately 50% of catch basins as missing hoods. As a result of the

program, the City's catch basin hooding coverage was increased to approximately 85% at the conclusion of the program in 1999. As of April 30, 2010, all work identified during the catch basin hooding program at locations requiring extensive repairs before a hood could be installed was completed. The City now tracks catch basin maintenance and repair activities through Hansen, a complaint and work order management system.

Sections 7.1 and 7.2 summarize the inspections, hooding, repair, reconstruction, and retrofitting completed in 2014. The information used to assess the reconstruction originates from DEP's Hansen system and data on catch basin inspections that are conducted by BWSO.

7.1 CATCH BASIN POST-INSPECTION AND HOODING SCHEDULE

Since the completion of the initial program in 1999, catch basin inspection and hooding continued in what is referred to as the "post-inspection" program conducted on a three-year cycle for all areas of the City. The current post-inspection schedule is presented in Table 7.1-1: "Post- Inspection Schedule" in Appendix 7. (DEP BWSO)

Inspections and Cleaning

The provisions of the SPDES permits require that DEP "shall inspect each catch basin in the tributary collection system a minimum of once every 36 months in accordance with a schedule to be outlined in the first annual CSO BMP report." As per the 2003 CSO BMP report, that schedule commenced in October 2002. As reported in the 2009 CSO BMP report, a new post-inspection schedule was presented. As reported in the 2012 CSO BMP report, an updated "Post Inspection" schedule was submitted to reflect new timelines. This current schedule can be found in Appendix 7.

Catch basin maintenance and repair work is a major focus of BWSO daily activities, and BWSO devotes significant resources to these tasks both as part the of programmatic three-year cycle and in response to complaints from the public. BWSO tracks inspection progress in several ways: by Community Board, by managing progress towards the target of inspecting one-third of the catch basins annually, by reviewing the number of basins inspected and cleaned on a regular basis, and by ensuring timely response to any issues reported by the public.

In 2014, 41,337 programmatic catch basin inspections were completed. DEP also cleaned 33,637 catch basins in 2014. Catch basin cleaning is performed both in response to a complaint and on a proactive cleaning schedule. Table 7.1-2: "CY 2014 Catch Basin (CB)Survey& Cleaning" presents a summary of catch basin cleaning as a result of the post-inspection program and other routine maintenance activities during 2014 for each borough. These data are based on Hansen system data retrievals for activities that included catch basin surveys and cleaning.

Hood Replacements

The provisions of the SPDES permits require that DEP *"shall replace missing or damaged catch basin hoods within 90 days after the date of the inspection for the basins known to be hooded upon completion of the catch basin hooding program."*

In 2014, DEP hooded 398 catch basins; seven replacements exceeded the 90-day period from the date of inspection. Overall, the average time to install a hood was 17.63 days – significantly lower than the 90-day period allotted.

Tables 7.1-3: CY 2014 Catch Basin Hooding, present a summary of hoods replaced during 2014 for each WWTP drainage area. These data are based on Hansen System data retrievals for repair activities that included hooding.

7.2 CATCH BASIN RETROFITTING, REPAIR AND RECONSTRUCTION

The SPDES permit provisions require that any retrofits for hooding compliance had to be completed by April 1, 2008. The SPDES provisions also require that catch basins requiring extensive repairs before a hood could be installed had to be hooded by January 2010.[1] Pursuant to the SPDES permit, BWSO has used three categories of work to achieve compliance with these requirements: retrofit, repair and reconstruction. As used in this report, these categories are defined as follows:

- Retrofit:[2] As defined in the SPDES permits and previous BMP reports, "retrofitting may include the replacement of street grating; restriction or elimination of curb cuts; installation of an outlet, 90-degree elbow,' catch basin sieves, or other device to limit street litter from entering the combined sewer system as approved by the Department." For practicality and efficiency, the retrofit that DEP has used for compliance with the retrofitting requirement is the restriction (closure or absence) of catch basin curb cuts (curb inlet or curb piece). This action is consistent with the WWTP SPDES permits which recognize that absence or closure of the catch basin curb inlet is an appropriate retrofit that minimizes the amount of street debris entering the basins.

- Repair: The repair category refers to catch basin work done by DEP in-house resources to allow a basin to accept a hood when it cannot in its existing condition do so. Specifically, repairs refer to basin rehabilitation activities including brick work on portions of the basin,

[1] "*The permittees hall maintain a schedule of repairing and installing hoods at a minimum of 1,000 per year and all*

[2] The definitions have been included to explicitly address the DEC December 1, 2008 comments to "clarify" and "distinguish between retrofits, repairs and reconstruction."

and/or replacement or rehabilitation of particular components of the basin. In the repairs category, the existing catch basin structure and footprint remain largely unchanged.

- Reconstruction: The reconstruction category refers to the complete reconstruction of the basin, including the removal of the existing basin structure, excavation or placement of fill if needed to change the elevation of the basin or reconfigure the basin's connection to the sewer and the construction of an entirely new basin structure that meets all current design standards.

Catch Basin Retrofit and Repair 2014 Work

In the 2010 Report, DEP confirmed that all of the remaining catch basins that were initially identified as requiring extensive repairs before a hood could be installed were repaired by April 30, 2010.

"For all future basins that have found by inspection to require extensive repairs before a hood can be installed, the permittee shall repair and install a hood within 24 months."

The status of these basins is carefully monitored through DEP's Hansen system to ensure compliance within the allotted time period.

7. C. ***Booming, Skimming and Netting*** *- "The permittee shall operate and maintain the floatable containment boom (or floatable containment netting) as applicable for the CSO outfalls listed in this permit. The in-water containment boom shall be inspected within 48 hours of a confirmed CSO event and, if necessary, cleared of floating debris. The permittee shall visually inspect floatable containment netting on a weekly basis and shall replace damaged or full netting bags as necessary."*

DEP maintains 23 permanent and one temporary floatable containment facilities serving stormwater and combined sewer drainage areas totaling approximately 60,000 acres. The temporary CSO boom at the Gowanus Canal is currently operated by a DEP-BEDC contractor.

Floatable containment site locations and offloading facilities are depicted in **Figure 7-2**.

The floatable materials contained by the boom and net sites are retrieved by four, City-owned skimmer vessels. Offloading currently occurs at two DEP WWTPs. The skimmer vessels are operated by a DEP contractor. The contractor also provides containment site inspection, maintenance and repair and vessel maintenance and repair services.

Skimmer vessels are dispatched to retrieve floatables from booms and nets based on inspections conducted with small vessels within 24 to 48 hours of significant rain events. The inspection vessels are also equipped with hand netting tools in order to retrieve small

amounts of floatables, so that the skimmer vessel use is more focused on containment sites with large amounts of floatables. In dry weather, boom and net inspections occur at least weekly and may occur more often for certain sites where specific tide and wind conditions may cause debris to accumulate outside of rain events.

In 2014, 437.75 cubic yards of floatable material were retrieved from the 24 containment facilities.

Total floatable recovery per each year is provided in **Figure 7-3** and in **Appendix 7C**, **Table 7C-1**.

Floatable recovery totals for 2014 per each of the boom and net sites are included in **Appendix 7C**, **Table 7C-2**.

DEP currently has two self-propelled skimmer vessels (Aquarius Systems Custom Model HSTH235 - High Speed Trash Hunter) and two old vintage skimmer vessels which require towing. **Table 7C-3** reflects DEP CSO Floatable Removal Program Via Skimmer Vessels – Collection Summary (Cubic Yards).

Figure 7-4. DEP Skimmer Vessel "Shearwater"

7.d.1 Keep New York City Beautiful Campaign (transitioned from the Street-Litter Working Group)

In 2014, the *Keep New York City Beautiful* organization remained active, focusing on Citywide community-improvement programs such as litter prevention, neighborhood clean-ups, urban greenspace initiatives, tree plantings, and other activities. For a detailed description and history of *Keep New York City Beautiful*, please refer to the CY2008 CSO BMP Annual Report. The following table presents a summary of *Keep New York City Beautiful* activities and impacts during 2014. Through these activities and initiatives, *Keep New York City Beautiful* programs not only increased the public's awareness of the impact of littering, but also directly reduced

litter and rainfall runoff through community cleanups and tree planting, all of which works to reduce CSOs and their impacts on New YorkHarbor.

***Keep New York City Beautiful* - 2014 Activities**
Together with partners from the EPA, NYC Departments of Sanitation (DSNY) and Parks (DPR), and the NY Aquarium, DEP launched the 2014 Clean Streets=Clean Beaches campaign with an event at MCU Park in Coney Island on July 8, showcasing a new poster and other outreach materials, The poster appeared on all DSNY sweepers and collection vehicles as well.
DEP enhanced the collection of floatable litter by conducting cleanups through a DEP initiative, including a Summer 2014 cleanup, which ran every day for six weeks removing approximately 927 bags of trash and filling 390 recycling bags from locations in Brooklyn, Queens, Staten Island and the Bronx.
DEP continued its Water-On-the-Go (WOTG) program by setting up 279 fountains at 28 locations during a 75 day period. WOTG provided free, easy access to clean NYC drinking water for hundreds of thousands of people. **Other Citywide cleanup and beautification efforts include:** **EVENTS** 1. **#** of events held: **47** 2. **#** of volunteers: **4,372** 3. **#** of volunteer hours: **192** **EVENT ACCOMPLISHMENTS** 4. Pounds of litter & debris collected: (1 bag of litter = est. 20 lbs.): **25,500** 5. Acres of land impacted/cleaned: **115** 6. Miles of waterways cleaned: **25**

7. of illegal dump sites cleaned: **975**

8. Number of bags of newspaper recycled : **59,200,000**
9. Numberof tires collected for recycling
(1 tire=24 lbs.): **17,300**
10. Number of tonnage of electronics collected: **55,000**

11. Number of trees planted: **99,130**

EDUCATION:

12. Number of training workshops held: **320**

Number of people in attendance: **7,200**

(at above workshops)

7.d.2 Development of BMP's for the Automotive Industries

DEP continued this program and completed the Automotive booklet in 2014. For a full description of this work, please see the CY 2012 CSO BMP Annual Report.

The "Smart Auto Body, Auto Repair, and Dismantling" Booklet was printed and distributed to major automobile associations in December 2013. It provides auto body, auto repair, and auto salvage and dismantling businesses in NYC with a serviceable and easy-to-use guide for complying with city, state and federal permitting requirements, environmental rules and regulations, and best management practices that are applicable to the Automotive Industry in New York City. Please see the list of automobile associations and auto dealers below to whom were sent copies of the Guide. The Guide also appears on the DEP website: www.nyc.gov/dep.

1)	Gasoline & Automotive Service Dealers Assn. (GASDA), Inwood, NY	100 copies
2)	Long Island Gasoline Retailers Assn. & Allied Trades (LIGRA), Melville, NY (They will send Guide to approx. 200 members)	20 copies
3)	United Auto Merchants Assn., Bronx, NY	100 copies
4)	NY Towing Auto Body & Salvage Assn. aka TABS Consulting, Brooklyn, NY	100 copies
5)	NYS Assn. of Service Stations & Repair Shops Albany, NY	100 copies
6)	Service Stations Dealers of Greater NY Mamaroneck, NY	150 copies
7)	Greater NY Auto Dealers Assn., Whitestone, NY	50 copies
8)	NYS Auto Dealers Assn., Albany, NY	

9) Automotive Craftsman's Guild 40 copies
Staten Island, NY

7.d.3. Development of a New Creek, South Beach, and Oakwood Beach Bluebelt

In 2014, DEP continued its development of the Staten Island Bluebelt system (see Figure right) with an expansion of the Bluebelt program in the New Creek, South Beach and Oakwood Beach sections of Staten Island. For a full description of the Bluebelt programs, please see the CY2009 CSO BMP Annual Report. The following sections describe the status of the programs.

Adopt-a-Bluebelt – This program continued in 2014. The total number of sites adopted and maintained by local community groups, companies, or individuals is 108, covering an area of 32,800 square feet.

Volunteer Cleanups – In 2014, probationers from the NYC Department of Probation and the Federal Community Service Program for Probationers contributed 207 days and 70 hours, respectively, to Bluebelt cleanup efforts.

Catch Basin Outreach and Education – DEP continued catch basin outreach and education.

Floatable Control – Trash booms are cleaned regularly by DEP maintenance staff and have significantly reduced floatable discharges into the storm water system and Raritan Bay.

Illegal Dumping Enforcement – This program continued in 2014.

Youth Conservation Corps – This program continued in 2014 in partnership with United Activities Unlimited (UAU) and the Summer Youth Employment Program (SYEP) in Staten Island. The YCC program's duration was from July 8 to August 16 and worked with four students in an effort to build community support and stewardship specifically in the management of invasive and exotic plant species of the Bluebelt.

7.d.4 Development of an Expanded Grease Interceptor Program

DEP continues to develop the Expanded Grease Trap Program. For a detailed description of this program, please see the CY2014 CSO BMP Annual Report. The following summarized activities during calendar year 2014:

- 1369 initial inspections were performed
- 2808 follow ups / maintenance inspections were performed
- 1950 Commissioner's Orders were issued
- 1080 Notices of Violation were issued,
- 2878 new grease interceptor installations were required

In addition, the Bureau of Public Affairs (BPA) – Economic Development Unit (EDU) completed the following activities in 2014:

EDU conducted 232 door-to-door visits, during which 228 food service establishments were invited to local meetings on proper grease management, and, in conjunction with BWT conducted three workshops for the hospitality industry, 13 workshops for property managers/residents and one workshop (each) for a civic group and a plumbing trade group to educate them on grease compliance issues. EDU also distributed an article (through a major hospitality association) to approximately 1200 professionals. Approximately 1088 mailings such as "Cease the Grease" posters & flyers, grease compliance information, and grease interceptor logs were provided to various parties including restaurants, property managers, and residents. EDU also attended eight trade shows where grease awareness literature was distributed.

7.d.5 Implementation of a Requirement for Significant Industrial Users to Hold Their Process Wastewater and Non-contact Cooling Water to the Maximum Extent Practicable During Heavy Rains

In 2014, DEP continued to implement this requirement for Significant Industrial Users (SIUs). Please see the CY2009 CSO BMP Annual Report for more details about this program. Additional information may be found in Section 7.d.7.3 – Industrial Pretreatment and in Appendix 6.

7.d.6 The Educational Campaign Program to Reduce Littering Behavior

In 2014, DEP continued to educate the public and raise awareness about the NYCwastewater treatment and water supply systems, floatable reduction, proper disposal of grease, green infrastructure, and water conservation. DEP developed, through its BPA, a comprehensive education and outreach program featuring:

- School Programs
- Visitor Center at Newtown Creek Programs
- Professional Development for formal and non-formal educators
- Special education programs and events

- Public Exhibitions
- Public Event-Based Programs
- Multi-Media
- Volunteer Programs
- Publications
- Promotional Items
- Website

The following sections describe the status of these programs during 2014. For a full description of these programs, please see the CY2009 CSO BMP Annual Report.

7.d.6.1 School Programs

BPA's school programs continued to reach thousands of young people and adults in 2014. For a description of the specific elements of these programs, please see the 2008 CSO BMP Annual Report. Some specific examples of these programs that occurred in 2014 are presented below.

7.d.6.1. 1 Education



In 2014, DEP conducted hundreds of educational programs with young people and adults through ongoing school visits, field trips, Visitor Center at Newtown Creek programs, career days, science fairs, teacher workshops, and other educational programs and events. Education materials, including background information about NYC's wastewater treatment and water supply systems, lesson plans and student activities, and education resource guides were also distributed to thousands of recipients throughout NYC. Detailed information on these programs is available from BPA's Education Office and on DEP's Website.

The Visitor Center at Newtown Creek, located at the Newtown Creek WWTP in Greenpoint, Brooklyn, provides an important program through which young people and adults learn about NYC's water supply and wastewater treatment systems, including infrastructure, green solutions to stormwater management, harbor water monitoring and anti-littering campaigns, proper disposal of grease, and ways to become effective stewards of the environment. The Visitor Center provides

the setting for DEP educators to present hands-on, multi-disciplinary lessons for grades pre-kindergarten through college, aligning, as appropriate, with Common Core State Standards. The Visitor Center, filled with interpretive exhibits, is open to school groups five days a week for programs and teacher workshops. A new exhibit about green roofs and stormwater management was added to the popular dollhouse exhibit.

In May 2014, DEP conducted its 28th Annual Water Resources Art & Poetry award ceremony, to recognize students' knowledge of the city's valuable water resources through their creative expression using art and poetry. Approximately 900 second through 12th grade students from NYC and watershed public, charter, independent, and parochial schools participated in the program. Students submitted entries online where their poetry, photographs, digital art, paintings, and crafts are featured on DEP's website. An award ceremony was held at Tribeca Performing Arts Center, where DEP honored the hundreds of students, in the presence of family, teachers and school principals, for their outstanding work featuring environmental themes.


In 2014, DEP continued to collaborate with Trout Unlimited with the Trout in the Classroom (TIC) program, a watershed environmental education initiative for elementary through high-school students. In October, more than 150 educators from NYC and the East and West of Hudson watersheds attended the Fall TIC Teacher Conference, where they participated in workshops presented by DEP professionals and veteran TIC teachers. Trout eggs, distributed by DEC, were hatched and raised by students in more than 120 classrooms (serving approximately 6,000 students) in NYC and the East and West of Hudson watersheds. In the spring, more than 1,600 NYC students released their trout into watershed streams and participated in hands-on activities focusing on water stewardship.

Throughout the year, DEP hosted additional professional development workshops for formal and non-formal educators with the NYC Department of Education (DOE) and their more than 1000 Sustainability Coordinators. Workshops were also conducted with NYS Parks, Materials for the Arts, Queens Museum, Environmental Education Advisory Council, Watershed Agricultural Council, and other cultural and environmental organizations. Participants learned about creative ways to incorporate the study of water into their curriculum, using activities and background information focusing on NYC's water resources and stewardship opportunities. DEP also

partnered once again with Groundswell on a New York water mural. Located in Greenpoint, Brooklyn, this major project was implemented by high school students who spent the summer learning about NYC's water resources prior to designing and painting their mural.

7.d.6.2 Publications

In 2014, DEP expanded the notification process concerning availability of the 2013 Drinking Water Supply and Quality Statement. The agency sent postcards to all of its approximately 840,000 bill-paying customers notifying them of the report's availability on the DEP website, and distributed approximately 8,800 hard copies as follows:

- 4,500 copies of the 2013 Report were sent to NYC libraries.
- More than 1,000 copies of the 2013 Report were distributed to teachers and administrators in public, private and parochial schools throughout NYC.
- Copies of the 2013 Report were distributed throughout the five boroughs at community and civic association meetings, outreach events (including trade shows, Greenmarkets, health fairs and street fairs), town halls, and project tours.

- Copies of the 2013 Report were distributed at West and East of Hudson Watershed events, and in NYC, at all DEP-sponsored tabling events and DEP speaking engagements, and to the general public upon request.

In 2014, DEP continued its on-going education outreach efforts through its presence with its Water-On-the-Go (WOTG) program at highly visible locations throughout the city. 279 WOTG fountains were set up at 28 locations during a 75-day period. These fountains provided free, easy access to clean NYC drinking water for hundreds of thousands of people. The fountains were staffed by City Seasonal Aides who served as Ambassadors to the public and were on site to give facts on the benefits of tap water vs. bottled water. The presence at public events and Greenmarkets gave DEP WOTG Outreach Ambassadors the opportunity to interface with the public and respond to questions from the public, as well as to distribute useful promotional items and educational literature that helped to reinforce the message. The staffers performed outreach with the WOTG program from June through Labor Day weekend.

The WOTG Outreach Ambassadors also raised awareness of Clean Streets = Clean Beaches and helped reduce floatables by distributing reusable, BPA-free NYC Water bottles; they encouraged the public to fill the bottles with tap water at the WOTG fountains instead of purchasing bottled water.

In July, DEP partnered with the NYC DSNY, Parks and Recreation (DPR), and Youth and Community Development as well as with EPA Region 2 to launch the 2014 "Clean Streets = Clean Beaches" program, a public information campaign and beach clean-up program aimed at improving the cleanliness and aesthetics of NYC beaches by reducing littering. When it rains, trash and debris discarded on city streets and sidewalks wash down storm drains and can end up on beaches. "Clean Streets = Clean Beaches" posters appear on DSNY vehicles citywide. In addition, in July and August, DEP joined with the Department of Youth and Community Development to clean streets still suffering the effects of Hurricane Sandy. The program was launched at MCU Park in Coney Island, home of the Brooklyn Cyclones, where staff distributed "Clean Streets = Clean Beaches" flyer toys to approximately 5,000 children from area day camps and the City's Summer Youth Employment Program who were attending the Cyclones game. During Summer 2014, the Clean Streets = Clean Beaches teams picked up 927 bags of trash and 390 bags of recycling.

7.d.6.3 Future Actions

In 2015, DEP will continue to engage in and support programs that address CSOs and floatable-litter reduction. For a full description of the Public Education programs, please see the CY2009 CSO BMP Annual Report. The following section describes the status of these programs.

7.d.6.3.1 **Program Continuation**

In 2015, DEP will continue its engagement with the programs described earlier in this Section (and in the CY2009 CSO BMP Annual Report) using the successful approach used since 2000.

The following describes for 2015 notable plans for several programs:

- School Programs: In 2015, DEP will expand the Water Resources Art and Poetry Contest to include a new, extremely relevant theme, Climate Change. Themes currently include the importance of New York Harbor, where our water comes from, how the City's wastewater is treated, green solutions to managing stormwater, and stewardship activities such as anti-littering, proper disposal of grease, and water conservation. School programs will increase, presentations at the Visitor Center at Newtown Creek will be enhanced, and more professional development for educators will be conducted. Additional collaborative programs will take place at the Queens Museum where DEP's model of the watersheds is located. DEP's grease awareness campaign will continue in schools citywide and in new target communities. A new green-infrastructure online education module for students and teachers will be launched during the winter of 2015. A new water-related mural developed in partnership with Groundswell and Row NY will be created by high school students and displayed throughout NYC, with particular emphasis on local water bodies.

- Publications: Documents that will receive updates in 2015 include the New York Harbor Water Quality Report and the Drinking Water Supply and Quality Report.

7.d.6.4 Conclusions

DEP currently manages an extensive education and outreach program that targets NYC students, teachers, parents, school administrators, curriculum specialists, non-formal educators, residents, community organizations, businesses, and visitors and internet users. The program is supported through the Visitor Center at Newtown Creek and the Newtown Creek Nature Walk, outreach events at schools and public events, multi-media promotion, exhibitions, publications, promotional item distribution, and the DEP website. In 2015, DEP plans to continue these programs and to expand outreach at the Visitor Center at Newtown Creek.

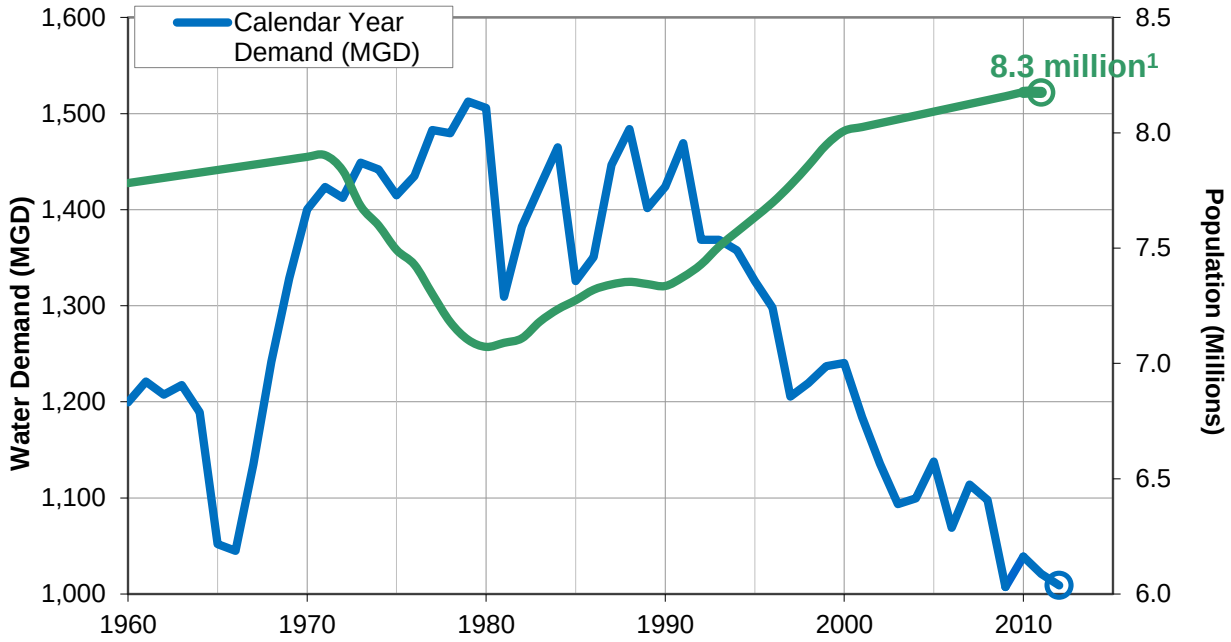
7.d.7 Pollution Prevention Activities Undertaken By DEP and/or Other City Entities

7.d.7.1 **Pollution Prevention**

- Economic Development Unit
  - Compliance Assistance
  - Green Business Development
  - Business Development
  - Financial Referrals & Incentives
  - Regulatory Reform
  - Infrastructure Assistance

7.d.7.2 – Water Conservation

DEP values the role of water conservation and demand management in the responsible long-term management of NYC's water supply. As a result, despite consistent increases in population, actual water demand is down more than 30% since the 1990s. With predictions of warmer temperatures and greater variability in precipitation due to climate change, however, DEP must consider in its management of the City's water supply such increasing uncertainty and the corresponding demand for this resource. Further, the leaking of the Delaware Aqueduct and its planned shut-down and repair in 2022 as part of DEP's Water for the Future Program is a near-term certain event that provides an imperative not only to proactively manage, but also to explicitly reduce, existing water demand in order to ensure adequate water supply through this period.



7.d.7.2.1 – Program Description

DEP's water conservation efforts aim to reduce water use in New York City and upstate communitiesby5% or 50 million gallons of water per dayfromthe2012demand level by the year 2020. This is equal to a reduction of approximately 50 million gallons of water per day. The Water

Demand Management Plan sets forth the five major strategies that DEP will implement to reduce water use.

- Municipal Water Efficiency Program, which involves retrofits of city-owned properties. This program will save up to nine million gallons of water per day.

- Residential Water Efficiency Program, which focuses primarily on the Toilet Replacement Program for multi-family buildings and other residential properties. This program will save up to 30 million gallons per day.

- Non-Residential Water Efficiency Program, involving collaboration with private sector organizations like businesses, hospitals, universities and theaters.

- Water Distribution System Optimization, entailing system repairs and upgrades, managing water pressure, and refining water meter accuracy and leak detection.

- Water Supply Shortage Management, which encompasses the review and revision of plans to prepare for a drought and other water shortages.

- Upstate Wholesale Customers Demand Management Program, which targets demand management planning and implementation for the wholesale customers north of NYC. This program will save five million gallons a day.

The following paragraphs summarize the progress DEP has made during2013 in designing and implementing efforts to suppor teach of the strategies listed above.

Municipal Water Efficiency Program

DEP made significant strides in this program, establishing working partnerships with two key municipal agencies—the NYC Department of Education(DOE)and the NYC Department of Parks and Recreation (DPR)—and executing 270 individual retrofit projects, by replacing running spray showers with push button activated ones. In addition two large recreation centers will have updated bathrooms and plumbing to reduce water consumption. Through its new partnership with the DOE, DEP funded the replacement of over 12,300 old toilets and urinals with high-efficiency fixtures in 129 in all five boroughs which will be complete by FY15. Through a new partnership with the City University of New York, DEP funded the replacement of over 300 old toilets and urinals at the City College of New York campus. Through a partnership with the New York City Fire Department (FDNY), DEP is funding a water recycling capital project for training exercises at the FDNY Chauffer School on Randall's Island. And finally, DEP has kicked off its second Water Challenge to Waste Water

Treatment Plants to encourage water reduction in house. As part of this program DEP will be replacing water hoses used to clean equipment at every plant with high efficient ones, reducing the amount of water used at every plant.

Residential Water Efficiency Program

In early 2014 the finishing touches were made to the project management framework and the contract partners were registered and trained. There was a pilot launch in July 2014, to 1000 eligible accounts so as to test the system. The full program launch occurred soon after, in early August 2014 and incorporated all eligible 10,300 accounts. This program offers $125 vouchers to eligible building owners who are part of the Multi-Family Conservation Program to replace old, inefficient toilets with high-efficiency, Water Sense-certified toilets. DEP has contracted sixtoiletwholesalevendorstoacceptthevouchersandprovidethetoilets to consumers, through the program's online application tool.

Originally, the program was conceived to have a parallel toilet recycling program which would accept the discarded fixtures and process them into aggregate for bioswales and sidewalks. In 2014 the City Council passed a policy further restricting the amount of construction and demolition (C&D) waste that can be processed in NYC facilities. As a result it is now less financially feasible for C&D facilities to take on the toilet recycling program. Currently, the feasibility of working with another city agency is being explored.

In addition to establishing the Toilet Replacement Program, DEP directed its contractor to provide complimentary household water surveys to building owners to promote water conservation at their properties.Thesurveyshelpthebuildingownersidentifyopportunitiesforwatersavings, as well as any leaks which may exist. In2014, the contractor conducted surveys in 12,934 individual apartments in 524 apartment buildings. It also surveyed 2,061 1-3 unit properties, and 6,792 individual units within these properties. While residential properties are the primary focus of this service, 130 small commercial properties and 29 restaurants were also surveyed in 2014.

Non-Residential Water Efficiency Program

The 2014 Mayor's Water Challenge to Hotels concluded in May, four hotels managed to reduce their demand by the targeted 5%. The four hotels were so successful in implementing their Water Conservation Plant that they managed to surpass the 5% goal and save more than 10% over the previous one year period. Building upon the success of the 2014 Mayor's Water Challenge to Hotels, in November 2014 DEP officially launched an initiative in partnership with US EPA, the Mayor's Office, the New York State Restaurant Association, and30NYC restaurants called The New York City Water Challenge to Restaurants. As with the last challenge, participating restaurants are encouraged to reduce their annual water consumption by an average of 5% from

their baseline year (measured as the 12-month period prior to the beginning of the Challenge). As part of the Challenge, DEP will host quarterly workshops to help participating restaurants learn how to make their facilities more water efficient. DEP also prepares monthly reports for participants to help them track their own consumption and their performance against the other restaurants in the Challenge. The Challenge is set to conclude in December 2015.

Water Distribution System Optimization

Water Distribution System Optimization entails system repairs and upgrades, managing water pressure, and refining water meter accuracy and leak detection. In 2014, DEP surveyed 3,866 miles of water mains for leaks; as a result of leaks proactively found and repaired, DEP estimates that 0.891 million gallons of water per day were saved. In addition, DEP recently implemented a more strategic approach to leak detection. In this new approach, local, borough-based teams properly trained in leak detection efforts target specific areas known to be served with older network mains that are more likely to need both preventive and corrective maintenance. These teams are able to respond rapidly to any identified problems, as opposed to the slower response times experienced in many locations when DEP relied upon one consolidated resource center.

Leaking and/or vandalized fire hydrants can also result in significant water waste, as an illegally opened fire hydrant can release more than 1,000 gallons per minute and drop pressure. In 2013, DEP repaired 10,764 hydrants, replaced 1,549, and provided other maintenance services to 5,267 more.

DEP's efforts to achieve universal metering of all DEP water and sewer accounts are motivated both by efforts to reduce non-revenue water and to promote conservation among water users by providing them with accurate information on their consumption. DEP's universal metering initiative is also critical to measuring the success of its many other demand management strategies. Accurate consumption data provided by newly installed or replaced meters enables DEP to determine whether projected reductions in consumption among target consumer groups have been reached, or if not, how demand management strategies may need to be adapted in order to improve their effectiveness. In 2013, DEP replaced 15,100 large meters (over two inches). This is a 50% increase in replacement over the previous year. Others, for a grand total of 10,048 meters, over nine times last year's total.

Water Supply Shortage Management

In 2014, DEP completed a fully revised draft of the Emergency Drought Rules. The draft's proposed regulations address the wider variety of drought and water shortage conditions that New York City could face over the next several years, whether weather-related or otherwise. DEP has proposed that these regulations be referred to as the "Water Shortage Rules," replacing the narrowerfocusofthepreviousstitle.Thedraftrulesarecurrentlyunderreview bytheMayor's Office of Operations and the New York City Law Department. Stakeholders have had an opportunity to

review them, and DEP has begun its review of the draft rules' potential environmental impact. DEP anticipates formal approval of the rules in 2015.

Upstate Wholesale Customers Demand Management Program

In 2014, DEP kicked off the demand management program for wholesale customers located upstate of NYC. These customers make up 10% of the system's current consumption. DEP has started working with the ten largest customers, who account for approximately 85% of the total upstate wholesale consumption to develop demand management plans for their systems, targeting a 5% reduction in consumption.

The more detailed Water Demand Management Plan can be found at:

http://www.nyc.gov/html/dep/pdf/conservation/water-demand-management-plan-single-page.pdf.

Updates to Drought Management Plan

7.d.7.3 Industrial Pretreatment

7.d.7.3.1 Program Description

This program continued in 2014. In 2014, 799 inspections were performed on regulated industries, and 65 Notices of Violation were issued. In 2014 the average total metals discharged by all regulated industries to the NYC Publicly Owned Treatment Works (POTW) was 12.2 lb/day. This corresponds with the trend of declining Industrial User (IU) discharges. If the same percentage of CSO bypass (1.5%) from the CSO report is applied to the current data, then on average, approximately 0.18lb/day of total metals from year 2014 regulated industries will be bypasses to CSOs. Over the years, the total amount of metals being discharged by regulated IUs continues to decline. It should be noted that in Appendix 6, the total metals loading for 1997 – 2009 and 2012 were calculated based on monthly metal sampling and the remaining years were calculated based on annual priority pollutant scans. For a complete description please see CY2009 CSO BMP Annual Report.

7.d.7.3.2 Potential for Improvement/Expansion

As an alternative means of reducing the likelihood of CSOs during storm events, DEP has required that regulated industries IUs hold their process wastewater and non-contact cooling water to the maximum extent practicable during heavy rains. In 2014, 799 IU inspections were performed, and 53 Notices of Violation were issued to IU's.

7.d.7.4 Water & Sewer Permits

Section 7.d.7.4.1 Program Description:

Any connection to a combined, storm or sanitary sewer requires an application for a permit to either make a new connection or repair/relay an existing sewer connection. A condition for Issuance of a permit for a new sewer connection is conditioned upon submission of a Certification of a Site Connection Proposal (SCP) or a House Connection Proposal (HCP). Only a NYC Licensed Master Plumber can apply for a sewer connection permit provided there is a certified HCP/SCP submitted by a NYS Licensed Professional Engineer or Registered Architect.

Section 7.d.7.4.2 Program Justification:

BWSO is responsible for overseeing the sewer permit process and for approving and inspecting water and sewer connections performed by licensed plumbers and/or authorized contractors. The careful review and certification of SCPs and HCPs allow the Department to ascertain whether the amount of sewage entering the collection system conforms to the City's Drainage Plan and whether the sewage generated will be conveyed to the plants for treatment without fear of sewage back-ups.

Section 7.d.7.4.3 Contextual Characterization:

This program is administered in accordance with several provisions in the Administrative Code and the Rules of the City of New York (RCNY), promulgated pursuant to both State and City laws that govern the proper disposal and treatment of wastewater (sewage) in accordance with the Clean Water Act (federal). The rules addressing the connection process can be found in RCNY Title 15, Chapter 31 entitled, "Rules Governing House/Site Connections to the Sewer System."

It is mandated that the physical connection to any city sewer be inspected by DEP inspectors, and that a connection card or "Certificate of Inspection" be generated; this certification is necessary for the property owner to receive a Certificate of Occupancy from the NYC Department of Buildings (DOB). A record of these connections is kept at the BWSO Borough Water & Sewer Records Offices.

7.d.7.5 Bureau of Public Affairs (BPA) Economic Development Unit (EDU) unit - Working with and for the NYC Business Community

BPA EDU's mission is to foster the joint goals of economic development and environmental protection by offering assistance with compliance, best management practices and financing incentives to NYC businesses.

In 2014, EDU continued its core programs ("verticals"), including Compliance Assistance, Green Business Development, Business Development, Financial Referrals & Incentives, Regulatory Reform & Infrastructure Assistance. Through these programs, EDU continued to work with its primary partners including Local Development Corporations (LDCs), Business Improvement Districts (BIDs), Chambers of Commerce, Merchant Associations, and trade associations. DEP provided assistance to these partners via several types of outreach including answering inquiries, making on-site visits, doing dedicated mailings (including via email), and presenting at workshops. In 2014, EDU also continued to enhance compliance with DEP's grease management requirements

through workshops (conducted in conjunction with BWT) and on-site visits to food-service establishments as well as through outreach to NYC property managers. (For further details on EDU's 2014 grease activities see section 7.d.4). EDU also continued to distribute 3 "Business-How-To" videos (produced in conjunction with NYC Media), to restaurants including to NYC "Restaurant Week" participants (see http://on.nyc.gov/howtovideos)

The following table summarizes selected EDU's outreach activities during 2014.

Selected EDU Outreach Program Activities[1] During 2014

Outreach Type	Compliance Assistance	Green Business Development	Business Development/ Financing/Infrastructure/Water Bill/Other	"Consumer Confidence Report" (Water Quality Report)	Total Unique Contacts
Tel./Email/Walk-in Inquiries[2]	115	15	83		207
On-Site Visits	232				232
Dedicated Mailings[3][5]	3682	2148	842	466,415[4]	473,087
Articles	109,200			233,680[4]	342,880
Workshops	48	1	6		55
Trade Shows(all verticals)					8
Grand Total					816,123

(1) Contacts include some primarily non-water related outreach (air compliance, Right-to-Know, etc.)
(2) Includes 6 inquiries counted in ≥ 1 category (e.g., Compliance *and* Green Business)
(3) Includes 1088 counted in Compliance & Green Business
(4) CCR = posters & flyers: estimated 202,789 units @ an estimated 2.3 occupants/unit; Articles: estimated 101,600 units @ 2.3 occupants/unit
(5) Note: mailings to business groups counted as one contact—if passed on to their memberships will result in higher totals than indicated above

7.d.7.7 Stormwater Regulations and Other Activities

Stormwater Rule

DEP's stormwater performance standard ("stormwater rule"), enables the City to manage stormwater runoff more effectively and to maximize the capacity of the City's combined sewer systems to the greatest extent practicable. Promulgated in July 2012, the stormwater rule requires any new house or site connections to the City's combined sewer system to comply with stricter stormwater release rates, effectively requiring greater on-site detention. Since the rule took effect, over 300 sites throughout the City in combined sewer areas have been required to comply with the rule. A key component of PlaNYC and the 2010 NYC Green Infrastructure Plan, the stormwater rule is one of several Green Infrastructure strategies that DEP will continue to track and evaluate as part of DEP's CSO LTCP development process.

In conjunction with the implementation of the new stormwater rule, DEP published a companion document, *Guidelines for the Design and Construction of Stormwater Management Systems*, to assist NYC's development community and licensed professionals in the selection, planning, design and construction of on-site source controls that comply with the new rule. The Stormwater Rule applies to new development or the alteration of an existing development in combined sewer areas of the City. For a new development, the stormwater release rate[1] is required to be 0.25 cubic feet per second (cfs) or 10 percent of the drainage plan allowable flow, whichever is greater.[2]If the allowable flow is less than 0.25 cfs, then the stormwater release rate shall be equal to the allowable flow. For alterations, the stormwater release rate for the altered area will be directly proportional to the ratio of the altered area to the total site area, and no new points of discharge will be permitted.[3] DEP provides regular updates on stormwater rule, particularly on the number of site and house connection proposals affected by storm water performance standard as part of the Annual Green Infrastructure Report (NYC Green Infrastructure Annual Report, 2013)

[1]NYC, N.Y., Rules, Tit. 15, § 31-01(b)
[2]Allowable flow is defined as the storm flow from developments based on existing sewer design criteria that can be released into an existing storm or combined sewer.
[3]NYC, N.Y., Rules, Tit. 15, § 31-03(a)(2)

Green Roof Tax Abatement

In 2013, DEP worked with the Mayor's Office, the Office of Management and Budget, and the Departments of Buildings and Finance, as well as environmental advocates to extend the NYC Green Roof Tax Abatement (which expired in March 2013) for an additional five years. With some modifications, the property tax abatement continues the previous abatement, which was intended to offset some of the costs associated with green roof installation. The tax abatement extension was signed by the Governor in December 2013, and is expected to be adopted into the City Administrative code in 2014.

As part of the extension, the definition of a green roof now includes native and/or agricultural plant species, in response to increased public interest and enthusiasm for locally produced food crops. Additionally, the tax abatement includes an increase to the value of the abatement from $4.50 to $5.23 per square foot and an increase in the abatement value cap from $100,000 to $200,000 to enable larger green roofs (i.e., up to approximately one acre) to receive the full value of the

abatement. Finally, based on the amount allocated for this abatement, the total annual amount available for applicants (i.e., in the aggregate) is $750,000 in the first year, and $1,000,000 in each subsequent year through March 15, 2018. The aggregate amount of abatements will be allocated by the NYC Department of Finance on a pro rata basis.

Parking Lot Stormwater Pilot

First initiated in 2011, DEP's Parking Lot Stormwater Pilot Program generates revenue for operation and maintenance of the City's wastewater system. The program applies a stormwater discharge fee to stand-alone parking lots that contribute runoff to the City's wastewater system, but do not receive (or pay for) City water service. DEP's stormwater charge increased from $0.06 per square foot in 2013 to $0.063 in 2014, to account for rate structure increases. In 2014 DEP billed 557 accounts for $501,882.68. Parking lot owners who implement green infrastructure practices are exempt from the stormwater discharge fee.

7.d.7.9 PlaNYC (Mayor's Office of Sustainability and Office of Recovery and Resiliency)

NYC's sustainability agenda prepares our city for a changing climate, a growing population, aging infrastructure, and an evolving economy with increasing inequality. In order to ensure quality of life for generations of New Yorkers to come, PlaNYC programs help create housing for a growing population, provide clean and reliable energy, and improve transit capacity. The Mayor's Office of Sustainability and the Office of Recovery and Resiliency (ORR) lead the City's sustainability planning effort, leveraging and expanding upon many DEP programs. In 2014, DEP continued to work to meet PlaNYC milestones that improve the quality of our waterways to increase opportunities for recreation and restore coastal ecosystems, and to ensure high quality and reliability of our water supply system.

In March 2014, Mayor Bill de Blasio announced the establishment of ORR to lead the City's efforts to build a stronger, more resilient New York by implementing recommendations laid out in *A Stronger, More Resilient New York*. This plan builds on the foundation of public collaboration and rigorous analysis set forth by PlaNYC. ORR guides the City's work to strengthen coastal defenses, upgrade buildings, protect infrastructure and critical services, and make homes, businesses, and neighborhoods safer and more vibrant. DEP works closely with ORR to incorporate and help implement projects that enhance the City's resiliency including protecting wastewater treatment facilities from storms, improving and expanding drainage infrastructure, and promoting redundancy and flexibility to ensure constant supply of high-quality drinking water.

7.d.7.10 NYC Green Infrastructure Program

The NYC Green Infrastructure Plan was released in September 2010 and lays out a comprehensive strategy to use green infrastructure along with water conservation, system optimization and cost-effective grey infrastructure to improve the quality of the City's waterways. The plan includes a citywide goal of managing one inch of runoff from 10% of impervious surfaces within combined sewer areas by 2030 and interim milestones for green infrastructure implementation including management of 1.5% of impervious surfaces. To achieve these milestones, DEP established the

Office of Green Infrastructure (OGI) in January 2011. In March 2012, DEC and DEP signed a modification to the CSO Order on Consent ("the Order"), which incorporates green infrastructure implementation into the regulatory regime governing CSOs.

Within the City's combined sewer watersheds, OGI has coordinated with the Bureau of Environmental Planning and Analysis (BEPA) and BWT to identify target CSI tributary drainage areas ("target areas"). These target areas represent the wet weather drainage area for the combined sewer outfalls that have the highest volumes, most frequent overflow events, and the worst water quality. OGI has formed partnerships with other city agencies including DPR and Design and Construction (DDC) and the Economic Development Corporation (EDC) to manage Area-Wide Contracts to build Right of Way (ROW) Bioswales, Stormwater Green streets, and ROW Rain Gardens in the public right of way. Built upstream of existing catch basins, these green infrastructure practices manage stormwater flowing along the curb line and capture as much stormwater as possible, diverting it from the catch basins and the larger wastewater system. OGI is also partnering with NYC School Construction Authority (SCA), NYC Department of Education, the non-profit Trust for Public Land, and the NYC Housing Authority (NYCHA) to retrofit City-owned properties with green infrastructure projects such as rain gardens, permeable paving, and subsurface detention where cost-effective.

As per the Order and in consultation with DEC, OGI identified three Neighborhood Demonstration Areas within the priority tributary areas to monitor the effectiveness of green infrastructure systems at scale. Approximately 20 acres each, the Neighborhood Demonstration Areas feature ROW Bioswales, Stormwater Greenstreets, and green infrastructure on NYCHA properties. DEP installed monitoring devices and rain gauges in fall 2011 to gather baseline wet weather flow data within combined sewer pipes. DEP collected and analyzed wet weather flows within the three Demonstration Areas. The data were submitted to DEC in August 2014 in the Post-Construction Monitoring (PCM) report and will inform future performance metrics analysis and modeling efforts estimating CSO reductions.

OGI also manages a robust public engagement program. The Green Infrastructure Grant Program began in 2011 and provides funding for the design and construction of green infrastructure installations on private properties including universities, private schools, businesses, and local organizations in the combined sewer areas of NYC.

DEP also educates and engages with the general public by coordinating an annual Citizens Group meeting, co-hosting the Water Infrastructure Steering Committee meetings, providing construction notification to residents in project areas, and delivering presentations to Community Boards, Elected Officials and local community organizations. OGI has also developed a BioswaleCare program to engage residents living near green infrastructure and train them to become stewardsof the green infrastructure in their neighborhoods.

7.d.7.11 Climate Change Resiliency Planning

Hurricane Sandy demonstrated the risks that NYC faces from storm surge today, and the types of risks that the City may increasingly face as a result of climate change. Even though ten WWTPs and 42 pumping stations were damaged during Sandy, DEP was treating99% of all NYC wastewater within two days of the storm.

The vulnerability to climate change is likely to increase over time, as climate change projections anticipate more extreme storm surge events and continued sea level rise in the next several decades. As such, DEP has taken a proactive stance in assessing its infrastructure vulnerabilities and setting forth a framework to implement protective measures. In October 2013, DEP released the NYC Wastewater Resiliency Plan, the nation's most detailed and comprehensive assessment of the risk climate change poses to a wastewater collection and treatment system. Building upon previous studies, DEP's 2013 citywide risk assessment and adaptation study sets forth a cost-effective strategy for reducing flooding damage to wastewater infrastructure and safeguarding public health and the environment. This comprehensive study examined buildings and infrastructure at DEP's 96 pumping stations and 14 WWTPs, identifying and prioritizing infrastructure that is most at-risk of flood damage. DEP developed a set of cost-effective protective measures that are tailored to each facility to improve resiliency in the face of future flood events. The study revealed a number of key results: All 14 WWTPs and 60% of pumping stations (58 out of 96) are at risk of flood damage. The study estimates that equipment valued at more than one billion dollars is at risk and requires additional protection. The recommended protective measures, totaling $315 million in improvements, are costly but critical. Increased resiliency not only reduces damage costs during a flood event, but also enables rapid recovery of full service following a flood event, prevents sewage backup into homes, and reduces the likelihood of release of untreated sewage into the environment. DEP is implementing the recommended actions to increase resiliency through new design standards and capital projects, and funding through the EPA Storm Mitigation Loan Program and FEMA's Hazard Mitigation Grant Program.

7e. Additional Control of Floatables and Settle able Solids: Floatables Monitoring Program Progress Report

DEP has been tasked through its SPDES permit requirements to implement and maintain a floatables control program as well as a monitoring program to provide a means to assess and measure the effectiveness of the programs. These control and monitoring programs are embodied in the City-Wide Comprehensive CSO Floatables Plan Modified Facility Planning Report (Floatables Plan, July 2005) inclusive of Addendum 1 – Pilot Floatables Monitoring Program Work plan (December 2005).

The Floatables Plan contains a conceptual framework for the monitoring of floatables conditions in the waters of New York Harbor. A pilot program was conducted over the course of 2006 and 2007 to develop and test the monitoring methodology envisioned in the framework, and the full program began in 2008. A progress report, presented in conjunction with the CSO BMP Annual Report under separate cover, describes the progress that DEP has made.

The floatables monitoring program is based on observations of the presence/absence of floatables from monitoring stations throughout the harbor and has developed into one of a number of methods to assess floatables control programs. These basic monitoring data have been used to prioritize and select sites for more comprehensive site-specific investigations focused on priority sites with

persistent poor ratings. The site-specific investigations characterize floatables, identify sources of floatables, correlate rating trends to floatables control programs where applicable, and, in conjunction with CSO LTCP processes, provide the first steps for appropriate remediation planning where feasible.

Since 2006, the program has been grown to monitor most of NYC's regional waters and their near shores and shorelines. NYC DEP Harbor Water Quality Survey (HWQS) and Volunteer Survey Program monitoring stations increased from 25 sites in 2006 to 96 sites in 2014. Over the long term, variations in monitoring sites and locations will likely occur as public participation volunteer interest varies, shoreline cleanup sites change, and HWQS sites change; floatables monitoring at PCM sites will continue to be added as forthcoming LTCP element construction is completed.

As part of the Floatables Monitoring Program, site-specific investigations were conducted for the monitoring sites that had the most persistent poor floatables condition ratings based on monitoring data collected in 2013 (i.e., BS82 Brighton Street, K1 B&O Coal Dock and BS49 Little Neck Bay; see Figure 13). The overarching goal of this year's site-specific investigations was to gain insight into the sources of floatables and other debris at the selected sites in order to inform planning within the framework of the City-wide CSOLTCP. The investigations were able to provide a step toward this goal.

In addition to the floatables controls listed in BMP 7a through 7d, the City engages in a street sweeping program to reduce floatable entry into catch basins and the combined sewer system. The program is administered by DSNY and evaluated through systematic street litter monitoring, known as the "Scorecard Program," conducted by the Mayor's Office of Operations. According to the Scorecard Program, City-wide street litter levels have improved somewhat over the past nine years with clear improvements in the percent acceptable and percent filthy ratings. Scorecard Program results for the past forty years are summarized in Appendix 7 (DEP BWT) Figure 7-

8. Combined Sewer System Replacement

> *"Replacement of combined sewers shall not be designed or constructed unless approved by NYS Department Of Health and specified in the NYCDEP Master Plan for Sewers and Drainage. When replacement of a combined sewer is necessary it shall be replaced by separate sanitary and storm sewers to the greatest extent possible. These separate sanitary and storm sewers shall be designed and constructed simultaneously but without interconnections to maximum extent practicable. When combined sewers are replaced, the design should contain cross sections which provide sewage velocities which prevent deposition of organic solids during low flow conditions."*

Combined Sewer System Replacements are done in conformance with the Master Plan for Sewers and Drainage, NYCDEP, 1985 and approved by NYS Department of Health (DOH).

DEP has finalized the design of a comprehensive amended Drainage Plan in Fresh Creek/26th Ward drainage area. In accordance with the Master Plan for Sewers and Drainage, one of the components is the Drainage Plan design of a "high level" storm sewer (HLSS) system in this combined sewer area in Brooklyn. DEP has initiated a series of capital projects to implement these plans, done pursuant to CSO order 602-20110512-25. Once built, they will allow for a reduction in CSO volume, which will improve water quality in Fresh Creek. The first two (2) projects, SE-851 and SE852, are in final design, with an anticipated completion in Spring 2015.

DEP has also proposed HLSS in the Gowanus area of Brooklyn. The project is proposed in two (2) phases. The area covered by this project currently consists of combined storm and sanitary sewers that are directed to the Red Hook and Owl's Head WWTP areas, and drain to Gowanus Canal during periods of overflow. Phase I of the HLSS Corridor consists of the entire length of Denton Place between 1st Street and Carroll Street, Carroll Street from the Gowanus Canal to 4th Avenue, 3rd Avenue between Carroll Street and Douglass Street and President, Union, Sackett and Degraw Streets between 3rd Avenue and 4th Avenue in Brooklyn, New York. Phase II of the HLSS Corridor continues northward including Douglas Street, Butler Street, Baltic Street, St. Mark's Place, Bergen Street, Dean Street, Pacific Avenue, Atlantic Avenue and State Street generally between 3rd Avenue and 4th Avenue in Brooklyn. The new storm sewer will discharge to the Gowanus Canal at Carroll Street. Phase I is currently in final design.

A HLSS is installed to take in street storm water flow, reducing this flow to the existing combined sewer. The original combined sewers when supplemented by a HLSS, would still be classified as combined, because they still take storm flow from adjacent private properties and in many cases flow from upstream combined sewers.

In the Rockaway drainage area, the sewer system is undergoing major modifications. Storm Sewer build-out is being done in conformance with the Master Plan for Sewers and Drainage, NYCDEP, 1985. See amended table Appendix 1, Exhibit 2 for status of all sewer projects in Rockaway WWTP drainage area.

The first Capital Project in Coney Island - CONISPH01 is currently in construction and is scheduled to be completed in Summer 2015. The project will include the installation of a new larger outfall at West 15th Street, new storm sewers, replacement of existing sanitary sewers, replacement and upgrading of existing trunk and distribution water mains in West 15th Street between Hart Place and Surf avenue, as well as the replacement of existing storm sewers in a portion of Surf Avenue between Stillwell and W17 Streets. There are two subsequent phases: CONISPH2A, which has been bid and is in the procurement process, and CONISPH2B which is currently in final design with DDC. Infrastructure work will include new/upgraded storm sewers, a new larger storm sewer outfall located at W 21st Street (Phase 2A) and West 12th Street (Phase 2B)and Hart Place and West 15th Street, replacement of existing sanitary sewers, and replacement and upgrading of existing trunk and distribution water mains. These subsequent phases have been funded in the budgets for FY 14 and 15. Additional phases (CONISPH3A and CONISPH3B) will be funded in FY17.

9. Combined Sewer/Extension

"Combined sewer/extension, when allowed should be accomplished using separate sewers. These sanitary and storm sewer extensions shall be designed and constructed simultaneously but without interconnections. No new source of storm water shall be connected to any separate sanitary sewer in the collection system. If separate sewers are to be extended from combined sewers, the permittee shall demonstrate the ability of the sewerage system to convey, and the treatment plant to adequately treat, the increased dry-weather flows. Upon written notification by the Region 2 Regional Water Engineer, the permittee shall assess the effects of the increased flow of sanitary sewage or industrial waste, on the frequency, flow and pollutant loading on the CSOs including the impacts on the receiving water quality and usage. This assessment should use techniques such as collection system and water quality modeling contained in the Water Environment Federation Manual of Practice FD-17 Combined Sewer Overflow Pollution Treatment."

The construction of five private combined sewers was completed in 2014These private sewerswere constructed to extend the existing City sewer to front the site of the proposed private development. The sewer extension is done in accordance to the City drainage plan. The extension is done within the original drainage boundaries of the City drainage plan.

10. Sewer Connection & Extension Prohibitions

> *"If, there are documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes, the permittee shall, upon letter notification from DEC, prohibit further connections that would make the surcharging/back-up problems worse. Wastewater connections to the combined sewer system downstream of the last regulator or diversion chamber are prohibited."*

For the calendar year 2014, no letter notification was received from DEC concerning chronic sewer backups or manhole overflows that would prompt NYCDEP to prohibit additional sewer connections or sewer extensions.

11. Septage and Hauled Waste

"The discharge or release of septage or hauled waste upstream of a CSO is prohibited."

The septage and hauled waste program has continued unchanged since the 2013 Annual BMP Report issued on March 31, 2014.

12. Control of Run-off

"All sewer certifications for new development shall be consistent with the latest DEP rules and regulations and shall require on-site detention or retention based on the Master Plan for Sewers and Drainage, DEP, 1985, under which the sewers were designed and built. Only allowable flow will be permitted to discharge into the combined or storm sewer system."

A rule to "reduce the release rate of storm flow to combined sewers of from new developments to 10% of the drainage plan allowable or 0.25 cfs, whichever is higher (for cases when the allowable storm flow is more than 0.25 cfs)," was promulgated on January 4, 2012, and has been in effect since, July 4, 2012.

All sewer certification for new development must follow DEP rules and regulations and must be permitted by DEP.

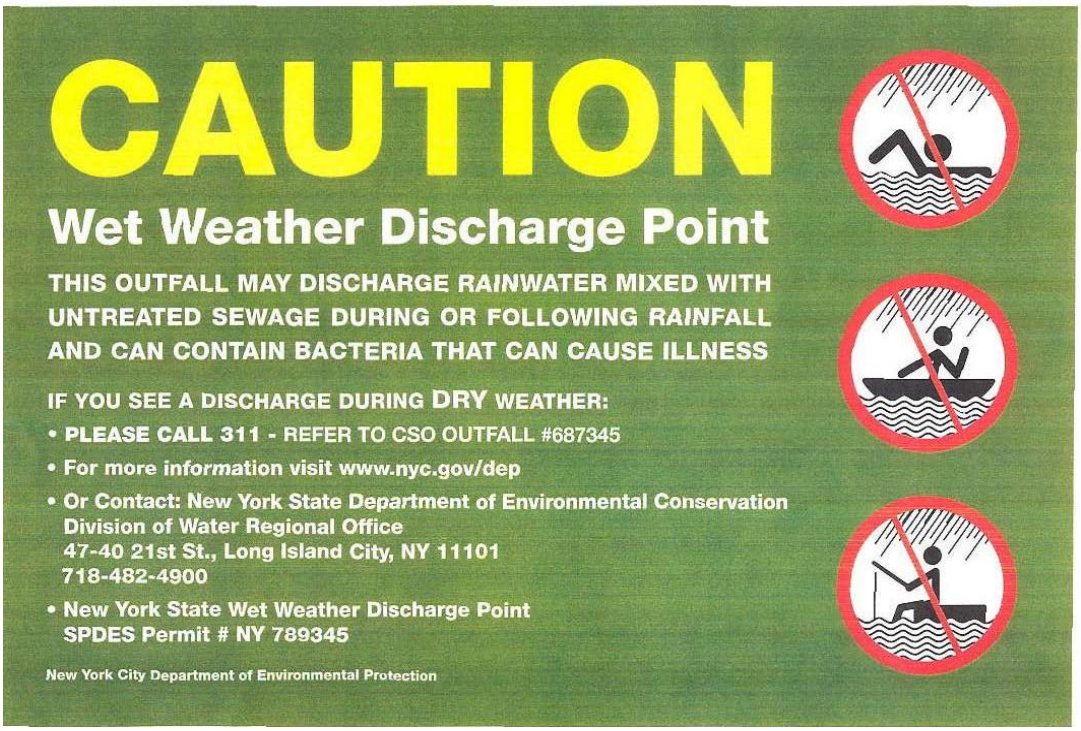
A copy of the Sewer Certification Form and Site Connection Proposal Form that must be filed for new development are attached in Appendix8.

13. Public Notification

a. *" The permittee shall install and maintain identification signs at all CSO outfalls owned and operated by the permittee as listed on the Additional Combined Sewer Outfall page(s) of this permit. The permittee shall place the signs at or near the CSO outfalls and ensure that the signs are easily readable by the public. The signs shall have minimum dimensions, information and appearance as specified in the Discharge Notification Requirements page of this permit."*

DEP installed signs at all CSO outfalls in 2003. Under the project "Signs Installation Plant-Wide," initiated in November 2005, DEP installed signs at all WWTP outfalls in 2007. The sign panels are 24" x 36" and the plaques are 6" x 9" with white letters on a green background. Each notification sign and plaque asks the public to contact DEP with the depicted Outfall number and SPDES number if they observe dry weather discharge from the outfall.

In 2010, DEP changed the design of the outfall signs at the recommendation of the Floatables Citizens Advisory Committee which requested that we include specific information about the



water quality at these locations. The new design was approved by DEC, the Arts Commission and DPR, as well as Community Boards in the five boroughs. Recommendations were made to include warnings about recreational activities such as swimming, boating and fishing at the outfall locations. The new design emphasizes the word "Caution" in order to alert the public to the fact that the location is a point of release of wastewater into surface water during wet weather. The

signs also provide graphics of non-recommended activities.The replacement of the signs was completed in May of 2011 with the newly designed CSO signs; see **Appendix 10** for the list of installed CSO sign locations.

The signs also provide contact numbers people can call to report discharges during dry weather. The ID number can help a 311 operator or a DEP employee to recognize the location from which someone is reporting discharges and to take immediate action. DEP has received calls prompted by these signs. These calls are handled by a trained group of employees who are aware of related response actions. Calls are evaluated and forwarded to responsible staff who will take the appropriate action.

The knowledge of New York's citizens about their water environment is being expanded with posting of DEP's educational signs. The notice depicts a typical CSO sewer regulator, explains its purpose, and alerts the public to action to be taken in the event of a release of wastewater from an outfall into surface waters during dry weather. The sign also serves a secondary purpose: it involves the citizen in community environmental actions.

Communication with Community Boards was essential to inform them that DEP would be working in their areas in response to the "Fisherman's Right to Know" mandate. The purpose of the Act was explained and specific contact points within DEP were established.

"Waterwalk" Educational Signage

b. "The permittee shall implement a public notification program to inform citizens of the location and occurrence of CSO events. As long as the Department of Health provides a public notification program, the permittee may submit a summary of the DOH program in the annual BMP report, rather than developing their own program. The program shall include a mechanism (public media broadcast, standing beach advisories, newspaper notice etc.) to alert potential users of the receiving waters affected by CSOs and a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to CSOs. "

The MHDOH *2013NYC Beach Surveillance and Monitoring Report* can be accessed at:

http://www.nyc.gov/html/doh/downloads/pdf/beach/beach-report-2013.pdf

Summary of DOH Report:

Routine Monitoring and Surveillance Procedures

The routine beach monitoring and surveillance procedures consist of the following three major components:

(1) Routine beach water quality monitoring;
(2) Compliance inspections; and
(3) Regulatory surveillance.

DOHMH monitors and samples each beach on a weekly basis with the exception of the Rockaway and Breezy Point beaches, which are sampled biweekly. Additional samples may be collected when necessary. The determining factors for additional sampling may include:

(1) Proximity to suspected pollution sources;
(2) Extent of pollution;
(3) Beach use;
(4) Historical water quality data; and
(5) Other health risk factors.

Prior to sample collection, a visual inspection is performed to identify any existing and/or potential sources of pollution that are likely to affect beach water quality. During a sample event, three samples are collected at each beach. At larger beaches, such as Coney Island and Rockaway, additional samples are taken at multiple locations to ensure adequate representation and reliable data results. Water samples are collected at knee- depth (18 inches) in three feet of water, at the middle of a typical or most highly used area of the beach, or near a potential source of pollution. The collected samples are delivered to the DOHMH Office of Public Health Laboratories (PHL) for analysis. The analytical turnaround time for Enterococci is 24 hours.

Public Notification and Risk Communication

Upon evaluation and assessment of beach water quality as specified above, when beach status changes occur, DOHMH notifies the public via on-site postings, website postings, through 311 (non-emergency government service hotline), Notify NYC, Twitter, RSS, e-mail, SMS and through DOHMH press releases (when necessary). Beach operators are also notified by phone and/or email for onsite postings.

Water Quality and Illness Reporting

Routine water quality monitoring and sample collection was performed at all twenty three permitted beaches. Approximately 1650 samples were collected and analyzed from these beaches between April and September 2013. The only illnesses reported to DOHMH in 2013 from beach water contact were two complaints related to swimmer's itch. This condition is a type of skin rash caused by tiny snails which naturally occur in the area. The allergic reaction of swimmer's itch can

be extremely annoying but is self-limiting and non-transmissible. For more information about swimmer's itch please go to the following link on the City's website:

http://www.nyc.gov/html/doh/html/diseases/beach_risks1.shtml.

There were 12 pollution advisory and two closure days for public beaches during the 2013 bathing season; because of reconstruction after Super Storm Sandy, Wolfe's Pond Beach was closed for bathing during the entire 2013 season. Private beaches had 92 closure days and 98 pollution advisory days. The repetitive North Easterly track of summer thunderstorm activity has an impact on private beaches in the Bronx which are susceptible to runoff resulting in elevated bacteriological levels. Douglaston Manor Beach in Queens had Pollution Advisories posted for 44 days and was closed a total of 64 days during the season because of localized elevated bacteria levels, likely due to failing septic systems in the area. The specific Advisory and Closure dates for each beach, are shown in Appendix 10: 2013 Advisories & Closures Summaries.

Inspections

During the 2013 bathing season, a total of 117inspections were conducted by the Department at permitted beaches, and both general violations and public health hazard violations were observed at both public and private beaches.

The specific Advisory and Closure dates, and reasons for issuing these advisories and closures are shown in **Appendix 10** Tables B-1 and B-2 - 2013 Advisories & Closures.

Appendix 10, Table A, shows Public Beach Advisories and Closure comparisons for 20010 to 2013. Tables B-1 and B-2 show all Beach Advisory and Closure summaries for Public and Private Beaches.

DOHMH monitors wet weather conditions daily during the bathing season and notifies the public when rainfall intensities exceed the pre-emptive limit. The notification and communication policies and procedures to inform the public of the potential risks associated with CSOs as well as storm water runoff are as follows: onsite postings, announcements through the City Information Hotline 311, and website postings at www.nyc.gov/health/beachand www.nyc.gov(under NYC Right to Know Now).

Preemptive Wet Weather Advisory information is posted by the facility in an area visible and accessible to the public such as at beach entrances, on bulletin boards, or in the general vicinity of the common swimming areas during the entire swimming season. When the beach is under a Wet Weather Advisory, the facility is required to post the additional advisory sign indicating that the Wet Weather Advisory is currently in effect.

Routine water quality testing is carried out at least once a week except at the Rockaways, where sampling is bi-weekly. Additional sampling may be conducted when routine samples exceed applicable standards, when there have been reported sewage spills and pollution events, and following a heavy rainfall event.

14. Annual Report

"The permittee shall submit an annual report summarizing implementation of the above best management practices (BMPs). The report shall list existing documentation of implementation of the BMPs and shall be submitted by April 1st of each year to the offices listed on the Recording, Reporting and Additional Monitoring page of this permit. Examples of recommended documentation of the BMP's are found in Combined Sewer Overflows, Guidance for Nine Minimum Controls, EPA, 1995. The actual documentation shall be stored at a central location and be made available to DEC upon request."

This report is the 11th annual report summarizing the implementation of the BMP's performed by DEP in calendar year 2013.

Field inspection logs, maintenance and repair schedules, summaries and analysis of performance are stored at DEP's Lefrak City office and respective crew quarters and are available to DEC upon request.

Appendix 1:

Exhibit 1 – CSO Maintenance Program

Exhibit 2 – Rockaway Sanitary and Storm Sewer Projects

Table 1 – CY'14 Chloride Concentrations Rolling Average Summary

Table 2 – Yearly Average Tidal Inflow Comparison for CY'13-'14

Exhibit 1

August 14, 2003

Mr. Robert Elburn
Regional Water Engineer
New York State Department of
Environmental Conservation, Region 2
Division of Water
47-40 21st Street - 2nd Floor
Long Island City, New York 11101

Re: **NY0026131** **NY0026115**
NY0026191 **NY0026239**
NY0026204 **NY0026158**
NY0026182 **NY0026221**
NY0026166 **NY0026107**
NY0026212 **NY0026247**
NY0027073

Dear Mr. Elburn:

The attached CSO Maintenance and Inspection Program is submitted in compliance with the CSO Best Management Practice #1 contained in the SPDES permits for the following New York City WPCPs: Bowery Bay (Section XV(e)), Coney Island (Section XV(d)), Tallman Island (Section XV(e)), Jamaica (Section XIV(d)), Newtown Creek (Section XIV(e)), 26th Ward (Section XIV(e)), Hunts Point (Section XIV(e)), Rockaway (Section XIV(e), Owls Head (Section XIII(e)), Port Richmond (Section XIII(e)), Red Hook (Section XIII(e)), Wards Island (Section XIII(e)) and North River (Section XII(e)).

Sincerely yours,

for Alfonso R. Lopez, P.E.
Deputy Commissioner

SR/fk

xc: Quinn/Sapienza/Rozelman/Volgende/Eckels/Hammerman/Kulcsar

CSO MAINTENANCE & INSPECTION PROGRAM
BEST MANAGEMENT PRACTICE #1 SPDES PERMIT

Section VIII (26W, HP, JA, NC, RK);
Section IX (BB, CI, TI);
Section VI (NR);
Section VII (OH, PR, RH, WI)

(a) *The permittee shall develop and implement a written maintenance and inspection program for all CSO's listed beginning on page 3 of this permit. This program shall include all regulators tributary to these CSOs. This is to insure that no discharge or leakage occurs during dry weather and that the maximum amount of wet weather flow is conveyed to the WPCP for treatment. This program shall consist of scheduled inspections with required repair, cleaning and maintenance performed as needed to prevent dry weather overflow and leakage and ensure maximum wet weather flow is conveyed in accordance with CSO BMP#4. Inspection reports shall contain a record of visual inspections, any observed flow, incidence of rain or snowmelt, condition of equipment and work required.*

Regulator / Tide Gate Maintenance Inspection Schedule

High priority regulators shall be inspected four times per month.
High Priority Regulators are regulators that convey at least five million gallons per day and / or inherently require high maintenance, or pose a threat to beaches because of their locations.

Normal priority regulators shall be inspected once per month.

Items of Inspection

The field crews inspect the entire regulator including, tide gates, sluice gates, access ways, electrical controls and any mechanical equipment and instrumentation located within each site. An inspection report must be completed for each CSO facility. This form is attached in appendix A.

During the inspection, the crews are responsible for correcting any conditions that they encounter which may have adverse effects on the proper operation of the regulator. Examples of these conditions include blockages or obstructions caused by debris that may result in partial or full dry weather bypassing.

Any blockage that the crew is not capable of removing is referred to an emergency Contractor, who is retained by the NYC DEP for such cases. The contractor is required to respond to the site within twenty-four hours of notification.
Furthermore, any structural damage noticed during the inspections upstream of the

regulators is referred to the appropriate group within DEP for repairs.

(b) *The permittee shall include in the maintenance and inspection program a plan to maintain CSO tide gates to prevent infiltration of seawater into the collection system such that the WPCP influent concentration of chlorides does not exceed a twelvemonth rolling average of 400 mg/l. The maintenance and inspection program shall specify corrective actions to be taken within twelve months of the influent chloride exceedance of 400 mg/l.*

CSO Tide Gate Maintenance Program

All tide gates are maintained and inspected on the same schedule as regulators. Antiquated tide gates are earmarked for replacement or reconstruction.

The maximum twelve-month rolling average of influent chloride concentration in the SPDES permits at all the applicable WPCPs except North River is 400-mg/L. The influent chloride concentration in the SPDES permit for North River WPCP is 250-mg/L.

In order to maintain CSO tide gates to prevent inflow of seawater into collection system the crews are responsible for correcting any conditions that they encounter during the inspections that may have adverse effects on the proper operation of the tide gates.

DEP is responsible for developing a drainage area evaluation program to identify possible sources of seawater infiltration. Chloride sampling and tide gate repairs are performed immediately by the CFO crews when seawater inflow is discovered and result in elevated levels of chlorides at the WPCPs. Corrective actions are taken within twelve months of influent chloride exceedance of 400 mg/l.

(c) *The permittee shall include in the maintenance and inspection program a schedule for telemetering regulators and a plan to report the telemetering results. Within six months after the completion of the telemetering of regulators required in the NYSDEC/NYCDEP Omnibus IV Consent Order Compliance Schedule (as noted in the outfall description page) the permittee shall record and report the number and duration of events that cause a discharge at an outfall during dry weather conditions.*

Regulator Telemetering

The installation of the telemetering equipment at one hundred and two regulators was completed in May, 2001 in accordance with the compliance schedule in Schedule B to the Omnibus IV Order on Consent.

The system is currently maintained through a service contract. The contractor is responsible for all maintenance work.

DEP records and reports the number and duration of events that cause a discharge during dry weather conditions.

(d) CSO maintenance and inspection program reports shall be available for DEC review no later than 9 AM on the day following the day of the inspection was conducted and shall be available for DEC review at the associated WPCP no later than 30 days following the inspection

Maintenance and Inspection Reports

The CSO maintenance and inspection program reports are kept at each respective crew quarters and are available for DEC by 9:00 AM on the day following an inspection. Rather than store these reports at WPCP's where they may get misplaced, we have centralized the storage into 5 collection crew quarters.

These crew quarters are located as follows:

Tallman Island WPCP
Wards Island WPCP
Paedergat Pump Station
Gowanus Pump Station
Oakwood Beach WPCP

We believe this record storage policy is more condusive to record retention and retrieval than storing at WPCP's, many of which are undergoing massive upgrades.

Regulator Truck # : _____ REGULATOR and TIDE GATE Inspection Log Backup Truck # : _____

DATE: _____ RUN : _____ WEATHER : _____

	Regulator Tide Gate Number	Inspection Level 1 / 2 / 3 ?	Inspection y / n Diversion	Inspection Of Regulator	Inspection y / n Tide Gate
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

Reporting System for Regulator and Tide Gate Locations

INSPECTION LEVEL :

LEVEL 1):	Diversion, Regulator and Tide Gate Manhole inspections performed from above ground which DO NOT involve entry into regulator or tide gate chambers
LEVEL 2) :	FULL ENTRY Regulator and Tide Gate inspections which DO NOT involve the use of back - up trucks
LEVEL 3) :	FULL ENTRY Regulator and Tide Gate inspections which DO involve the use of back - up trucks

REGULATOR CHAMBERS :

A 1):	Regulator flow O.K. No visible flow obstruction through regulator. Gate operational in automatic mode.
A 2):	Regulator flow O.K. No visible flow obstruction through regulator. Gate operational in manual mode ONLY ! **Explanation of problem required on log sheet**
A 3):	Regulator flow O.K. No visible flow obstruction through regulator. Gate NOT OPERATIONAL ! **Explanation of problem required on log sheet**
A 4):	Partial Blockage in Regulator. When flow through regulator is partially obstructed by debris, which may result in dry weather by-passing **Explanation required**
A 5):	Blockage in Regulator causing partial or full dry weather by-passing. **Explanation of problem required on log sheet**

TIDE GATE CHAMBERS :

INSPECTIONS DURING HIGH TIDE :

B 1):	No leak from TIDE GATE. When the gate is properly closed and there is no tidal flow
B 2):	Minor leak from TIDE GATE. When tidal inflow is small and acceptable.
B 3):	Mild leak from TIDE GATE. When tidal inflow is noticeably higher than a Minor leak.
B 4):	MAJOR LEAK from TIDE GATE. When tidal inflow is significantly high and may impact treatment plant processes with high chlorides

INSPECTIONS DURING LOW TIDE :

C 1):	No leak from TIDE GATE. When the gate is properly closed and there is no evidence of any potential tidal inflow problem.
C 2):	TIDE GATE is visibly held open by DEBRIS or FROZEN HINGES etc. **Explanation of problem required on log sheet**
C 3):	TIDE GATE Vulnerable to inflow. When gate is closed, damaged seals, warping or other factors likely to allow leakage. **Explanation of problem required on log sheet**

S.S.T.W. : _____ S.E.E. : _____ S.S.E.E. _____ CHIEF : _____

Appendix A

Exhibit 2

Rockaway Sanitary and Storm Sewer Projects

Project No. Locations Status

SE 378A/379A B. 130th Street, etc. Completed in March 1989

SE 378B/379B Rockaway Beach Blvd. etc. Completed in November 1988

SE 422A/423A B. 121st Street, etc. Completed in June 1989

SE 422B/423B B. 123rd Street, etc. Completed in April 1990

SE 422C/423C B. 127th Street, etc. Completed in April 1991

SE 424A/425A B. 132nd Street, etc. Completed in April 1993

SE 426A/427A B. 135th Street, etc. Completed in December 1990

SE 426B/427B B. 138th Street, etc. Completed in November 1990

SE 426C/427C B. 140th Street, etc. Completed 2003

SE 196/372 Camp Road, etc. Completed in June 1991

SE-772/87HW Beach 71st Str. Completed12/30/2004

Formerly SEQ200350

SEQ-002355 B. 43rd Street, etc Completed in April 1991

SEQ-200239 Rockaway Freeway, etc.Completed08/21/1996

SEQ-200240 Rockaway Freeway, etc.Completed08/21/1996

SEQ-002348 Rockaway Blvd., etc. Completed in May 1997

SEQ-002363 B. 37th Street, etc. Completed in April 1996

SEQ-002380 Rockaway Beach Blvd. Completed in November 1996

SEQ-200251 Rockaway Beach Blvd. Completed in July 1997

71

Project No. Locations Status

SEQ-200254 Beach 108th Street, etc. Completed in November 1998

SEQ-002402 Beach 45th Street, etc. Completed in September 1997

SEQ-002413/ R Collier Avenue, etc. Completed March 2005

200275

SEQ-002426 Bay 25th Street, etc. Completed in September, 1998

SEQ-002427 Cold Spring Road, etc. Completed in May, 1998

SE-424B/425B B. 134th Street, etc. Completed in August, 1999

SEQ-002453 B. 47th Street, etc.Projectcancelled 12/1/97

SEQ-002428 Healy Avenue, etc. Completed1/21/2000

SEQ-200305 Amstel Blvd, etc. Completed May 2000

SEQ-002460 WestBourne Ave, etc. Completed November 2000

SEQ-002499 B 61st St. Completed July 2000

SEQ-200311 B 35th St. Edgemere Project Completed April 2002

SEQ-002507/ Beach 69th St. Canceled; Included 200356 in HWQ631 completed 12/31/2004

SEQ- 200358 Beach 87th St. Completed October 2002

SEQ-002511/ Beach 36th St. Completed April 2002

200347

SEQ- 200324 Beach Channel Dr. Included in Edgemere

Projects HD153 series

SE-426C/427C Beach 69th St. Completed Jan 2003

72

Project No. Locations Status

SEQ-002571/ Hope VI Phase A Completed – 04/20/2004

200412

SEQ-002538/ Beach 18th St. Completed in August 2003

200371

SEQ- 002546/ Grandview Terrace Completed in 2003

200425

SEQ- 200368 Redfern Ave. Completed 06/27/2006

SEQ- 200381 Beach 53th St. Scheduled for FY 2002

Cancelled due to LIPA issues

SEQ002550/ Beach 40 St.

200390 (Edgemere Phase HD153B) Completed 4/10/2006

SEQ002516/ Cornaga Ave. Part of QED965

200352 complete

SE-795 Chandler St. Projected Construction Start:05/05/2014 and projected completion date 6/2016

SEQ002511/ Beach 36 St. Completed

200347

SEQ200378 Seagirt Blvd. Completed September 2002

In SEQ200358

SEQ002551/ Edgemene Phase B1. In Construction

200398 (HD153B1) complete 6/07

SEQ-200453 Thursby Ave. In Construction – subs comp8/07

SE-789 / HWQ631B1 Sommerville Area Actual Construction Start

01/2009 Projected finish -2/2012 – actual completion date 5/16/2014

SEQ-200407/002564 Edgemene Phase C1 and C2 Actual Construction Phase C1 includes SEQ002562/200406, projected completion date: 11/2015 and Phase C2 includes SEQ200421/SEQ002576, projected completion date: 12/1/2015

Start 04/2009

SEQ-200426 (HWQ1126B) Hope VI Phase B On Hold

73

Project No. Locations Status

SEQ-02479/QED-983/SEQ-200341 Rockaway Bch. Blvd Projected

Construction Start 9/19/11 projected completion date 1/31/2015

SEQ-200508 BEACH 32nd St. Actual construction start – 5/14/12 and projected completion date 6/30/15

QED-982 Rockaway Beach Blvd :Projected construction start date:12/11/2015

SEQ002681 (HWQ631B2) Sommerville B2 Projected construction start date: 07/15/2020

SEQ200523 New Haven Avenue, etc.Actual construction start date – 1/2/12 and completion date 8/22/13

SEQ200533 Beach 42nd Street Actual Construction Start date 6/7/2010 and completion date 6/15/12

QED-983 Beach 88th Street Actual construction start date 9/19/2011

SEX20039 Fairfax Avenue (Bronx) Construction completed on

11/10/11

EXHIBIT 2

Rockaway Projects

Updates & construction start dates as of 01/09/2014 are as follows:

HD153C2/SEQ200421/SEQ002576 Edgemere C2 - Actual Construction Start 09/2011,

Projectedcompletion 12/1/2015

SE795 - Projected Construction Start 4/2014, Projected completion 4/2016:Actual construction start date:05/05/2014 and projected completion 6/2/16.

HWQ631B1/SE-789 - Actual Construction Start 01/22/2009, actual construction completion – 5/16/14

HD153C1/SEQ200406/2562/Edgemere C1 - Actual Construction Start 04/2009, Projected Finish 11/2015

SEQ200426/HWQ1126B - On Hold – DOT issue

QED983 - Construction Start Actual 09/2011, Projected completion 4/15/14

SEQ200508 - Actual Construction Start 5/14/12 ,Projected completion 6/30/2015

QED982 - Projected Construction Start 12/11/2015

SEQ002681/HWQ631B2 - Projected Construction Start 01/2020

SEQ200523 - Actual Construction Start 1/2012, Completed on 8/2013

SEQ200533 - Actual Construction Start 06/07/2010, Completed on 6//2012

75

Table 1: 2014 12 Month Rolling Average Influent Chlorides (mg/L)

	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	Jul-2014	Aug-2014	Sep-2014	Oct-2014	Nov-2014	Dec-2014
Wards Island	380	390	380	380	370	380	380	390	410	430	430	420
North River	264	274	268	272	268	274	275	283	295	303	310	298
Hunts Point	229	267	263	267	278	292	291	297	316	312	308	298
26th Ward	220	230	250	250	280	280	280	280	290	290	280	290
Coney Island	650	670	660	670	700	710	720	750	770	790	780	790
Owls Head	200	210	210	210	220	230	230	230	230	240	240	250
Newtown Creek	610	620	620	610	620	640	650	640	640	630	620	630
Red Hook	370	400	400	400	400	420	410	410	400	400	400	400
Jamaica	300	300	300	290	280	260	250	250	250	250	250	240
Tallman Island	260	290	290	290	300	310	310	320	330	310	310	310
Bowery Bay	320	350	330	360	380	380	380	400	440	450	450	430
Rockaway	2,730	2,690	2,650	2,630	2,640	2,630	2,620	2,580	2,580	2,530	2,460	2,440
Oakwood Beach	270	280	270	280	320	320	310	320	330	330	330	330
Port Richmond	490	530	540	540	470	460	430	400	400	410	430	410

(*) The chloride concentration limit for WWTPs is 400mg/L.

TABLE 2 **YEARLY AVERAGE TIDAL INFLOW COMPARISON FOR CY '13-'14**

WPCP	JANUARY - DECEMBER '13		JANUARY - DECEMBER '14		VARIANCE		REMARKS*
	INFLOW (MGD)	% DWF	INFLOW (MGD)	% DWF	INFLOW (MGD)	%	
WARDS ISLAND	8.599	4.5%	8.245	4.1%	0.354	0.35%	4.12% DECREASE
NORTH RIVER	4.419	4.1%	3.937	3.6%	0.482	0.51%	10.92% DECREASE
HUNTS POINT	2.050	1.8%	2.104	1.9%	-0.054	-0.12%	2.65% INCREASE
26th WARD	0.835	2.0%	0.721	1.8%	0.114	0.28%	13.65% DECREASE
CONEY ISLAND	4.514	5.4%	3.957	4.9%	0.557	0.51%	12.34% DECREASE
OWLS HEAD	1.305	1.5%	1.326	1.5%	-0.021	-0.02%	1.61% INCREASE
NEWTOWN CREEK	12.701	6.3%	10.844	5.4%	1.858	0.96%	14.62% DECREASE
RED HOOK	0.864	3.4%	0.820	3.3%	0.043	0.12%	4.99% DECREASE
JAMAICA	1.578	2.1%	1.324	1.8%	0.255	0.32%	16.14% DECREASE
TALLMAN ISLAND	0.813	1.5%	1.105	2.0%	-0.291	-0.52%	35.81% INCREASE
BOWERY BAY	2.625	2.7%	2.897	3.0%	-0.272	-0.27%	10.35% INCREASE
ROCKAWAY	2.986	19.8%	2.956	18.7%	0.030	1.13%	1.01% DECREASE
OAKWOOD BEACH	0.794	2.9%	0.625	2.3%	0.169	0.62%	21.27% DECREASE
PORT RICHMOND	1.118	4.6%	1.192	4.3%	-0.074	0.30%	6.60% INCREASE

Tidal Inflow (MGD) seasonal percentage change.

Appendix 2 – BWSO

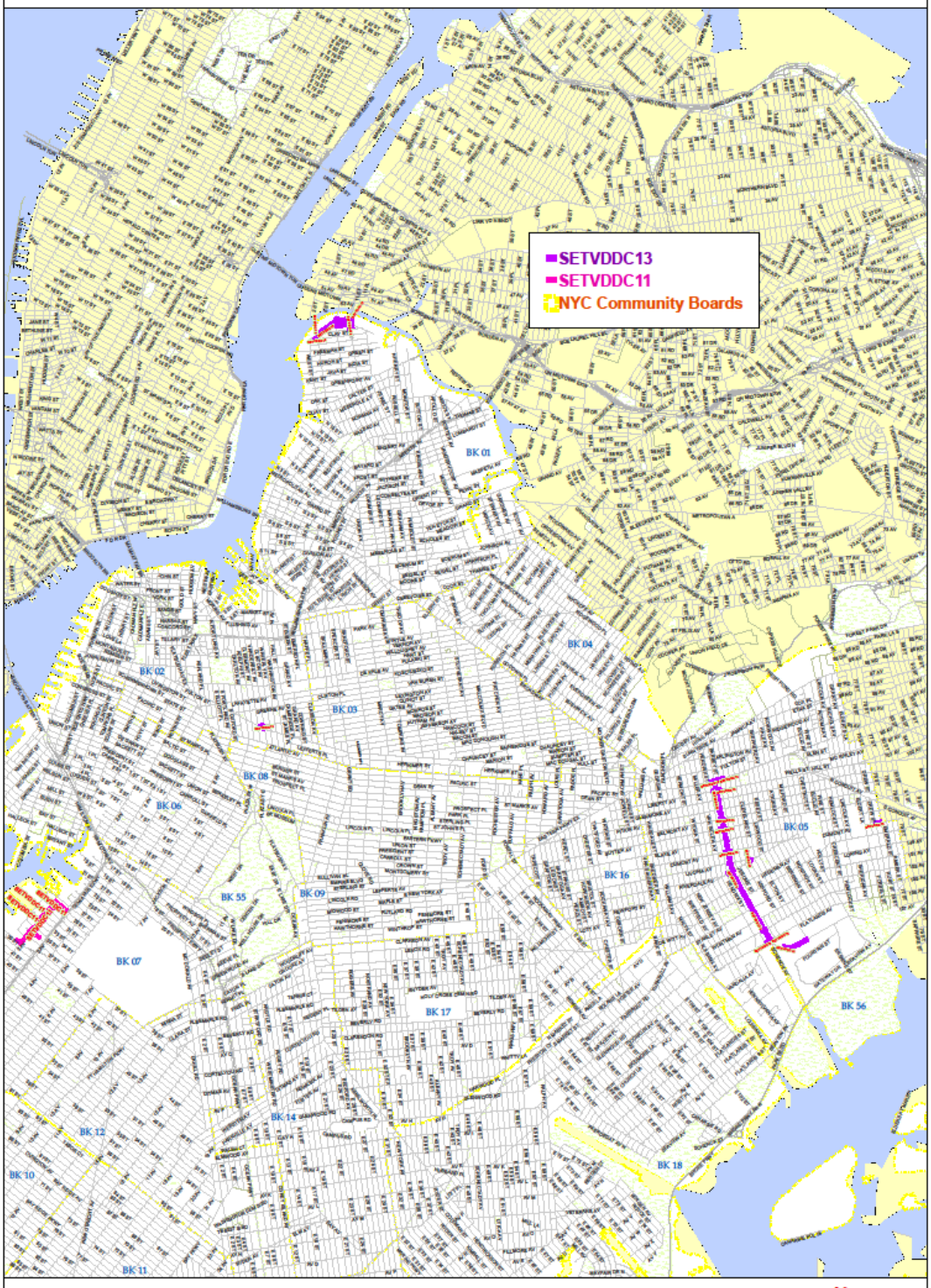
Maps of Cleaning Activities for NYC DDC: TV Inspection and Cleaning (Borough Map 1-5)

Maps of Cleaning Activities for CMOM Section: NYC Public Sewers Inspected, Cleaned or Televised in CY2013 (Borough Map 1-6)

Maps of Cleaning Activities for CMOM Section: NYC Public Sewers Inspected, Cleaned or Televised in CY2013 (Community Board Map 1-59)

CMOM Section Inspected Locations

BROOKLYN
SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



Hon.Bill de Blasio, Mayor

NYC DDC Department of Design and Construction

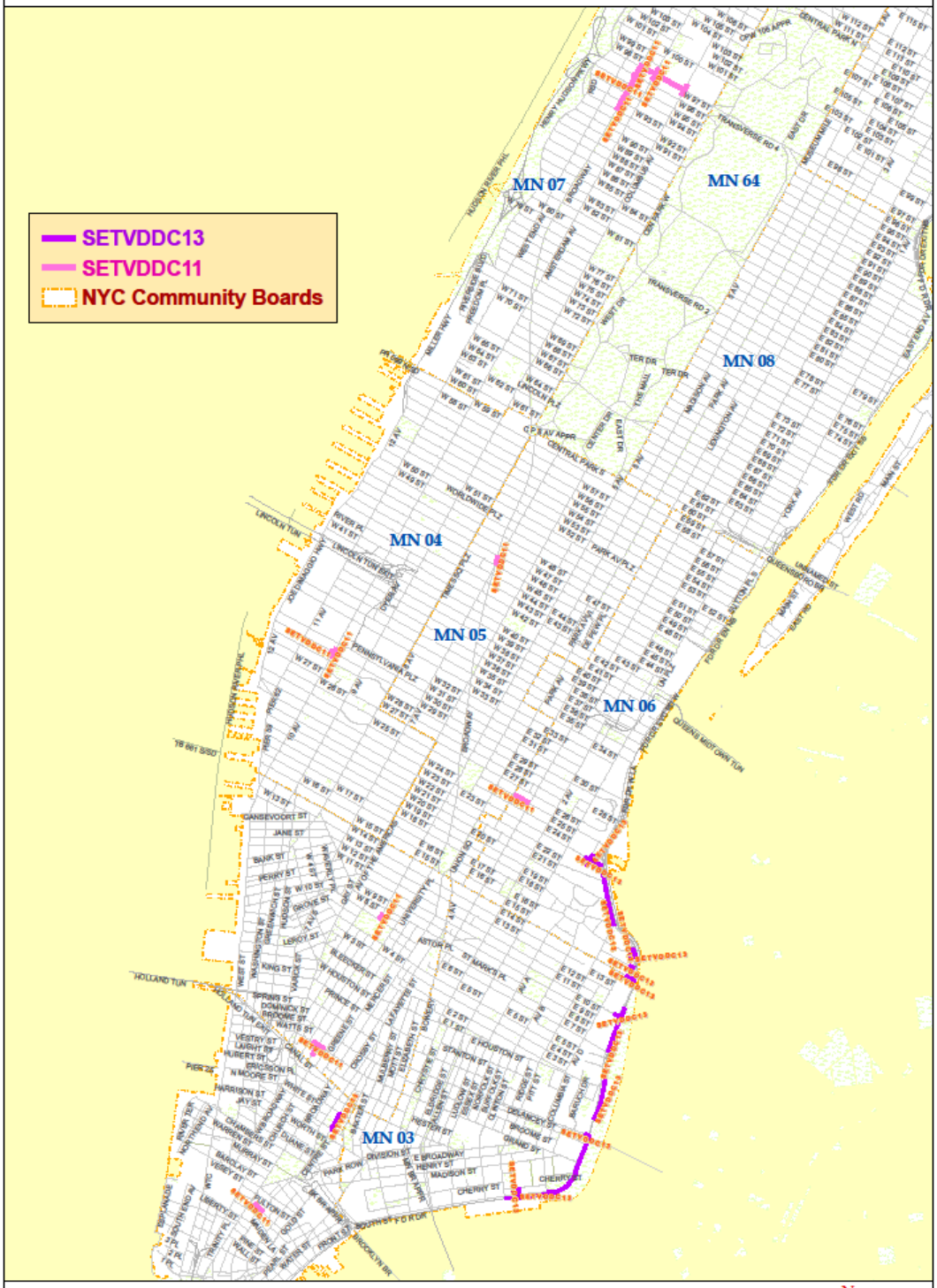
1.5 0.75 0 1.5 Miles

N

Data Source: DDC GIS - Map No. 4663 - February 10, 2015

M A N H A T T A N

SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



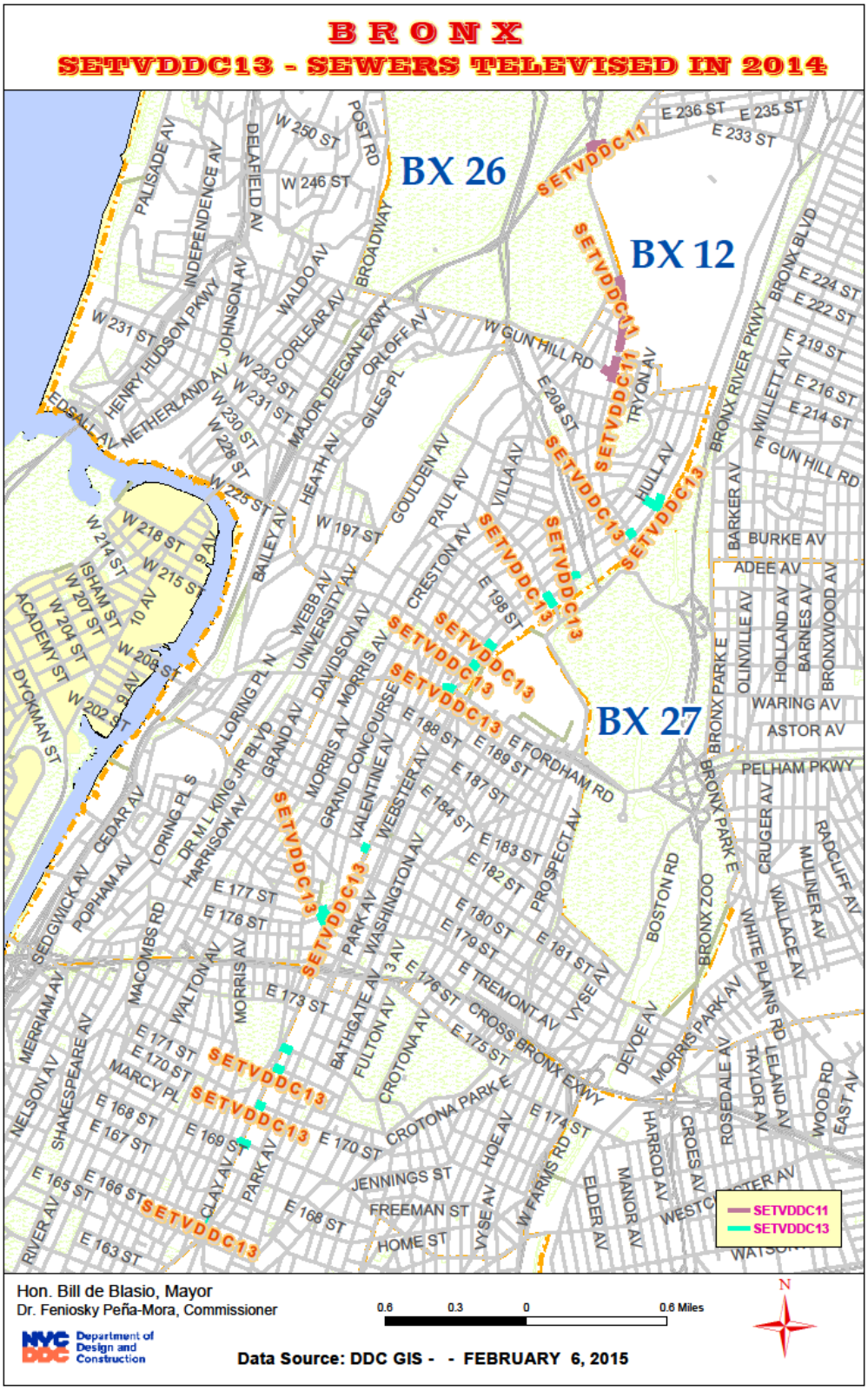
Hon. Bill de Blasio, Mayor

NYC DDC Department of Design and Construction

1 0.5 0 1 Miles

N

Data Source: DDC GIS - Map No. 4662 - February 10, 2015


BRONX
SETVDDC13 - SEWERS TELEVISED IN 2014
BX 26
BX 12
BX 27
SETVDDC11
SETVDDC13
Hon. Bill de Blasio, Mayor
Dr. Feniosky Peña-Mora, Commissioner
Department of Design and Construction
0.6 0.3 0 0.6 Miles
N
Data Source: DDC GIS - - FEBRUARY 6, 2015

QUEENS

SEWERS TELEVISED IN 2014

Hon. Bill de Blasio, Mayor
Dr. Feniosky Peña-Mora, Commissioner

1.5 0.75 0 1.5 Miles

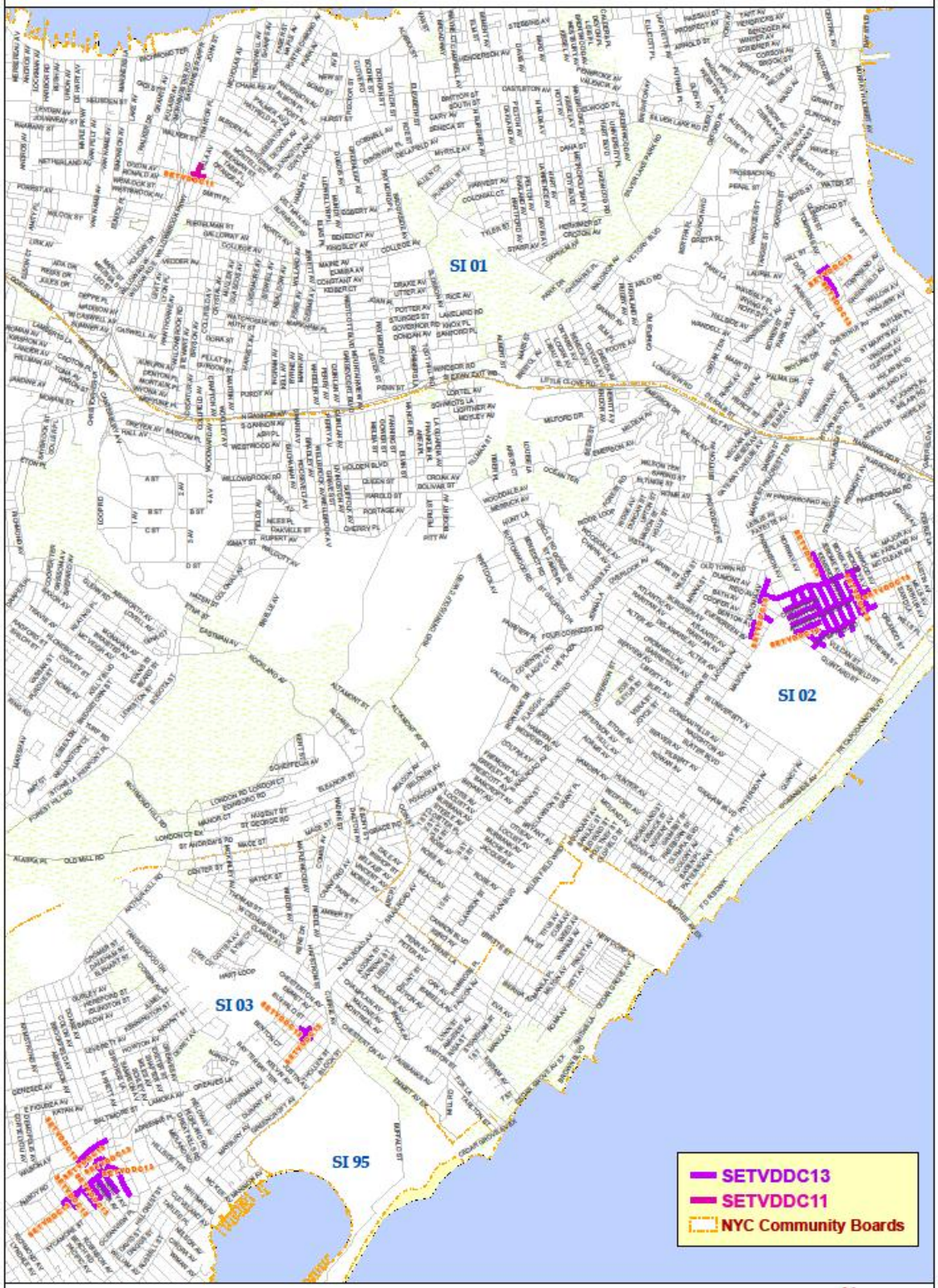
N

Department of Design and Construction

Data Source: DDC GIS - - FEBRUARY 6, 2015

STATEN ISLAND

SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



Hon. Bill de Blasio, Mayor

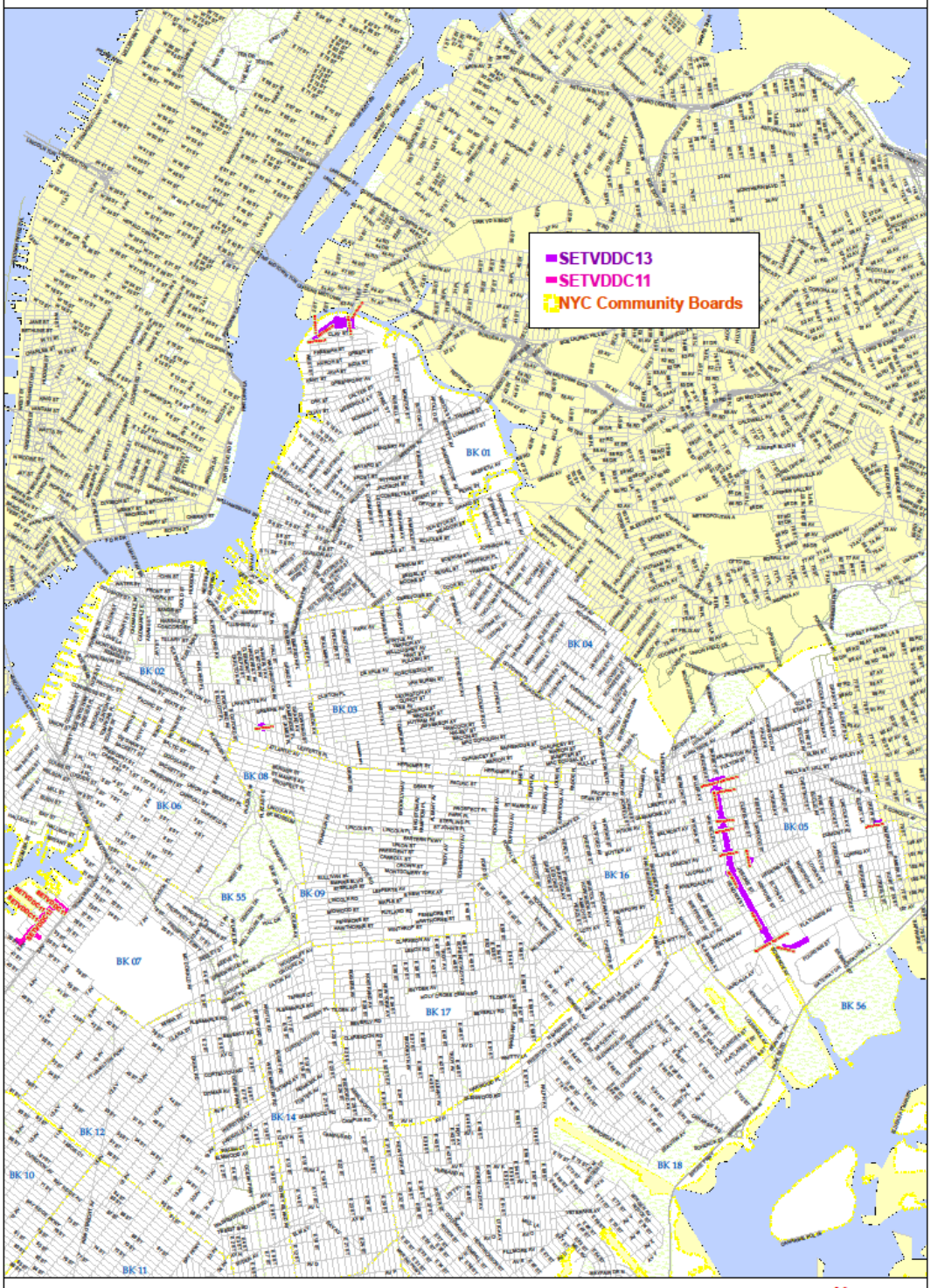
NYC DDC Department of Design and Construction

1 0.5 0 1 Miles

N

Data Source: DDC GIS - Map No. 4664 - February 9, 2015

BROOKLYN
SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



Hon.Bill de Blasio, Mayor

NYC DDC Department of Design and Construction

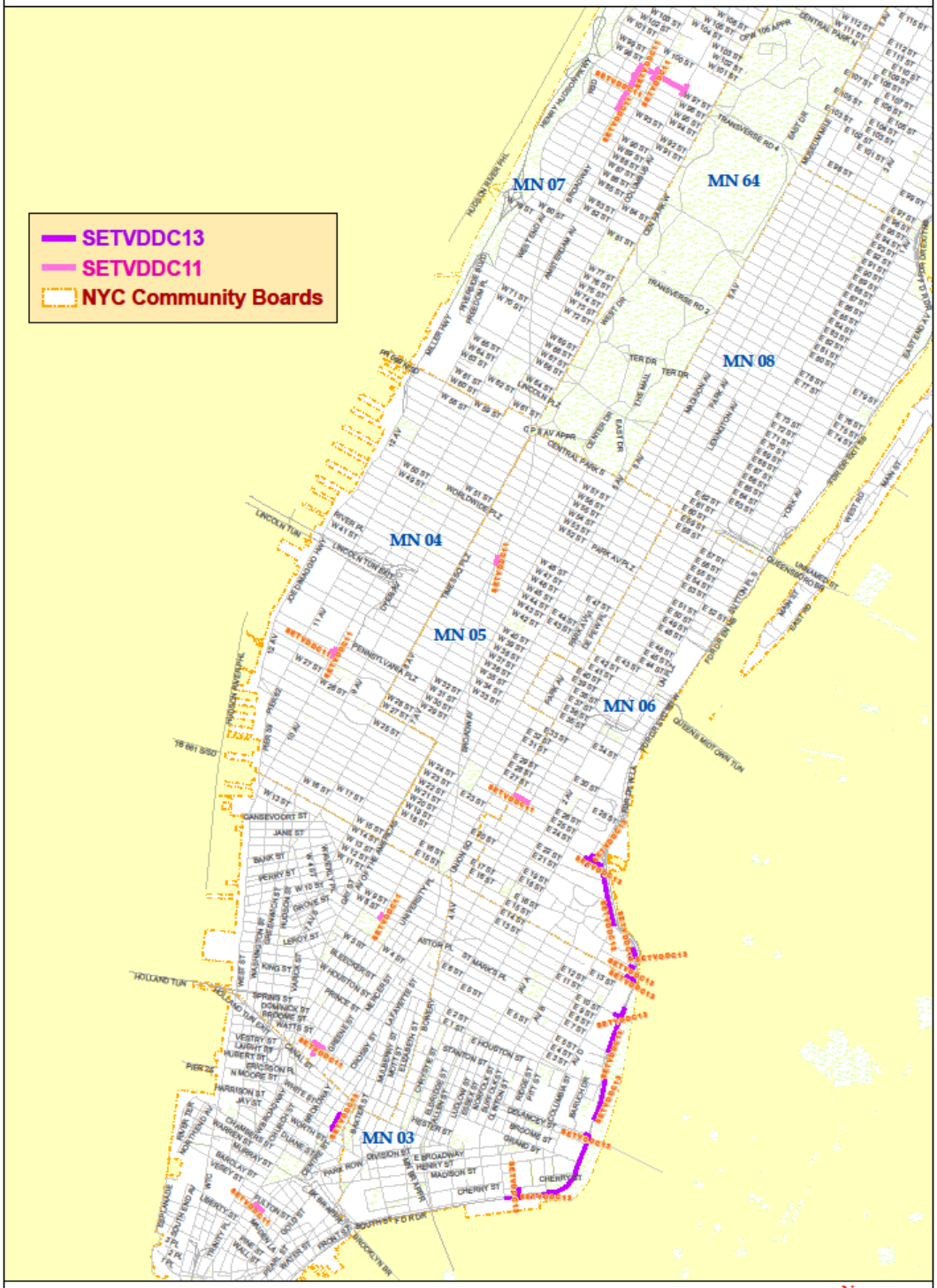
1.5 0.75 0 1.5 Miles

N

Data Source: DDC GIS - Map No. 4663 - February 10, 2015

M A N H A T T A N

SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



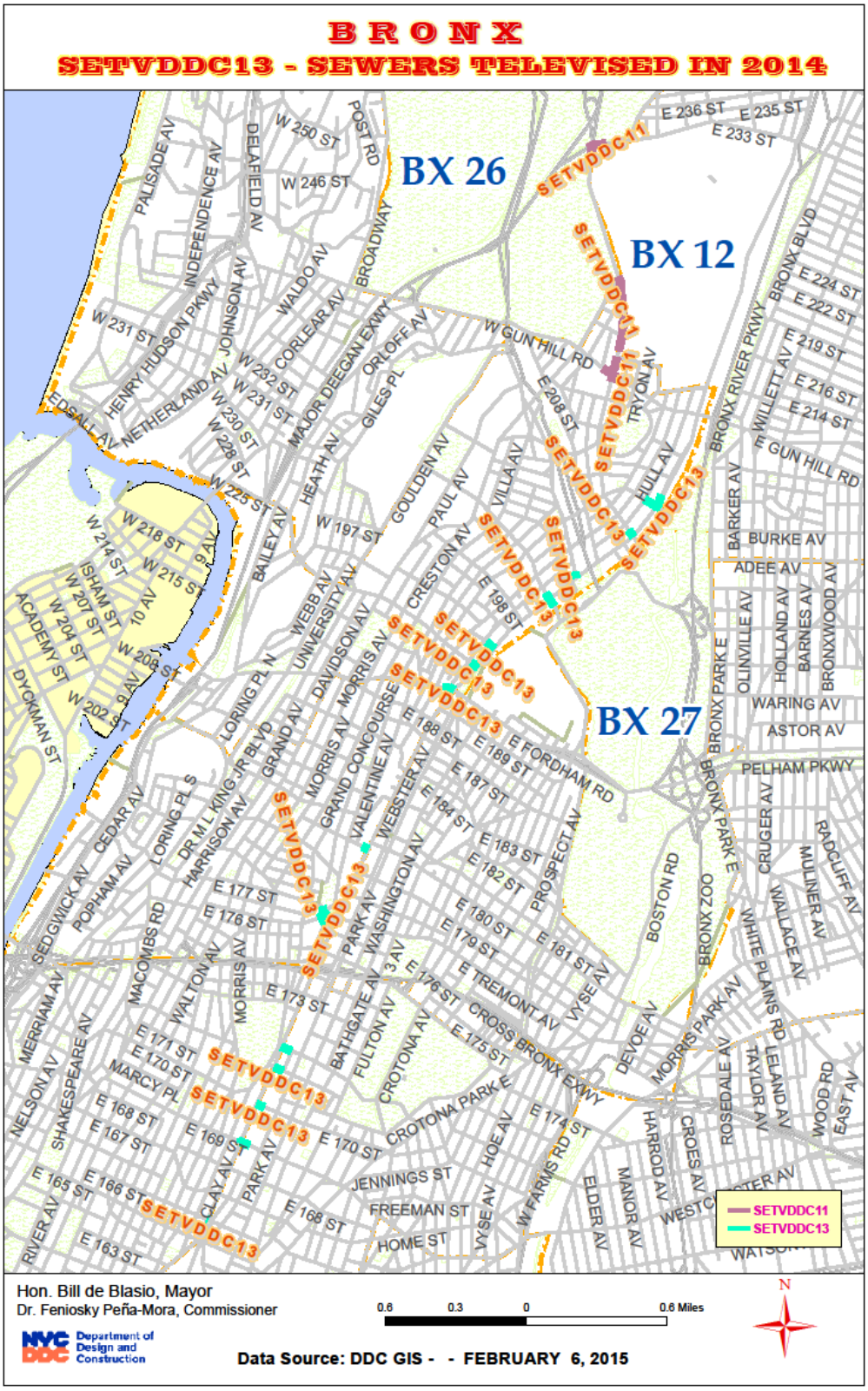
Hon. Bill de Blasio, Mayor

NYC DDC Department of Design and Construction

1 0.5 0 1 Miles

N

Data Source: DDC GIS - Map No. 4662 - February 10, 2015


BRONX
SETVDDC13 - SEWERS TELEVISED IN 2014
BX 26
BX 12
BX 27
SETVDDC11
SETVDDC13
Hon. Bill de Blasio, Mayor
Dr. Feniosky Peña-Mora, Commissioner
Department of Design and Construction
0.6 0.3 0 0.6 Miles
N
Data Source: DDC GIS - - FEBRUARY 6, 2015

QUEENS

SEWERS TELEVISED IN 2014

Hon. Bill de Blasio, Mayor
Dr. Feniosky Peña-Mora, Commissioner

1.5 0.75 0 1.5 Miles

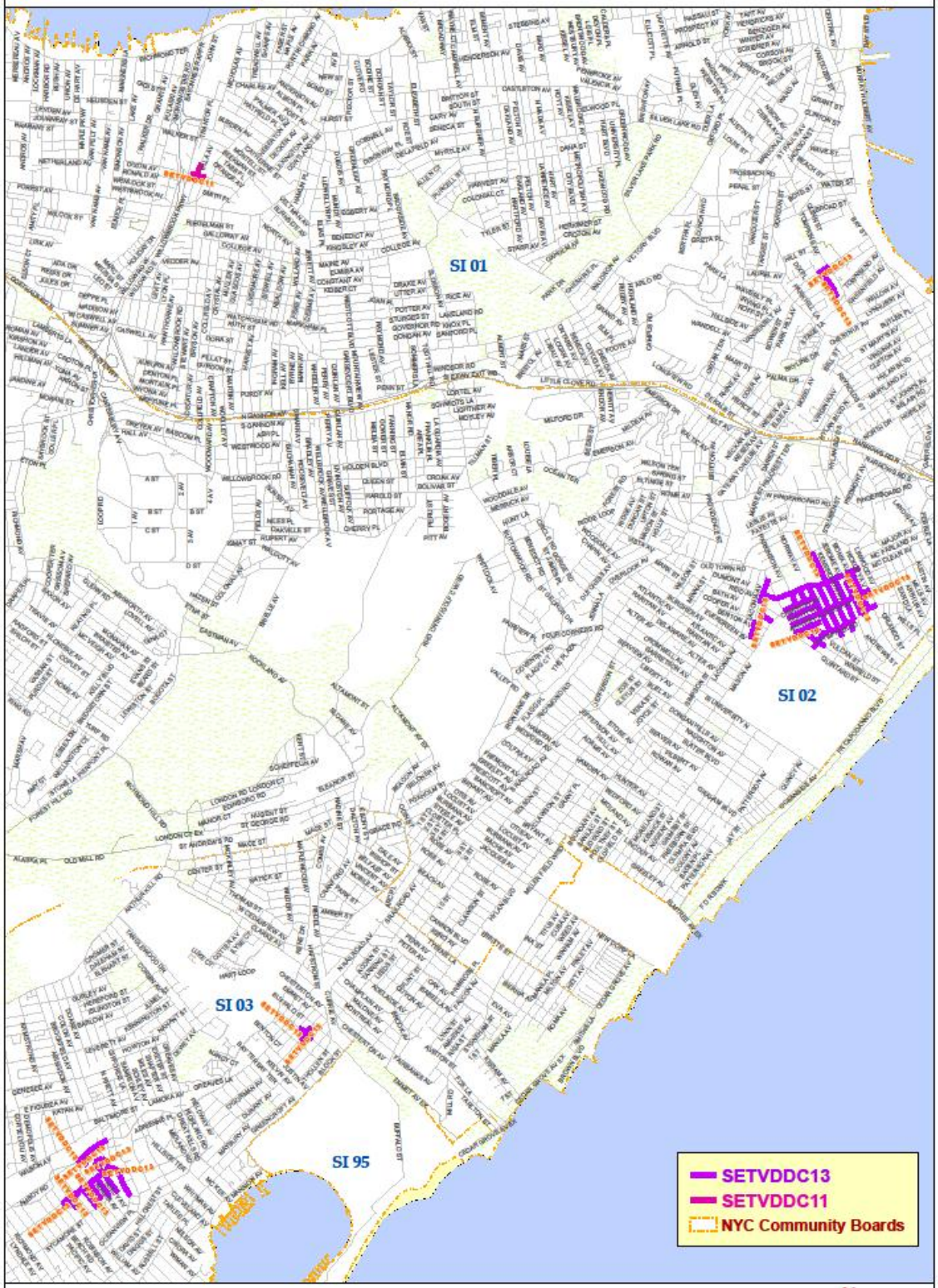
N

Department of Design and Construction

Data Source: DDC GIS - - FEBRUARY 6, 2015

STATEN ISLAND

SETVDDC13 & 11 - SEWERS TELEVISED IN 2014



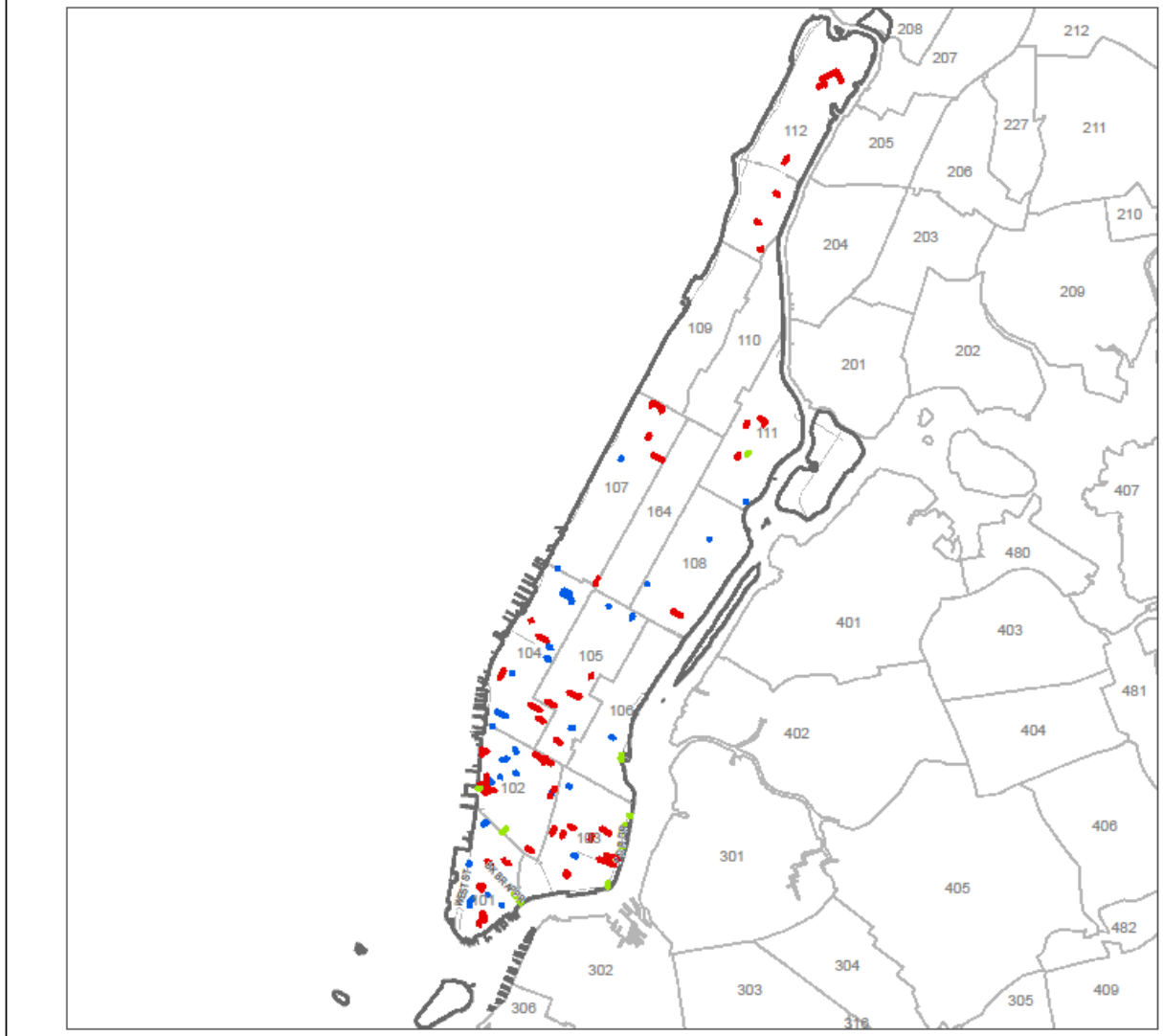
Hon. Bill de Blasio, Mayor

NYC DDC Department of Design and Construction

1 0.5 0 1 Miles

N

Data Source: DDC GIS - Map No. 4664 - February 9, 2015

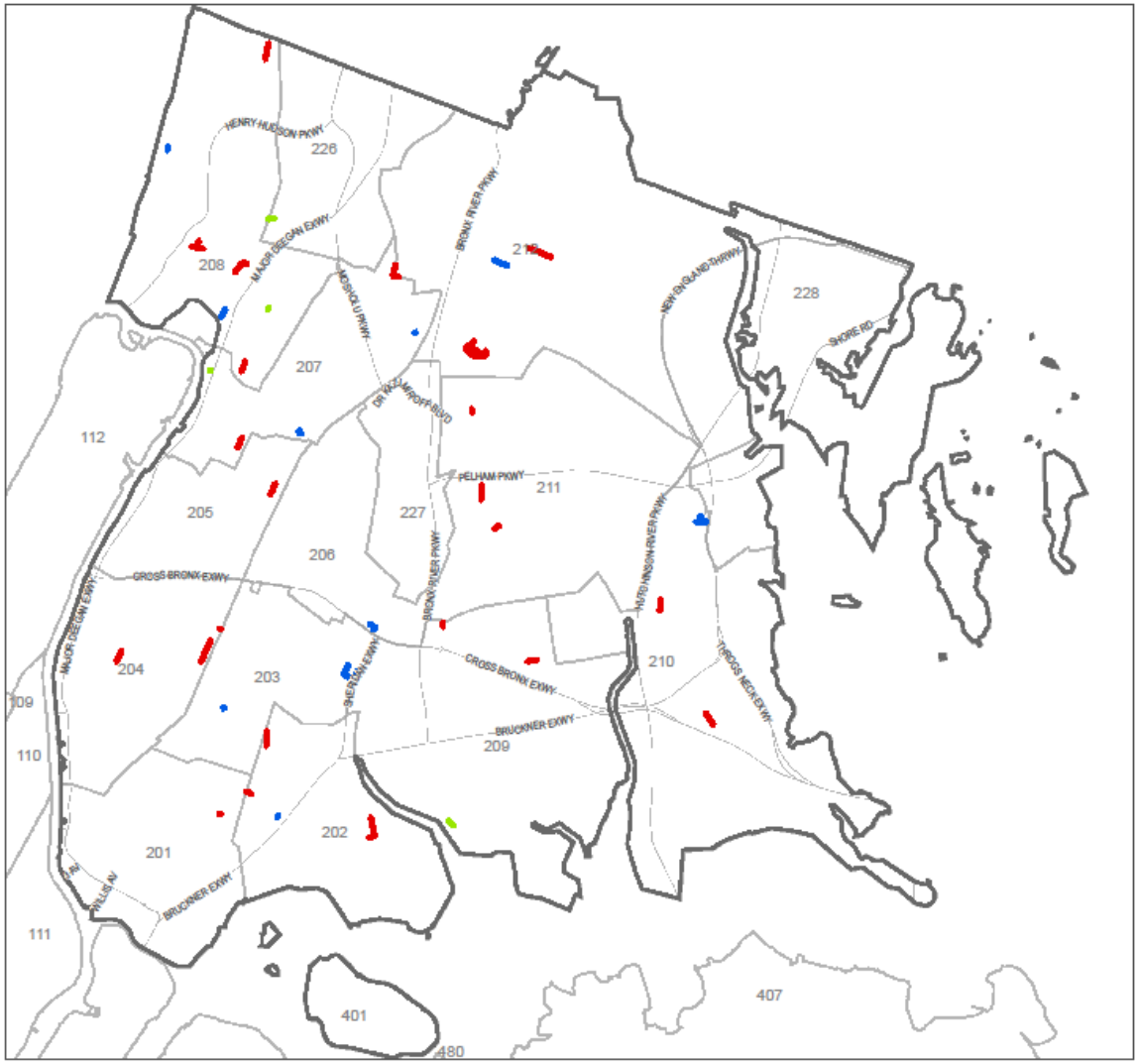


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014

- Sewer Cleaned & CCTV
- Sewer Visual Inspections
- Sewer Walkthrough Inspections
- Community Boards
- NYC Major Streets

NYC LOCATION MAP

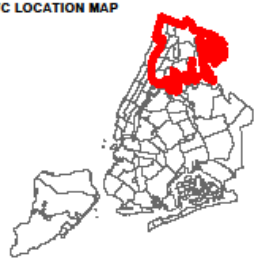
NYC Department of Environmental Protection Bureau of Water and Sewer Operations CMOM Compliance	
Borough Map	
Datum and Projection: NAD, 1983 StatePlane NY Long Island	Manhattan
0 0.025 0.05 0.1 0.15 Miles 1 Inch = 7,600 feet	
Prepared By the Mapping Unit on 2/17/2015	



NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014

- Sewer Cleaned & CCTV
- Sewer Visual Inspections
- Sewer Walkthrough Inspections
- Community Boards
- NYC Major Streets

NYC LOCATION MAP



NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance

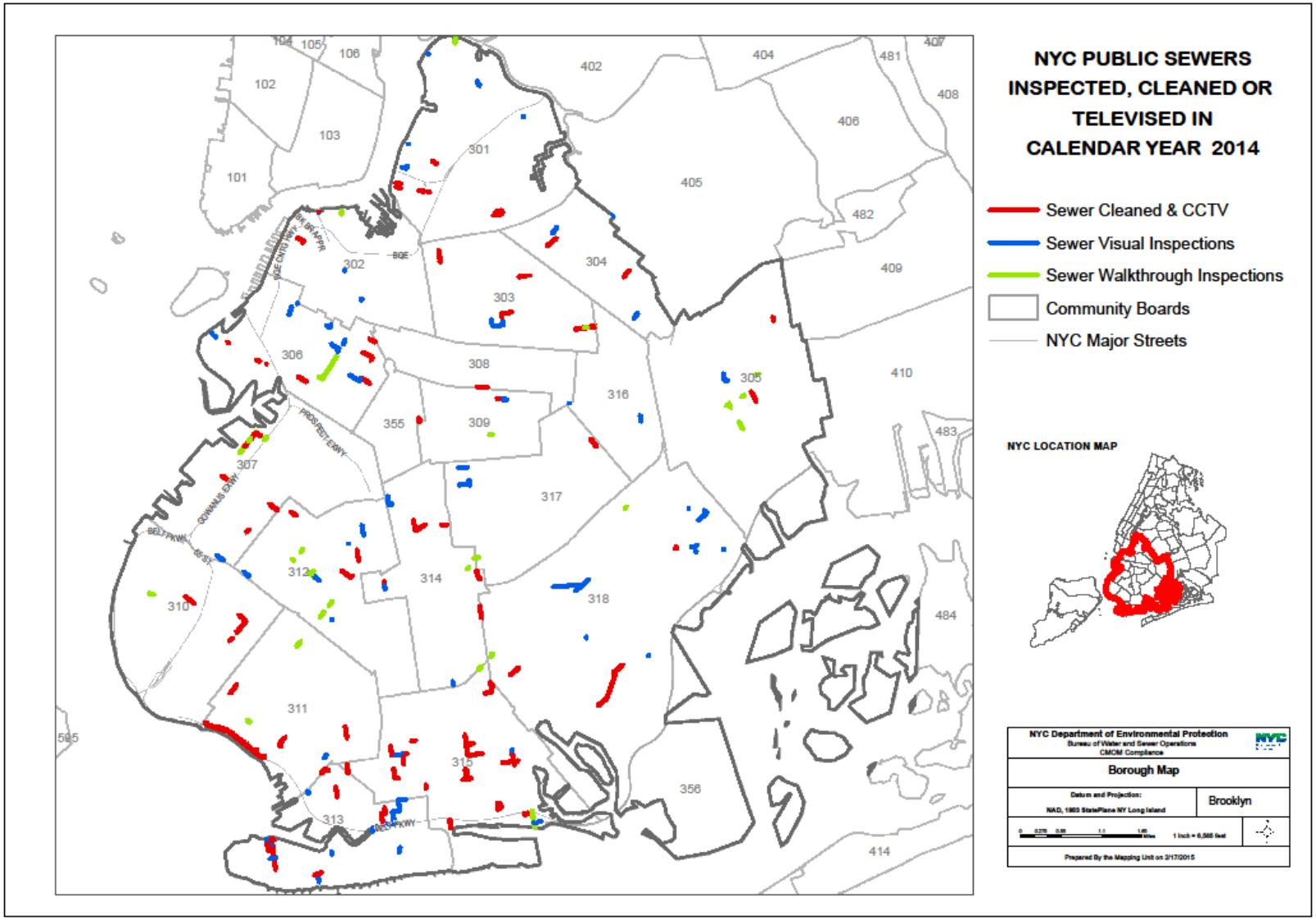
Borough Map

Datum and Projection:
NAD, 1983 StatePlane NY Long Island

The Bronx

0 0.2 0.4 0.8 1.2 Miles 1 Inch = 5,076 feet

Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS
INSPECTED, CLEANED OR
TELEVISED IN
CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
NYC Major Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Borough Map
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
Brooklyn
1 Inch = 6,585 feet
Prepared By the Mapping Unit on 2/17/2015
101
102
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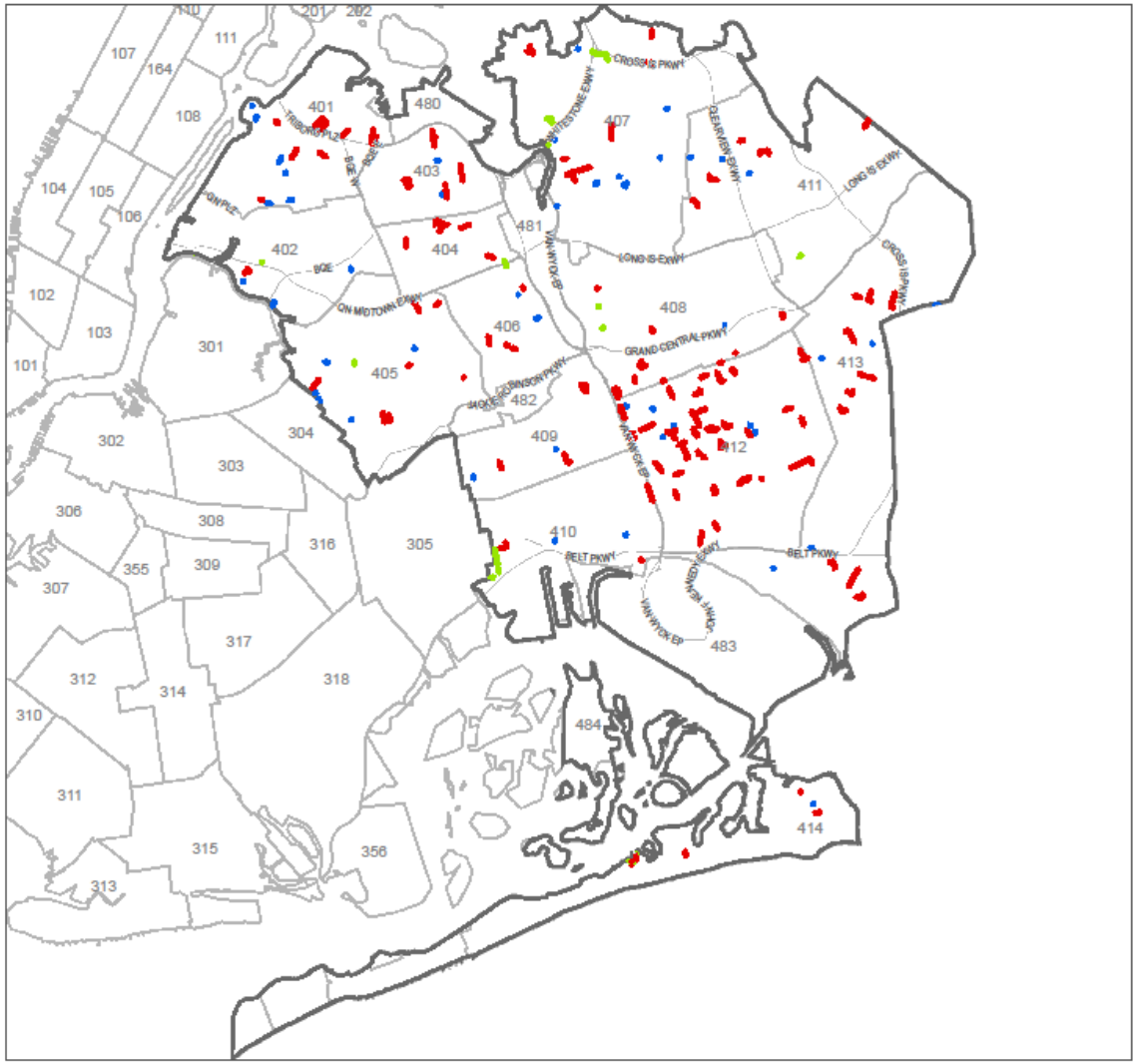
402
404
405
406
408
409
410
481
482
483
484
595
414
BQE
PROSPECT EXPWY
GOWANUS EXPY
BELT PKWY
45 ST
MCDONALD AVE
OCEAN PKWY



NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014

- Sewer Cleaned & CCTV
- Sewer Visual Inspections
- Sewer Walkthrough Inspections
- Community Boards
- NYC Major Streets

NYC LOCATION MAP

NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance

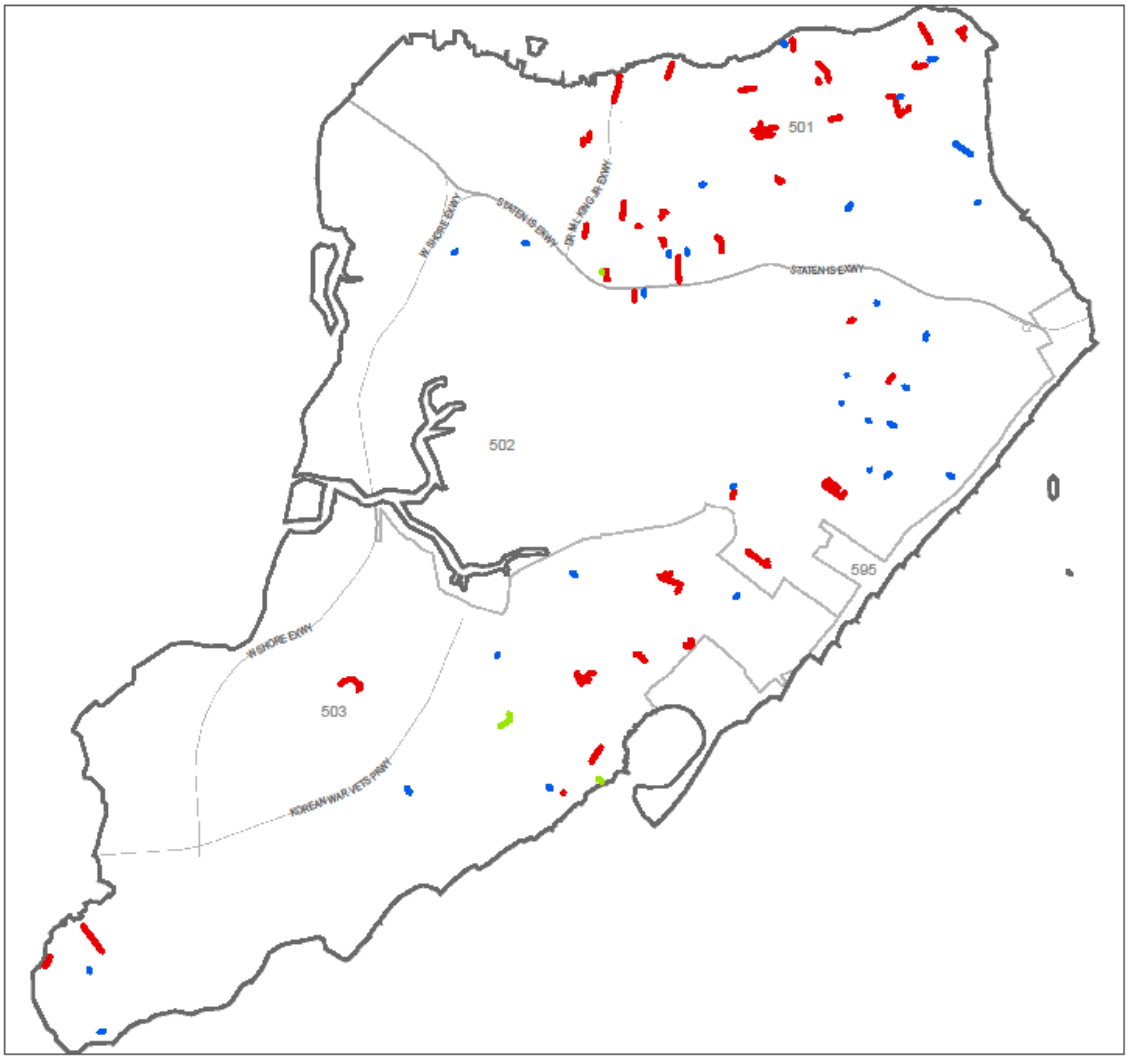
Borough Map

Datum and Projection:
NAD, 1983 StatePlane NY Long Island

Queens

1 Inch = 10,000 feet

Prepared By the Mapping Unit on 3/17/2015

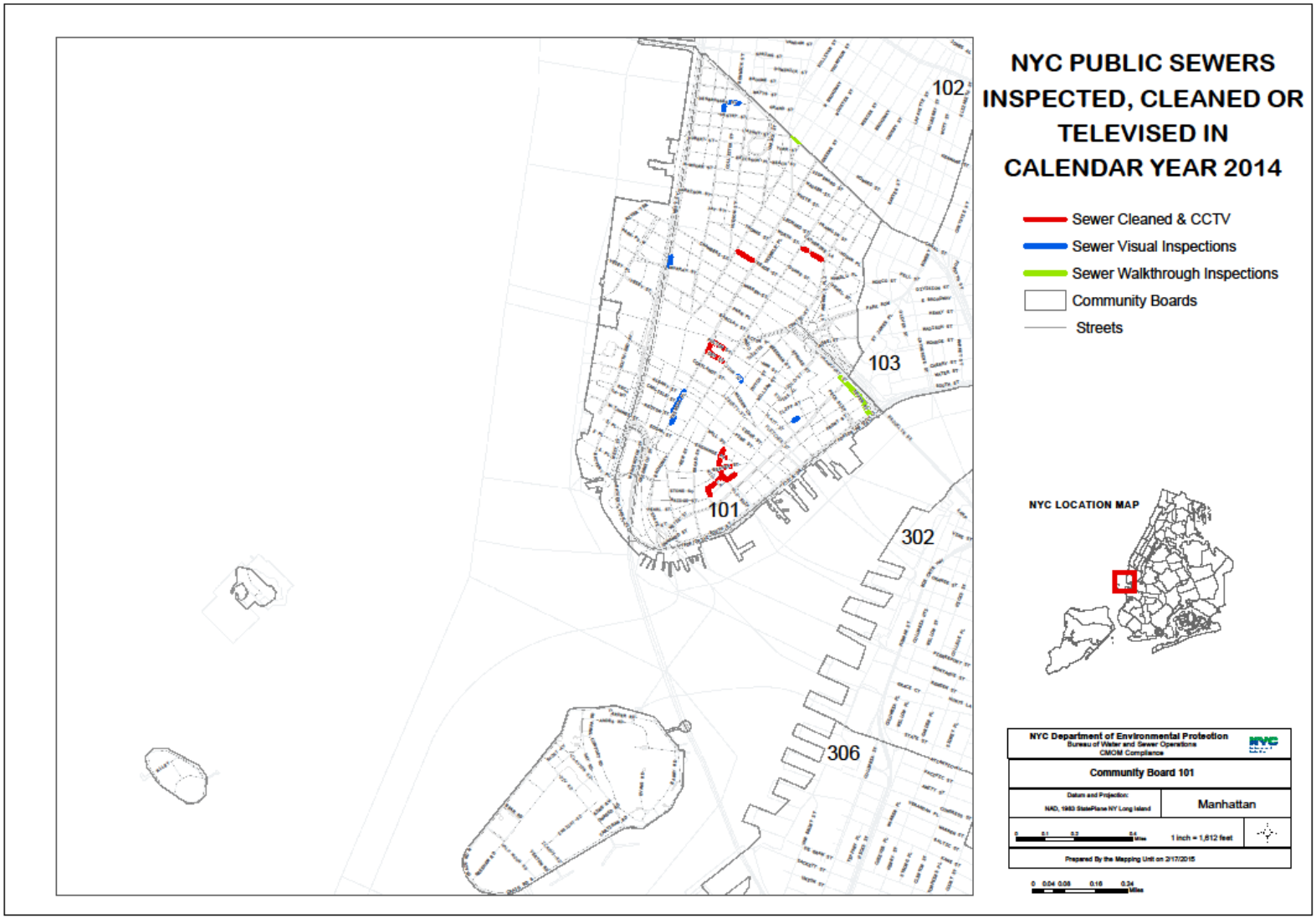


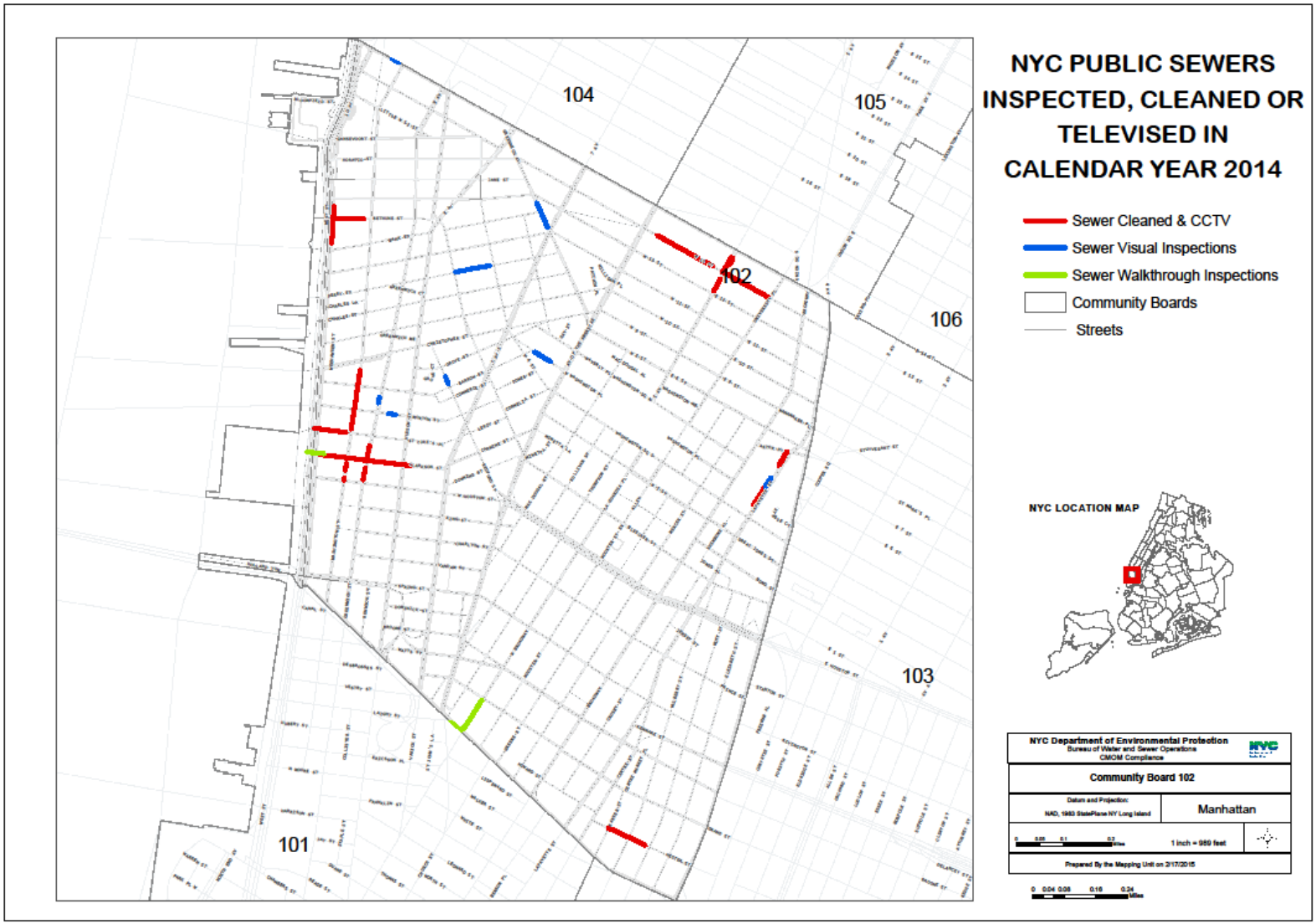
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014

- Sewer Cleaned & CCTV
- Sewer Visual Inspections
- Sewer Walkthrough Inspections
- Community Boards
- NYC Major Streets

NYC LOCATION MAP

NYC Department of Environmental Protection Bureau of Water and Sewer Operations CMOM Compliance	NYC
Borough Map	
Datum and Projection: NAD, 1983 StatePlane NY Long Island	Staten Island
0 0.25 0.5 1 1.5 Miles 1 Inch = 5,344 feet	
Prepared By the Mapping Unit on 2/17/2015	


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
102
103
101
302
306
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 101
Manhattan
1 inch = 1,612 feet
Prepared By the Mapping Unit on 2/17/2015


104
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102
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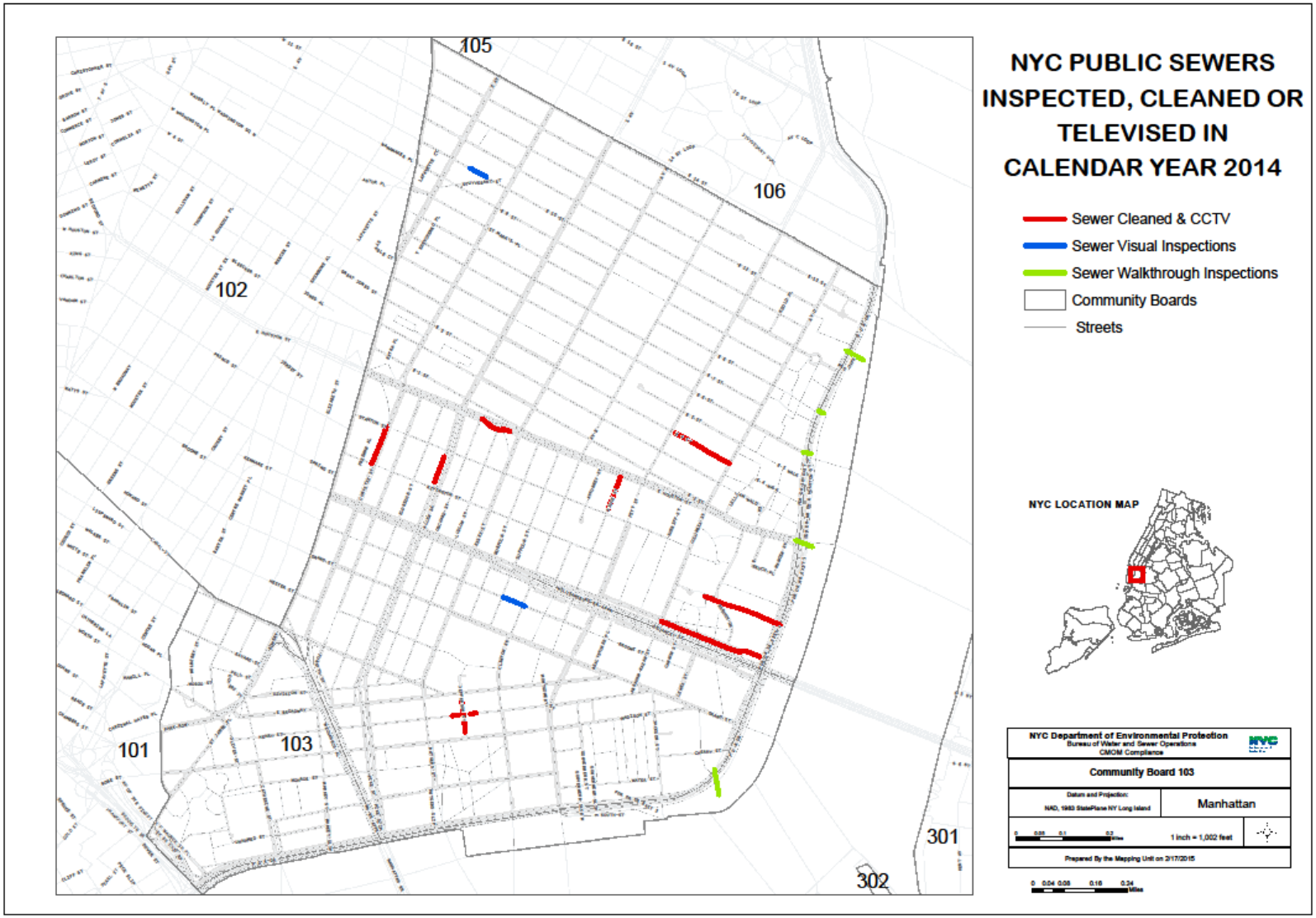
101
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 102
Manhattan
1 inch = 989 feet
Prepared By the Mapping Unit on 2/17/2015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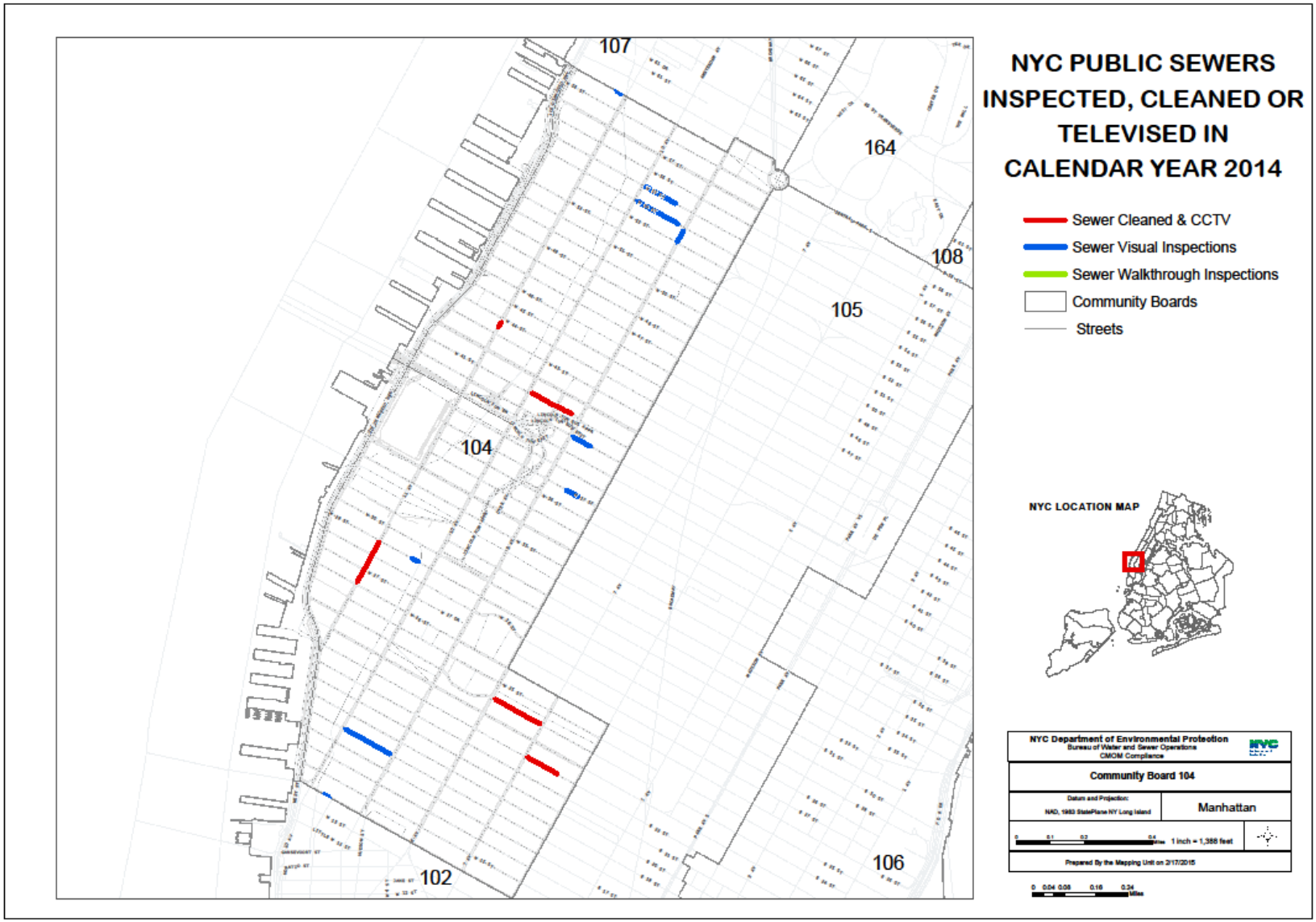
302
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 103
Manhattan
1 inch = 1,002 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
107
164
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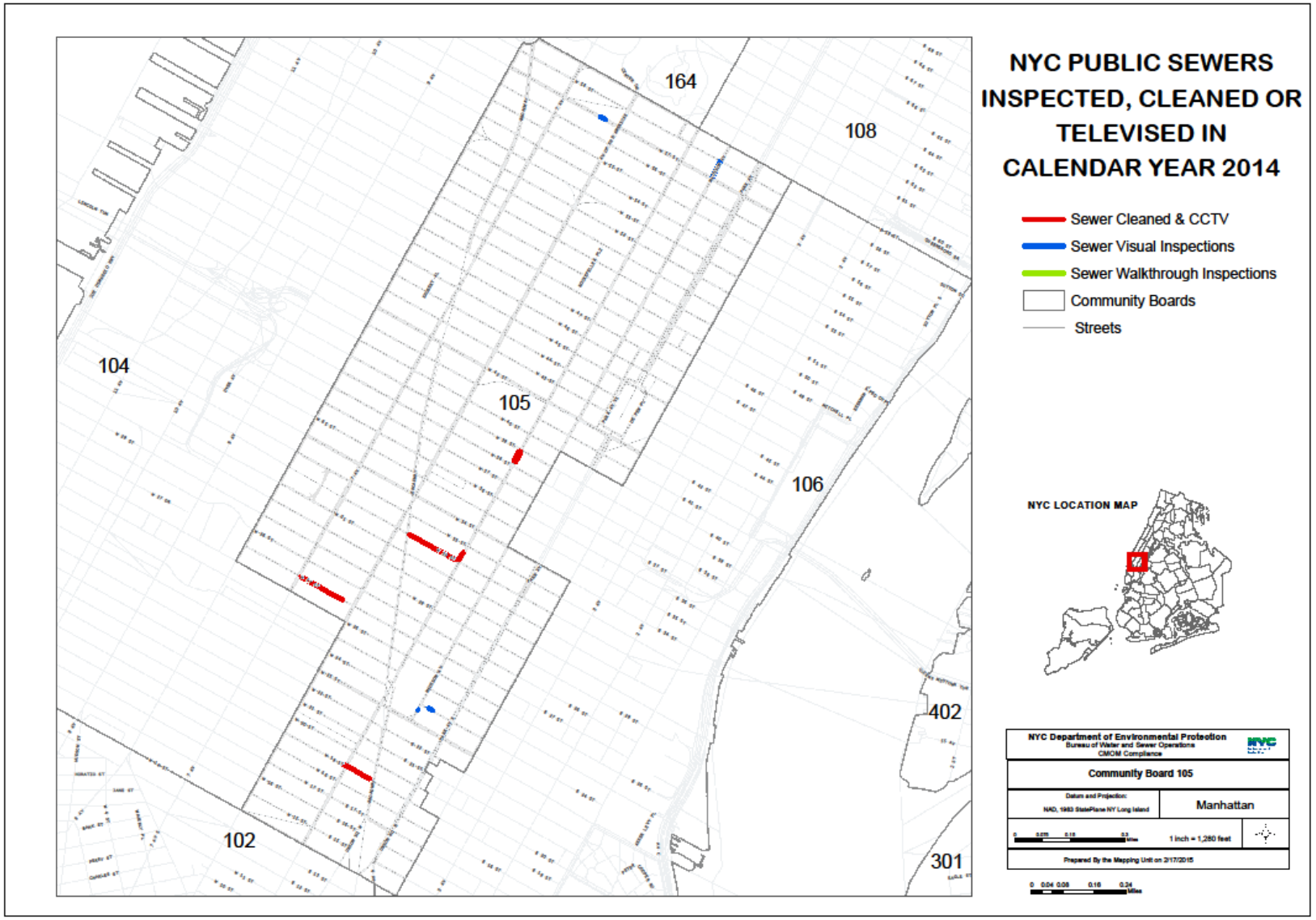
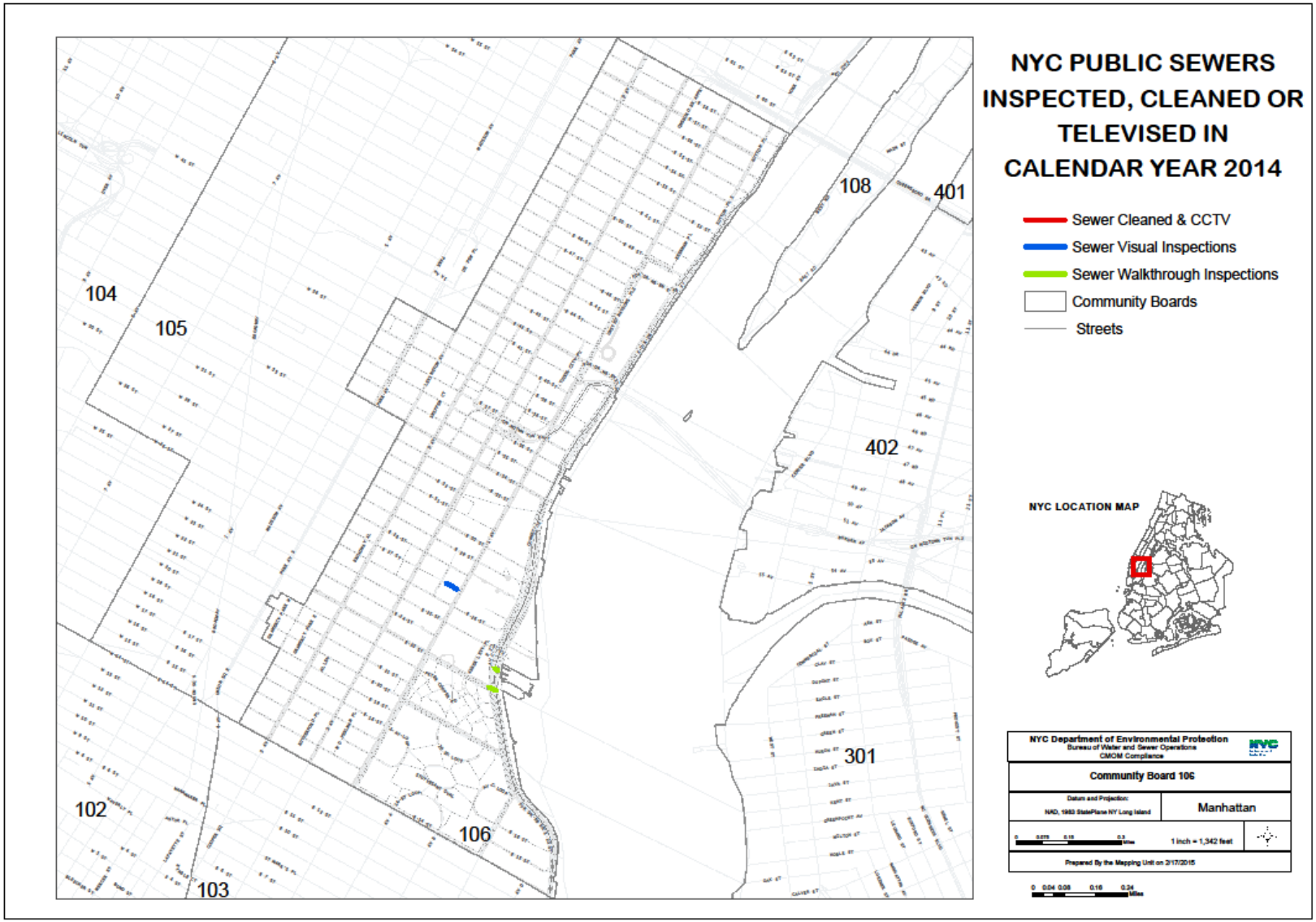
102
106
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 104
Manhattan
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
164
108
104
105
106
402
102
301
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 105
Manhattan
1 inch = 1,280 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Visual Inspections
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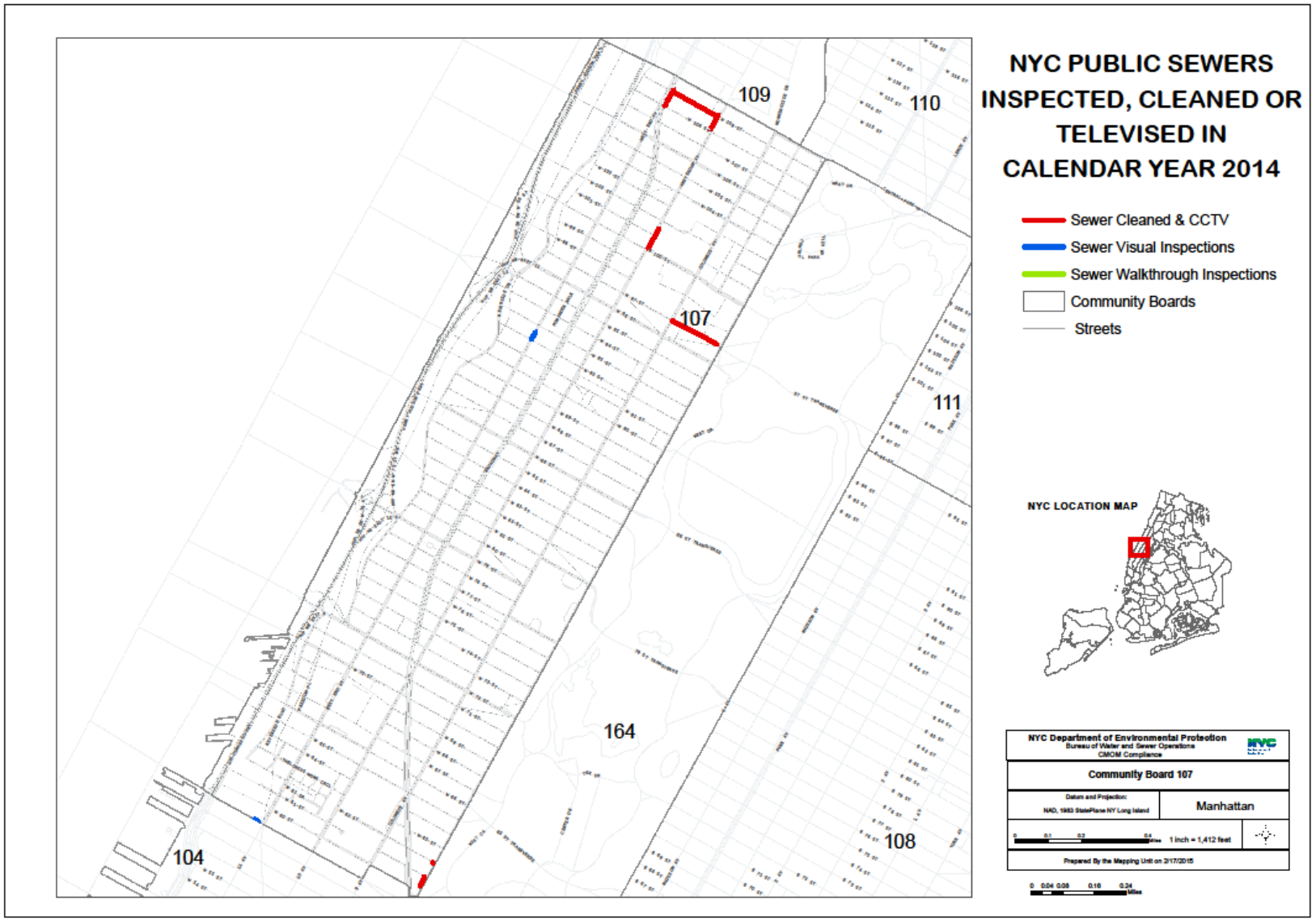
Community Boards
Streets
104
105
102
103
106
108
401
402
301
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 106
Manhattan
1 inch = 1,342 feet
Prepared By the Mapping Unit on 2/17/2015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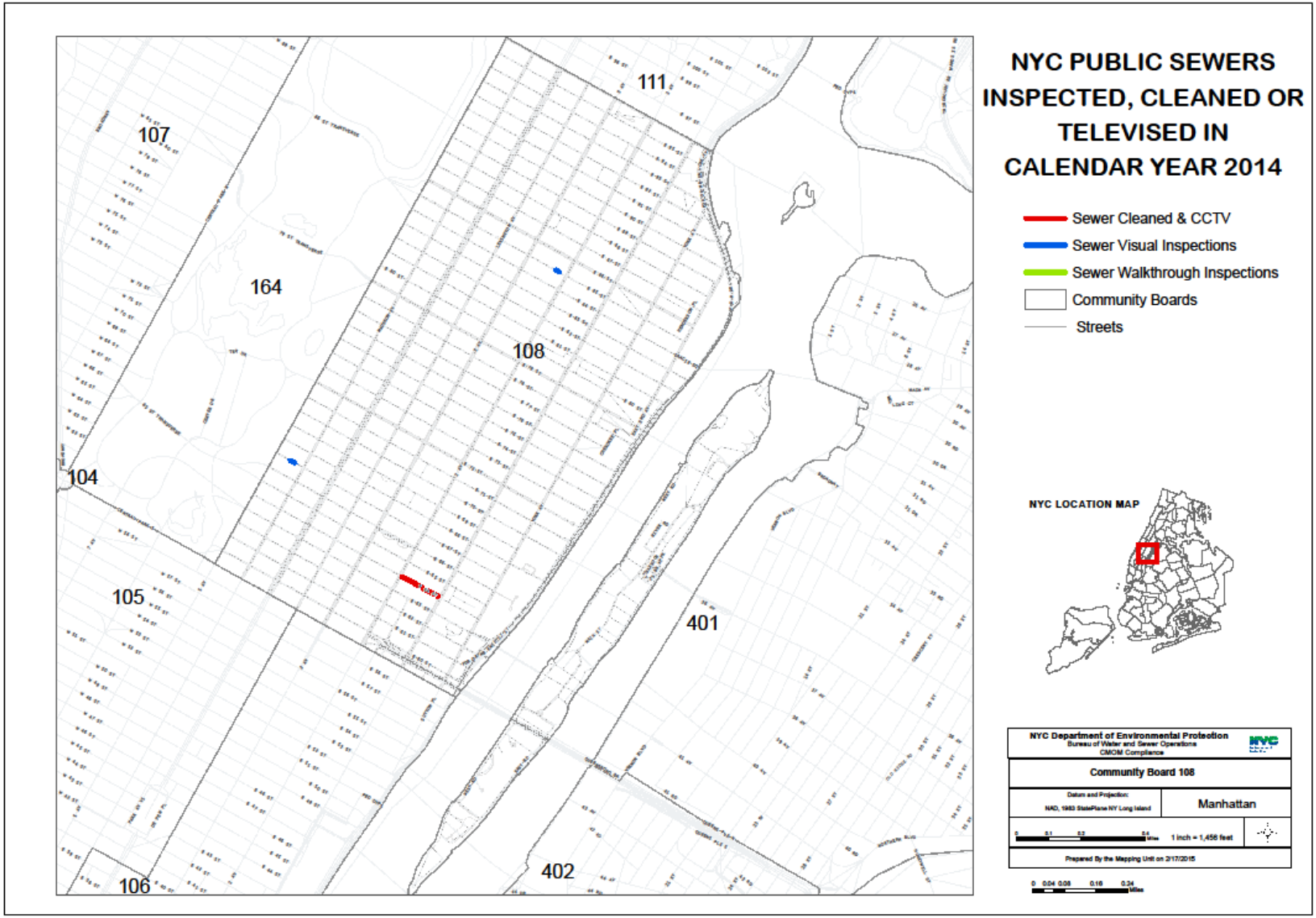
Community Boards
Streets
109
110
107
111
164
104
108
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 107
Manhattan
1 inch = 1,412 feet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Sewer Walkthrough Inspections
Community Boards
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NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 108
Manhattan
1 inch = 1,456 feet
Prepared By the Mapping Unit on 2/17/2015
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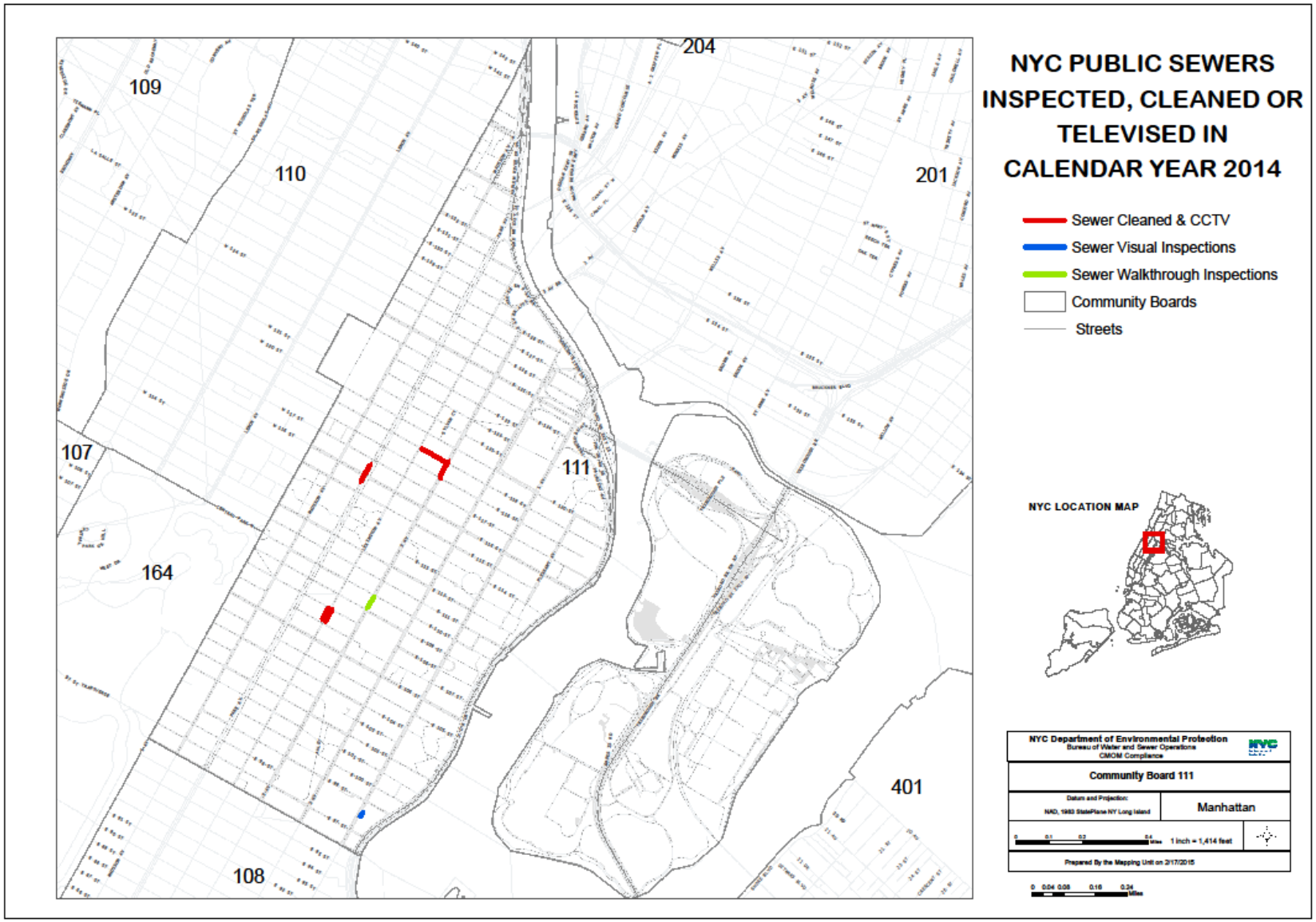
111
164
108
104
105
401
402
106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Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 111
Manhattan
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
1 inch = 1,414 feet
Prepared By the Mapping Unit on 2/17/2015
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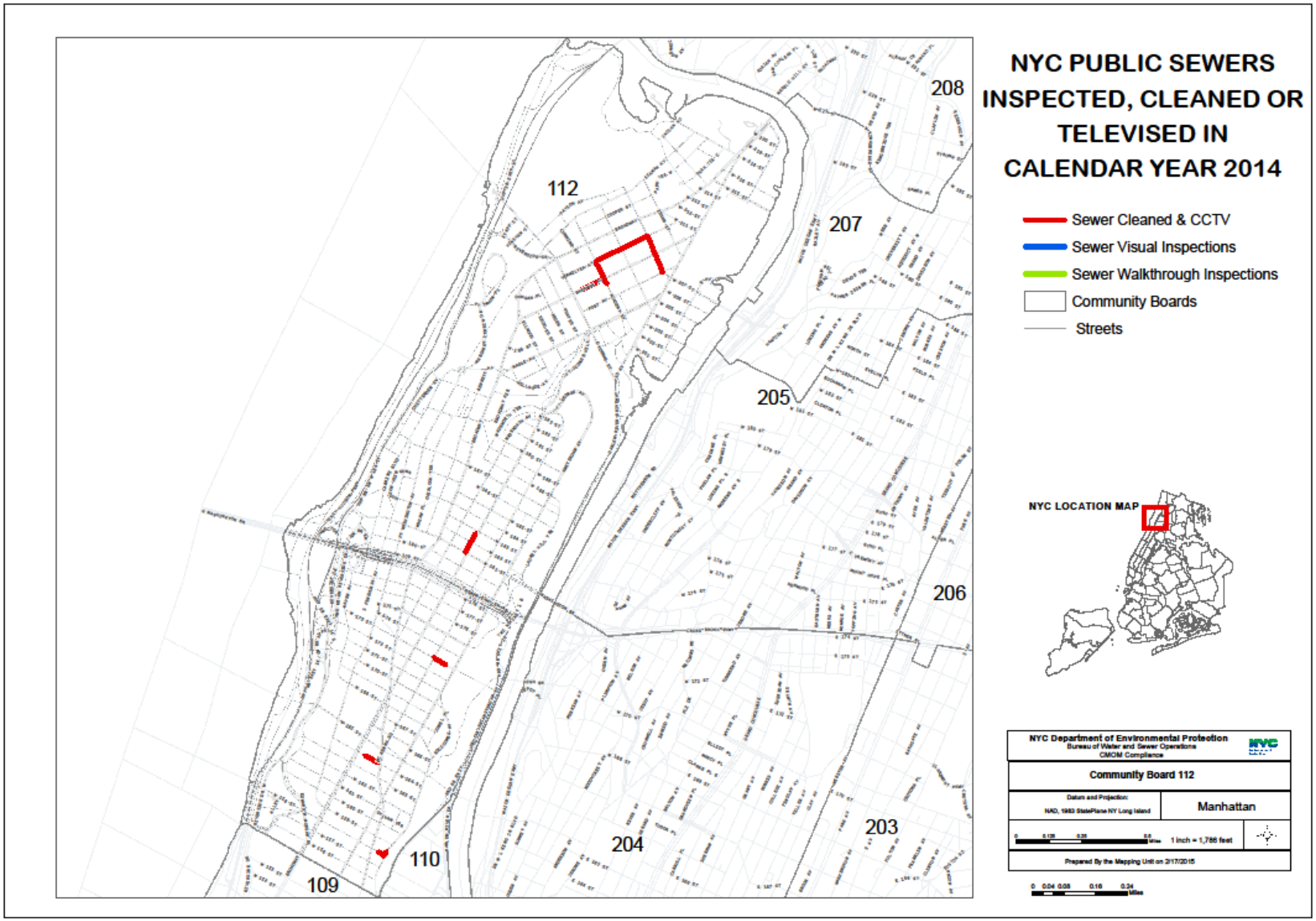
110
204
201
107
111
164
401
108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Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
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Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 112
Manhattan
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
1 inch = 1,786 feet
Prepared By the Mapping Unit on 2/17/2015
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207
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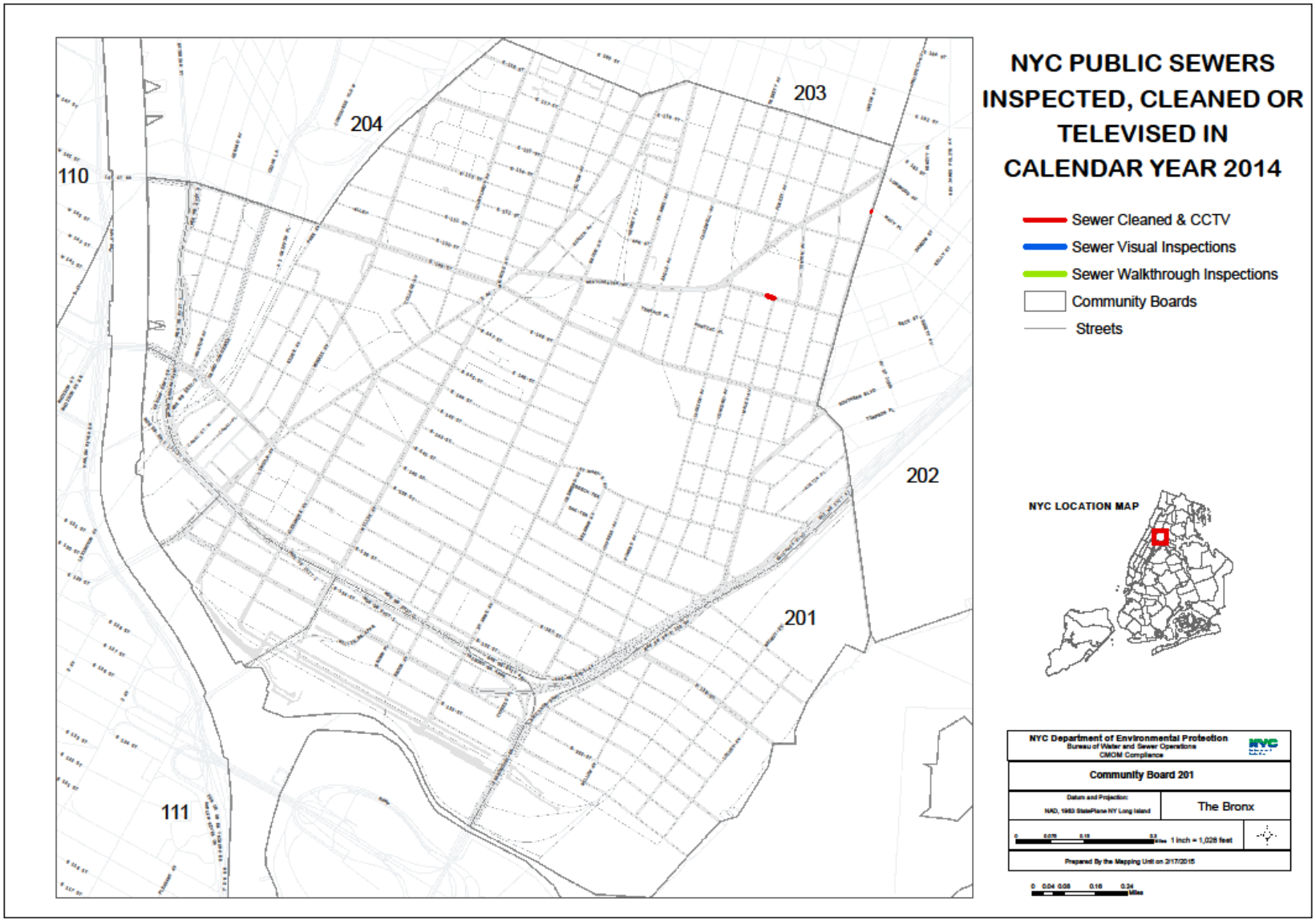
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Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 201
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,026 feet
Prepared By the Mapping Unit on 2/17/2015
0 0.04 0.08 0.16 0.24
Miles
203
204
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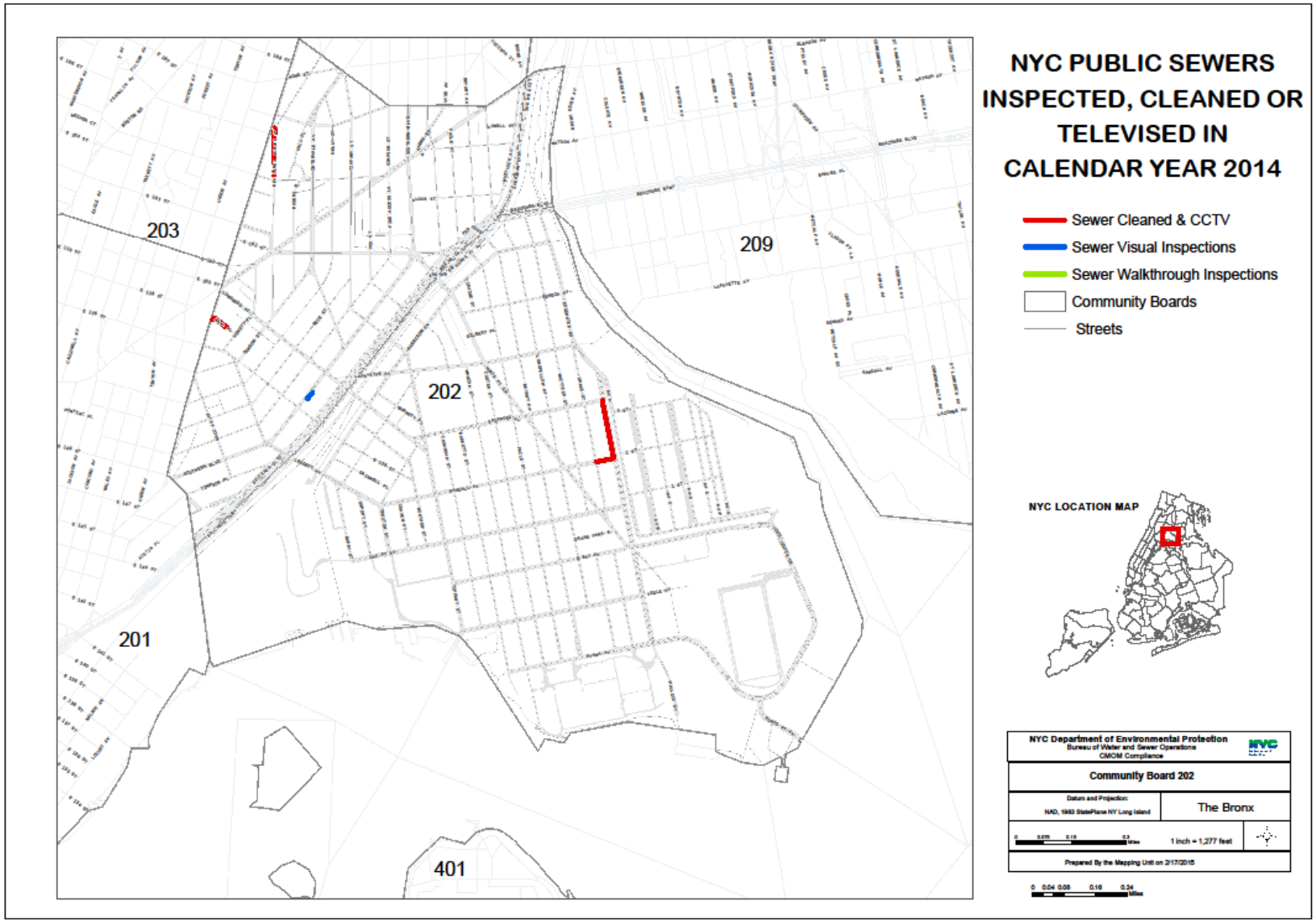
111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Sewer Visual Inspections
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Community Boards
Streets
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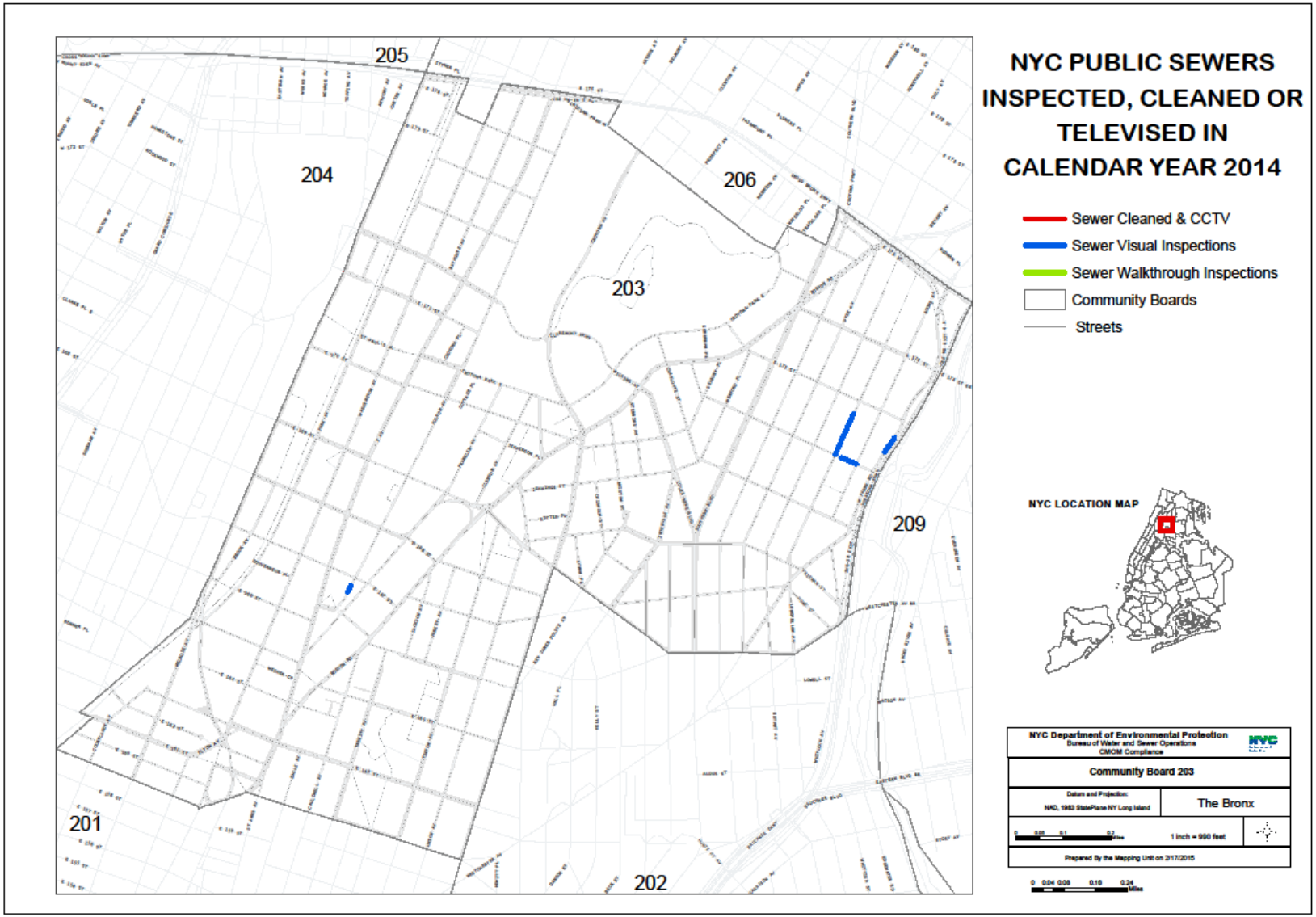
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 202
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,277 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
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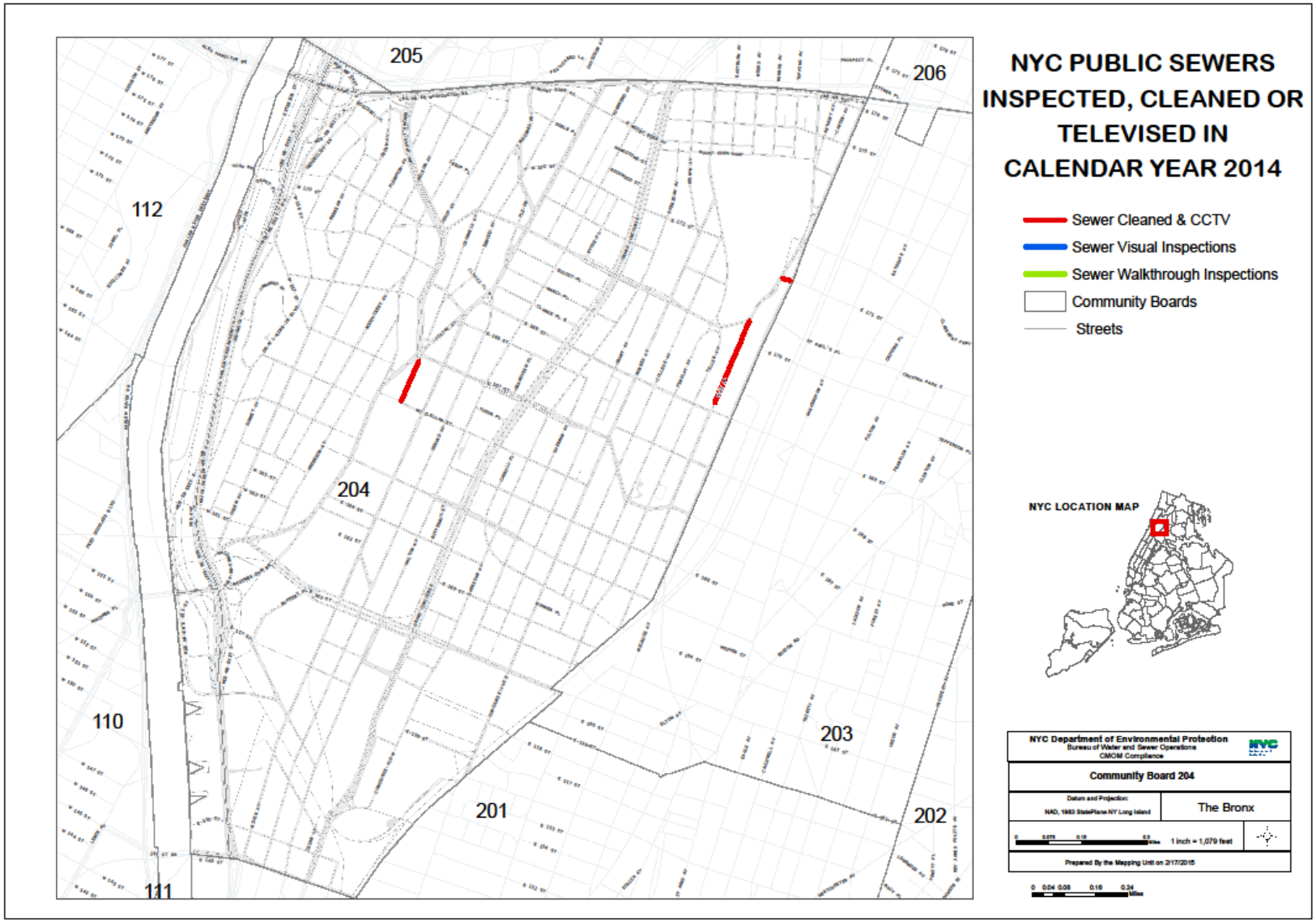
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 203
The Bronx
1 inch = 990 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
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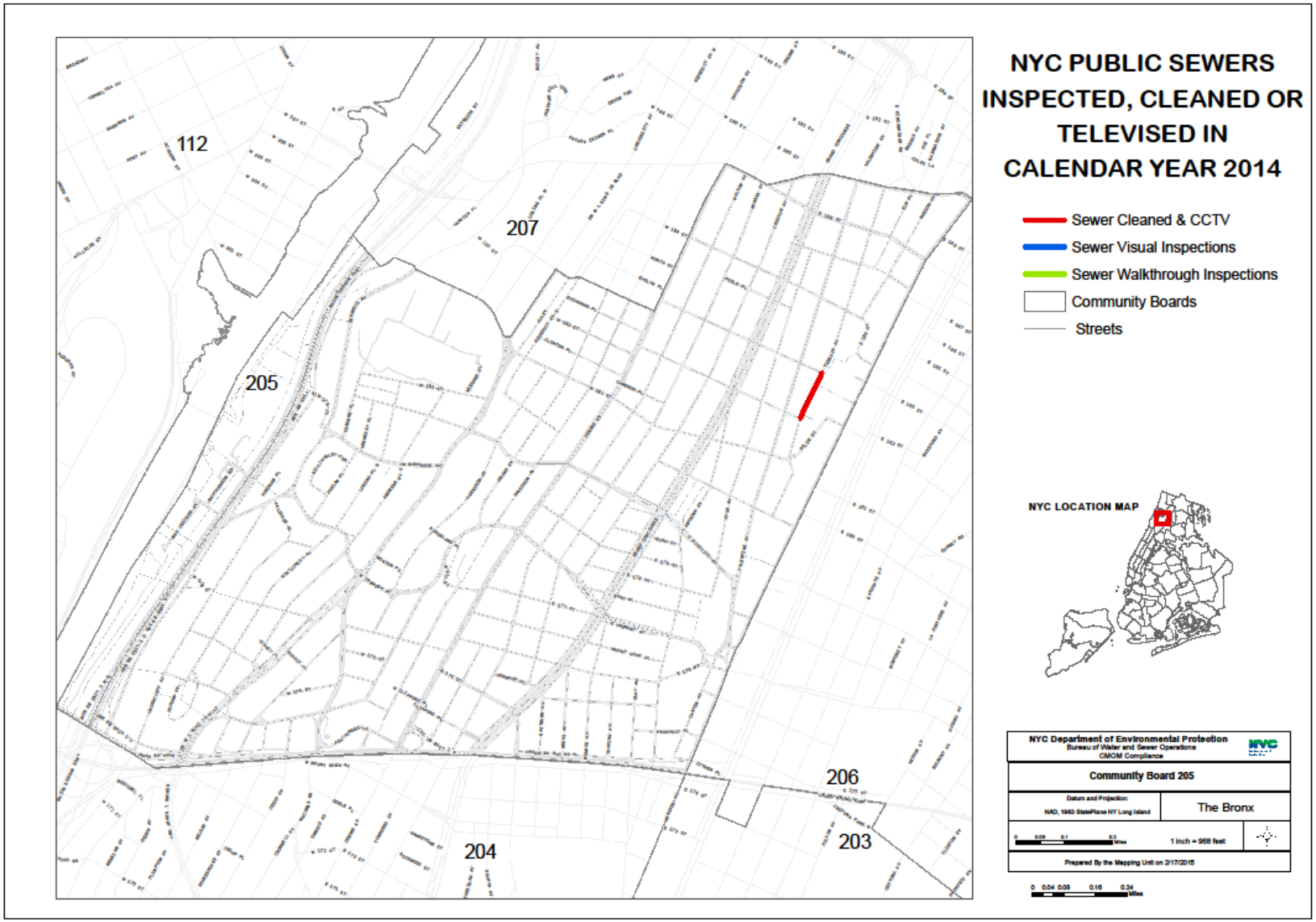
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 204
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,079 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
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Community Boards
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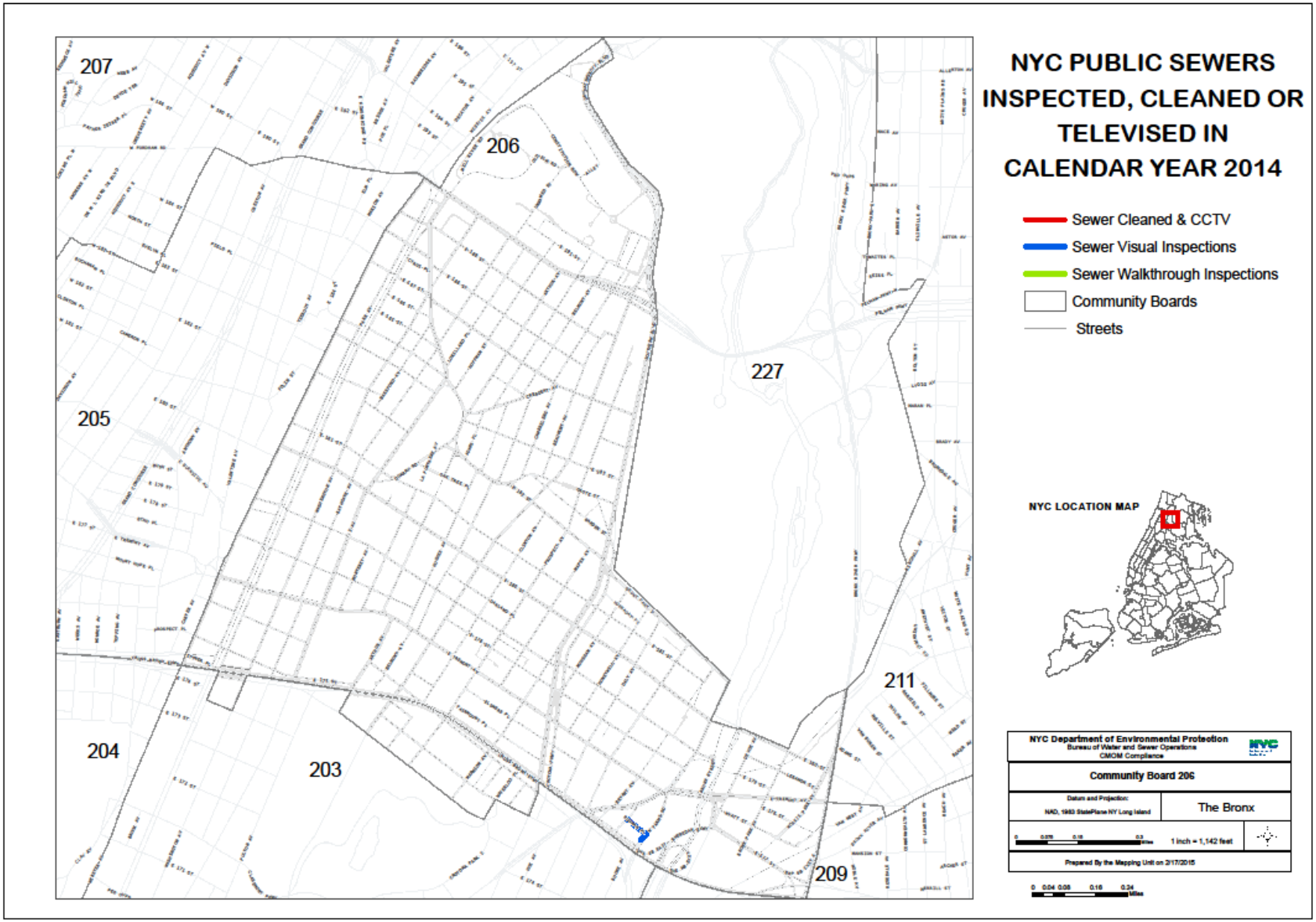
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 205
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 988 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
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Sewer Visual Inspections
Sewer Walkthrough Inspections
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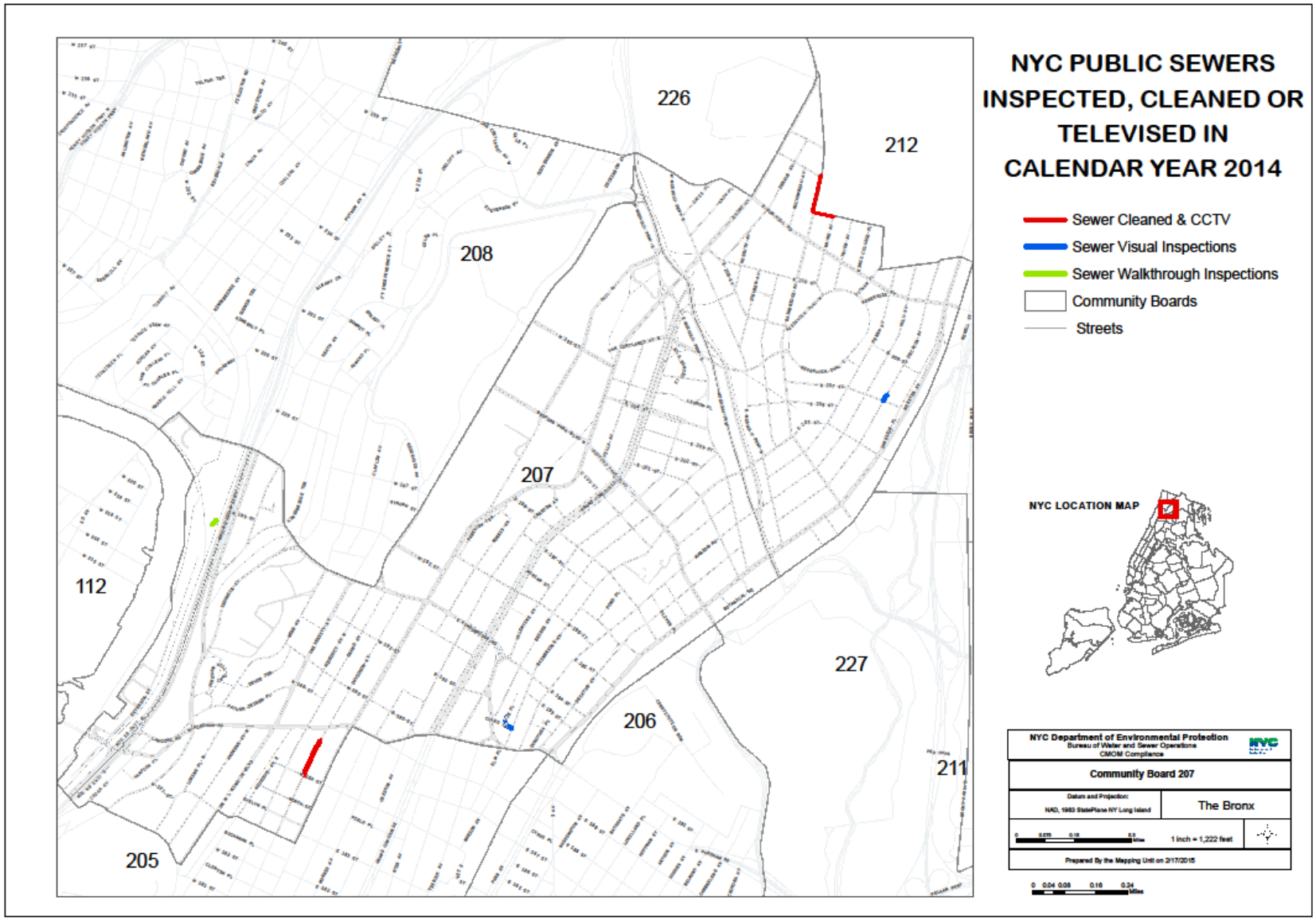
CMOM Compliance
Community Board 206
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,142 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Visual Inspections
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NYC LOCATION MAP
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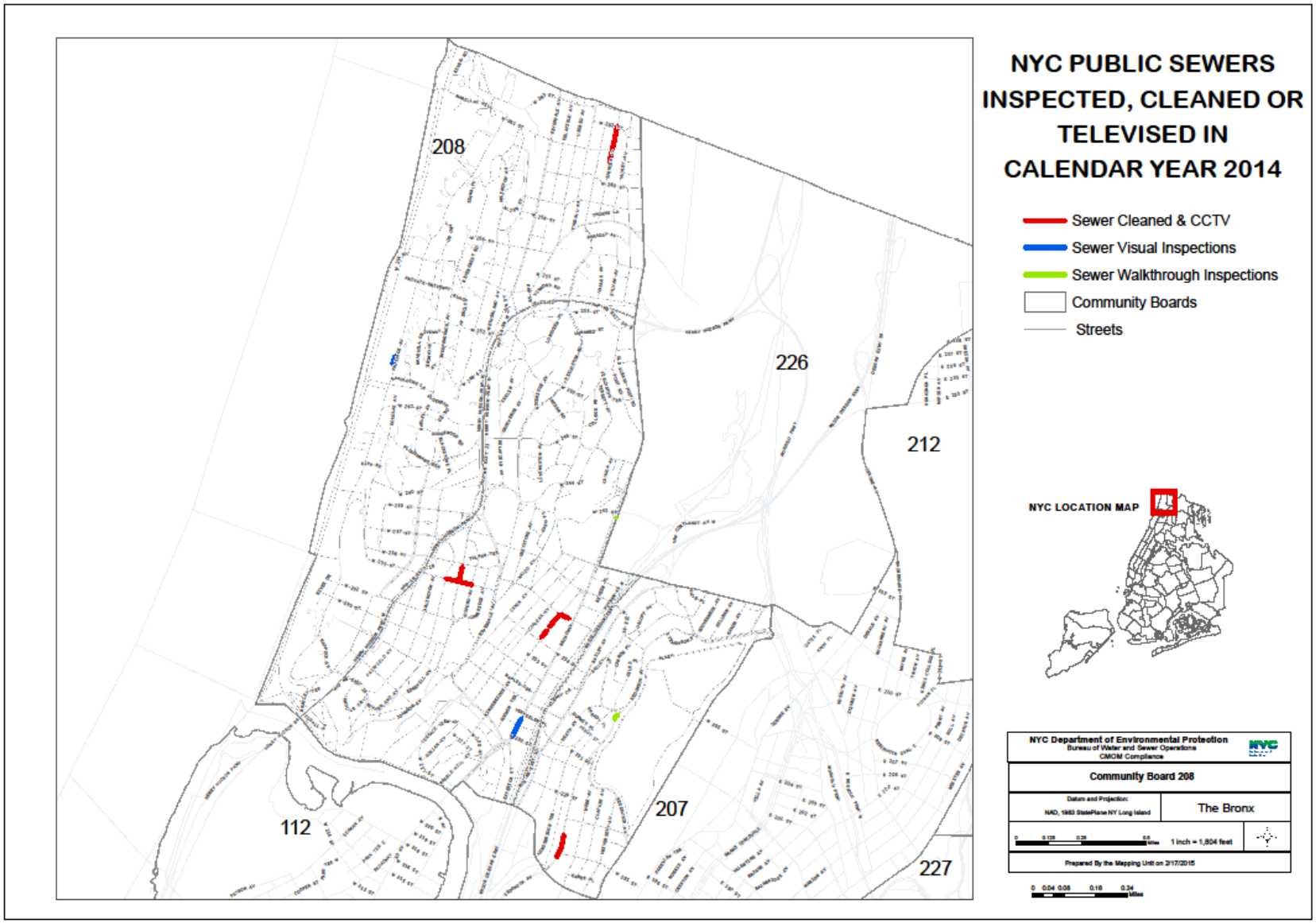
208
207
112
227
206
211
205
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 207
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,222 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Visual Inspections
Sewer Walkthrough Inspections
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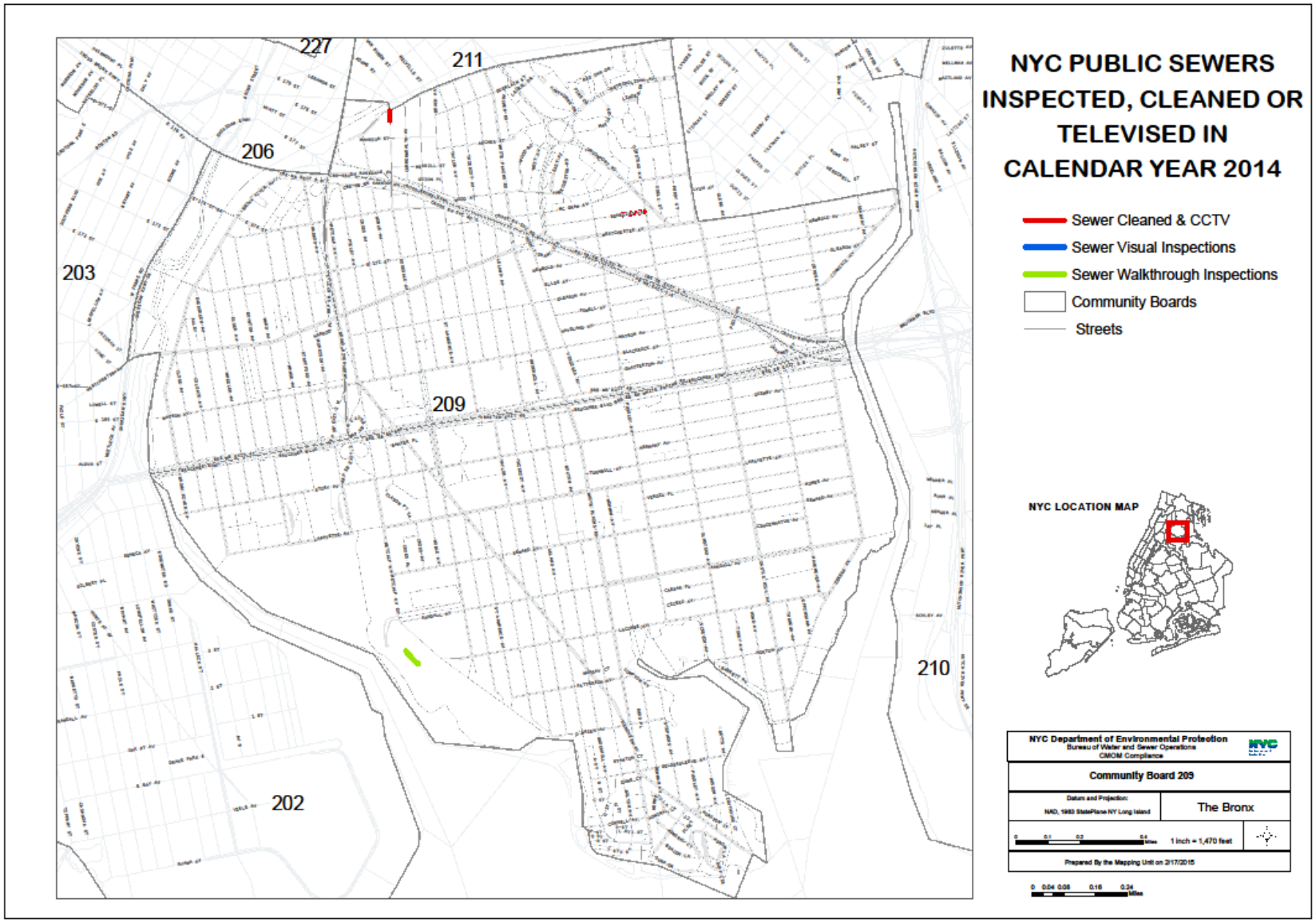
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 208
The Bronx
1 inch = 1,804 feet
Prepared By the Mapping Unit on 2/17/2015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NYC Department of Environmental Protection
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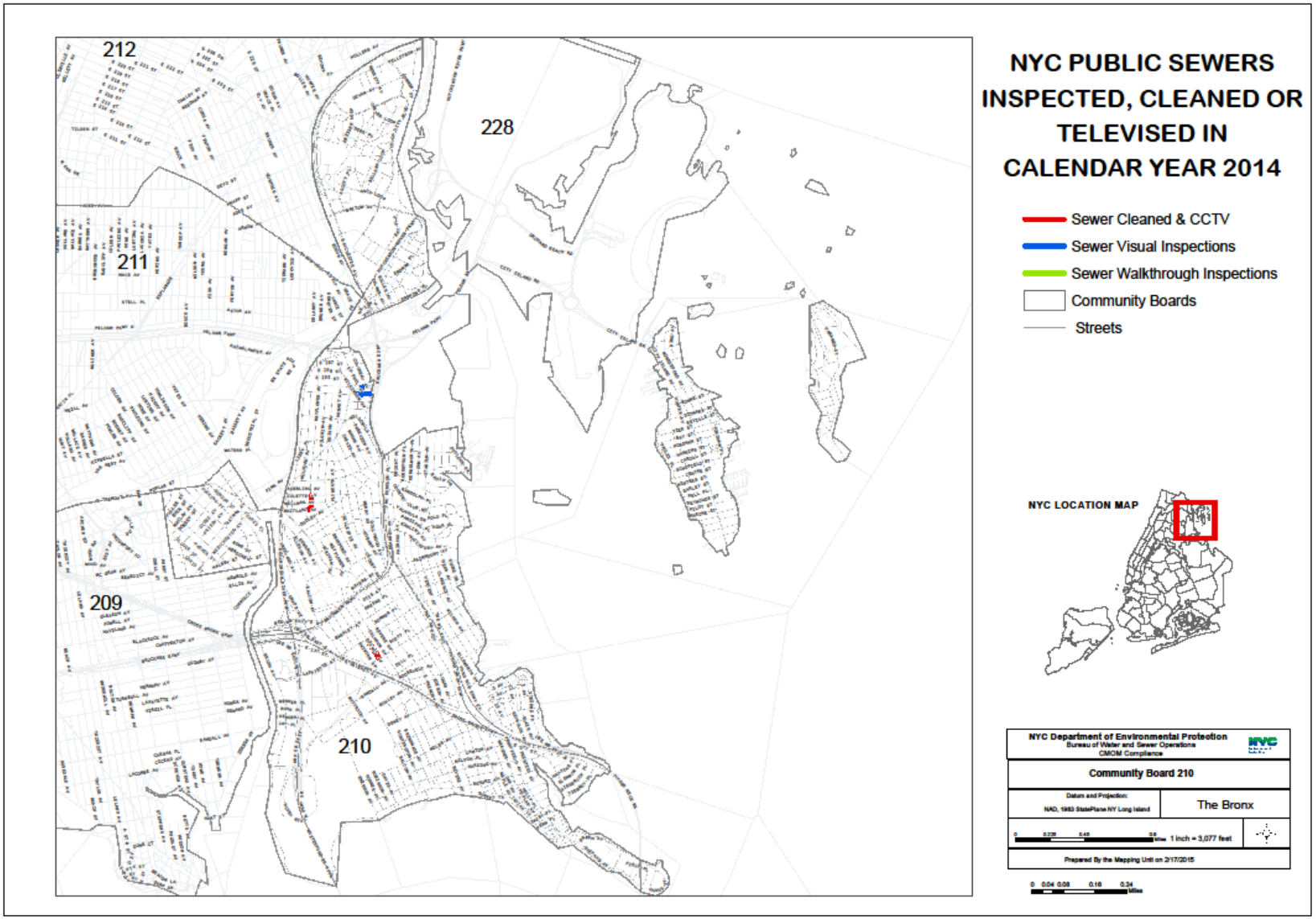
CMOM Compliance
Community Board 209
The Bronx
1 inch = 1,470 feet
Prepared By the Mapping Unit on 2/17/2015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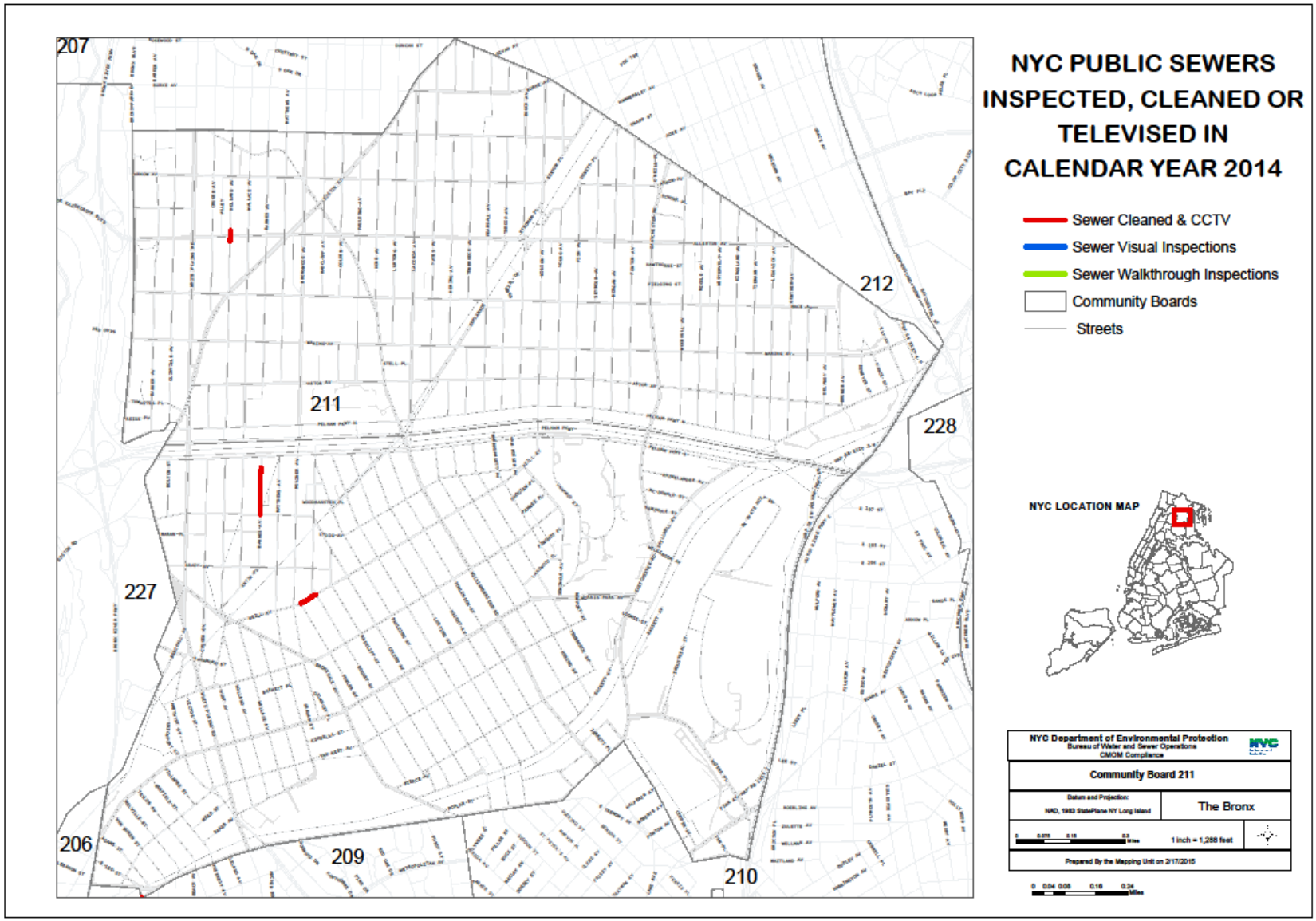
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 210
The Bronx
1 inch = 3,077 feet
Prepared By the Mapping Unit on 2/17/2015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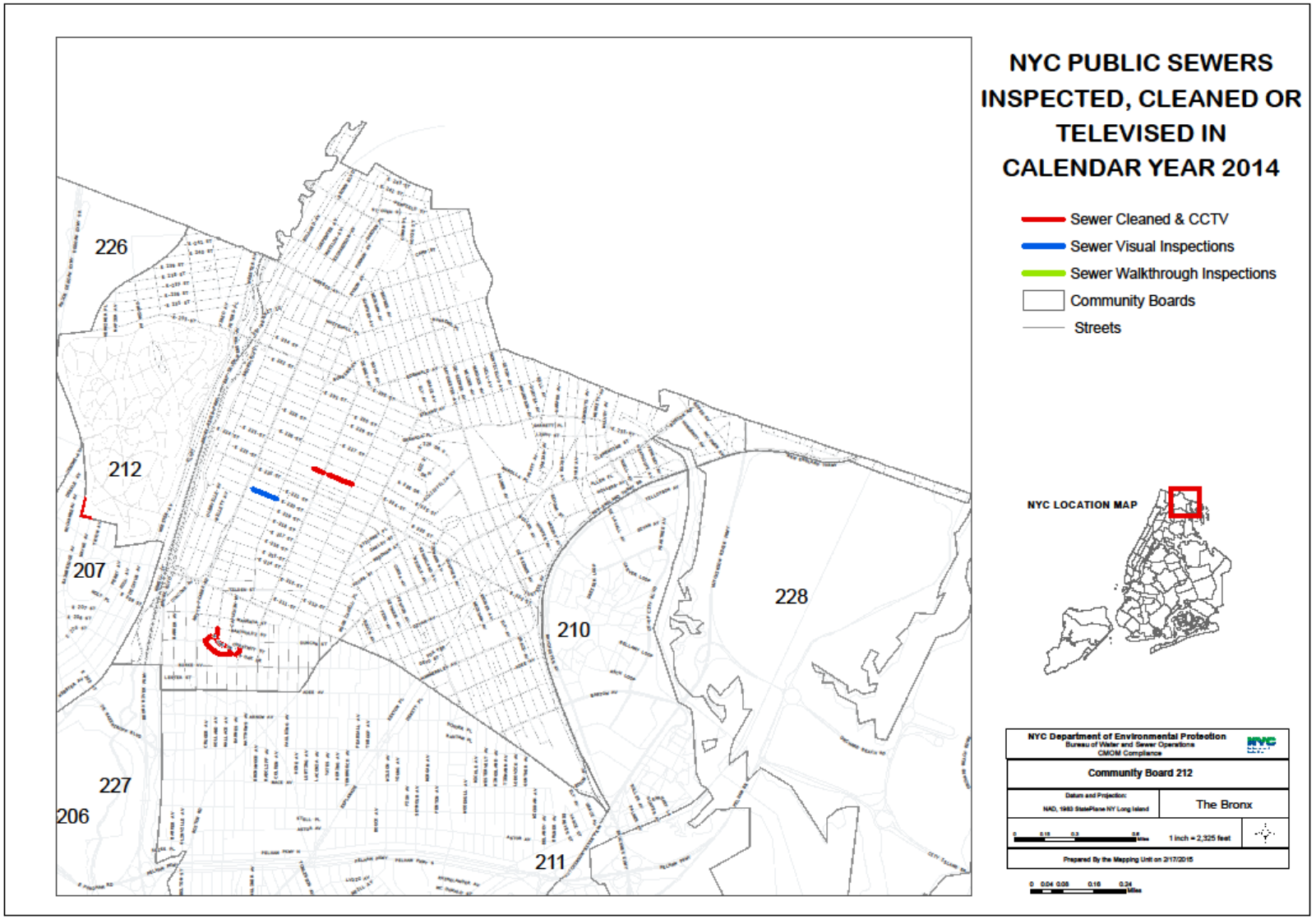
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 211
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 1,288 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Visual Inspections
Sewer Walkthrough Inspections
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210
228
211
NYC Department of Environmental Protection
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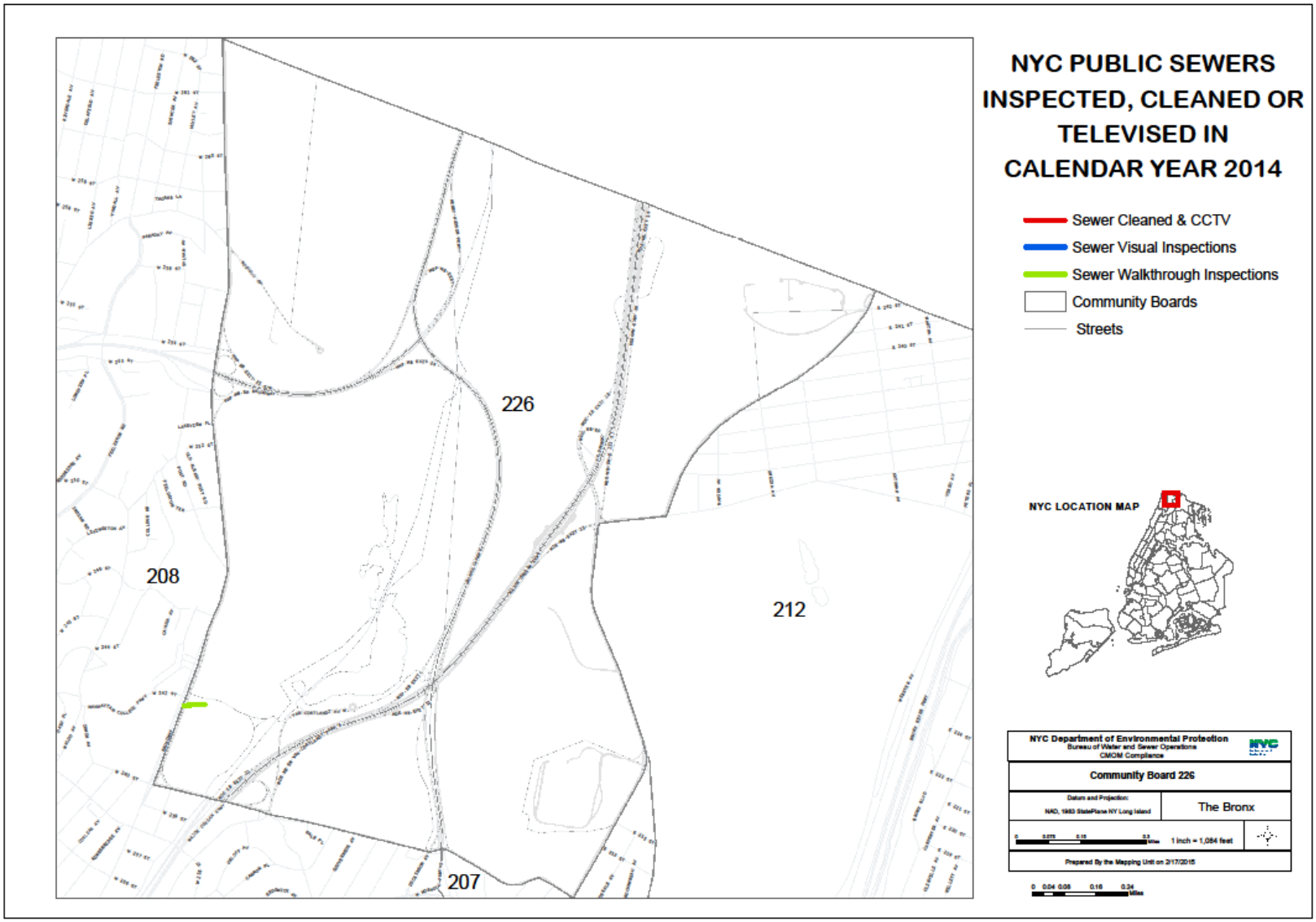
CMOM Compliance
Community Board 212
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
The Bronx
1 inch = 2,325 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Walkthrough Inspections
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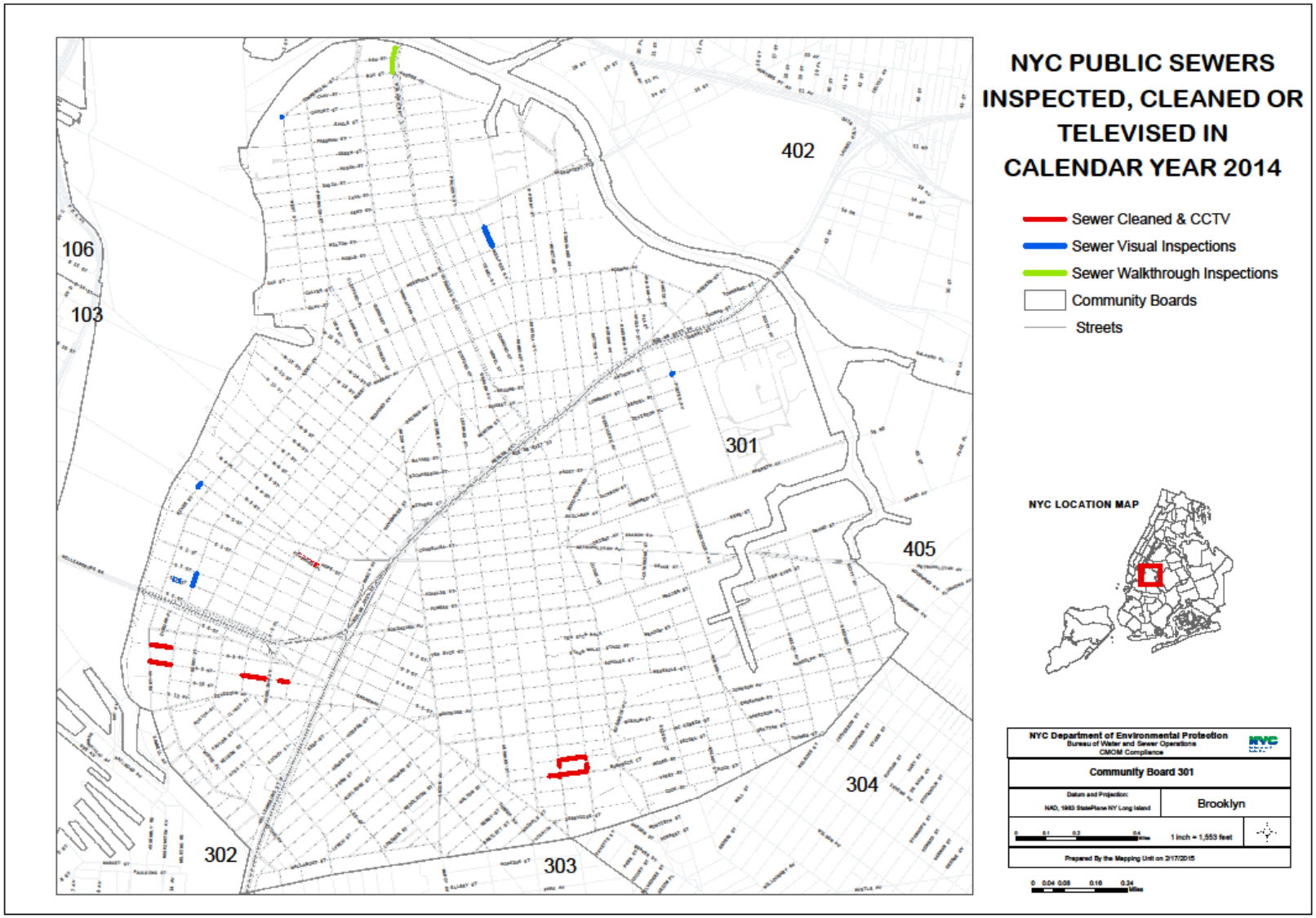
212
207
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 226
The Bronx
1 inch = 1,084 feet
Prepared By the Mapping Unit on 2/17/2015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NYC LOCATION MAP
402
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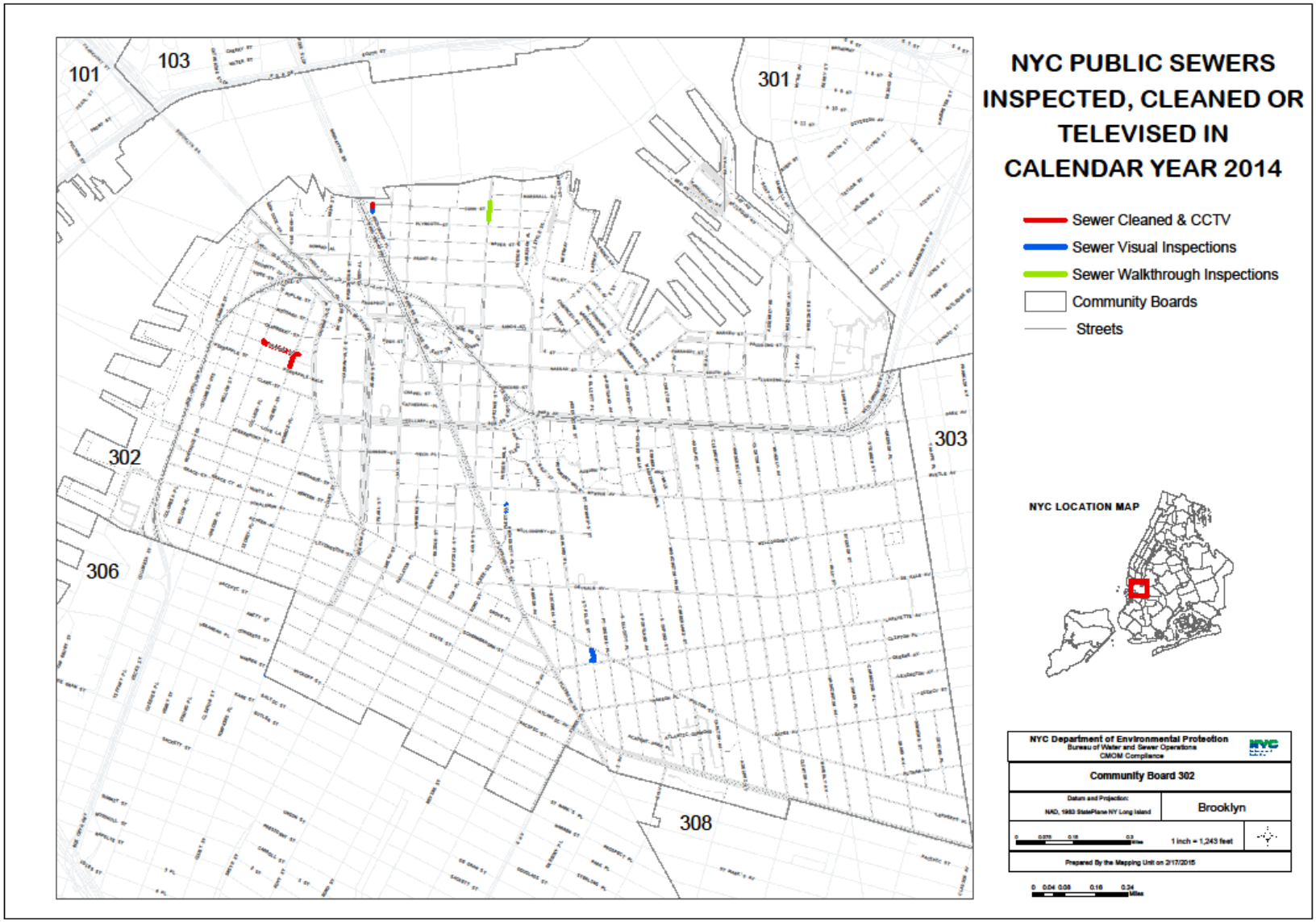
103
301
405
304
302
303
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 301
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
Brooklyn
1 inch = 1,553 feet
Prepared By the Mapping Unit on 2/17/2015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NYC LOCATION MAP
NYC Department of Environmental Protection
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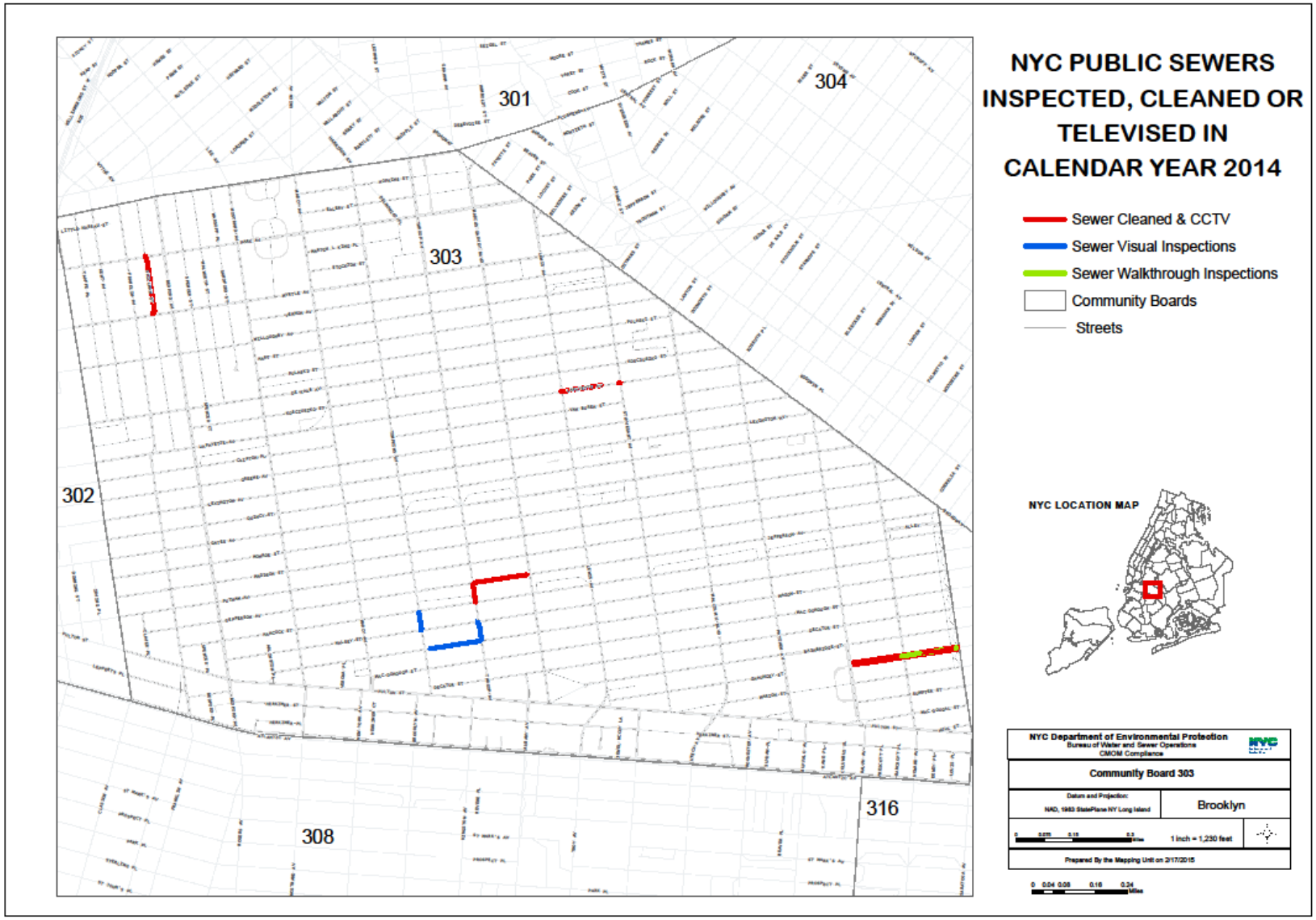
Community Board 302
Brooklyn
1 inch = 1,243 feet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NYC Department of Environmental Protection
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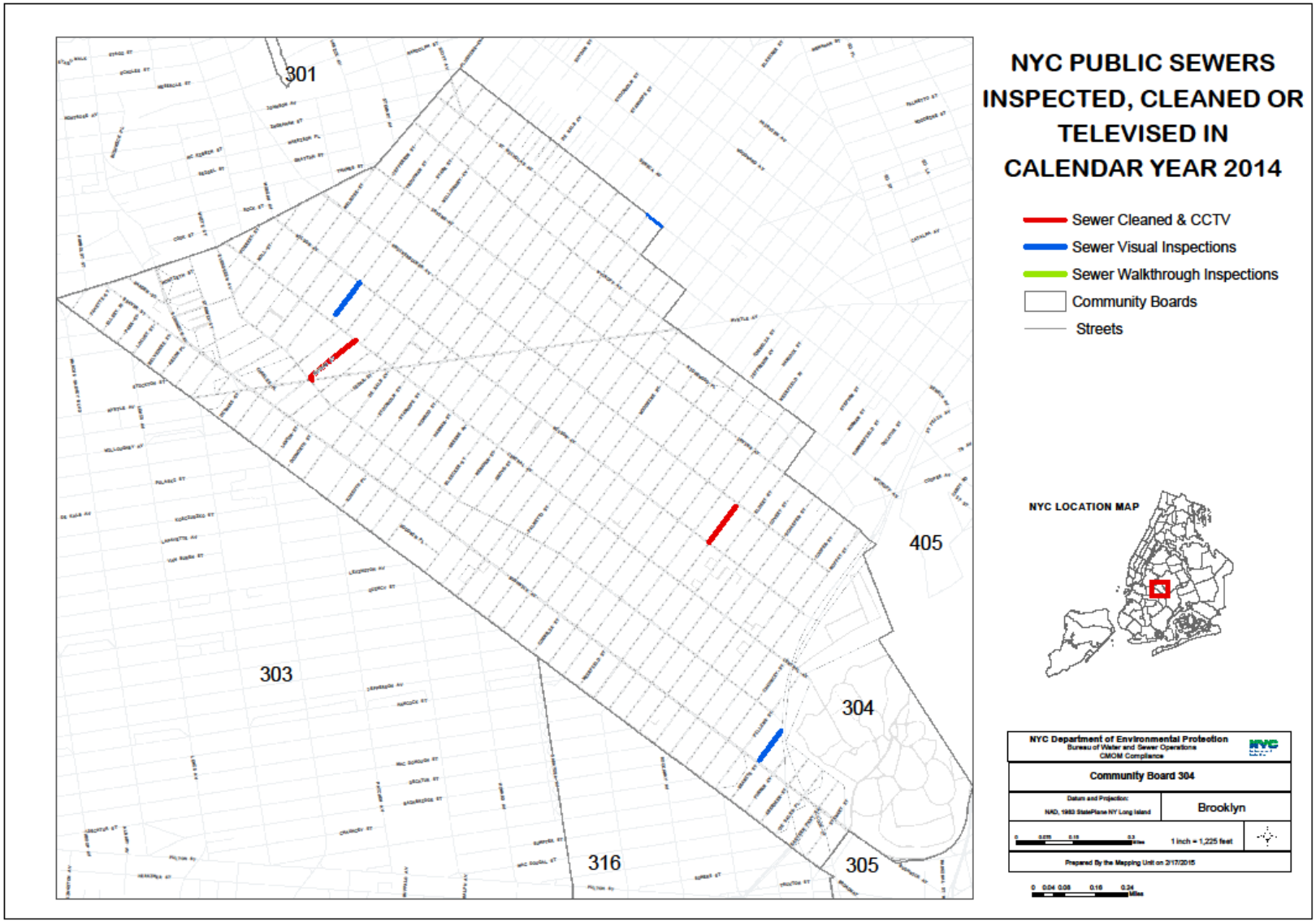
Community Board 303
Brooklyn
1 inch = 1,250 feet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NYC Department of Environmental Protection
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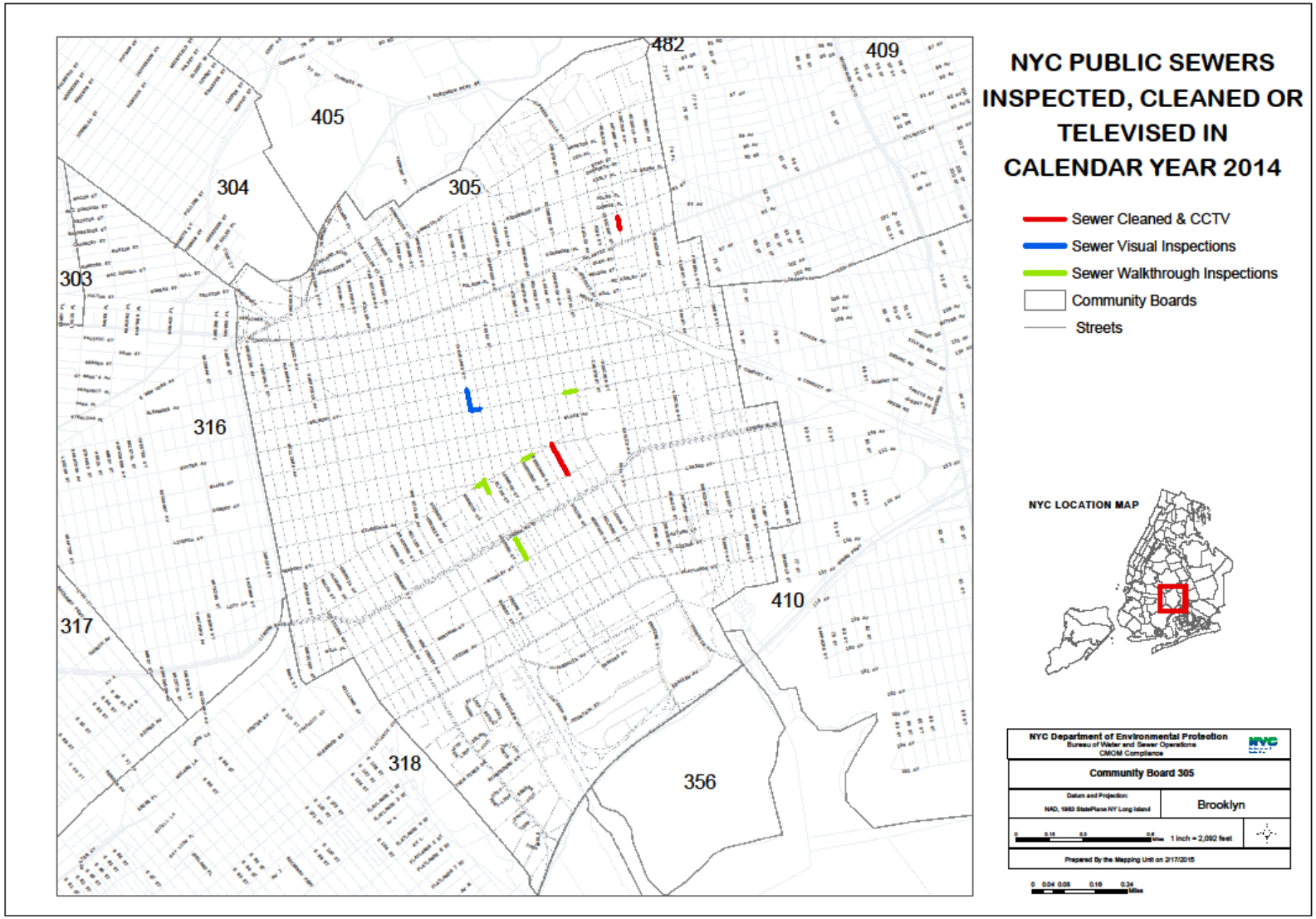
Community Board 304
Brooklyn
1 inch = 1,225 feet
Prepared By the Mapping Unit on 2/17/2015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NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 305
Brooklyn
1 inch = 2,092 feet
Prepared By the Mapping Unit on 2/17/2015
482
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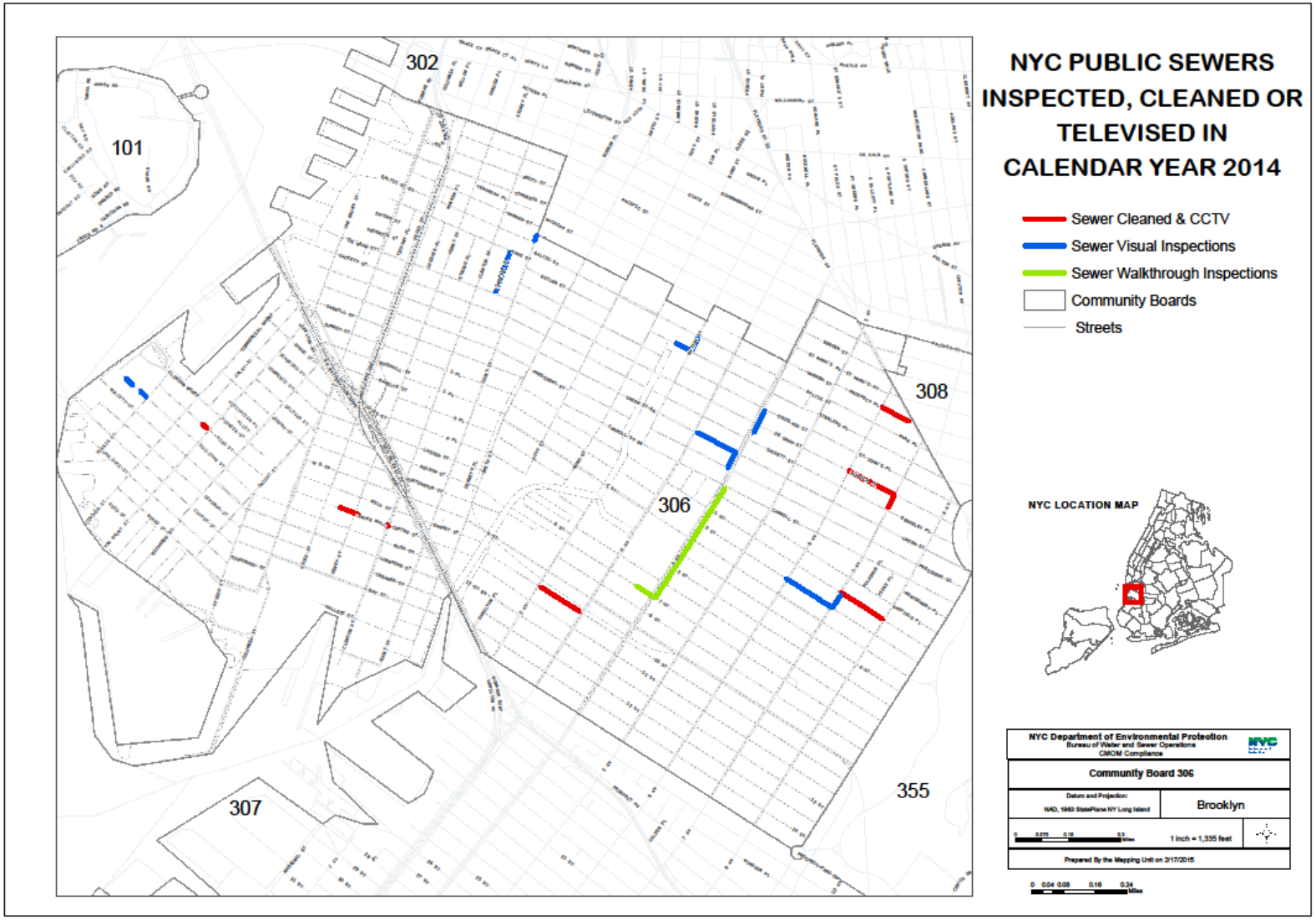
410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Sewer Visual Inspections
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NYC Department of Environmental Protection
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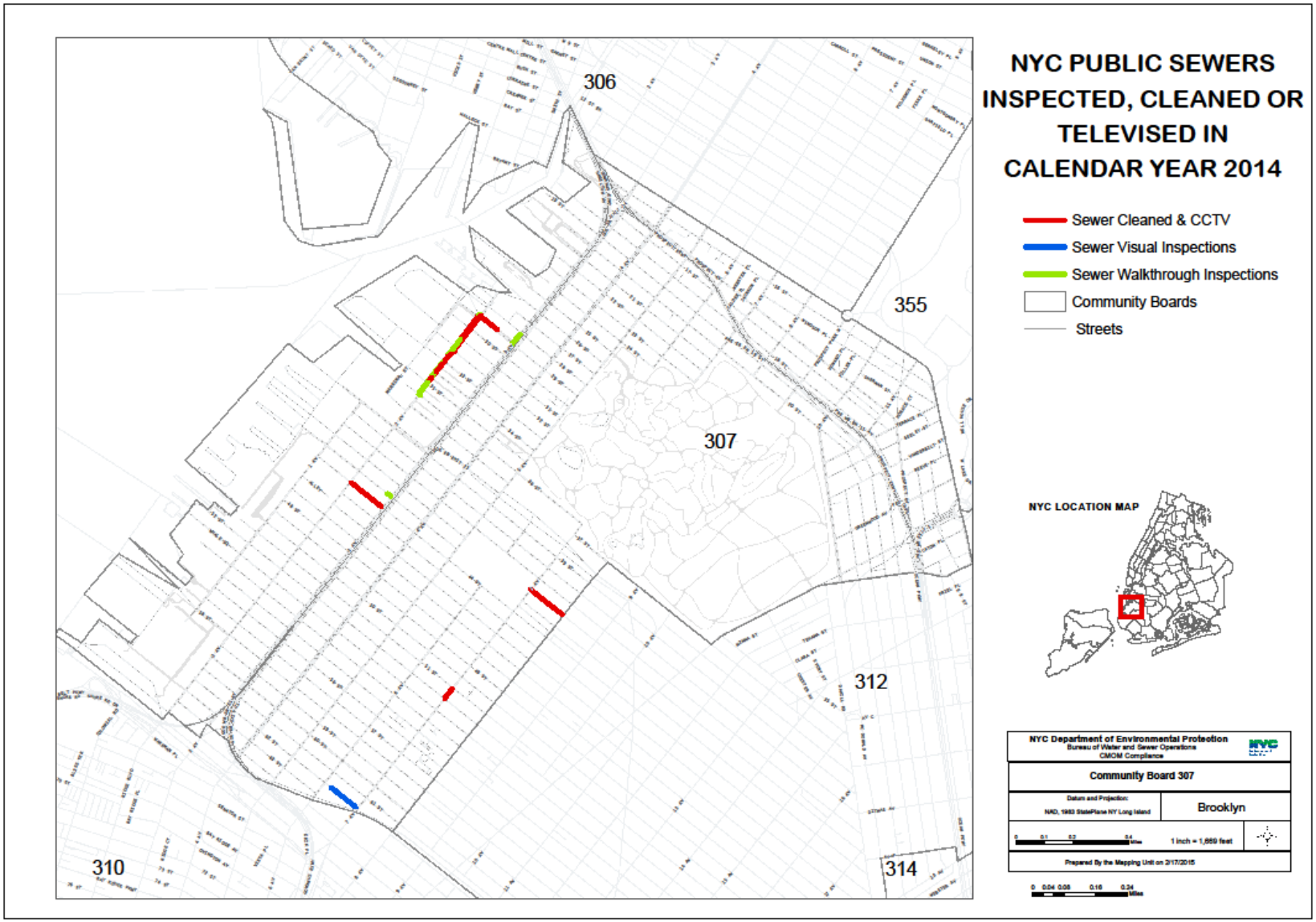
CMOM Compliance
Community Board 306
Brooklyn
1 inch = 1,335 feet
Prepared By the Mapping Unit on 3/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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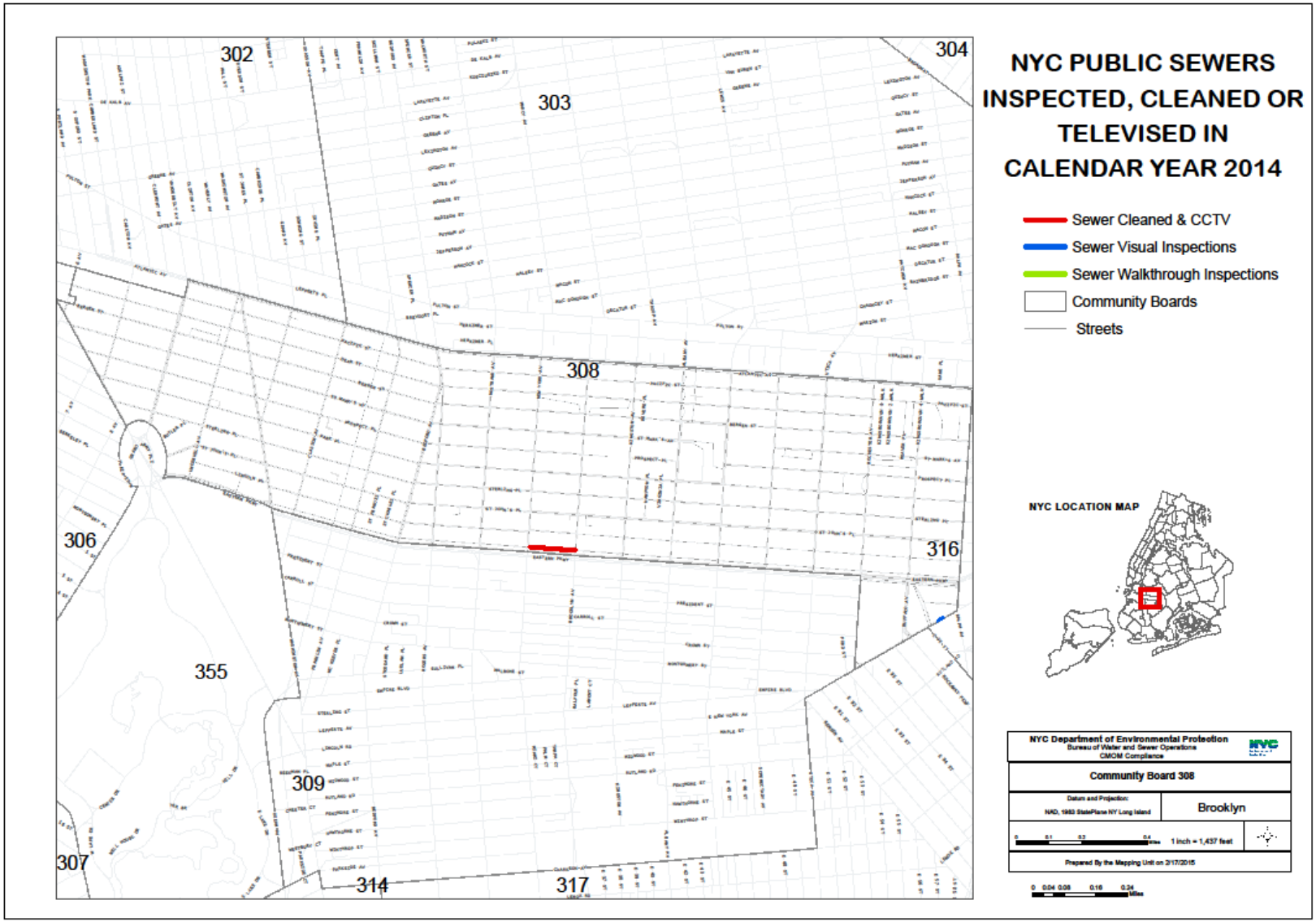
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 307
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
Brooklyn
1 inch = 1,669 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
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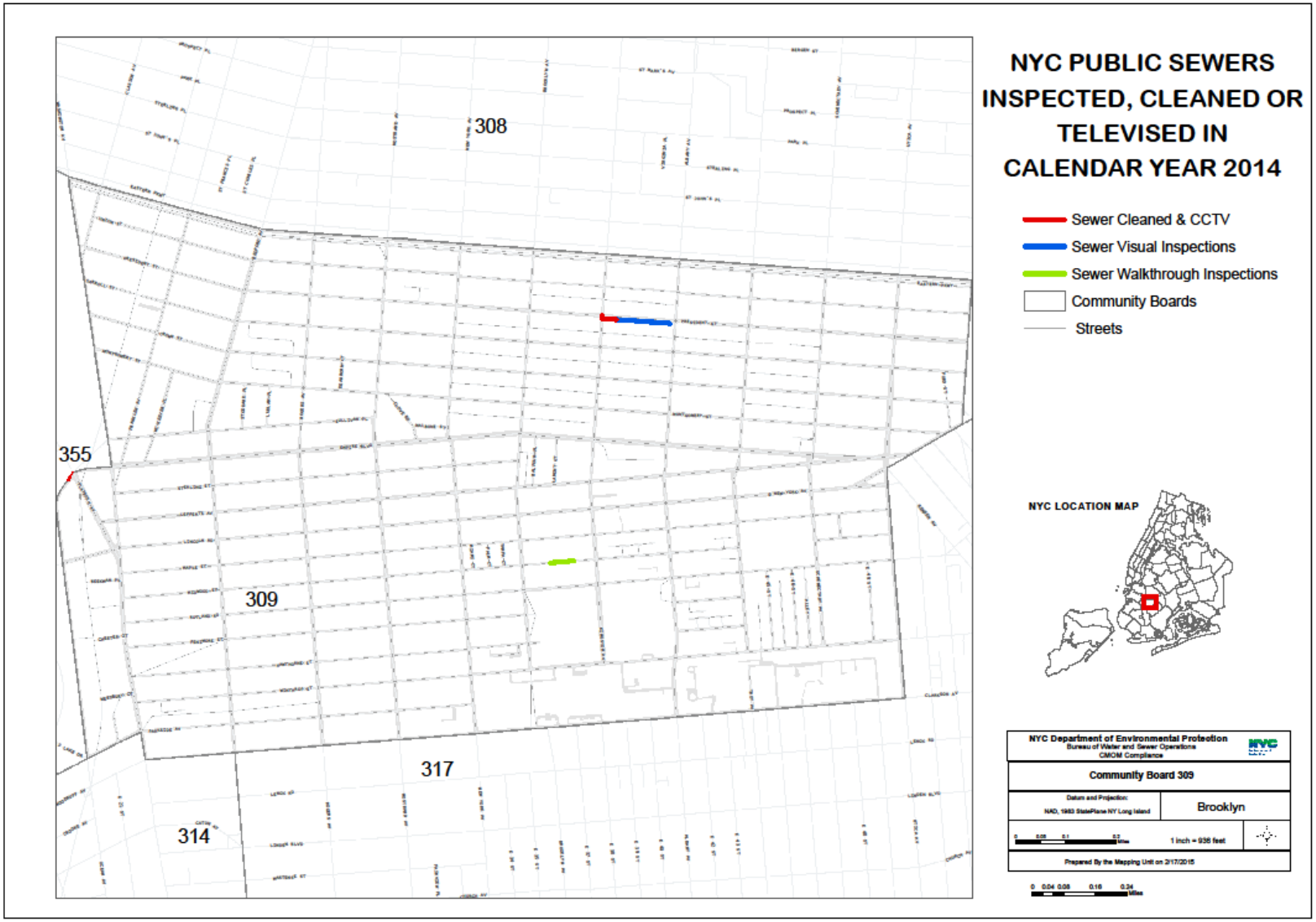
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 308
Brooklyn
1 inch = 1,437 feet
Prepared By the Mapping Unit on 2/17/2015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Sewer Walkthrough Inspections
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NYC Department of Environmental Protection
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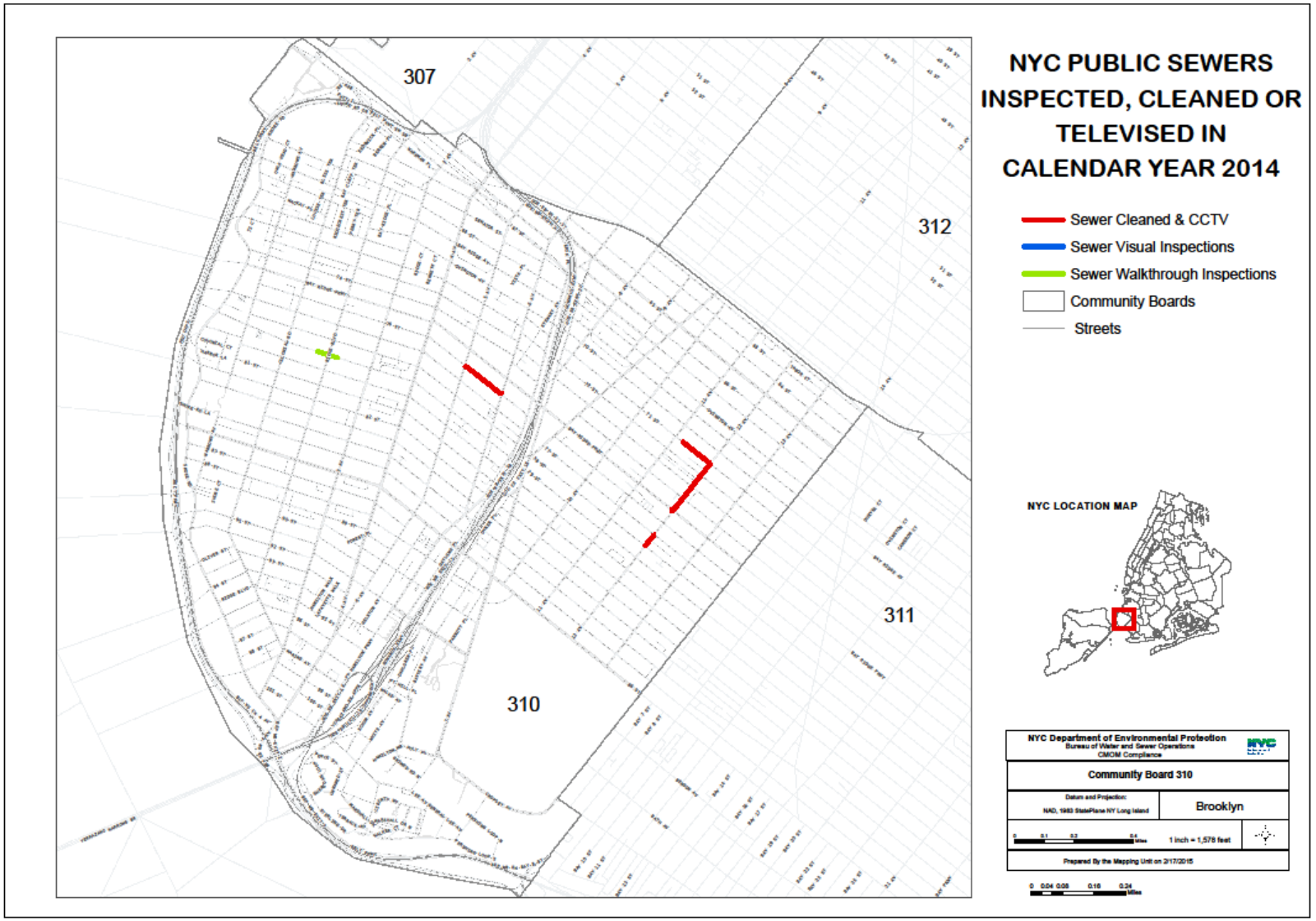
CMOM Compliance
Community Board 309
Brooklyn
1 inch = 936 feet
Prepared By the Mapping Unit on 2/17/2015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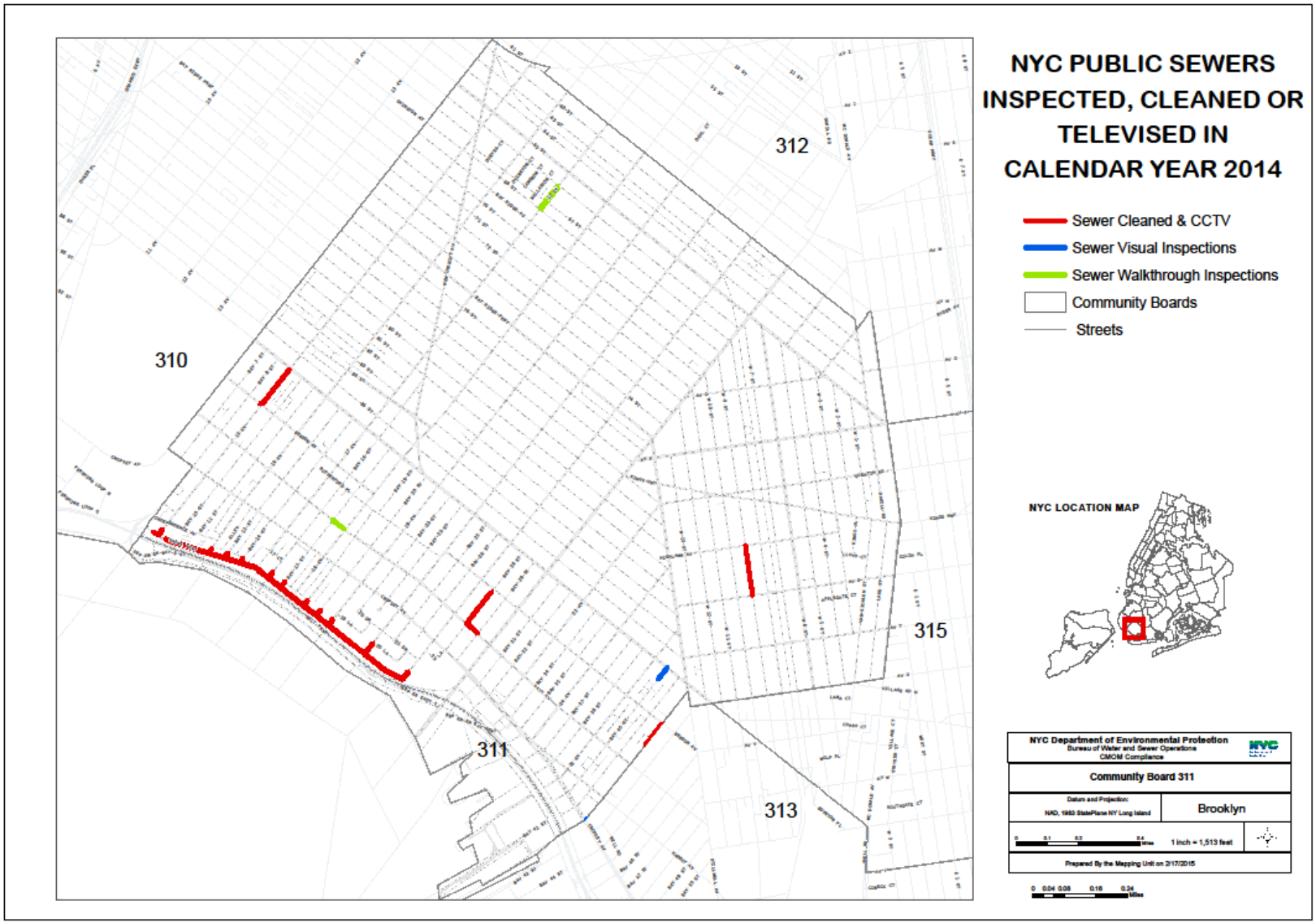
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 310
Brooklyn
1 inch = 1,578 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
310
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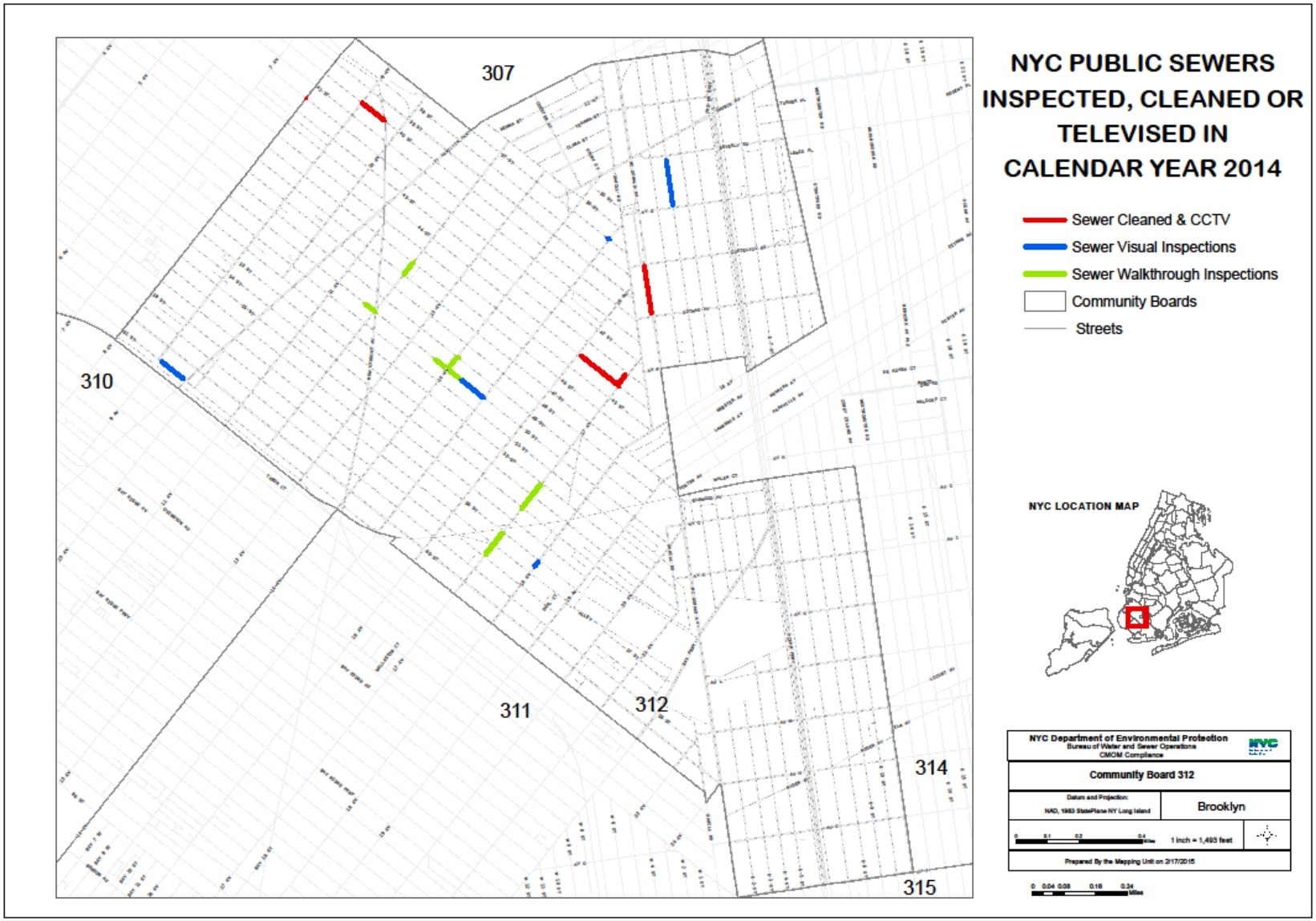
315
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 311
Brooklyn
1 inch = 1,513 feet
Prepared By the Mapping Unit on 2/17/2015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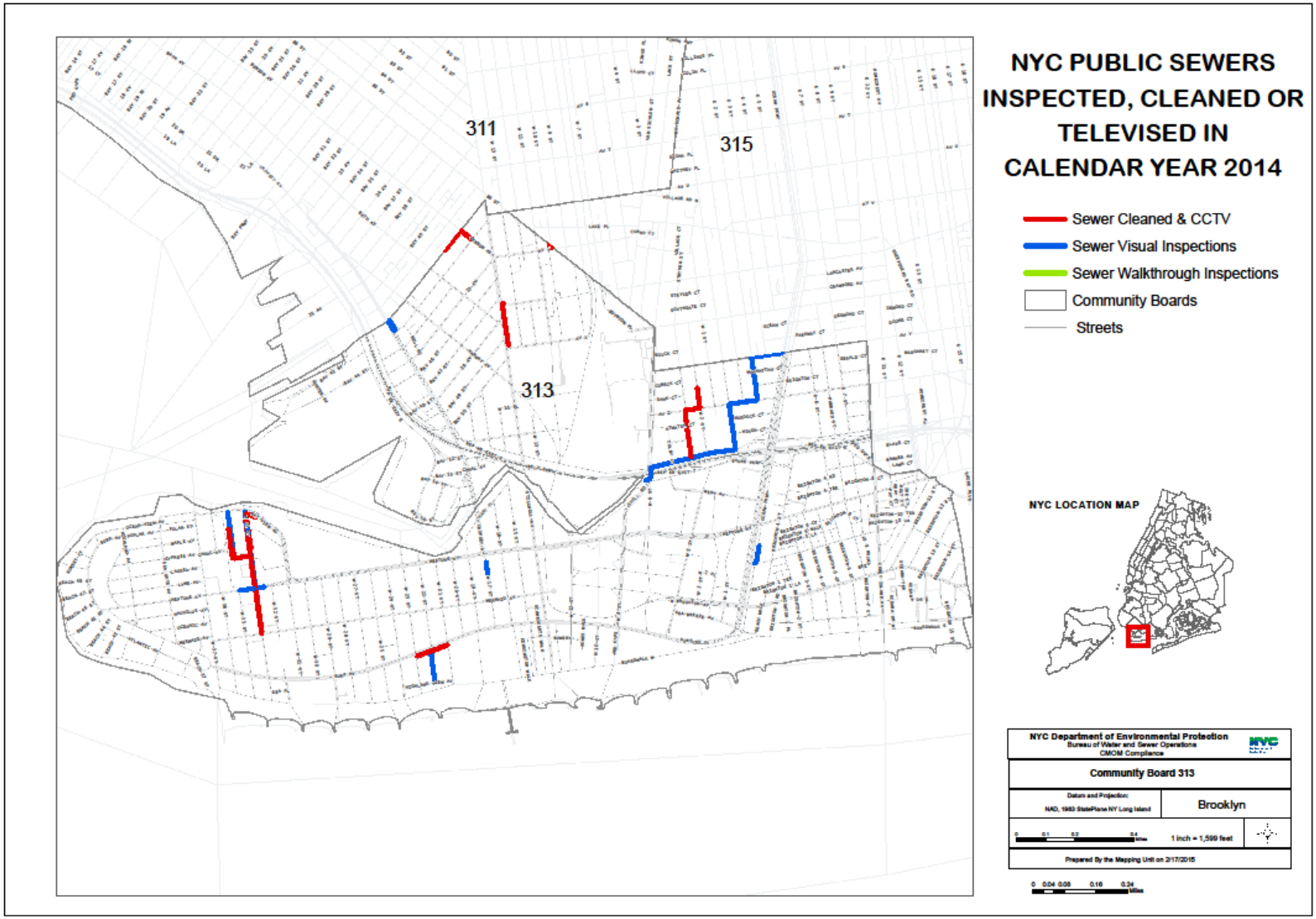
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 312
Brooklyn
1 inch = 1,493 feet
Prepared By the Mapping Unit on 2/17/2015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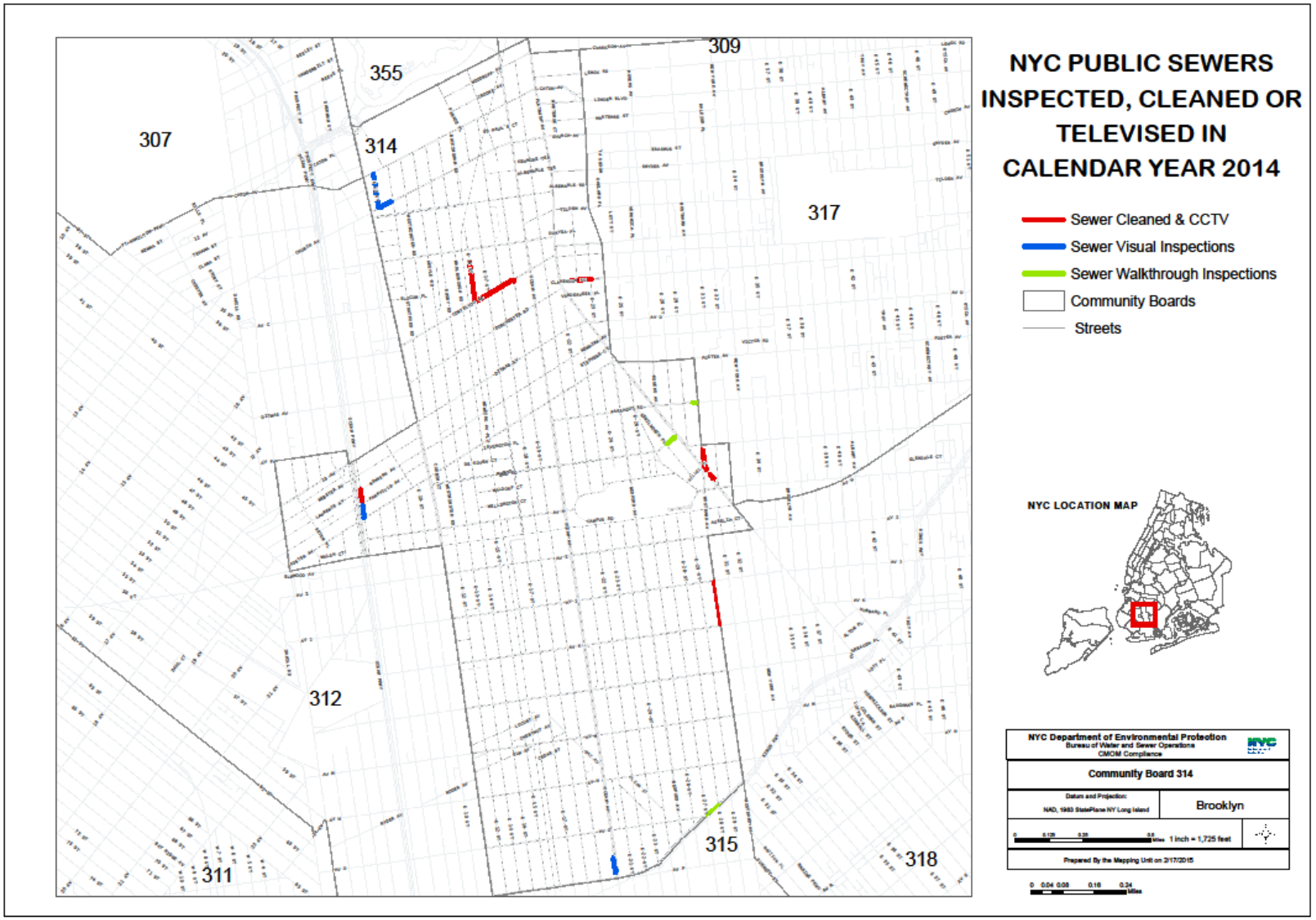
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 313
Brooklyn
1 inch = 1,599 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 314
Brooklyn
1 inch = 1,725 feet
Prepared By the Mapping Unit on 2/17/2015
307
355
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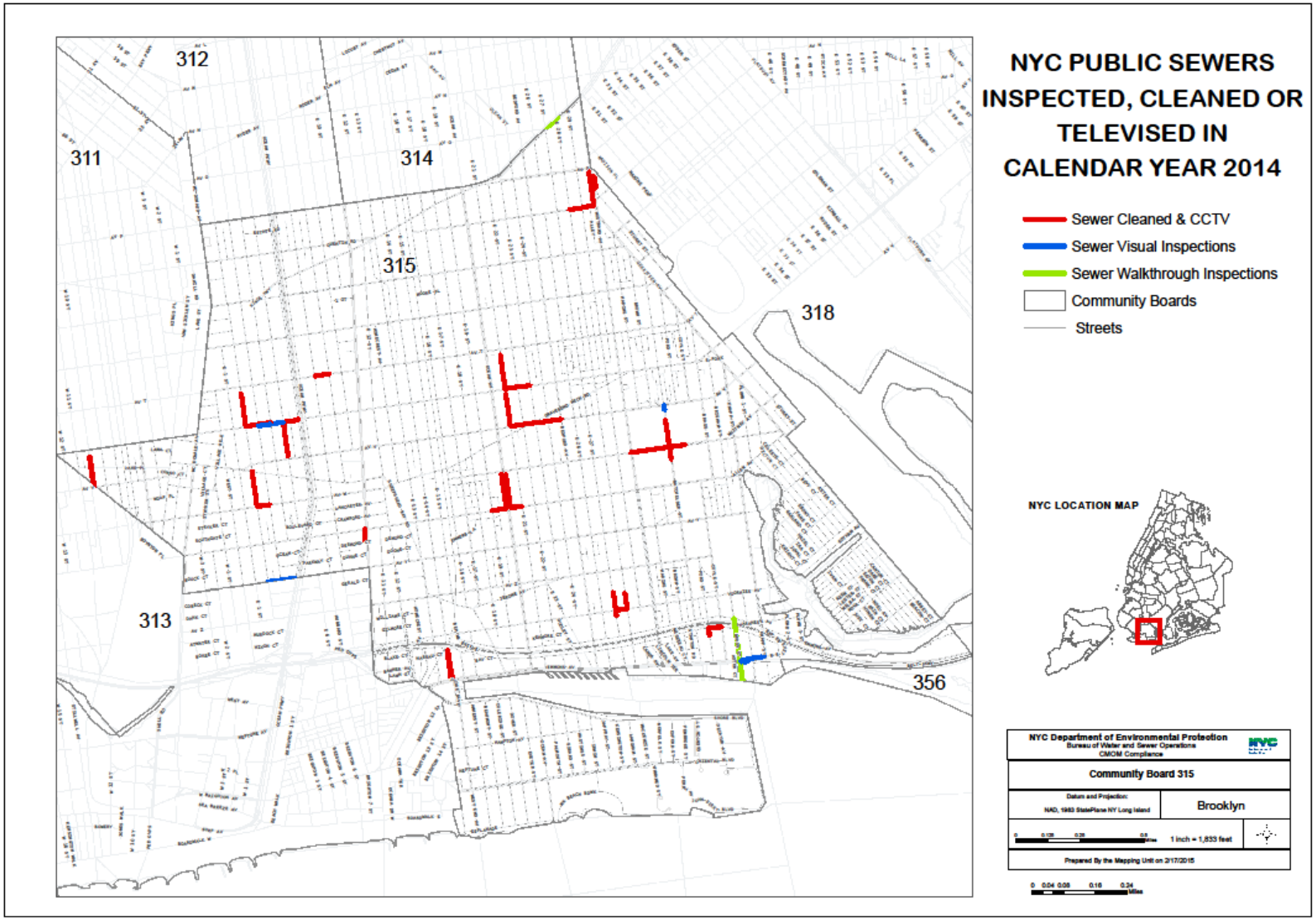
311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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
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Community Boards
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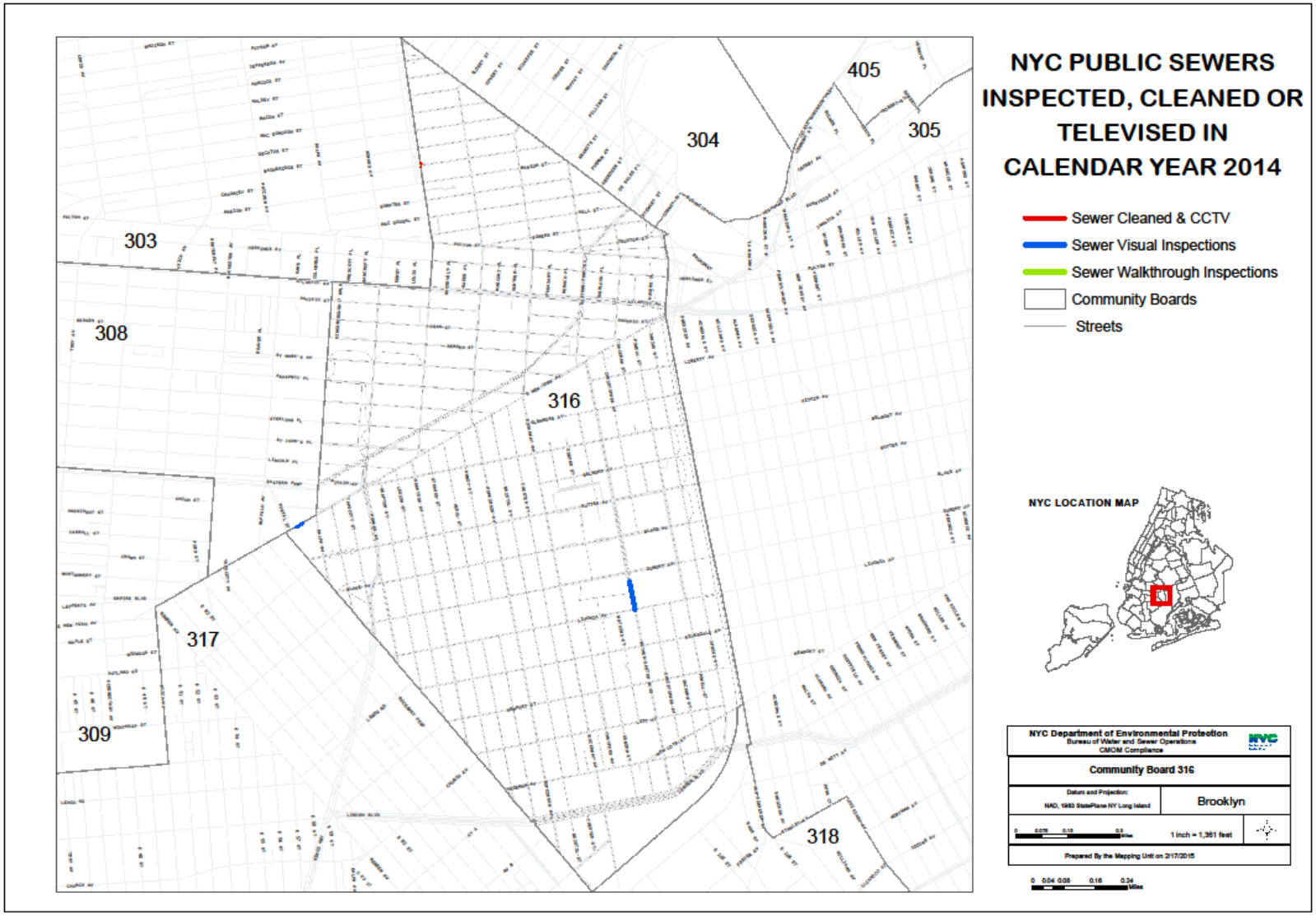
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 315
Brooklyn
1 inch = 1,833 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
303
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316
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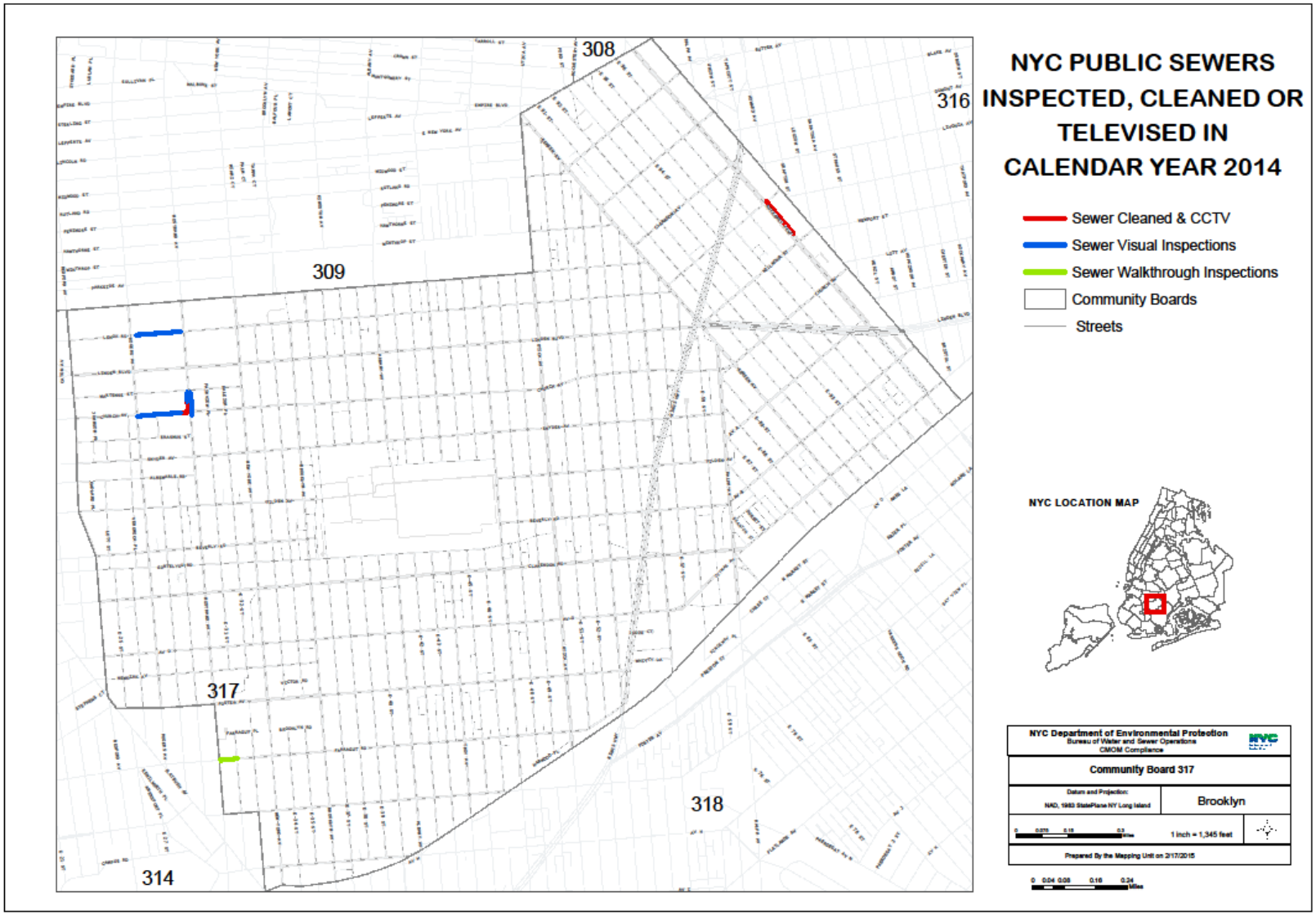
405
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 316
Brooklyn
1 inch = 1,361 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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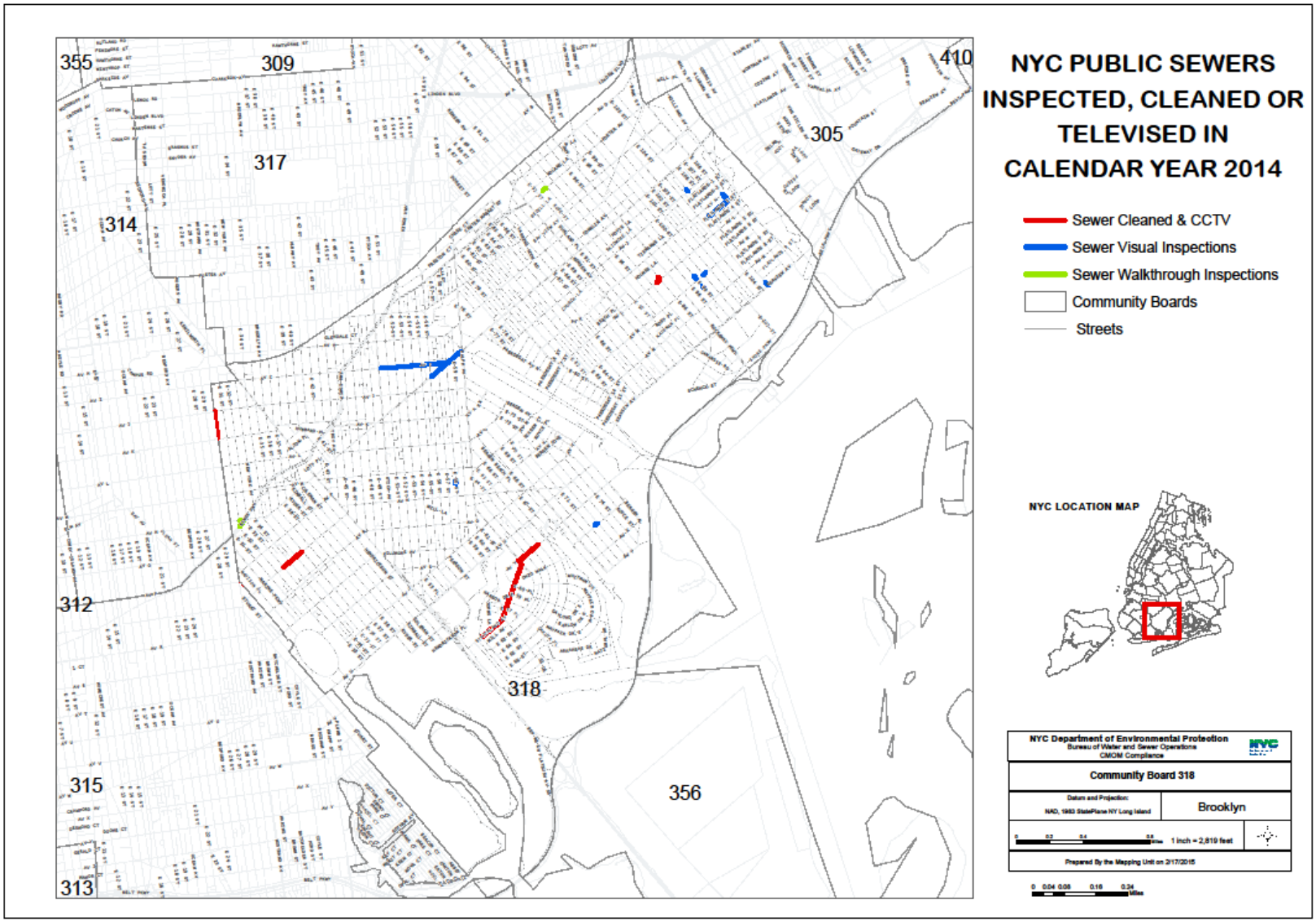
Streets
NYC LOCATION MAP
308
316
309
317
318
314
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 317
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
Brooklyn
1 inch = 1,345 feet
Prepared By the Mapping Unit on 2/17/2015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313
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
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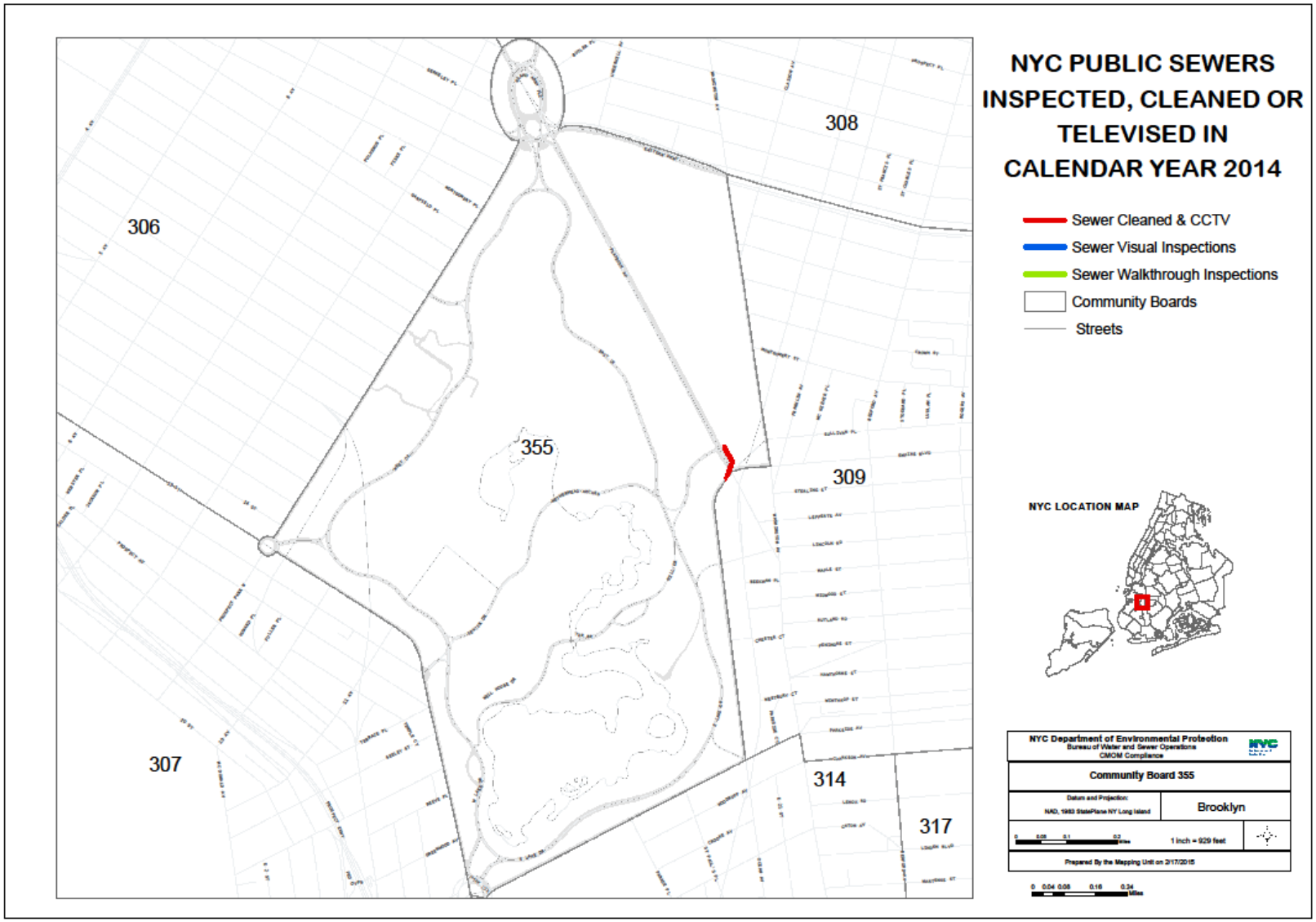
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 318
Brooklyn
1 inch = 2,819 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
306
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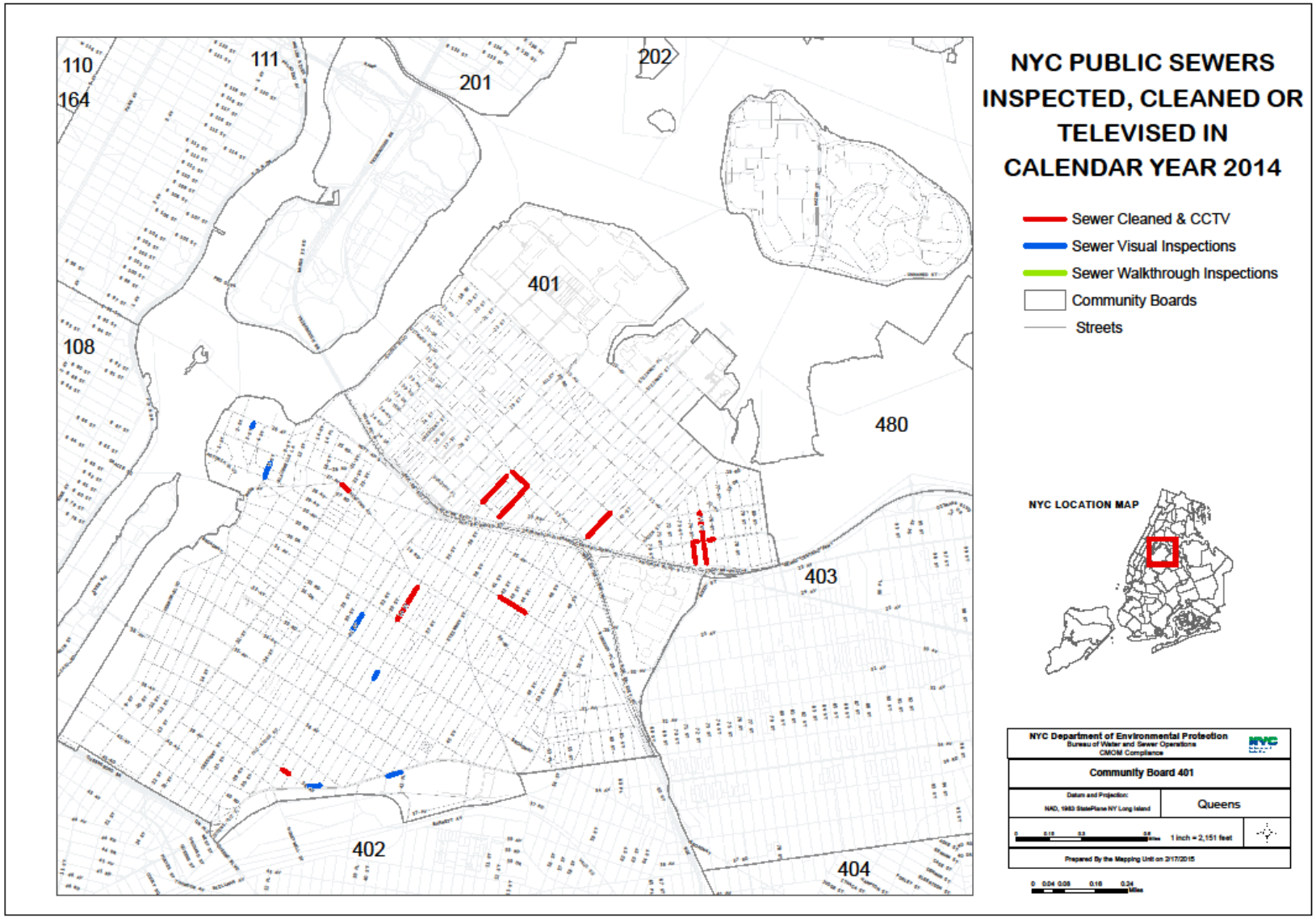
314
317
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 355
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
Brooklyn
1 inch = 929 feet
Prepared By the Mapping Unit on 2/17/2015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164
111
201
202
401
108
480
403
402
404
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
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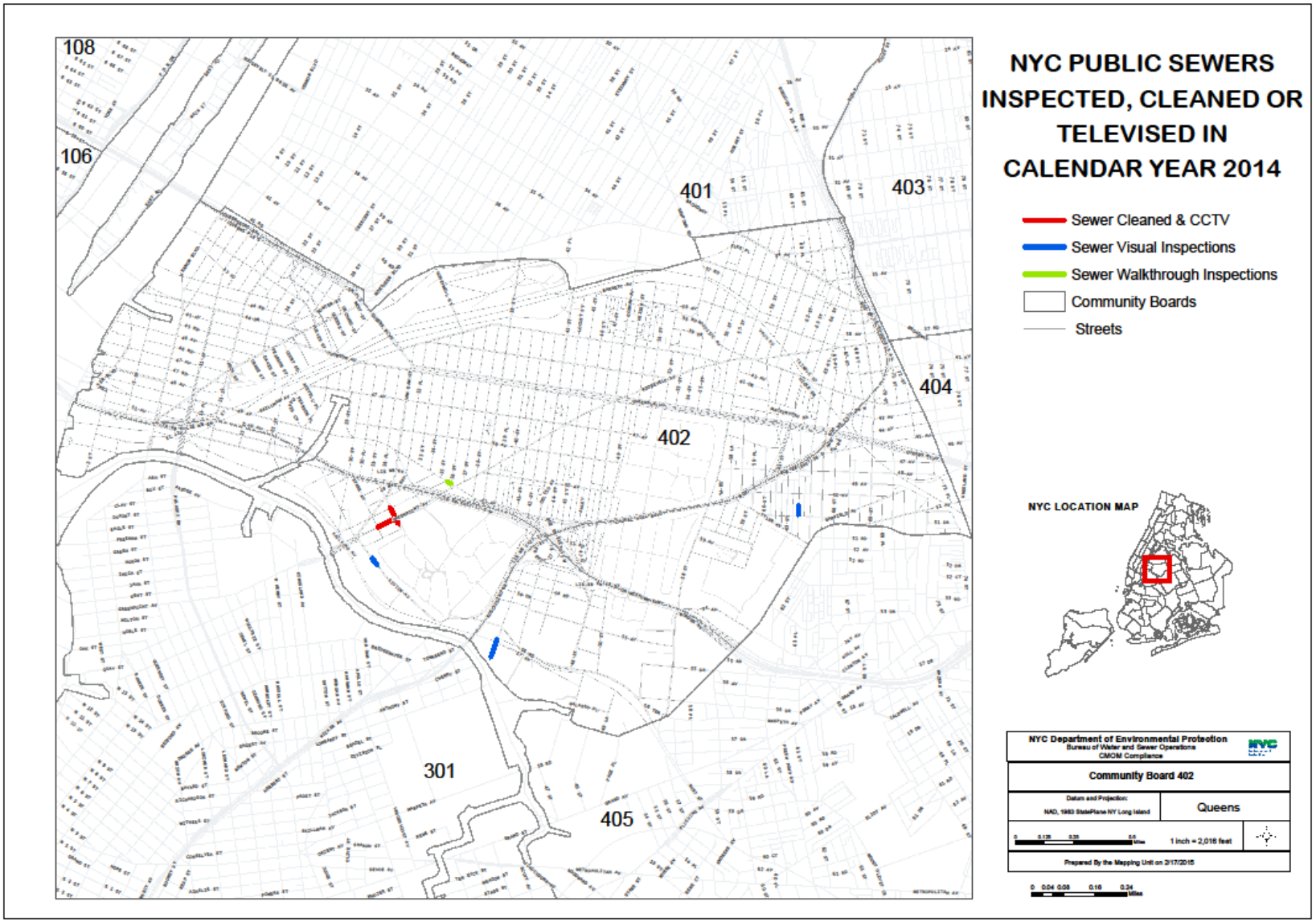
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 401
Queens
1 inch = 2,151 feet


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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Streets
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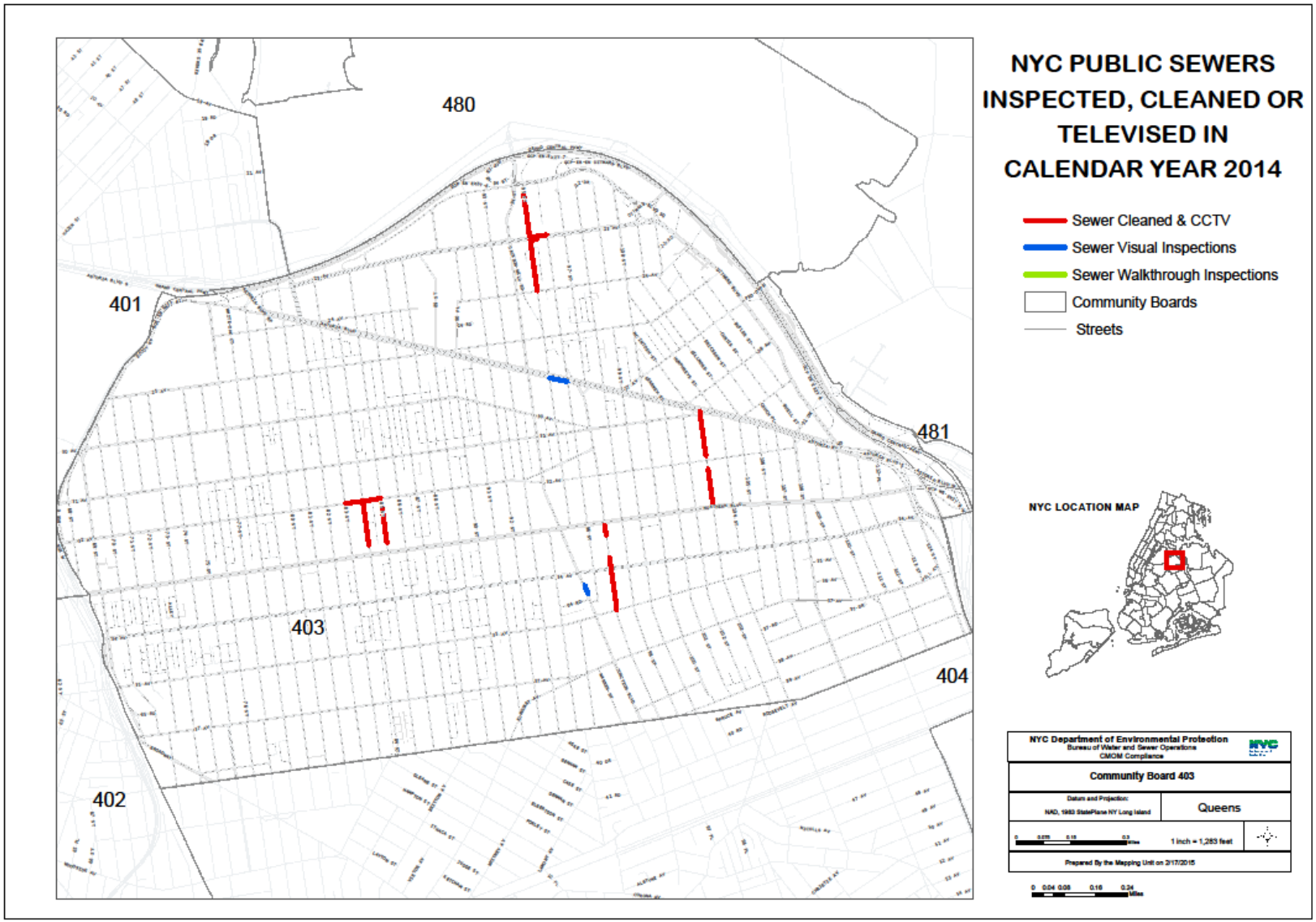
108
106
401
403
404
402
301
405
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 402
Queens
1 inch = 2,016 feet
Prepared By the Mapping Unit on 2/17/2015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402
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
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Community Boards
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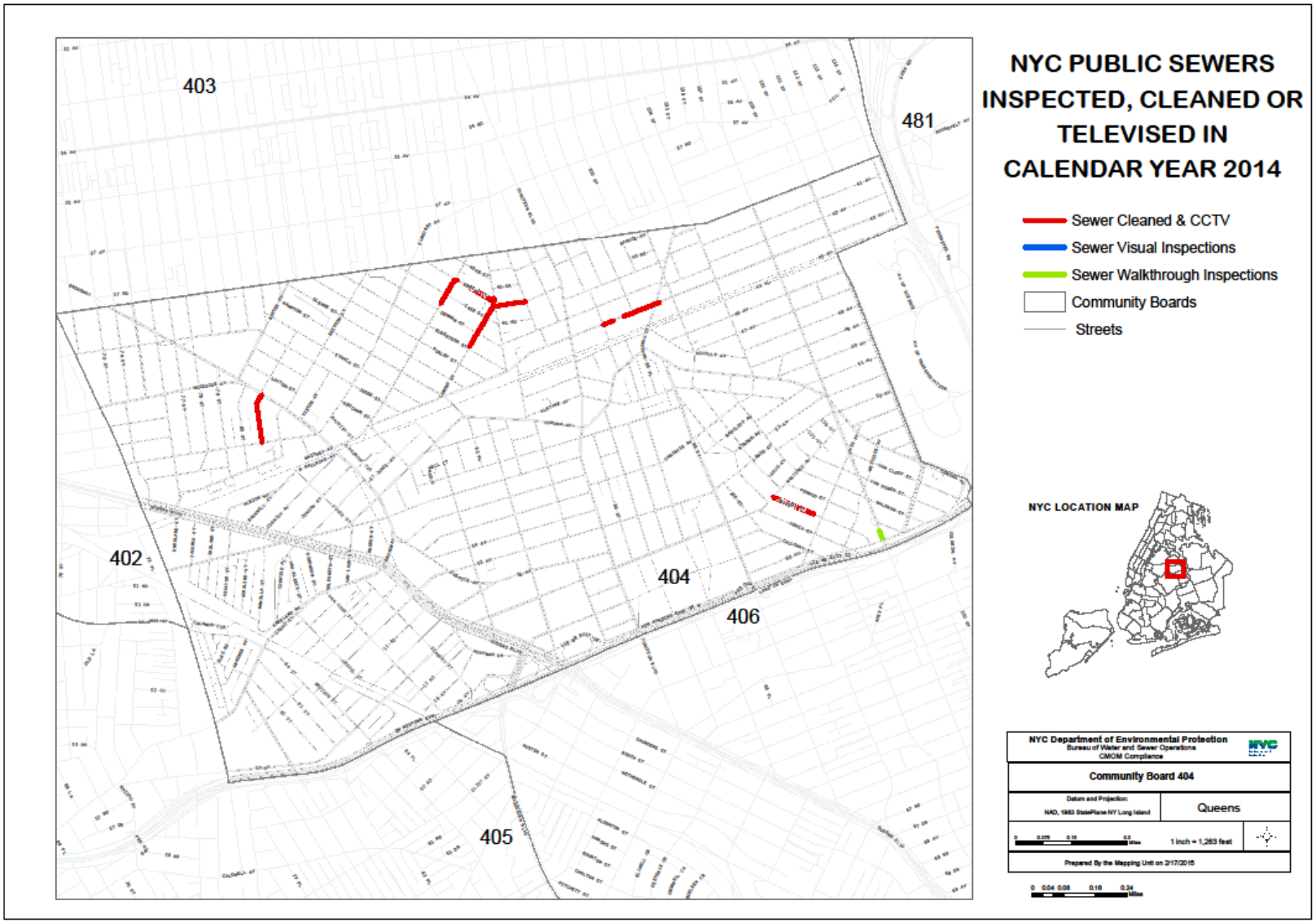
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 403
Queens
1 inch = 1,283 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
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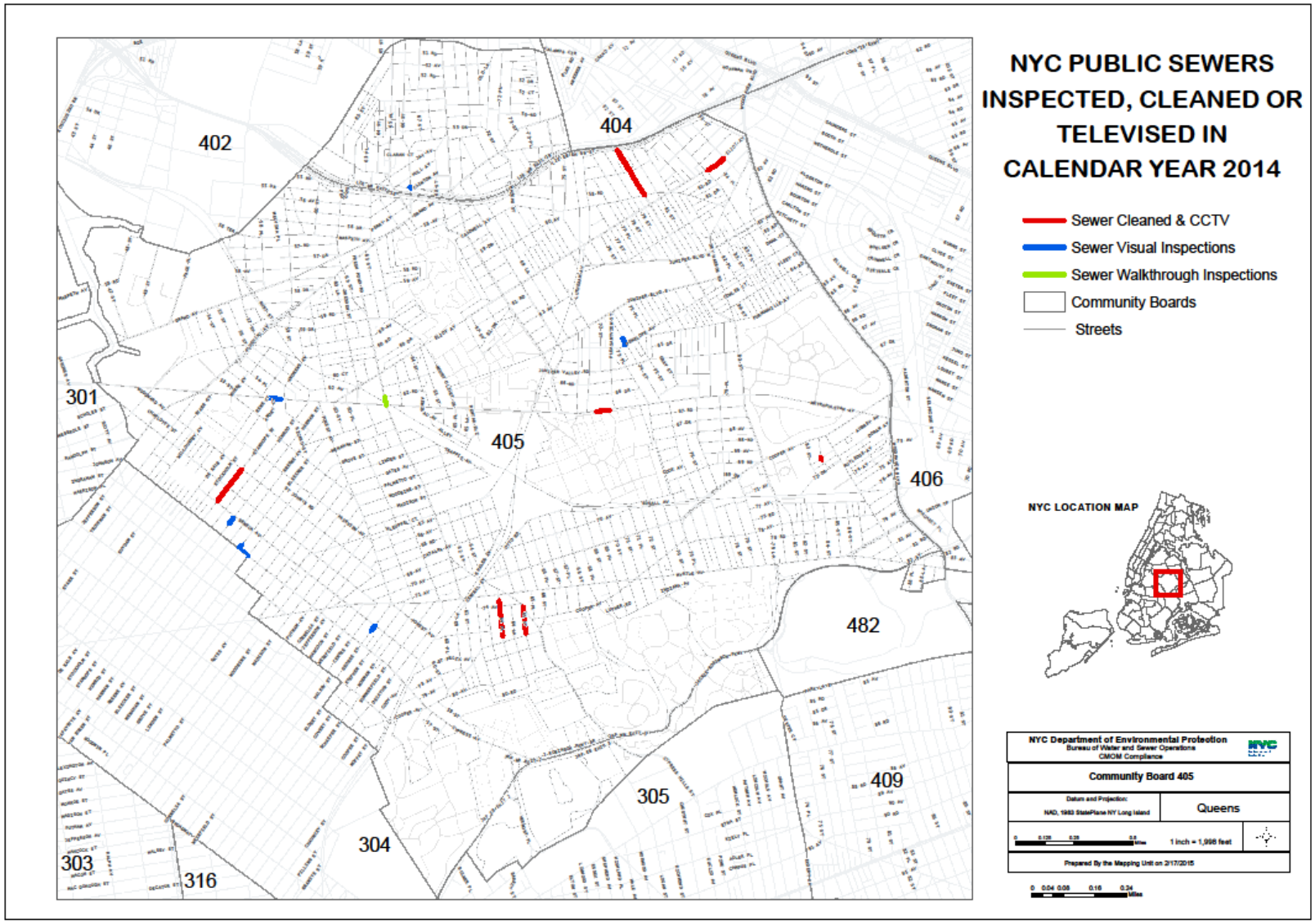
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 404
Queens
1 inch = 1,283 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
402
404
301
405
406
482
409
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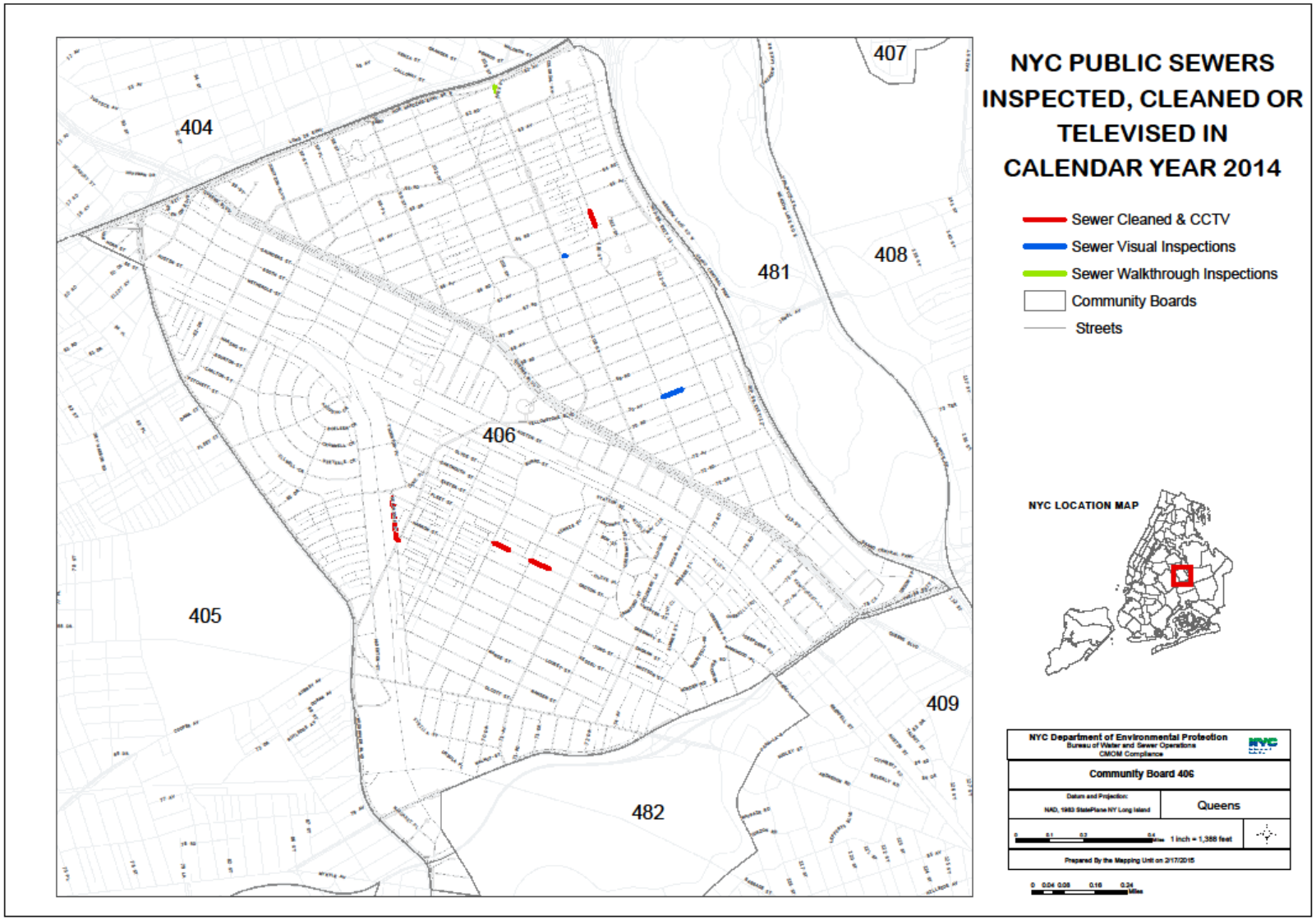
304
303
316
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 405
Queens
1 inch = 1,666 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
NYC LOCATION MAP
404
407
408
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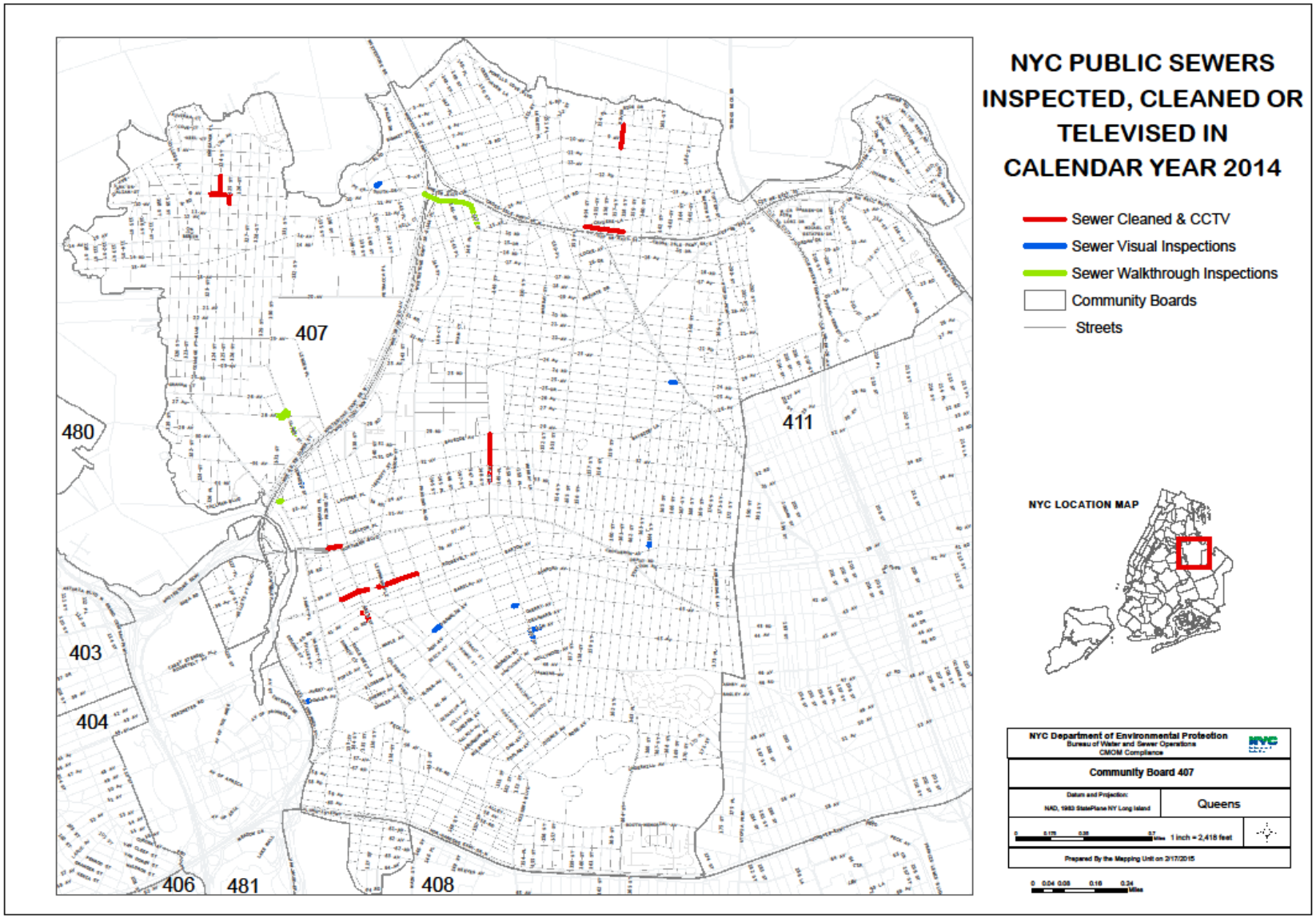
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 406
Queens
1 inch = 1,388 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
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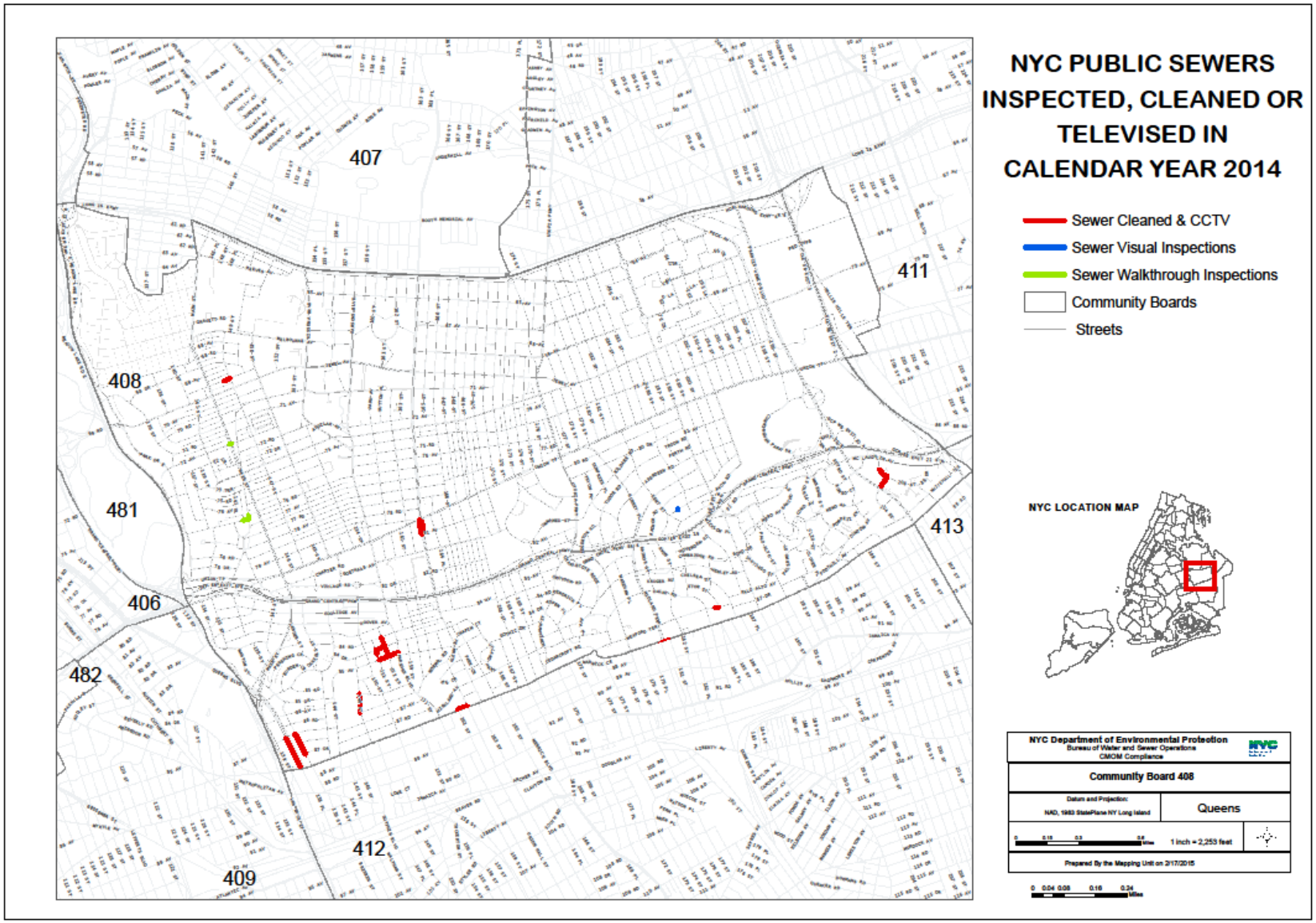
408
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 407
Queens
Datum and Projection:
NAD, 1983 StatePlane NY Long Island
1 inch = 2,418 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
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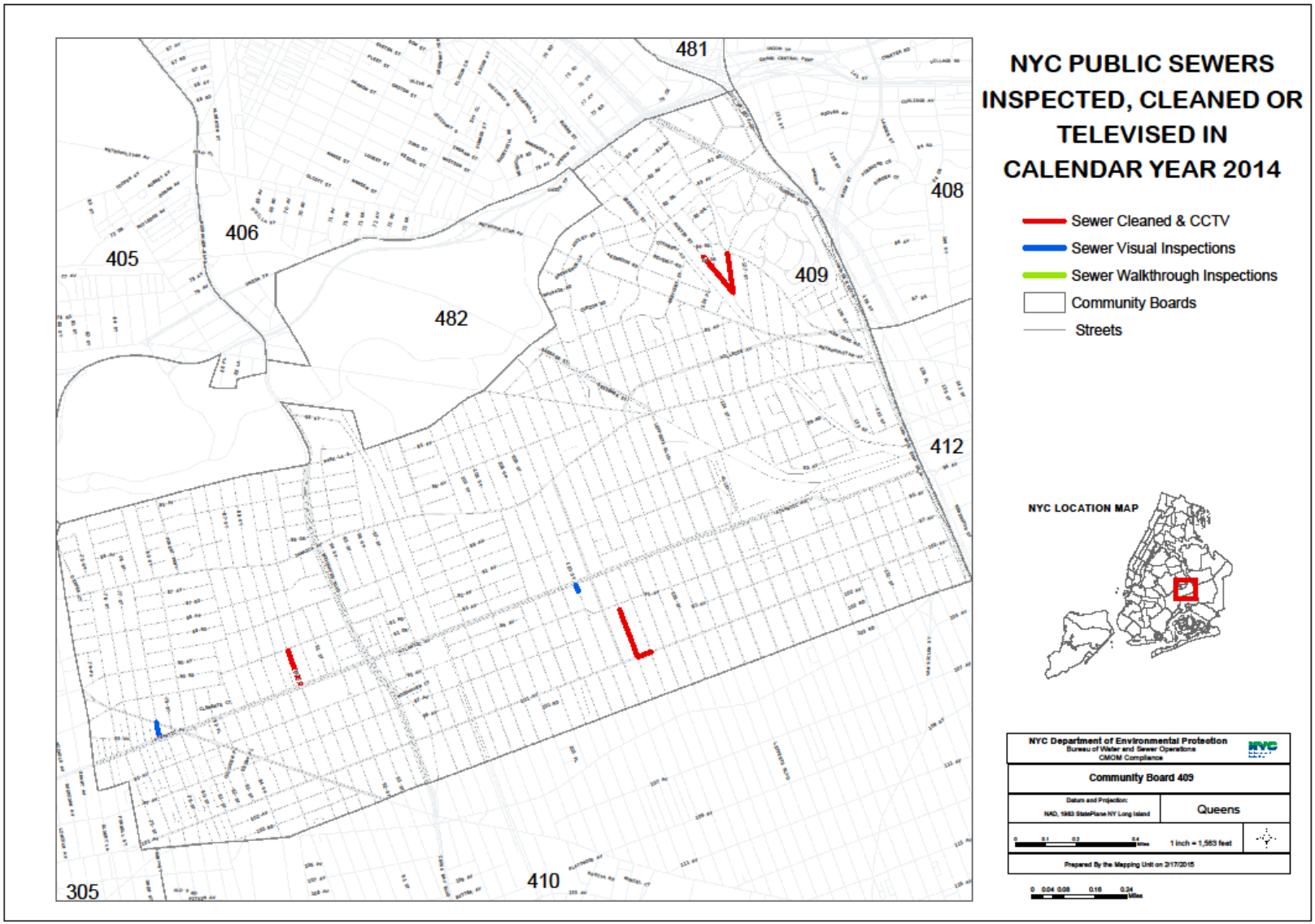
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 408
Queens
1 inch = 2,253 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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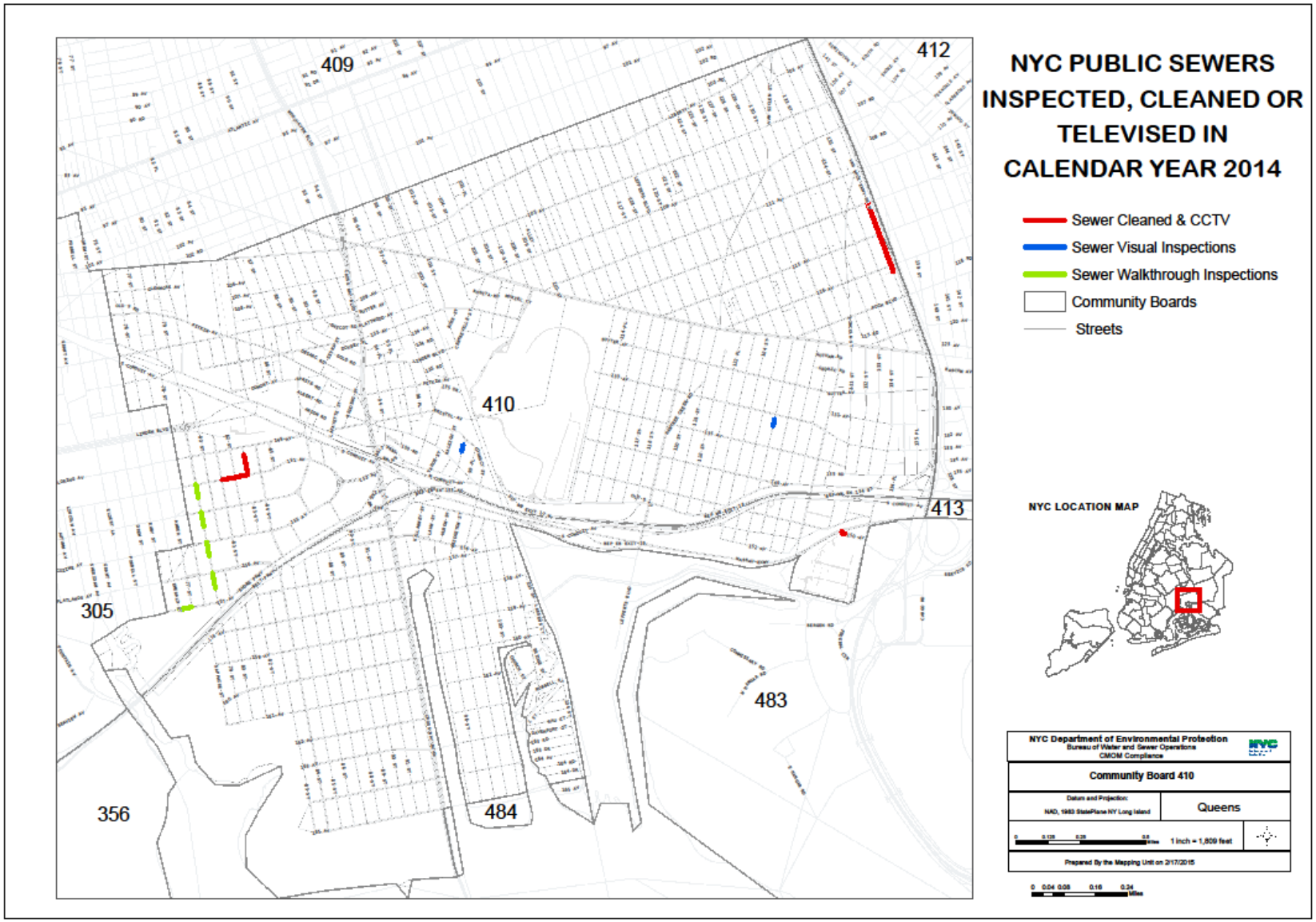
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 409
Queens
1 inch = 1,583 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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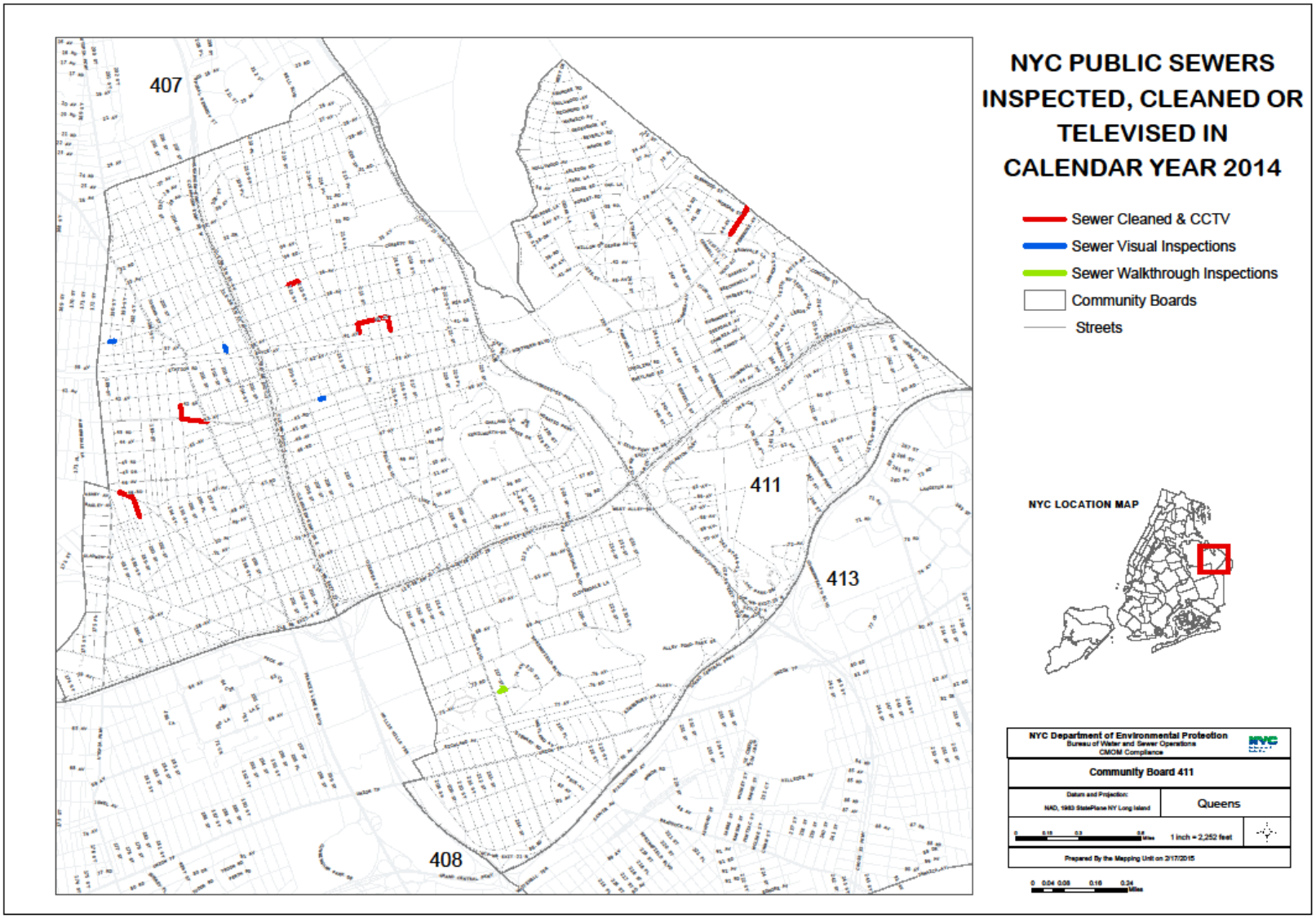
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 410
Queens
1 inch = 1,809 feet
Prepared By the Mapping Unit on 2/17/2015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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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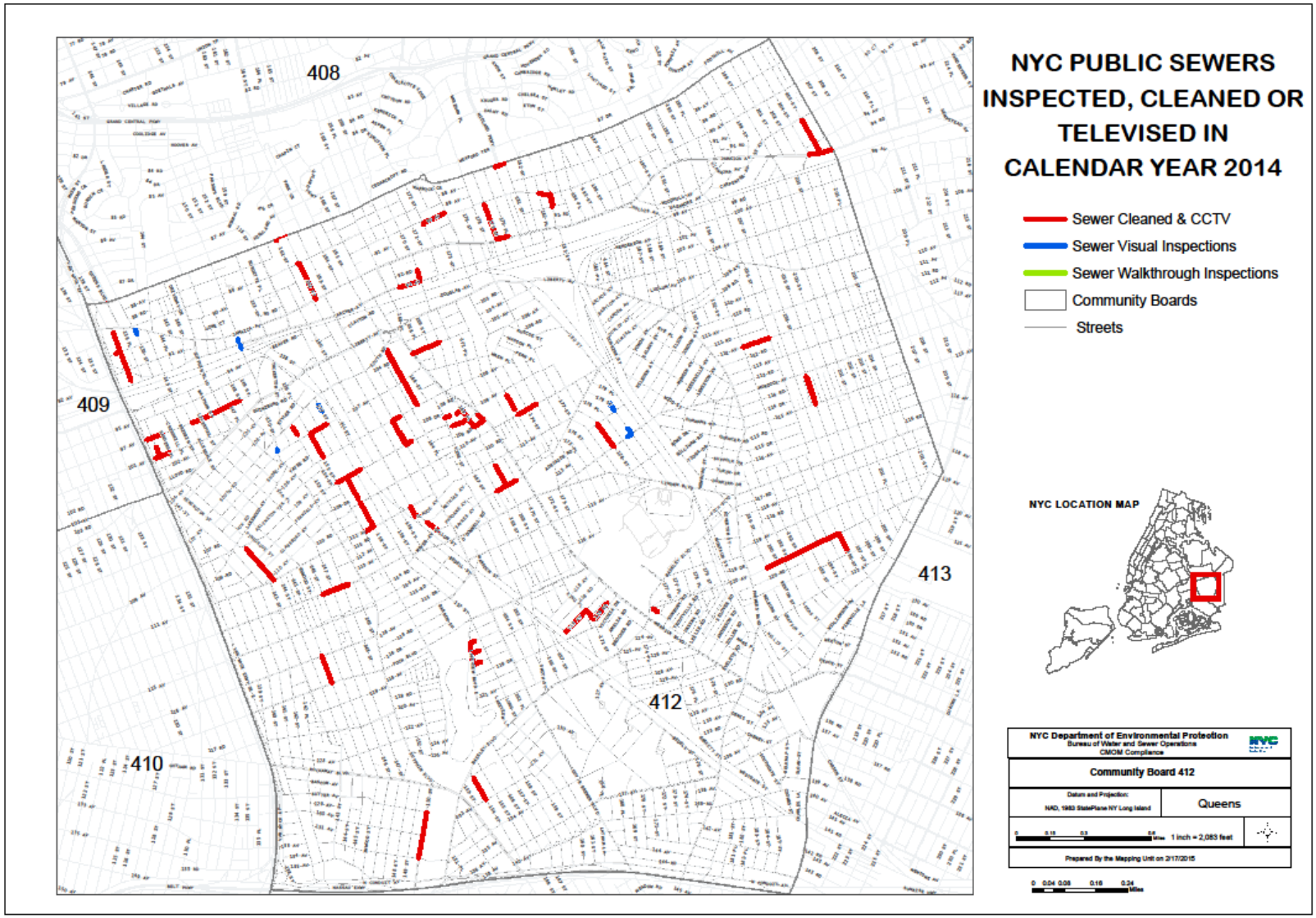
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 411
Queens
1 inch = 2,252 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
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NYC LOCATION MAP
408
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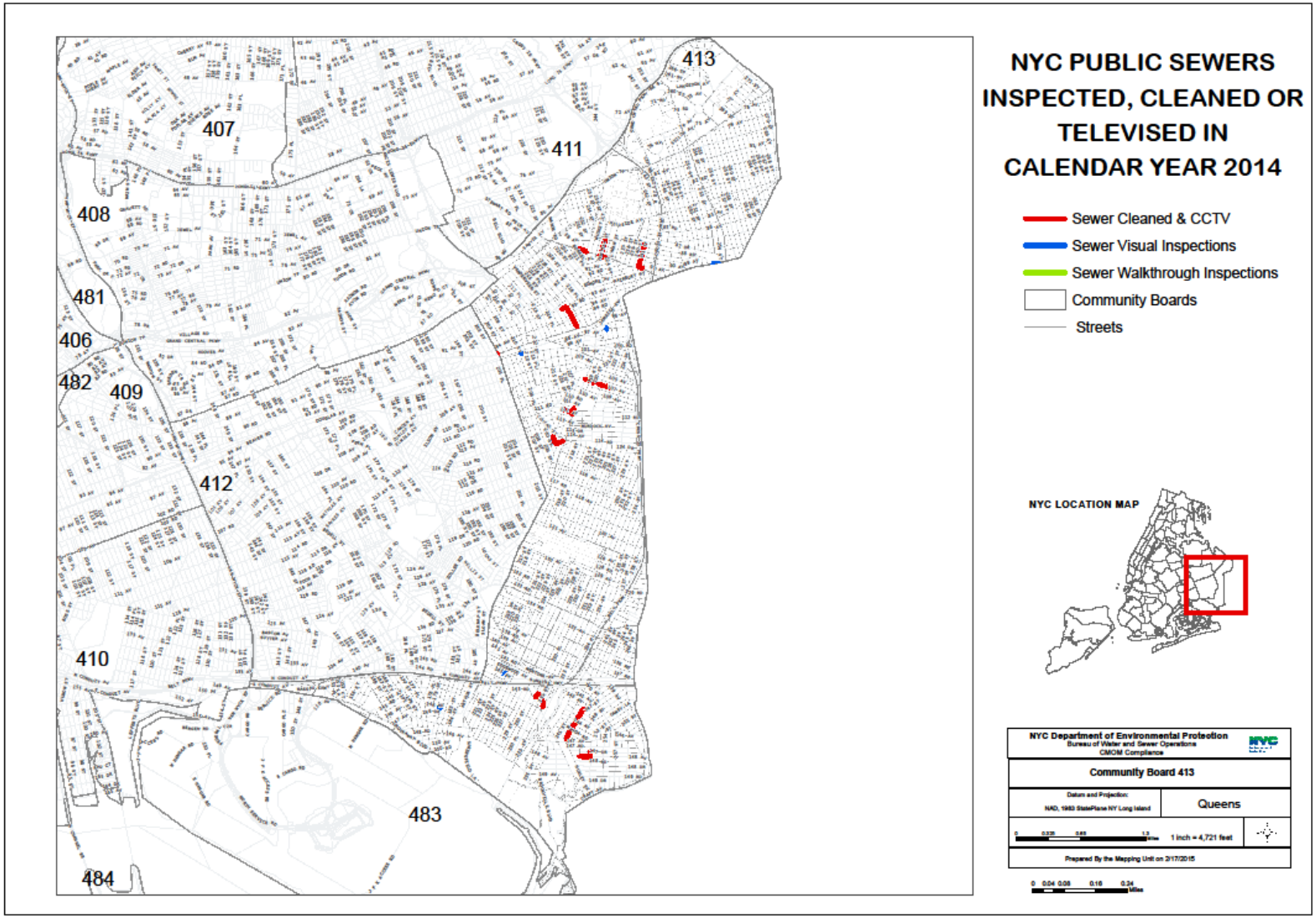
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 412
Queens
1 inch = 2,083 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
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NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 413
Queens
1 inch = 4,721 feet
Prepared By the Mapping Unit on 2/17/2015
413
407
411
408
481
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412
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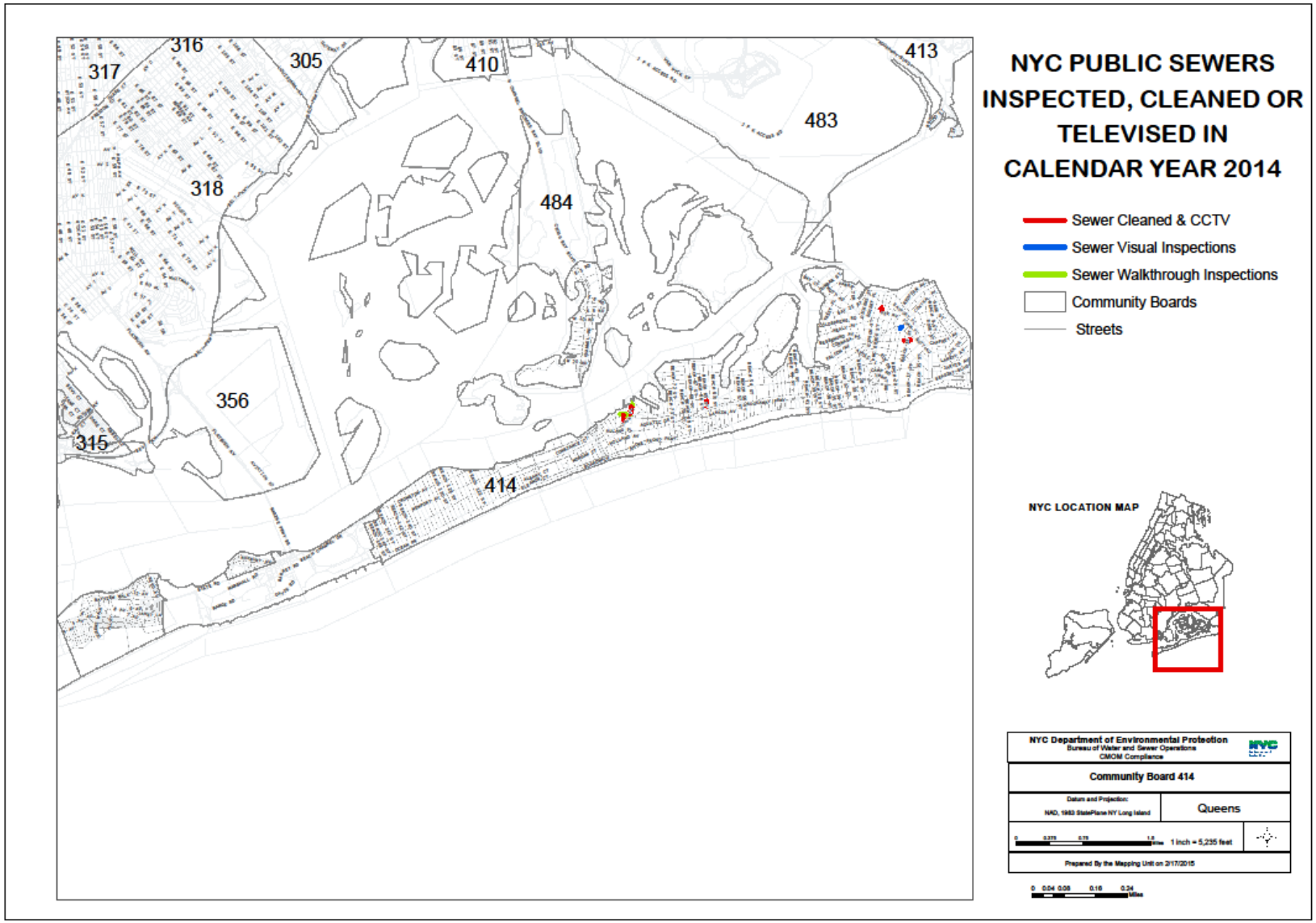
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NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
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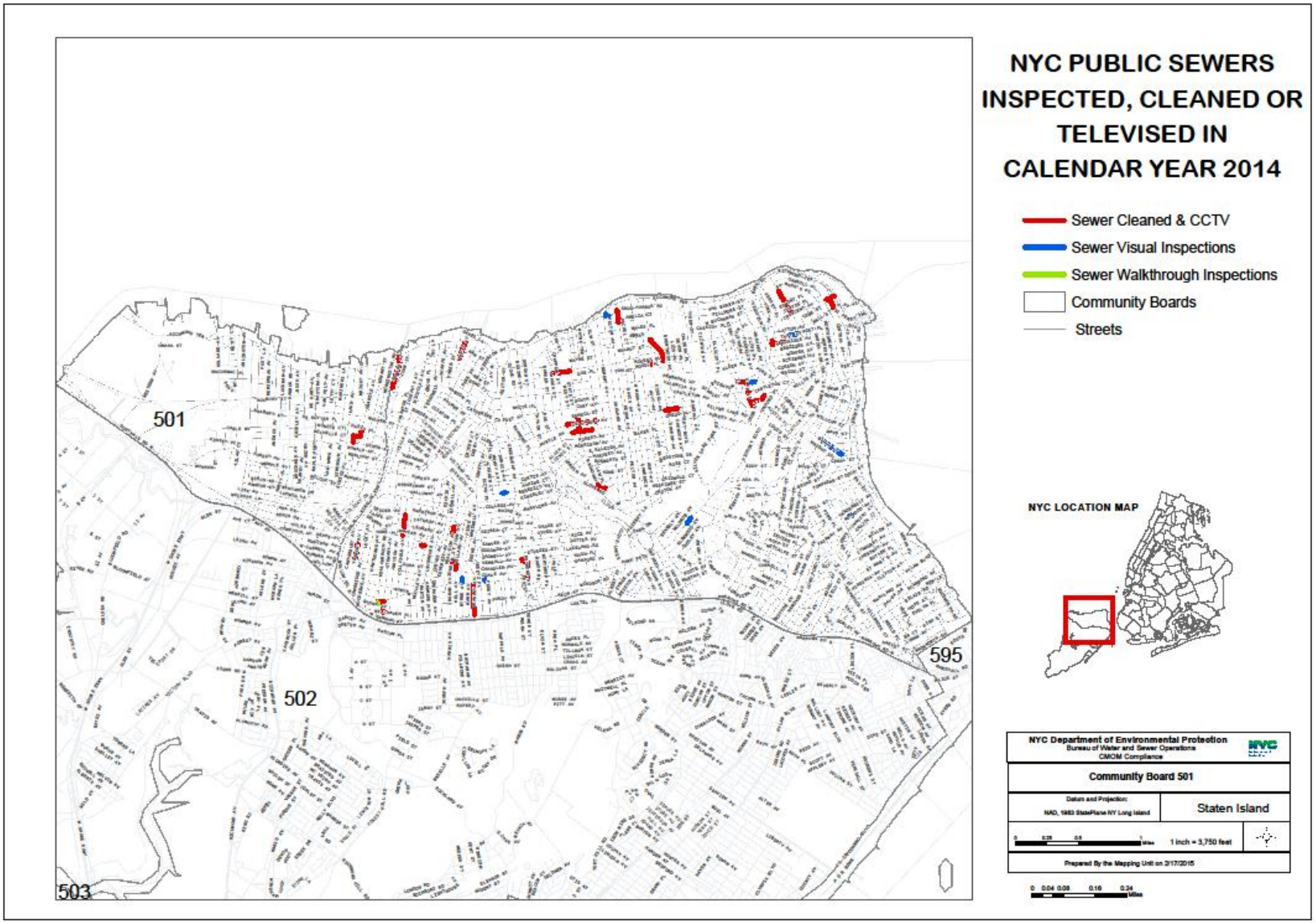
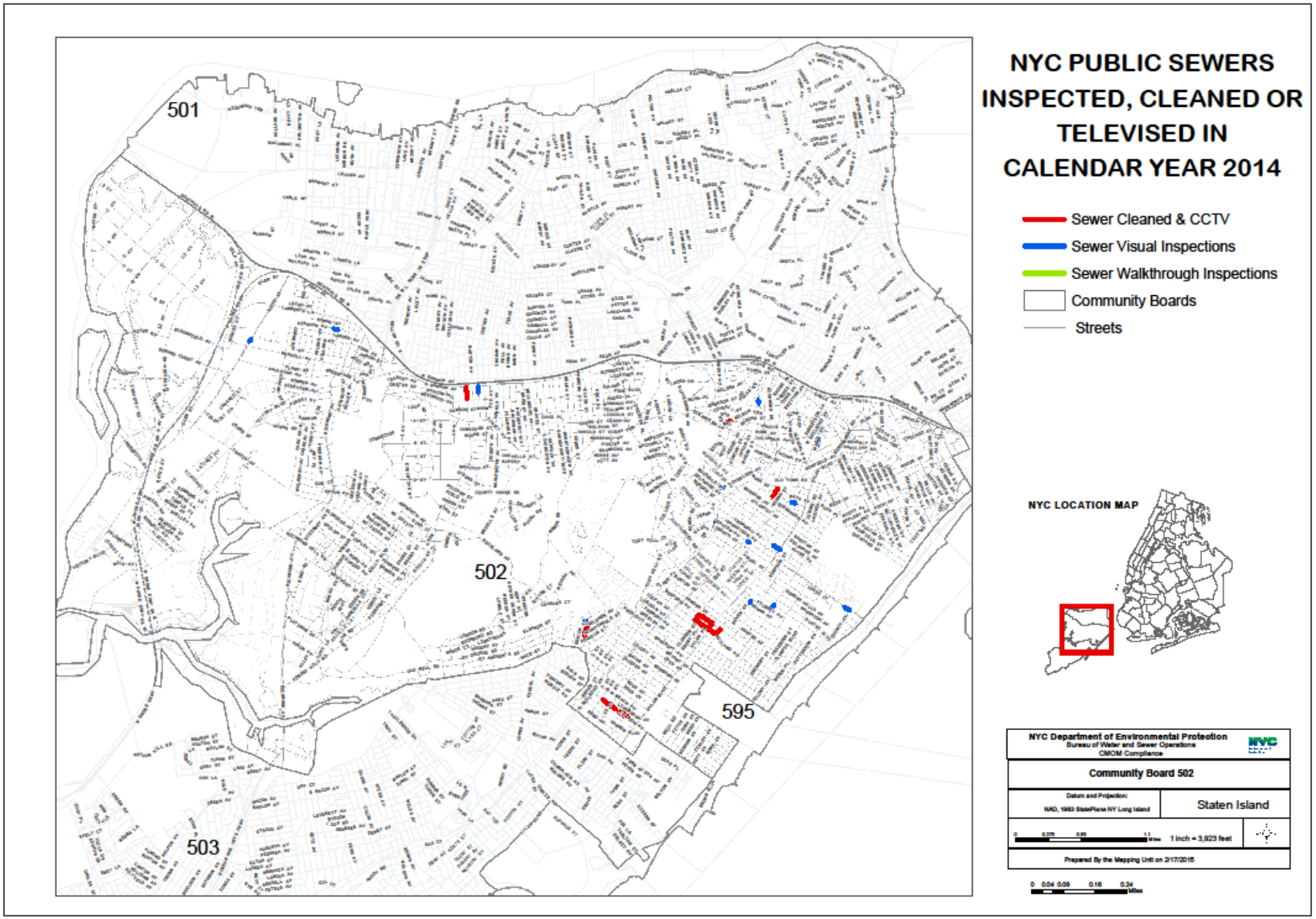
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 414
Queens
1 inch = 5,255 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
501
502
503
595
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 501
Staten Island
1 inch = 3,750 feet
Prepared By the Mapping Unit on 2/17/2015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595
NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
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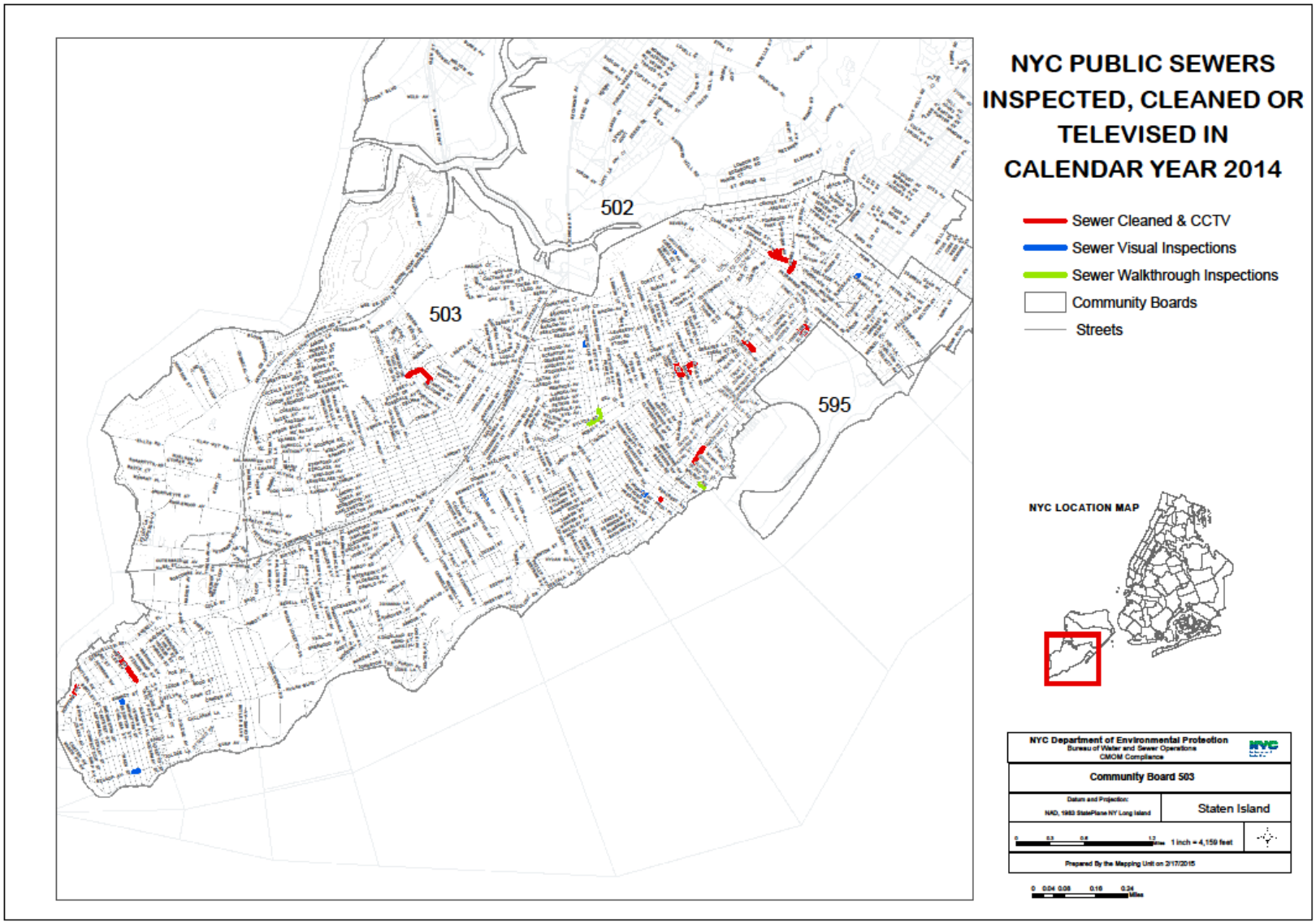
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 502
Staten Island
1 inch = 3,923 feet
Prepared By the Mapping Unit on 2/17/2015


NYC PUBLIC SEWERS INSPECTED, CLEANED OR TELEVISED IN CALENDAR YEAR 2014
Sewer Cleaned & CCTV
Sewer Visual Inspections
Sewer Walkthrough Inspections
Community Boards
Streets
502
503
595
NYC LOCATION MAP
NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
CMOM Compliance
Community Board 503
Staten Island
1 Inch = 4,159 feet
Prepared By the Mapping Unit on 2/17/2015

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER AND SEWER OPERATIONS
CMOM SECTION

Inspected Locations

2014

In-House Survey

Brooklyn

N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF) Cleaned	Surveyed	Walked
1	12-331	Ashford St (381) bt Pitkin Av and Belmont Av	IS		8/13/2012	12/19/2014			
2	12-420	Av N (3107) bt E 31 St and Kings Hwy	MS		2/27/2014	2/27/2014			154
3	12-443	Cleveland St (909)	IS		10/5/2012	12/16/2014			
4	12-546	Halsey St (501)	IS		2/13/2013	12/16/2014			
5	13-1013	49 St (354) bt 3 Av and 4 Av	IS		1/24/2014	2/21/2014			
6	13-1017	Hancock St (61) bt Bedford Av and Nostrand Av	IS		1/24/2014	12/17/2014			
7	13-1018	Av W (7111)	IS		1/2/2014	1/2/2014		144	
8	13-1020	Gravesend Park at 18 Av bt 56 St and 57 St	IS		1/14/2014	1/14/2014		113	
9	13-282	Oxford Av (186) bt Sore Blvd and Oriental Blvd	IS		4/16/2013	12/29/2014			
10	13-383	Paerdegat Av and Flatlands Av	NG		6/6/2013	6/21/2013		3,300	
11	13-473	52 St (457) bt 4 Av and 5 Av	IS		7/8/2013	1/31/2014			
12	13-484	Bragg Sr from Shore Pkwy S Rd to the Outfall	MS		1/28/2014	1/29/2014			1,322
13	13-532A	Ocean Pkway bt PARKWAY Court and Av Y	MS		1/7/2014	1/13/2014		4,348	
14	13-541	Bayridge Pkwy (1271)	IS		8/16/2013	12/1/2014			
15	13-544	79 St and Ridge Blvd	CJ		1/15/2014	1/20/2014			400
16	13-711	Van Siclen Av (833) bt Linden Blvd and Stanley Av	IS		10/3/2013	2/4/2014			
17	13-712	Bayview Av (3326) bt W 33 St and W 35 St	RB		9/26/2013	5/9/2014			
18	13-800	Halsey St 1006) bt Broadway and Bushwick Av	IS		10/18/2013	1/29/2014			
19	13-858	Oakland Pl (18) bt Albemarle Rd and Tilden Av	IS		11/15/2013	4/23/2014			
20	13-874	W 33 St (2729) bt Bayview Av and Neptune Av	CJ		6/10/2014	6/10/2014		2,679	
21	13-925	43 St bt 2 Av and 3 Av. 3 Av bt 42 St and 43 St	CJ		1/24/2014	1/24/2014			103
22	13-928	Sutter AV (953 955)	AQ		1/15/2014	1/16/2014		684	
23	13-930	E New York Av (1157)	IS		2/14/2014	2/14/2014		125	
24	13-963	Nostrand Av (1434)	DE		3/5/2014	3/5/2014		1,072	
25	13-964	7 Av (179)	DE		3/5/2014			1,012	
26	13-965	Macon St (195)	DE		3/5/2014	3/5/2014		958	
27	13-966	Union St (639)	DE		3/5/2014	3/5/2014		910	
28	13-990	12 Av (4620) bt 46 St and 47 St	MS		8/7/2014	8/7/2014			259
29	14-004	Sullivan St	LJ		1/9/2014	1/9/2014		140	
30	14-029	Brown St (2819)	NG		2/27/2014				
31	14-030	Quentin Rd (3424)	NG		2/27/2014				
32	14-031	Strickland Av (6215)	NG		2/27/2014				
33	14-071	Mcguinness Blvd bt Ash St and Commercial St	MS		4/8/2014	4/8/2014			534
34	14-074	50 St & 14 Av	MS		2/11/2014	2/11/2014			200
35	14-075	4 Av (948)	IS		2/26/2014				
36	14-076	E 8 St (734)	IS		2/26/2014	2/26/2014			
37	14-086	S 4 St (51-59)	AQ		2/19/2014	5/9/2014		537	
38	14-091	Kent Av (429)	LJ		3/31/2014				
39	14-097	Ferris St and Sullivan St	IS		2/28/2014	2/28/2014		134	
40	14-099	Adams St & John St	MS		4/22/2014	4/22/2014		100	
41	14-101	Sunset Park North (Project HWK 1048H)	MS		10/15/2014	10/31/2014			1,949
42	14-107	Knapp St (2727)	LJ		4/11/2014			141	
43	14-141	Glenwood Rd (2809) bt Kenilworth Pl and Flatbush Av	CJ		3/5/2014	3/6/2014			402
44	14-156	37 St bt 14 Av and 15 Av	RB		3/7/2014			50	

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
45	14-160	Van Sicklen Av (411) bt Sutter Av and Blake Av	IS		12/17/2014	12/17/2014			
46	14-161	Aberdeen St (74) and Bushwick Av	IS		3/25/2014				
47	14-163	Central Av and Piling St	LJ		6/6/2014	6/6/2014		599	
48	14-170	Avenue P (3200)	IS		4/17/2014	4/17/2014			
49	14-176	Kent Av (230)	IS		3/28/2014	3/28/2014		100	
50	14-178	Adams St and John St	RB		4/3/2014			100	
51	14-180	Foster Av (9227) bt E 92 St and E 93 St	MS		4/4/2014	4/4/2014			177
52	14-181	61 St bt Ft Hamilton Pkwy and 9 Av	LJ		4/16/2014			458	
53	14-195	Midwood St (494) bt Brooklyn Av and Kingston Av	MS		4/10/2014	4/10/2014			255
54	14-200	17 Av (5709) bt 57 St and 58 St	MS		4/9/2014	4/9/2014			440
55	14-208	6 Av (6201)	AQ		7/11/2014	7/11/2014		693	
56	14-217	Court St (226)	IS		4/21/2014	4/21/2014		95	
57	14-222	Dupont St (16)	IS		4/23/2014	4/23/2014		20	
58	14-225	Union St (191)	IS		4/29/2014	4/29/2014		53	
59	14-226	Graham Av (57)	LJ		5/7/2014	5/7/2014		187	
60	14-229	E 58 St (1387)	IS		4/26/2014	4/26/2014		114	
61	14-232	Starr St (26 and 28)	LJ		5/28/2014	5/28/2014		566	
62	14-236	Goatham Av (45)	LJ		5/21/2014	5/21/2014		110	
63	14-238	Kings Hwy bt Av N and E 31 St	MS		9/10/2014	9/10/2014			265
64	14-239	46 St (967) bt 9 Av and 10 Av	IS		5/9/2014	5/9/2014			
65	14-241	Kings Hwy (2705) bt E 27 St and E 28 St	MS		6/24/2014	6/24/2014			200
66	14-242	Porter Av and Lombardy St	RB		5/8/2014			40	
67	14-250	W 17 St (2818)	LJ		5/28/2014	5/28/2014		221	
68	14-251	E New York Av (1579) bt Prospect Pl and St Mark's Av	IS		12/1/2014	12/1/2014			
69	14-252	Eastern Pkwy (542)	IS		12/1/2014	12/1/2014			
70	14-253	Seaview Av (10503) bt E 105 St and E 108 St	RB		5/12/2014			140	
71	14-254	Bay Pkwy and E 4 St	RB		5/14/2014				
72	14-255	Cass Pl and Neptune Av	IS		12/2/2014	12/2/2014			
73	14-268	W 22 St (3046) bt Av U and Av V	YL		6/3/2014			597	
74	14-270	Stillwell Av (2331) bt Av W AND Av X	DE		6/2/2014			696	
75	14-272	Av U (428) bt E 3 St and E 4 St	DE		6/2/2014	6/2/2014		520	
76	14-275	Batchelder St (2241) bt Av V and Av W	YL		6/2/2014			304	
77	14-276	E 45 St (1095)	NA		5/27/2014	9/23/2014			
78	14-277	E 45 St (1095)	NA		5/22/2014	5/22/2014			
79	14-283	Bedford Av bt Campus Rd and Av I	RB		6/4/2014				
80	14-285	Cleveland Av and New Lots Av Project HWPLZ009K	MS		8/27/2014	8/27/2014			543
81	14-288	3 St (214)	LJ	1	4/30/2014	4/30/2014			
82	14-323	Whiteman Dr (147) bt Utahwalk and Bassett Av	RB		6/4/2014	6/4/2014			
83	14-324	Av L (9525) bt E 95 St and E 96 St	RB		8/27/2014				
84	14-325	Albany Av (47) bt Fulton St and Herkimer St	RB		6/4/2014	2/10/2015			
85	14-330	Moultrie St and Meserole Av	RB		6/5/2014			729	
86	14-342	Eldert Ln (628,624)	LJ	1	7/9/2014	7/9/2014			
87	14-343	Av M (6650)	RB		8/13/2014				
88	14-346	Ocean Pkwy (733)	AQ		8/7/2014	8/7/2014		211	
89	14-350	Ocean Pkwy (2965)	LJ		8/14/2014	8/14/2014		320	
90	14-352	65 St (2277)	IS		12/11/2014	12/11/2014			
91	14-354	Autumn Av (426)	IS		12/11/2014	1/6/2015			
92	14-356	Jerome St (582)	IS		12/9/2014	12/9/2014			
93	14-358	E 3 St bt Beverly Rd and Avenue C	MS		7/30/2014	7/30/2014		770	270
94	14-359	17 Av bt 53 St and 54 St	MS		7/7/2014	7/7/2014			578
95	14-360	Chauncey St bt Saratoga Av and Howard Av	MS		7/9/2014	7/9/2014			766
96	14-370	Fulton St(620)	LJ		7/10/2014	7/10/2014		167	
97	14-374	W 29 St (2960)	LJ	1	7/22/2014	7/22/2014			
98	14-377	Lenox Rd (271)	LJ		9/12/2014	9/12/2014		738	
99	14-380	President St (1476)	AQ		9/10/2014	9/10/2014		738	
100	14-385	Cropsey Av (2609)	LJ		10/1/2014	10/1/2014		438	
101	14-389	Caton Av and E 10 St	RB		8/13/2014			843	

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							Cleaned	Surveyed	Walked
102	14-390	Strickland Av (2737) bt National Dr and Bend	RB		7/16/2014				
103	14-396	Granite St (99)	LJ		9/11/2014	9/11/2014		453	
104	14-401	Mother Gaston Blvd (603)	AQ		9/30/2014	9/30/2014		578	
105	14-405	Bath Av (1765) bt Bay 17 St and 18 Av	MS		8/14/2014	8/14/2014			250
106	14-407	Grafton St (301) bt Livonia Av and Bend	IS		12/3/2014	12/3/2014			
107	14-411	Hamilton Av (435)	LJ	1	8/11/2014	8/11/2014			
108	14-417	82 St (2053)	IS		12/9/2014	12/9/2014			
109	14-427	7 St and 4 Av	MS		9/22/2014	10/8/2014			2,122
110	14-435	Tompkins Av (420)	AQ		9/22/2014	9/22/2014		308	120
111	14-437	Tompkins Pl (25)	LJ		9/18/2014	9/18/2014		628	
112	14-451	Minna St (161)	CP		8/27/2014				
113	14-452	E 56 St (2030)	CP		8/27/2014				
114	14-453	Rockaway PKWY (1899)	CP		8/27/2014				
115	14-455	33 St (179A)	CP		8/27/2014				
116	14-481	Sutter Av (1161) bt Logan St and Fountain Av	MS		8/12/2014	8/12/2014			261
117	14-482	Cass Pl (21-37)	IS		12/1/2014	12/1/2014			
118	14-485	Surf Av (2007) bt W 20 St and W 21 St	RB		8/27/2014	1/13/2015			
119	14-486	Av J and E 80 St	RB		8/27/2014				
120	14-488	E 105 St and Av J	RB		9/16/2014			100	
121	14-494	New Lots Av (878)	MS		8/27/2014	8/27/2014			260
122	14-500	4 Av (163)	LJ		9/26/2014	9/26/2014		345	
123	14-501	Emmons Av (3235)	LJ		9/10/2014	9/10/2014		645	
124	14-517	Bay 40 St and 86 St	RB		9/12/2014			253	
125	14-525	Central Av and Pilling St	LJ		9/12/2014	9/12/2014		610	
126	14-528	4 Av (275)	LJ		8/27/2014	9/17/2014		124	
127	14-540	50 St (1458)	LJ		9/7/2014	10/29/2014		522	
128	14-552	Lombardy St (171)	NA					258	
129	14-562	Butler St (255)	AQ		11/13/2014	11/13/2014		296	
130	14-563	Cadman Plaza Park and Tillary St	LJ		11/13/2014	11/13/2014		114	
131	14-564	Fleet St (86)	LJ		10/22/2014			96	
132	14-573	Ocean Av (2068)	LJ		11/25/2014	11/25/2014		307	
133	14-575	E 19 St (27)	LJ		11/7/2014	11/7/2014		142	
134	14-579	Gold St (Coned and CSO Inspection	CJ		12/17/2014	12/17/2014			600
135	14-595	50 St (1185) bt 11 Ave and 12 Ave	MS		11/19/2014	11/19/2014			226
136	14-598	Marcy Ave (827) bt Monroe St and Madison St	IS		12/2/2014	12/2/2014			
137	14-600	17 Av (6615) bt 66 St and 67 St	MS		11/12/2014	11/12/2014			637
138	14-601	Cleveland St (909) bt Linden Blvd and Stanley Av	MS		11/13/2014	11/13/2014			600
139	14-602	Ocean Av (2044) bt Ave O and Ave P	RB		11/12/2014				
140	14-603	Degraw St (132) bt Columbia St and Tiffany Pl	IS		12/30/2014	2/5/2015			
141	14-620	Liberty Ave (799)	IS		12/9/2014	12/9/2014			
142	14-622	Hill St (75) bt Crescent St and Autumn Ave	IS		12/3/2014	2/5/2015			
143	14-623	Franklin Ave (537)	IS		12/3/2014	12/3/2014			
144	14-644	E108 St between Flatlands Ave and Ave K	TB		11/18/2014	11/18/2014		2,067	
145	14-659	63 St (1774)	IS		12/2/2014	12/2/2014			
146	14-660	Ralph Av (1558)	IS		12/24/2014	12/24/2014			
147	14-667	18 Av (7001)	RB		12/9/2014				
148	14-669	7 Ave (227-237)	NA		12/8/2014	12/8/2014		29	
149	14-676	Kent Av (420)	AQ		12/17/2014				
150	14-715	Van Burren St (60)	IS		12/22/2014	12/22/2014			
151	14-730	Foster Av and Corbin Ct	RB		12/23/2014				

Manhattan

152	13-1000	Dover St and South St	MS		1/29/2014	2/19/2014			802
153	13-1019	W 18 St (425)	LJ		2/8/2014	2/8/2014		802	
154	13-525	W 125 St (319) bt 8 Av and St Nicholas Av	YL		7/18/2013				
155	13-981	3 Av (1992)	MS		7/2/2014	7/2/2014			200
156	13-991	Water St (200)	IS		2/27/2014	2/27/2014		89	

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
157	13-992	Murray St (101)	LJ		4/12/2014	4/12/2014		534	
158	13-999	W 55 St (424)	LJ		1/12/2014	1/12/2014		717	
159	14-002	First Av (835)	LJ		1/12/2014	1/12/2014		558	
160	14-005	Broadway (726)	IS		2/19/2014	2/19/2014		151	
161	14-010	Barrow St (58)	IS		1/30/2014	1/30/2014		90	
162	14-021	Trinity Pl (74)	LJ		2/23/2014	2/23/2014		125	
163	14-066	Madison Av (5)	LJ		2/11/2014	2/11/2014		99	
164	14-067	Madison Av (5) & E 24 St	LJ		2/11/2014	2/11/2014		99	
165	14-084	Ann St (49-53)	LJ		2/8/2014	2/8/2014		345	
166	14-104	John St (24)	IS		3/5/2014	3/5/2014		110	
167	14-151	W 54 St (439)	LJ		3/9/2014	3/9/2014		724	
168	14-152	W 15 St (450)	IS		3/12/2014	3/12/2014		96	
169	14-162	W Broadway (325) bt Canal St and Grand St	MS		3/11/2014	3/11/2014		75	474
170	14-202	Gramercy Park S (18)	IS	1	4/4/2014	4/4/2014			
171	14-207	W 26 St (540)	LJ		4/13/2014	4/13/2014		615	
172	14-209	W 37 ST (326)	LJ		4/19/2014	4/19/2014		216	
173	14-218	Avenue Of Americas (1414)	LJ		5/15/2014	5/15/2014			
174	14-219	Morton St (75)	IS		4/28/2014	4/28/2014		87	
175	14-220	Morton St (75)	IS		4/28/2014	4/28/2014		76	
176	14-221	Morton St (75) (sanitary in greenwich)	IS		4/28/2014	4/28/2014			
177	14-230	W 57 St (111)	IS		4/27/2014	4/27/2014		88	
178	14-248	West End Av (666)	AQ		5/6/2014	5/6/2014		130	
179	14-258	Greeenwich St (443)	LJ		6/19/2014	6/19/2014		112	
180	14-261	Greenwuch St and Debrosses St	LJ		6/19/2014	6/19/2014		93	
181	14-262	Greenwich St and Desbrosses St	LJ		6/19/2014	6/19/2014		108	
182	14-265	First Av (1918)	LJ		7/23/2014	7/23/2014		81	
183	14-267	Lafayette St	LJ		10/25/2014	10/25/2014			
184	14-278	Madison Av (317)	LJ		5/31/2014	5/31/2014			
185	14-287	W 86 St (272)	LJ		7/5/2014	7/5/2014		256	
186	14-327	Trinity Church on 75 Broadway	LJ		6/16/2014	6/16/2014		9	
187	14-351	W 55 St (424)	LJ		6/30/2014	6/30/2014		724	
188	14-361	W 40 St (346-350)m	LJ		6/30/2014	6/30/2014	144	301	
189	14-376	E 27 St (335)	LJ		9/7/2014	9/7/2014		193	
190	14-381	E 67 St (11)	LJ		7/31/2014	7/31/2014		110	
191	14-386	9 Av (805)	LJ		9/9/2014	9/9/2014		158	
192	14-394	E 23 St and Montgomery St	MS		8/4/2014	9/4/2014			1,915
193	14-397	Grand St (394-406)	LJ		9/20/2014	9/20/2014		295	
194	14-432	Perry St (64)	LJ		9/23/2014	9/23/2014		396	
195	14-475	5 Av (292)	LJ		9/20/2014	10/3/2014		322	
196	14-476	West End Av (1-15)	AQ		8/21/2014	8/21/2014		83	
197	14-497	Broadway (4467)	LJ	1	9/9/2014	9/9/2014			
198	14-502	Greenwich Av (76)	NA		8/20/2014	9/17/2014		309	
199	14-503	Bronx Shore Rd (20)	LJ		10/22/2014	10/22/2014			
200	14-505	w 29 St (515)	LJ		9/11/2014	9/11/2014		120	
201	14-507	Bronx Shore Rd (20)	LJ		10/22/2014	10/22/2014			
202	14-510	Trinity Pl (68-74)	LJ		10/4/2014	10/4/2014		432	
203	14-535	Stuyvesant St (27)	LJ		9/24/2014	9/24/2014		219	
204	14-541	Clarkson St and Washington St	MS		10/7/2014	10/7/2014			205
205	14-543	Washington Pl (123)	LJ		10/9/2014	10/9/2014		216	
206	14-640	E 85 St (236)	LJ		12/3/2014	12/3/2014		91	
207	14-642	E 23 St and Montgomery Ave (Area 1)	MS		12/3/2014				2,053
208	14-677	Madison Ave (611)	NA		1/12/2015	1/12/2015		266	

Queens

209	11-203	78 St (92-20) bt Rockaway Blvd and Atlantic Av	MS		1/6/2014	1/6/2014		265	
210	11-267	77 Av (141-27) bt 141 St and Velegh Pl	CJ		3/19/2014	3/19/2014			254
211	11-314	Beach Channel Dr and B 86 St	MS		3/12/2014	3/12/2014		276	89

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							Cleaned	Surveyed	Walked
212	11-342	217 St and 75 Av	MS		2/7/2014	2/7/2014			311
213	13-1021	Jamaica Av (251-63)	AQ		1/29/2014	1/29/2014		290	
214	13-506	179 St (111-71) bt 112 St & Bend	RB		1/9/2014			526	
215	13-649	224 St (147-36,147-38)	LJ		12/26/2014	12/26/2014		1,176	
216	13-707	B 79 St (245) bt B 74 St and B Channel Dr	RB		9/20/2013				
217	13-735C	146 St and 133 Rd,120 Av and 147 St,Sutphin Blvd bt 112 and 113	TB		10/2/2013	1/16/2014		1,307	
218	13-780	Horatio Pkwy and 50 Av	RB		10/15/2013	1/17/2014			
219	13-812	108 St bt 64 Rd and Horace Harding Exp	MS		7/1/2014				1,065
220	13-890	Sutphin Blvd (107-05)	LJ		2/7/2014	2/7/2014			
221	13-947A	255 St and 75 Av	RB		12/6/2013				
222	13-947B	Langston Av and 73 Av	RB		12/6/2013				
223	13-947C	263 St and 73 Av	RB		12/6/2013				
224	13-947D	260 St and 74 Av	RB		12/6/2013				
225	13-954	82 St (58-14)	IS		12/9/2013	1/21/2015			
226	13-955	25 Rd (146-26)	IS		12/9/2013	1/24/2014			
227	13-956	Kissena Blvd (50-06)	IS		1/7/2014	1/23/2014			
228	14-023	167 St (49-16)	IS		2/4/2014	2/4/2014			
229	14-032	70 St (41-62)	KD		2/20/2014				
230	14-033	64 PL (75-17)	NG		2/20/2014	2/20/2014			
231	14-034	Cross Island Pkwy (157-01)	NG		2/20/2014				
232	14-036	190 St (46-35)	NA		2/20/2014	2/20/2014			
233	14-098	149 St (42-540	IS		3/7/2014	3/7/2014		101	
234	14-100	Ulmer St (Project Sandy FEMA Site VISIT)	CJ		4/24/2014	4/24/2014			20
235	14-106	Channel Rd(1502)	LJ		3/12/2014	3/12/2014		165	
236	14-113	41 Av (23-10)	IS	2	3/5/2014	3/5/2014			
237	14-144	143 Av (222-26)	LJ		3/12/2014	3/12/2014		249	
238	14-153	Roosevelt Av (121-16)	IS		3/7/2014	3/7/2014		110	
239	14-154	Junction Blvd (34-20)	IS		3/10/2014	3/10/2014		130	
240	14-165	8 St bt Astoria Blvd and 28 Av	LJ		3/14/2014	3/14/2014		198	
241	14-166	Burling St(4620)	LJ		4/11/2014	4/11/2014		40	
242	14-168	Metropolitan Av (54-29	LJ		5/10/2014	5/10/2014		315	
243	14-175	24 Rd (163-38)	IS		3/27/2014	3/27/2014		140	
244	14-189	104 St (39-24)	IS	2	4/23/2014				
245	14-190	43 Av bt 57 Av and DE	MS		4/21/2014	4/21/2014			164
246	14-196	Nadal Pl (164-52)	IS		4/7/2014				
247	14-197	B 65 St (337) bt DE and B Channel Dr	IS		4/7/2014	4/23/2014			
248	14-203	Northern Blvd (42-2)	LJ		6/18/2014	6/18/2014		372	
249	14-210	119 Av and 192 St	MS		4/29/2014	5/7/2014			100
250	14-211	Atlantic Av (110-04)	LJ		5/9/2014	5/9/2014		130	
251	14-212	Atlantic Av (110-04)	LJ		5/9/2014	5/9/2014		130	
252	14-216	3 St bt 26 Av and 27 Av	IS		5/2/2014	5/2/2014		102	
253	14-223	College Point Blvd (20-16,20-18)	LJ		5/5/2014	5/5/2014		305	
254	14-231	31 St (31-51)	AQ		5/29/2014	5/29/2014		413	
255	14-235	171 St (87-65)	NA						
256	14-237	Bell Blvd and Cross Island Pkwy	MS		5/13/2014	5/22/2014		600	
257	14-240	B 31 St (201) bt Seagirt Av and Seagirt Blvd	IS		5/8/2014	5/8/2014			
258	14-247	149 St (43-57)	AQ		5/22/2014	5/22/2014		601	
259	14-257	157 St (106-20)	LJ		5/20/2014	5/20/2014		174	
260	14-291	148 Av (249-37)	NG		6/3/2014	6/3/2014			
261	14-292	143 St (109-40)	NG		6/3/2014	6/3/2014			
262	14-293	Sayres Av (169-09)	NG		6/3/2014				
263	14-294	205 St (93-02)	NG		6/3/2014	6/3/2014			
264	14-295	112 St (95-50)	NG		6/2/2014	6/2/2014			
265	14-296	Northern Blvd (84-09)	CP		6/2/2014	6/2/2014		214	
266	14-298	119 Rd (171-22)	CP		6/2/2014	6/2/2014			
267	14-299	Vaswani av (173-21)	CP		6/2/2014	6/2/2014			
268	14-300	B 68 St (560)	CP		6/3/2014	6/3/2014			

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
269	14-301	216 St (94-05)	CP		6/2/2014	6/2/2014			
270	14-309	37 Av (126-23)	LJ		5/27/2014	5/27/2014			
271	14-310	37 Av (126-30)	LJ		5/27/2014	5/27/2014			
272	14-311	37 Av (126-63)	LJ		5/27/2014	5/27/2014			
273	14-317	Downing St (31-45)	LJ		6/3/2014	6/3/2014		94	
274	14-332	Pearson St (45-56)	AQ		6/9/2014	6/9/2014			
275	14-335	Center Dr (30)	LJ		7/24/2014	7/24/2014		395	
276	14-336	70 Av (110-14)	LJ		6/16/2014	6/16/2014		327	
277	14-337	Ulmer St and 28 Av	CJ		6/10/2014	6/19/2014		1,070	
278	14-338	128 Dr bt Hook Creek Blvd and DE	RB		6/19/2014				
279	14-339	74 St (63-68)	AQ		6/19/2014	6/19/2014		134	
280	14-344	108 St r bt Horace Harding Exp and 43 Ave Reg 10 and Reg 9	MS		6/17/2014	6/17/2014			50
281	14-345	35 St (42-03)	LJ		6/27/2014	7/17/2014			
282	14-347	Ditmars Blvd (95-10)	NA		6/18/2014	9/19/2014		250	
283	14-349	Northern Blvd (42-02)	LJ		6/18/2014	6/18/2014		89	
284	14-369	Huron St (149-26)	AQ		8/26/2014	8/26/2014		139	
285	14-383	Central Av (1637)	LJ		7/30/2014	7/30/2014		116	
286	14-392	35 St (32-30)	AQ		8/11/2014	8/11/2014		205	
287	14-398	Bowne St (40-04)	RB		8/12/2014				
288	14-402	149 Av (132-10)	LJ		10/1/2014	10/1/2014	89		
289	14-404	Poplar St (239-16)	AQ		8/15/2014	1/21/2015			
290	14-408	150 St (5-16)	MS		7/31/2014	7/31/2014			268
291	14-409	Main St and 72 Av	MS		7/31/2014	7/31/2014			64
292	14-421	B 84 St (340) bt B Channel Dr and DE	IS		12/22/2014	12/22/2014			
293	14-431	220 St (96-06)	LJ		8/11/2014	8/11/2014		92	
294	14-433	Francis Lewis Blvd (45-64)	LJ	1	9/16/2014	9/16/2014			
295	14-434	Surrey Pl (81-18)	AQ		8/11/2014	8/11/2014		143	
296	14-436	Fresh Pond Rd and Metorpolitan Av	MS		8/26/2014	8/26/2014			172
297	14-461	150 St (128-20)	NG		8/18/2014	8/18/2014			
298	14-463	154 St (129-49)	NG		8/18/2014				
299	14-464	156 St (110-46)	NG		8/18/2014				
300	14-466	169 Pl (108-31)	NG		8/18/2014				
301	14-468	165 St (104-19)	NG		8/18/2014	8/18/2014			
302	14-495	11 St (46-09)	LJ	1	8/4/2014	9/17/2014			
303	14-496	90 Av (148-13)	LJ	1	9/4/2014	9/4/2014			
304	14-498	Kent St (80-15)	LJ		9/9/2014	9/9/2014		140	
305	14-504	Bowne St (42-12)	LJ		10/14/2014	10/14/2014		245	
306	14-513	Astoria Blvd (95-06)	LJ		9/9/2014	9/9/2014		266	
307	14-527	150 St (93-02)	NA		9/4/2014	9/17/2014		80	
308	14-529	66 St (55-44)	LJ		10/21/2014	10/21/2014		98	
309	14-530	Abingdon Rd (82-21)	LJ		10/17/2014	10/17/2014		304	
310	14-533	64 St (50-23)	LJ		9/18/2014	9/18/2014		205	
311	14-542	108 St (6635	LJ		10/1/2014	10/1/2014		43	
312	14-545	147 St bt 13 Av and 15 Av (Project SE-811)	CJ		10/28/2014	11/5/2014			1,867
313	14-546	181 St (146-12)	LJ		9/16/2014	10/28/2014		112	
314	14-548	211 St ((98-10)	LJ		10/2/2014	10/2/2014		92	
315	14-549	Borden Av (28-25)	LJ	2	10/17/2014	10/17/2014			
316	14-554	133 Av (126-04)	LJ		10/10/2014	10/10/2014		145	
317	14-568	94 Rd (211-41)	LJ	1	10/9/2014	10/9/2014			
318	14-570	College Point Blvd and NB Whitestone Exp SR (SE-809)	MS		10/10/2014	10/10/2014			10
319	14-578	146 Ave (227-15)	LJ	1	11/7/2014	11/7/2014			
320	14-581	89 Av (92-19)	LJ	6	12/1/2014	12/1/2014			
321	14-583	Avon Rd (184-26)	LJ		7/30/2014	7/30/2014		59	
322	14-604	146 Ave (227-03)	LJ	1	11/7/2014	11/7/2014			
323	14-615	Jackson Ave (22-44)	LJ		11/24/2014	11/24/2014		113	
324	14-636	49 Ave (Hunters Point Ave) bt 35 St and 36 St	MS		12/16/2014	12/16/2014			125
325	14-641	36 St (37-14)	LJ		12/2/2014	12/2/2014		304	

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
326	14-646	39 Ave (204-09)	NA		12/1/2014	12/1/2014		125	
327	14-648	Bowne St (42-12)	LJ		12/1/2014	12/1/2014		235	
328	14-650	Northern Blvd (210-08)	NA		12/2/2014	12/2/2014		126	
329	14-652	Review Ave (37-30)	NA		11/24/2014	11/24/2014		189	
330	14-655	Beach 84 St bt Beach Channel Dr and Dead End	TB		11/7/2014	11/7/2014			627
331	14-670	190 St (35-15, 35-19) (dye test 1)	NA		12/4/2014	12/4/2014		137	
332	14-675	Harman St (1736-1738)	NA		12/31/2014	12/31/2014		561	
333	14-679	Cypress Ave (559)	NA		12/4/2014	12/4/2014		1,022	
334	14-680	Seneca Av (976)	NA		12/4/2014	12/4/2014		536	
335	14-724	Liberty Ave and Brisbin St	TB		12/22/2014	1/2/2015		70	
336	14-729	12 St (27-01)	NA		12/30/2014	1/13/2015			
337	15-004	South Rd and Guy Brewer Blvd	TB					20	
338	15-005	193 St and 109 Av	TB					140	

Staten Island

339	13-118	Villanova St (32) bt Brunswick St and Rocknes St	IS		3/26/2013	12/12/2014			
340	13-292	Dongan Hills Av and Hylan Blvd	RB		4/25/2013				
341	13-467	Sheldon Av (310)	RB		6/14/2013				
342	13-716	Mapleton Av (37) and Olympia Blvd	IS		9/13/2013	12/23/2014			
343	13-790	Benton Av (2) and Cooper Av	RB		4/15/2014			150	
344	13-832	Benedict Rd and Buttonwood Rd	RB		3/14/2014				
345	13-850	Rose Ct (50) bt Lakewood Rd and DE	RB		3/14/2014				
346	13-859	South Av (135) bt Richmond Ter	AQ		10/31/2013	8/7/2014			
347	13-961	Westervelt Av (162)	NG		2/27/2014	2/24/2014			
348	14-001	Winfield Av	LJ		2/20/2014	2/20/2014		77	
349	14-018	Scribner Av (105)	LJ		1/20/2014	1/20/2014		355	
350	14-019	Scribner (139)	LJ		4/7/2014	4/7/2014		563	
351	14-050	Maple Av (50)	NG		2/27/2014	2/27/2014			
352	14-085	Amboy Rd	LJ		4/10/2014	4/10/2014			
353	14-095	Talbot Pl (242)	LJ		2/26/2014	2/26/2014		155	
354	14-096	Talbot Pl (242)	IS		2/25/2014	2/25/2014		155	
355	14-103	Benedict Av (159)	IS		3/21/2014	3/21/2014		180	
356	14-105	Douglas Rd (82)	AQ		4/15/2014	4/15/2014		128	
357	14-146	Westport St and Westport Ln	IS		4/4/2014	1/30/2015			
358	14-147	Richmond Av (1410) bt Lamberts Ln and Lander Av	IS		3/25/2014				
359	14-171	Hopkins Av bt Twombly Av and O"Gorman Av	RB		3/27/2014			625	
360	14-182	Sheridan Av (80) bt Crist St and Fingerboard Rd	IS		4/1/2014	1/16/2015			
361	14-183	Phelps Pl (7) and Hamilton Av	IS		12/29/2014	3/13/2015			
362	14-184	Watkins Av (41) bt Crossfield Av and Annadale Rd	RB		4/15/2014				
363	14-206	Overlook Av (156)	LJ		4/24/2014	4/24/2014		68	
364	14-224	Highland Av	LJ		5/13/2014	5/13/2014		185	
365	14-228	Hylan Blvd (3948)	LJ		4/25/2014	4/25/2014			
366	14-233	Eltingville Blvd (44)	AQ		5/21/2014	5/21/2014		133	
367	14-245	Flint St (414)	AQ		5/7/2014	5/7/2014		201	
368	14-266	Taft Av	AQ		6/26/2014	7/7/2014		365	
369	14-279	Pelton Av and Pelton Pl	AQ		6/26/2014	7/7/2014		331	
370	14-281	Willowbrook Rd and Wyona Av	MS		5/21/2014	5/21/2014			112
371	14-286	Amboy Rd and Eltingville Blvd	MS		6/26/2014	6/26/2014			470
372	14-307	Jewett Av (961.965) and Victory Blvd	RB		5/20/2014			255	
373	14-312	Tennyson Dr and Armstrong Av	MS		5/23/2014	6/20/2014			269
374	14-313	Beach St (98)	AQ		5/22/2014	5/22/2014		11,043	
375	14-314	Lyndale Av (340)	AQ		5/22/2014	5/22/2014		239	
376	14-315	Gulf Av and Bloomfield Av	LJ		7/8/2014	7/8/2014		158	
377	14-334	Hurlbert St (121)	AQ		7/7/2014	8/13/2014			
378	14-368	Laconia Av (619)	AQ		7/11/2014	7/11/2014		110	
379	14-373	Westervelt Av (357)	IS		12/23/2014	12/23/2014			
380	14-375	Elmira St (48)	LJ		7/24/2014	7/24/2014		200	

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
381	14-378	Byrne Av	AQ		8/28/2014	8/28/2014		301	
382	14-384	Cromwell Av (306)	LJ		8/11/2014	8/11/2014		356	
383	14-393	Victory Blvd (982)	LJ		9/25/2014	9/25/2014		198	
384	14-399	Billop Av bt Brighton St and Chelsea St	LJ		11/5/2014	11/5/2014		253	
385	14-410	Van Duzer St	LJ		9/17/2014	9/17/2014		384	
386	14-430	Kirshon Av (86)	AQ		8/11/2014	8/11/2014		250	
387	14-438	Davis Av andDelafield Pl	MS		8/21/2014	8/21/2014			309
388	14-471	Katan Av (226)	CP		8/26/2014	8/26/2014			
389	14-472	Mann Av (18)	CP		8/26/2014	8/26/2014			
390	14-523	Ridgefield Av (43) bt DE and Cunard Pl	IS		12/30/2014	12/30/2014			
391	14-536	Brighton St (40)	LJ		9/23/2014	9/23/2014		155	
392	14-537	Beacon Av (135)	LJ		9/25/2014	9/25/2014		145	
393	14-538	Corbin Av (447)	NA		9/23/2014	9/23/2014		249	
394	14-551	Ardmore Av (165)	LJ		10/1/2014	10/1/2014		260	
395	14-558	Johnson Av (119) bt Arthur Kill Rd and Craig Av	IS		11/25/2014	11/25/2014			
396	14-559	Winter Av (12)	IS		11/25/2014	11/25/2014			
397	14-560	Bloomingdale Rd and Churchill Av	RB		10/16/2014				
398	14-569	Brighton Av (125)	LJ		10/21/2014	10/21/2014		172	
399	14-576	Armstrong Av (561) bt Wilson AV and Lamoka Av	RB		10/16/2014				
400	14-577	Tompkins Av (662) and Thompson Pl (6)	LJ		10/27/2014	10/27/2014			
401	14-589	Parkinson Ave	LJ		11/19/2014	11/19/2014		214	
402	14-606	Av B (59) BT Bennet St and Dead End	IS		12/23/2014	12/23/2014			
403	14-607	Farraday St and Madison Av	RB		11/17/2014				
404	14-609	Victory Blvd and Speedwell Av	RB		11/17/2014				
405	14-645	Steuben St and Beverly Rd	RB		11/17/2014				
406	14-651	Ruggles St (8)	LJ		12/3/2014	12/3/2014		295	
407	14-674	South Ave	LJ		12/17/2014	12/22/2014		1,249	

The Bronx

408	11-237	E 240 St (411) bt Martha Av and city boundary	IS		10/12/2012	12/16/2014			
409	12-319	Amethyst St (1920) bt Rhinelander Av and Nycta Subway	IS		8/22/2012	12/5/2014			
410	12-371	E 221 St (1017)	IS		9/11/2012	12/5/2014			
411	13-1014	Randall Av (bend) Soundview Park HP-10 CSO25	MS		6/18/2014	6/18/2014			30
412	13-211	Huntington Av (355)	IS		4/18/2013	12/17/2014			
413	13-279	Bainbridge Av (2670) bt E 194 St and E 196 St	IS		4/18/2013				
414	13-348	Marine St (50) City Island Av and DE	YL		6/3/2013	3/5/2014			
415	13-397	Union Av (1236) bt E 168 St and E 169 St	IS		6/10/2013	3/4/2014			
416	13-778	Walton Av (2159) bt E 181 St and Cameron Pl	IS		10/23/2013	12/8/2014			
417	13-834	New England Thruway (2107)	IS		11/13/2013	3/6/2014			
418	13-835	Hollywood Av (286) bt Lawton Av and Miles Av	IS		11/18/2013	12/5/2014			
419	13-836	Boller Av (3683)	IS		11/18/2013	12/8/2014			
420	13-857	Sedgwick Av (2274) bt W 183 St and Bend	IS		11/18/2013	12/19/2014			
421	13-919	Holland Av (2547)	YL		3/5/2014	3/5/2014			
422	13-920	N Oak Dr (788)	YL		3/5/2014	3/5/2014			
423	14-022	751 E 220 St	AQ		3/6/2014	3/6/2014			
424	14-077	Vincent Av (727)	IS		1/30/2014	12/8/2014			
425	14-143	Thieriot Av (305) bt DE and Patterson Av	IS		2/27/2014	3/25/2014			
426	14-145	Broadway (5510 and 5520)	LJ		4/5/2014	4/5/2014		429	
427	14-169	Exterior St and W 225 St	CJ		3/13/2014	3/14/2014		305	400
428	14-204	Bruckner Blvd (3683)	LJ		6/25/2014	6/25/2014		785	
429	14-205	Bruckner Blvd (3683)	LJ		6/18/2014	6/18/2014		100	
430	14-214	E 207 St (341)	IS		4/22/2014	4/22/2014		100	
431	14-227	Zerega Av (501)	LJ		5/8/2014	5/8/2014			
432	14-244	E 220 St (751)	LJ		2/7/2014	2/7/2014		791	
433	14-249	Coles Lane bt Briggs and Bainbridge Av	AQ		6/4/2014	6/4/2014		231	
434	14-263	Bartholdi St (700-710)	AQ	1	5/27/2014	7/14/2014			
435	14-264	Carpenter Av (3961)	AQ	1	5/27/2014	7/14/2014			

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
436	14-326	Ely Av (3251) bt Burke Av and Givan Av	IS		11/26/2014	11/26/2014			
437	14-341	University Av (2553)	AQ		6/27/2014	6/27/2014			
438	14-379	NYC Estella Diggs Park at 3 Av	AQ		9/11/2014	9/11/2014		88	
439	14-388	Southern Blvd	AQ		8/22/2014	8/22/2014		95	
440	14-428	W Farms Rd bt Jennings St and E 173 St	AQ		10/30/2014	10/30/2014		1,170	
441	14-429	W Farms Rd bt Cross Bronx Sr Rd and Roadman Pl	AQ		10/30/2014	10/30/2014		473	
442	14-477	E 178 St (778-784)	LJ	1	9/9/2014	9/9/2014			
443	14-484	Manor Av (1227)	IS		11/26/2014	12/2/2014			
444	14-516	Sheridan Av	LJ		10/20/2014	10/20/2014		841	
445	14-522	Independence Av (5240)	IS		11/26/2014	11/26/2014			
446	14-539	Waldo Av (3900)	LJ	1	9/26/2014	9/26/2014			
447	14-561	E 162 St (383)	LJ	1	10/6/2014	10/6/2014			
448	14-618	Bruckner Blvd (955)	IS		11/25/2014				
449	14-658	Rev James Polite Av (936)	IS		12/2/2014	12/12/2014			
450	14-672	Spaulding Ln (1)	NA		12/3/2014	12/3/2014		149	
451	14-721	E Mosholu Pkwy S (170)	NA	1	12/19/2014	12/19/2014			
452	14-728	Bruckner Blvd (164)	LJ		12/26/2014	12/26/2014			
	2014 In-House Survey Total, LF:	**114,624** (21.71 mi)		**30**	**1/2/2014**	**12/31/2014**	**233**	**88,073**	**26,318**
	Operating Expenses, $								

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked

CITYWIDE

Brooklyn

453	09-225	Mcdonald Av (752) Cortelyou Rd and Ditmas Av	DL		10/17/2014	10/17/2014			
454	11-406	Washington Av (1000)	EC		10/1/2014	10/1/2014	243		
455	13-067	Lafayette Av (904) bt Lewis Av and Stuyvesant Av	DL		7/23/2014	7/24/2014	844		
456	13-1010	Shore Pkwy Sr (EB) (3810)	CP		6/27/2014	6/27/2014	444		
457	13-496	Henry St (770) bt Centre Mall & Bush St	DE		11/4/2013	1/2/2014	759		
458	13-497	Ocean Av (2765) bt Av W and Av X	DE		5/22/2014	5/23/2014	1,974		
459	13-500	E 21 St (2119) bt Av T and Av U	DL		5/15/2014	5/16/2014	1,236		
460	13-705	Bay 13 St and Shore Pkwy	DL		8/8/2014	11/18/2014	14,080		
461	13-717	72 7 Av bt Lincoln Pl and Berkeley Pl	DE		5/20/2014	5/21/2014	954		
462	13-720	312 Chauncey St bt Ralph Av and Howard Av	EC		5/22/2014	5/23/2014	1,405		
463	13-874	W 33 St (2729) bt Bayview Av and Neptune Av	NG		12/10/2013	8/7/2014	6,801		
464	13-963	Nostrand Av (1434)	EC		5/28/2014	5/29/2014	1,423		
465	13-964	7 Av (179)	DE		5/19/2014	5/20/2014	1,051		
466	13-965	Macon St (195)	YL		6/20/2014	6/23/2014	996		
467	13-966	Union St (639)	EC		7/14/2014	7/15/2014	1,277		
468	13-988	Rockaway Pkwy (385) bt Lenox Rd and Willmohr St	DL		7/24/2014	7/28/2014	645		
469	13-993	10 St bt 2 Av and 3 Av	KD		12/15/2014		701		
470	14-006	44 St bt 2 Av and 3 Av	EC		1/9/2014	1/9/2014	721		
471	14-025	Jefferson Av (430)	NG		6/23/2014	6/25/2014	1,021		
472	14-026	44 St (1650)	CP		7/16/2014	7/17/2014	1,020		
473	14-027	E 2 St (2131)	EC		7/17/2014	7/17/2014	942		
474	14-028	Nostrand Av (2970)	DL		7/17/2014	7/21/2014	1,539		
475	14-030	Quentin Rd (3424)	DL		6/11/2014	6/11/2014	785		
476	14-031	Strickland Av (6215)	DL		6/12/2014	6/12/2014	810		
477	14-079	E 14 St bt Neptun Av and Shore Blvd	CP		7/17/2014	7/18/2014	1,115		
478	14-080	Av T (711)	DL		6/13/2014	6/13/2014	306		
479	14-087	7 Av bt 51 St and 52 St	JL		2/6/2014	2/6/2014	262		
480	14-101	Sunset Park North (Project HWK 1048H)	EC		9/22/2014	10/9/2014	3,049		
481	14-108	W 2 ST (2574) bt Av Y and Av Z	DL		2/27/2014	3/11/2014	1,491		
482	14-109	Av L (9525) bt E 95 St and E 96 St	DL		7/24/2014	1/23/2015	295		
483	14-110	Ocean Pkwy and Parkville Av	DL		7/21/2014	7/21/2014	143		
484	14-156	37 St bt 14 Av and 15 Av	DL		7/22/2014	7/22/2014	653		
485	14-172	Coney Island Av (2692) bt Av X and Desmond Ct	DL		6/13/2014	6/13/2014	240		
486	14-173	President St ((1474) bt Kingston Av and Albany Av	DL		4/25/2014	4/25/2014	738		
487	14-192	1 St (469) bt 7 Av and 8 Av	JL		7/18/2014	7/21/2014	747		
488	14-193	E 16 St (342) bt Beverly Rd and Cortelyou RdK	EC		6/11/2014	6/13/2014	1,638		
489	14-243	12 Av (7115) bt 71 St and 72 St	DL		6/30/2014	10/9/2014	1,135		
490	14-256	E 27 St and Voorhies Av	NG		6/30/2014	7/1/2014	1,357		
491	14-268	W 22 St (3046) bt Av U and Av V	JL		7/7/2014	7/8/2014	1,245		
492	14-269	Bay 28 St (135) bt Benson Av and Bath Av	CP		7/2/2014	7/3/2014	925		
493	14-270	Stillwell Av (2331) bt Av W AND Av X	JL		6/12/2014	6/16/2014	1,221		
494	14-271	Conover St (150) bt Sullivan St and King St	DL		7/28/2014		96		
495	14-272	Av U (428) bt E 3 St and E 4 St	JL		6/11/2014	6/11/2014	848		
496	14-273	E 21 St (2210) bt Av U and Av V	DL		5/16/2014	5/20/2014	1,727		
497	14-274	26 Av (8713) bt Benson Av and Bath Av	DE		6/19/2014	6/19/2014	723		
498	14-275	Batchelder St (2241) bt Av V and Av W	CP		6/26/2014	6/27/2014	1,969		
499	14-290	12 Av(7713) bt 77 St and 78 St	DL		6/30/2014	6/30/2014	262		
500	14-319	Prospect Pl (88) bt 6 Av and Flatbush Av	YL		7/10/2014	7/11/2014	432		
501	14-320	Suydam St(122) bt Evergreen Av and Central Av	DL		7/22/2014	7/23/2014	869		
502	14-321	76 St (539) bt 5 Av and 6 Av	DL		7/10/2014	7/10/2014	863		
503	14-333	40St (930) bt 9 Av and New Utrecht Av	EC		6/11/2014	6/11/2014	488		

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
504	14-340	Flatbush Av (1579) bt Hillel Pl and E 31 St	EC		7/16/2014	7/16/2014	747		
505	14-360	Chauncey St bt Saratoga Av and Howard Av	DL		7/11/2014	7/14/2014	1,535		
506	14-363	Henry St (76) bt Orange St and Pineapple St	DL		7/17/2014	7/17/2014	723		
507	14-390	Strickland Av (2737) bt National Dr and Bend	DL		8/4/2014	8/6/2014	2,916		
508	14-427	7 St and 4 Av	RF		8/18/2014	9/30/2014	2,122		
509	14-454	Skillman St (113)	CP		9/25/2014	9/25/2014	834		
510	14-456	Havemeyer St (255)	DL		10/1/2014	10/3/2014	935		
511	14-457	Moore St (113)	DL		9/26/2014	10/1/2014	1,580		
512	14-487	Montauk Av (417) bt Dumont Av and Hegeman Av	DL		9/8/2014	9/9/2014	825		
513	14-491	w 9 St (1869) bt Highlawn Av and Av S	DL		9/10/2014	9/10/2014	857		
514	14-493	Fillmore Pl bt Driggs Av and Roebling St	DL		9/8/2014	9/8/2014	384		
515	14-512	Eastern (667) bt New York Av and Brooklyn Av	DL		9/5/2014	9/5/2014	728		
516	14-515	Kent Av and S 8 St	DL		9/9/2014	9/10/2014	657		
517	14-518	W 10 St (2165) bt Lake Pl and 86 St	DL		11/21/2014	11/24/2014	1,245		
518	14-585	Adam St and John St	JL		10/20/2014	10/20/2014	32		
519	14-593	Nostrand Ave (2400) bt Ave J and Ave K	DL		11/18/2014	11/20/2014	851		
520	14-594	Halsey St (1250) bt Wilson Av and Knickerbocker Av	DL		11/25/2014	11/25/2014	645		
521	14-597	Clarendon Rd (2177) bt E 22 St and Flatbush Av	DL		11/20/2014	11/21/2014	578		
522	14-665	15 Av (8672)	DL		12/24/2014	12/26/2014	769		
523	14-666	Hemlock St (282)	DL		12/31/2014	1/2/2015	264		
524	14-681	71 St (1117) between 11 Ave and 12 Ave	DL		12/5/2014	12/5/2014	627		
525	14-682	42 St (768) between 7 Ave and 8 Ave	DL		12/17/2014	12/17/2014	782		
526	14-702	E 2 St (2275)	CP		12/26/2014	12/30/2014	986		
527	14-703	E 5 St (2177)	DL		12/30/2014	12/31/2014	1,014		

Manhattan

528	08-312	5 Av bt W 38 St and W 39 St	JL		5/22/2014	5/23/2014	408		
529	12-496	NYCHA Baruch Houses Degreasing	EC		6/3/2014	12/29/2014	2,411		
530	13-1015	W 12 St (400) bt Washington St and Joe Dimaggio Hwy	EC		6/20/2014	6/25/2014	834		
531	13-181	Washington St (700)	EC		6/26/2014	8/29/2014	1,157		
532	13-186	Fredrick Douglas Blvd bt W 147 St and W 148 St	JL		7/18/2013				
533	13-346	Sherman Av bt Dyckman Av and Academy Av	JL		5/7/2014	5/15/2014	2,998		
534	13-733	E 64 St (337) bt 2 Av and 1 Av	JL		5/21/2014	5/22/2014	734		
535	13-845	Hester St bt Mott St and Mulberry St	JL		5/6/2014	5/7/2014	461		
536	13-921	Hanover Sq (3)	JL		5/23/2014	5/30/2014	1,735		
537	13-922	E 119 St (158)	JL		3/28/2014	6/19/2014	977		
538	13-924	W 109 St (209)	JL		5/19/2014	5/20/2014	1,385		
539	13-998	11 Av bt W 43 St and W 44 St	EC		12/23/2013		201		
540	14-015	5 Av and W 13 St	JL		1/15/2014	5/5/2014	2,078		
541	14-016	E 19 St bt 5 Av and Broadway	YL		7/3/2014	7/9/2014	425		
542	14-102	W 164 St (558) bt Broadway and St Nicholas Av	EC		2/26/2014	2/27/2014	305		
543	14-157	Lafayette St bt 4 St and Astor Pl	JL		4/28/2014	4/29/2014	720		
544	14-174	Park Av (west side) from E 116 St to E 117 St	JL		3/19/2014	3/28/2014	349		
545	14-213	W 173 St (506) bt Amsterdam Av and Audubon Av	EC		4/11/2014	4/11/2014	306		
546	14-284	E Houston St bt Orchard St and Ludow St	EC		5/27/2014	5/27/2014	368		
547	14-357	W 24 St (200) bt 7 Av and 8 Av	EC		7/31/2014	7/31/2014	797		
548	14-391	11 Av (264) bt W 28 St and W 26 St	EC		7/18/2014	7/28/2014	1,138		
549	14-397	Grand St (394-406)	EC		11/10/2014	11/10/2014	290		
550	14-400	Amsterdam Av bt W 102 St and W 101 St	EC		7/29/2014	7/29/2014	525		
551	14-403	Church St (55) bt Fulton St and Versey St	EC		7/30/2014	7/31/2014	798		
552	14-448	St Nicholas Av (1421)	KD		11/19/2014	11/20/2014	488		
553	14-474	Allen St (169) bt Rivington St and Stanton St	DE		8/19/2014	8/28/2014	379		
554	14-478	Ridge St bt Stanton St and E Houston St	EC		8/21/2014	8/21/2014	391		
555	14-490	Reade St (111) bt Church St and W Broadway	EC		8/29/2014	11/3/2014	317		
556	14-532	E 4 St (303) bt Av C AND Av D	EC		10/14/2014	10/15/2014	705		
557	14-541	Clarkson St and Washington St	EC		10/1/2014	11/6/2014	1,758		
558	14-567	W/S Park Av bt E 118 St and e 119 St	EC		10/14/2014				

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
559	14-572	Lexington Av bt E 107 St and E 108 St	JL		10/17/2014	10/17/2014	443		
560	14-580	Worth St (95) bt Broadway and Lafayette St	EC		10/27/2014	10/28/2014	387		
561	14-584	Central Park West bt Columbus Av and W 61 St	JL		10/16/2014	10/16/2014	192		
562	14-599	W 32 St bt 5 Av and Broadway	EC		11/12/2014	11/18/2014	987		
563	14-624	Chrystie St bt Rivington St and Stanton St	KD		11/18/2014	11/18/2014	460		
564	14-628	W 97 St bt Central Park West and Columbus Ave	KD		11/20/2014	11/21/2014	831		
565	14-632	Central Park West bt W 61 St and W 62 St	EC		11/24/2014	11/24/2014	270		
566	14-656	Jefferson St & Henry St	EC		12/8/2014	12/9/2014	674		
567	14-678	W 158 St and Edgecombe Ave	DL		12/2/2014	12/2/2014	284		
568	14-712	W 27 St bt 6 Ave and 7 Ave	EC		12/10/2014	12/11/2014	703		
569	14-722	W 22 St bt 6 Ave and 7 Ave	KD		12/29/2014	12/30/2014	769		
570	14-723	W 41 St bt 9 Ave and 10 Ave	KD		12/31/2014	12/31/2014	722		

Queens

571	13-179	Guy R Brewer Blvd (108-51)	JL		6/3/2014	6/4/2014	1,651		
572	13-311	Northern Blvd (255-07) bt Glennwood St and Morgan St	JL		6/5/2014	6/5/2014	786		
573	13-351	90-12 183 St bt 90 Av and 91 Av	DL		4/23/2014	4/24/2014	814		
574	13-352	162 St (89-16) bt 89 Av and Jamaica Av	EC		3/20/2014	3/21/2014	971		
575	13-353	138 St (89-32) Jamaica Av and 90 Av	DL		4/16/2014	4/22/2014	1,346		
576	13-503	35 St (23-07) bt 23 Av and 24 Av	NG		6/19/2014	6/27/2014	2,474		
577	13-504	Nothern Blvd (196-30) bt 196 St & Francis Lewis Blvd	KD		8/1/2014	12/1/2014	1,003		
578	13-512	Pontiac St (89-48) bt 88 Av and Braddock Av	DL		4/24/2014	5/21/2014	1,203		
579	13-515	145 St (116-15) bt 116 Av and Foch Blvd	DL		4/11/2014	4/14/2014	687		
580	13-516	Linden Blvd (147-11) bt 147 St and 148 St	CP		5/23/2014	5/23/2014	1,177		
581	13-519	241 St (88-25) bt 88 Av and 89 Av	EC		3/27/2014	4/9/2014	1,566		
582	13-566	Dalny Rd (183-19)	CP		9/5/2014	9/5/2014	113		
583	13-663	124 St and 9 Av and vicinity	DL		7/15/2014	7/16/2014	1,672		
584	13-677	Doran Av bt 84 St and Vicinity	DE		9/9/2013		57		
585	13-812	108 St bt 64 Rd and Horace Harding Exp	TB		10/23/2013		2,499		
586	13-866	Groton St (70-10) bt 70 Av and 71 Av	DL		11/17/2014	11/17/2014	950		
587	13-879	97 St and 34 Av	DE		12/3/2013		923		
588	13-885	123-16 Irwin Pl	RB		1/6/2014	1/6/2014	145		
589	13-899	28 Av (43-15)	DL		6/23/2014	6/24/2014	740		
590	13-900	216 St (40-29)	JL		1/8/2014	1/13/2014	1,390		
591	13-903	87 Av (139-12)	JL		1/13/2014	1/14/2014	818		
592	13-905	109 Av (157-08)	DL		10/7/2014	10/7/2014	763		
593	13-917	Hillside Av (180-18)	JL		6/10/2014	6/10/2014	247		
594	13-936	110 St bt 81 Av and Union Tpke	DL		1/17/2014	2/26/2014	262		
595	13-937	164 St bt 81 Av and Union Tpke	DL		2/24/2014	2/24/2014	1,111		
596	13-939	23 Av bt 95 St and 96 St	DL		12/26/2013	1/9/2014	1,929		
597	13-940	43 Av and 97 Pl	DE		1/17/2014	1/27/2014	828		
598	13-942	Ditmars Blvd bt 77 St and 76 St	DL		12/19/2013	1/13/2014	1,928		
599	13-943	69 Rd bt Main St and 147 St	DL		1/17/2014		177		
600	13-946	Stanhope St bt Onderdonk Av and Woodward Av	DL		2/25/2014	2/26/2014	811		
601	13-950	126 St (84-53)	DL		1/15/2014	1/16/2014	1,539		
602	13-967	84 Dr (151-10)	CP		10/7/2014	10/8/2014	1,164		
603	13-968	208 St (86-35)	CP		5/27/2014	5/27/2014	588		
604	13-969	Van Wyck Expwy (114-40)	CP		5/27/2014	5/28/2014	1,507		
605	13-970	154 St (106-35)	DL		7/30/2014	7/30/2014	319		
606	13-971	107 Av (155-07)	DL		5/30/2014	6/2/2014	1,130		
607	13-972	93 Av (168-73)	JL		3/20/2014	3/20/2014	796		
608	13-973	90 Av (172-20)	DL		4/22/2014	4/23/2014	873		
609	13-974	173 St (109-15)	DL		3/27/2014	3/31/2014	1,041		
610	13-975	211 St (114-55)	DE		10/9/2014	10/10/2014	831		
611	13-976	Redfern Av (16-20)	DL		3/11/2014	3/27/2014			
612	13-977	B 65 St (337)	CP		7/21/2014	7/22/2014	365		
613	13-978	B 86 St (312)	RB		2/24/2014	2/25/2014	1,029		

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N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF)		
							Cleaned	Surveyed	Walked
614	13-979	196 St (120-22)	DL		1/20/2014	3/25/2014	2,368		
615	14-007	B 84 St bt B Channel Dr and DE	RB		2/21/2014		901		
616	14-009	85 Av (151-11)	CP		7/22/2014	7/23/2014	463		
617	14-033	64 PL (75-17)	DL		10/10/2014	10/14/2014	1,027		
618	14-034	Cross Island Pkwy (157-01)	DL		10/16/2014	10/16/2014	1,051		
619	14-035	139 St (87-05)	DL		6/2/2014	6/16/2014	1,171		
620	14-036	190 St (46-35)	EC		3/21/2014	3/24/2014	889		
621	14-038	112 Av (194-32)	CP		5/20/2014	5/20/2014	666		
622	14-039	105 Av (168-26)	CP		5/19/2014	5/19/2014	684		
623	14-040	156 St (109-44)	EC		4/14/2014	4/16/2014	837		
624	14-041	97 Av (145-09)	EC		3/26/2014	3/27/2014	1,251		
625	14-042	165 St (107-12)	RB		3/25/2014	3/25/2014	1,252		
626	14-043	Merrick Blvd (109-18)	DL		5/21/2014	5/21/2014	465		
627	14-044	179 St (90-70)	CP		5/20/2014	5/22/2014	1,130		
628	14-045	243 St (143-71)	JL		6/6/2014	6/9/2014	1,991		
629	14-046	Lansing Av (231-26)	RB		4/10/2014	4/11/2014	1,041		
630	14-047	Springfield Blvd	CP		5/22/2014	5/22/2014	887		
631	14-048	Mcbride St (13-86)	DL		5/29/2014	5/30/2014	489		
632	14-049	Cornaga Av (18-26)	DL		5/29/2014	5/29/2014	1,047		
633	14-072	89 St (91-30)	CP		7/24/2014	7/24/2014	528		
634	14-073	Braddock Av bt Ashford Av and Winchester Blvd	KD		7/24/2014	7/25/2014	1,019		
635	14-088	Metropolitan Av bt 71 St and Pleasantview St	DL		2/7/2014		296		
636	14-158	107 Av (225-24) bt 225 St and 227 St	DL		3/24/2014	4/2/2014	1,050		
637	14-159	Rockaway Blvd (141-30)	JL		6/10/2014	6/10/2014	35		
638	14-179	Northern Blvd (135-17) bt Prince St and Main St	JL		3/20/2014	3/20/2014	632		
639	14-190	43 Av bt 57 Av and DE	EC		4/3/2014	4/3/2014			
640	14-194	Granger St (57-51)	DL		6/20/2014	6/23/2014	632		
641	14-199	46 St (22-35) bt Ditmars Blvd and 23 Av	NG		6/26/2014	6/26/2014	832		
642	14-215	27 St bt Skillman Av and 47 Av	DL		4/17/2014	4/17/2014	315		
643	14-291	148 Av (249-37)	CP		10/21/2014	10/21/2014	832		
644	14-292	143 St (109-40)	DL		11/14/2014	11/14/2014	1,002		
645	14-293	Sayres Av (169-09)	DL		10/15/2014	10/15/2014	1,045		
646	14-294	205 St (93-02)	DL		7/29/2014	7/30/2014	1,436		
647	14-295	112 St (95-50)	DL		10/20/2014	10/20/2014	1,146		
648	14-296	Northern Blvd (84-09)	DL		11/10/2014	11/13/2014	1,810		
649	14-297	94 St (40-69)	DL		7/31/2014	8/1/2014	1,440		
650	14-298	119 Rd (171-22)	DL		6/18/2014	6/19/2014	1,473		
651	14-301	216 St (94-05)	DL		6/16/2014	6/17/2014	1,583		
652	14-318	74 St bt Astoria Blvd and Ditmars Blvd	NG		6/27/2014	6/27/2014	514		
653	14-329	38 Av (32-10) bt 32 St and 33 St	NG		6/27/2014	6/27/2014	211		
654	14-348	157 St bt Powells Cove Blvd and 10 Av	CP		7/23/2014	7/23/2014	630		
655	14-398	Bowne St (40-04)	KD		12/1/2014	12/12/2014	3,281		
656	14-402	149 Av (132-10)	JL		10/31/2014	10/31/2014	138		
657	14-406	36 Av (211-06)	DL		12/12/2014	12/12/2014	525		
658	14-441	149 St bt 34 Av & Bayside Av	DL		8/18/2014	8/18/2014	1,298		
659	14-443	103 st bt 31 Av & Northern Blvd	DL		8/19/2014	8/20/2014	1,159		
660	14-444	198 St bt Murdock Av & 115 Av	DL		8/25/2014	8/25/2014	1,369		
661	14-445	80 St bt Caldwell Av & Horace Harding EXPY	DL		8/21/2014	8/21/2014	1,703		
662	14-446	178 St bt 112 Av & Murdock Av	DL		8/20/2014	8/20/2014	666		
663	14-458	83 St (149-36)	CP		11/26/2014	11/26/2014	966		
664	14-459	Remington St (97-36)	EC		9/16/2014	11/28/2014	1,220		
665	14-461	150 St (128-20)	JL		9/12/2014	9/15/2014	1,093		
666	14-462	Lake View Rd (118-31)	DL		11/5/2014	11/7/2014	998		
667	14-463	154 St (129-49)	CP		9/11/2014	9/12/2014	583		
668	14-464	156 St (110-46)	CP		9/11/2014	9/11/2014	891		
669	14-465	Dillon St (112-11)	EC		9/16/2014	9/16/2014	891		
670	14-466	169 Pl (108-31)	DE		11/3/2014	11/5/2014	1,373		

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							Cleaned	Surveyed	Walked
671	14-468	165 St (104-19)	DE		9/9/2014	9/10/2014	1,623		
672	14-469	Benham St (41-17)	CP		11/7/2014	11/10/2014	903		
673	14-479	Bradley Av and Greenpoint Av	CP		9/4/2014	9/4/2014	879		
674	14-480	Eliot Av (84-34)	CP		9/4/2014	9/5/2014	470		
675	14-489	Main St and 41 Av	CP		9/8/2014	9/8/2014	442		
676	14-492	Newtown Av and 21 St	DE		9/9/2014	9/9/2014	290		
677	14-626	81 St bt Broadway and 45 Ave	DL		11/28/2014	11/28/2014	723		
678	14-629	65 St bt Cypress Hills St and Cooper Av	CP		11/28/2014	11/28/2014	627		
679	14-633	34 St bt 30 Av and 31 Av	DL		12/8/2014	12/9/2014	901		
680	14-634	Hillside Ave (161-15)	EC		11/26/2014	11/26/2014	316		
681	14-635	Selfridge St (66-72)	DL		12/1/2014	12/1/2014	695		
682	14-664	148 St (85-87)	DE		12/29/2014	12/29/2014	486		

Staten Island

683	13-792	Stuyvesant Pl and Hamilton Av	DL		12/22/2014	12/22/2014	426		
684	13-846	Cedar St (10) bt Boyd St and Hudson St	EC		12/18/2013		16		
685	13-847	Amboy Rd (3130) bt Montreal Av and Clark Av	EC		12/18/2013		214		
686	13-868	Woolley Av (650) and Westwood Av	JL		4/22/2014	4/22/2014	530		
687	13-906	Giffords Ln (6)	JL		1/29/2014	2/4/2014	1,848		
688	13-907	Princess St (80)	JL		1/14/2014	1/15/2014	962		
689	13-909	Midland Av (249)	RB		1/24/2014	1/28/2014	2,656		
690	13-910	Delafield Av (511)	DL		2/4/2014	2/10/2014	2,469		
691	13-948	Ainsworth Av and S Railroad Av	JL		4/18/2014	4/18/2014	734		
692	13-961	Westervelt Av (162)	JL		4/14/2014	4/14/2014	1,116		
693	13-962	Princeton Av (89)	JL			2/12/2014	1,232		
694	13-989	Geldner Av (96) bt Walnut Pl and Sydney Pl	JL		4/16/2014	4/16/2014	395		
695	14-050	Maple Av (50)	JL		4/15/2014	4/16/2014	806		
696	14-068	Hopping Av bt Patten St and Amboy Rd	JL		2/12/2014	2/12/2014	582		
697	14-069	Hopkins Av bt Durant Av and Block St	KD		2/19/2014	2/19/2014	1,066		
698	14-070	Henderson Av bt Broadway & Alaska St	RB		2/20/2014	2/20/2014	780		
699	14-111	Allison Av (195) bt Clawson St and Hylan Blvd	JL		4/21/2014	4/21/2014	462		
700	14-140	Wood Av (207) bt Craig Av and Amboy Rd	JL		7/8/2014	7/9/2014	1,689		
701	14-142	Bradley Av (86) bt Purdy Av and N Gannon Av	DL		7/1/2014	7/2/2014	1,338		
702	14-148	Maple Av (50) bt Richmond Ter and NYCTA Subway	DL		7/8/2014	7/9/2014	1,661		
703	14-149	Stewart Av (577) bt Victory Blvd and Bellhaven Pl	DL		7/2/2014	7/3/2014	882		
704	14-150	Remsen St (4) bt Cornelia St bt Newberry Av	JL		7/10/2014	7/10/2014	413		
705	14-185	Simonson Pl(102) bt Anderson Av and Catherine Ct	DL		7/7/2014	7/8/2014	827		
706	14-186	Castleton Av(1627) bt Sharpe Av and Treadwell Av	JL		4/21/2014	4/21/2014	255		
707	14-187	Hendricks Av (151) bt Bismark Av and Jersey St	EC		4/17/2014		741		
708	14-188	Lyndale Av (400) bt King St and Hylan Blvd	JL		7/10/2014	7/10/2014	266		
709	14-280	Glen Av(266) bt Brighton Av and Stanley Av	DL		7/3/2014	7/7/2014	1,447		
710	14-302	Green Valley Rd (302)	DE		8/8/2014	8/12/2014	1,620		
711	14-303	Wilder Av (297)	JL		8/12/2014	8/13/2014	1,947		
712	14-304	Collfield Av (126)	JL		8/8/2014	8/8/2014	878		
713	14-306	Raymond Av (306)	JL		8/6/2014	12/15/2014	951		
714	14-371	Seward Pl (20)	JL		7/11/2014	7/11/2014			
715	14-372	Neal Dow Av (208)	CP		7/11/2014	7/16/2014	534		
716	14-399	Billop Av bt Brighton St and Chelsea St	NG		11/17/2014		532		
717	14-418	Westbury Av(10) bt Henderson Av and Springhill Av	JL		8/14/2014	8/15/2014	1,284		
718	14-423	Tremont Av (54) bt Watchhogue Rd and Caswell Av	EC		8/15/2014	8/18/2014	637		
719	14-425	Delafield Av (120) bt Hart Blvd and Walbeooke Av	CP		8/18/2014	9/3/2014	1,159		
720	14-438	Davis Av andDelafield Pl	DL		12/19/2014	12/19/2014	1,038		
721	14-473	Spring St (210) bt Ridge Av and Emerson Ct	DL		12/18/2014	12/18/2014	247		
722	14-556	Columbus Pl (90) bt Woolley Av and Glacoe Av	DL		12/18/2014	12/18/2014	51		
723	14-557	Newark Av (65) and Richmond Terr	DL		12/10/2014	12/11/2014	1,447		
724	14-566	Nelson Av from Amboy Rd to Baltimore St	DL		12/23/2014	12/23/2014	682		
725	14-608	Tyler Av (17)	DL		12/3/2014	12/3/2014	482		

* No footage indicates investigations where inspection of sewers was not required or completed

N	LOG	Location	Ins	CB	Start	Comp	*Footage (LF) Cleaned	Surveyed	Walked
726	14-610	Moody Pl (23, 27)	DL		12/26/2014	12/26/2014	678		
727	14-611	Hylan Blvd (4160) bt Walnut Av and Heinz Av	DL		12/16/2014	12/16/2014	1,036		
728	14-612	Castleton Av (179) bt Glen Av and Webster Av	DL		12/12/2014	12/15/2014	768		

The Bronx

729	04-159	Rhinelander Av (1574) and Eastchester Rd	RF		5/27/2014				
730	13-1002	Sedgwick Av and W 195 St	JL		9/19/2014	9/19/2014	469		
731	13-1003	Davidson Av (2415) bt W 184 St and W Fordham Rd	DL		4/7/2014		537		
732	13-1004	Macy Pl (873) bt Prospect Av and Hewitt Pl	DL		4/4/2014		370		
733	13-1005	E 171 St (396)	DL		9/24/2014	10/6/2014	133		
734	13-1006	Rev JamesPolite Av and E 165 St	DL		4/3/2014	4/9/2014	702		
735	13-1007	Quincy Av (821) bt Philip Av and Lafayette Av	DL		4/2/2014	4/10/2014	645		
736	13-1008	Benedict Av (2043) bt Pugsley Av and Olmstead Av	DL		9/22/2014	9/22/2014	424		
737	13-1009	Barnes Av (2182) bt Lydig Av and Pelham Pkwy	DL		4/10/2014		686		
738	13-1011	Zerega Av (433) bt Effingham Av and Lacombe Av	DL		9/22/2014	9/22/2014	563		
739	13-1014	Randall Av (bend) Soundview Park HP-10 CSO25	CJ		5/15/2014	5/23/2014	509		
740	13-1016	Johnson Av (3533) bt W 235 St and W 236 St	DL		4/7/2014		840		
741	13-919	Holland Av (2547)	JL		7/30/2014	7/31/2014	657		
742	13-920	N Oak Dr (788)	CP		7/28/2014	7/30/2014	2,383		
743	14-012	E 152 St (726)	JL		8/1/2014	8/1/2014	2		
744	14-078	Rosedale Av (1508)	JL		9/18/2014	9/18/2014	190		
745	14-081	Clay Av (1372)	DL		4/4/2014		1,453		
746	14-082	Cromwell Av (1164)	DL		4/4/2014		540		
747	14-112	Maitland Av (2851) bt Willam Pl and Mayflower Av	JL		10/30/2014	10/30/2014	592		
748	14-164	Bainbridge Av and Jerome Av	DL		10/6/2014	10/6/2014			
749	14-282	E 224 St (923)	JL		8/1/2014	8/6/2014	1,553		
750	14-364	Webster Av and E 69 St (Project HWX100SBS)	YL		8/18/2014	9/26/2014			
751	14-449	Kingsbridge Av (3417)	EC		10/29/2014	10/30/2014	873		
752	14-524	Tiebout Av bt E 182 St and E 183 St	JL		9/17/2014	9/17/2014	555		
753	14-555	Randall Av (1390) bt Drake St and Halleck St	JL		10/20/2014	10/28/2014	1,371		
754	14-571	Spencer Av bt W 260 St and W 262 St	CP		10/22/2014	10/28/2014	810		
755	14-657	Neill Av (936)	DL		12/2/2014	12/8/2014	444		

2014 CITYWIDE Total, LF:	**287,192**	(54.39 mi)			**1/2/2014**	**12/31/2014**	**287,192**		
Operating Expenses, $	**3,508,921**								

2014 CMOM Grand Total, LF:	**401,816**	(76.1 mi)	**30**		**1/2/2014**	**12/31/2014**	**287,425**	**88,073**	**26,318**
Operating Expenses, $	**3,508,921**								

* No footage indicates investigations where inspection of sewers was not required or completed

Appendix 2 – BWT

Table 1 – Status of Regulators under SCADA

Map 1 – BWT CY2014 Wastewater Collection Systems Cleaning Locations

May 2 – BWT CY2014 Inspected Interceptors

Table 2 – BWT CY2014 Wastewater Collection Systems Cleaning Locations

Table 1: NYCDEP - List Of Regulators under SCADA

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
1	WI(M)	02A	E. 74th ST. & FDR DR.	003	□	CCFISS	REG-027		7-Aug-12
2	WI(M)	02B	N/O E. 74th ST. & FDR DR.	003	□	CCFISS	REG-027		7-Aug-12
3	WI(M)	07	E.79th ST. & FDR DR.	008	□	CCFISS	REG-027		31-Jul-12
4	WI(M)	23	E.106th ST. & FDR DR.	023	□	CCFISS	REG-027		14-Feb-12
5	WI(M)	24	E.110th ST. & FDR DR.	024	□	CCFISS	REG-027		25-Sep-12
6	WI(M)	38	E.135th ST. & E/O HARLEM R. DR.	038	□	CCFISS	REG-027		7-Feb-12
7	WI(M)	45	W.147th ST. & IRT YARD	045	□	CCFISS	REG-027		14-Dec-11
8	WI(M)	46	W.151 st ST. & PLAYGROUND	046	□	CCFISS	REG-027		25-Jul-12
9	WI(M)	51	N/S HARLEM RIVER DR. & W.167th ST.	051		CCFISS	REG-027		19-Jul-12
10	WI(M)	52	N/S HARLEM R. DR. & W.176th ST.	052		CCFISS	REG-027		10-Sep-12
11	WI(B)	53	BRUCKNER BLVD. & BROOK AV.	068		CCFISS	REG-027		28-Sep-12
12	WI(B)	58	MAJOR DEEGAN S/S 138th ST.	075	□	CCFISS	REG-027		10-Apr-12
13	WI(B)	60	JEROME AV. &McCOMB.D PARK	062	□	CCFISS	REG-027		9-Nov-12
14	WI(B)	62	UNDERCLIFF & SEDGEWICK AV.	060	□	CCFISS	REG-027		13-Sep-12
15	WI(B)	66	N/O FORDHAM RD. W/S MAJOR DEEGAN	057	□	CCFISS	REG-027		11-Jan-13
16	WI(B)	67	E.192nd ST. W/O BAYLEY AV.	056	□	CCFISS	REG-027		28-Aug-12
17	WI(B)	68	E.149th ST. & EAST RIVER	072	□	CCFISS	REG-027		14-Feb-12
18	NR	N-03	W.201st ST. & HARLEM RIVER	017	□	CCFISS		REG-026	29-Dec-10
19	NR	N-16	DYKMAN ST. & HENRY HUDSON PKWY.	006		CCFISS	REG-027		16-Feb-12
20	NR	N-18	RIVERSIDE DR. & W.172nd. ST.	004	□	CCFISS		REG-026	29-Dec-10

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
21	NR	N-23	ST.CLAIR PLACE & 12th AV.	043		CCFISS		REG-026	29-Dec-10
22	NR	N-26	RIVERSIDE PARK @ W.96th ST.	040		CCFISS		REG-026	29-Dec-10
23	NR	N-28	RIVERSIDE PARK @ 80th ST.	038		CCFISS		REG-026	29-Dec-10
24	NR	N-29A	FREEDOM PL. @ W.66th ST.	046		CCFISS		REG-026	29-Dec-10
25	NR	N-33	TWELFTH AV. @ W.48th ST.	033		CCFISS		REG-026	29-Dec-10
26	NR	N-45	TWELFTH AV @ W.30th ST.	027		CCFISS		REG-026	29-Dec-10
27	NR	N-50	ELEVENTH AV. @ W.18th ST.	023		CCFISS		REG-026	29-Dec-10
28	HP	01	E.177th ST. E/O TIERNEY PL	022		CCFISS	REG-027		17-Jan-12
29	HP	02	SHORE DR. S/O PENNYFIELD AV.	021		CCFISS	REG-027		11-Sep-12
30	HP	03	CALHOUN AV. S/O SCHURZ AV.	019		CCFISS	REG-027		24-Jan-12
31	HP	04	BRUSH AVE & BRUCKNER BLVD	016		CCFISS	REG-027		18-Apr-12
32	HP	05	WHITE PL RD. S/O RIVER AV.	011		CCFISS	REG-027		17-Jan-12
33	HP	06	WHITE PL RD. & 0'BRIEN AV.	011		CCFISS	REG-027		18-Sep-12
34	HP	08	TRUXTON ST. & OAKPOINT AV.	025		CCFISS	REG-027		29-May-12
35	HP	09	TIFFANY ST. & EAST BAY AV.	002		CCFISS	REG-027		13-Sep-12
36	HP	10	HUNTS POINT AV. & RYAWA AVES.	003		CCFISS	REG-027		31-Jan-12
37	HP	11	EMERSON AV. & SCHURZ AV.	017		CCFISS	REG-027		13-Jan-12
38	HP	12	ROBINSON AV. & SCHURZ AV.	018		CCFISS	REG-027		19-Jan-12
39	HP	13	METCALF AV. & SOUNDVIEW PARK	009		CCFISS	REG-027		20-Sep-12
40	HP	14	EDGEWATER PARK	026		CCFISS	REG-027		13-Jan-12
41	HP	15	CONNER ST. E/O HUTCHISON AV.	023					31-Dec-12
42	26W	01	TIDE GATE (26 WARD WPCP)	004		CCFISS	REG-027		6-Dec-12

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
43	26W	02	WILLIAMS & FLATLANDS AVES.	003		CCFISS	REG-027		4-Oct-12
44	26W	03	CRESENT ST. & FLATLANDS AV.	005		CCFISS	REG-027		5-Sep-12
45	OH	01	92nd ST. & BELT PKWY	017		CCFISS		REG-026	29-Dec-10
46	OH	03	79th ST. E/O BELT PKWY (IN PARK)	018		CCFISS	REG-027		28-Dec-11
47	OH	04	71st ST. E/O BELT PKWY (IN PARK)	019		CCFISS	REG-027		29-Dec-11
48	OH	06	64th ST. BUSH TERMINAL	002		CCFISS		REG-026	29-Dec-10
49	OH	06A	64th ST. IN RR YARD	002		CCFISS		REG-026	29-Dec-10
50	OH	06B	64th ST. IN RR YARD	002		CCFISS		REG-026	29-Dec-10
51	OH	06C	64th ST. BUSH TERMINAL	002		CCFISS		REG-026	29-Dec-10
52	OH	07	49th ST. & 1st AV.	003		CCFISS		REG-026	29-Dec-10
53	OH	07A	49th ST. & 1st AV.	003		CCFISS		REG-026	29-Dec-10
54	OH	07B	49th ST. & 1st AV.	003		CCFISS		REG-026	29-Dec-10
55	OH	07C	49th ST. & 1st AV.	003		CCFISS		REG-026	29-Dec-10
56	OH	07D	43nd ST. & 1st AV.	004		CCFISS	REG-027		19-Jan-12
57	OH	09A	17th AV. & BATH AV.	015		CCFISS	REG-027		15-Nov-11
58	OH	09B	17th AV. & 72nd ST.	015		CCFISS	REG-027		15-Nov-11
59	OH	10	21st AVENUE & 83rd STREET	021		CCFISS	REG-027		7-Feb-12
60	OH	11	AVE. V & W. 11th ST.	021		CCFISS	REG-027		15-Aug-12
61	NC(Q)	Q-01	RUST & 56th ST.	077		CCFISS	REG-027		9/162012
62	NC(B)	B-01	JOHNSON AV. W/O PORTER AV.	015		CCFISS		REG-026	29-Dec-10
63	NC(B)	B-04	KENT AV. & TAYLOR ST.	014		CCFISS		REG-026	29-Dec-10
64	NC(B)	B-05	DIVISION AV. W/O KENT AV.	013		CCFISS		REG-026	29-Dec-10

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
65	NC(B)	B-06	S.5th AV. W/O KENT AV.	012		CCFISS		REG-026	29-Dec-10
66	NC(B)	B-09	N.12th ST. & KENT AV.	006		CCFISS		REG-026	29-Dec-10
67	NC(M)	M-01	CLARKSON ST. & WEST ST.	076		CCFISS		REG-026	29-Dec-10
68	NC(M)	M-02	N/O CANAL ST. & WEST ST.	075		CCFISS		REG-026	29-Dec-10
69	NC(M)	M-10	SOUTH ST. N/O BROAD ST.	069		CCFISS	REG-027		9-Feb-12
70	NC(M)	M-16	SOUTH ST. N/O DOVER ST.	078		CCFISS		REG-026	29-Dec-10
71	NC(M)	M-17	SOUTH ST. & ROBERT WAGNER ST.	066		CCFISS	REG-027		31-Jan-12
72	NC(M)	M-19	SOUTH ST. S/O CATHERINE SLIP	050		CCFISS		REG-026	29-Dec-10
73	NC(M)	M-21	SOUTH ST & JEFFERSON ST.	063		CCFISS		REG-026	29-Dec-10
74	NC(M)	M-36	FDR DR. & E.14th ST.	052		CCFISS		REG-026	29-Dec-10
75	NC(M)	M-37	E.18th ST. & AV.C	049		CCFISS		REG-026	29-Dec-10
76	NC(M)	M-40	FDR DR. & E.26th ST.	045		CCFISS		REG-026	29-Dec-10
77	NC(M)	M-42	E.33rd ST. E/O 1st AV.	041		CCFISS		REG-026	29-Dec-10
78	NC(M)	M-44	E.41st ST. E/O 1st AV.	037		CCFISS		REG-026	29-Dec-10
79	NC(M)	M-47	FDR DR. & E.49th ST.	036		CCFISS		REG-026	29-Dec-10
80	NC(M)	M-50	FDR DR. & E.61st ST.	032		CCFISS		REG-026	29-Dec-10
81	RH	R-02	WOLCOTT ST. & CONOVER ST.	028		CCFISS		REG-026	29-Dec-10
82	RH	R-20	GOLD ST. @ PLYMOUTH ST.	004		CCFISS		REG-026	29-Dec-10
83	RH	R-20A	GOLD ST. @ PLYMOUTH ST.	004		CCFISS		REG-026	29-Dec-10
84	RH	R-21	HUDSON AVE. @ PLYMOUTH ST.	OO3		CCFISS		REG-026	29-Dec-10
85	RH	R-21A	HUDSON AVE. @ PLYMOUTH ST.	OO3		CCFISS		REG-026	29-Dec-10

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
86	JA	01	JFK AIRPORT	006		CCFISS	REG-027		23-Oct-12
87	JA	2	79TH STR.N.CONDUIT AVE	26W-005		CCFISS		REG-026	29-Dec-10
88	JA	03	123rd. PLACE & 150th ST.	003		CCFISS		REG-026	29-Dec-10
89	JA	09	LINDEN & SPRINGFIELD BLVDS.	005		CCFISS	REG-027		23-Feb-12
90	JA	14	124th ST. & N.CONDUIT AV.	003a		CCFISS		REG-026	29-Dec-10
91	TI	09	LINDEN PL & 32nd AV.	011		CCFISS	REG-027		27-Mar-12
92	TI	10A	144th ST. & E/O MALBA AVE	003		CCFISS	REG-027		15-Jun-12
93	TI	13	15th DR. & WILLETS POINT BLVD.	023		CCFISS	REG-027		15-Aug-12
94	TI	30	QUINCE AV. & KISSENA BLVD.	010		CCFISS	REG-027		26-Jan-12
95	TI	40	FRESH MEADOW La & PECK AV.	010		CCFISS	REG-027		18-Jul-12
96	TI	46	210 th ST. & LIE (N.S)	008		CCFISS	REG-027		26-Jan-12
97	TI	47	218th ST & LIE (N.S)	008		CCFISS	REG-027		10-Apr-12
98	TI	49	220th PL. & 46th AV.	008		CCFISS	REG-027		24-Oct-12
99	BBL	L-04	47th AV. BETW. 28th & 29th ST.	026		CCFISS	REG-027		24-Aug-12
100	BBL	L-21	37th AV. & VERNON BLVD.	028		CCFISS	REG-027		22-May-12
101	BBL	L-22	VERNON BLVD & BROADWAY	O29		CCFISS	REG-027		1-May-12
102	BBL	L-23	30th RD. & VERNON BLVD.	030		CCFISS	REG-027		3-May-12
103	BBL	L-30	ASTORIA PARKS E/O SHORE BLVD.	034		CCFISS	REG-027		16-Feb-12
104	BBH	02	45th ST. & PLANT	002		CCFISS	REG-027		11-Oct-12
105	BBH	03	HAGEN ST. & 19th ST. AV.	003		CCFISS	REG-027		2-Feb-12
106	BBH	06	108th ST.(31st DR)& DITMARS BLVD.	008		CCFISS	REG-027		23-Feb-12
107	BBH	09	108th ST. & 43rd. AV.	008		CCFISS	REG-027		2-Feb-12

	WPCP Drainage Area	Reg#	Location	SPDES	BEACH SENSITIVE	Existing Telemetry System	SCADA Contract		CCFISS Installation date
108	RK	01	B.106th ST. & BEACH CHANNEL DR.	029	□	CCFISS	REG-027		31-Dec-12
109	PR	R-13E	CANAL ST. & FRONT ST	031	□	CCFISS		REG-026	29-Dec-10
110	PR	R-35W	BODINE ST. & RICHMOND TERR.	035	□	CCFISS		REG-026	29-Dec-10
111	PR	R-06W	RICHMOND TERR. & NICHOLAS AV.	029	□	CCFISS		REG-026	29-Dec-10

REG-026 - CONSENT ORDER REGULATOR SCADA

Table 2 – CY'14 Wastewater Collections Systems Cleaning Locations

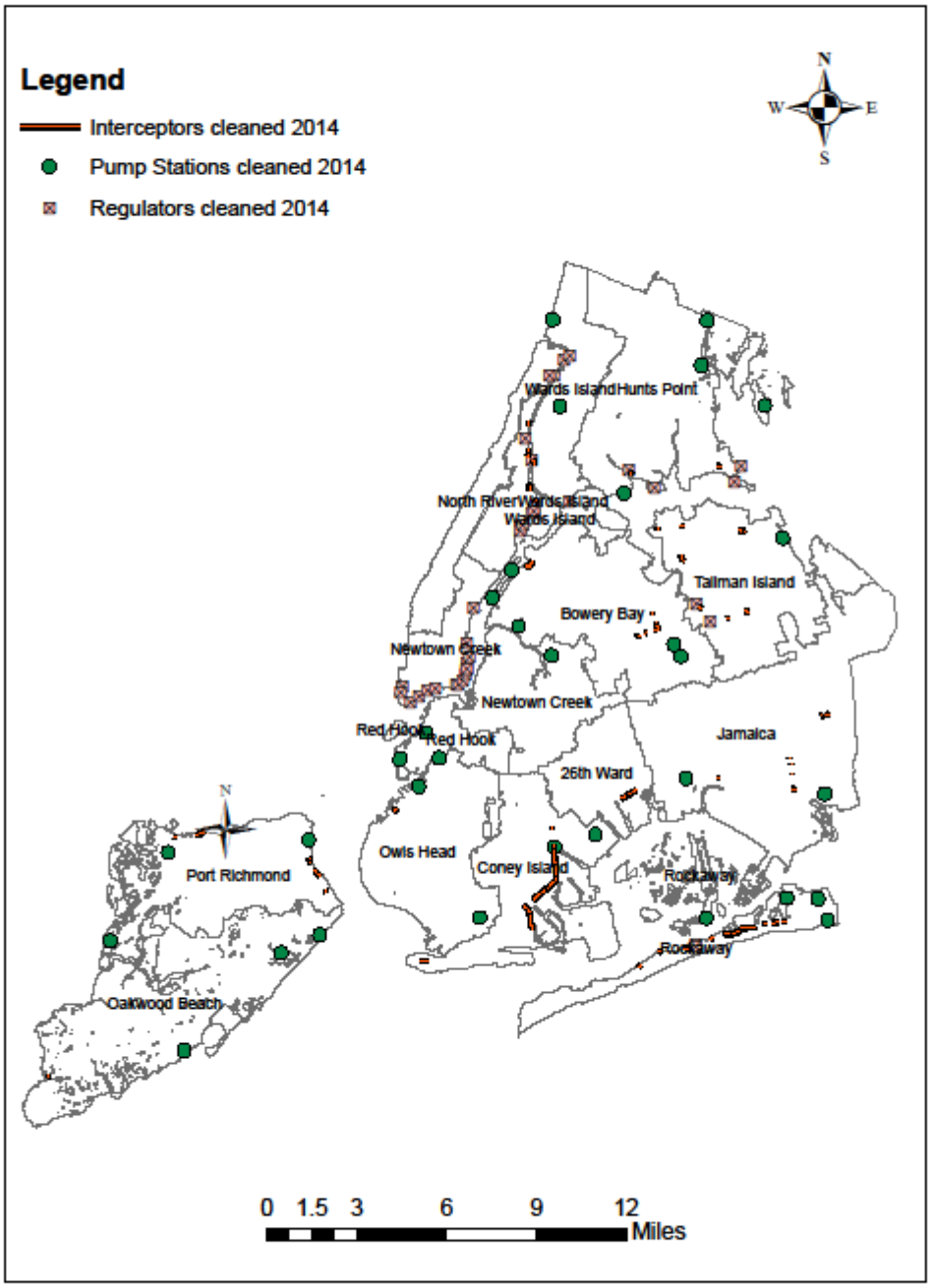
Appendix 2 Table 2

Drainage Area	Asset Type	Asset	Volume Removed (cu yds)
BB	Plant	Holding Tank	10.14
BB	Pump Station	Borden Ave	7.43
BB	Pump Station	Roosevelt Island Main	2.57
BB	Pump Station	Roosevelt Island South	2.57
BB	Pump Station	67 RD	8.00
BB	Pump Station	70 RD	3.50
BB	Sewer	G209819	6.00
CI	CSO	Paerdegat	208.25
CI	Plant	Primary Tank	70.25
CI	Pump Station	Ave M	4.48
CI	Pump Station	Howard Beach	7.06
CI	Pump Station	Paerdegat	35.27
HP	Plant	WI WWTP	8.34
HP	Pump Station	City Island	46.00
HP	Pump Station	Co-op City South	51.00
HP	Pump Station	Hollers Ave	15.00
HP	Pump Station	Hunts Point	12.00
HP	Regulator	HP-1	20.00
HP	Regulator	HP-13	24.00
HP	Regulator	HP-15B	3.50
HP	Regulator	HP-2	8.00
HP	Regulator	HP-5	21.50
HP	Regulator	HP-7	5.00
HP	Regulator	TI-57	10.00
HP	Sewer	G207439	6.00
HP	Sewer	M2009564	5.00
JA	Plant	Aeration	33.95
JA	Pump Station	Howard Beach	8.45
JA	Pump Station	Rosedale	2.55
NC	Pump Station	49th St.	7.72
NC	Regulator	NCM-11	6.00
NC	Regulator	NCM-13	10.00
NC	Regulator	NCM-17	32.50
NC	Regulator	NCM-20 DP	8.00
NC	Regulator	NCM-23	18.00
NC	Regulator	NCM-24	10.00
NC	Regulator	NCM-26	3.00
NC	Regulator	NCM-29	14.50

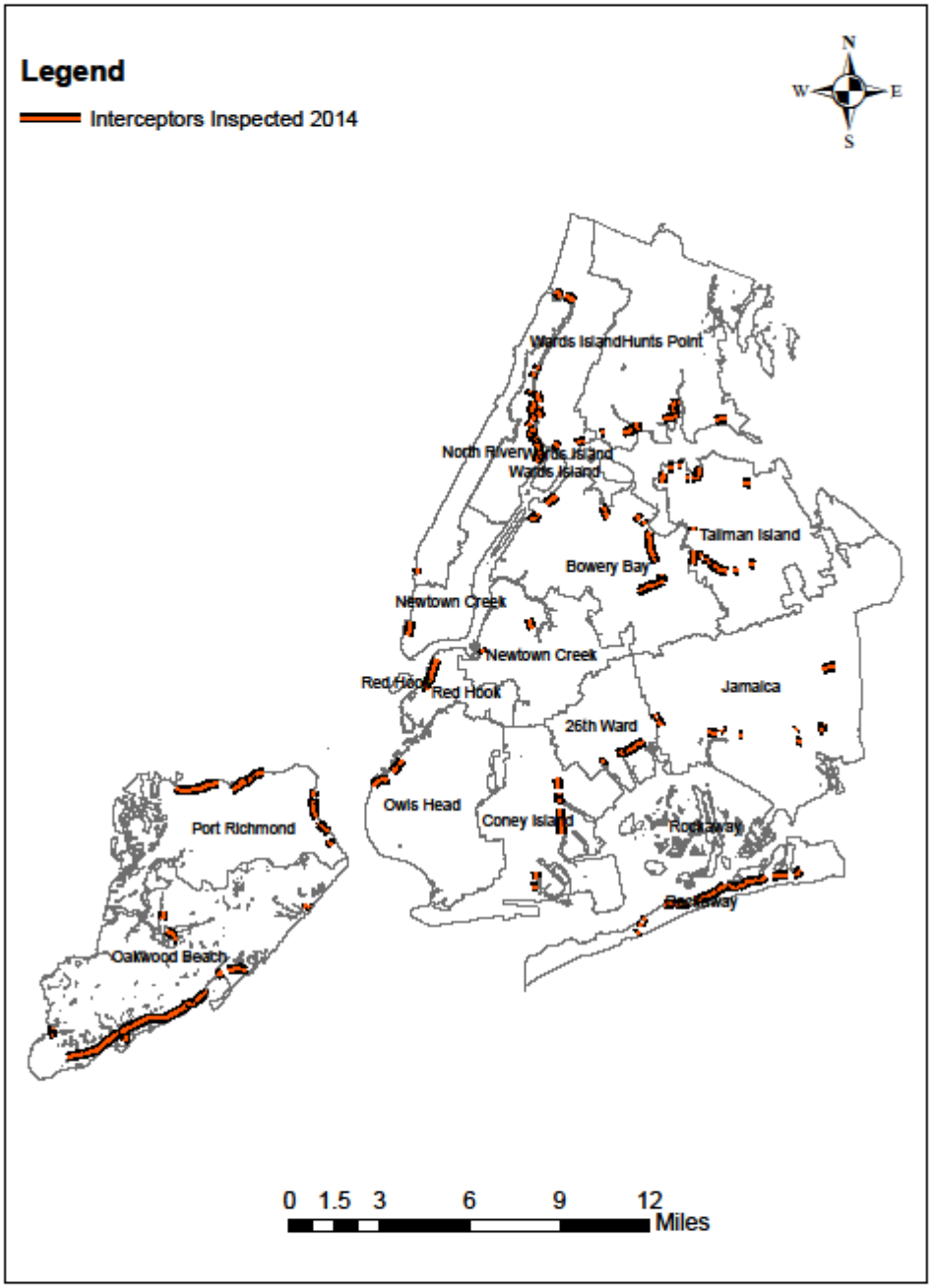
NC	Regulator	NCM-30	11.50
NC	Regulator	NCM-31	11.00
NC	Regulator	NCM-32	48.50
NC	Regulator	NCM-33	15.00
NC	Regulator	NCM-35	58.00
NC	Regulator	NCM-37	4.00
NC	Regulator	NCM-44	5.00
NC	Regulator	NCM-6	11.00
NC	Regulator	NCM-6 DP	4.00
NC	Regulator	NCM-8	4.00
NR	Regulator	NR-02	4.00
NR	Regulator	NR-13	12.00
NR	Regulator	NR-14	4.00
NR	Regulator	NR-2	15.00
NR	Regulator	NR-4	8.00
OB	Pump Station	Mason Av	14.08
OB	Pump Station	Richmond Av	26.22
OB	Pump Station	Richmond Hill	7.19
OB	Pump Station	South Beach	5.92
OB	Sewer	OB_W_94	10.75
OH	Plant	Digester	8.28
OH	Plant	Primary Tank	6.21
OH	Pump Station	2nd Ave	26.38
OH	Pump Station	Bush Terminal	12.68
OH	Pump Station	Ave U	6.81
PR	Pump Station	Hannah St.	17.52
PR	Pump Station	Mersereau Ave	86.64
PR	Pump Station	Victory Blvd	7.92
PR	Pump Station	Hannah St	13.37
RH	Pump Station	Kane St	2.74
RH	Pump Station	TG	3.88
RH	Pump Station	Van Brunt	14.14
RK	Pump Station	Nameoke Ave	3.69
RK	Pump Station	Bayswater Ave	21.36
RK	Pump Station	Broad Channel	8.52
RK	Pump Station	Seagirt Ave	35.58
RK	Regulator	RK-01	0.81
RK	Regulator	RK-02	5.84
RK	Sewer	CI_N_32B	19.71
RK	Sewer	CI_N_32C	18.30
RK	Sewer	MH-11	7.15
RK	Sewer	MH-13	6.97

RK	Sewer	MH-15	5.15
RK	Sewer	MH-17	9.05
RK	Sewer	MH-19	9.39
RK	Sewer	MH-2	1.32
RK	Sewer	MH-22	25.66
RK	Sewer	MH-24	25.53
RK	Sewer	MH-26	27.21
RK	Sewer	MH-28	8.05
RK	Sewer	MH-3	4.12
RK	Sewer	MH-30	19.03
RK	Sewer	MH-31	8.81
RK	Sewer	MH-32	21.40
RK	Sewer	MH-33	23.03
RK	Sewer	MH-34	18.11
RK	Sewer	MH-5	3.39
TI	CSO	Alley Creek	160.00
TI	CSO	Flushing Bay	37.00
TI	Plant	Primary Dump Lines	6.17
TI	Pump Station	24th Ave	20.00
TI	Regulator	TI-32	5.00
TI	Regulator	TI-37	15.00
WI	CSO	BGC	7.86
WI	Plant	Aeration	149.96
WI	Plant	C Battery	134.83
WI	Plant	Cross Collector	6.65
WI	Plant	FST	327.85
WI	Plant	Holding Tank	60.14
WI	Plant	Influent	18.28
WI	Pump Station	235th St-Riverdale	10.00
WI	Pump Station	Jerome Av	8.00
WI	Regulator	HP-13	6.00
WI	Regulator	WIB-67	14.00
WI	Regulator	WIB-59	11.00
WI	Regulator	WIB-70	3.50
WI	Regulator	WIM-18	54.00
WI	Regulator	WIM-22	4.00
WI	Regulator	WIM-26	34.00
WI	Regulator	WIM-27	2.00
WI	Regulator	WIM-50	8.00
WI	Sewer	WWTP	1.03
		Total	2682.71

2014 BWT CLEANED



2014 BWT INSPECTED



Appendix 3.1

Key Regulator Monitoring Report CY2014 Summary

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Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
26TH WARD											
26W01											
JUNE	1	06/09/14 7:00 AM	06/09/2014 07:30 AM	0.50	128	141	170	06/09/2014 8:00 AM	06/09/2014 11:15 AM	192	181
DECEMBER	1	12/24/14 12:15 PM	12/24/14 12:45 PM	0.50	120	146	170	N/A	N/A	N/A	N/A
26W02											
JUNE	1a	06/03/14 6:45 PM	06/03/2014 07:00 PM	0.25	130	168	170	06/03/2014 7:15 PM	06/03/2014 7:15 PM	172	172
	1b	06/03/14 7:30 PM	06/03/2014 07:45 PM	0.25	166	166					
	2	06/09/14 11:30 AM	06/09/2014 12:15 PM	0.75	168	168	170	06/09/2014 8:00 AM	06/09/2014 11:15 AM	192	181
	3	06/13/14 11:45 AM	06/13/2014 03:00 PM	3.25	162	162	170	06/13/2014 9:45 AM	06/13/2014 11:30 AM	188	184
	4	06/13/14 10:30 PM	06/14/2014 03:30 AM	5.00	154	154	170	06/13/2014 7:15 PM	06/13/2014 9:45 PM	176	173
AUGUST	1	08/13/14 2:30 AM	08/13/2014 03:00 AM	0.50	157	157	170	08/13/2014 3:15 AM	08/13/2014 05:45 AM	179	159*
NOVEMBER	1	11/26/14 4:30 PM	11/26/14 5:15 PM	0.75	163	163	170	11/26/14 3:00 PM	11/26/14 3:15 PM	171	171
DECEMBER	1	12/6/14 12:30 AM	12/6/14 1:00 AM	0.50	159	159	170	N/A	N/A	N/A	N/A
	2a	12/6/14 1:15 PM	12/6/14 2:30 PM	1.25	167	167	170	12/6/14 3:15 PM	12/6/14 4:45 PM	184	177
	2b	12/6/14 3:00 PM	12/6/14 3:00 PM	0.00	162	162	170				
	3	12/24/14 3:00 PM	12/24/14 3:30 PM	0.50	156	156	170	N/A	N/A	N/A	N/A
	4	12/24/14 4:15 PM	12/24/14 4:45 PM	0.50	112	114	170	N/A	N/A	N/A	N/A
BOWERY BAY											
BBH02											
JUNE	1	06/03/14 8:00 PM	06/03/2014 09:15 PM	1.25	140	142	300	n/a	n/a	n/a	n/a
	2a	06/13/14 6:45 PM	06/13/2014 06:45 PM	0.00	269	269	300	06/13/2014 7:00 PM	06/13/2014 7:45 PM	310	304
	2b	06/13/14 8:00 PM	06/13/2014 08:30 PM	0.50	298	299					
AUGUST	1a	08/02/14 7:15 AM	08/02/2014 08:15 AM	1.00	232	291	300	08/02/2014 8:30 AM	08/02/2014 08:30 AM	310	310
	1b	08/02/14 8:45 AM	08/02/2014 12:15 PM	3.50	279	279	300				
	2a	08/13/14 4:30 AM	08/13/2014 04:30 AM	0.00	240	240	300	08/13/2014 2:00 AM	08/13/2014 04:15 AM	345	312
	2b	08/13/14 5:15 AM	08/13/2014 09:45 AM	4.50	299	299	300	08/13/2014 4:45 AM	08/13/2014 05:00 AM	306	305
	3a	08/22/14 12:30 AM	08/22/2014 12:30 AM	0.00	269	269	300	08/22/2014 12:45 AM	08/22/2014 02:15 AM	325	311
	3b	08/22/14 2:30 AM	08/22/2014 03:30 AM	1.00	293	293	300				
	4a	08/31/14 5:30 PM	08/31/2014 05:30 PM	0.00	299	299	300	08/31/2014 5:45 PM	08/31/2014 06:45 PM	368	323
	4b	08/31/14 7:00 PM	08/31/2014 07:00 PM	0.00	293	293	300				
	4c	08/31/14 7:30 PM	08/31/2014 09:30 PM	2.00	235	235	300	08/31/2014 7:15 PM	08/31/2014 07:15 PM	319	319
SEPTEMBER	1a	09/16/14 11:00 AM	09/16/2014 11:30 AM	0.50	299	299	300	09/16/2014 10:15 AM	09/16/2014 10:45 AM	316	313
	1b	09/16/14 12:30 PM	09/16/2014 01:45 PM	1.25	293	293	300	09/16/2014 11:45 AM	09/16/2014 12:15 PM	303	301
	2	09/21/14 3:45 AM	09/21/2014 04:15 AM	0.50	227	234	300	N/A	N/A	N/A	N/A
OCTOBER	1	10/22/14 5:45 AM	10/22/14 6:00 AM	0.25	148	199	300	10/22/14 6:15 AM	10/22/14 10:45 AM	320	313
NOVEMBER	1	11/1/14 11:15 AM	11/1/14 11:45 AM	0.50	158	166	300	N/A	N/A	N/A	N/A
	2	11/13/14 11:00 PM	11/13/14 11:30 PM	0.50	194	198	300	N/A	N/A	N/A	N/A
	3a	11/17/14 1:45 PM	11/17/14 1:45 PM	0.00	277	277	300	11/17/14 2:00 PM	11/17/14 3:15 PM	331	323
	3b	11/17/14 3:30 PM	11/17/14 5:15 PM	1.75	282	282	300				
	4a	11/24/14 4:00 AM	11/24/14 4:00 AM	0.00	289	289	300	11/24/14 4:15 AM	11/24/14 5:30 AM	351	318
	4b	11/24/14 5:45 AM	11/24/14 8:00 AM	2.25	297	297	300				
	5a	11/26/14 9:45 AM	11/26/14 9:45 AM	0.00	299	299	300	11/26/14 10:00 AM	11/26/14 8:00 PM	336	317
	5b	11/26/14 8:15 PM	11/26/14 8:30 PM	0.25	299	299	300				
	5c	11/26/14 9:00 PM	11/26/14 9:15 PM	0.25	294	295	300	11/26/14 8:45 PM	11/26/14 8:45 PM	357	357

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
BOWERY BAY cont.											
BBH06											
JUNE	1	06/13/14 9:45 AM	06/13/2014 09:45 AM	0.00	218	218	300	06/13/2014 10:00 AM	06/13/2014 10:30 AM	319	315
AUGUST	1	08/22/14 12:30 AM	08/22/2014 12:30 AM	0.00	269	269	300	08/22/2014 12:45 AM	08/22/2014 02:15 AM	325	311
OCTOBER	1	10/4/14 10:30 AM	10/4/14 10:30 AM	0.00	254	254	300	10/4/14 10:45 AM	10/4/14 12:15 PM	341	324
	2	10/16/14 4:30 AM	10/16/14 4:30 AM	0.00	155	155	300	10/16/14 4:45 AM	10/16/14 7:30 AM	319	310
	3	10/22/14 11:15 PM	10/22/14 11:45 PM	0.50	285	293	300	N/A	N/A	N/A	N/A
NOVEMBER	1	11/17/14 3:30 PM	11/17/14 4:00 PM	0.50	282	282	300	11/17/14 2:00 PM	11/17/14 3:15 PM	331	323
DECEMBER	1	12/6/14 12:30 PM	12/6/14 12:30 PM	0.00	232	232	300	12/6/14 12:45 PM	12/7/14 1:30 AM	350	316
	2a	12/9/14 6:15 AM	12/9/14 6:30 AM	0.25	276	276	300	12/9/14 6:45 AM	12/9/14 4:30 PM	381	330
	2b	12/9/14 4:45 PM	12/9/14 4:45 PM	0.00	277	277	300	12/9/14 5:00 PM	12/9/14 5:30 PM	313	311
BBL04											
JUNE	1a	06/13/14 1:00 PM	06/13/2014 01:00 PM	0.00	296	296	300	06/13/2014 11:00 AM	06/13/2014 12:45 PM	323	312
	1b	06/14/14 12:00 AM	06/14/2014 01:00 AM	1.00	220	235	300	06/13/2014 7:00 PM	06/13/2014 7:45 PM	310	304
AUGUST	1a	08/02/14 7:30 AM	08/02/2014 08:15 AM	0.75	269	291	300	08/02/2014 8:30 AM	08/02/2014 08:30 AM	310	310
	1b	08/02/14 8:45 AM	08/02/2014 09:00 AM	0.25	279	279	300				
	2a	08/13/14 4:30 AM	08/13/2014 04:30 AM	0.00	240	240	300	08/13/2014 2:00 AM	08/13/2014 04:15 AM	345	312
	2b	08/13/14 5:15 AM	08/13/2014 05:45 AM	0.50	299	299	300	08/13/2014 4:45 AM	08/13/2014 05:00 AM	306	305
	3	08/22/14 12:15 AM	08/22/2014 12:30 AM	0.25	153	269	300	08/22/2014 12:45 AM	08/22/2014 02:15 AM	325	311
	4	08/31/14 7:00 PM	08/31/2014 07:00 PM	0.00	293	293	300	08/31/2014 5:45 PM	08/31/2014 06:45 PM	368	323
								08/31/2014 7:15 PM	08/31/2014 07:15 PM	319	319
SEPTEMBER	1	09/16/14 10:00 AM	09/16/2014 10:00 AM	0.00	238	238	300	09/16/2014 10:15 AM	09/16/2014 10:45 AM	316	313
OCTOBER	1	10/4/14 12:30 PM	10/4/14 12:45 PM	0.25	297	297	300	10/4/14 10:45 AM	10/4/14 12:15 PM	341	324
								10/4/14 1:00 PM	10/4/14 2:45 PM	311	307
	2	10/22/14 11:00 AM	10/22/14 11:30 AM	0.50	295	295	300	10/22/14 6:15 AM	10/22/14 10:45 AM	320	313
	3	10/22/14 9:15 PM	10/23/14 2:45 AM	5.50	289	295	300	N/A	N/A	N/A	N/A
NOVEMBER	1a	11/17/14 8:30 AM	11/17/14 8:45 AM	0.25	298	298	300	11/17/14 5:30 AM	11/17/14 8:15 AM	312	308
	1b	11/17/14 9:30 AM	11/17/14 9:30 AM	0.00	295	295	300	11/17/14 9:00 AM	11/17/14 9:15 AM	302	301
	1c	11/17/14 3:30 PM	11/17/14 3:30 PM	0.00	282	282	300	11/17/14 2:00 PM	11/17/14 3:15 PM	331	323
	1d	11/17/14 4:00 PM	11/17/14 4:30 PM	0.50	280	280	300	11/17/14 7:15 PM	11/17/14 7:15 PM	328	328
	2a	11/24/14 3:15 AM	11/24/14 4:00 AM	0.75	126	289	300	11/24/14 4:15 AM	11/24/14 5:30 AM	351	318
	2b	11/24/14 5:45 AM	11/24/14 5:45 AM	0.00	297	297	300				
DECEMBER	1	12/6/14 1:45 AM	12/6/14 1:45 AM	0.00	284	284	300	12/5/14 11:15 PM	12/6/14 1:30 AM	311	306
	2a	12/9/14 6:00 AM	12/9/14 6:30 AM	0.50	263	276	300	12/9/14 6:45 AM	12/9/14 4:30 PM	381	330
	2b	12/9/14 4:45 PM	12/9/14 4:45 PM	0.00	277	277	300	12/9/14 5:00 PM	12/9/14 5:30 PM	313	311
BBL22											
JUNE	1	06/05/14 6:45 AM	06/05/2014 07:15 AM	0.50	108	274	300	06/05/2014 7:30 AM	06/05/2014 11:45 AM	338	319
AUGUST	1a	08/13/14 4:30 AM	08/13/2014 04:30 AM	0.00	240	240	300	08/13/2014 2:00 AM	08/13/2014 04:15 AM	345	312
	1b	08/13/14 5:15 AM	08/13/2014 05:30 AM	0.25	299	299	300	08/13/2014 4:45 AM	08/13/2014 05:00 AM	306	305
	2	08/22/14 12:15 AM	08/22/2014 12:30 AM	0.25	153	269	300	08/22/2014 12:45 AM	08/22/2014 02:15 AM	325	311
	3	08/31/14 5:00 PM	08/31/2014 05:30 PM	0.50	135	299	300	08/31/2014 5:45 PM	08/31/2014 06:45 PM	368	323
								08/31/2014 7:15 PM	08/31/2014 07:15 PM	319	319
OCTOBER	1	10/4/14 12:30 PM	10/4/14 12:45 PM	0.25	297	297	300	10/4/14 10:45 AM	10/4/14 12:15 PM	341	324
								10/4/14 1:00 PM	10/4/14 2:45 PM	311	307
	2	10/23/14 1:00 AM	10/23/14 2:00 AM	1.00	277	280	300	N/A	N/A	N/A	N/A
NOVEMBER	1	11/24/14 3:30 AM	11/24/14 4:00 AM	0.50	185	289	300	11/24/14 4:15 AM	11/24/14 5:30 AM	351	318
DECEMBER	1	12/9/14 6:00 AM	12/9/14 6:30 AM	0.50	263	276	300	12/9/14 6:45 AM	12/9/14 4:15 PM	381	330

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
HUNTS POINT											
HP05											
JUNE	1a	06/05/14 8:00 AM	06/05/2014 09:15 AM	1.25	394	394	400	06/05/2014 7:00 AM	06/05/2014 7:45 AM	419	413
	1b	06/05/14 9:45 AM	06/05/2014 10:45 AM	1.00	399	399	400	06/05/2014 9:30 AM	06/05/2014 9:30 AM	401	401
	2	06/09/14 11:45 AM	06/09/2014 01:15 PM	1.50	389	389	400	06/09/2014 7:00 AM	06/09/2014 11:30 AM	442	423
	3	06/13/14 3:45 PM	06/13/2014 05:15 PM	1.50	238	238	400	06/13/2014 10:30 AM	06/13/2014 12:30 PM	429	416
	4a	06/13/14 6:45 PM	06/13/2014 07:00 PM	0.25	247	379	400	06/13/2014 7:15 PM	06/13/2014 7:15 PM	421	421
	4b	06/13/14 7:30 PM	06/13/2014 07:30 PM	0.00	395	395	400	06/13/2014 7:45 PM	06/13/2014 8:00 PM	413	408
AUGUST	1	08/02/14 8:45 AM	08/02/2014 09:15 AM	0.50	337	337	400	N/A	N/A	N/A	N/A
	2	08/13/14 5:15 AM	08/13/2014 06:00 AM	0.75	388	388	400	08/13/2014 4:00 AM	08/13/2014 4:30 AM	405	402
	3	08/22/14 1:30 AM	08/22/2014 02:15 AM	0.75	348	348	400	N/A	N/A	N/A	N/A
	4	08/31/14 6:30 PM	08/31/2014 07:15 PM	0.75	392	392	400	08/31/2014 5:30 PM	08/31/2014 06:15 PM	414	410
OCTOBER	1	10/4/14 12:45 PM	10/4/14 2:15 PM	1.50	398	398	400	10/4/14 10:45 AM	10/4/14 12:30 PM	423	409
NOVEMBER	1	11/24/14 5:00 AM	11/24/14 7:00 AM	2.00	390	390	400	11/24/2014 4:15	11/24/2014 4:45	411	407
	2	11/26/14 7:00 PM	11/26/14 9:00 PM	2.00	344	344	400	N/A	N/A	N/A	N/A
DECEMBER	1	12/6/14 4:15 PM	12/6/14 7:45 PM	3.50	387	389	400	N/A	N/A	N/A	N/A
	2	12/9/14 6:00 PM	12/9/14 8:45 PM	2.75	348	348	400	12/9/14 6:45 AM	12/9/14 5:00 PM	416	405
	3	12/24/14 6:15 PM	12/24/14 7:00 PM	0.75	324	324	400	12/24/14 2:30 PM	12/24/14 3:00 PM	405	402
HP10											
AUGUST	1	08/02/14 8:00 AM	08/02/2014 09:15 AM	1.25	345	345	400	N/A	N/A	N/A	N/A
	2	08/13/14 8:30 AM	08/13/2014 09:15 AM	0.75	272	337	400	08/13/2014 4:00 AM	08/13/2014 4:30 AM	405	402
	3	08/22/14 12:45 AM	08/22/2014 02:15 AM	1.50	216	385	400	N/A	N/A	N/A	N/A
	4a	08/31/14 5:15 PM	08/31/2014 05:15 PM	0.00	319	319	400	08/31/2014 5:30 PM	08/31/2014 06:15 PM	414	410
	4b	08/31/14 6:30 PM	08/31/2014 07:00 PM	0.50	392	392	400				
SEPTEMBER	1	09/30/14 8:00 AM	09/30/2014 09:45 AM	1.75	177	266	400	N/A	N/A	N/A	N/A
OCTOBER	1	10/4/14 12:45 PM	10/4/14 12:45 PM	0.00	398	398	400	10/4/14 10:45 AM	10/4/14 12:30 PM	423	409
NOVEMBER	1	11/17/14 2:15 PM	11/17/14 2:15 PM	0.00	392	392	400	11/17/14 2:30 PM	11/17/14 4:00 PM	413	408
	2	11/24/14 5:00 AM	11/24/14 7:30 AM	2.50	390	390	400	11/24/14 4:15 AM	11/24/14 4:45 AM	411	407
	3	11/26/14 9:30 AM	11/26/14 10:15 AM	0.75	287	349	400	N/A	N/A	N/A	N/A
DECEMBER	1	12/9/14 6:30 AM	12/9/14 6:30 AM	0.00	398	398	400	12/9/14 6:45 AM	12/9/14 5:00 PM	416	405
HP13											
DECEMBER	1	12/6/14 5:15 PM	12/6/14 7:00 PM	1.75	373	373	400	N/A	N/A	N/A	N/A

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
JAMAICA											
JA03											
JUNE	1	06/05/14 7:45 AM	06/05/2014 11:15 AM	3.50	77	170	200	n/a	n/a	n/a	n/a
	2	06/09/14 6:30 AM	06/09/2014 09:15 AM	2.75	63	184	200	n/a	n/a	n/a	n/a
	3	06/13/14 9:30 AM	06/13/2014 11:45 AM	2.25	103	162	200	n/a	n/a	n/a	n/a
JULY	1	07/28/14 3:00 AM	07/28/2014 05:45 AM	2.75	94	132	200	N/A	N/A	N/A	N/A
AUGUST	1	08/02/14 7:00 AM	08/02/2014 10:30 AM	3.50	102	143	200	N/A	N/A	N/A	N/A
	2a	08/13/14 12:00 AM	08/13/2014 04:00 AM	4.00	142	191	200	08/13/2014 4:15 AM	08/13/2014 05:30 AM	213	207
	2b	08/13/14 6:15 AM	08/13/2014 06:45 AM	0.50	190	190	200				
	2c	08/13/14 7:30 AM	08/13/2014 08:45 AM	1.25	168	173	200				
	3	08/22/14 1:00 AM	08/22/2014 02:30 AM	1.50	112	137	200	N/A	N/A	N/A	N/A
	4	08/31/14 6:15 PM	08/31/2014 07:30 PM	1.25	122	146	200	N/A	N/A	N/A	N/A
SEPTEMBER	1	09/13/14 4:00 PM	09/13/2014 06:00 PM	2.00	116	144	200	N/A	N/A	N/A	N/A
	2	09/16/14 9:30 AM	09/16/2014 12:00 PM	2.50	95	165	200	N/A	N/A	N/A	N/A
	3	09/21/14 1:30 AM	09/21/2014 03:00 AM	1.50	116	132	200	N/A	N/A	N/A	N/A
	4	09/25/14 11:30 AM	09/25/2014 12:30 PM	1.00	114	133	150	N/A	N/A	N/A	N/A
OCTOBER	1	10/4/14 10:30 AM	10/4/14 3:00 PM	4.50	114	174	200	N/A	N/A	N/A	N/A
	2	10/11/14 6:45 AM	10/11/14 8:30 AM	1.75	74	130	200	N/A	N/A	N/A	N/A
	3	10/16/14 4:15 AM	10/16/14 5:15 AM	1.00	65	166	200	N/A	N/A	N/A	N/A
	4	10/22/14 4:15 AM	10/22/14 11:15 AM	7.00	66	168	200	N/A	N/A	N/A	N/A
	5	10/22/14 9:15 PM	10/22/14 10:15 PM	1.00	130	144	200	N/A	N/A	N/A	N/A
		10/22/14 10:45 PM	10/23/14 1:00 AM	2.25	144	168					
NOVEMBER	1a	11/1/14 10:00 AM	11/1/14 2:15 PM	4.25	88	156	200	N/A	N/A	N/A	N/A
	1b	11/1/14 5:45 PM	11/1/14 6:30 PM	0.75	132	138	200	N/A	N/A	N/A	N/A
	2	11/6/14 11:30 AM	11/6/14 1:00 PM	1.50	128	142	200	N/A	N/A	N/A	N/A
	3a	11/17/14 4:15 AM	11/17/14 9:00 AM	4.75	70	151	200	N/A	N/A	N/A	N/A
	3b	11/17/14 1:15 PM	11/17/14 3:15 PM	2.00	117	170	200	N/A	N/A	N/A	N/A
	4	11/24/14 3:45 AM	11/24/14 6:15 AM	2.50	86	136	200	N/A	N/A	N/A	N/A
	5a	11/26/14 9:00 AM	11/26/14 9:45 AM	0.75	113	140	200	N/A	N/A	N/A	N/A
	5b	11/26/14 10:00 AM	11/26/14 8:00 PM	10.00	147	168	200	N/A	N/A	N/A	N/A
	5c	11/26/14 9:15 PM	11/26/14 10:00 PM	0.75	143	145	200	N/A	N/A	N/A	N/A
DECEMBER	1	12/3/14 3:30 PM	12/3/14 4:00 PM	0.50	111	117	200	N/A	N/A	N/A	N/A
	2	12/5/14 8:30 PM	12/6/14 1:30 AM	5.00	116	166	200	N/A	N/A	N/A	N/A
	3a	12/6/14 1:00 PM	12/6/14 11:15 PM	10.25	117	189	200	N/A	N/A	N/A	N/A
	3b	12/6/14 11:45 PM	12/7/14 1:45 AM	2.00	146	152	200				
	4a	12/9/14 5:30 AM	12/9/14 8:30 AM	3.00	117	198	200	12/9/14 8:45 AM	12/9/14 3:45 PM	220	215
	4b	12/9/14 4:00 PM	12/9/14 4:00 PM	0.00	196	196	200				
	4c	12/9/14 4:15 PM	12/9/14 6:15 PM	2.00	197	197	200				
	5	12/16/14 9:45 PM	12/17/14 12:00 AM	2.25	127	156	200	N/A	N/A	N/A	N/A
	6a	12/24/14 11:15 AM	12/24/14 4:15 PM	5.00	122	189	200	N/A	N/A	N/A	N/A
	6b	12/24/14 5:30 PM	12/24/14 6:45 PM	1.25	148	162	200				

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
NEWTOWN CREEK											
NCB01											
AUGUST	1	08/13/14 4:45 AM	08/13/2014 05:00 AM	0.25	603	603	620	08/13/2014 1:30 AM	08/13/2014 04:30 AM	817	749
OCTOBER	1	10/16/14 4:30 AM	10/16/14 4:30 AM	0.00	600	600	620	10/16/14 4:45 AM	10/16/14 6:45 AM	892	823
NCB04											
JUNE	1	06/09/14 12:00 PM	06/09/2014 12:00 PM	0.00	598	598	620	06/09/2014 6:30 AM	06/09/2014 11:45 AM	924	817
	2	06/13/14 12:30 PM	06/13/2014 12:45 PM	0.25	570	570	620	06/13/2014 9:45 AM	06/13/2014 12:15 PM	785	742
AUGUST	1	08/13/14 4:45 AM	08/13/2014 05:00 AM	0.25	603	603	620	08/13/2014 1:30 AM	08/13/2014 04:30 AM	817	749
OCTOBER	1	10/4/14 11:30 AM	10/4/14 11:45 AM	0.25	520	536	620	10/4/14 10:30 AM	10/4/14 11:15 AM	808	727
								10/4/14 12:15 AM	10/4/14 2:00 PM	748	667
	2	10/22/14 10:45 AM	10/22/14 11:00 AM	0.25	540	540	620	10/22/14 5:30 AM	10/22/14 10:30 AM	880	759
	3	10/23/14 1:00 AM	10/23/14 1:15 AM	0.25	572	572	620	10/22/14 11:30 PM	10/23/14 12:45 AM	820	772
NCM47											
AUGUST	1	08/31/14 5:45 PM	08/31/2014 06:30 PM	0.75	440	616	620	N/A	N/A	N/A	N/A
OCTOBER	1	10/4/14 11:30 AM	10/4/14 12:00 PM	0.50	520	606	620	10/4/14 10:30 AM	10/4/14 11:15 AM	808	727
								10/4/14 12:15 AM	10/4/14 2:00 PM	748	667
NORTH RIVER											
NR16											
AUGUST	1	08/13/14 2:15 AM	08/13/2014 02:45 AM	0.50	271	337	340 / 255	08/13/2014 3:00 AM	08/13/2014 3:00 AM	340	340
								08/13/2014 3:30 AM	08/13/2014 6:00 AM	271**	265*
	2	08/31/14 5:00 PM	08/31/2014 05:15 PM	0.25	226	339	340	08/31/2014 5:30 PM	08/31/2014 07:15 PM	367	355
OCTOBER	1	10/4/14 10:30 AM	10/4/14 11:15 AM	0.75	231	284	340	10/4/14 11:30 AM	10/4/14 4:30 PM	369	326*
NOVEMBER	1	11/24/14 3:45 AM	11/24/14 4:00 AM	0.25	274	327	340	11/24/14 4:15 AM	11/24/14 7:30 AM	353	334*
NR23											
AUGUST	1	08/31/14 5:00 PM	08/31/2014 05:15 PM	0.25	226	339	340	08/31/2014 5:30 PM	08/31/2014 07:15 PM	367	355
OCTOBER	1	10/4/14 10:45 AM	10/4/14 11:15 AM	0.50	280	284	340	10/4/14 11:30 AM	10/4/14 4:30 PM	369	326*
DECEMBER	1a	12/6/14 2:45 PM	12/6/14 4:00 PM	1.25	260	275	340	12/6/14 4:15 PM	12/6/14 6:15 PM	372	364
	1b	12/6/14 6:30 PM	12/6/14 6:45 PM	0.25	339	339	340				
NR33											
JUNE	1a	06/09/14 4:45 AM	06/09/2014 05:45 AM	1.00	87	162	340	06/09/2014 7:00 AM	06/09/2014 2:15 PM	353	329*
	1b	06/09/14 6:00 AM	06/09/2014 06:45 AM	0.75	260	317					
	2	06/13/14 9:15 AM	06/13/2014 10:00 AM	0.75	151	279	340	06/13/2014 10:15 AM	06/13/2014 12:00 PM	359	348
	3	06/13/14 6:30 PM	06/13/2014 06:45 PM	0.25	246	254	340	06/13/2014 7:00 PM	06/13/2014 9:45 PM	362	353
OCTOBER	1	10/4/14 11:00 AM	10/4/14 11:15 AM	0.25	284	284	340	10/4/14 11:30 AM	10/4/14 4:30 PM	369	326*
	2	10/15/14 11:00 PM	10/15/14 11:30 PM	0.50	230	230	340	N/A	N/A	N/A	N/A

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
OWLS HEAD											
OH01											
JUNE	1	06/05/14 8:30 AM	06/05/2014 08:30 AM	0.00	155	155	180	06/05/2014 8:45 AM	06/05/2014 1:30 PM	217	206
	2	06/13/14 10:45 AM	06/13/2014 12:00 PM	1.25	220	220	240	06/13/2014 9:15 AM	06/13/2014 10:30 AM	264	258
JULY	1	07/28/14 3:00 AM	07/28/2014 05:15 AM	2.25	198	200	240	N/A	N/A	N/A	N/A
AUGUST	1	08/02/14 7:15 AM	08/02/2014 08:15 AM	1.00	208	208	240	08/02/2014 8:30 AM	08/02/2014 09:15 AM	259	250
	2	08/22/14 12:00 AM	08/22/2014 12:00 AM	0.00	141	141	180	08/22/2014 12:15 AM	08/22/2014 06:00 AM	196	189
SEPTEMBER	1	09/01/14 5:00 PM	09/01/2014 07:30 PM	2.50	100	147	240	N/A	N/A	N/A	N/A
	2	09/16/14 10:00 AM	09/16/2014 10:15 AM	0.25	239	239	240	09/16/2014 9:00 AM 09/16/2014 10:30 AM	09/16/2014 09:45 AM 09/16/2014 11:00 AM	249 240	246 240
NOVEMBER	1	11/17/14 5:30 AM	11/17/14 5:30 AM	0.00	208	208	240	11/17/14 5:45 AM	11/17/14 9:45 AM	261	252
	2	11/24/14 4:30 AM	11/24/14 5:45 AM	1.25	140	192	240	N/A	N/A	N/A	N/A
DECEMBER	1a	12/6/14 12:45 PM	12/6/14 12:45 PM	0.00	202	202	240	12/6/14 1:00 PM	12/6/14 3:00 PM	250	247
	1b	12/6/14 3:15 PM	12/6/14 3:45 PM	0.50	234	234	240	12/6/14 4:00 PM	12/7/14 2:00 AM	256	251
	2	12/16/14 10:15 PM	12/16/14 11:30 PM	1.25	199	199	240	12/16/14 11:45 PM	12/17/14 1:00 AM	248	245
OH06											
AUGUST	1	08/02/14 6:45 AM	08/02/2014 07:30 AM	0.75	143	208	240	08/02/2014 8:30 AM	08/02/2014 09:15 AM	259	250
	2	08/22/14 12:00 AM	08/22/2014 12:00 AM	0.00	141	141	180	08/22/2014 12:15 AM	08/22/2014 06:00 AM	196	189
NOVEMBER	1	11/1/14 10:15 AM	11/1/14 10:15 AM	0.00	139	139	240	11/1/14 11:30 AM	11/1/14 4:30 PM	262	253
	2	11/24/14 4:00 AM	11/24/14 8:15 AM	4.25	141	192	240	N/A	N/A	N/A	N/A
PORT RICHMOND											
PR06W											
JULY	1a	07/28/14 2:30 AM	07/28/2014 03:15 AM	0.75	52	53	120	N/A	N/A	N/A	N/A
	1b	07/28/14 4:15 AM	07/28/2014 04:45 AM	0.50	79	79					
AUGUST	1a	08/02/14 6:30 AM	08/02/2014 07:00 AM	0.50	28	60	120	N/A	N/A	N/A	N/A
	1b	08/02/14 7:30 AM	08/02/2014 08:15 AM	0.75	87	88	120				
	2	08/13/14 1:30 AM	08/13/2014 03:45 AM	2.25	60	102	120	N/A	N/A	N/A	N/A
	3a	08/22/14 12:00 AM	08/22/2014 12:45 AM	0.75	34	47	120	N/A	N/A	N/A	N/A
	3b	08/22/14 1:00 AM	08/22/2014 01:30 AM	0.50	58	77	120				
SEPTEMBER	1	09/16/14 9:00 AM	09/16/2014 09:45 AM	0.75	54	89	120	N/A	N/A	N/A	N/A
OCTOBER	1a	10/4/14 10:30 AM	10/4/14 11:00 AM	0.50	52	117	120	10/4/14 11:15 AM	10/4/14 11:30 AM	124	124
	1b	10/4/14 11:45 AM	10/4/14 12:00 PM	0.25	118	118	120				
	2	10/16/14 4:15 AM	10/16/14 6:15 AM	2.00	40	91	120	N/A	N/A	N/A	N/A
	3	10/22/14 10:30 AM	10/22/14 11:15 AM	0.75	102	102	120	N/A	N/A	N/A	N/A
	4	10/23/14 12:00 AM	10/23/14 12:45 AM	0.75	93	93	120	N/A	N/A	N/A	N/A
NOVEMBER	1	11/24/14 4:00 AM	11/24/14 5:15 AM	1.25	38	88	120	N/A	N/A	N/A	N/A
	2	11/26/14 2:45 PM	11/26/14 7:15 PM	4.50	90	119	120	N/A	N/A	N/A	N/A
DECEMBER	1	12/5/14 11:45 PM	12/6/14 12:45 AM	1.00	87	87	120	N/A	N/A	N/A	N/A
	2a	12/6/14 2:30 PM	12/6/14 6:15 PM	3.75	90	109	120	N/A	N/A	N/A	N/A
	2b	12/6/14 11:45 PM	12/7/14 1:45 AM	2.00	78	93	120				
	3a	12/9/14 5:00 AM	12/9/14 6:15 AM	1.25	62	79	120	12/9/14 8:30 AM	12/9/14 1:30 PM	133	130
	3b	12/9/14 1:45 PM	12/9/14 4:15 PM	2.50	117	117	120				
	4	12/16/14 10:30 PM	12/16/14 11:30 PM	1.00	53	77	120	N/A	N/A	N/A	N/A
	5a	12/24/14 1:00 PM	12/24/14 1:15 PM	0.25	110	115	120	12/24/14 11:45 AM	12/24/14 12:30 PM	133	127
	5b	12/24/14 2:45 PM	12/24/14 3:30 PM	0.75	114	114	120	12/24/14 1:30 PM	12/24/14 2:30 PM	131	125
	5c	12/24/14 5:15 PM	12/24/14 6:00 PM	0.75	71	71	120				

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
PORT RICHMOND cont.											
PR13E											
JUNE	1	06/05/14 9:45 AM	06/05/2014 10:30 AM	0.75	76	76	90	n/a	n/a	n/a	n/a
	2a	06/09/14 5:30 AM	06/09/2014 06:45 AM	1.25	20	47	90	06/09/2014 7:00 AM	06/09/2014 1:00 PM	106	99
	2b	06/09/14 1:15 PM	06/09/2014 08:15 PM	7.00	74	74					
	3a	06/13/14 8:45 AM	06/13/2014 09:15 AM	0.50	36	61	90	06/13/2014 9:30 AM	06/13/2014 10:45 AM	92	91
	3b	06/13/14 11:00 AM	06/13/2014 11:30 AM	0.50	78	78					
JULY	1a	07/28/14 2:00 AM	07/28/2014 03:15 AM	1.25	53	53	120	N/A	N/A	N/A	N/A
	1b	07/28/14 3:45 AM	07/28/2014 04:45 AM	1.00	52	80					
AUGUST	1	08/02/14 7:00 AM	08/02/2014 08:45 AM	1.75	60	88	120	N/A	N/A	N/A	N/A
	2	08/13/14 1:00 AM	08/13/2014 04:15 AM	3.25	49	102	120	N/A	N/A	N/A	N/A
	3a	08/21/14 11:30 PM	08/22/2014 01:30 AM	2.00	35	77	120	N/A	N/A	N/A	N/A
	3b	08/22/14 2:15 AM	08/22/2014 04:00 AM	1.75	74	86	120				
SEPTEMBER	1	09/13/14 4:00 PM	09/13/2014 04:45 PM	0.75	44	44	120	N/A	N/A	N/A	N/A
	2	09/16/14 8:45 AM	09/16/2014 10:15 AM	1.50	29	89	120	N/A	N/A	N/A	N/A
OCTOBER	1a	10/4/14 10:00 AM	10/4/14 11:00 AM	1.00	54	117	120	10/4/14 11:15 AM	10/4/14 11:30 AM	124	124
	1b	10/4/14 11:45 AM	10/4/14 1:45 PM	2.00	118	118	120				
	2	10/11/14 6:15 AM	10/11/14 7:15 AM	1.00	19	54	120	N/A	N/A	N/A	N/A
	3	10/22/14 7:30 AM***	10/22/14 10:15 AM	2.75	106	111	120	N/A	N/A	N/A	N/A
NOVEMBER	1	11/6/14 11:15 AM	11/6/14 12:00 PM	0.75	64	70	120	N/A	N/A	N/A	N/A
	2a	11/17/14 5:45 AM	11/17/14 6:45 AM	1.00	92	108	120	N/A	N/A	N/A	N/A
	2b	11/17/14 1:15 PM	11/17/14 2:30 PM	1.25	70	119	120	11/17/14 2:45 PM	11/17/14 3:30 PM	132	128
	2c	11/17/14 3:45 PM	11/17/14 4:30 PM	0.75	69	115	120				
	3	11/24/14 4:00 AM	11/24/14 5:00 AM	1.00	38	88	120	N/A	N/A	N/A	N/A
	4a	11/26/14 9:30 AM	11/26/14 1:00 PM	3.50	89	117	120	N/A	N/A	N/A	N/A
	4b	11/26/14 2:00 PM	11/26/14 6:30 PM	4.50	98	119	120	N/A	N/A	N/A	N/A
DECEMBER	1a	12/5/14 10:15 PM	12/5/14 11:00 PM	0.75	78	88	120	N/A	N/A	N/A	N/A
	1b	12/5/14 11:30 PM	12/6/14 12:15 AM	0.75	88	88	120				
	2a	12/6/14 12:15 PM	12/6/14 1:15 PM	1.00	47	71	120	N/A	N/A	N/A	N/A
	2b	12/6/14 2:15 PM	12/6/14 7:00 PM	4.75	88	109	120				
	2c	12/6/14 7:15 PM	12/6/14 10:15 PM	3.00	105	105	120				
	2d	12/6/14 11:00 PM	12/7/14 1:00 AM	2.00	86	93	120				
	3a	12/9/14 4:30 AM	12/9/14 8:15 AM	3.75	40	119	120	12/9/14 8:30 AM	12/9/14 1:30 PM	133	130
	3b	12/9/14 1:45 PM	12/9/14 3:30 PM	1.75	117	117	120				
	4	12/16/14 10:00 PM	12/16/14 10:45 PM	0.75	28	65	120	N/A	N/A	N/A	N/A
	5a	12/24/14 10:45 AM	12/24/14 11:30 AM	0.75	85	117	120	12/24/14 11:45 AM	12/24/14 12:30 PM	133	127
	5b	12/24/14 12:45 PM	12/24/14 1:15 PM	0.50	116	116	120	12/24/14 1:30 PM	12/24/14 2:30 PM	131	125
	5c	12/24/14 2:45 PM	12/24/14 3:00 PM	0.25	114	114	120				
RED HOOK											
RH02											
	No Potential CSO Discharges Outside the Period of a Critical Wet Weather Event in Reporting Period										
RH20											
	No Potential CSO Discharges Outside the Period of a Critical Wet Weather Event in Reporting Period										

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
TALLMAN ISLAND											
TI09											
JUNE	1	06/05/14 7:30 AM	06/05/2014 12:15 PM	4.75	95	150	160	n/a	n/a	n/a	n/a
	2a	06/09/14 8:00 AM	06/09/2014 08:30 AM	0.50	130	146	160	06/09/2014 8:45 AM	06/09/2014 9:00 AM	164	163
	2b	06/09/14 9:15 AM	06/09/2014 09:30 AM	0.25	155	155	160	06/09/2014 9:45 AM	06/09/2014 11:00 AM	171	169
	2c	06/09/14 11:15 AM	06/09/2014 01:00 PM	1.75	155	155	160				
	3	06/13/14 10:00 AM	06/13/2014 12:30 PM	2.50	110	152	160	n/a	n/a	n/a	n/a
	4a	06/13/14 6:45 PM	06/13/2014 08:15 PM	1.50	79	155	160	06/13/2014 8:30 PM	06/13/2014 8:30 PM	160	160
	4b	06/13/14 8:45 PM	06/13/2014 10:30 PM	1.75	154	154					
JULY	1	07/28/14 4:45 AM	07/28/2014 05:15 AM	0.50	129	129	160	N/A	N/A	N/A	N/A
AUGUST	1	08/02/14 8:45 AM	08/02/2014 10:00 AM	1.25	134	138	160	08/02/2014 8:45 AM	08/02/2014 10:15 AM	139**	133*
	2a	08/13/14 1:30 AM	08/13/2014 03:45 AM	2.25	126	158	160	08/13/2014 4:00 AM	08/13/2014 4:00 AM	161	161
	2b	08/13/14 4:15 AM	08/13/2014 04:45 AM	0.50	158	158	160	08/13/2014 05:00 AM	08/13/2014 05:45 AM	162	161
	2c	08/13/14 6:00 AM	08/13/2014 07:30 AM	1.50	158	158	160				
	3a	08/22/14 12:45 AM	08/22/2014 12:45 AM	0.00	99	99	160	08/22/2014 1:00 AM	08/22/2014 01:00 AM	163	163
	3b	08/22/14 1:15 AM	08/22/2014 03:00 AM	1.75	159	159	160				
	4a	08/31/14 5:30 PM	08/31/2014 05:45 PM	0.25	93	148	159	08/31/2014 6:00 PM	08/31/2014 06:00 PM	161	161
	4b	08/31/14 6:15 PM	08/31/2014 08:00 PM	1.75	152	152	159				
SEPTEMBER	1	09/16/14 11:00 AM	09/16/2014 01:15 PM	2.25	147	153	160	N/A	N/A	N/A	N/A
OCTOBER	1a	10/4/14 10:45 AM	10/4/14 11:30 AM	0.75	139	158	160	10/4/14 11:45 AM	10/4/14 1:15 PM	165	162
	1b	10/4/14 1:30 PM	10/4/14 3:45 PM	2.25	155	155	160				
	2	10/16/14 4:45 AM	10/16/14 7:30 AM	2.75	130	153	160	N/A	N/A	N/A	N/A
	3a	10/22/14 5:30 AM	10/22/14 8:15 AM	2.75	137	146	160	N/A	N/A	N/A	N/A
	3b	10/22/14 9:00 AM	10/22/14 11:30 AM	2.50	138	149	160				
	4a	10/22/14 8:30 PM	10/22/14 11:00 PM	2.50	139	159	160	10/22/14 11:15 PM	10/23/14 12:00 AM	164	163
	4b	10/23/14 12:15 AM	10/23/14 1:30 AM	1.25	157	157	160				
NOVEMBER	1a	11/17/14 6:00 AM	11/17/14 10:00 AM	4.00	154	155	160	N/A	N/A	N/A	N/A
	1b	11/17/14 2:00 PM	11/17/14 2:45 PM	0.75	131	158	160	11/17/14 3:00 PM	11/17/14 4:30 PM	168	165
	1c	11/17/14 4:45 PM	11/17/14 7:15 PM	2.50	148	148	160				
	2	11/24/14 4:30 AM	11/24/14 6:30 AM	2.00	126	152	160	N/A	N/A	N/A	N/A
	3a	11/26/14 9:45 AM	11/26/14 4:30 PM	6.75	126	156	160	11/26/14 4:45 PM	11/26/14 4:45 PM	161	161
	3b	11/26/14 5:00 PM	11/26/14 10:15 PM	5.25	150	150	160				
DECEMBER	1	12/5/14 10:15 PM	12/6/14 2:15 AM	4.00	128	156	160	N/A	N/A	N/A	N/A
	2	12/6/14 12:45 PM	12/7/14 2:00 AM	13.25	105	156	160	N/A	N/A	N/A	N/A
	3a	12/9/14 6:15 AM	12/9/14 6:30 AM	0.25	92	114	159	12/9/14 6:45 AM	12/9/14 6:45 AM	161	161
	3b	12/9/14 7:00 AM	12/9/14 7:00 AM	0.00	153	153	159	12/9/14 7:15 AM	12/9/14 6:15 PM	167	155*
	3c	12/9/14 6:30 PM	12/9/14 8:00 PM	1.50	158	158	159	N/A	N/A	N/A	N/A
	4	12/24/14 12:00 PM	12/24/14 7:45 PM	7.75	122	155	160	N/A	N/A	N/A	N/A
TI10A											
	No Potential CSO Discharges Outside the Period of a Critical Wet Weather Event in Reporting Period										

Key Regulators Monitoring Report - CY2014 Summary

Regulator #	Potential CSO Discharges Outside the Period of a Critical Wet Weather Event						WWTP Event Capacity (MGD)	Critical Wet Weather Event			
	Event #	Start Time	End Time	Duration (hrs)	WWTP Flow at Start (MGD)	WWTP Max Flow (MGD)		Start Time	End Time	WWTP Event Max Flow (MGD)	WWTP Event Avg Flow (MGD)
WARDS ISLAND											
WIB53											
AUGUST	1	08/13/14 5:00 AM	08/13/2014 05:45 AM	0.75	351	381	463	08/13/2014 2:30 AM	08/13/2014 04:00 AM	351**	309*
	2	08/22/14 2:30 AM	08/22/2014 02:30 AM	0.00	284	284	420	08/22/2014 12:30 AM	08/22/2014 02:15 AM	324**	299*
SEPTEMBER	1	09/13/14 5:00 PM	09/13/2014 07:45 PM	2.75	137	305	327 / 275	09/13/2014 4:15 PM	09/13/2014 07:45 PM	352**	233*
	2	09/16/14 9:45 AM	09/16/2014 10:30 AM	0.75	283	336	367	09/16/2014 9:15 AM	09/16/2014 09:30 AM	372	370
OCTOBER	2	10/16/14 9:00 AM	10/16/14 9:30 AM	0.50	293	293	327	10/15/14 10:00 PM	10/16/14 8:45 AM	375**	215*
NOVEMBER	1	11/24/14 3:45 AM	11/24/14 3:45 AM	0.00	417	417	463	11/24/14 4:00 AM	11/24/14 8:45 AM	512	356*
DECEMBER	1	12/24/14 3:45 PM	12/24/14 7:15 PM	3.50	284	324	370	12/24/14 10:45 AM	12/24/14 3:30 PM	364**	329*
WIB67											
	No Potential CSO Discharges Outside the Period of a Critical Wet Weather Event in Reporting Period										
WIM23											
	No Potential CSO Discharges Outside the Period of a Critical Wet Weather Event in Reporting Period										

NOTES

A system crash on July 14, 2014 impacted the SCADA historian that stored telemetry data. The system was restored on July 19, 2014. Because the July regulator telemetry data had not been downloaded prior to the system crash, DEP was not able to recover the data from July 1 to July 18, 2014, therefore this monthly report submittal has a data gap for that period.

* "WWTP Event Average Flow" values reported with an asterisk (*) had an average flow during the critical wet weather event that was less than the wet weather flow requirement ("WWTP Event Capacity"). These events will be reported in the Wet Weather Quarterly Report submittal.

** "WWTP Event Maximum Flow" values reported with two asterisks (**) had a maximum flow during the critical wet weather event that was less than the wet weather flow requirement ("WWTP Event Capacity"), see below:
- NORTH RIVER: During the rain event on August 13, 2014, North River WWTP throtted at less than the wet weather flow requirement due to critical equipment outage for less than 48 hours, see Cancellation of Report of Non-Compliance Item No. 5334 letter dated August 18, 2014 for further information.
- TALLMAN ISLAND: During the rain event on August 2, 2014, Tallman Island WWTP throttled at less than the wet weather flow requirement, see Report of Non-Compliance Item No. 5331 letter dated August 7, 2014 for further information.
- WARDS ISLAND: During the rain event on August 13, 2014, Wards Island WWTP throttled at less than the wet weather flow requirement, see Report of Non-Compliance Item No. 5335 letter dated August 18, 2014 for further information.
- WARDS ISLAND: During the rain event on August 22, 2014, Wards Island WWTP throttled at less than the wet weather flow requirement, see Report of Non-Compliance Item No. 5338 letter dated August 27, 2014 for further information.
- WARDS ISLAND: During the rain event on September 13, 2014, Wards Island WWTP throttled at less than the previosuly requested wet weather flow requirement of 420 MGD, see Report of Non-Compliance Item No. 5340 letter dated September 18, 2014 for further information.
- WARDS ISLAND: During the rain event on October 15-16, 2014, Wards Island WWTP throttled at less than the previosuly requested wet weather flow requirement of 463 MGDdue to critical equipment outage for less than 48 hours, see Cancellation of Report of Non-Compliance Item No. 5344 letter dated October 21, 2014 for further information.
- WARDS ISLAND: During the rain event on December 24, 2014, Wards Island WWTP throttled at less than the previosuly requested wet weather flow requirement of 370 MGD, see Report of Non-Compliance Item No. 5351 letter dated December 29, 2014 for further information.

*** PR-13E: There was a loss of communication with PR-13E from 10/14/14 to 10/17/14 and then periodically from 10/21/14 to 10/25/14. Therefore, there may have been missed potential CSO Events during this time particularly on 10/16/14 which had events at several other regulators. Additionally, the Potential CSO Event on 10/22/14 most likely started earlier than the reported 7:30 AM Start Time, as this was the time communication was temporarily restored.

**** OH-06: Data is not available do to a data quality issue. A revised report will be submitted if necessary once available. (October 2014)

Appendix 3.2

CY2014 Critical Wet Weather Event Summary

26TH WARD - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
2/13/2014 - 2/14/2014	170	NO	n/a	n/a	n/a	n/a	2/13/2014	10:00 PM	2/13/2014	10:00 PM	170	170	n/a
		YES	165	165	160	n/a	2/13/2014	10:30 PM	2/14/2014	12:15 AM	165	160	WW855
3/19/2014 - 3/20/2014	170	YES	159	159	156	n/a	3/20/2014	12:00 AM	3/20/2014	12:45 AM	159	156	WW864
3/29/2014 - 3/30/2014	170	YES	177	188	186	n/a	3/29/2014	7:00 PM	3/30/2014	5:45 AM	188	185	n/a
4/26/2014	170	YES	128	142	109	n/a	4/26/2014	4:15 AM	4/26/2014	11:00 AM	142	109	WW870
4/30/2014 - 5/1/2014	170	YES	186	186	173	n/a	4/30/2014	12:00 PM	4/30/2014	3:30 PM	190	174	n/a
			184	191	182	n/a	4/30/2014	5:00 PM	5/1/2014	4:30 AM	191	182	n/a
5/10/2014	170	YES	144	176	159	n/a	5/10/2014	3:30 PM	5/10/2014	5:30 PM	176	159	WW871
5/16/2014 - 5/17/2014	170	YES	174	174	161	n/a	5/16/2014	9:15 PM	5/17/2014	1:30 AM	174	162	WW872
5/23/2014 - 5/24/2014	170	NO	n/a	n/a	n/a	n/a	5/23/2014	11:15 PM	5/23/2014	11:15 PM	171	171	n/a
		YES	159	159	150	5319	5/23/2014	11:45 PM	5/24/2014	2:30 AM	159	150	WW873
6/9/2014	170	YES	185	185	176	n/a	6/9/2014	8:15 AM	6/9/2014	11:15 AM	187	177	n/a
6/13/2014	170	YES	174	183	180	n/a	6/13/2014	9:45 AM	6/13/2014	11:30 AM	183	179	n/a
			171	171	168	n/a	6/13/2014	7:15 PM	6/13/2014	9:45 PM	171	168	WW1025
7/2/14	170	NO	n/a	n/a	n/a	n/a	7/2/2014	8:45 PM	7/2/2014	10:15 PM	185	181	n/a
7/14/2014 - 7/15/2014	170	YES	192	209	185	n/a	7/14/2014	10:30 PM	7/15/2014	12:30 AM	209	184	n/a
			173	173	168	n/a	7/15/2014	3:00 PM	7/15/2014	4:15 PM	173	168	WW1026
			170	170	166	n/a	07/15/2014	8:45 PM	07/15/2014	10:00 PM	170	166	WW1027
08/13/14	170	YES	174	174	154	n/a	08/13/2014	3:15 AM	08/13/2014	5:45 AM	174	154	WW1013
08/22/2014	170	NO	n/a	n/a	n/a	n/a	08/22/2014	1:00 AM	08/22/2014	1:00 AM	172	172	n/a
10/4/2014	170	YES	174	174	171	n/a	10/4/2014	11:00 AM	10/4/2014	12:45 PM	174	171	n/a
10/16/2014	170	YES	172	172	170	n/a	10/16/2014	4:45 AM	10/16/2014	5:45 AM	172	171	n/a
10/22/2014	170	YES	175	175	171	n/a	10/22/2014	5:15 AM	10/22/2014	09:00 AM	175	171	n/a
11/17/2014	170	YES	180	202	175	n/a	11/17/2014	1:30 PM	11/17/2014	4:45 PM	202	175	n/a
11/26/2014	170	NO	n/a	181	181	n/a	11/26/2014	11:45 AM	11/26/2014	11:45 AM	181	181	n/a
12/06/2014	170	NO	n/a	n/a	n/a	n/a	12/06/2014	3:15 PM	12/06/2014	4:45 PM	184	177	n/a
12/09/2014	170	YES	184	184	174	n/a	12/09/2014	6:15 AM	12/09/2014	4:00 PM	184	174	n/a

BOWERY BAY - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	300	NO	n/a	n/a	n/a	n/a	1/6/2014	2:30 AM	1/6/2014	3:00 AM	317	308	n/a
							1/6/2014	9:45 AM	1/6/2014	11:00 AM	308	304	n/a
1/11/2014	300	NO	n/a	n/a	n/a	n/a	1/11/2014	7:00 PM	1/11/2014	8:00 PM	320	308	n/a
2/13/2014 - 2/14/2014	300	NO	n/a	n/a	n/a	n/a	2/13/2014	10:00PM	2/14/2014	1:30 AM	327	313	n/a
2/19/2014	300	NO	n/a	n/a	n/a	n/a	2/19/2014	2:00 PM	2/19/2014	3:00 PM	324	319	n/a
3/29/2014 - 3/30/2014	300	NO	n/a	n/a	n/a	n/a	3/29/2014	9:00 PM	3/30/2014	2:30 AM	333	323	n/a
4/15/2014 - 4/16/2014	300	NO	n/a	n/a	n/a	n/a	4/15/2014	10:45 PM	4/16/2014	1:00 AM	368	317	n/a
4/26/2014	300	NO	n/a	n/a	n/a	n/a	4/26/2014	4:00 AM	4/26/2014	5:30 AM	306	302	n/a
4/30/2014 - 5/1/2014	300	NO	n/a	n/a	n/a	n/a	4/30/2014	4:00 AM	4/30/2014	5:00 AM	306	303	n/a
							4/30/2014	5:30 AM	4/30/2014	5:30 AM	302	302	n/a
							4/30/2014	6:45 AM	4/30/2014	7:00 AM	327	320	n/a
							4/30/2014	7:30 AM	4/30/2014	9:30 AM	317	313	n/a
							4/30/2014	11:45 PM	5/01/2014	4:15 AM	386	330	n/a
							5/01/2014	4:45 AM	5/01/2014	4:45 AM	300	300	n/a
5/10/2014	300	NO	n/a	n/a	n/a	n/a	5/10/2014	6:00 PM	5/10/2014	6:00 PM	309	309	n/a
5/16/2014 - 5/17/2014	300	NO	n/a	n/a	n/a	n/a	5/16/2014	9:30 PM	5/17/2014	1:30 AM	342	309	n/a
5/23/2014 - 5/24/2014	300	YES	306	333	299	n/a	5/23/2014	9:45 PM	5/24/2014	4:30 AM	333	299	n/a
6/5/2014	300	NO	n/a	n/a	n/a	n/a	6/5/2014	7:30 AM	6/5/2014	11:45 AM	338	319	n/a
6/9/2014	300	YES	310	314	306	n/a	6/9/2014	7:15 AM	6/9/2014	12:30 PM	314	306	n/a
6/13/2014	300	NO	n/a	n/a	n/a	n/a	6/13/2014	10:00 AM	6/13/2014	10:30 AM	319	315	n/a
							6/13/2014	11:00 AM	6/13/2014	12:45 PM	323	312	n/a
							6/13/2014	7:00 PM	6/13/2014	7:45 PM	310	304	n/a
7/3/2014 - 7/4/2014	300	NO	n/a	n/a	n/a	n/a	07/03/2014	9:45 PM	07/03/2014	10:30 PM	310	305	n/a
7/14/2014 - 7/15/2014	300	NO	n/a	n/a	n/a	n/a	07/14/2014	10:15 PM	07/15/2014	1:45 AM	322	313	n/a
							07/15/2014	3:00 PM	07/15/2014	5:00 PM	318	311	n/a
08/02/2014	300	NO	n/a	n/a	n/a	n/a	08/02/2014	8:30 AM	08/02/2014	8:30 AM	310	310	n/a
08/13/2014	300	NO	n/a	n/a	n/a	n/a	08/13/2014	2:00 AM	08/13/2014	4:15 AM	345	312	n/a
							08/13/2014	4:45 AM	08/13/2014	5:00 AM	306	305	n/a
08/22/2014	300	NO	n/a	n/a	n/a	n/a	08/22/2014	0:45 AM	08/22/2014	2:15 AM	325	311	n/a

BOWERY BAY - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
08/31/2014	300	NO	n/a	n/a	n/a	n/a	08/31/2014	5:45 PM	08/31/2014	6:45 PM	368	323	n/a
							08/31/2014	7:15 PM	08/31/2014	7:15 PM	319	319	n/a
9/16/2014	300	NO	n/a	n/a	n/a	n/a	9/16/2014	10:15 AM	9/16/2014	10:45 AM	316	313	n/a
							9/16/2014	11:45 AM	9/16/2014	12:15 AM	303	301	n/a
10/4/2014	300	NO	n/a	n/a	n/a	n/a	10/4/2014	10:45 AM	10/4/2014	12:15 PM	341	324	n/a
							10/4/2014	1:00 PM	10/4/2014	2:45 PM	311	307	n/a
10/16/2014	300	YES	301	319	310	n/a	10/16/2014	4:45 AM	10/16/2014	7:30 AM	319	310	n/a
10/22/2014	300	NO	n/a	n/a	n/a	n/a	10/22/2014	6:15 AM	10/22/2014	10:45 AM	320	313	n/a
11/17/2014	300	NO	n/a	n/a	n/a	n/a	11/17/2014	5:30 AM	11/17/2014	8:15 AM	312	308	n/a
							11/17/2014	9:00 AM	11/17/2014	9:15 AM	302	301	n/a
							11/17/2014	2:00 PM	11/17/2014	3:15 PM	331	323	n/a
							11/17/2014	7:15 PM	11/17/2014	7:15 PM	328	328	n/a
11/24/2014	300	NO	n/a	n/a	n/a	n/a	11/24/2014	4:15 AM	11/24/2014	5:30 AM	351	318	n/a
11/26/2014	300	NO	n/a	n/a	n/a	n/a	11/26/2014	10:00 AM	11/26/2014	8:00 PM	336	317	n/a
							11/26/2014	8:45 PM	11/26/2014	8:45 PM	357	357	n/a
12/05/2014 - 12/06/2014	300	NO	n/a	n/a	n/a	n/a	12/05/2014	9:45 PM	12/05/2014	9:45 PM	321	321	n/a
		NO	n/a	n/a	n/a	n/a	12/05/2014	11:15 PM	12/06/2014	1:30 AM	311	306	n/a
12/06/2014 - 12/07/2014	300	NO	n/a	n/a	n/a	n/a	12/06/2014	12:45 PM	12/07/2014	1:30 AM	350	316	n/a
12/9/2014	300	NO	n/a	n/a	n/a	n/a	12/09/2014	6:45 AM	12/09/2014	4:30 PM	381	330	n/a
							12/09/2014	5:00 PM	12/09/2014	5:30 PM	313	311	n/a
12/24/2014	300	NO	n/a	n/a	n/a	n/a	12/24/2014	11:00 AM	12/24/2014	11:00 AM	310	310	n/a
							12/24/2014	11:30 AM	12/24/2014	4:00 PM	333	326	n/a

CONEY ISLAND - CY2014 CRITICAL WET WEATHER EVENT SUMMARYSUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
2/13/2014 - 2/14/2014	220	YES	227	227	221	n/a	2/13/2014	11:15 PM	2/14/2014	4:00 AM	227	222	n/a
3/19/2014 - 3/20/2014	220	NO	n/a	n/a	n/a	n/a	3/20/2014	12:15 AM	3/20/2014	12:15 AM	221	221	n/a
							3/20/2014	1:00 AM	3/20/2014	1:00 AM	220	220	n/a
							3/20/2014	1:30 AM	3/20/2014	1:30 AM	222	222	n/a
3/29/2014 - 3/30/2014	220	YES	224	224	223	n/a	3/29/2014	6:00 PM	3/30/2014	9:00 AM	233	225	n/a
3/30/2014	220	NO	n/a	n/a	n/a	n/a	3/30/2014	7:45 PM	3/30/2014	7:45 PM	228	228	n/a
4/26/2014	220	YES	224	224	224	n/a	4/26/2010	5:45 AM	4/26/2014	11:30 AM	225	223	n/a
4/30/2014 - 5/1/2014	220	YES	228	230	226	n/a	4/30/2014	12:00 PM	4/30/2014	1:00 PM	230	226	n/a
5/10/2014	220	YES	225	232	227	n/a	5/10/2014	4:45 PM	5/10/2014	11:15 PM	232	227	n/a
5/16/2014 - 5/17/2014	220	YES	224	235	230	n/a	5/16/2014	11:15 PM	5/17/2014	6:00 AM	235	230	n/a
5/23/2014 - 5/24/2014	220	NO	n/a	n/a	n/a	n/a	5/23/2014	11:15 PM	5/23/2014	11:15 PM	224	224	n/a
		YES	231	232	228	n/a	5/23/2014	11:45 PM	5/24/2014	7:30 AM	232	228	n/a
6/9/2014	220	YES	226	231	227	n/a	6/9/2014	8:30 AM	6/9/2014	5:45 PM	231	227	n/a
6/13/2014	220	YES	228	232	230	n/a	6/13/2014	7:30 PM	6/14/2014	4:00 AM	233	230	n/a
7/2/2014	220	NO	n/a	n/a	n/a	n/a	7/2/2014	10:00 PM	7/2/2014	11:45 PM	230	227	n/a
7/14/2014 - 7/15/2014	220	YES	226	229	227	n/a	7/14/2014	11PM	7/15/2014	5:00 AM	229	227	n/a
7/15/2014 - 7/16/2014	220	YES	227	229	225	n/a	7/15/2014	3:45 PM	7/16/2014	3:30 AM	229	225	n/a
08/13/2014	220	NO	n/a	n/a	n/a	n/a	08/13/2014	3:45 AM	08/13/2014	5:45 AM	228	225	n/a
							08/13/2014	6:30 AM	08/13/2014	1:15 PM	240	233	n/a
10/4/2014	220	YES	224	241	235	n/a	10/4/2014	12:15 PM	10/4/2014	6:45 PM	241	235	n/a
10/16/2014	220	YES	226	238	226	n/a	10/16/2014	5:15 AM	10/16/2014	1:00 PM	238	226	n/a
10/22/2014	220	YES	229	232	228	n/a	10/22/2014	7:00 AM	10/22/2014	4:00 PM	238	228	n/a
11/17/2014	220	YES	230	245	222	n/a	11/17/2014	3:00 PM	11/18/2014	12:30 AM	245	222	n/a
11/26 - 11/27/2014	220	YES	226	228	221	n/a	11/26/2014	2:30 PM	11/27/2014	12:30 AM	235	223	n/a
12/06 - 12/07/2014	220	YES	223	228	222	n/a	12/06/2014	3:30 PM	12/07/2014	5:30 AM	228	222	n/a
12/9/2014	220	YES	225	232	229	n/a	12/09/2014	7:30 AM	12/10/2014	1:00 AM	232	228	n/a
		YES	225	232	228	n/a							
12/24/2014	220	NO	n/a	n/a	n/a	n/a	12/24/2014	4:30 PM	12/24/2014	7:00 PM	233	226	n/a

HUNTS POINT - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/11/2014	400	NO	n/a	n/a	n/a	n/a	1/11/2014	6:30 PM	1/11/2014	6:30 PM	401	401	n/a
2/13/2014 - 2/14/2014	400	NO	n/a	n/a	n/a	n/a	2/13/2014	10:15 PM	2/13/2014	10:45 PM	410	409	n/a
3/19/2014 - 3/20/2014	400	YES	362	400	356	n/a	3/19/2014	11:00PM	3/20/2014	12:30 AM	400	356	WW859
3/29/2014 - 3/30/2014	400	NO	n/a	n/a	n/a	n/a	3/29/2014	10:30 PM	3/29/2014	11:15 PM	405	403	n/a
							3/29/2014	11:45 PM	3/29/2014	11:45 PM	400	400	n/a
							3/30/2014	12:15 AM	3/30/2014	12:15 AM	403	403	n/a
4/7/2014 - 4/8/2014	400	NO	n/a	n/a	n/a	n/a	4/7/2014	9:30 PM	4/7/2014	9:30 PM	408	408	n/a
4/30/2014 - 5/1/2014	400	NO	n/a	n/a	n/a	n/a	4/30/2014	12:15 PM	5/1/2014	4:00 AM	436	411	n/a
5/10/2014	400	NO	n/a	n/a	n/a	n/a	5/10/2014	6:00 PM	5/10/2014	6:00 PM	402	402	n/a
5/16/2014 - 5/17/2014	400	NO	n/a	n/a	n/a	n/a	5/16/2014	10:00 PM	5/17/2014	1:00 AM	426	414	n/a
5/23/2014 - 5/24/2014	400	YES	419	419	402	n/a	5/23/2014	10:15 PM	5/23/2014	11:45 PM	419	402	n/a
	400	NO	n/a	n/a	n/a	n/a	5/24/2014	12:15 AM	5/24/2014	12:30 AM	404	403	n/a
6/5/2014	400	NO	n/a	n/a	n/a	n/a	6/5/2014	7:00 AM	6/5/2014	7:30 AM	412	409	n/a
6/9/2014	400	YES	429	435	416	n/a	6/9/2014	7:00 AM	6/9/2014	11:30 AM	435	416	n/a
6/13/2014	400	YES	422	422	409	n/a	6/13/2014	10:30 AM	6/13/2014	12:30 PM	422	409	n/a
7/3/2014 - 7/4/2014	400	YES	417	417	411	n/a	07/03/2014	08:45 PM	07/03/2014	10:00 PM	417	411	n/a
08/31/2014	400	NO	n/a	n/a	n/a	n/a	08/31/2014	5:30 PM	08/31/2014	6:00 PM	405	403	n/a
10/04/2014	400	NO	n/a	n/a	n/a	n/a	10/04/2014	10:45 AM	10/04/2014	11:00 AM	415	410	n/a
							10/04/2014	12:00 PM	10/04/2014	12:15 PM	404	403	n/a
10/16/2014	400	NO	n/a	n/a	n/a	n/a	10/16/2014	4:45 AM	10/16/2014	5:30 AM	412	405	n/a
							10/16/2014	6:00 AM	10/16/2014	6:15 AM	406	406	n/a
10/22 - 10/23/2014	400	YES	415	415	407	n/a	10/22/2014	11:00 PM	10/23/2014	0:45 AM	415	407	n/a
11/17/2014	400	YES	406	406	402	n/a	11/17/2014	2:30 PM	11/17/2014	3:45 PM	406	402	n/a
11/24/2014	400	NO	n/a	n/a	n/a	n/a	11/24/2014	4:30 AM	11/24/2014	4:45 AM	404	402	n/a
12/5/2014	400	NO	n/a	n/a	n/a	n/a	12/5/2014	11:45 PM	12/5/2014	11:45 PM	401	401	n/a
12/9/2014	400	YES	411	416	405	n/a	12/09/2014	6:45 AM	12/09/2014	5:00 PM	416	405	n/a
12/24/2014	400	NO	n/a	n/a	n/a	n/a	12/24/2014	12:00 PM	12/24/2014	12:15 PM	404	402	n/a
							12/24/2014	2:00 PM	12/24/2014	2:00 PM	400	400	n/a
							12/24/2014	2:30 PM	12/24/2014	3:00 PM	405	402	n/a

JAMAICA - CY2014 CRITICAL WET WEATHER EVENT SUMMARYSUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
3/29/2014 - 3/30/2014	200	NO	n/a	n/a	n/a	n/a	3/30/2014	12:30 AM	3/30/2014	1:45 AM	206	203	n/a
4/30/2014 - 5/1/2014	200	YES	215	216	212	n/a	4/30/2014	7:45 PM	5/1/2014	3:15 AM	216	212	n/a
5/16/2014 - 5/17/2014	200	NO	n/a	n/a	n/a	n/a	5/16/2014	10:45 PM	5/17/2014	12:30 AM	210	205	n/a
08/13/2014	200	NO	n/a	n/a	n/a	n/a	08/13/2014	4:15 AM	08/13/2014	5:30 AM	213	207	n/a
12/09/2014	200	NO	n/a	n/a	n/a	n/a	12/09/2014	8:45 AM	12/09/2014	3:45 PM	220	215	n/a

NEWTOWN CREEK - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information							Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did B/Q Throttle? Yes/No	CCT Flow at Start of B/Q Throttling	Did MPS Throttle? Yes/No	CCT Flow at Start of MPS Throttling	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	620	YES	710	NO	n/a	710	645	n/a	1/6/2014	9:45 AM	1/6/2014	11:15 AM	710	655	n/a
1/11/2014	620	YES	685	NO	n/a	685	659	n/a	1/11/2014	6:30 PM	1/11/2014	8:00 PM	720	666	n/a
2/5/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	2/5/2014	10:00 AM	2/5/2014	10:15 AM	634	627	n/a
2/13/2014 - 2/14/2014	620	NO	n/a	YES	589	734	698	n/a	2/13/2014	10:00 PM	2/14/2014	12:45 AM	734	700	n/a
2/19/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	2/19/2014	1:00 PM	2/19/2014	2:00 PM	719	677	n/a
3/19/2014 - 3/20/2014	620	NO	n/a	YES	538	838	751	n/a	3/19/2014	11:00 PM	3/20/2014	1:45 AM	838	778	n/a
3/29/2014 - 3/30/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	3/29/2014	4:45 PM	3/29/2014	6:15 PM	712	660	n/a
		NO	n/a	YES	802	802	782	n/a	3/29/2014	7:15 PM	3/30/2014	3:00 AM	804	770	n/a
3/30/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	3/30/2014	7:30 PM	3/30/214	7:30 PM	621	621	n/a
4/7/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	4/7/2014	8:45 PM	4/7/2014	10:15 PM	742	828	n/a
4/8/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	4/8/2014	5:30 AM	4/8/2014	6:00 AM	673	636	n/a
4/15/2014 - 4/16/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	4/15/2014	10:15 PM	4/16/2014	12:15 AM	700	666	n/a
4/26/2014	620	NO	n/a	YES	259	747	570	n/a	4/26/2014	4:15 AM	4/26/2014	6:15 AM	801	720	VWV875
4/30/2014 - 5/1/2014	620	YES	744	YES	744	794	745	n/a	4/30/2015	11:30 AM	5/1/2015	3:30 AM	794	738	n/a
5/10/2014	620	NO	n/a	YES	n/a	482	420	n/a	n/a	n/a	n/a	n/a	n/a	n/a	VWV876
5/16/2014 - 5/17/2014	620	YES	710	YES	637	786	732	n/a	5/16/2014	9:30 PM	5/17/2014	1:30 AM	788	727	n/a
5/22/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	5/22/2014	4:30 AM	5/22/2014	5:45 AM	709	662	n/a
5/23/2014 - 5/24/2014	620	NO	n/a	YES	557	748	695	n/a	5/23/2014	8:45 PM	5/24/2014	2:15 AM	748	694	n/a
6/5/2014	620	NO	n/a	YES	412	n/a	n/a	n/a	6/5/2014	8:00 AM	6/5/2014	11:00 AM	745	706	n/a
		YES	722	NO	n/a	n/a	n/a	n/a							
6/9/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	6/9/2015	6:30 AM	6/9/2015	7:45 AM	731	675	n/a
		NO	n/a	YES	697	n/a	n/a	n/a	6/9/2014	8:15 AM	6/9/2014	11:45 AM	831	785	n/a
6/13/2014	620	NO	n/a	YES	428	n/a	n/a	n/a	6/13/2014	9:45 AM	6/13/2014	12:15 PM	706	687	n/a
		YES	717	YES	633	717	675	n/a	6/13/2014	6:45 PM	6/13/2014	9:45 PM	772	686	n/a
07/02/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	7/2/2014	9:00 PM	7/2/2014	9:15 PM	669	652	n/a
7/3/2014 - 7/4/2014	620	YES	637	YES	587	727	687	n/a	7/3/2014	9:15 PM	7/3/2014	10:45 PM	727	681	n/a
7/14/2014	620	NO	n/a	YES	629	n/a	n/a	n/a	7/14/2014	1:15 AM	7/14/2014	2:15 AM	708	667	n/a
7/14/2014 - 7/15/2014	620	YES	702	NO	n/a	n/a	n/a	n/a	7/14/2014	10:45 PM	7/15/2014	1:00 AM	738	706	n/a
07/15/2014	620	NO	n/a	YES	598	n/a	n/a	n/a	7/15/2014	8:45 PM	7/15/2014	9:30 PM	658	639	n/a
07/28/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	7/28/2014	3:00 PM	7/28/2014	3:00 PM	626	626	n/a
8/13/2014	620	YES	725	NO	n/a	n/a	n/a	n/a	08/13/2014	1:30 AM	08/13/2014	4:30 AM	725	694	n/a
08/22/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	08/22/2014	0:45 AM	08/22/2014	1:45 AM	706	663	n/a
8/31/2014	620	NO	n/a	YES	600	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9/16/2014	620	NO	n/a	YES	580	n/a	n/a	n/a	9/16/2014	9:45 AM	9/16/2014	10:45 AM	768	706	n/a

NEWTOWN CREEK - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information							Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did B/Q Throttle? Yes/No	CCT Flow at Start of B/Q Throttling	Did MPS Throttle? Yes/No	CCT Flow at Start of MPS Throttling	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
10/4/2014	620	NO	n/a	YES	669	n/a	n/a	n/a	10/4/2014	10:30 AM	10/4/2014	11:15 AM	694	674	n/a
									10/4/2014	12:15 PM	10/4/2014	2:00 PM	700	655	n/a
10/15/2014	620	NO	n/a	YES	610	n/a	n/a	n/a	10/15/2014	11:15 PM	10/16/2014	12:30 AM	712	678	n/a
10/16/2014	620	NO	n/a	YES	696	n/a	n/a	n/a	10/16/2014	4:45 AM	10/16/2014	6:45 AM	791	738	n/a
10/22/2014	620	NO	n/a	YES	748	n/a	n/a	n/a	10/22/2014	5:30 AM	10/22/2014	10:30 AM	810	708	n/a
10/22 - 10/23/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	10/22/2014	10:00 PM	10/22/2014	10:30 PM	656	641	n/a
		NO	n/a	YES	668	n/a	n/a	n/a	10/22/2014	11:30 PM	10/23/2014	12:45 AM	739	693	n/a
11/17/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	11/17/2014	6:00 AM	11/17/2014	7:15 AM	696	674	n/a
	620	NO	n/a	YES	768	n/a	n/a	n/a	11/17/2014	1:45 PM	11/17/2014	5:30 PM	801	735	n/a
11/24/2014	620	YES	684	NO	n/a	n/a	n/a	n/a	11/24/2014	4:15 AM	11/24/2014	5:45 AM	716	680	n/a
11/26/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	11/26/2014	9:30 AM	11/26/2014	5:15 PM	724	696	n/a
12/05/2014 - 12/06/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	12/05/2014	10:45 PM	12/06/2014	12:45 AM	712	674	n/a
12/06/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	12/06/2014	12:45 PM	12/06/2014	1:45 PM	713	679	n/a
									12/06/2014	3:30 PM	12/06/2014	3:45 PM	704	682	n/a
									12/06/2014	5:30 PM	12/06/2014	6:45 PM	684	648	n/a
									12/06/2014	8:15 PM	12/06/2014	9:45 PM	664	650	n/a
12/07/2014	620	NO	n/a	NO	n/a	n/a	n/a	n/a	12/07/2014	12:30 AM	12/07/2014	12:45 AM	644	636	n/a
12/9/2014	620	YES	716	YES	716	716	633	n/a	12/09/2014	6:30 AM	12/09/2014	5:00 PM	716	637	n/a
12/24/2014	620	NO	n/a	YES	656	n/a	n/a	n/a	12/24/2014	11:00 AM	12/24/2014	2:45 PM	737	703	n/a
	620	NO	n/a	NO	n/a	n/a	n/a	n/a	12/24/2014	3:15 PM	12/24/2014	3:15 PM	686	686	n/a

NORTH RIVER - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	297 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	1/6/2014	2:45 AM	1/6/2014	3:30 AM	329	321	n/a
							1/6/2014	2:00 PM	1/6/2014	2:00 PM	298	298	n/a
1/11/2014	297 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	1/11/2014	6:30 PM	1/11/2014	8:00 PM	352	344	n/a
2/5/2014	297 (1 PST o/s)	YES	163	303	241	n/a	2/5/2014	10:00 AM	2/5/2014	5:00 PM	303	241	WW895
2/13/2014 - 2/14/2014	297 (1 PST o/s)	YES	305	338	306	n/a	2/13/2014	10:15 PM	2/14/2014	3:00 AM	339	313	WW869
3/12/2014 - 3/13/2014	255 (2 PSTs o/s)	NO	n/a	n/a	n/a	n/a	3/12/2014	10:15 PM	3/12/2014	10:30 PM	267	264	n/a
3/19/2014 - 3/20/2014	255 (2 PSTs o/s)	YES	255	294	270	n/a	3/19/2014	10:30 PM	3/20/2014	5:15 AM	294	267	WW867
3/29/2014 - 3/30/2014	300 (1 MSP o/s)	YES	258	320	278	n/a	3/29/2014	3:45 PM	3/30/2014	6:00 AM	340	292	WW868
4/7/2014 - 4/8/2014	297 (1 PST o/s)	YES	297	308	251	n/a	4/7/2014	9:15 PM	4/8/2014	1:00 AM	308	254	n/a
4/15/2014 - 4/16/2014	340	NO	n/a	n/a	n/a	n/a	4/15/2014	11:00 PM	4/15/2014	11:15 PM	349	345	n/a
4/26/2014	340	YES	152	356	293	n/a	4/26/2014	3:30 AM	4/27/2014	8:00 AM	356	293	WW877
4/30/2014 - 5/1/2014	255 (2 MSPs o/s)	YES	262	275	262	n/a	4/30/2014	4:30 AM	5/1/2014	10:00 AM	275	262	WW878
5/10/2014	340	YES	248	268	266	n/a	5/10/2014	6:00 PM	5/10/2014	6:30 PM	268	266	WW879
5/16/2014 - 5/17/2014	340	YES	340	360	338	n/a	5/16/2014	9:45 PM	5/17/2014	2:30 AM	363	346	WW880
5/23/2014 - 5/24/2014	340	YES	345	345	342	n/a	5/23/2014	9:45 PM	5/23/2014	11:30 PM	345	341	n/a
6/5/2014	340	NO	n/a	n/a	n/a	n/a	6/5/2014	7:15 AM	6/5/2014	11:45 AM	354	349	n/a
6/9/2014	340	YES	330	353	328	n/a	6/9/2014	7:00 AM	6/9/2014	2:15 PM	353	329	WW1000
6/13/2014	340	YES	350	350	339	n/a	6/13/2014	10:15 AM	6/13/2014	01:45 PM	359	340	n/a
7/2/2014 - 7/3/2014	255 (2 MSPs o/s)	YES	260	260	248	n/a	07/02/2014	6:45 PM	07/03/2014	2:45 AM	260	248	WW1010
7/3/2014 - 7/4/2014	340	YES	340	340	330	n/a	07/03/2014	8:30 PM	07/04/2014	1:30 AM	340	330	WW1011
7/14/2014	340	NO	n/a	n/a	n/a	n/a	07/14/2014	2:00 AM	07/14/2014	3:00 AM	347	345	n/a
							07/14/2014	10:00 PM	07/14/2014	11:45 PM	352	347	n/a
7/15/2014	340	YES	354	365	318	n/a	07/15/2014	3:15 PM	07/15/2014	10:30 PM	365	331	WW1028
08/13/2014	340	NO	n/a	n/a	n/a	n/a	08/13/2014	3:00 AM	08/13/2014	3:00 AM	340	340	n/a
	340	YES	271	271	265	Cancelled Item No. 5334	08/13/2014	3:30 AM	08/13/2014	6:00 AM	271	265	WW1012
08/22/2014	340	NO	n/a	n/a	n/a	n/a	08/22/2014	1:30 AM	08/22/2014	1:45 AM	348	346	n/a
08/31/2014	340	YES	356	367	306	n/a	08/31/2014	5:30 PM	08/31/2014	8:30 PM	367	317	WW1029
9/16/2014	340	YES	340	357	348	n/a	9/16/2014	10:45 AM	9/16/2014	12:00 PM	357	347	n/a
10/4/2014	340	YES	357	369	326	n/a	10/4/2014	11:30 AM	10/4/2014	4:30 PM	369	326	WW1015

NORTH RIVER - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
10/16/2014	340	YES	348	370	300	n/a	10/16/2014	12:15 AM	10/16/2014	7:45 AM	370	300	WW1016
10/22/2014	340	NO	n/a	n/a	n/a	n/a	10/22/2014	7:15 AM	10/22/2014	7:45 AM	369	360	n/a
							10/22/2014	7:30 PM	10/23/2014	1:00 AM	354	348	n/a
10/23/2014	340	NO	n/a	n/a	n/a	n/a	10/23/2014	10:00 AM	10/23/2014	10:30 AM	356	353	n/a
11/17/2014	340	NO	n/a	n/a	n/a	n/a	11/17/2014	6:00 AM	11/17/2014	6:00 AM	355	355	n/a
	340	YES	355	375	345	n/a	11/17/2014	2:15 PM	11/17/2014	8:45 PM	375	346	n/a
11/24/2014	340	YES	353	353	334	n/a	11/24/2014	4:15 AM	11/24/2014	7:30 AM	353	334	WW1017
11/26/2014	340	YES	359	359	352	n/a	11/26/2014	11:00 AM	11/26/2014	2:15 PM	359	352	n/a
	340	NO	n/a	n/a	n/a	n/a	11/26/2014	4:30 PM	11/26/2014	5:45 PM	347	345	n/a
12/05/2014 - 12/06/2014	340	NO	n/a	n/a	n/a	n/a	12/05/2014	11:30 PM	12/06/2014	12:30 AM	353	348	n/a
12/06/2014	340	NO	n/a	n/a	n/a	n/a	12/06/2014	4:15 PM	12/06/2014	6:15 PM	372	362	n/a
12/9/2014	340	YES	367	383	360	n/a	12/09/2014	7:00 AM	12/09/2014	7:45 PM	383	361	n/a
12/24/2014	340	YES	359	370	350	n/a	12/24/2014	11:30 AM	12/24/2014	4:15 PM	370	350	n/a

OAKWOOD BEACH - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	79.8	NO	n/a	n/a	n/a	n/a	1/6/2014	10:00 AM	1/6/2014	10:00 AM	81	81	n/a
2/13/2014 - 2/14/2014	79.8	NO	n/a	n/a	n/a	n/a	2/13/2014	10:00 PM	2/14/2014	1:00 AM	84	83	n/a
2/21/2014	79.8	NO	n/a	n/a	n/a	n/a	2/21/2014	8:15 PM	2/21/2014	9:30 PM	81	81	n/a
3/29/2014 - 3/30/2014	79.8	NO	n/a	n/a	n/a	n/a	3/29/2014	7:45 PM	3/30/2014	6:45 AM	129	111	n/a
							3/30/2014	7:30 AM	3/30/2014	9:30 AM	111	101	n/a
							3/30/2014	10:15 AM	3/30/2014	10:15 AM	82	82	n/a
							3/30/2014	1:00 PM	3/30/2014	4:00 PM	85	82	n/a
4/30/2014 - 5/1/2014	79.8	YES	unknown	unknown	unknown	n/a	4/30/2014	12:45 PM	5/1/2014	3:00 PM	117	101	n/a
6/9/2014	79.8	NO	n/a	n/a	n/a	n/a	6/9/2014	7:45 AM	6/9/2014	12:30 PM	107	98	n/a
6/13/2014 - 6/14/2014	79.8	NO	n/a	n/a	n/a	n/a	6/13/2014	7:30 PM	6/14/2014	12:15 AM	118	100	n/a
7/2/2014	79.8	NO	n/a	n/a	n/a	n/a	7/2/2014	10:00 PM	7/2/2014	11:00 PM	87	86	n/a
7/14/2014 - 7/15/2014	79.8	NO	n/a	n/a	n/a	n/a	7/14/2014	9:45 PM	7/15/2014	2:00 AM	109	100	n/a
12/9/2014	79.8	NO	n/a	n/a	n/a	n/a	12/9/2014	8:00 AM	12/9/2014	4:45 PM	112	103	n/a

OWLS HEAD - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	240	NO	n/a	n/a	n/a	n/a	1/6/2014	1:00 AM	1/6/2014	3:00 AM	243	241	n/a
	240	YES	255	255	246	n/a	1/6/2014	9:45 AM	1/6/2014	12:15 PM	255	246	n/a
1/11/2014	240	NO	n/a	n/a	n/a	n/a	1/11/2014	6:00 PM	1/11/2014	8:30 PM	256	251	n/a
1/14/2014	240	NO	n/a	n/a	n/a	n/a	1/14/2014	3:45 PM	1/14/2014	5:30 PM	252	245	n/a
2/5/2014	240	YES	257	257	247	n/a	2/5/2014	10:00 AM	2/5/2014	4:00 PM	259	247	n/a
2/13/2014 - 2/14/2014	240	YES	255	255	247	n/a	2/13/2014	10:00 PM	2/14/2014	1:15 AM	255	247	n/a
2/19/2014	240	YES	257	257	250	n/a	2/19/2014	1:00 PM	2/19/2014	4:00 PM	257	248	n/a
2/21/2014	240	NO	n/a	n/a	n/a	n/a	2/21/2014	4:15 PM	2/21/2014	5:45 PM	247	243	n/a
3/19/2014 - 3/20/2014	240	YES	247	n/a	n/a	n/a	3/19/2014	10:30 PM	3/20/2014	2:15 AM	262	250	n/a
3/29/2014 - 3/30/2014	240	YES	257	260	256	n/a	3/29/2014	2:15 PM	3/30/2014	3:15 AM	265	260	n/a
3/30/2014	240	YES	257	257	247	n/a	3/30/2014	6:45 PM	3/30/2014	9:30 PM	260	254	n/a
4/7/2014 - 4/8/2014	240	NO	n/a	n/a	n/a	n/a	4/7/2014	9:00 PM	4/7/2014	11:00 PM	253	249	n/a
							4/8/2014	6:00 AM	4/8/2014	7:15 AM	242	241	n/a
4/15/2014 - 4/16/2014	240	NO	n/a	n/a	n/a	n/a	4/15/2014	9:30 PM	4/16/2014	2:30 AM	262	252	n/a
4/26/2014	240	NO	n/a	n/a	n/a	n/a	4/26/2014	3:45 AM	4/26/2014	7:15 AM	260	253	n/a
4/30/2014	240	YES	257	258	253	n/a	4/30/2014	6:15 AM	5/1/2014	3:45 AM	262	255	n/a
4/30/2014 - 5/1/2014	240	YES	258	262	257	n/a							
5/8/2014	240	NO	n/a	n/a	n/a	n/a	5/8/2014	5:15 AM	5/8/2014	6:45 AM	262	252	n/a
							5/8/2014	8:45 AM	5/8/2014	9:15 AM	246	243	n/a
5/10/2014	240	YES	150	261	236	n/a	5/10/2014	3:15 PM	5/10/2014	6:15 PM	262	246	WW882
5/16/2014 - 5/17/2014	240	YES	260	262	251	n/a	5/16/2014	9:45 PM	5/17/2014	1:30 AM	262	254	n/a
5/23/2014 - 5/24/2014	180 (1 PST o/s)	YES	191	212	204	n/a	5/23/2014	8:45 PM	5/24/2014	4:30 AM	212	204	WW896
6/3/2014	180 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	6/3/2014	7:45 PM	6/3/2014	9:15 PM	204	198	n/a
6/5/2014	180 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	6/5/2014	8:45 AM	6/5/2014	1:30 PM	217	206	n/a
6/9/2014	180 (1 PST o/s)	YES	215	209	195	n/a	6/9/2014	6:15 AM	6/9/2014	12:45 PM	215	195	n/a
6/13/2014	240	YES	260	262	259	n/a	6/13/2014	9:15 AM	6/13/2014	10:30 AM	264	258	n/a
	240	YES	245	262	260	n/a	6/13/2014	7:00 PM	6/13/2014	11:15 PM	262	256	n/a
7/2/2014	240	YES	251	251	245	n/a	7/2/2014	8:15 PM	7/3/2014	11:00 AM	251	245	n/a
7/14/2014	240	NO	n/a	n/a	n/a	n/a	7/14/2014	2:15 AM	7/14/2014	3:00 AM	241	241	n/a

OWLS HEAD - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
7/14/2014 - 7/15/2014	240	YES	240	261	255	n/a	7/14/2014	10:00 PM	7/15/2014	1:00 AM	261	255	n/a
7/15/2014	240	NO	n/a	n/a	n/a	n/a	7/15/2014	4:00 PM	7/15/2014	5:00 PM	248	245	n/a
							7/15/2014	8:00 PM	7/15/2014	11:00 PM	251	248	n/a
8/2/2014	240	NO	n/a	n/a	n/a	n/a	8/2/2014	8:30 AM	8/2/2014	9:15 AM	259	250	n/a
8/13/2014	240	YES	256	262	256	n/a	8/13/2014	12:30 AM	8/13/2014	6:15 AM	262	255	n/a
8/22/2014	180 (1 PST o/s)	YES	202	202	187	n/a	8/22/2014	12:15 AM	8/22/2014	6:00 AM	196	189	n/a
9/13/2014	240	NO	n/a	n/a	n/a	n/a	9/13/2014	6:00 PM	9/13/2014	6:00 PM	240	240	n/a
9/16/2014	240	NO	n/a	n/a	n/a	n/a	9/16/2014	9:00 AM	9/16/2014	9:45 AM	249	246	n/a
							9/16/2014	10:30 AM	9/16/2014	11:00 AM	240	240	n/a
9/25/2014	240	NO	n/a	n/a	n/a	n/a	9/25/2014	9:15 AM	9/25/2014	9:45 AM	247	243	n/a
10/4/2014	240	YES	257	248	246	n/a	10/4/2014	10:30 AM	10/4/2014	3:30 PM	258	246	n/a
10/11/2014	240	NO	n/a	n/a	n/a	n/a	10/11/2014	7:45 AM	10/11/2014	7:45 AM	242	242	n/a
							10/11/2014	10:15 AM	10/11/2014	11:45 AM	250	246	n/a
10/15 - 10/16/2014	240	NO	n/a	n/a	n/a	n/a	10/15/2014	10:45 PM	10/16/2014	1:30 AM	259	251	n/a
10/16/2014	240	YES	252	254	250	n/a	10/16/2014	4:45 AM	10/16/2014	7:30 AM	254	249	n/a
10/22/2014	240	YES	259	259	250	n/a	10/22/2014	5:15 AM	10/22/2014	12:15 PM	262	252	n/a
10/22/2014 - 10/23/2014	240	NO	n/a	n/a	n/a	n/a	10/22/2014	10:45 PM	10/23/2014	1:15 AM	260	255	n/a
11/1/2014	240	NO	n/a	n/a	n/a	n/a	11/1/2014	11:30 AM	11/1/2014	4:30 PM	262	253	n/a
11/6/2014	240	NO	n/a	n/a	n/a	n/a	11/6/2014	9:15 AM	11/6/2014	12:45 PM	253	247	n/a
11/17/2014	240	NO	n/a	n/a	n/a	n/a	11/17/2014	5:45 AM	11/17/2014	9:45 AM	261	252	n/a
	180 (1 PST o/s)	YES	241	241	190	n/a	11/17/2015	1:00 PM	11/17/2015	8:45 PM	241	190	n/a
11/26/2014	240	YES	258	258	248	n/a	11/26/2014	9:00 AM	11/26/2014	9:00 PM	258	247	n/a
12/3/2014	240	NO	n/a	n/a	n/a	n/a	12/3/2014	12:00 AM	12/3/2014	12:30 AM	245	244	n/a
12/5/2014	240	NO	n/a	n/a	n/a	n/a	12/5/2014	8:45 PM	12/6/2014	1:30 AM	259	252	n/a
12/6/2014	240	NO	n/a	n/a	n/a	n/a	12/6/2014	1:00 PM	12/6/2014	3:00 PM	250	247	n/a
							12/6/2014	4:00 PM	12/5/2014	2:00 AM	256	251	n/a
12/9/2014	240	YES	265	265	253	n/a	12/9/2014	5:30 AM	12/9/2014	5:15 PM	265	253	n/a
12/16 - 12/17/2014	240	NO	n/a	n/a	n/a	n/a	12/16/2014	11:45 PM	12/17/2014	1:00 AM	248	245	n/a
12/24/2014	240	YES	257	259	247	n/a	12/24/2014	11:00 AM	12/24/2014	4:45 PM	259	247	n/a

PORT RICHMOND - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	120	NO	n/a	n/a	n/a	n/a	1/6/2014	10:00 AM	1/6/2014	11:15 AM	134	132	n/a
3/19/2014 - 3/20/2014	90 (1 PST o/s)	YES	97	97	95	n/a	3/19/2014	11:30 PM	3/20/2014	2:00 AM	97	95	WW865
3/29/2014 - 3/30/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	3/29/2014	4:30 PM	3/29/2014	5:45 PM	98	94	n/a
		YES	96	96	94	n/a	3/29/2014	6:30 PM	3/30/2014	8:00 AM	96	94	WW866
3/30/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	3/30/2014	7:00 PM	3/30/2014	9:00 PM	98	94	n/a
4/26/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	4/26/2014	4:00 AM	4/26/2014	5:00 AM	100	99	n/a
4/30/2014 - 5/1/2014	90 (1 PST o/s)	YES	100	115	104	n/a	4/30/2014	11:30 AM	5/1/2014	3:15 PM	115	103	WW883
5/5/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	5/5/2014	1:00 PM	5/5/2014	1:00 PM	95	95	n/a
5/8/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	5/8/2014	6:00 AM	5/8/2014	6:00 AM	91	91	n/a
5/10/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	5/10/2014	4:00 PM	5/10/2014	6:45 PM	107	97	n/a
5/16/2014 - 5/17/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	5/16/2014	10:00 PM	5/17/2014	1:00 AM	92	91	n/a
5/23/2014 - 5/24/2014	90 (1 PST o/s)	NO	n/a	n/a	n/a	n/a	5/23/2014	11:30 PM	5/24/2014	12:30 AM	93	92	n/a
							5/24/2014	1:30 AM	5/24/2014	2:15 AM	91	90	n/a
6/9/2014	90 (1 PST o/s)	YES	104	104	94	n/a	6/9/2014	8:00 AM	6/9/2014	12:45 PM	104	94	n/a
6/13/2014 - 6/14/2014	90 (1 PST o/s)	YES	109	109	93	n/a	6/14/2014	6:45 PM	6/14/2014	1:00 AM	109	93	n/a
7/2/2014	120	NO	n/a	n/a	n/a	n/a	7/2/2014	9:00 PM	7/2/2014	10:30 PM	133	126	n/a
7/14/2014 - 7/15/2014	120	NO	n/a	n/a	n/a	n/a	7/15/2014	12:00 AM	7/15/2014	12:00 AM	120	120	n/a
7/15/2014	120	NO	n/a	n/a	n/a	n/a	7/15/2014	3:30 PM	7/15/2014	4:45 PM	126	134	n/a
10/4/2014	120	NO	n/a	n/a	n/a	n/a	10/4/2014	11:00 AM	10/4/2014	11:00 AM	120	120	n/a
11/17/2014	120	NO	n/a	n/a	n/a	n/a	11/17/2014	1:45 PM	11/17/2014	2:15 PM	133	126	n/a
							11/17/2014	4:00 PM	11/17/2014	4:00 PM	126	126	n/a
11/26/2014	120	NO	n/a	n/a	n/a	n/a	11/26/2014	10:00 AM	11/26/2014	10:15 AM	125	123	n/a
							11/26/2015	2:45 PM	11/26/2015	3:30 PM	128	124	n/a
12/9/2014	120	YES	133	133	132	n/a	12/9/2014	8:30 AM	12/9/2014	1:30 PM	133	130	n/a
12/24/2014	120	NO	n/a	n/a	n/a	n/a	12/24/2014	11:45 AM	12/24/2014	12:30 PM	133	127	n/a
							12/24/2015	1:30 PM	12/24/2015	2:30 PM	131	125	n/a

RED HOOK - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/11/2014	120	NO	n/a	n/a	n/a	n/a	1/11/2014	6:30 PM	1/11/2014	6:45 PM	123	122	n/a
2/13/2014 - 2/14/2014	120	YES	129	130	125	n/a	2/13/2014	9:45 PM	2/14/2014	12:00 AM	130	125	n/a
3/19/2014 - 3/20/2014	120	YES	130	130	124	n/a	3/19/2014	10:30 PM	3/20/2014	2:00 AM	130	124	n/a
3/29/2014 - 3/30/2014	120	YES	128	130	126	n/a	3/29/2014	7:15 PM	3/30/2014	3:15 AM	130	126	n/a
3/30/2014	120	NO	n/a	n/a	n/a	n/a	3/30/2014	7:00 PM	3/30/2014	7:15 PM	121	121	n/a
4/7/2014 - 4/8/2014	120	NO	n/a	n/a	n/a	n/a	4/7/2014	9:00 PM	4/7/2014	9:30 PM	125	124	n/a
4/26/2014	120	YES	130	130	125	n/a	4/26/2014	3:30 AM	4/26/2014	6:45 AM	130	125	n/a
4/30/2014 - 5/1/2014	120	YES	128	130	125	n/a	4/30/2014	11:15 AM	5/1/2014	3:00 AM	130	125	n/a
5/10/2014	120	YES	130	130	125	n/a	5/10/2014	3:45 PM	5/10/2014	4:45 PM	130	125	n/a
5/16/2014 - 5/17/2014	120	YES	126	129	126	n/a	5/16/2014	9:30 PM	5/17/2014	1:15 AM	129	126	n/a
5/23/2014 - 5/24/2014	120	YES	127	127	123	n/a	5/23/2014	8:30 PM	5/24/2014	2:15 AM	127	123	n/a
6/5/2014	120	YES	130	130	128	n/a	6/5/2014	9:30 AM	6/5/2014	10:45 AM	130	128	n/a
6/9/2014	120	YES	127	128	124	n/a	6/9/2014	8:00 AM	6/9/2014	12:15 PM	128	124	n/a
6/13/2014	120	YES	128	130	126	n/a	6/13/2014	9:30 AM	6/13/2014	12:15 PM	130	126	n/a
		YES	129	130	125	n/a	6/13/2014	6:30 PM	6/13/2014	11:00 PM	130	125	n/a
7/2/2014	120	YES	132	132	126	n/a	7/2/2014	8:00 PM	7/2/2014	11:15 PM	132	126	n/a
7/3/2014	120	YES	131	131	124	n/a	7/3/2014	9:15 PM	7/3/2014	11:15 PM	131	124	n/a
7/14/2014	120	YES	127	127	124	n/a	7/14/2014	1:00 AM	7/14/2014	3:00 AM	127	124	n/a
7/14/2014 - 7/15/2014	120	YES	130	130	123	n/a	7/14/2014	9:30 PM	7/15/2014	2:30 AM	130	123	n/a
7/15/2014	120	YES	130	130	122	n/a	7/15/2014	3:00 PM	7/15/2014	5:45 PM	130	122	n/a
		YES	128	130	122	n/a	7/15/2014	8:00 PM	7/15/2014	11:30 PM	130	123	n/a
7/28/2014	120	NO	n/a	n/a	n/a	n/a	7/28/2014	2:45 AM	7/28/2014	2:45 AM	123	123	n/a
8/12/2014	120	YES	124	124	123	n/a	8/12/2014	8:15 PM	8/12/2014	8:30 PM	124	123	n/a
8/13/2014	120	YES	125	125	123	n/a	8/13/2014	1:15 AM	8/13/2014	5:30 AM	125	123	n/a
8/22/2014	120	YES	125	127	126	n/a	8/22/2014	12:00 AM	8/22/2014	2:15 AM	127	126	n/a
9/16/2014	120	YES	127	127	125	n/a	9/16/2014	9:30 AM	9/16/2014	11:15 AM	127	124	n/a
10/4/2014	120	YES	128	129	126	n/a	10/4/2014	10:15 AM	10/4/2014	2:30 PM	129	126	n/a
10/15 - 10/16/2014	120	YES	123	125	122	n/a	10/15/2014	10:00 PM	10/16/2014	1:00 AM	125	122	n/a
10/16/2014	120	YES	123	126	123	n/a	10/16/2014	4:30 AM	10/16/2015	7:30 AM	126	123	n/a

RED HOOK - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
10/22/2014	120	YES	125	128	123	n/a	10/22/2014	5:00 AM	10/22/2014	11:30 AM	128	123	n/a
10/22 - 10/23/2014	120	YES	124	125	123	n/a	10/22/2014	11:30 PM	10/23/2014	12:30 AM	125	123	n/a
11/17/2014	120	YES	125	129	125	n/a	11/17/2014	1:45 PM	11/17/2014	6:15 PM	129	125	n/a
11/24/2014	120	YES	123	124	122	n/a	11/24/2014	4:15 AM	11/24/2014	5:45 AM	124	122	n/a
11/26/2014	120	YES	125	129	124	n/a	11/26/2014	9:45 AM	11/26/2014	6:15 PM	129	124	n/a
12/06/2014	120	YES	126	126	124	n/a	12/6/2014	12:45 PM	12/6/2014	2:00 PM	126	124	n/a
	120	YES	123	129	125	n/a	12/6/2014	3:15 PM	12/6/2014	7:45 PM	129	124	n/a
12/09/2014	120	YES	122	130	125	n/a	12/9/2014	6:15 AM	12/9/2014	5:15 PM	130	125	n/a
12/24/2014	120	YES	126	129	124	n/a	12/24/2014	10:45 AM	12/24/2014	4:00 PM	129	124	n/a

ROCKAWAY - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event				
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time	Critical Event End Date & Time	Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.

NO EVENTS

TALLMAN ISLAND - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
2/5/2014	120 (7 Godwin o/s)	NO	n/a	n/a	n/a	n/a	2/5/2014	12:15 PM	2/5/2014	12:30 PM	122	122	n/a
							2/5/2014	13:15 PM	2/5/2014	13:30 PM	122	122	n/a
							2/5/2014	14:15 PM	2/5/2014	14:30 PM	121	121	n/a
							2/5/2014	15:30 PM	2/5/2014	15:30 PM	121	121	n/a
							2/5/2014	18:00 PM	2/5/2014	18:00 PM	121	121	n/a
2/13/2014 - 2/14/2014	120 (7 Godwin o/s)	YES	111	111	95	n/a	2/13/2014	10:15 PM	2/14/2014	8:00 AM	111	95	WW856
2/14/2014	120 (7 Godwin o/s)	YES	95	117	99	n/a	2/14/2014	1:45 PM	2/14/2014	7:45 PM	117	98	WW857
2/19/2014	120 (7 Godwin o/s)	NO	n/a	n/a	n/a	n/a	2/19/2014	1:45 PM	2/19/2014	4:00 PM	134	127	n/a
							2/19/2014	4:30 PM	2/19/2014	4:45 PM	129	127	n/a
2/21/2014	120 (7 Godwin o/s)	NO	n/a	n/a	n/a	n/a	2/21/2014	4:45 PM	2/21/2014	7:45 PM	137	130	n/a
3/19/2014 - 3/20/2014	152.5 (2 Godwin o/s)	YES	149	150	144	n/a	3/19/2014	11:30 PM	3/19/2014	11:45 PM	167	160	WW860
							3/20/2014	12:45 AM	3/20/2014	2:15 AM	149	143	
3/29/2014 - 3/30/2014	160	NO	n/a	n/a	n/a	n/a	3/29/2014	11:00 PM	3/29/2014	11:30 PM	162	161	n/a
							3/30/2014	12:00 AM	3/30/2014	12:15 AM	161	161	n/a
							3/30/2014	12:45 AM	3/30/2014	2:00 AM	167	166	n/a
4/30/2014 - 5/1/2014	160	YES	174	174	162	n/a	4/30/2014	10:30 AM	5/1/2014	3:00 AM	174	162	n/a
5/16/2014 - 5/17/2014	160	YES	164	172	160	n/a	5/16/2014	10:30 PM	5/17/2014	12:45 AM	172	160	n/a
6/9/2014	160	NO	n/a	n/a	n/a	n/a	6/9/2014	8:45 AM	6/9/2014	9:00 AM	164	163	n/a
							6/9/2014	9:45 AM	6/9/2014	11:00 AM	171	169	n/a
6/13/2014	160	NO	n/a	n/a	n/a	n/a	6/13/2014	8:30 PM	6/13/2014	8:30 PM	160	160	n/a
8/2/2014	160	YES	139	139	133	5331	8/2/2014	8:45 AM	8/2/2014	10:15 AM	139	133	WW1014
8/13/2014	160	NO	n/a	n/a	n/a	n/a	8/13/2014	4:00 AM	8/13/2014	4:00 AM	161	161	n/a
							8/13/2014	5:00 AM	8/13/2014	5:45 AM	162	161	n/a
8/22/2014	160	NO	n/a	n/a	n/a	n/a	8/22/2014	1:00 AM	8/22/2014	1:00 AM	163	163	n/a
8/31/2014	159 (1 Godwin o/s)	NO	n/a	n/a	n/a	n/a	8/31/2014	6:00 PM	8/31/2014	6:00 PM	161	161	n/a
9/13/2014	160	NO	n/a	n/a	n/a	n/a	9/13/2014	6:30 PM	9/13/2014	6:30 PM	163	163	n/a
10/4/2014	160	YES	165	165	162	n/a	10/4/2014	11:45 AM	10/4/2014	1:15 PM	165	162	n/a
10/22/2014 - 10/23/2014	160	NO	n/a	n/a	n/a	n/a	10/22/2014	11:15 PM	10/23/2014	12:00 AM	164	163	n/a
11/17/2014	160	NO	n/a	n/a	n/a	n/a	11/17/2014	3:00 PM	11/17/2014	4:30 PM	168	165	n/a

TALLMAN ISLAND - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information					Critical Wet Weather Event						
Storm Dates	Event Wet Weather Capacity (MGD)	Did Plant Throttle? Yes/No	Influent Flow at Start of Throttling (MGD)	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
11/26/2014	160	NO	n/a	n/a	n/a	n/a	11/26/2014	4:45 PM	11/26/2014	4:45 PM	161	161	n/a
12/9/2014	160	NO	n/a	n/a	n/a	n/a	12/9/2014	6:45 AM	12/9/2014	6:45 AM	161	161	n/a
	159 (1 Godwin o/s)	YES	152	167	155	n/a	12/9/2014	7:15 AM	12/9/2014	6:30 PM	167	155	WW1018

WARDS ISLAND - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information							Critical Wet Weather Event						
Storm Dates	WET WEATHER PLANT CAPACITY (MGD)	Did MGC Throttle? Yes/No	CCT Flow at Start of MGC Throttling	Did BGC Throttle? Yes/No	CCT Flow at Start of BGCThrottling	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
1/6/2014	413 (1 CCT o/s)	NO	n/a	YES	352	378	361	n/a	n/a	n/a	n/a	n/a	n/a	n/a	VWV851
1/6/2014	413 (1 CCT o/s)	YES	395	YES	388	395	332	n/a	1/6/2014	9:00 AM	1/6/2014	1:30 PM	395	355	VWV852
1/11/2014	413 (1 CCT o/s)	YES	370	YES	370	387	358	n/a	1/11/2014	6:00 PM	1/11/2014	9:15 PM	387	358	VWV853
1/14/2014	413 (1 CCT o/s)	NO	n/a	YES	375	394	390	n/a	n/a	n/a	n/a	n/a	n/a	n/a	VWV854
2/13/2014 - 2/14/2014	420 (2 MSPs o/s)	YES	260	YES	418	418	281	n/a	2/14/2014	12:00 AM	2/14/2014	1:30 PM	351	276	VWV858
3/12/2014 - 3/13/2014	370 (2 Screens o/s)	YES	219	YES	226	323	182	n/a	3/12/2014	6:45 PM	3/13/2014	12:45 AM	323	214	VWV861
3/19/2014 - 3/20/2014	370 (2 Screens o/s)	YES	395	YES	395	395	226	n/a	3/19/2014	8:30 PM	3/20/2014	2:15 AM	395	230	VWV862
3/29/2014 - 3/30/2014	420 (1 Screen o/s)	YES	403	YES	290	426	364	n/a	3/29/2014	8:30 PM	3/29/2014	10:00 PM	423	422	VWV863
									3/29/2014	11:45 PM	3/30/2014	12:15 AM	426	422	
									3/30/2014	1:00 AM	3/30/2014	3:30 AM	409	377	
4/7/2014 - 4/8/2014	370 (2 Screens o/s)	YES	398	YES	425	435	397	n/a	4/7/2014	7:00 PM	4/8/2014	12:15 AM	435	403	VWV885
4/8/2014	370 (2 Screens o/s)	YES	461	YES	478	478	392	n/a	4/8/2014	5:45 AM	4/8/2014	9:30 AM	420	397	VWV886
4/15/2014 - 4/16/2014	440 (2 MSPs o/s)	YES	434	YES	434	436	427	n/a	4/15/2014	9:00 PM	4/16/2014	1:45 AM	436	429	VWV887
4/26/2014	440 (2 MSPs o/s)	YES	347	YES	295	347	305	n/a	4/26/2014	3:45 AM	4/26/2014	6:00 AM	323	302	VWV888
4/30/2014 - 5/1/2014	440 (2 MSPs o/s)	YES	391	YES	402	438	392	n/a	4/30/2014	5:00 AM	4/30/2014	5:30 AM	390	371	VWV889
		YES	432						4/30/2014	11:30 AM	5/1/2014	7:00 AM	438	396	VWV890
5/8/2014	440 (2 MSPs o/s)	NO	n/a	YES	319	319	290	n/a	n/a	n/a	n/a	n/a	n/a	n/a	VWV891
5/10/2014	440 (2 MSPs o/s)	YES	378	YES	364	374	291	n/a	5/10/2014	5:30 PM	5/10/2014	8:45 PM	374	291	VWV892
5/15/2014	463 (1 Screen o/s)	NO	n/a	YES	331	331	266	n/a	n/a	n/a	n/a	n/a	n/a	n/a	VWV893
5/16/2014 - 5/17/2014	463 (1 Screen o/s)	YES	414	YES	414	503	410	n/a	5/16/2014	9:15 PM	5/17/2014	2:30 AM	503	418	VWV893
5/23/2014 - 5/24/2014	463 (1 Screen o/s)	YES	361	YES	531	531	408	n/a	5/23/2014	10:00 PM	5/23/2014	11:15 PM	515	421	VWV894
									5/24/2014	12:00 AM	5/24/2014	1:30 AM	490	458	
6/3/2014	463 (1 Screen o/s)	NO	n/a	YES	340	340	252	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6/5/2014	463 (1 Screen o/s)	YES	314	YES	325	425	373	n/a	6/5/2014	6:30 AM	6/5/2014	11:15 AM	425	373	VWV1001
6/9/2014	463 (1 Screen o/s)	YES	410	YES	392	473	433	n/a	6/9/2014	6:45 AM	6/9/2014	12:30 PM	473	432	VWV1002
6/13/2014	330 (3 MSPs o/s)	YES	303	YES	303	340	330	n/a	6/13/2014	9:45 AM	6/13/2014	3:30 AM	340	330	n/a
	370 (2 BGC o/s)	YES	291	YES	264	316	283	5324	6/13/2014	6:30 PM	6/13/2014	8:30 PM	316	283	VWV1003
7/2/2014	370 (2 Sceens o/s)	YES	318	YES	358	413	253	n/a	7/2/2014	6:00 PM	7/2/2014	11:15 PM	413	266	VWV1004
7/3/2014 - 7/4/2014	370 (2 Sceens o/s)	YES	374	YES	374	441	413	n/a	7/3/2014	7:430PM	7/3/2014	12:00 AM	441	414	n/a
7/4/2014	370 (2 Sceens o/s)	NO	n/a	NO	n/a	n/a	n/a	n/a	7/4/2014	8:00 PM	7/4/2014	10:00 PM	405	398	n/a
7/5/2014	370 (2 Sceens o/s)	NO	n/a	NO	n/a	n/a	n/a	n/a	7/5/2014	12:00 AM	7/5/2014	12:00 AM	377	377	n/a
7/8/2014	370 (2 Sceens o/s)	YES	385	YES	385	493	474	n/a	7/8/2014	1:00 AM	7/8/2014	1:00 AM	398	398	n/a
									7/8/2014	1:30 AM	7/8/2014	2:45 AM	493	430	n/a
7/14/2014	370 (2 Sceens o/s)	YES	357	YES	394	496	523	n/a	7/14/2014	1:00 AM	7/14/2014	3:30 AM	496	383	n/a

WARDS ISLAND - CY2014 CRITICAL WET WEATHER EVENT SUMMARY

		Plant Throttling Information							Critical Wet Weather Event						
Storm Dates	WET WEATHER PLANT CAPACITY (MGD)	Did MGC Throttle? Yes/No	CCT Flow at Start of MGC Throttling	Did BGC Throttle? Yes/No	CCT Flow at Start of BGCThrottling	Throttling Max Flow (MGD)	Throttling Avg Flow (MGD)	Bypass Item No.	Critical Event Start Date & Time		Critical Event End Date & Time		Critical Event Max Flow (MGD)	Critical Event Avg Flow (MGD)	Wet Weather Item No.
7/14/2014 - 7/15/2014	370 (2 Sceens o/s)	YES	400	YES	463	548	371	n/a	7/14/2014	9:00 PM	7/14/2014	9:45 PM	548	498	n/a
									7/15/2014	12:00 AM	7/15/2014	12:30 AM	403	390	
									7/15/2015	1:00 AM	7/15/2015	1:30 AM	397	385	
7/15/2014 - 7/16/2014	370 (2 Sceens o/s)	YES	380	YES	307	463	380	n/a	7/15/2014	3:00 PM	7/16/2014	1:15 AM	522	384	n/a
7/23/2014	370 (2 Sceens o/s)	YES	390	YES	375	413	308	n/a	7/23/2014	9:00 PM	7/23/2014	11:30 PM	475	329	WW1005
8/2/2014	370 (2 Sceens o/s)	NO	n/a	NO	n/a	n/a	n/a	n/a	8/2/2014	7:15 AM	8/2/2014	9:30 AM	407	390	n/a
8/13/2014	463 (1 Screen o/s)	YES	295	YES	319	351	309	5335	8/13/2014	2:30 AM	8/13/2014	4:00 AM	351	309	WW1006
8/13/2014	463 (1 Screen o/s)	NO	n/a	YES	307	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8/22/2014	463 (1 Screen o/s)	YES	304	YES	304	324	299	5338	8/22/2014	12:30 AM	8/22/2014	2:15 AM	324	299	WW1007
8/31/2014	420 (2 Screens o/s)	YES	415	YES	415	449	269	n/a	8/31/2014	5:00 PM	8/31/2014	8:15 PM	449	269	WW1008
9/13/2014	420 275 at 4:25PM	YES	351	YES	351	352	233	5340	9/13/2014	4:15 PM	9/13/2014	7:45 PM	352	233	WW1009
9/16/2014	420 327 at 9:05AM	NO	n/a	YES	372	n/a	n/a	n/a	9/16/2014	9:15 AM	9/16/2014	9:30 AM	372	370	n/a
10/4/2014	463 (1 Screen o/s)	YES	314	YES	262	314	280	5342	10/4/2014	10:30 AM	10/4/2014	3:30 PM	314	280	WW1019
10/15/2014 - 10/16/2014	463, 420 at 9:50PM, 327 at 10:05PM	YES	328	YES	366	375	251	5344 Cancelled	10/15/2014	10:00 PM	10/16/2014	8:45 AM	375	251	WW1020
10/22/2014 - 10/23/2014	463 (1 Screen o/s)	YES	246	YES	246	525	392	n/a	10/22/2014	6:30 PM	10/23/2014	1:45 AM	525	392	WW1021
11/17/2014	463 (1 Screen o/s)	NO	n/a	YES	436	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	463 (1 Screen o/s)	YES	593	YES	593	593	360	n/a	11/17/2014	1:30 PM	11/17/2014	8:15 PM	593	360	WW1022
11/24/2014	463 (1 Screen o/s)	YES	479	YES	479	479	340	n/a	11/24/2014	4:00 AM	11/24/2014	8:45 AM	512	356	WW1023
11/26/2014	463 (1 Screen o/s)	NO	n/a	YES	341	n/a	n/a	n/a	11/26/2014	11:00 AM	11/26/2014	12:00 PM	516	491	n/a
									11/26/2014	12:45 PM	11/26/2014	6:15 PM	504	480	n/a
12/05 - 12/06/2014	463 (1 Screen o/s)	NO	n/a	YES	372	n/a	n/a	n/a	12/5/2014	10:30 PM	12/6/2014	12:15 AM	516	491	n/a
12/06/2014	463 (1 Screen o/s)	YES	560	YES	575	578	475	n/a	12/6/2014	3:15 PM	12/6/2014	10:00 PM	578	476	n/a
12/07/2014	463 (1 Screen o/s)	NO	n/a	NO	n/a	n/a	n/a	n/a	12/7/2014	12:00 AM	12/7/2014	12:45 AM	470	467	n/a
12/9/2014	463 (1 Screen o/s)	YES	572	YES	557	551	467	n/a	12/9/2014	6:30 AM	12/6/2014	5:45 PM	551	468	n/a
12/24/2014	370 (2 Screens o/s)	YES	341	YES	341	364	329	5351	12/24/2014	10:45 AM	12/24/2014	3:30 PM	364	329	WW1024

Appendix 3.3

Estimation of Wet-Weather Capture

3.0 ESTIMATION OF WET-WEATHER CAPTURE

This section provides a description of analyses used to calculate the wet-weather capture of combined-sewage (CS) flow and associated floatables at New York City (NYC) treatment facilities (referred to as Waste Water Treatment Plants, WWTPs) during calendar year (CY) 2014. Section 3.1 describes the difference between runoff capture and combined-sewage capture. Section 3.2 discusses the scenarios used to evaluate capture. Section 3.3 summarizes the modeling approach – an InfoWorks modeling methodology used to calculate flow volume capture for CY2014 at all drainage areas served wholly or partially by combined sewers. Section 3.4 describes the 2014 wet-weather combined-sewage percent capture results for these drainage areas. References are listed in Section 3.5.

EPA issued the current guidance pertaining to the intent and calculation of "combined-sewage capture" in 1995. Prior to that time, a different parameter, known as "runoff capture," was used to assess the operation of the collection/treatment system. As detailed in a subsequent section, runoff capture measured the ratio of runoff treated to runoff collected in a sewer system. For the NYC WWTPs, historically speaking, the runoff capture values were typically about 15 percentage points less than the corresponding CS capture values. The runoff capture remains a useful parameter in the calculation of floatables capture. CS capture has replaced runoff capture as the pertinent measure of flow-capture performance, and as such, runoff capture is no longer reported. However, runoff capture is used in the calculation of floatables capture.

Since 1998 capture of CS floatables has also been calculated and reported. Initially, the basis for this measurement was the floatables passing into combined sewers from the catch basins (see Figure 3-1), but because the catch basins themselves are considered part of the sewer system, an estimate of catch basin retention was added to the floatables-capture calculation. As a result, the basis for floatables capture is now what enters the catch basins.

Historically, capture of flow and floatables has been simulated and reported for three different scenarios. The first simulation scenario reflects actual operation of the collection/treatment system (in terms of the flow rates treated at a WWTP during wet weather) and the actual rainfall (and tides) affecting the system during the subject, calendar-year period. The results of this simulation scenario indicate the actual capture performance for the period.

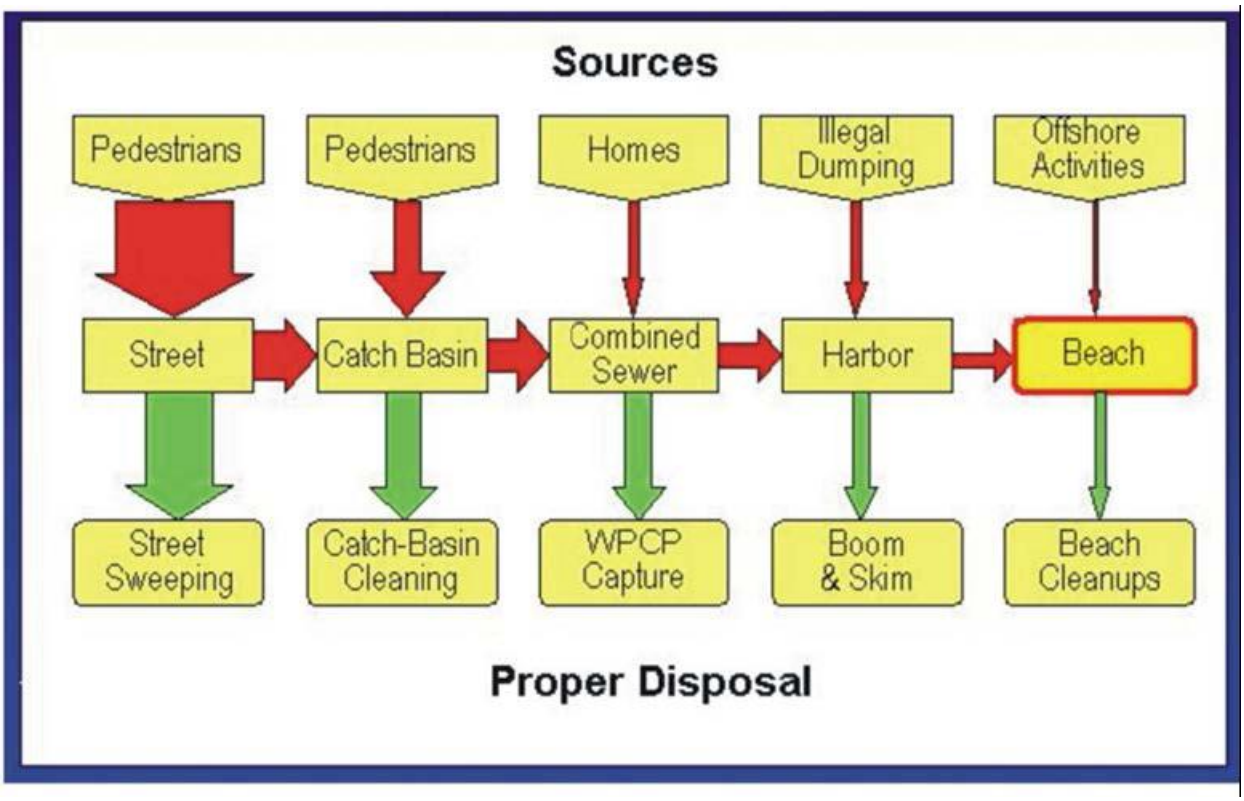


Figure 3-1. Sources and Fate of Floatables in New York City of New York DEP

However, due to natural variations in rainfall patterns, it is difficult to make year-to-year assessments of performance as it relates to the operation of the collection/treatment system. To isolate system performance from these annual rainfall variations, model simulations are also performed using a "standard" rainfall condition (rainfall observed in 1988 at the John F. Kennedy Airport, representing a typical annual precipitation condition in the NYC metropolitan area) and the associated tidal conditions (historically, 1988). Thus, the second simulation scenario reflects actual operation of the collection/treatment system and a standard rainfall/tidal condition. For some WWTPs, DEP will be implementing upgrades to maximize the flow to twice the design dry weather flow levels (2XDDWF), while other WWTPs are already operating at their maximum capacity levels. Therefore, only Scenarios 1 and 2 are pursued and presented in this report.

The methodology for calculation of flow capture has evolved historically with the advent of improved modeling tools and increasing computing power. Initially, flow capture was estimated using the "Statistical Method" (Hydroscience, 1978), an approach relying on drainage area/runoff-coefficient information from a calibrated sewer-system rainfall-runoff model (such as the EPA's Storm Water Management Model, SWMM), but which can be used without the complicated set-up and computational runtimes associated with those models. As it became more feasible to perform capture calculations directly with sewer-system models, the use of the

Statistical Method was discontinued in favor of using RAINMAN, a simplified sewer-system model that itself was cross-calibrated against a dynamic sewer system model (SWMM or one of its commercial counterparts, such as XP-SWMM or InfoWorks) available for a specific drainage area. Finally, as part of the CSO Long Term Control Plan (LTCP) project, DEP adopted an InfoWorks modeling framework to support facility-planning analyses citywide. InfoWorks is a state-of-the-art hydrology and hydraulics model that will provide the most sophisticated and accurate representation of the NYC drainage areas. Although model set up and calibration do require extensive effort, advancements in computing have lessened run-time requirements so that the use of these models becomes reasonable for planning and design-level analyses.

For 2014, the percent-capture analyses utilize the InfoWorks modeling framework for all drainage areas wholly or partially served by combined sewers. Section 3.3 provides a more detailed discussion of the InfoWorks model.

InfoWorks models constructed for various WWTP drainage areas have undergone a major recalibration process in the 2009-11 period and the DEP had submitted a detailed report on this recalibration effort to New York State DEC in June 2012. DEP adopted the updated models to support the capture calculations for CY2014. In addition, the City has worked with DEC to identify JFK2008 as the new "standard" to represent a typical annual precipitation condition in the metropolitan area. This JFK2008 record is a more representative precipitation pattern, based on a statistical analysis of rainfalls occurring in the metropolitan area in the recent past (as recorded at four official gauges maintained by NOAA). Annual total for JFK2008 is 46.3 inches in comparison to the JFK1988 annual total of 40.6 inches. Besides the total annual volume of rainfall, the intensity and number of storms are also critical in the assessment of system performance and analysis of results. Table 3-1 shows these statistics for the old versus new typical precipitation conditions. Based on the model updates and the use of different standard rainfall conditions, the percent capture information presented in this report may not be directly comparable with those reported in previous calendar years.

Table 3-1. NYC-Area Rainfall Statistics, 2008[5]

Gage Location[1]	Period	Number of Storms Avg.	Liquid-Equivalent Precipitation (Rainfall) (inch)			Storm Intensity (inch/hr)		Storm Duration (hour)		Delta[2] (hour)	
			Annual Total	Storm Avg.	Storm COV[3]	Avg.	COV[3]	Avg.	COV[3]	Avg.	COV[3]
Central Park	2008	144	53.95	0.37	1.6	0.0575	1.19	5.69	1.10	61.27	1.07
LaGuardia Airport	2008	137	47.74	0.35	1.58	0.0672	2.24	5.36	1.12	63.81	1.03
JFK Airport	2008	135	47.35	0.35	1.49	0.0621	1.67	5.76	1.07	65.37	1.01
Newark Airport	2008	139	48.45	0.35	1.64	0.0579	1.42	5.64	1.09	63.5	1.09
JFK Airport	"Standard" 1988	100	40.66	0.41	1.25	0.0677	1.54	6.12	0.90	87.86	0.95
Central Park	1955-2008	116	46.71	0.40	1.56	0.0579	1.36	6.57	1.02	76.49	1.12
LaGuardia Airport	1955-2008	115	42.83	0.37	1.56	0.0568	1.43	6.34	1.02	76.57	1.02
JFK Airport	1970-2008	114	42.25	0.37	1.49	0.0573	1.40	6.19	1.01	77.27	1.0
Newark Airport	1955-2008	118	43.78	0.37	1.57	0.0542	1.42	6.43	1.04	74.86	1.02
NYC Metro[4]	Historical					0.0560	1.35				

[1] National Oceanic and Atmospheric Administration Data Center rain gages.
[2] Delta refers to time between storm midpoints.
[3] Coefficient of Variation (average/standard deviation).
[4] Values reported as "Typical for NYC Metropolitan Area , circa 1950 through 1976" (from Hydroscience, 1978)
[5] Statistics calculated using EPA's SYNOP package with inputs for interevent time of 4 hours and zero minimum rainfall depth

3.1 DEFINITIONS OF COMBINED-SEWAGE CAPTURE AND RUNOFF CAPTURE

Previous EPA guidance defined wet-weather capture at combined-sewer treatment facilities in terms of the ratio of runoff captured to the total runoff generated. This ratio, expressed as a percentage, is herein referred to as "runoff capture." For the purposes of this study, the runoff capture is estimated as the ratio of total treated volume of runoff from combined-sewer areas (the sum of the runoff treated by the plant and the runoff treated by any off-line storage facilities) to the total volume of runoff generated from combined-sewer areas during wet weather. More recent EPA guidance (EPA 1995) suggests an alternate definition of capture in terms of both runoff and sanitary sewage. One of the Presumptive Approach criteria is:

> *"The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS [combined-sewer system] during precipitation events on a system-wide annual basis."*

This definition of capture, herein referred to as "combined-sewage capture," is the ratio of CS volume captured at the WWTP to the total runoff and sanitary sewage entering the combined-sewer system during wet-weather periods.

Figure 3-2 presents a schematic representation of both runoff capture and CS capture. With runoff capture, WWTP flow rates exceeding average diurnal (dry-weather) sanitary flows during wet-weather periods were assumed to represent captured runoff. In reality, the flow in the sewer system is a mixture of runoff and sanitary flow, and a portion of CSOs is sanitary in nature. The combined-sewage capture definition takes into account the sanitary flow already in the sewer system during wet weather, and hence is a more realistic measure of the capture at WWTPs during wet-weather periods.

In NYC, values for CS capture are typically about 15 percent points higher than those for runoff capture. EPA's CSO guidance (EPA 1995) has established a target criterion of 85 percent CS capture for the presumptive approach to CSO control.

3.2 PERCENT CAPTURE EVALUATION – TWO SCENARIOS

Wet-weather capture depends upon the particular weather patterns within the subject period, the state of a sewer system and wet-weather operation of the WPCPs. Capture values tend to increase when storm patterns produce sustained, low-level flows to the plant. Capture values also increase when sewer-system restrictions are eliminated and flows to the WPCP are maximized. If the interceptors and combined sewers are not surcharged when the plant inflows reach 2XDDWF levels in certain drainage areas, those may provide some additional in-line storage for wet-weather flow and, as such, can increase the wet weather capture rate. Although it is important to record the actual

capture achieved at WWTPs each year, it is also useful to isolate the effect of the uncontrollable, year-to-year rainfall variations from the controllable aspects related to the operation and maintenance of the collection system and treatment plant. To address these issues, the model results presented herein represent two different scenarios:

1. the "Actual" captures, reflecting the "state and operation of the collection/ treatment system" during the subject period, as well as the actual rainfall and tidal conditions during the subject period,
2. the "Standardized" captures, reflecting the "state and operation of the collection/treatment system" during the subject period, but with rainfall and tide conditions representing the standardized (typical) rainfall year, and

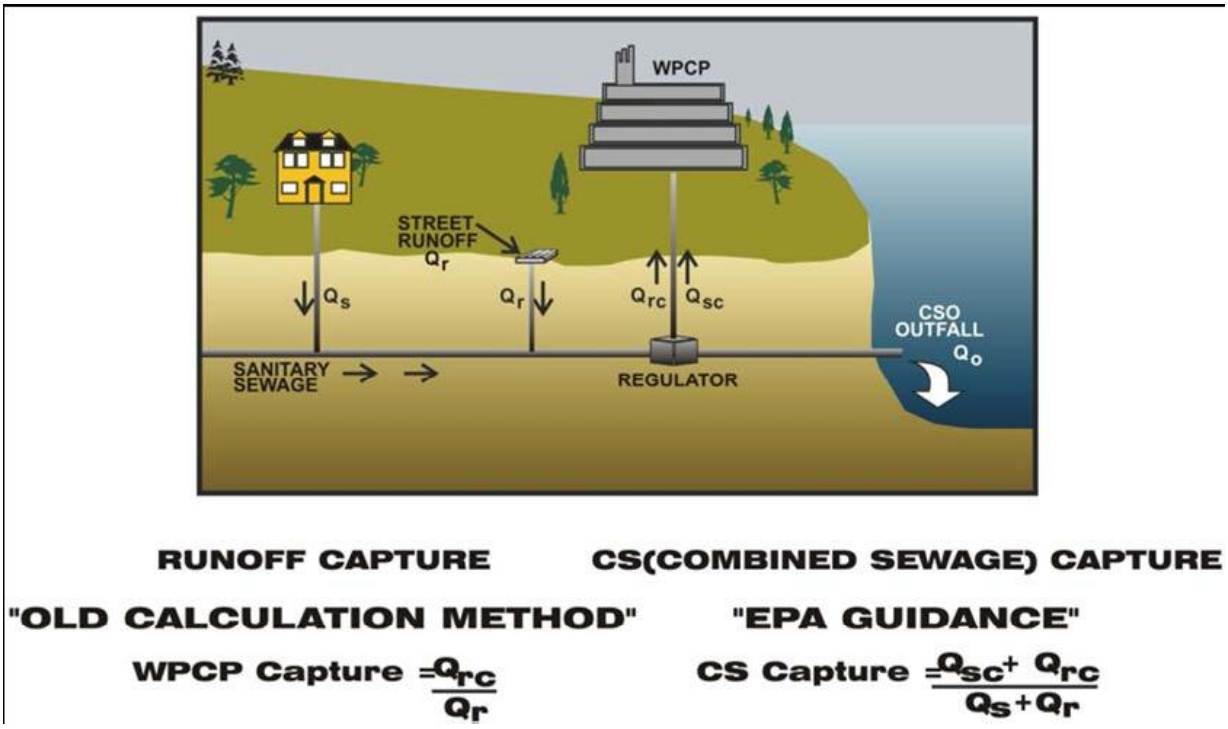


Figure 3-2. Wet Weather Flow Capture at WWTP

3.3 TOOLS TO CALCULATE WET-WEATHER FLOW CAPTURE

Although the definitions presented in Section 3.1 and the equations on Figure 3-2 are relatively simple, actual application to calculate CS capture can be rather complicated. Because the capture must be evaluated over a long-term (annual) period, and with hundreds of potential CSO outfalls City-wide, direct measurements of all parameters would be impractical. Furthermore, measurements of flow and rainfall distribution over a large geographical area have proved to be less than reliable. A more practical approach is to estimate the terms presented on Figure 3-2 using calibrated sewer-system models to simulate (instead of directly measuring through monitoring) system performance during the subject period. The following section describes the modeling approach applied for 2014 calculations, namely, InfoWorks. As indicated earlier, InfoWorks was adopted for citywide use and has been calibrated for all service areas that are wholly or partially served by combined sewers.

3.3.1 InfoWorks Model

The InfoWorks model, distributed by Innovyze from the U.K., has been used in DEP projects since 2001. The model engine is a FORTRAN program, linked with a front interface that contains both relational databases of the sewer network and GIS databases of the geographic attributes such as latitude, longitude, and ground elevations. Based on comparative evaluations performed in 2002-03 by the DEP and its consultants, this interface appeared to offer several advantages over other commercial models such as easy interfacing with GIS for graphical and input/output data analysis and faster computational times for annual simulations. The model uses an implicit finite difference-based numerical solution technique to provide more stable modeling of key elements of the sewer systems. The model incorporates full Saint-Venant's equations for continuity and momentum for hydraulic routing and, as such, is well suited for modeling of the backwater effects and reverse flow, open channels, sewers, detention ponds, complex pipe connections and complex ancillary structures such as culverts, orifices and weirs.

Similar to other urban drainage models, the InfoWorks model calculates runoff volumes first using the same algorithms used in the SWMM model and routes the runoff over sub-areas (subcatchments) to generate runoff hydrographs. The hydrographs are then applied to the channel-sewer system for hydraulic routing. Dry weather flows are added at the respective manholes for routing towards the treatment plant. Figure 3-3 presents a schematic of the InfoWorks model linkage and outputs used to calculate the wet-weather and runoff percent captures.

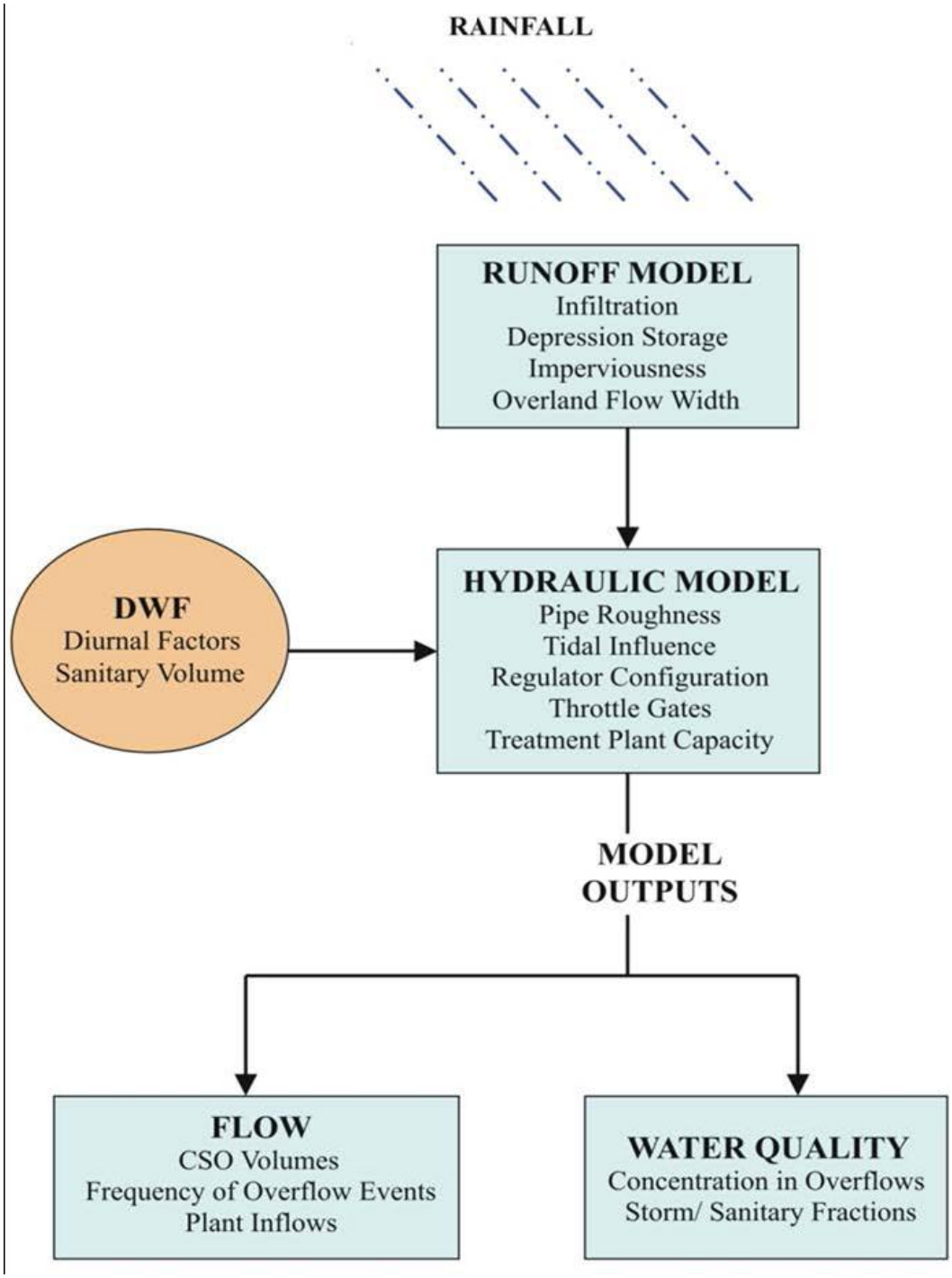


Figure 3-3. Schematic Representation of InfoWorks Model

The SWMM RUNOFF option has been chosen as the InfoWorks runoff simulation algorithm. Each WWTP drainage area was divided into component regulator drainage areas. All pipes larger than 48 inches were included in all WWTP models, and some pipes in the range of 12 to 42 inches in selected WWTP models that were expanded based on local hydraulic conditions. The pipe network was used to further divide the regulator drainage area into smaller sub-catchments that drain to

individual manholes. Each sub-catchment was then divided into impervious and pervious areas, based on geographical features including rooftops, driveways, roadways, lawns, parking lots, and parks/open spaces. An example representation of pipes, manholes and surface features is shown in Figure 3-4.

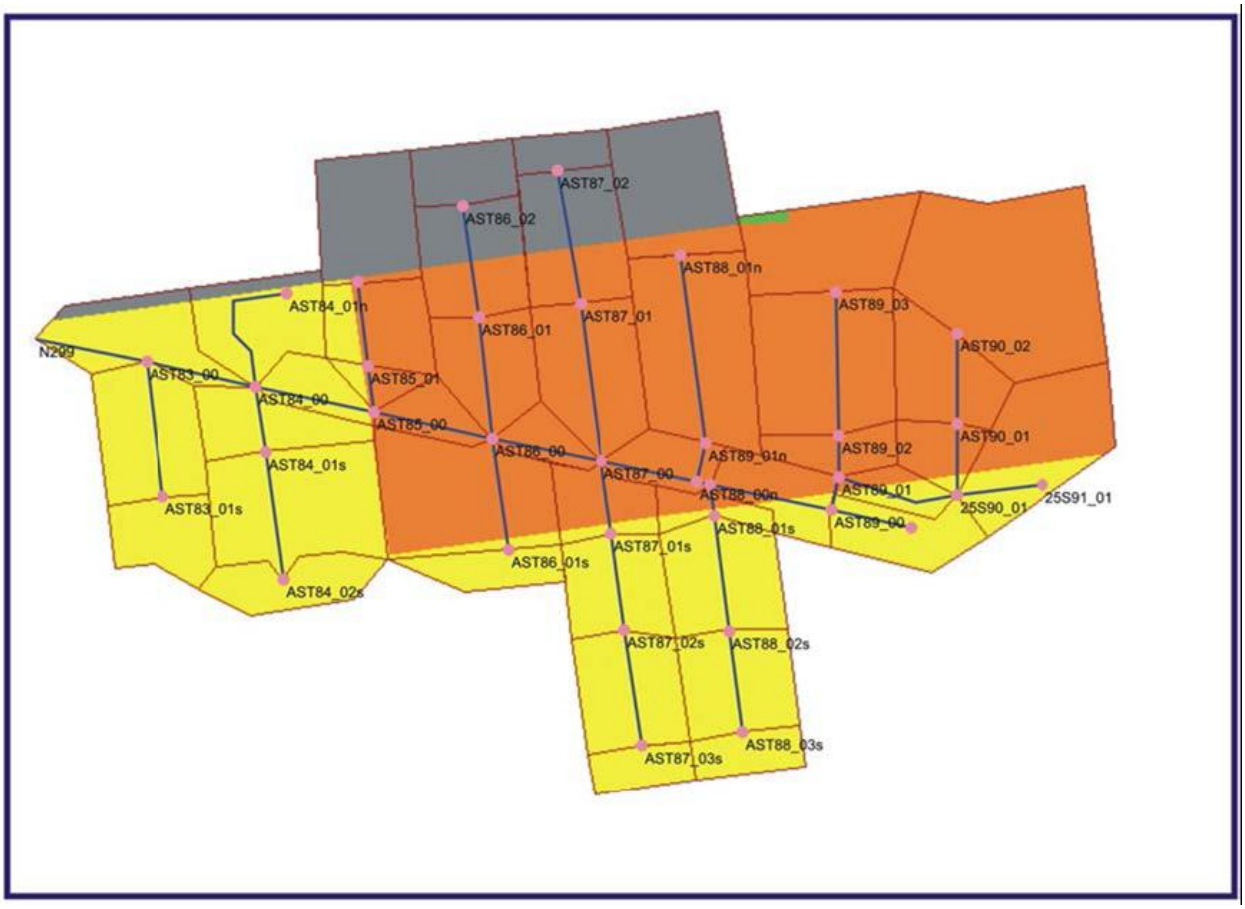


Figure 3-4. Geographical and Sewer System Data in InfoWorks Model

A major component of the 2011 InfoWorks model update was the satellite-imagery based imperviousness estimate. This process was well documented in the 2011 recalibration report submittal to the DEC. Although this estimate represents the total impervious area in each subcatchment, the flow monitoring performed by DEP confirmed that only a fraction of this area was contributing runoff directly to the sewer system. This fraction is referred to as the directly connected impervious area (DCIA) for each subcatchment, which is one of the calibration parameters. The DCIA, in essence, is equivalent to the runoff coefficient used in traditional sewer design principles with a standard rational approach. Hydrologic parameters included in the

InfoWorks model for impervious surfaces are: DCIA, depression storage (initial losses), and surface roughness.

Similarly, the pervious areas were represented with the same three parameters – only difference being that the pervious areas were divided into open surfaces (parks, cemeteries or large open areas) and non-open surfaces (pervious areas in residential, commercial, industrial landuses). Soil compaction due to several factors in these two distinct surfaces presents different runoff loss rates, which led to the explicit representation of open and non-open areas with different runoff coefficients in the InfoWorks models. Runoff is generated from each of these three surfaces within a subcatchment for a given rainfall intensity/volume. An example image and associated definition of pervious and impervious (complement of pervious areas) from theNewtown Creek WWTP drainage area is shown in Figure 3-5. The areas within red boundaries represent the catchment areas to two flow metering locations within this WWTP drainage area.

Figure 3-5. Landcover Definitions Using Remote Sensing Data

Monthly evaporation data were obtained from the Northeast Climate Center at Cornell University for all the four NOAA raingage locations. This data was further processed based on the

geographical proximity of WWTP service areas and used to develop the inputs for evaporation rates in the model.

The InfoWorks model uses the SWMM's non-linear reservoir model to route the runoff through urban landscapes to the sewer entry-point (catch basin/manhole included in the model). Sub-catchments are modeled as idealized rectangular areas with the slope of a sub-basin perpendicular to the width. The routing is performed according to the equation:

$$Q = \frac{1.486}{n} W (d - d_s)^{\frac{5}{3}} S^{\frac{1}{2}}$$

where: Q is surface runoff (cfs);

W is width of sub-area (ft);

S is average slope of sub-area (ft/ft);

d is depth in the non-linear reservoir (ft);

d_s is the depression storage depth in the non-linear reservoir (ft); and

n is the Manning's roughness coefficients.

For hydraulic routing, the model uses the Saint-Venant equations to describe the conservation of mass and momentum:

$$\frac{\delta A}{\delta t} + \frac{\delta Q}{\delta x} = 0$$

$$\frac{\delta Q}{\delta t} + \frac{\delta}{\delta x}\left(\frac{Q^2}{A}\right) + gA\left(\cos\theta \frac{\delta g}{\delta x} - S_o + \frac{Q|Q|}{K^2}\right) = 0$$

with: Q Discharge (m^3/s)

A Cross-sectional area (m^2)

g Acceleration due to gravity (m/s^2)

2 Angle of bed to horizontal (º)

S_o Bed slope

K Conveyance

With the use of the Saint Venant equations, the following complex phenomena that occur in a sewer system can be dynamically characterized:

- Presence of sewer sediments
- Pump-station operations (variable, step-wise, etc.), along with wet-well controls
- Inverted siphon
- Bifurcations
- Regulator operations during tidal conditions
- Throttling at treatment plants during wet weather to limit inflows
- Behavior of in-line regulators
- Street and basement flooding
- Groundwater infiltration into combined and separately sewers.

Depending on the complexity of each WWTP drainage area, some or all of the above processes were modeled in InfoWorks. Available CSO and in-system flow and depth monitoring data compiled in the recently completed waterbody-watershed facility planning studies and PlaNYC project were used to update the sewer system models of the 12 WWTP drainage areas with combined sewers and the Rockaway WWTP service area with separate sewers. The system-wide calibration involved the use of flow and depth data compiled at several in-system locations, selected outfalls, DEP SCADA locations, and at the influent of a WWTP. The City has been using a grid-based radar rainfall data framework to characterize the spatial-temporal variability. Selected storms ranging in intensity and total volumes observed during the calibration period were used to calibrate the appropriate hydrologic (e.g., runoff coefficient (DCIA), depression storage, and roughness) and hydraulic (pipe roughness, pump operations, weir coefficients and gate controls)

model parameters. Additional wet weather events (storms) were used to independently validate the model performance. DEP used a weight-of-evidence approach to assess the adequacy of model calibration including correlation plots between observed and modeled runoff volumes, flow rates, and water depths in sewers; and also the temporal comparisons of flows during wet events at various calibration points including the plant influent. Figure 3-6 illustrates the detailed calibration/validation approach that involves assessing correlations at different spatial scales and also using a variety of flow/depth monitoring data.

The input parameters necessary for InfoWorks application to compute percent capture include: (a) maximum WWTP capacity that can be varied on a monthly basis – represented in the form of a wet well elevation versus pump capacity curve; (b) precipitation at hourly or shorter intervals; (c) dry weather flow at each regulator and its diurnal pattern that can be varied on a monthly basis; (d) distribution of land uses within each subcatchment along with losses such as evaporation and depression storage; (e) operation of throttling/sluice gates within a system; (f) tide conditions near the various outfalls within a system. Since the model accounts for surcharging and backups within sewers, such complex aspects as in-line storage are modeled accurately.

Tide data were developed from the three permanent tide gages maintained by NOAA near New York City – namely, King's Point, The Battery, and Sandy Hook. NOAA also publishes tidal correction factors in terms of differences in time and amplitude at several locations in the NY-NJ Harbor. The correction factors were tabulated for the locations of the waterbody near each or a set of outfalls, and then the data from the nearest NOAA station were used to develop the tidal boundary conditions for each or a set of outfalls within a drainage area.

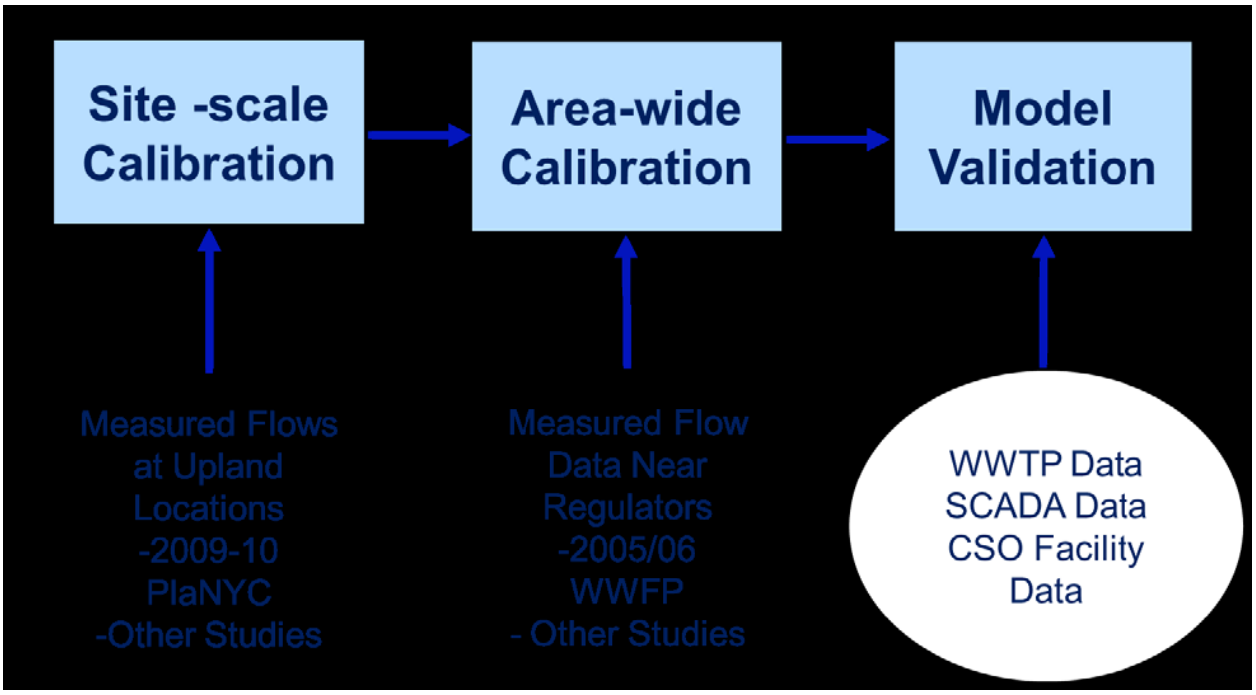


Figure 3-6. Comprehensive InfoWorks Model Calibration Approach

As a first step, the plant flow data at each WWTP was reviewed to develop the wet-well elevation versus pump discharge curves on a monthly basis. Appropriate dry weather flows and diurnal patterns were used for all regulators within the drainage area. The modeled and monitored plant flows were compared to confirm the adequacy of calibration of plant influent in the InfoWorks model for CY2014 conditions. If needed, the pump rating curves were adjusted to better match the monitored and modeled flows. Similarly, the rule curves associated with throttling gates, if appropriate, were modified to achieve better agreement between modeled and observed inflows at the plant. No other hydrologic or hydraulic model parameters were adjusted in the drainage area during this model application process. Specific hydraulic adjustments of the models have been made in select WWTP models to account for changes to the conveyance system, such as the operation of the Alley Creek, Flushing Creek, Paerdegat Basin and Spring Creek CSO retention facilities. The as-modeled inputs used in the InfoWorks model for all drainage areas with combined sewers are summarized in Table 3-2. Figure 3-7 shows an example correlation between measured and modeled inflows to the Tallman Island WWTP, for CY2013.

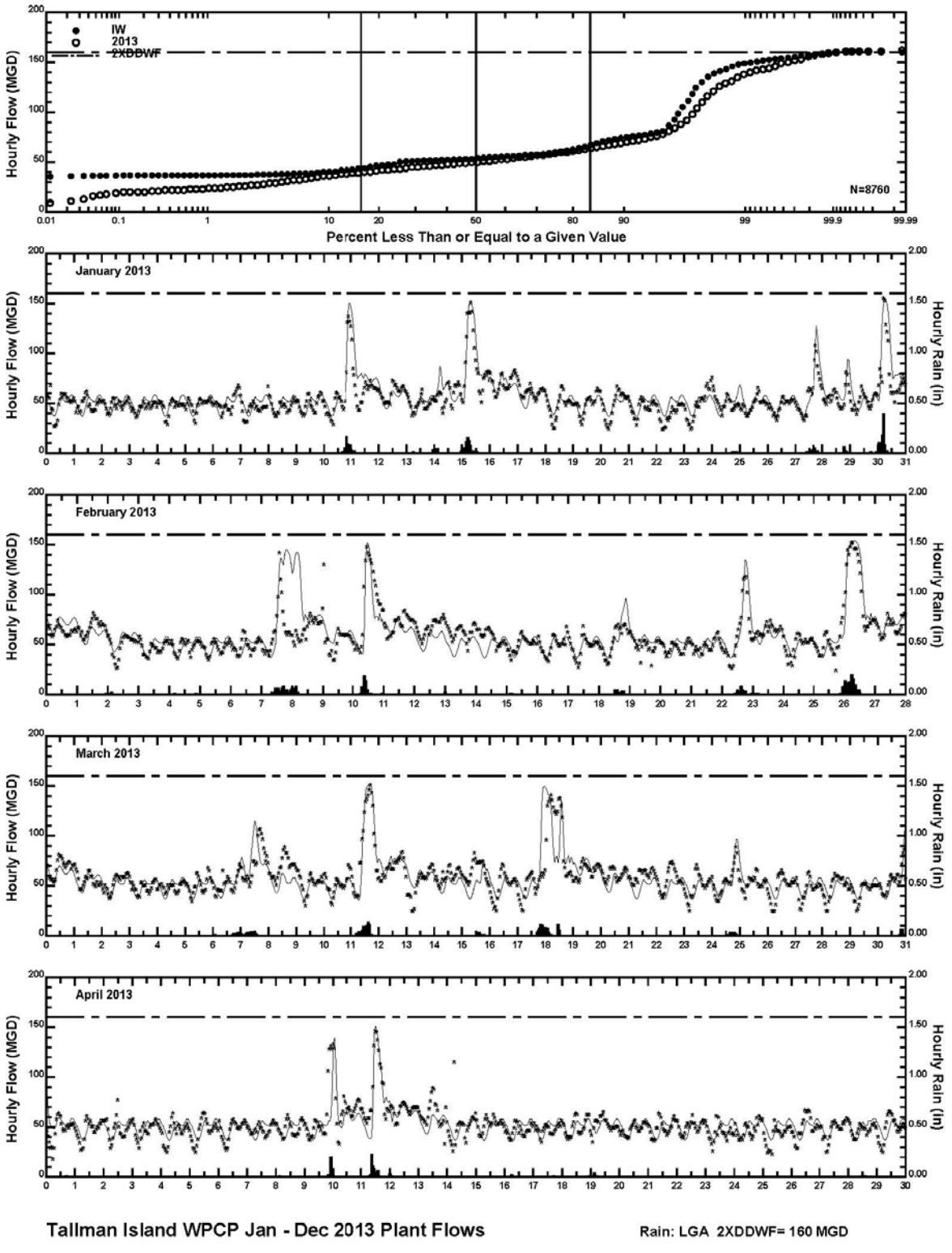


Figure 3-7. InfoWorks Sample Results 2013

3.4 COMBINED-SEWAGE CAPTURE RESULTS - 2014 FLOW VOLUME

Table 3-2 presents the results of the combined-sewage volume percent capture evaluation performed for CY2014. The InfoWorks model was used to analyze drainage areas for the two scenarios, as discussed in Section 3.2 - "Actual" refers to the actual conveyance/treatment system performance and rainfall in 2014 and "Standardized" refers to the actual conveyance/treatment system performance simulated with a "typical" rainfall condition.

As shown in Table 3-3, the “Actual” scenario capture of combined-sewage volume in 2014 averaged 78 percent citywide. Combined-sewage capture at individual, combined area WWTPs varied from a low at Owls Head (66 percent) to a high at North River (92 percent).

The “Standardized” scenario reveals that flow capture under the rainfall conditions of 2014 was less than what would be expected under more typical rainfall conditions (i.e., JFK 2008 rainfall). Under typical rainfall conditions, system operations in 2014 would have produced citywide average combined-sewage volume captures of 80 percent. Results at individual combined-area WWTPs varied from a low of 69 percent at Owls Head and Bowery Bay to a high of 94 percentat North River and 26th Ward.

Table 3-2. As-Modeled(5) WWTP Service Area Characteristics – CY 2014

WWTP	Total Drainage Area (acres)	Combined Sewage Drainage Area (acres)	Average Dry Weather Flow (MGD)	Design Dry Weather Flow (MGD)	Maximum Wet Weather Flow[(1)] (MGD)	Permitted Wet Weather Flow[(2)] (MGD)
26W	5,787	4,358	44	85	190	170
BB	14,232	12,446	96	150	334	300
CI	6,779	6,070	81	110	229	220
HP	22,543	11,546	112	200	414	400
JA	26,421	5,451	74	100	208	200
NC	15,103	13,562	200	310	801	700
NR	5,572	4,448	108	170	354	340
OH	10,078	9,448	85	120	259	240
PR	11,541	3,575	28	60	133	120
RH	3,738	2,991	28	60	129	120
TI	18,314	8,721	54	80	167	160
WI	15,799	12,822	198	275	496	500[(5)]
NYC CS Total[(3)]	155,907	95,438	1,107	1,720	3,714	3,390
Separate Areas						
RO	5,710	NA	15	45	480	90
OB[(4)]	10,779	NA	28	40	108	80
NYC overall	172,396	95,438	1,150	1,805	4,302	3,560

(1) Maximum of calibrated monthly values used as InfoWorks input.
(2) Permitted flow is max design flow, or twice design dry-weather flow (2xDDWF), except as noted.
(3) Average value.
(4) Certain statistics excluded for RO and OB because these areas are separately sewered.
(5) Requirement per Consent Judgment, Index No. 04-402174 (Sup. Ct. New York Court, P. Feinman), Modification to the Judgement dated November 3, 2006.

Table 3-3. Combined-Sewage Capture Results - Flow Volume Calendar Year 2014

Case Name:	**"Actual"(1)**	**"Standardized"(2)**
Rainfall Condition:(3)	**Actual (2014)**	**Standardized (2008 JFK)**
Wet Weather Flows:	**Actual (2014)**	**Actual (2014)**
26W	89	94
BB	67	69
CI	88	92
HP	74	75
JA	68	71
NC	81	83
NR	92	94
OH	66	69
PR	79	76
RH	78	79
TI	74	75
WI	77	78
NYC avg.(4)	78	80

Notes: (1) The "actual" case capture results reflect the "state and operation of the collection/treatment system" during the subject period, as well as the actual rainfall patterns during the subject period. (2) The "standardized" capture results reflect the "state and operation of the collection/treatment system" during the subject period, but with a standardized rainfall condition representing a typical rainfall/CSO year. (3) Rainfall conditions: "Standardized" refers to 2008 rainfall at JFK Airport gage, 135 storms, total 46.3 inches, average intensity = 0.0621 inch/hour, COV = 1.67. "Actual (2014)" refers to 2014 rainfall at Central Park, LaGuardia Airport, Newark International Airport, and JFK Airport, as appropriate per drainage area (see Table 2-1 NYC-Area Rainfall Statistics, 2014). (4) Averages are drainage-area weighted, and exclude separately sewered areas (Oakwood Beach and Rockaway).

As shown in Table 3-2, the "Actual" scenario capture of combined-sewage volume in 2014 averaged 71 percent City-wide. Combined-sewage capture at individual, combined area WPCPs varied from a low at Jamaica (62 percent) to a high at North River (85 percent). Combined-sewage flow capture is not applicable at the separately sewered WPCPs (Oakwood Beach and Rockaway).

The "Standardized" scenario reveals that flow capture under the rainfall conditions of 2014 was higher than what would be expected under more typical rainfall conditions (i.e., JFK 1988 rainfall). Under typical rainfall conditions, system operations in 2014 would have produced City-wide average combined-sewage volume captures of 80 percent. Results at individual combined-area WPCPs varied from a low at Bowery Bay of 62 percent to a high at 26th Ward of 91 percent.

3.7 REFERENCES

DiToro, D.M. and Small, M.J., June 1977. Theory of Storage and Treatment Plant Overflows, Journal of the Environmental Division, ASCE, Vol. 102, NO. EE3.

Driscoll, E.D. et. al., November 1989. Analysis of Storm Event Characteristics for Selected Rainfall Gages Throughout the United States, prepared for the USEPA Office of Water.

HydroQual, Inc., June 1997. City-wide Floatables Plan, Prepared for the New York City Department of Environmental Protection.

HydroQual, Inc., January 1992. City-wide Floatables Study: Third Interim Report, Sources, Fate and Control of Floatable Materials: Preliminary Findings. Prepared for the New York City Department of Environmental Protection.

Hydroscience, Inc., March 1978. NYC 208 Study Task Report: Rainfall-Runoff and Statistical Receiving Water Models, (PCP Task 225), p110. Prepared for Hazen & Sawyer, Engineers on behalf of New York City Department of Environmental Protection.

USEPA, August 1995. Combined-Sewer Overflows: Guidance for Long-Term Control Plan, p.2-11. EPA 832-B-95-002.

USEPA, May 1995. Combined-Sewer Overflows: Guidance for Nine Minimum Controls, p.1-4. EPA 832-B-95-003.

Appendix 4

WWOP Submittal Schedule

WET WEATHER OPERATING PLAN (WWOP) SUBMITTAL SCHEDULE

Submittal Dates			
Facilities	**Original**	**Revisions**	**Status**
WPCP's			
Wards Island	July 2003	Sept. 2004, April 2007, Aug. 2007, June 2008 (submitted Sept. 2008), Dec. 2008, June 2009, Jan. 2011, Oct. 2014, De.c 2014	Jun 2009 version Approved (Mar. 2010) Awaiting DEC approval of the Dec. 2014 version
North River	April 2004	July 2011, Dec. 2014	April 2004 version Approved (Jan. 2006) July 2011 submittal was an ammendment to WWOP due to fire Awaiting DEC approval of the Dec. 2014 version
Hunts Point	July 2003	Sept. 2004, April 2010, Aug. 2010, Dec. 2014	Aug. 2010 version Approved (Oct. 2010) Awaiting DEC approval of the Dec. 2014 version
26th Ward	July 2003	Sept. 2004, May 2007, Oct. 2007, Feb. 2009, Aug. 2009, July 2010, Dec. 2014	Aug.2009 version Approved (Sept. 2009) Awaiting DEC approval of the Dec. 2014 version
Coney Island	April 2005	Dec. 2007, May 2010, Oct. 2010, Dec. 2014	Dec. 2007 version Approved (Mar. 2008) Awaiting DEC approval of the Dec. 2014 version
Owls Head	April 2005	Dec. 2007, Sept. 2008, Dec. 2008, Dec. 2014	Dec. 2008 version Approved (Jan. 2009) Awaiting DEC approval of the Dec. 2014 version
Newtown Creek	June 2003	April 2005, March 2009, April 2010, Oct. 2011, April 2013, Dec. 2014	April 2013 version Approved (Jun. 2013) Awaiting DEC approval of the Dec. 2014 version
Red Hook	Feb. 2005	Dec. 2014	WWOP Approved (Jan. 2006) Awaiting DEC approval of the Dec. 2014 version
Jamaica	April 2005	April 2007, June 2007, Dec. 2014	June 2007 version Approved (Sept. 2007) Awaiting DEC approval of the Dec. 2014 version
Tallman Island	July 2003	Sept. 2004, May 2007, Oct. 2007, Aug. 2009, April 2010, July 2010, July 2011, Dec. 2014	July 2010 version Approved (Sept. 2010) Awaiting DEC approval of the Dec. 2014 version
Bowery Bay	July 2003	Sept. 2004, March 2009, Dec. 2014	March 2009 version Conditionally Approved (May 2009) Awaiting DEC approval of the Dec. 2014 version

Rockaway	April 2005	Dec. 2007, Dec. 2014	Dec. 2007 version Approved (Mar. 2008) Awaiting DEC approval of the Dec. 2014 version
Oakwood Beach	April 2005	Dec. 2007, Dec. 2014	Dec. 2007 version Approved (Mar. 2008) Awaiting DEC approval of the Dec. 2014 version
Port Richmond	April 2005	Dec. 2007, Dec. 2014	Dec. 2007 version Approved (Mar. 2008) Awaiting DEC approval of the Dec. 2014 version
CSO FACILITIES			
Spring Creek	June 2003	May 2007, Oct. 2007, Feb. 2009, Aug. 2009, July 2010, Dec 2014	appended to 26W WWOP
Flushing Bay	Dec. 2003	May 2007, Oct. 2007, Aug. 2009, April 2010, July 2010, July 2011, Dec 2014	appended to TI WWOP
Alley Creek	Dec. 2003	May 2007, Oct. 2007, Aug. 2009, April 2010, July 2010, July 2011 Dec 2014	appended to TI WWOP
Peardegat Basin	Dec. 2003	May 2010, Oct. 2010, Dec 2014	appended to CI WWOP
Corona Avenue	Dec. 2003	March 2009, Dec 2014	appended to BB WWOP

Appendix 5

Dry Weather Raw Sewage Bypass Graph (CY2009-2014)

Dry Weather Raw Sewage Bypass Summary (CY2009-2014)

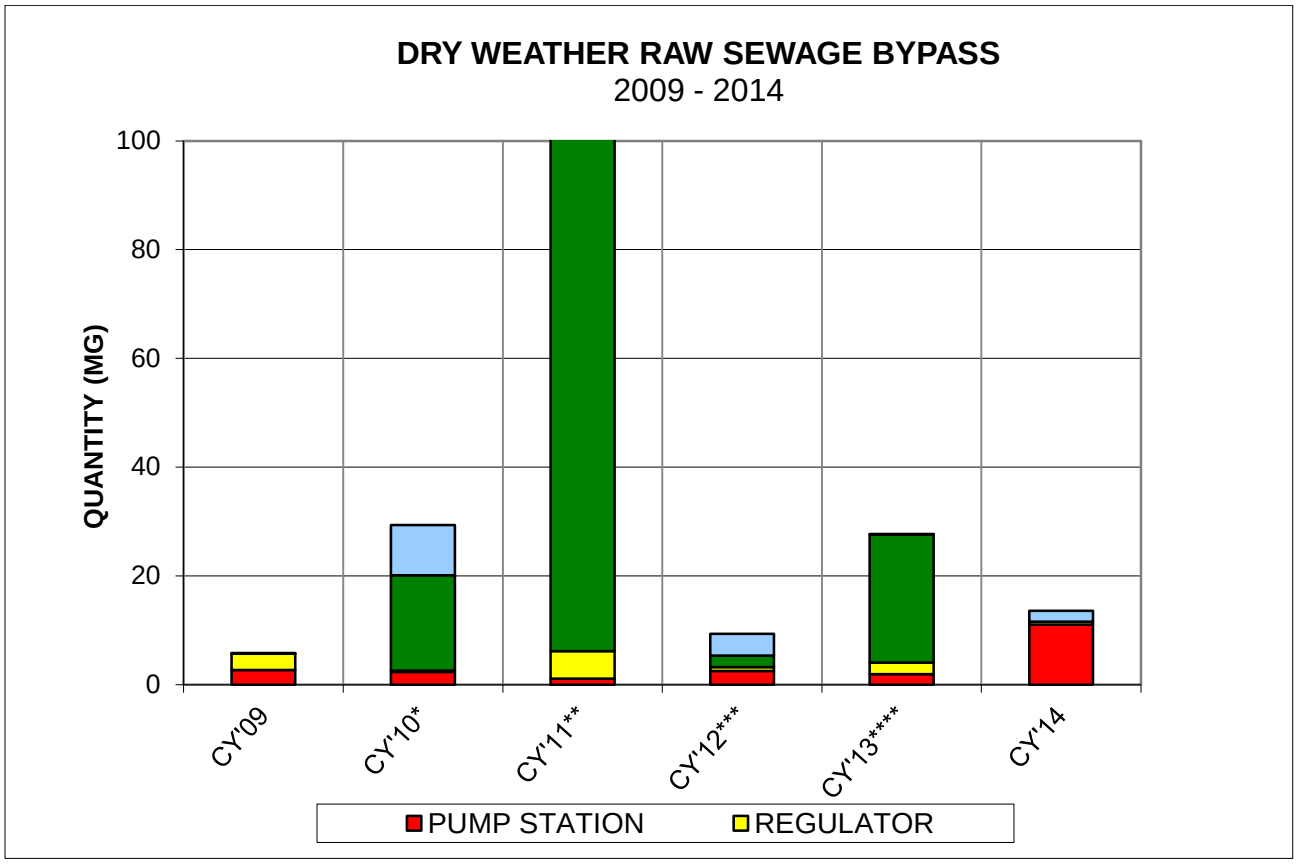
Pump Station Bypass Summary

Pump Station Bypass Cause Code Summary

Pump Station Bypass Summary Itemized by Cause Code & PS's

Regulator Bypass Summary Regulator Bypass Summary Itemized by Cause Code & Location

WWTPs Bypasses



Dry Weather Bypassing CY'08-CY'13

SOURCE	CY'09	CY'10*	CY'11**	CY'12***	CY'13****	CY'14
PUMP STATION	2.69	2.32	1.12	2.50	1.95	11.07
REGULATOR	2.99	0.27	5.02	0.72	2.09	0.51
WPCP	0.06	17.50	275.41	2.10	23.61	0.00
OTHER	0.02	9.25	0.00	4.04	0.01	1.98
TOTAL	**5.76**	**29.34**	**281.55**	**9.36**	**27.65**	**13.56**

Note: Other locations include: bypasses from outfalls, street locations, etc.

*In 2010, there was a Potential Raw Sewage Bypass at Newtown Creek, but it was not confirmed.
*In 2010, there was a Bypass during Wet Weather at Jamaica which is included in the above totals.
**In2011, there were two bypasses occurred due to the fire events at North River WPCP engine room on July 20-22 and 23, which contributed 270 MG and lasted 52.2 hours (DEP ITEM# 5140).
***In2012 October29and30 there were citywide raw sewage bypss related to Hurricane Sandy wich contributed approximately 561.9MG and 805.5 MG secondary Treatment Reduction (DEP ITEM#5219)
and is included in the above totals.
****In 2013, there was a Bypass during Wet Weather at Hunts Point which is included in the above totals.

Dry Weather Raw Sewage Bypasses

Pump Station Bypass Summary

Years	# Of Events	Total Bypass(MG)	Duration (Hrs)
CY2009	15	3.37	33.27
CY2010	13	2.36	50.50
CY2011	10	9.03	36.54
CY2012	8	2.50	25.17
CY2013	6	1.95	16.60
CY2014	2	11.07	19.42

Regulator Bypass Summary

Years	# Of Events	Total Bypass (MG)	Duration (Hrs)
CY2009	8	2.30	17.42
CY2010	12	0.21	14.17
CY2011	5	0.42	18.08
CY2012	9	0.72	11.17
CY2013	11	2.09	30.93
CY2014	9	0.51	25.44

WWTP Bypass Summary

Years	# Of Events	Total Bypass(MG)	Duration (Hrs)
CY2009	32	87.17	29.25
CY2010	3	17.50	12.00
CY2011*	9	368.42	127.02
CY2012	2	2.10	2.90
CY2013	6	23.61	29.61
CY2014	0	0.00	0.00

***This report contains two bypasses occurred due to the fire events at North River WPCP on July 20-22 and 23 which contributed 270 MG and lasted 44.4 hours (DEP Item# 5140).**

Other Location Bypass Summary*

Years	# Of Events	Total Bypass(MG)	Duration (Hrs)
CY2009	1	0.02	5.17
CY2010	12	9.25	49.60
CY2011	0	0.00	0.00
CY2012	11	4.04	156.53
CY2013	9	0.005	15.41
CY2014	5	1.98	19.71

***Other locations include: bypasses from outfalls, street locations, etc.**

PUMP STATION BYPASSING

CY 2014

SUMMARY BY CAUSE CODE & PUMPING STATIONS

CAUSECODE: 2A ELECTRICAL UTILITY FAILURE-FEEDER

ITEM #	LOCATION	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
5299	HP-Conner Street PS	1	50.00	0.367	3.32	8.25	42.48
	TOTAL	1	50.00	0.367	3.32	8.25	42.48

CASECODE: 4C MECHANICAL EQUIPMENT FAILURE-MSP

ITEM #	LOCATION	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
5303	OH-Avenue V PS	1	50.00	10.7	96.68	11.17	57.52
	TOTAL	1	50.00	10.7	96.68	11.17	57.52

PUMP STATION BYPASSING SUMMARY

CY 2014

LOCATION	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
HP-Conner Street PS	1	50.00	0.367	3.32	8.25	42.48
OH-Avenue V PS	1	50.00	10.7	96.68	11.17	57.52
TOTAL	2	100	11.067	100	19.42	100

PUMP STATION BYPASSING

CY 2014

CAUSECODE BYPASS SUMMARY

CAUSECODE	CODE DESCRIPTION	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
2A	ELECTRICAL UTILITY FAILURE - FEEDER	1	50.00	0.367	3.32	8.25	42.48
4C	MECHANICAL EQUIPMENT FAILURE-MSP	1	50.00	10.700	96.68	11.17	57.52
Total		2	100	11.067	100	19.42	100

REGULATOR BYPASSING SUMMARY

CY 2014

LOCATION	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
WI-Reg. No. 27	2	22.22	0.00513	1.00	3.75	14.74
WI-Reg. No. 67	2	22.22	0.466	90.74	2.52	9.91
TI-Reg. No. 06	1	11.11	0.00313	0.61	0.83	3.26
TI-Regulator 13	1	11.11	0.029	5.65	1.67	6.56
NC-Reg. No. B-5A	3	33.33	0.01032	2.01	16.67	65.53
TOTAL	9	100	0.5136	100	25.44	100

REGULATOR BYPASSING SUMMARY

CY 2014

CAUSECODE: 6A BLOCKAGES - Regulator

REGULATORS	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
WI-Reg. No. 27	2	22.22	0.005	0.97	3.75	14.74
WI-Reg. No. 67	1	11.11	0.128	24.93	0.33	1.30
TI-Reg. No. 06	1	11.11	0.003125	0.61	0.83	3.26
NC-Reg.No.B-05A	2	22.22	0.00433	0.84	7.17	28.18
TOTAL	6	66.67	0.140455	27.36	12.08	47.48

CAUSECODE: 6C BLOCKAGES - Branch Intrceptor

REGULATORS	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
NC-Reg.No.B-05A	1	11.11	0.00599	1.17	9.50	37.34
TOTAL	1	11.11	0.006	1.17	9.50	37.34

CAUSECODE: 8C FLOODING. Other

REGULATORS	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
WI-Reg. No. 67	1	11.11	0.338	65.83	2.19	8.61
TOTAL	1	11.11	0.338	65.83	2.19	8.61

CAUSECODE: 9B MISCELLANEOUS. Contractor Error

REGULATORS	EVENTS	%EVENTS	MG	%MG	HOURS	%HOURS
TI-Reg. No. 13	1	11.11	0.029	5.65	1.67	6.56
TOTAL	1	11.11	0.029	5.65	1.67	6.56

Appendix 6

Exhibit 1 – Letter to Industrial Users Amending

Exhibit 2 – Trends in Metals Loadings to New York City WWTP s

The City of New York
Department of Environmental Protection
59-17 Junction Boulevard
Flushing, New York
11373-5108

Christopher O. Ward
Commissioner

Alfonso R. Lopez, P.E.
Deputy Commissioner
Bureau of Wastewater Treatment
Tel (718) 595-5050
(Fax (718) 595-6950
Alopez@dep.nyc.gov

September 1, 2004

Re: Industrial Wastewater Discharge Permit/Commissioner's Order and Directive Amendments

Certified Mail/Return Receipt Requested

Dear Industrial User:

This is to notify you that the New York City Department of Environmental Protection (DEP) is hereby amending the requirements of your Industrial Wastewater Discharge Permit/Commissioner's Order and Directive (Permit/Directive) as follows:

1. Your establishment is now required to hold its process wastewater and non-contact cooling water to the maximum extent practicable during heavy wet weather events.

The reason for this is that in New York City, combined sewers carry both wastewater and storm water to the City's Water Pollution Control Plants (WPCP). Combined Sewer Overflows (CSOs) can occur during heavy wet weather events, causing wastewater and storm water to be discharged to the receiving waters, without treatment at a WPCP, due to the inability of the WPCP to accept the increased flow. This has an adverse affect on New York City's waterways. DEP has made significant reductions in the size and frequency of CSO events within the City; however, this problem can still occur during heavy rainfall.

2. Part II, Section A of your Permit/Directive is hereby amended, raising the maximum civil and misdemeanor penalties from $1,000.00 to $10,000.00, as per an amendment to the New York City Administrative Code.

3. Part II, Section C (2) (c) is amended to require inclusion of the dates of analysis for each sample and the laboratory's sample identification for each sample in the laboratory report. Please see the amended Industrial User Self Monitoring Report Form and the Sample Laboratory Report Form enclosed for all information establishment is required to submit.

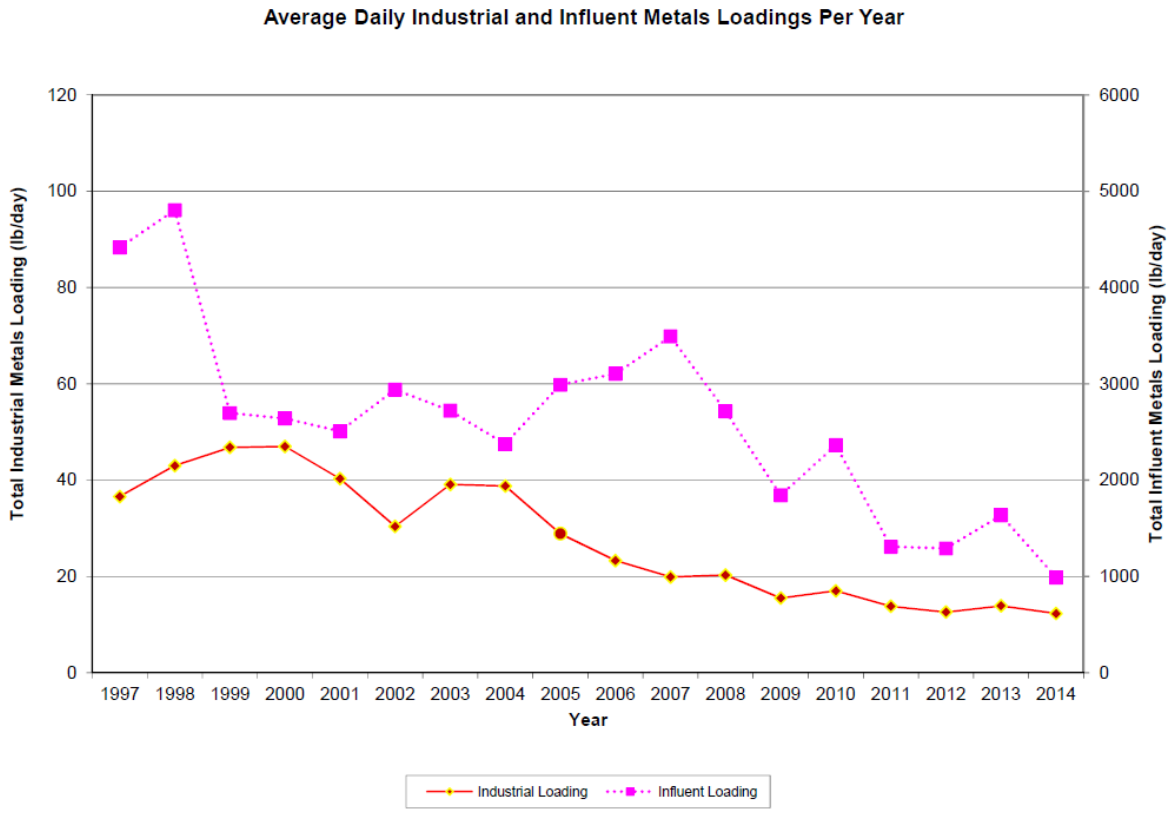
All other requirements of your Permit/Directive remain in effect.

If you have any questions regarding this matter, please telephone Ms. Frances Leung at (718) 595-4763.

Sincerely,

Leslie Lipton, Esq., Chief
Division of Pollution Control and Monitoring

Enc. Industrial User Self Monitoring Report Form
Sample Laboratory Report Form


Average Daily Industrial and Influent Metals Loadings Per Year
Total Industrial Metals Loading (lb/day)
Total Influent Metals Loading (lb/day)
120
100
80
60
40
20
0
6000
5000
4000
3000
2000
1000
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014
Year
Industrial Loading
Influent Loading

Appendix 7-BWSO

Table 7.1-1: Post Inspection Schedule

Table 7.1-2: Catch Basin Survey & Cleaning

Table 7.1-3: Catch Basin Hooding

Programmatic Citywide Catch Basins Survey and Cleaning Schedule

TABLE 7.1-1: Post Inspection Schedule — Updated 3/11/2013

Brooklyn North			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
3	1701	October 1, 2012	February 28, 2013
8	856	December 1, 2012	May 31, 2013
1	3157	March 1, 2013	October 31, 2013
9	772	November 1, 2013	January 31, 2014
4	856	February 1, 2014	April 30, 2014
6	1660	April 1, 2014	August 31, 2014
7	1476	July 1, 2014	December 31, 2014
10	1482	November 1, 2014	March 31, 2015
2	1721	March 1, 2015	July 31, 2015
17	1877	July 1, 2015	November 30, 2015

Brooklyn South			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
16	1090	October 1, 2012	January 31, 2013
13	1585	December 1, 2012	April 30, 2013
11	1857	March 1, 2013	July 31, 2013
14	1614	July 1, 2013	November 30, 2013
15	3526	June 1, 2013	March 31, 2014
5	3459	December 1, 2013	August 31, 2014
12	2104	August 1, 2014	January 31, 2015
18	4375	July 1, 2014	June 30, 2015

Staten Island			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
1	3768	July 1, 2012	May 31, 2013
2	4270	February 1, 2013	January 31, 2014
3	5741	May 1, 2014	June 30, 2015

Manhattan			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
8	1033	October 1, 2012	January 31, 2013
7	1242	December 1, 2012	April 30, 2013
5	1131	April 1, 2013	July 31, 2013
6	974	July 1, 2013	October 31, 2013
4	1193	October 1, 2013	January 31, 2014
1	1093	January 1, 2014	April 30, 2014
3	1139	March 1, 2014	July 31, 2014
11	917	July 1, 2014	October 31, 2014
2	1373	October 1, 2014	February 28, 2015
9	802	March 1, 2015	May 31, 2015
10	877	May 1, 2015	August 31, 2015
12	1275	September 1, 2015	December 31, 2015

Queens North			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
3	2445	November 1, 2012	February 28, 2013
4	2405	March 1, 2013	June 30, 2013
7	6185	February 1, 2013	September 30, 2013
11	5050	July 1, 2013	January 31, 2014
6	1858	April 1, 2014	June 30, 2014
5	4576	May 1, 2014	October 31, 2014
8	3944	October 1, 2014	February 28, 2015
1	2968	March 1, 2015	June 30, 2016
2	3089	June 1, 2015	October 31, 2015

Queens South			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
12	7987	June 1, 2012	April 30, 2013
9	3652	April 1, 2013	September 30, 2013
10	4790	July 1, 2013	January 31, 2014
14	3690	January 1, 2014	June 30, 2014
13	9847	October 1, 2014	October 31, 2015

Bronx			
CB#	# Basins	Start Date	Survey & Cleaning Completion Due Date
5	781	November 1, 2012	January 31, 2013
10	2073	November 1, 2012	April 30, 2013
8	1103	April 1, 2013	July 31, 2013
11	1882	July 1, 2013	November 30, 2013
12	2675	August 1, 2013	February 28, 2014
2	797	March 1, 2014	May 31, 2014
1	1106	May 1, 2014	August 31, 2014
4	1070	July 1, 2014	November 30, 2014
9	2058	September 1, 2014	February 28, 2015
6	920	March 1, 2015	May 31, 2015
7	910	June 1, 2015	August 31, 2015
3	736	September 1, 2015	November 30, 2015

Table 7.1-2: CY 2014 Catch Basin (CB) Survey & Cleaning

Borough	Total CB Surveyed	Scheduled CB Cleanings	Complaint Based CB Cleaned	Total CB Cleaned
Bronx	8,635	2,561	1,126	3,687
Brooklyn	9,593	3,977	2,480	6,457
Manhattan	4,177	2,854	1,014	3,868
Queens	14,837	9,920	5,569	15,489
Staten island	4,095	3,866	680	4,546
Total:	**41,337**	**23,178**	**10,189**	**33,367**

Table 7.1-3: CY 2014 Catch Basin Hooding (Total number of hoods replaced by drainage area)

Catch Basin Hooding

Drainage Area	Quantity
26th Ward	18
Bowery Bay	56
Coney Island	4
Hunts Point	11
Jamaica	107
Newtown Creek	55
North River	40
Owls Head	18
Port Richmond	5
Red Hook	1
Rockaway	1
Tallman Island	47
Wards Island	16
Oakwood Beach	19
Total	**398**

Appendix 7 -BWT

Table 7C-1. City-Wide Floatable Material Recovery 2004-2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
No. Sites[1]											
FCP[2] Permanent	21.00	21.00	22.00	21.00	21.00	24.00	23.00	23.00	23.00	23.00	23.00
FCP Temporary[3]	2.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
Other Sites	2.00	2.00	3.00	4.00	4.00	3.00	12.00	N/A	N/A	N/A	N/A
Total	25.00	25.00	26.00	27.00	27.00	29.00	36.00	24.00	24.00	24.00	24.00
Volume [cy][4]											
FCP Permanent	1,460.00	1,047.50	1,614.50	2,131.30	1,881.75	1,368.75	1774.50	1,988.25	1,384.00	921.00	437.75
FCP Temporary	2.00	3.00	18.00	25.50	18.25	1.00	5.00	1.50	9.00	6.00	0.00
Other Sites	32.00	80.25	70.50	151.50	136.50	207.50	523.00	N/A	N/A	N/A	N/A
Total	**1,494.00**	**1,130.75**	**1,703.00**	**2,308.30**	**2,036.50**	**1,577.25**	**2,302.50**	**1,989.75**	**1,393.00**	**927.00**	**437.75**

[1] Maximum number of sites operating during calendar year period.

[2] Floatables Containment Program.

[3] "Temporary" status refers to sites which do not have a permanent floatables containment installation - Gowanus Canal.

[4] Total volume of floatables retrieved from sites during period.

Table 7C-2. City-Wide Floatable Material Recovery Per CSO Floatable Containment Sites, 2014

Month-Year	FRESH CREEK	BERGEN BASIN	THURSTON BASIN	FLUSHING BAY I	FLUSHING BAY II	FLUSHING CREEK I	FLUSHING CREEK II	BRONX RIVER	CRYDERS LANE	HENDRIX CREEK	ENGLISH KILLS	CONEY ISLAND	GOWANUS CANAL
Jan-14	0	0	0	0	0	0	0	24	0	0	0	0	0
Feb-14	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-14	0	0	0	0	0	0	0	10	0	0	0	0	0
Apr-14	0	0	0	0	0	0	1	63	1	0	0	0	0
May-14	0	0	0	0	0	0	1	118	0	0	0	0	0
Jun-14	0	0	0	0	0	0	2	54	3	0	0	0	0
Jul-14	0	0	0	0	0	0	0	26	1	0	0	0	0
Aug-14	0	0	0	0	0	0	1	20	0	0	0	0	0
Sep-14	0	0	0	0	0	0	2	0	0	0	0	0	0
Oct-14	0	0	0	0	0	0	1	18	0	0	0	0	0
Nov-14	0	0	0	0	0	0	0.75	48	0	0	0	0	0
Dec-14	0	0	0	0	0	0	1	34	0	0	0	0	0
2014 Total	**0**	**0**	**0**	**0**	**0**	**0**	**9.75**	**415**	**5**	**0**	**0**	**0**	**0**

Month-Year	MASPETH CREEK	BOWERY BAY	BUSHWICK INLET	EAST BRANCH	HUNTS POINT	PAERDEGAT BASIN	OWLS HEAD	WALLABOUT I	WALLABOUT II	WESTCHESTER CREEK	CLASON POINT	OUTSIDE CONTAINMENT (1)	2014 Total
Jan-14	0	0	0	0	0	0	0	0	0	0	0	0	**24**
Feb-14	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Mar-14	0	0	0	0	0	0	0	0	0	0	0	5	**15**
Apr-14	0	0	0	0	0	0	0	0	0	0	0	0	**65**
May-14	0	0	0	0	0	0	0	0	0	0	0	0	**119**
Jun-14	0	0	0	0	0	0	0	0	0	0	0	2	**61**
Jul-14	0	0	0	0	0	0	0	0	0	0	0	1	**28**
Aug-14	0	0	0	0	0	0	0	0	0	0	0	0	**21**
Sep-14	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Oct-14	0	0	0	0	0	0	0	0	0	0	0	0	**19**
Nov-14	0	0	0	0	0	0	0	0	0	0	0	0	**48.75**
Dec-14	0	0	0	0	0	0	0	0	0	0	0	0	**35**
2014 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**437.75**

(1) See next page for skimming activities en route to CSO containment site.

Table 7C-2A. City-Wide Floatable Material Recovery While Navigating to Containment Sites, 2014

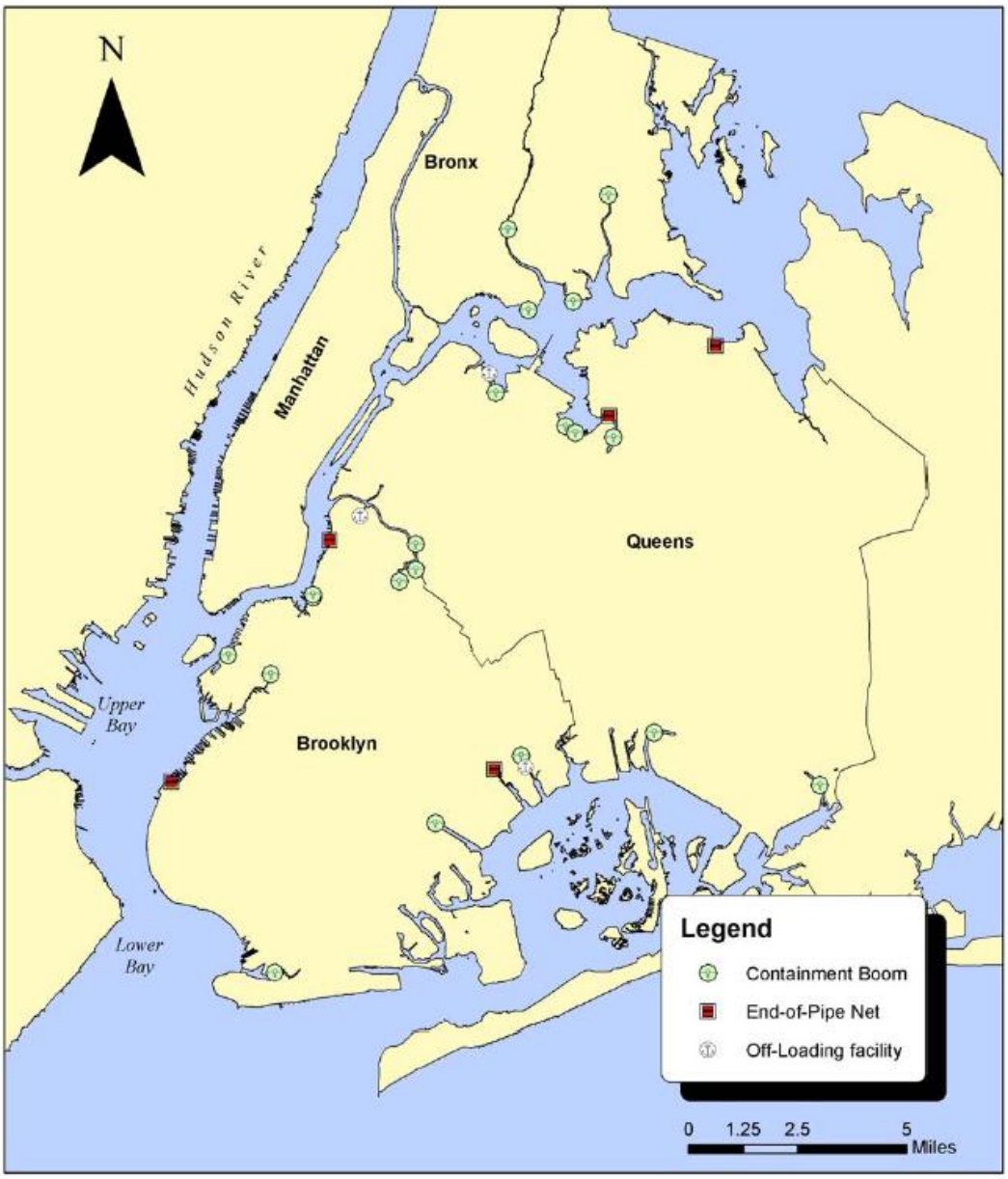
Month-Year	BERGEN BASIN	THURSTON BASIN	FLUSHING BAY II	CRYDERS POINT	WHALE CREEK	GRAVESEND BAY	UPPER NY BAY	EAST RIVER	SHEEPSHEAD BAY	2014 Total
Jan-14	0	0	0	0	0	0	0	0	0	**0**
Feb-14	0	0	0	0	0	0	0	0	0	0
Mar-14	0	0	0	0	5	0	0	0	0	5
Apr-14	0	0	0	0	0	0	0	0	0	0
May-14	0	0	0	0	0	0	0	0	0	0
Jun-14	0	0	0	0	2	0	0	0	0	2
Jul-14	0	0	0	0	1	0	0	0	0	1
Aug-14	0	0	0	0	0	0	0	0	0	0
Sep-14	0	0	0	0	0	0	0	0	0	0
Oct-14	0	0	0	0	0	0	0	0	0	0
Nov-14	0	0	0	0	0	0	0	0	0	0
Dec-14	0	0	0	0	0	0	0	0	0	0
2014 Total	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	8

Table 7C-3. NYCDEP CSO FLOATABLES REMOVAL PROGRAM VIA SKIMMER VESSELS
COLLECTION SUMMARY (CUBIC YARDS)

MONTH	ZONE I	ZONE II/III	ZONE IV	TOTAL
January	0	0	24	24
February	0	0	0	0
March	0	5	10	15
April	0	0	65	65
May	0	0	119	119
June	0	2	59	61
July	0	1	27	28
August	0	0	21	21
September	0	0	2	2
October	0	0	19	19
November	0	0	48.75	48.75
December	0	0	35	35
2014 TOTAL YTD	**0**	**8**	**429.75**	**437.75**

ZONE I	ZONE II/III	ZONE IV
PAERDEGAT BASIN	CONEY ISLAND	BOWERY BAY
FRESH CREEK	OWLS HEAD	FLUSHING BAY I
HENDRIX CREEK	GOWANUS CANAL	FLUSHING BAY II
BERGEN BASIN	WALLABOUT I	FLUSHING CREEK I
THURSTON BASIN	WALLABOUT II	FLUSHING CREEK II
GRAVESEND BAY (*)	BUSHWICK INLET	WESTCHESTER CREEK
SHEEPSHEAD BAY (*)	UPPER NY BAY (*)	CLASON POINT
	MASPETH CREEK	BRONX RIVER
	EAST BRANCH	HUNTS POINT
	ENGLISH KILLS	CRYDERS POINT
	WHALE CREEK (*)	EAST RIVER (*)

* Open Water skimming (not a floatable containment site)



1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	Figure 7-2 Floatables Booming, Netting and Offloading Sites Annual Report on Best Management Practices for CSO's	

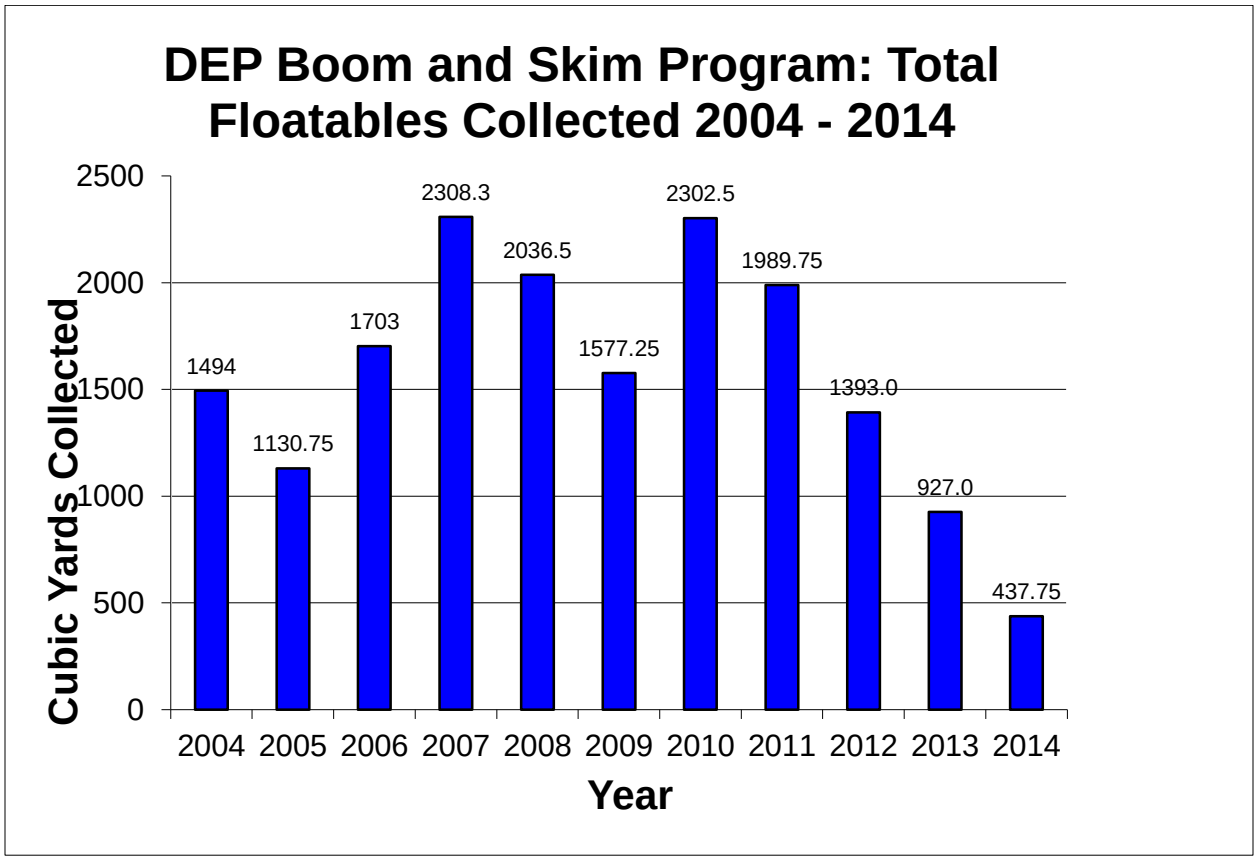
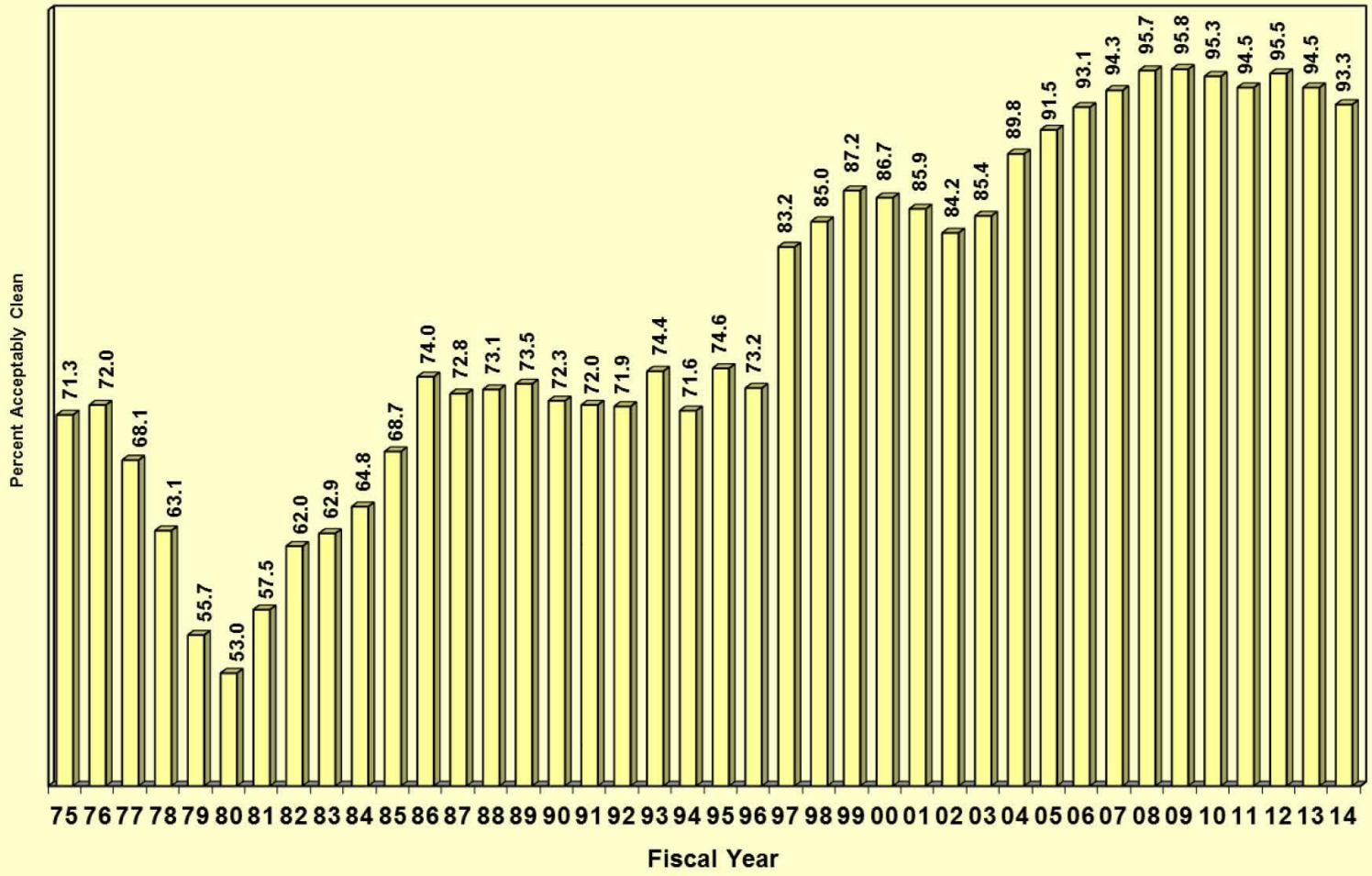


Figure 7-3. City Floatable Material Recovery 2004 - 2014

Department of Sanitation

Scorecard Street Cleanliness Ratings
Percent of Acceptably Clean Streets
Fiscal 1975 - 2014



Appendix 8

Site Connection Proposal Form

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER & SEWER OPERATIONS

SITE CONNECTION PROPOSAL FORM
VALID FOR TWO (2) YEARS
[SC /]

PE/RA signature and original seal

A. PROJECT DATA:

Borough of _____ Building Dept. No (s) _____

Tax Block _____ Lot (s) _____ Zoning _____ Map No._____

Project Location _____

Applicant _____

Address _____ Zip _____ Phone (___)_____

Owner _____

Address _____ Zip _____ Phone (___)_____

B. PROJECT USE:

TYPE: ☐ 1, 2, 3, Family ☐ Multiple Dwelling ☐ Commercial _____

Number of Buildings _____ Total Number of Dwelling Units _____

Ownership: ☐ Fee Simple ☐ Condominium ☐ Home Owner Association ☐ Other.....

C. SITE CONNECTIONS REQUESTED:

Total Developed Site Storm Flow _____ cfs

Allow. Storm Flow to the Sewers _____ cfs

☐ Detention ☐ Retention

	Sanitary	Storm	Comb.	Drywells
No. Requested	_____	_____	_____	xxxxxxx
Size	_____	_____	_____	xxxxxxx
Material (s)	_____	_____	_____	xxxxxxx
Total Q (s)	_____	_____	_____	_____

Note: **The property owner is responsible for plugging all inactive pre-existing sewer connections**

D. CONNECTION INFO:

1. ☐ Connection to exist:
   ☐ Spur ☐ Riser ☐ Curb Connection
2. ☐ Proposed New Riser
3. ☐ Fold Spur in
4. ☐ Drill in
5. ☐ M.H. Conn. ☐ Exist. ☐ Prop.
6. ☐ Reuse Plugged Connections

E. PRIVATE SEWER/DRAIN DATA:

1. P.D. Plan No. _____ Date Approved _____ Expiration Date _____
2. Date Construction Permit Was Issued _____
3. Date Sewer Was Accepted By DEP _____
4. Sanitary Discharge Tributary to:

			Location
Private Sewage Treatment Plant	☐ No	☐ Yes	_____
Private Pumping Station	☐ No	☐ Yes	_____
Private Sewer	☐ No	☐ Yes	_____

F. LOCATION PLAN: ☐ As Shown Below ☐ See Attached Location Plan Attachment "F" (8 ½ x 14 Size)

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G. SUPPORT DOCUMENTS:

*1. Site Plan – 6 copies with hydraulic calculations _____

*2. Survey – 3 copies with watercourse note _____

*3. Tentative Lot Number Request Form – Attached _____ Not Applicable _____

**4. Owner's Consent for STP/PS Connection – Attached _____ Not Applicable _____

5. Department of Health Approval – Attached _____ Not Applicable _____

6. Department of Buildings Amendment – Attached _____ Not Applicable _____

***7. Condo/HOA Prospectus or Affidavit – Attached _____ Not Applicable _____

8. Industrial Waste Approval – Attached _____ Not Applicable _____

9. Associated Mapping/Demapping Action – Attached _____ Not Applicable _____

10. Builders Pavement Plan – Attached _____ Not Applicable _____

11. Boring Logs – Attached _____ Not Applicable _____

12. Other (Specify) _____ Attached _____

* Requires PE/RA Stamp and Original Signature (L.S. for Survey)
** Must Be Notarized and have Corporate Seal
*** Must be Notarized

SEWER INFORMATION CERTIFIED BY DEP

		PUBLIC	PRIVATE
1. There (is) (is not) a sanitary sewer fronting the property available for connections.	SIZE	_____	_____
2. There (is) (is not) a storm sewer fronting the property available for connections.	SIZE	_____	_____
3. There (is) (is not) a combined sewer fronting the property available for connections.	SIZE	_____	_____

4. Sanitary discharge tributary to:

			Location
City Treatment Plant -	☐ NO	☐ YES	_____
Private Sewage Treatment Plant -	☐ NO	☐ YES	_____
Private Pumping Station -	☐ NO	☐ YES	_____

5. Distance to, and location of nearest allowable drainage plan sewer:
   a) Sanitary Outlet _____
   b) Storm Outlet _____
   c) Combined Outlet _____

CERTIFICATION, RESTRICTIONS, SPECIAL CONDITIONS:

ADDITIONAL, INFORMATION, COMMENTS BY DEP OFFICE:

1. Topo Map No. _____ Watercourse shown: ☐YES ☐ NO
2. Comments:

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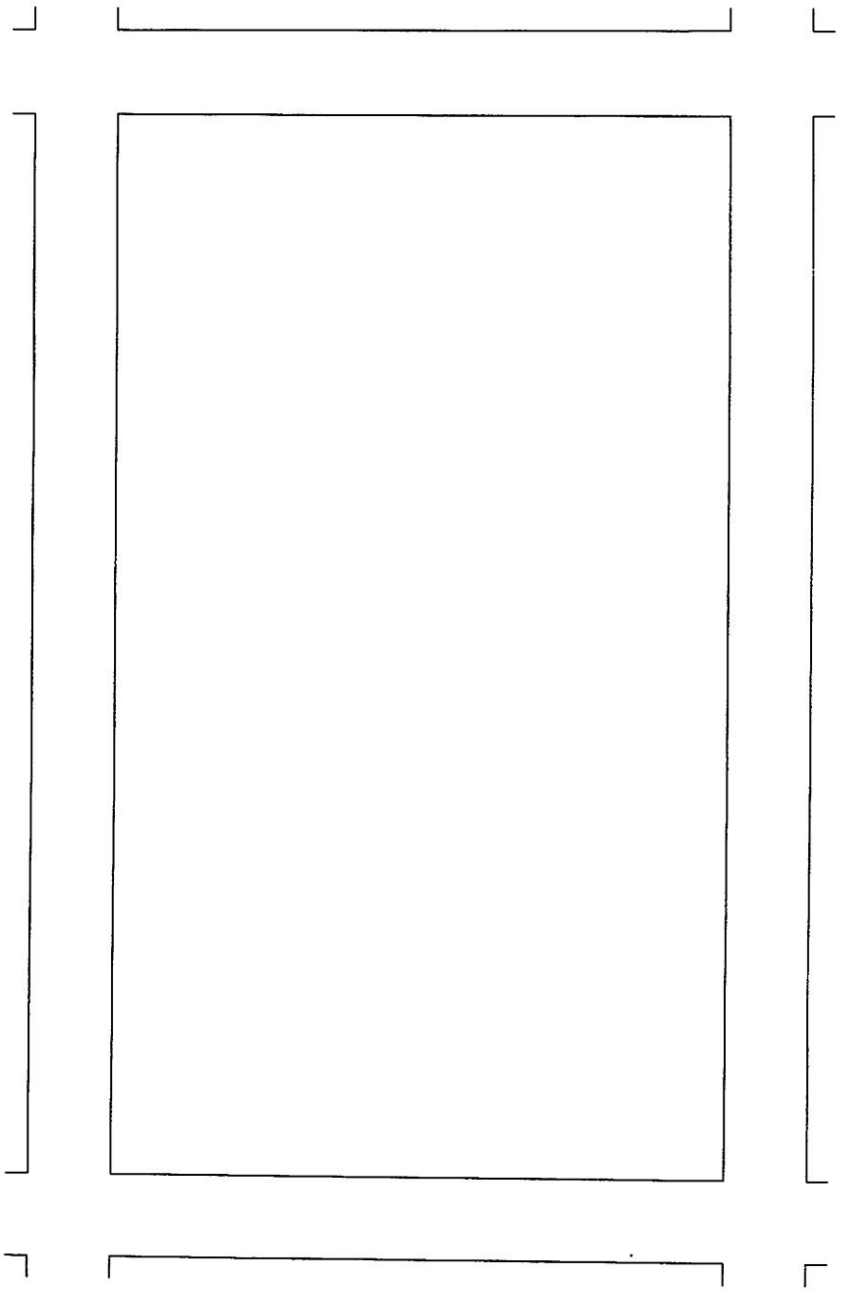
ATTACHMENT "F"

LOCATION PLAN:

PE/RA signature and original seal



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Appendix 9

CSO Sign Sample

List of installed CSO Signs

CAUTION

Wet Weather Discharge Point

THIS OUTFALL MAY DISCHARGE RAINWATER MIXED WITH UNTREATED SEWAGE DURING OR FOLLOWING RAINFALL AND CAN CONTAIN BACTERIA THAT CAN CAUSE ILLNESS

IF YOU SEE A DISCHARGE DURING DRY WEATHER:

- **PLEASE CALL 311 -** REFER TO CSO OUTFALL # HP-019
- For more information visit www.nyc.gov/dep
- Or Contact: New York State Department of Environmental Conservation
  Division of Water Regional Office
  47-40 21st St., Long Island City, NY 11101
  718-482-4900
- New York State Wet Weather Discharge Point
  SPDES Permit # NY 0026191

New York City Department of Environmental Protection

CSO Signs

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
1	**WI - 001**	**Wards Island W.P.C.P. Outfall**		Installed
2	WIM-002	EAST RIVER & E. 73rd STREET	REG #1	Installed
3	WIM-003	EAST RIVER & E. 74th STREET	REG #2A, 2B	Installed
4	WIM-004	EAST RIVER & E. 75th STREET	REG #3	Installed
5	WIM-005	EAST RIVER & E. 76th STREET	REG #4	Installed
6	WIM-006	EAST RIVER & E. 77th STREET	REG #5	Installed
7	WIM-007	EAST RIVER & E. 78th STREET	REG #6	Installed
8	WIM-008	EAST RIVER & E. 79th STREET	REG #7	Installed
9	WIM-009	EAST RIVER & E. 83rd STREET	REG #8	Installed
10	WIM-010	EAST RIVER & E. 84th STREET	REG #9	Installed
11	WIM-011	EAST RIVER & E. 86th STREET	REG #10	Installed
12	WIM-012	EAST RIVER & E. 89th STREET	REG #11	Installed
13	WIM-013	EAST RIVER & E. 90th STREET	REG #12	Installed
14	WIM-014	EAST RIVER & E. 91st STREET	REG #13	Installed
15	WIM-015	EAST RIVER & E. 92nd STREET	REG #14	Installed
16	WIM-016	EAST RIVER & E. 95th STREET	REG #15	Installed
17	WIM-017	EAST RIVER & E. 96th STREET	REG #16	Installed
18	WIM-018	EAST RIVER & E. 100th STREET	REG #17	Installed
19	WIM-019	EAST RIVER & E. 101st STREET	REG #18	Installed
20	WIM-020	EAST RIVER & E. 103rd STREET	REG #20	Installed
21	WIM-021	EAST RIVER & E. 104th STREET	REG #21	Installed
22	WIM-022	EAST RIVER & E. 105th STREET	REG #22	Installed
23	WIM-023	EAST RIVER & E. 106th STREET	REG #23	Installed
24	WIM-024	EAST RIVER & E. 110th STREET	REG #24	Installed
25	WIM-025	EAST RIVER & E. 114th STREET	REG #25	Installed
26	WIM-026	EAST RIVER & E. 115th STREET	REG #26	Installed
27	WIM-027	EAST RIVER & E. 116th STREET	REG #27	Installed
28	WIM-030	EAST RIVER & E. 119th STREET	REG #30	Installed
29	WIM-031	EAST RIVER & E. 120th STREET	REG #31	Installed
30	WIM-032	EAST RIVER & E. 121st STREET	REG #32	Installed
31	WIM-033	EAST RIVER & E. 122nd STREET	REG #33	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
32	WIM-034	EAST RIVER & E. 124th STREET	REG #34	Installed
33	WIM-035	EAST RIVER & E. 125th STREET	REG #35	Installed
34	WIM-036	HARLEM RIVER & E. 129th STREET	REG #36	Installed
35	WIM-037	HARLEM RIVER & E. 130th STREET	REG #37	Installed
36	WIM-038	HARLEM RIVER & E. 135th STREET	REG #38	Installed
37	WIM-039	HARLEM RIVER & W. 140th STREET	REG #39	Installed
38	WIM-040	HARLEM RIVER & W. 141st STREET	REG #40	Installed
39	WIM-041	HARLEM RIVER & W. 142nd STREET	REG #41	Installed
40	WIM-042	HARLEM RIVER & W. 143rd STREET	REG #42	Installed
41	WIM-043	EAST RIVER & E. 102nd STREET	REG #19	Installed
42	WIM-044	HARLEM RIVER & W. 145th STREET	REG #44	Installed
43	WIM-045	HARLEM RIVER & W. 149th STREET	REG #45	Installed
44	WIM-046	HARLEM RIVER & W. 151st STREET	REG #46	Installed
45	WIM-047	HARLEM RIVER & W. 154th STREET	REG #47	Installed
46	WIM-048	HARLEM RIVER & W. 155th STREET	REG #48	Installed
47	WIM-050	HARLEM RIVER & W. 156th STREET	REG #50	Installed
48	WIM-051	HARLEM RIVER & W. 167th STREET	REG #51	Installed
49	WIM-052	HARLEM RIVER & W. 176th STREET	REG #52	Installed
50	WIB-053	HUDSON RIVER & W. 256th STREET	REG #R-3	Installed
51	WIB-054	HUDSON RIVER & W. 248th STREET	REG #R-2	Installed
52	WIB-055	HUDSON RIVER & W. 236th STREET	REG #R-1	Installed
53	WIB-056	HARLEM RIVER & W. 192nd STREET	REG #67	Installed
54	WIB-057	HARLEM RIVER & LANDING ROAD	REG #66	Installed
55	WIB-058	HARLEM RIVER & W. 178th STREET	REG #65	Installed
56	WIB-059	HARLEM RIVER & W. 176th STREET	REG #64	Installed
57	WIB-060	HARLEM RIVER & UNDER HIGH BRIDGE	REG #62	Installed
58	WIB-061	HARLEM RIVER & W. 167th STREET	REG #61	Installed
59	WIB-062	HARLEM RIVER & JEROME AVENUE	REG #60, 60A	Installed
60	WIB-063	HARLEM RIVER & S/O MCCOMBS DAM BRIDGE	REG #72	Installed
61	WIB-064	HARLEM RIVER & E. 149th STREET	REG #59	Installed
62	WIB-065	HARLEM RIVER & PARK AVENUE	REG #57	Installed
63	WIB-066	HARLEM RIVER & THIRD AVENUE BRIDGE	REG #56	Installed
64	WIB-067	HARLEM RIVER & LINCOLN AVENUE	REG #55	Installed
65	WIB-068	BRONX KILL & BROOK AVENUE	REG #53, 54	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
66	WIB-069	BRONX KILL & CYPRESS AVENUE	REG #71	Installed
67	WIB-070	EAST RIVER & E. 134th STREET	REG #70	Installed
68	WIB-071	EAST RIVER & E. 138th STREET	REG #69	Installed
69	WIB-072	EAST RIVER & E. 149th STREET	REG #68	Installed
70	WIB-073	BRONX KILL & SAINT ANN'S AVENUE	REG #73	Installed
71	WIB-075	HARLEM RIVER & E. 138th STREET	REG #58	Installed
72	WIB-076	HARLEM RIVER & BRADLEY TERRACE	REG #MH-1	Installed
73	WIB-077	HARLEM RIVER & TEUNISSEN PLACE	REG #MH-2	Installed
74	WIB-078	HARLEM RIVER & W. BROADWAY BRIDGE	REG #MH-3	Installed
75	WIB-079	HUDSON RIVER & W. 261st STREET (MT. ST. VINCENT)	REG #R-4	Installed
76	**NR - 001**	**North River W.P.C.P. Outfall**		Installed
77	NR-002	HUDSON RIVER & W. 152nd STREET	REG #N-20,21,21A,21B	Installed
78	NR-003	HUDSON RIVER & W. 158th STREET	REG #N-19	Installed
79	NR-004	HUDSON RIVER & W. 171st STREET	REG #N-18	Installed
80	NR-005	HUDSON RIVER & W. 190th STREET	REG #N-17	Installed
81	NR-006	HUDSON RIVER & DYCKMAN STREET	REG #N-16	Installed
82	NR-007	HARLEM RIVER & W. 218th STREET	REG #N-15	Installed
83	NR-008	HARLEM RIVER & W. 216th STREET	REG #N-14	Installed
84	NR-009	HARLEM RIVER & W. 215th STREET	REG #N-13	Installed
85	NR-010	HARLEM RIVER & W. 211th STREET	REG #N-10, N-11, N-12	Installed
86	NR-011	HARLEM RIVER & W. 209th STREET	REG #N-9	Installed
87	NR-012	HARLEM RIVER & W. 207th STREET	REG #N-7	Installed
88	NR-013	HARLEM RIVER & W. 206th STREET	REG #N-6	Installed
89	NR-014	HARLEM RIVER & W. 205th STREET	REG #N-5	Installed
90	NR-016	HARLEM RIVER & W. 203rd STREET	REG #N-4	Installed
91	NR-017	HARLEM RIVER & W. 201st STREET	REG #N-3	Installed
92	NR-018	HARLEM RIVER & HIGHBRIDGE PARK	REG #N-1	Installed
93	NR-019	HUDSON RIVER & BANK STREET	REG #N-56	Installed
94	NR-020	HUDSON RIVER & JANE STREET	REG #N-55	Installed
95	NR-021	HUDSON RIVER & GANSEVOORT STREET	REG #N-54	Installed
96	NR-022	HUDSON RIVER & S/O W. 17th STREET	REG #N-51	Installed
97	NR-023	HUDSON RIVER & W. 18th STREET	REG #N-50	Installed
98	NR-024	HUDSON RIVER & W. 21st STREET	REG #N-48, N-49	Installed
99	NR-025	HUDSON RIVER & W. 24th STREET	REG #N-47	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
100	NR-026	HUDSON RIVER & W. 26th STREET	REG #N-46	Installed
101	NR-027	HUDSON RIVER & W. 30th STREET	REG #N-45	Installed
102	*NR-028*	*HUDSON RIVER & W. 36th STREET*	*REG #N-43*	*WAIVER*
103	NR-029	HUDSON RIVER & W. 40th STREET	REG #N-42	Installed
104	NR-030	HUDSON RIVER & W. 43rd STREET	REG #N-39, N-40	Installed
105	NR-031	HUDSON RIVER & W. 44th STREET	REG #N-38	Installed
106	NR-032	HUDSON RIVER & W. 46th STREET	REG #N-36, N-37	Installed
107	NR-033	HUDSON RIVER & W. 48th STREET	REG #N-33, N-34	Installed
108	NR-034	HUDSON RIVER & W. 50th STREET	REG #N-32	Installed
109	NR-035	HUDSON RIVER & W. 56th STREET	REG #N-31	Installed
110	NR-036	HUDSON RIVER & W. 59th STREET	REG #N-30	Installed
111	NR-037	HUDSON RIVER & W. 72nd STREET	REG #N-29	Installed
112	NR-038	HUDSON RIVER & W. 80th STREET	REG #N-28	Installed
113	NR-039	HUDSON RIVER & W. 91st STREET	REG #N-27	Installed
114	NR-040	HUDSON RIVER & W. 96th STREET	REG #N-26, N-26A	Installed
115	NR-041	HUDSON RIVER & W. 108th STREET	REG #N-25	Installed
116	NR-042	HUDSON RIVER & W. 115th STREET	REG #N-24	Installed
117	NR-043	HUDSON RIVER & SAINT CLAIR PL	REG #N-23	Installed
118	NR-044	HUDSON RIVER & W. 138th STREET	REG #N-22	Installed
119	NR-045	HARLEM RIVER & ACADEMY STREET	REG #N-2	Installed
120	NR-046	HUDSON RIVER & W. 66th STREET	REG #N-29A	Installed
121	NR-047	HUDSON RIVER & W. 47th STREET	REG #N-35	Installed
122	NR-048	HUDSON RIVER & W. 42nd STREET	REG #N-40, N-41	Installed
123	NR-049	HUDSON RIVER & W. 14th STREET	REG #N-52	Installed
124	NR-050	HUDSON RIVER & BLOOMFIELD STREET	REG #N-53	Installed
125	NR-051	HUDSON RIVER & W. 49th STREET	N/A	Installed
126	NR-052	HUDSON RIVER & W. 34th STREET	REG #N-44	Installed
127	NR-055	HARLEM RIVER & W. 207th STREET	REG #N-7, N-8	Installed
128	NR-056	HUDSON RIVER & W. 142nd STREET	REG #N-22A	Installed
129	**HP - 001**	**Hunt's Point W.P.C.P. Outfall**		Installed
130	HP-002	EAST RIVER & TIFFANY STREET	REG #9, 9A	Installed
131	HP-003	EAST RIVER & FARRAGUT STREET	REG #10	Installed
132	HP-004	BRONX RIVER & WEST FARM ROAD	CSO-28, 28A	Installed
133	HP-005	HUTCHINSON RIVER & HOLLERS AVENUE PS	HOLLERS AVENUE P.S.	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
134	HP-006	HUTCHINSON RIVER & BARTOW AVENUE	CO-OP CITY SO PS, ELY AVE PS	Installed
135	HP-007	BRONX RIVER & E. 177th STREET	CSO-27, 27A	Installed
136	HP-008	BRONX RIVER & LAFAYETTE AVENUE	CSO-26	Installed
137	HP-009	BRONX RIVER & METCALF AVENUE	REG #13	Installed
138	HP-010	BRONX RIVER & LACOMBE AVENUE	CSO-25	Installed
139	HP-011	EAST RIVER & WHITE PLAINS ROAD	REG #5, 6, 7	Installed
140	HP-012	WESTCHESTER CREEK & LAFAYETTE AVENUE	CSO-23A	Installed
141	HP-013	PUGSLEY'S CREEK & NEWMAN AVENUE	CSO-24	Installed
142	HP-014	WESTCHESTER CREEK & EAST TREMONT AVENUE	CSO-29, 29A	Installed
143	HP-015	WESTCHESTER CREEK & LATTING STREET	CSO-22	Installed
144	HP-016	WESTCHESTER CREEK & BRUCKNER EXPWY	REG #4	Installed
145	HP-017	EAST RIVER & EMERSON AVENUE	REG #11	Installed
146	HP-018	EAST RIVER & ROBINSON AVENUE	REG #12	Installed
147	HP-019	EAST RIVER & CALHOUN AVENUE	REG #3	Installed
148	HP-020	EAST RIVER & THROGS NECK BLVD	REG #2A	Installed
149	HP-021	EAST RIVER & PENNYFIELD AVENUE	REG #2	Installed
150	HP-022	EASTCHESTER BAY & E 177th STREET	REG #1	Installed
151	HP-023	HUTCHINSON RIVER & CONNER STREET	REG #15, CONNOR ST.PS	Installed
152	HP-024	HUTCHINSON RIVER & E 233rd STREET	REG #15A	Installed
153	HP-025	EAST RIVER & TRUXTON STREET	REG #8	Installed
154	HP-026	WEIR CREEK & ELLESWORTH AVENUE	REG #14	Installed
155	HP-028	EASTCHESTER BAY & OUTLOOK AVENUE	CSO-20	Installed
156	HP-029	EASTCHESTER BAY & WATT AVENUE	CSO-21	Installed
157	HP-031	HUTCHINSON RIVER & BELLAMY LOOP	CSO-32, CO-OP CITY N. P.S.	Installed
158	HP-032	EAST RIVER & RIKERS ISLAND NORTH	RIKER'S ISLAND N. P.S.	Installed
159	HP-033	WESTCHESTER CREEK & S/O BRUCKNER BLVD, E/O ZEREGA AVE	CSO-23	Installed
160	HP-034	WESTCHESTER CREEK & NEWBOLD AVENUE (CITY ISLAND)	COMMERCE AVENUE P.S.	Installed
161	HP-036	LONG ISLAND SOUND & SCHOFIELD STREET	CITY ISLAND P.S.	Installed
162	*HP-037*	*SHORE ROAD LAGOON & ORCHARD BEACH*	*ORCHARD BEACH P.S.*	*WAIVER*
163	HP-039	EAST RIVER & N/O HUNTS POINT AVE	HUNT'S PONT MARKET P.S.	Installed
164	**NC - 001**	**Newtown Creek W.P.C.P. Outfall**		Installed
165	NCB-002	WHALE CREEK & WPCP OVERFLOW	WPCP OVERFLOW	Installed
166	NCB-003	EAST RIVER & GREENPOINT AVENUE	REG #B-11	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
167	NCB-004	EAST RIVER & QUAY STREET	REG #B-10	Installed
168	NCM-005	EAST RIVER & E. 63rd STREET	REG #M-51	Installed
169	NCB-006	EAST RIVER & N. 12th STREET	REG #B-9	Installed
170	NCB-007	EAST RIVER & N. 5th STREET	REG #B-8	Installed
171	NCB-008	EAST RIVER & METROPOLITAN AVENUE	REG #B-7	Installed
172	NCB-010	EAST RIVER & GRAND STREET	REG #B-6A	Installed
173	NCM-011	EAST RIVER & E. 48th STREET	REG #M-47A	Installed
174	NCB-012	EAST RIVER & S. 5th STREET	REG #B-6	Installed
175	NCB-013	WALLABOUT CHANNEL & DIVISION AVENUE	REG #B-5	Installed
176	NCB-014	WALLABOUT CHANNEL & KENT AVENUE	REG #B-3, B-4	Installed
177	NCB-015	ENGLISH KILLS & JOHNSON AVENUE	REG #B-1	Installed
178	*NCM-016*	*EAST RIVER & E. 46th STREET*	*REG #M-46*	*WAIVER*
179	NCM-017	EAST RIVER & E. 42nd STREET	REG #M-45A	Installed
180	NCM-018	EAST RIVER & E. 41st STREET	REG #M-45	Installed
181	NCB-019	NEWTOWN CREEK & METROPOLITAN AVENUE	REG #B-2	Installed
182	NCM-020	EAST RIVER & E. HOUSTON STREET	REG #M-31	Installed
183	NCB-021	NEWTOWN CREEK & MCGUINNESS BOULEVARD	CSO next to B-17	Installed
184	NCB-022	NEWTOWN CREEK & MCGUINNESS BOULEVARD	REG #B-17	Installed
185	NCB-023	NEWTOWN CREEK & FRANKLIN STREET	REG #B-16	Installed
186	NCB-024	EAST RIVER & DUPONT STREET	REG #B-15	Installed
187	NCB-025	EAST RIVER & FREEMAN STREET	REG #B-14	Installed
188	NCB-026	EAST RIVER & GREEN STREET	REG #B-13	Installed
189	NCB-027	EAST RIVER & HURON STREET	REG #B-12	Installed
190	NCM-028	EAST RIVER & DELANCEY STREET	REG #M-28	Installed
191	NCQ-029	NEWTOWN CREEK & 43rd STREET	REG #Q-2	Installed
192	NCM-030	EAST RIVER & E. 71st STREET	REG #M-51C	Installed
193	NCM-031	EAST RIVER & E. 70th STREET	REG #M-51A, M-15B	Installed
194	NCM-032	EAST RIVER & E. 61st STREET	REG #M-50	Installed
195	NCM-033	EAST RIVER & E. 57th STREET	REG #M-49	Installed
196	NCM-034	EAST RIVER & E. 54th STREET	REG #M-48	Installed
197	NCM-035	EAST RIVER & E. 53rd STREET	REG #M-48A	Installed
198	NCM-036	EAST RIVER & E. 49th STREET	REG #M-47	Installed
199	NCM-037	EAST RIVER & E. 41st STREET	REG #M-44	Installed
200	NCM-038	EAST RIVER & E. 38th STREET	REG #M-43B	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
201	NCM-039	EAST RIVER & E. 37th STREET	REG #M-43A	Installed
202	NCM-040	EAST RIVER & E. 36th STREET	REG #M-43	Installed
203	NCM-041	EAST RIVER & E. 33rd STREET	REG #M-42	Installed
204	NCM-042	EAST RIVER & BROOME STREET	REG #M-27	Installed
205	NCM-043	EAST RIVER & E. 30th STREET	REG #M-41	Installed
206	*NCM-044*	*EAST RIVER & E. 29th STREET*	*REG #M-41A*	*WAIVER*
207	*NCM-045*	*EAST RIVER & E. 26th STREET*	*REG #M-40*	*WAIVER*
208	NCM-046	EAST RIVER & E. 24th STREET	REG #M-39, M-39A	Installed
209	NCM-047	EAST RIVER & E. 23rd STREET	REG #M-38B	Installed
210	NCM-048	EAST RIVER & E. 21st STREET	REG #M-38	Installed
211	NCM-049	EAST RIVER & E. 18th STREET	REG #M-37	Installed
212	NCM-051	EAST RIVER & OLD SLIP	REG #M-12	Installed
213	NCM-052	EAST RIVER & E. 14th STREET	REG #M-36	Installed
214	NCM-053	EAST RIVER & E. 11th STREET	REG #M-35	Installed
215	NCM-054	EAST RIVER & E. 8th STREET	REG #M-34	Installed
216	NCM-055	NEWTOWN CREEK & E. 6th STREET	REG #M-33	Installed
217	NCM-056	EAST RIVER & E. 3rd STREET	REG #M-32	Installed
218	NCM-057	EAST RIVER & STANTON STREET	REG #M-30	Installed
219	NCM-058	EAST RIVER & RIVINGTON STREET	REG #M-29	Installed
220	NCM-059	EAST RIVER & S/O GRAND STREET	REG #M-26	Installed
221	NCM-060	EAST RIVER & S/O CORLEARS HOOK PARK	REG #M-25	Installed
222	NCM-061	EAST RIVER & JACKSON STREET	REG #M-23	Installed
223	NCM-062	EAST RIVER & GOUVERNEUR SLIP E.	REG #M-22	Installed
224	NCM-063	EAST RIVER & JEFFERSON STREET	REG #M-21	Installed
225	NCM-064	EAST RIVER & MARKET SLIP	REG #M-20	Installed
226	NCM-065	EAST RIVER & S/O CATHERINE STREET	REG #M-18	Installed
227	NCM-066	EAST RIVER & ROBERT WAGNER SR. PLACE	REG #M-17	Installed
228	NCM-067	EAST RIVER & MAIDEN LANE	REG #M-13	Installed
229	NCM-068	EAST RIVER & COENTIES SLIP	REG #M-11	Installed
230	NCM-069	EAST RIVER & BROAD STREET	REG #M-10	Installed
231	*NCM-070*	*HUDSON RIVER & BATTERY PLACE*	*REG #M-9*	*WAIVER*
232	*NCM-071*	*HUDSON RIVER & RECTOR STREET*	*REG #M-6, M-7*	*WAIVER*
233	*NCM-072*	*HUDSON RIVER & VESEY STREET*	*REG #M-5*	*WAIVER*
234	*NCM-073*	*HUDSON RIVER & DUANE STREET*	*REG #M-4*	*WAIVER*

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
235	NCM-074	HUDSON RIVER & VESTRY STREET	REG #M-3	Installed
236	NCM-075	HUDSON RIVER & WATTS STREET	REG #M-2	Installed
237	NCM-076	HUDSON RIVER & CLARKSON STREET	REG #M-1	Installed
238	NCQ-077	MASPETH CREEK & 49th STREET	REG #Q-1	Installed
239	NCM-078	EAST RIVER & N/O DOVER STREET	REG #M-16	Installed
240	NCM-080	HUDSON RIVER & N/O VANDAM STREET	REG #TG-2	Installed
241	NCM-081	HUDSON RIVER & N/O CHARLES STREET	REG #TG-1	Installed
242	NCB-082	EAST RIVER & S. 8th STREET	REG #B-5A	Installed
243	NCB-083	NEWTOWN CREEK & METROPOLITAN/SCOTT AVENUE	N/A	Installed
244	NCM-087	EAST RIVER & E 22nd STREET	REG #M-38A	Installed
245	**RH - 001**	**Red Hook W.P.C.P. Outfall**		Installed
246	RH-002	EAST RIVER & HUDSON AVENUE	REG #R-21A	Installed
247	RH-003	EAST RIVER & HUDSON AVENUE	REG #R-21	Installed
248	RH-005	EAST RIVER & GOLD STREET	REG #R-20A	Installed
249	RH-006	EAST RIVER & PEARL STREET	REG #R-19A	Installed
250	RH-007	EAST RIVER & ADAMS STREET	REG #R-19	Installed
251	RH-008	EAST RIVER & WASHINGTON STREET	REG #R-18A	Installed
252	RH-009	EAST RIVER & MAIN STREET	REG #R-18	Installed
253	RH-010	EAST RIVER & ORANGE STREET	REG #R-16	Installed
254	RH-011	EAST RIVER & MONTAGUE STREET	REG #R-15	Installed
255	RH-012	EAST RIVER & CADMAN PLAZA	REG #R-17	Installed
256	RH-013	EAST RIVER & JORALEMON STREET	REG #R-14	Installed
257	RH-014	EAST RIVER & ATLANTIC AVENUE	REG #R-13	Installed
258	RH-016	EAST RIVER & AMITY STREET	REG #R-12	Installed
259	RH-018	EAST RIVER & KANE STREET	REG #R-11	Installed
260	RH-019	BUTTERMILK CHANNEL & HAMILTON AVENUE	REG #R-9	Installed
261	RH-020	BUTTERMILK CHANNEL & DEGRAW STREET	REG #R-10	Installed
262	RH-021	BUTTERMILK CHANNEL & SACKETT STREET	REG #R-9A	Installed
263	RH-022	ATLANTIC BASIN & BOWNE STREET	REG #R-8	Installed
264	RH-023	ATLANTIC BASIN & COMMERCE STREET	REG #R-7	Installed
265	RH-024	ATLANTIC BASIN & VERONA STREET	REG #R-6	Installed
266	RH-025	ATLANTIC BASIN & PIONEER STREET	REG #R-5	Installed
267	RH-028	BUTTERMILK CHANNEL & WOLCOTT STREET	REG #R-2	Installed
268	RH-029	UPPER NEW YORK BAY & VAN BRUNT STREET	REG #R-1, VAN BLANT ST. PS	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
269	RH-030	GOWANUS CANAL & HICKS STREET	CSO-2	Installed
270	RH-031	GOWANUS CANAL & CREAMER STREET	BOND-LORRAINE SWR RELIEF	Installed
271	RH-033	GOWANUS CANAL & DOUGLASS STREET (E)	REG #R-25	Installed
272	RH-034	HEAD OF GOWANUS CANAL	GOWANUS PS	Installed
273	RH-035	GOWANUS CANAL & BOND STREET	CSO-3, BOND-LORR SWR REL.	Installed
274	RH-036	GOWANUS CANAL & PRESIDENT STREET	REG #R-22	Installed
275	RH-037	GOWANUS CANAL & SACKETT STREET	REG #R-23	Installed
276	RH-038	GOWANUS CANAL & DEGRAW STREET	REG #R-24	Installed
277	RH-040	EAST RIVER & NAVY YARD	REG #R-26	Installed
278	**TI - 001**	**Tallman Island W.P.C.P. Outfall**		Installed
279	TI-003	POWELL'S COVE & N/O 7th AVENUE	REG #10A, 10B	Installed
280	TI-004	EAST RIVER & 151st STREET	REG #11	Installed
281	TI-005	EAST RIVER & 154th STREET	REG #12	Installed
282	TI-006	LITTLE NECK BAY & 24th AVENUE	24 AVENUE P.S.	Installed
283	TI-007	ALLEY CREEK & NORTHERN BLVD	OLD DOUG P.S.	Installed
284	TI-008	ALLEY CREEK & 46th AVENUE	REG #46, 47, 48, 49	Installed
285	*TI-009*	*LITTLE NECK BASIN & DOUG. BAY P.S.*	*DOUG BAY P.S.*	*WAIVER*
286	TI-010	FLUSHING RIVER & ROOSEVELT AVENUE	REG #30, 31, 40, 44	Installed
287	TI-011	FLUSHING BAY & 32nd AVENUE	REG #9, 51, 52, 53, 54	Installed
288	TI-012	FLUSHING BAY & 29th AVENUE	122ND STREET P.S.	Installed
289	TI-014	FLUSHING BAY & 23rd AVENUE	REG #7	Installed
290	TI-015	FLUSHING BAY & 22nd AVENUE	REG #6	Installed
291	TI-016	FLUSHING BAY & 20th AVENUE	REG #5	Installed
292	TI-017	FLUSHING BAY & 15th AVENUE	REG #4	Installed
293	TI-018	FLUSHING BAY & 14th AVENUE	REG #3	Installed
294	TI-019	EAST RIVER & 9th AVENUE	REG #2	Installed
295	TI-020	EAST RIVER & COLLEGE PLACE	REG #1	Installed
296	TI-022	FLUSHING RIVER & 40th ROAD	REG #55, 56, 57, 58	Installed
297	TI-023	LITTLE BAY & CRYDERS LANE	REG #13, CLEARVIEW P.S.	Installed
298	TI-024	ALLEY POND & 61st AVENUE	NEW DOUG P.S.	Installed
299	TI-025	ALLEY CREEK (W) & 400' SOUTH OF LIRR BRIDGE	Alley Creek CSO Storage Facility	Installed
300	**BB - 001**	**Bowery Bay W.P.C.P. Outfall**		Installed
301	BB-002	RIKER'S ISLAND CHANNEL & 45th STREET	REG #2	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
302	BB-003	BOWERY BAY & HAZEN STREET	REG #3	Installed
303	BB-004	DUTCH KILLS & BORDEN AVENUE	REG #L-3, L-41	Installed
304	BB-005	BOWERY BAY & E/O 81st STREET	REG #4	Installed
305	BB-006	FLUSHING BAY & W/O MARINA (114th STREET)	REG #10, 12, 13	Installed
306	BB-007	FLUSHING BAY & 27th AVENUE	REG #5	Installed
307	BB-008	FLUSHING BAY & 31st DR (108th STREET)	REG #6, 7, 8, 9	Installed
308	BB-009	DUTCH KILLS & HUNTERS POINT AVE.	REG #L-3B, L-37,L-38,L-41,L-3A	Installed
309	BB-010	DUTCH KILLS & QUEENS-MIDTOWN EXPWY	REG #L-3C	Installed
310	BB-011	NEWTOWN CREEK & GREENPOINT AVENUE	REG #L-1	Installed
311	BB-012	NEWTOWN CREEK & 35th STREET	REG #L-2	Installed
312	BB-013	NEWTOWN CREEK & 11th STREET	REG #L-8	Installed
313	BB-014	NEWTOWN CREEK & VERNON BLVD	REG #L-9	Installed
314	BB-015	NEWTOWN CREEK & 5th STREET	REG #L-10	Installed
315	BB-016	EAST RIVER & 51st AVENUE	REG #L-11	Installed
316	BB-017	EAST RIVER & 50th AVENUE	REG #L-12	Installed
317	BB-018	EAST RIVER & 49th AVENUE	REG #L-12A	Installed
318	BB-021	EAST RIVER & 47th AVENUE	REG #L-15	Installed
319	BB-022	EAST RIVER & 5th STREET	REG #L-16	Installed
320	BB-023	EAST RIVER & 44th DRIVE	REG #L-17	Installed
321	BB-024	EAST RIVER & 43rd AVENUE	REG #L-18	Installed
322	BB-025	EAST RIVER & 41st AVENUE	REG #L-19	Installed
323	BB-026	DUTCH KILLS & BETW. 28th & 29th STREET	REG #L-4, L-39, L-40, L-42	Installed
324	BB-027	EAST RIVER & 38th AVENUE	REG #L-20	Installed
325	BB-028	EAST RIVER & 37th AVENUE	REG #L-21	Installed
326	BB-029	EAST RIVER & BROADWAY	REG #L-22	Installed
327	BB-030	EAST RIVER & 30th ROAD	REG #L-23	Installed
328	BB-032	EAST RIVER & MAIN AVENUE	REG #L-29, L-29A, MH-15	Installed
329	BB-033	EAST RIVER & 27th AVENUE	REG #L-27	Installed
330	BB-034	EAST RIVER & HOYT AVENUE	REG #L-30	Installed
331	BB-035	EAST RIVER & DITMARS BLVD	REG #L-31	Installed
332	BB-036	EAST RIVER & 21st AVENUE	REG #L-32	Installed
333	BB-037	EAST RIVER & 20th AVENUE	REG #L-33	Installed
334	BB-040	DUTCH KILLS & 49th AVENUE	REG #L-5	Installed
335	BB-041	LUYSTER CREEK & 19th AVENUE	REG #1	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
336	BB-042	DUTCH KILLS & W/O 27th STREET	REG #L-6	Installed
337	BB-043	NEWTOWN CREEK & 11th STREET	REG #L-7	Installed
338	BB-045	EAST RIVER & 9th STREET	REG #L-25	Installed
339	BB-046	EAST RIVER & 3rd STREET	REG #L-26	Installed
340	BB-047	EAST RIVER & ASTORIA BLVD	REG #L-28	Installed
341	BB-049	NEWTOWN CREEK & 21st STREET	N/A	Installed
342	BB-053	HELL GATE & 20th AVENUE	N/A	Installed
343	**26W - 001**	**26th Ward W.P.C.P. Outfall**		Installed
344	26W-002	HENDRIX CREEK & PLANT BYPASS	PLANT BYPASS	Installed
345	26W-003	FRESH CREEK BASIN & WILLIAMS AVENUE	REG #2	Installed
346	26W-004	HENDRIX CREEK & HENDRIX STREET	REG #1	Installed
347	26W-005	SPRING CREEK & SPRING CREEK AUXILIARY WPCP	REG #3, JAM REG #2	Installed
348	**CI - 001**	**Coney Island W.P.C.P. Outfall**		Installed
349	**CI - 002**	**Coney Island W.P.C.P. Outfall**		Installed
350	CI-004	PAERDEGAT BASIN & FLATLANDS AVENUE	TG #5	Installed
351	CI-005	PAERDEGAT BASIN & FLATLANDS AVENUE	REG #1, 2, 3, 4	Installed
352	CI-006	PAERDEGAT BASIN & RALPH AVENUE	REG #6	Installed
353	**OH - 001**	**Owls Head W.P.C.P. Outfall**		Installed
354	OH-002	UPPER NEW YORK BAY & 64th STREET	REG #6A, 6B, 6C	Installed
355	OH-003	UPPER NEW YORK BAY & 49th STREET	REG #7A, 7B, 7C	Installed
356	*OH-004*	*UPPER NEW YORK BAY & 43rd STREET*	*REG #7D, 19th ST. PS*	*WAIVER*
357	OH-005	GOWANUS CANAL & CARROLL STREET	3rd AVE SEWER RELIEF	Installed
358	OH-006	GOWANUS CANAL & 19th STREET (N0RTH SIDE)	3rd AVE SEWER RELIEF	Installed
359	OH-007	GOWANUS CANAL & 2nd AVENUE	2nd AVENUE P.S.	Installed
360	OH-015	GRAVESEND BAY & 17th AVENUE	REG #9A, 9B, 9C	Installed
361	OH-017	UPPER NEW YORK BAY & 92nd STREET	REG #1	Installed
362	OH-018	UPPER NEW YORK BAY & 79th STREET	REG #2, 3	Installed
363	OH-019	UPPER NEW YORK BAY & 71st STREET	REG #4	Installed
364	OH-020	UPPER NEW YORK BAY & BAY RIDGE AVENUE	REG #5	Installed
365	OH-021	CONEY ISLAND CREEK & W 15th STREET	REG #10, 11, AVE.V P.S.	Installed
366	OH-022	GOWANUS BAY & 32nd STREET (Bush Terminal Complex)	2nd AVE SEWER RELIEF	Installed
367	OH-024	GOWANUS CANAL & 23rd STREET	3rd AVE SEWER RELIEF	Installed
368	***Jam - 001***	***Jamaica W.P.C.P. Outfall***		***WAIVER***
369	JAM-003	BERGEN BASIN & 123rd STREET	REG #3	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
370	JAM-003A	BERGEN BASIN & 123rd STREET	REG #14	Installed
371	JAM-005	HEAD OF THURSTON BASIN & JFK AIRPORT	REG #6, 7, 8, 9	Installed
372	JAM-006	HEAD OF BERGEN BASIN & JFK AIRPORT	REG #1, 4, 10, SECONDARY PLANT EFFLUENT	Installed
373	JAM-007	HEAD OF THURSTON BASIN & JFK AIRPORT (NEXT TO JA-005)	REG #6, 7, 8, 9	Installed
374	**Roc - 001**	**Rockaway W.P.C.P. Outfall**		Installed
375	ROC-003	JAMAICA BAY & PLANT BYPASS	PLANT BYPASS	Installed
376	ROC-009	JAMAICA BAY & BEACH 98th STREET	REG #D-6	Installed
377	ROC-014	JAMAICA BAY & BEACH 91st STREET	REG #D-2	Installed
378	ROC-016	NORTON BASIN & BAYSWATER AVENUE	BAYSWATER P.S.	Installed
379	ROC-017	BANNISTER CREEK & BEACH 3rd STREET	SEAGIRT AVE. P.S.	Installed
380	ROC-029	JAMAICA BAY & BEACH 106 STREET	REG #1, 2	Installed
381	ROC-031	MOTT BASIN & REDFERN AVENUE	NAMEOKE P.S.	Installed
382	ROC-032	JAMAICA BAY & BEACH 98th STREET	REG #D-7,D-8,D-9,D-10,D-11	Installed
383	ROC-033	JAMAICA BAY & BEACH 106th STREET	REG #D-12	Installed
384	**OB - 001**	**Oakwood Beach W.P.C.P. Outfall**		Installed
385	OB-001A	LOWER NEW YORK BAY & PLANT BYPASS	PLANT BYPASS	Installed
386	**PR - 001**	**Port Richmond W.P.C.P. Outfall**		Installed
387	PR-002	KILL VAN KULL & E/O TAYLOR STREET	REG #R-34	Installed
388	PR-003	KILL VAN KULL & BROADWAY	REG #R-33	Installed
389	PR-004	KILL VAN KULL & BARD AVENUE	REG #R-29	Installed
390	PR-005	KILL VAN KULL & W/O KISSEL AVENUE	REG #R-28	Installed
391	PR-006	KILL VAN KULL & CLINTON AVENUE	REG #R-23	Installed
392	PR-007	KILL VAN KULL & SAILOR SNUG HARBOR	REG #R-27	Installed
393	PR-008	KILL VAN KULL & FRANKLIN AVENUE	REG #R-21	Installed
394	PR-009	KILL VAN KULL & JERSEY STREET	REG #R-20	Installed
395	PR-010	UPPER NEW YORK BAY & ST. PETERS PLACE	REG #R-19	Installed
396	PR-011	UPPER NEW YORK BAY & HAMILTON AVENUE	REG #R-18	Installed
397	PR-013	UPPER NEW YORK BAY & VICTORY BLVD.	REG #R-17	Installed
398	PR-014	UPPER NEW YORK BAY & BALTIC STREET	REG #R-15	Installed
399	PR-015	UPPER NEW YORK BAY & S/O DOCK STREET	REG #R-11	Installed
400	PR-016	UPPER NEW YORK BAY & MARINE HOSPITAL	REG #R-10	Installed
401	PR-017	UPPER NEW YORK BAY & NORWOOD AVENUE	REG #R-9	Installed
402	PR-018	UPPER NEW YORK BAY & N/O CAMDEN STREET	REG #R-8	Installed

No	OUTFALLID	OUTFALL LOCATION	CONTRIBUTORS	STATUS/COMMENTS
403	PR-019	UPPER NEW YORK BAY & S/O LYNHURST AVENUE	REG #R-7	Installed
404	PR-020	UPPER NEW YORK BAY & N/O SYLVA LANE	REG #R-5	Installed
405	PR-021	UPPER NEW YORK BAY & HYLAN BOULEVARD	REG #R-4	Installed
406	PR-023	UPPER NEW YORK BAY & NAUTILUS STREET	REG #R-3	Installed
407	PR-023A	UPPER NEW YORK BAY & NAUTILUS STREET	REG #R-2	Installed
408	PR-023B	UPPER NEW YORK BAY & NAUTILUS STREET	REG #R-1	Installed
409	PR-024	NEWARK BAY & W/O HOLLAND AVENUE	REG #R-1W	Installed
410	PR-025	NEWARK BAY & SOUTH AVENUE	REG #R-2W	Installed
411	PR-026	NEWARK BAY & HARBOR ROAD	REG #R-3W	Installed
412	PR-027	NEWARK BAY & UNION AVENUE	REG #R-4W	Installed
413	PR-028	NEWARK BAY & HOUSEMAN AVENUE	REG #R-5W	Installed
414	PR-029	NEWARK BAY & NICHOLAS STREET	REG #R-6W	Installed
415	PR-030	UPPER NEW YORK BAY & SYLVATON TER..	REG #R-6	Installed
416	PR-031	UPPER NEW YORK BAY & CANAL STREET	REG #13	Installed
417	PR-032	UPPER NEW YORK BAY & VICTORY BOULEVARD	REG #16	Installed
418	PR-033	KILL VAN KULL & ELIZABETH AVENUE	REG #R-31	Installed
419	PR-034	KILL VAN KULL & BEMENT AVENUE	REG #R-32	Installed
420	PR-035	KILL VAN KULL & BODINE STREET	REG #R-35	Installed
421	PR-036	BODINE CREEK & RECTOR STREET	REG #R-36	Installed
422	PR-037	KILL VAN KULL & RICHMOND AVENUE	REG #R-37	Installed

Appendix 10

Exhibit 1: Department of Health (DOH) Notification Program

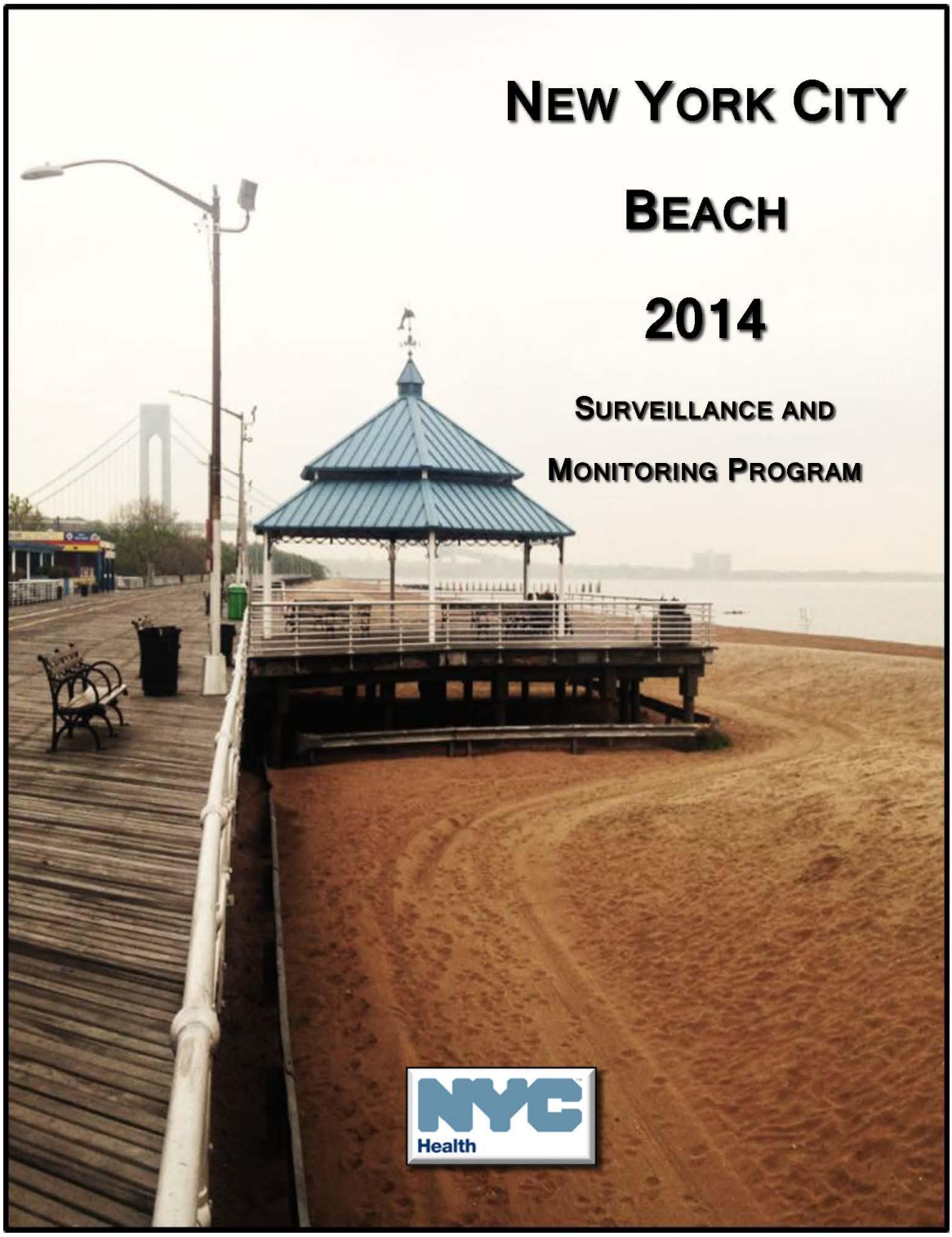
Table 1: NYC Permitted Beaches

Figure 1: Location of NYC Permitted Beaches

Table A: Beach Advisory and Closure Comparison

Table B-1: Advisory & Closure Summary for Public Beaches

Table B-2: Advisory & Closure Summary for Private Beaches


NEW YORK CITY
BEACH
2014
SURVEILLANCE AND
MONITORING PROGRAM
NYC
Health

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SECTION 1

INTRODUCTION

In accordance with the New York City Administrative Code §18-131 (c) (4), this annual report summarizes the 2014 New York City Beach Surveillance and Monitoring Program for beaches permitted by the Department of Health and Mental Hygiene (DOHMH or the "Department"). This law requires that the Commissioner of Health and Mental Hygiene "forward a combined report of the dates and results of all inspections of all beaches and the dates and reasons for any warning (previously referred to as Advisory) or closure, and such other information deemed appropriate by the Commissioner of Health and Mental Hygiene, for the Friday proceeding the last Monday of May until the Friday after the first Monday of September of each year, to the Mayor, the Public Advocate and the Speaker of the Council.

"Under both Article 167 of the New York City Health Code (Article 167) and Subpart 6-2 of the New York State Sanitary Code (Subpart 6-2), the Department is required to monitor and conduct surveillance of permitted beaches in the City of New York. In order to meet requirements under Article 167, the Department administers the Beach Surveillance and Monitoring Program for all beaches operating within the city limits and with a permit issued by the Department. The Program responsibilities include: 1) beach monitoring and surveillance; 2) public notification and communication, and 3) conducting annual safety inspections.

The City's beaches function as an important recreational and quality-of-life resource for City residents and neighboring communities. As shown in Table 1 (page 3) and Figure 1 (page 4) there are eight public and sixteen private permitted beaches within New York City limits.

TABLE 1: NEW YORK CITY PERMITTED BEACHES AND WATER BODY IDENTIFICATION

Borough	Beaches	Water Body
Brooklyn	*Public:* Coney Island, Manhattan *Private:* Seagate, Kiddie Gerritsen, Kingsborough	Lower New York Harbor
Bronx	*Public:* Orchard Beach *Private:* American Turner, Danish American, Manheim, Whitecross Fishing, Morris Yacht Club, Schuyler Hill, Trinity Danish, Locust Point Yacht Club, West Fordham Street	Eastchester Bay, Western Long Island Sound
Queens	*Public:* Rockaway *Private:* Breezy Point	Atlantic Ocean Coastline
	Private: Douglaston Manor, Whitestone Booster Civic Association	Western Long Island Sound
Staten Island	*Public:* South Beach, Midland, Cedar Grove, Wolfe's Pond Park *Private:* Staten Island YMCA	Lower New York Bay

FIGURE 1: NEW YORK CITY PERMITTED BEACHES

1.1 New Initiatives 2014

This beach year, the Department completed a comprehensive upgrade to the Program's Public Notification and Risk Communication efforts. New user friendly, easy to read signs were developed and implemented and The Department rolled out a new free texting service called "Know Before You Go" for the 2014 beach season. These new initiatives were highlighted in EPA's National Beach Guidance and Required Performance Criteria for Grants, 2014 Edition where case study examples of the Departments revised notification signage, and digital and mobile notification systems were included.

1.1.1 New Public Risk Communication Signs

This season, the Department developed user friendly, easy to read public notification signs for closures and warnings as shown in Figure 2 (page 6). The new sign design was informed by a substantial effort during the 2013 season to improve risk communication to the public when beach water quality exceeds or is expected to exceed acceptable standards.

In 2013, the Department initiated a study amongst NYC beachgoers to assess public awareness and the effectiveness of the then current beach notification methods for reporting water quality conditions at New York City beaches. Participants in intercept surveys and focus groups provided baseline data on how warning messages in beach advisories and closures influenced public perception and understanding of water quality risks and the impact of advisories on beach attendance and swimming behaviors.

Upon completion of the study, the "Wet Weather" and "Pollution Advisories" were combined to a new "Warning" status which encompasses any condition which would warrant a Warning notification including preemptive rain events. Based on study results, the new signage was re-named and posted in 2014 using the language "Warning" instead of "Advisory" to foster public understanding of notifications and risk communication. The signs communicate the core recommendations clearly and directly and provide supplemental information on the basis for the Warning or Closure.

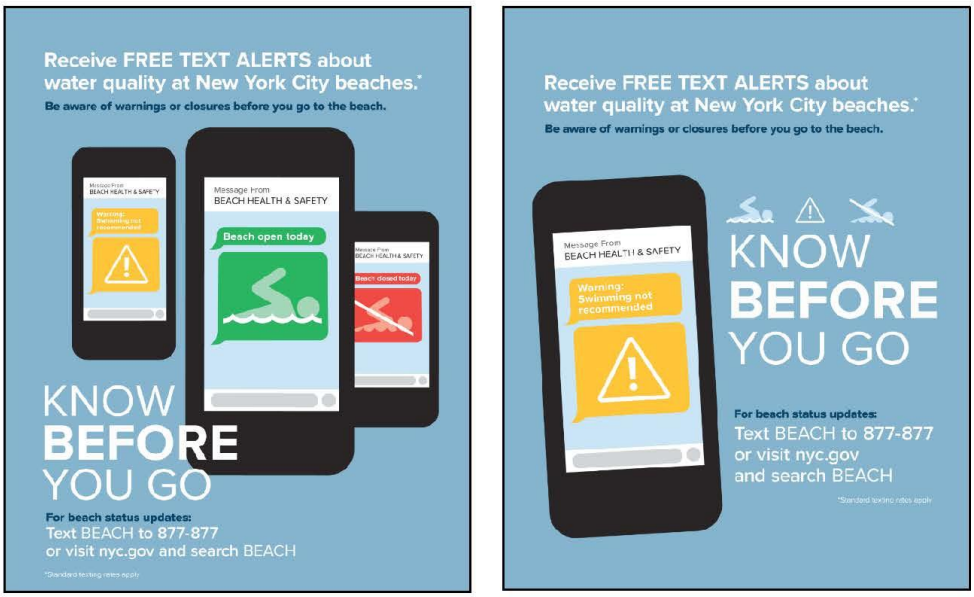
FIGURE 2: NEW BEACH WARNING AND CLOSED SIGNS

1.1.2 Know Before You Go

The texting service enabled subscribers to make informed decisions before they went to the beach by checking if the beach was open or closed or if there were any warnings due to wet weather conditions or water quality concerns. Subscribers simply text "BEACH" to 877-877 to get updates on the beach status of any of the eight public beaches in New York City. Prior to the texting roll-out, the DOHMH initiated an extensive outreach advertising campaign using MTA Bus shelters and the Staten Island Ferry LED advertising display as shown in Figure 3 (page 7). Throughout the season in addition to providing information on beach status the Department also used this tool to broadcast safety related messages including a warning for high RIP currents and when beaches opened and closed for the season.

By the close of the beach season, there were over 3000 subscribers to "Know Before You Go." Most subscribers indicated a specific beach for which they would like information. Coney Island and Rockaway Beach were the most popular beach-specific subscriptions. Based on an instant poll results from subscribers at the end of the season, more than half (67%) found the texting service to be "very useful".

FIGURE 3: KNOW BEFORE YOU GO TEXTING PROGRAM



1.2 Clean Streets=Clean Beaches

In a continued effort to prevent floating debris and trash from reaching NYC area beaches, through a multi-Departmental effort, the City launched the "Clean Streets=Clean Beaches" campaign on July 8th from the MCU Park in Coney Island, home of the Brooklyn Cyclones. At the event, "Clean Streets=Clean Beaches" flyer toys were handed out to approximately 5,000 children attending the Cyclones game from area day camps and the City's Summer Youth Employment Program. In partnership with the Department of Environmental Protection (DEP) and the Department of Sanitation more than 200 participants in the SYEP were involved in removing litter and debris from waterfront properties throughout the five boroughs. As part of the campaign's education and outreach initiatives, Clean Streets=Clean Beaches posters were displayed on over 2,000 sanitation vehicles throughout the 5 boroughs and at area beaches and thousands of reusable tote bags were handed out at New York City beaches throughout the season.

In order to control floatable debris from entering area waterways, especially when Combined Sewer Overflows (CSO's) discharge into the New York City harbor during wet weather events, DEP employs several pollution prevention and control programs. Hooded catch basins help reduce the discharge of street litter to sewers, targeted neighborhood street cleaning, skimmer vessels fitted with nets that collect floating debris, floating booms that trap debris and sewer-system improvements all help to maximize the ability to retain floating debris before they enter

the ocean. DEP maintains 24 floatable containment facilities and 4 CSO retention facilities that significantly reduce CSO overflows and control floatables. DEP has also completed the installation of three litter control devices located within sewer outfalls along the Bronx River that use hydraulic bar screens and nylon netting systems to capture litter before it reaches the river. This is the first time this type of technology is being used in New York City, and a similar facility is slated to be completed at the head of the Gowanus Canal.

1.3 Post Super Storm Sandy Re-construction

Rehabilitation work to area beaches as a result of the destruction caused by Super Storm Sandy continued during the off-season and into the 2014 beach season. Ongoing work included the implementation of emergency protective measures to serve as erosion and coastal flooding protection during potentially high surf conditions. Temporary barriers were set up which included the construction of a berm along the shoreline and installing sand-filled geotextile bags in Rockaway Beach, Cedar Grove Beach, South Beach and Midland Beach.

In Rockaway new concrete baffle walls were erected from 129th to 149th Streets and reconstruction of the boardwalk which included removing the existing concrete pylons from the old boardwalk was underway between 87th and 105th Streets. The new boardwalk will be made of steel and will incorporate a sea wall on one side for protection. The elevation of the new boardwalk will be on the 100 year flood plan level. This segment of the boardwalk reconstruction project is expected to be completed in 2015. As shown in Figure 4 (page 9) Mobi-mats were installed at most beach access ramps to facilitate beach accessibility.

FIGURE 4: ROCKAWAY BEACH 108TH STREET, MAY 2014

SECTION 2

BACKGROUND INFORMATION

This chapter provides background information on the New York City Beach Surveillance and Monitoring Program. The topics of discussion include, bacteriological water quality criteria, pre-emptive rainfall thresholds, beach classifications, procedures and protocols for monitoring and surveillance, public notification and risk communication and safety inspections.

2.1 Water Quality Criteria

Under the New York State Sanitary Code §6-2.15, Article §167.13 of the New York City Health Code and the Federal Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH) Act, Enterococci is the indicator organism mandated for evaluating the microbiological quality of marine (saline) recreational beach water. Under the New York State Sanitary Code and the New York City Health Code, Enterococci concentrations for a single sample shall not exceed 104 Colony Forming Units (CFU's) per 100 mL (61 CFU's per 100 ml for fresh water), and the Enterococci geometric mean shall not exceed 35 CFU's per 100 mL (33 CFU's per 100 ml for fresh water) for a series of five or more samples collected during a 30-day period. The geometric mean and single sample maximum is determined by analyzing samples for the presence and quantification of Enterococci using EPA method 1600.

2.2 Rainfall Events

Pre-emptive rainfall thresholds have been developed for New York City Beaches through statistical modeling of historical data. These preemptive thresholds are used as a management tool to provide a quick and reliable indication of water quality conditions. When threshold levels of precipitation have been exceeded there is very a high probability for elevated levels of harmful bacteria due to CSO's and stormwater runoff. Untreated sewage bypasses and excess stormwater runoff can potentially pose a public health threat in nearby beach water bodies. When rainfall intensities meet the pre-emptive thresholds, as defined in Table 2 (page 10) a public notification or a warning will take effect for the predetermined duration.

TABLE 2: NEW YORK CITY PRE-EMPTIVE RAINFALL THRESHOLDS

Beach (Borough)	Rainfall Event Limit	Duration of Warning
South Beach, Midland Beach, Cedar Grove, Staten Island YMCA (Staten Island), Manhattan Beach, Kingsborough Community College (Brooklyn)	1.5 – 2.5 inches	12 hours
	> 2.5 inches	24 hours
Orchard Beach (Brooklyn)	> 2.5 inches	24 hours
Coney Island (Brooklyn)	> 2.5 inches	12 hours
Gerritsen Beach (Brooklyn) Whitestone Booster (Queens)	0.3 - 0.6 inches	18 hours
	> 0.6 inches	40 hours
American Turner, Danish American , Manheim, White Cross, Morris Yacht, Schuyler Hill, Trinity Danish, Locust Point Yacht Club, West Fordham Street Association (Bronx)	0.6 – 2.5 inches	36 hours
	> 2.5 inches	48 hours
Douglaston Manor (Queens)	0.3 – 0.6 inches	30 hours
	0.6 – 2.5 inches	60 hours
	> 2.5 inches	72 hours

2.3 Beach Classifications

There are three classifications for New York City beaches which are determined by assessing water quality monitoring data and surveillance, rainfall and pollution events, on-site sanitary surveys, and/or historical information. Warnings (Class B) are issued to the public to avoid recreational water contact when bacteria levels or other conditions that may contribute to possible illness are present. Swimming or wading are not recommended in any area placed under a Warning especially for people with underlying medical conditions and for young and elderly people who may be at a greater risk of contracting swimming related illnesses. Additionally swimming or wading is temporarily not permitted in any area placed under a Closure. Beaches except those specifically restricted under Article §167.05 are classified as follows:

Class A: Open for Swimming and Wading. Beaches may be classified as open and approved for swimming and wading when all of the following conditions are met:

1. Beach water quality is in accordance with standards defined under Article §167.13.
2. Sanitary and safety surveys are satisfactory in accordance with Article §167.25.

3. The epidemiological history is satisfactory to the Department. No repeated complaints/reports of illness/injury received from the public or from owners/operators of city beaches.

Class B: Warning – Not Recommended for Swimming and Wading. Beaches may be classified as "Not Recommended for Swimming and Wading" when one or more of the following conditions exists:

1. When rainfall events exceed the pre-emptive rainfall thresholds, when naturally occurring organisms or human influences may cause a continuous or reoccurring degradation of water quality that would put public health at risk;
2. When a water quality sample exceeds the water quality standard or a beach notification threshold. The notification should remain in effect until resampling indicates that the beach water quality standard and/or notification thresholds are being met.
3. When an on-site sanitary survey or investigation reveals the presence of floatable debris, medical/infectious waste or toxic contaminants, petroleum products and/or other contamination on the beach; or
4. When there is evidence of sewage and wastewater discharge.

Class C: Closed – Temporarily Restricted for Swimming and Wading: Beaches may be classified as "Temporarily Restricted for Swimming and Wading" when one or more of the following conditions exists:

1. Sampling by bacteriological testing that finds beach water quality exceeding the statutory water quality standard for marine water beaches;
2. Epidemiological data indicates a significant incidence of related illnesses or repeated complaints/reports of illness/injury received from beach patrons;
3. A sanitary and safety survey or an investigation reveals the presence of potentially hazardous amounts of floatable debris, medical/infectious waste, toxic contaminants, petroleum products or other contaminants on the beach, or there is evidence of sewage and wastewater discharges in sufficient quantities that will adversely affect the quality of the beach water; or
4. Any other environmental factors determined to be a public health or safety hazard by the Department.

2.4 Beach Monitoring and Surveillance

Starting a month before the beach season, the Department monitors and samples each beach on a weekly basis with the exception of the Rockaway and Breezy Point beaches, which are sampled bi-weekly. In addition to routine water quality monitoring, the Department monitors on a daily basis the regional wet weather conditions and occasional Waste Water Treatment

Plant (WWTP) bypasses, operational upsets and spills through interagency communication and cooperation. This information can be used to assess and make beach status determinations.

During a sample event, a routine on-site sanitary survey inspection is performed to identify any existing and/or potential sources of pollution that are likely to affect beach water quality. Water samples are collected at knee-depth (18 inches) in three feet of water, from the center left and right of the beach. At larger beaches, such as Coney Island and Rockaway, samples are taken from multiple locations to ensure adequate representation and reliable results. The collected samples are delivered to the Department's Public Health Laboratory for analysis. The analytical turnaround time for Enterococci is 24 hours.

The water quality of the samples analyzed is reviewed and assessed based on conformance or non-conformance to applicable standards. If the regulatory limit for Enterococci is exceeded or conditions exist which may pose a threat to the health and/or safety of the public, the Department will initiate one of the following actions: conduct immediate re-sampling; issue a warning and conduct re-sampling; and/or close the beach and conduct re-sampling. The determining factors for additional sampling may include: (1) proximity to suspected pollution sources; (2) extent of pollution; (3) beach use; (4) historical water quality data; and (5) other health risk factors.

2.5 Public Notification and Risk Communication

When beach status changes based upon evaluation and assessment of beach water quality as specified above, the Department notifies the public through on-site beach signage, website postings, 311 non-emergency government service hotline, Notify NYC (via Twitter, RSS feed, e-mail, and SMS), "Know Before You Go" texting service, and Department press releases when necessary. Beach operators are notified by phone, email and/or text as to the necessary on-site postings. The specific notification procedures and requirements for each of the above conditions are as follows:

On-Site Signage: When notified by the Department, the permittee is required to post or remove the warning or closure signs in designated areas visible to beach users such as beach entrances, bulletin boards, or the general vicinity of the common swimming areas.

"Know Before You Go" Texting Service: Subscribers simply send a text using "BEACH" to 877-877 to get updates on beach status for any of the eight public beaches in New York City.

Website Postings: The Department has developed an easily accessible website updated with location and information for all permitted beaches: www.nyc.gov/health/beach. The website contains background information on the beach program, explains the causes and sources of surface water pollution, and summarizes the beach classification system, including the different

types of warnings. A list of City beaches by borough, along with their respective status (Open, Closed, or Warning) and sample results are promptly updated on the website. Beach warnings or closures are also posted under the "NYC Right Now" link on the City website, www.nyc.gov, during the beach season. The public can report swimming related illnesses through the website.

Notify NYC: When notified by the Department of status changes relating to public beaches the Office of Emergency Management will send members of the public who have signed up to Notify NYC status information via Twitter, RSS feed, e-mail and SMS.

311: The 311 telephone operators monitor the Department's website for updates on warning or closure information, as described above, and convey that information to 311 callers. The public can also report a swimming related illness via 311.

NYC Press Release: Press releases are disseminated to various types of media (newspaper, radio, website, television) as well as elected officials.

2.6 Safety Inspections

To reduce substantial health hazards and other risk factors that lead to illness or injury, the Department conducts annual safety inspections and complaint inspections at bathing beaches to assure that (1) all staff, especially lifeguards and supervisors, have proper certificates and coverage including CPR certification, (2) all required life-saving equipment is available, including rescue tubes, spine boards, first aid kits, and resuscitation equipment, (3) there is proper signage posted on site. Direct observations of conditions are supplemented by interviews with lifeguards and other personnel.

SECTION 3

FINDINGS

3.1 Water Quality and Illness Reporting

Routine water quality monitoring and sample collection was performed at all twenty-three permitted beaches. Approximately 1570 samples were collected and analyzed from these beaches between April and September 2014, 360 of which were collected prior to the start of the beach season which begins Memorial Day weekend. There was no recreational water illness complaints reported to the Department during the season.

Water quality sample results showing the 30-Day geometric mean and daily averages are listed in Appendix A, Table A1-1 to Table A1-4 2014 Water Quality Results (pages 16 to 19), and exceedances are listed in Appendix A (Table A2-1, Table A2-2 and Table A2-3): 2014 Sample Results and Exceedances (pages 20 to 22). During the 2014 beach season Cedar Grove beach in Staten Island had the highest percentage exceedance rate for all public beaches (11.8%) while Rockaway Beach and Orchard Beach had no exceedances. Extremely heavy rainfall events due to passing thunderstorms resulted in a high amount of surface runoff and subsequent sporadic water quality exceedances in Staten Island, especially at Cedar Grove Beach and Brooklyn in July.

For private beaches, Douglaston Manor had the highest exceedance rate (18.3%), while Morris Yacht Club, West Fordham Civic Association and Breezy Point had no exceedances. The repetitive North Easterly track of summer thunderstorm activity has an impact on private beaches in the Bronx which are susceptible to runoff resulting in elevated bacteriological levels. Bronx private beaches are located in the western terminus of the Long Island Sound which has a complex hydrodynamic system. Long retention times, complex water circulation and mixing patterns and seasonal tidal variations can produce poor mixing in these waters and may contribute to deteriorated water quality. Deteriorated water quality and associated bacteriological contamination as a result of rainfall events as indicted by the number of notification days at susceptible beaches are shown in Appendix B: 2014 Warnings and Closures (pages 23 to 26).

3.2 Public Notification and Risk Communication

Public Beaches had no closure days and a total of 13 warning days, 5 of which were as a result of wet weather conditions where the pre-emptive rainfall threshold was exceeded. Private beaches had 294 warning days (168 of which were as a result of wet weather conditions) and 62 closure days. Kiddie Gerritsen Beach was voluntarily closed for 2 days in July after a fuel slick

was observed on the water in the swimming area. The beach was re-opened after water quality testing and on-site observations confirmed that water quality conditions were acceptable. The specific warning and closure dates for each beach are shown in Appendix B: 2014 Warnings and Closures (pages 23 to 26).

3.3 Inspections

During the 2014 beach season, a total of 24 inspections were conducted by the Department at permitted beaches. Both general violations and public health hazards observed during the inspections are outlined in Table C, Appendix C: 2014 Inspection Non-compliance Summary (page 27).

APPENDIX A: 2014 WATER QUALITY RESULTS AND EXCEEDANCE

Table A1-1: Brooklyn Beaches Water Quality Results

Enterococci 30 Day Geometric Mean/Daily Average (Count/100ml)

Water Quality Standards: 30 day geomean limit: 35cfu/100ml, Daily average limit: 104cfu/100ml

Date of Week Ending	CONEY ISLAND BEACH		MANHATTAN BEACH		GERRITSEN/ KIDDIE BEACH		KINGSBOROUGH COMMUNITY COLLEGE		SEA GATE 42ND		SEA GATE BEACH CLUB	
	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily
5/24/2014	7	5	5	4	12	49	6	5	6	4	9	13
5/31/2014	6	4	4	5	13	9	5	4	5	4	8	4
6/7/2014	5	4	4	5	10	4	7	41	5	4	7	4
6/14/2014	5	14	6	17	14	36	10	36	4	5	5	4
6/21/2014	5	4	6	5	14	13	10	4	4	4	5	5
6/28/2014	5	5	6	4	9	5	10	4	4	4	5	23
7/5/2014	5	5	6	5	8	4	23	5	4	5	6	7
7/12/2014	5	4	6	5	8	4	16	5	4	4	6	4
7/19/2014	7	4	8	4	7	15	22	25	8	5	10	8
7/26/2014	7	4	8	5	8	33	28	25	8	4	10	4
8/2/2014	9	26	9	7	13	4	28	4	8	4	8	4
8/9/2014	9	5	9	4	13	4	14	4	7	4	9	9
8/16/2014	11	26	13	71	14	8	23	101	7	4	12	35
8/23/2014	7	4	8	4	12	4	13	16	4	4	7	4
8/30/2014	7	15	8	5	9	5	10	5	4	4	7	4

Table A1-2: Bronx Beaches Water Quality Results

Enterococci 30 Day Geometric Mean/Daily Average (Count/100ml)

Water Quality Standards: 30 day geomean limit: 35cfu/100ml, Daily average limit: 104cfu/100ml

Date of Week Ending	ORCHARD BEACH		AMERICAN TURNER		DANISH AMERICAN BEACH CLUB		LOCUST POINT YACHT CLUB		MANHEM CLUB		MORRIS YACHT AND BEACH CLUB		SCHUYLER HILL CIVIC ASSOCIATION		TRINITY DANISH		WEST FORDHAM STREET ASSOCIATION		WHITE CROSS FISHING CLUB	
	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily
5/24/2014	6	4	15	8	12	8	5	5	11	7	7	4	8	7	12	4	11	9	27	5
5/31/2014	8	27	45	**1267**	36	**1500**	8	52	35	**1133**	7	4	14	59	35	**733**	14	13	87	**2440**
6/7/2014	6	4	39	5	30	4	8	5	27	4	6	4	12	4	23	5	14	5	55	13
6/14/2014	7	16	95	**440**	65	**283**	14	**144**	49	77	7	35	21	**149**	51	**413**	17	11	**133**	**1160**
6/21/2014	7	4	46	15	51	37	16	7	29	12	7	15	20	23	37	21	7	4	66	23
6/28/2014	7	4	42	5	45	4	17	13	26	4	7	4	18	4	38	5	7	7	66	5
7/5/2014	5	4	13	4	14	4	10	4	9	4	7	4	11	4	15	7	6	8	21	4
7/12/2014	5	5	21	79	19	23	10	4	12	20	10	44	11	4	19	23	8	20	28	48
7/19/2014	4	4	14	75	10	11	5	4	6	4	8	5	5	4	9	8	6	4	12	15
7/26/2014	4	4	12	5	7	4	5	4	5	4	6	4	4	4	7	4	7	7	12	36
8/2/2014	4	4	13	9	7	4	4	4	5	4	6	4	4	4	6	4	7	4	11	4
8/9/2014	4	4	13	4	7	4	4	4	5	4	6	4	4	4	6	4	6	4	13	28
8/16/2014	5	11	12	43	7	31	4	4	6	23	6	20	4	7	7	47	4	4	11	17
8/23/2014	5	4	8	5	6	4	4	4	6	8	5	4	4	4	8	11	4	4	10	12
8/30/2014	5	4	7	4	6	4	4	4	6	4	5	4	4	4	8	8	4	4	9	23
9/6/2014			6	4	6	4			6	4	6	5					4	5	9	4
9/13/2014					16	**1820**					7	12					4	7		
9/20/2014											5	4					4	4		
9/27/2014											7	20					6	25		

Table A1-3: Queens Beaches Water Quality Results

Enterococci 30 Day Geometric Mean/Daily Average (Count/100ml)

Water Quality Standards- 30 day geomean limit: 35cfu/100ml, Daily Average limit: 104cfu/100ml

Date of Week Ending	ROCKAWAY BEACH*		BREEZY POINT 219		BREEZY POINT Reid Ave		WHITESTONE BOOSTER CIVIC ASSOCIATION		DOUGLASTON MANOR ASSOCIATION	
	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily
5/24/2014							10	20	24	16
5/31/2014	8	4	8	4	10	4	17	96	50	**213**
6/7/2014							18	12	53	27
6/14/2014	4	4	5	8	4	4	27	81	48	**268**
6/21/2014							20	5	40	20
6/28/2014	4	4	5	4	4	4	15	5	34	7
7/5/2014							10	9	15	4
7/12/2014	4	4	5	4	4	4	14	44	31	**197**
7/19/2014							13	52	28	**121**
7/26/2014	4	4	4	4	4	4	14	8	27	7
8/2/2014							14	5	31	19
8/9/2014	4	4	6	16	4	4	14	9	33	7
8/16/2014							11	16	17	24
8/23/2014	4	4	6	4	4	4	7	5	9	4
8/30/2014							7	12	11	19
9/6/2014							7	4	11	27
9/13/2014									15	25
9/20/2014									10	4
9/27/2014									16	32

*Note: Rockaway and Breezy Point Beaches are routinely sampled bi-weekly.

Table A1-4: Staten Island Beaches Water Quality Results

Enterococci 30 Day Geometric Mean/Daily Average (Count/100ml)

Water Quality Standards- 30 day Geomean limit: 35cfu/100ml, Daily Average limit: 104cfu/100ml
Fresh Water Standards- 30 day Geomean limit: 33cfu/100ml, Daily Average limit: 61cfu/100ml

Date of Week Ending	SOUTH BEACH		MIDLAND BEACH		CEDAR GROVE BEACH		WOLFE'S POND BEACH		STATEN ISLAND YMCA *	
	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily	30 Day	Daily
5/24/2014	8	4	6	4	6	4	6	4	5	4
5/31/2014	6	5	6	4	6	4	6	4	6	13
6/7/2014	5	4	5	4	5	5	5	4	12	**87**
6/14/2014	18	80	12	15	20	87	14	91	36	56
6/21/2014	22	21	13	5	23	16	14	4	45	21
6/28/2014	22	4	13	4	23	4	14	4	47	5
7/5/2014	22	4	13	4	23	4	14	4	39	4
7/12/2014	21	4	13	4	22	4	14	4	25	8
7/19/2014	9	7	8	16	9	4	5	4	10	5
7/26/2014	7	4	7	4	7	4	5	4	7	4
8/2/2014	7	5	7	4	7	4	5	4	9	9
8/9/2014	9	17	7	4	9	28	5	4	10	12
8/16/2014	10	7	8	5	10	8	6	16	9	4
8/23/2014	6	5	4	4	6	4	5	4	6	4
8/30/2014	6	4	4	4	6	4	5	4	6	4

Table A2-1: 2014 Summary of Beach Samples and Exceedances

Beach	Sample Location	Total # of Samples	# of Sample exceed 104	% of Sample exceed 104
ALL Beaches (Locations) TOTAL		**1210**	**85**	**7.0%**
Public Beaches (Locations) TOTAL		**449**	**21**	**4.7%**
Private Beaches (Locations) TOTAL		**761**	**64**	**8.4%**

Table A2-2: 2014 Public Beaches Samples and Exceedances

Beach	Sample Location		Total # of Samples	# of Sample exceed 104	% of Sample exceed 104 (Location)	% of Sample exceed 104 (Beach)
CEDAR GROVE	CEDAR GROVE	Left	17	3	17.6%	*11.8%*
	CEDAR GROVE	Center	17	2	11.8%	
	CEDAR GROVE	Right	17	1	5.9%	
CONEY ISLAND	CONEY ISLAND BR. 15TH - 6TH	Center	16	1	6.3%	*3.1%*
	CONEY ISLAND BR. 6TH - OCEAN PKWY	Center	16	0	0.0%	
	CONEY ISLAND OCEAN PKWY - WEST 8TH	Center	16	1	6.3%	
	CONEY ISLAND WEST 8TH - PIER	Center	16	0	0.0%	
	CONEY ISLAND WEST 16TH - WEST 27TH	Center	16	0	0.0%	
	CONEY ISLAND WEST 28TH - WEST 37TH	Center	16	1	6.3%	
MANHATTAN BEACH	MANHATTAN BEACH	Left	16	1	6.3%	*6.3%*
	MANHATTAN BEACH	Center	16	1	6.3%	
	MANHATTAN BEACH	Right	16	1	6.3%	
MIDLAND BEACH	MIDLAND BEACH	Left	17	1	5.9%	*5.9%*
	MIDLAND BEACH	Center	17	1	5.9%	
	MIDLAND BEACH	Right	17	1	5.9%	
ORCHARD BEACH	ORCHARD BEACH	Left	15	0	0.0%	*0.0%*
	ORCHARD BEACH	Center	15	0	0.0%	
	ORCHARD BEACH	Right	15	0	0.0%	
ROCKAWAY BEACH	ROCKAWAY BEACH 9TH - 13TH	Center	7	0	0.0%	*0.0%*
	ROCKAWAY BEACH 15TH - 22TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 23RD - 59TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 59TH - 80TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 80TH - 95TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 95TH - 116TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 116TH - 126TH	Center	7	0	0.0%	
	ROCKAWAY BEACH 126TH - 149TH	Center	7	0	0.0%	
SOUTH BEACH	SOUTH BEACH	Left	17	1	5.9%	*5.9%*
	SOUTH BEACH	Center	17	1	5.9%	
	SOUTH BEACH	Right	17	1	5.9%	
WOLFE'S POND BEACH	WOLFE'S POND BEACH	Left	17	1	5.9%	*5.9%*
	WOLFE'S POND BEACH	Center	17	1	5.9%	
	WOLFE'S POND BEACH	Right	17	1	5.9%	
Public Beaches (Locations) Total			**449**	**21**	**4.7%**	

Table A2-3: 2014 Private Beaches Samples and Exceedances

Beach	Sample Location		Total # of Samples	# of Sample exceed 104	% of Sample exceed 104 (Location)	% of Sample exceed 104 (Beach)
AMERICAN TURNER	AMERICAN TURNER	Left	16	2	12.5%	*16.7%*
	AMERICAN TURNER	Center	16	4	25.0%	
	AMERICAN TURNER	Right	16	2	12.5%	
BREEZY POINT 219	BREEZY POINT 219	Center	7	0	0.0%	*0.0%*
BREEZY POINT Reid Ave	BREEZY POINT Reid Ave	Center	7	0	0.0%	*0.0%*
DANISH AMERICAN BEACH CLUB	DANISH AMERICAN BEACH CLUB	Left	17	3	17.6%	*17.6%*
	DANISH AMERICAN BEACH CLUB	Center	17	3	17.6%	
	DANISH AMERICAN BEACH CLUB	Right	17	3	17.6%	
DOUGLASTON MANOR ASSOCIATION	DOUGLASTON MANOR ASSOCIATION	Left	20	5	25.0%	*18.3%*
	DOUGLASTON MANOR ASSOCIATION	Center	20	4	20.0%	
	DOUGLASTON MANOR ASSOCIATION	Right	20	2	10.0%	
GERRITSEN/KIDDIE BEACH	GERRITSEN/KIDDIE BEACH	Left	16	1	6.3%	*6.3%*
	GERRITSEN/KIDDIE BEACH	Center	16	1	6.3%	
	GERRITSEN/KIDDIE BEACH	Right	16	1	6.3%	
KINGSBOROUGH COMMUNITY COLLEGE	KINGSBOROUGH COMMUNITY COLLEGE	Left	17	2	11.8%	*13.7%*
	KINGSBOROUGH COMMUNITY COLLEGE	Center	17	2	11.8%	
	KINGSBOROUGH COMMUNITY COLLEGE	Right	17	3	17.6%	
LOCUST POINT YACHT CLUB	LOCUST POINT YACHT CLUB	Left	15	1	6.7%	*4.4%*
	LOCUST POINT YACHT CLUB	Center	15	0	0.0%	
	LOCUST POINT YACHT CLUB	Right	15	1	6.7%	
MANHEM CLUB	MANHEM CLUB	Left	16	1	6.3%	*6.3%*
	MANHEM CLUB	Center	16	1	6.3%	
	MANHEM CLUB	Right	16	1	6.3%	
MORRIS YACHT AND BEACH CLUB	MORRIS YACHT AND BEACH CLUB	Left	19	0	0.0%	*0.0%*
	MORRIS YACHT AND BEACH CLUB	Center	19	0	0.0%	
	MORRIS YACHT AND BEACH CLUB	Right	19	0	0.0%	
SCHUYLER HILL CIVIC ASSOCIATION	SCHUYLER HILL CIVIC ASSOCIATION	Left	15	0	0.0%	*4.4%*
	SCHUYLER HILL CIVIC ASSOCIATION	Center	15	1	6.7%	
	SCHUYLER HILL CIVIC ASSOCIATION	Right	15	1	6.7%	
SEA GATE 42ND	SEA GATE 42ND	Left	16	1	6.3%	*4.2%*
	SEA GATE 42ND	Center	16	0	0.0%	
	SEA GATE 42ND	Right	16	1	6.3%	
SEA GATE BEACH CLUB	SEA GATE BEACH CLUB	Left	16	1	6.3%	*6.3%*
	SEA GATE BEACH CLUB	Center	16	1	6.3%	
	SEA GATE BEACH CLUB	Right	16	1	6.3%	
TRINITY DANISH	TRINITY DANISH	Left	15	2	13.3%	*13.3%*
	TRINITY DANISH	Center	15	2	13.3%	
	TRINITY DANISH	Right	15	2	13.3%	
WEST FORDHAM STREET ASSOCIATION	WEST FORDHAM STREET ASSOCIATION	Left	19	0	0.0%	*0.0%*
	WEST FORDHAM STREET ASSOCIATION	Center	19	0	0.0%	
	WEST FORDHAM STREET ASSOCIATION	Right	19	0	0.0%	
WHITE CROSS FISHING CLUB	WHITE CROSS FISHING CLUB	Left	16	2	12.5%	*12.5%*
	WHITE CROSS FISHING CLUB	Center	16	2	12.5%	
	WHITE CROSS FISHING CLUB	Right	16	2	12.5%	
WHITESTONE BOOSTER CIVIC ASSOCIATION	WHITESTONE BOOSTER CIVIC ASSOCIATION	Left	16	0	0.0%	*4.2%*
	WHITESTONE BOOSTER CIVIC ASSOCIATION	Center	16	2	12.5%	
	WHITESTONE BOOSTER CIVIC ASSOCIATION	Right	16	0	0.0%	
Private Beaches (Locations) Total			**761**	**64**	**8.4%**	

Table A2-4: 2014 Private Beach (Fresh Water) Samples and Exceedances *

Beach	Sample Location		Total # of Samples	# of Sample exceed 61	% of Sample exceed 61 (Location) *	% of Sample exceed 61 (Beach)
Staten Island YMCA	Staten Island YMCA	Left	17	3	17.6%	*17.6%*
	Staten Island YMCA	Center	17	3	17.6%	
	Staten Island YMCA	Right	17	3	17.6%	
Private Fresh Water Beach (Locations) Total			**51**	**9**	**17.6%**	

* Water Quality Standard for fresh water: 61cfu/100ml

APPENDIX B: 2014 WARNINGS AND CLOSURES

Table B-1: Summary of Beach Warnings and Closure

Beach	Types	Reason	Start Date	End Date	Beach Days	# of Beach-Specific Days	Notification (Beach Specific Days)		
							Warning	Closure	Total
NYC ALL Beaches	Warning or Closure	Enterococci Exceedance or Rainfall Event	5/24/14	9/1/14	**2229**	**397**	**333**	**64**	**397**

Table B-2: Public Beaches Warnings and Closures

Beach	Types	Reason	Start Date	End Date	Beach Days	# of Beach-Specific Days	Notification (Beach Specific Days)		
							Warning	Closure	Total
CEDAR GROVE*	Warning	Enterococci Exceedance	6/11/14	6/12/14	98	2	3	0	3
	Warning	Rainfall Event	8/13/14	8/13/14		1			
CONEY ISLAND	Warning	Rainfall Event	8/13/14	8/13/14	100	1	1	0	1
MANHATTAN BEACH	Warning	Rainfall Event	8/13/14	8/13/14	100	1	1	0	1
MIDLAND BEACH	Warning	Enterococci Exceedance	6/11/14	6/12/14	98	2	3	0	3
	Warning	Rainfall Event	8/13/14	8/13/14		1			
ORCHARD BEACH					101	0	0	0	0
ROCKAWAY BEACH					101	0	0	0	0
SOUTH BEACH	Warning	Enterococci Exceedance	6/11/14	6/12/14	98	2	3	0	3
	Warning	Rainfall Event	8/13/14	8/13/14		1			
WOLFE'S POND PARK	Warning	Enterococci Exceedance	6/11/14	6/12/14	99	2	2	0	2
Public Beaches TOTAL					**795**	**13**	**13**	**0**	**13**

**Cedar Grove beach was closed during 5/24/14-6/22/14 period for construction*

Table B-3: Private Beaches Warnings and Closures

Beach	Types	Reason	Start Date	End Date	Beach Days	# of Beach-Specific Days	Notification (Beach Specific Days)		
							Warning	Closure	Total
AMERICAN TURNERS	Warning	Rainfall Event	5/24/14	5/25/14	62	2	33	6	39
	Closure	Confirmed Enterococci Exceedance	5/30/14	6/4/14		6			
	Warning	Enterococci Exceedance	6/5/14	6/12/14		8			
	Warning	Enterococci Exceedance	6/19/14	7/2/14		14			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
BREEZY POINT 219					101	0	0	0	0
BREEZY POINT REID					101	0	0	0	0
DANISH AMERICAN BEACH CLUB	Closure	Confirmed Enterococci Exceedance	5/30/14	6/4/14	64	6	31	6	37
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Enterococci Exceedance	6/13/14	7/2/14		20			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
DOUGLASTON HOMEOWNERS ASSOCIATION	Warning	Rainfall Event	5/24/14	5/26/14	39	3	38	24	62
	Closure	Confirmed Enterococci Exceedance	5/30/14	6/4/14		6			
	Warning	Enterococci Exceedance	6/5/14	6/12/14		8			
	Closure	Confirmed Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Enterococci Exceedance	6/19/14	7/2/14		14			
	Warning	Rainfall Event	7/3/14	7/5/14		3			
	Warning	Enterococci Exceedance	7/10/14	7/11/14		2			
	Closure	Confirmed Enterococci Exceedance	7/12/14	7/23/14		12			
	Warning	Rainfall Event	8/2/14	8/3/14		2			
	Warning	Rainfall Event	8/13/14	8/13/14		1			
	Warning	Rainfall Event	8/22/14	8/24/14		3			
	Warning	Rainfall Event	9/1/14	9/2/14		2			
GERRITSEN/KIDDIE BEACH	Warning	Rainfall Event	5/24/14	5/25/14	78	2	21	2	23
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Rainfall Event	6/13/14	6/15/14		3			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/17/14		3			
	Closure	Other Preemptive	7/21/14	7/22/14		2			
	Warning	Rainfall Event	7/28/14	7/28/14		2			
	Warning	Enterococci Exceedance	7/30/14	7/31/14		2			
	Warning	Rainfall Event	8/2/14	8/3/14		2			
	Warning	Rainfall Event	8/13/14	8/13/14		1			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			

Table B-3: Private Beaches Warnings and Closures (continued)

Beach	Types	Reason	Start Date	End Date	Beach Days	# of Beach-Specific Days	Notification (Beach Specific Days)		
							Warning	Closure	Total
KINGSBOROUGH COMMUNITY COLLEGE	Warning	Enterococci Exceedance	7/2/14	7/3/14	96	2	5	0	5
	Warning	Enterococci Exceedance	7/17/14	7/18/14		2			
	Warning	Rainfall Event	8/13/14	8/13/14		1			
LOCUST POINT YACHT CLUB	Warning	Rainfall Event	5/24/14	5/25/14	82	2	19	0	19
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
MANHEM BEACH CLUB	Warning	Rainfall Event	5/24/14	5/25/14	76	2	19	6	25
	Closure	Confirmed Enterococci Exceedance	5/30/14	6/4/14		6			
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
MORRIS YACHT AND BEACH CLUB	Warning	Rainfall Event	5/24/14	5/25/14	88	2	13	0	13
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Rainfall Event	6/13/14	6/13/14		1			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/13/14		1			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
SCHUYLER HILL CIVIC ASSOCIATION	Warning	Rainfall Event	5/24/14	5/25/14	82	2	19	0	19
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
SEAGATE 42nd					101	0	0	0	0
SEAGATE BEACH CLUB					101	0	0	0	0

Table B-3: Private Beaches Warnings and Closures (continued)

Beach	Types	Reason	Start Date	End Date	Beach Days	# of Beach-Specific Days	Notification (Beach Specific Days)		
							Warning	Closure	Total
TRINITY DANISH YOUNG PEOPLE'S SOCIETY	Warning	Rainfall Event	5/24/14	5/25/14	61	2	28	12	40
	Closure	Confirmed Enterococci Exceedance	5/30/14	6/4/14		6			
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Closure	Confirmed Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Enterococci Exceedance	6/19/14	7/2/14		14			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/15/14		3			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
WEST FORDHAM STREET ASSOCIATION	Warning	Rainfall Event	5/24/14	5/25/14	86	2	15	0	15
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Rainfall Event	6/13/14	6/14/14		2			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
WHITE CROSS FISHING CLUB	Warning	Rainfall Event	5/24/14	5/25/14	61	2	34	6	40
	Warning	Enterococci Exceedance	6/5/14	6/12/14		8			
	Closure	Confirmed Enterococci Exceedance	6/13/14	6/18/14		6			
	Warning	Enterococci Exceedance	6/19/14	7/2/14		14			
	Warning	Rainfall Event	7/3/14	7/5/14		3			
	Warning	Rainfall Event	7/15/14	7/16/14		2			
	Warning	Rainfall Event	8/13/14	8/14/14		2			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
WHITESTONE BOOSTER CIVIC ASSOCIATION	Warning	Rainfall Event	5/24/14	5/25/14	83	2	18	0	18
	Warning	Rainfall Event	6/9/14	6/10/14		2			
	Warning	Rainfall Event	6/13/14	6/14/14		2			
	Warning	Rainfall Event	7/3/14	7/4/14		2			
	Warning	Rainfall Event	7/14/14	7/14/14		1			
	Warning	Rainfall Event	7/15/14	7/17/14		3			
	Warning	Rainfall Event	8/2/14	8/3/14		2			
	Warning	Rainfall Event	8/13/14	8/13/14		1			
	Warning	Rainfall Event	8/22/14	8/23/14		2			
	Warning	Rainfall Event	9/1/14	9/1/14		1			
Staten Island YMCA	Closure	Confirmed Enterococci Exceedance	6/11/14	6/12/14	73	2	26	2	28
	Warning	Enterococci Exceedance	6/13/14	7/8/14		26			
Private Beaches TOTAL					**1434**	**384**	**320**	**64**	**384**

APPENDIX C: 2014 INSPECTION SUMMARY

Table C-1: Inspection Non-Compliance Summary *

Beach Name	Public Health Hazard Violations**	General Violations***			
	167.21(a)(1)	167.31(a)	167.31(b)	167.31(d)	167.31(e)
CEDAR GROVE	√				
CONEY ISLAND BEACH			√	√	√
MANHATTAN				√	
MIDLAND BEACH			√		
SOUTH BEACH		√	√		

* All other beaches were in full compliance of the regulations at the time of inspection

**** Public Health Hazard Violations:**

§167.21(a)(1) 1 Pocket face mask/shield for each active lifeguard not available

***** General Violations:**

§167.31(a) Failure to properly maintain and operate in a safe, clean, and sanitary condition
§167.31(b) Failure to provide adequate toilet and shower facilities
§167.31(d) Failure to provide liquid soap, paper towels or electric hand dryer
§167.31(e) Failure to properly maintain the building structure free of cracks or open joints on the walls or floors

Appendix 11

Combined Sewer Overflow Annual Report Checklist*

CY2013/2014 CSO Summary

Print

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER

COMBINED SEWER OVERFLOWS ANNUAL REPORT

SECTION A. GENERAL INSTRUCTIONS: The Combined Sewer Overflows (CSO) Annual Report is consistent with the EPA CSO Long-Term Control Policy requiring permitting authorities to report "Measures of Success" of the policy implementation. Hence, the goal of this report is to obtain information regarding:

1. Compliance with the 15 CSO Best Management Practices;
2. The condition and operation of the combined sewer system (CSS) components. Most importantly, the end-of-pipe measures that show trends in the discharge of CSS flows to the receiving water body, such as reduction of pollutant loadings, the frequency of CSOs, and the duration of CSOs;
3. Receiving water body measures that show trends of the conditions in the water body to which the CSO occurs;
4. Overall status of the CSO LTCP, if applicable;
5. Key CSO control accomplishments and design and construction progress in the previous year.

Permittee must complete ALL parts of the form and must attach all supporting documents. Please be aware that this annual report form template highlights the minimum requirement a permittee is expected to submit. Permittee is obligated to complete abatement activities to ensure compliance with the Clean Water Act. This report is also consistent with *NYS 6 NYCRR 750-2.1(i)*. Send your questions about this form to dowinfo@gw.dec.state.ny.us or call 518-402-8111.

This reporting format replaces the previous CSO Annual Report Checklist

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Let

SECTION B: CSO LTCP GENERAL INFORMATION

CSO Facility:	See Below	**SPDES Number:**	NY-
Has implementation of the LTCP Phase II begun?	◉ Yes	○ No	
If No:	○ Not Approved	○ Not Submitted	○ Not Required
LTCP Approach:	○ Presumptive	◉ Demonstrative	○ Both

Briefly Describe LTCP Implementation Approach (Attach a Separate Sheet for Detailed Descriptions):

DEP has four CSO retention facilities: Alley Creek (SPDES Number NY0026239), Flushing Bay (NY0026239), Paerdegat (NY0026182), and Spring Creek (NY0026212). DEP has completed five LTCPs: Paerdegat Basin (approved by DEC in 2007), Alley Creek, Westchester Creek, Hutchinson River, and Flushing Creek pursuant to the CSO Order on Consent (DEC Case No. CO2-20110512-25). DEP is required under the CSO Order to develop six more LTCPs by 2017. In 2015, DEP is required to submit LTCPs for Gowanus Canal and Bronx River. DEP has obtained a modification of the Order to defer the Coney LTCP until 2016 and in its place DEP will submit the LTCP for Westchester Creek.

DEP's LTCP planning approach includes several phases including waterbody and watershed characterization, public participation, alternatives evaluation, phased and adaptive implementation strategies and post-construction monitoring. The LTCPs will identify the appropriate level of CSO control and evaluate alternatives.

Update any changes or corrections to the outfalls currently listed in SPDES permit. Indicate if any outfalls have been closed. Attach extra sheets, if necessary. Also, include a map showing the locations of each outfall.

Outfall #	Latitude	Longitude	Receiving Water	Notes
				See Attachment 1

PPERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

Provide an estimate or actual data on overflow events. If not applicable, describe how CSO abatement is achieved. Use a separate spreadsheet, if necessary, to report all CSO outfalls.

CSO Outfall #	No. of overflow events in the previous year		Total Annual CSO Volume Discharged (MG)		Total Annual Volume Capture or Diverted to POTW (MG)		How is the flow estimated or measured?
	Last Period	This Period	Last Period	This Period	Last Period	This Period	
							DEP to provide
							additional data
							under separate cover
TOTAL							

Collection System Ownership

✓	Collection system is owned and maintained by permittee
	Portions of collection system is owned and maintained by others

Describe ownership and maintenance responsibilities:

Describe in detail the major progress or milestones achieved in past year (attach extra sheets as necessary):
See text of the 2014 CSO BMP Annual Report for a detailed update of related projects.

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

Provide detailed explanations why planned milestones for this year were not achieved (attach extra sheets as necessary):

DEP complied with a number of CSO Consent Order milestones in CY2014 and requested modifications to a few milestone dates. A modification of the construction completion date for the Gowanus Canal Pump Station and Flushing Tunnel upgrade was granted, and these delays were primarily associated with force majeure events including Super Storm Sandy. Both facilities are currently completed and operational and have resulted in significant improvements in water quality.

A modification was also granted for the Coney Island Creek LTCP submittal, swapping the date with that of the Westchester Creek LTCP (June 2014). This was to enable collection of more meaningful data from the Creek after certain work will be completed. The Westchester Creek LTCP was submitted on time.

A modification of the Notice to Proceed (NTP) date for the Newtown Creek Bending Weirs / Floatables Control was also granted in 2014, changing the NTP date from December 2014 to May 2015. This modification stemmed from delays associated with obtaining a necessary property-related agreement.

Summarize major projects or milestones planned for upcoming year (attach extra sheets as necessary):

See attachment titled, "Upcoming 2015 CSO Consent Order Milestones".

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title (type or print):	Jim Mueller, Asst. Commissioner BWT			Phone: 718	595-5973
Signature:		Date Signed	04/01/15	Fax:	

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

SECTION C: 15 BEST MANAGEMENT PRACTICES

Check N/A if not required in the permit, consent order, or LTCP:

1. CSO Maintenance/Inspection *6 NYCRR 750-2.8(a)(2)* **N/A** *(EPA NMC: Proper Operation and Maintenance)*	**YES**	**NO**	**N/A**
Is there a written program for the operation, inspection and maintenance of the CSS?	☐	☐	
Does the program include procedures for:			
All outfalls in the permit	☑	☐	
All regulators	☑	☐	
Are inspections conducted at least as frequently as required in the permit (weekly or monthly)?	☐	☐	
Are inspections conducted during dry and wet weather?	☑	☐	
Do the inspection reports indicate visual inspection, any observed flows, incidence of rain or snowmelt, condition of equipment, and any work required?	☑	☐	
Are inspection reports submitted to the DEC regional office with the monthly operating reports?	☐	☐	
Is the written program sufficiently detailed? Indicate which of the following additional components are included in the plan:	☑	☐	☐
Pump Stations	☑	☐	☐
Sewer cleaning	☐	☐	☑
Sediment removal	☐	☐	☑
FOG removal	☐	☐	☑
Root removal	☐	☐	☑
Are there inter-municipal agreements which require inspection and maintenance?	☐	☐	☑
Are any changes planned in the upcoming year for the agreements to make them more effective?	☐	☐	☑
Is the collection system mapped using GIS?	☐	☐	☑
Entire system, including manholes and catch basins?	☐	☐	☑
In the past year, was significant mapping progress accomplished?	☐	☐	☑
In the upcoming year, is GIS mapping planned?	☐	☐	☑
Is the collection system monitored using a SCADA system?	☐	☐	☑
In the past year, was significant progress accomplished in installing or expanding monitoring with a SCADA system?	☐	☐	☑
In the upcoming year, is installation of a SCADA system planned or being expanded?	☐	☐	☑
Does the municipality have an asset management plan that includes the collection system?	☐	☐	☑
Are funds available to carry out the BMP requirements?	☐	☐	☑

BMP 1 CSO Maintenance & Inspections

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

1. CSO Maintenance/Inspection (continued)	YES	NO	N/A
Are any major equipment purchases planned or expected in the next five years related to the BMP requirements? If yes, describe below.	☐	☐	☑
Is the pump inventory, including spare parts, adequate for the upcoming year?	☐	☐	☑
Is sufficient staff training available?	☐	☐	☑
Is funding for training adequate and available?	☐	☐	☑
Have any work efforts or problems in the past year resulted in changes in overflows? If yes, describe below.	☑	☐	☐
Fewer events	☑	☐	☐
Less volume	☑	☐	☐
Reduction in floatables, settleable solids or oil and grease discharged	☑	☐	☐
Reduction in industrial pollutants (chemicals)	☐	☑	☐
Improvement in water quality of receiving waterbody	☑	☐	☐
In the past year, was the inspection and maintenance program mostly: reactive (responding to problems) proactive (focusing on preventative maintenance to avoid problems)?	○ Reactive	◉ Proactive	
If the program is mostly reactive, describe below any plans to shift the emphasis to prevention.			

BMP 1 CSO Maintenance & Inspections

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

2. Maximum Use of Collection System for Storage *6 NYCRR 750-2.7(f), 750-2.8(a)(2), 750-2.8(a)(5)* ☐ N/A *(EPA NMC: Maximum Use of Collection System for Storage)*	Yes	No	N/A
Are CSOs minimized, and flow to the treatment plant maximized?	☑	☐	☐
Has the hydraulic capacity of the system been evaluated?	☑	☐	☐
Is there a continuous program of flushing and cleaning to prevent deposition of solids?	☑	☐	☐
Have regulators and weirs been adjusted to maximize storage without causing service backups?	☑	☐	☐
In the past year or the upcoming year, have any changes to structures or procedures been made or planned that will improve use of the collection system for storage? Describe below.	☐	☑	☐
Tidegates maintenance/repairs/replacement	☐	☐	☐
FOG program	☐	☐	☐
Removal of small systems bottlenecks	☐	☐	☐
Sewer cleaning and sediment removal	☐	☐	☐
Removal of flow obstructions	☐	☐	☐
Regulator or weir adjustment - list locations below	☑	☐	☐
In-line storage: Inflatable dams or sluice gates	☐	☑	☐
Wet Weather Operating Plan	☐	☐	☐
Do the municipalities within the combined sewer system have a water conservation program for homeowners?	☑	☐	☐
In the upcoming year are there any studies, work, or projects planned (other than routine activities) to improve use of collection system for storage? Describe below.	☑	☐	☐

See attachment titled, "Upcoming 2015 CSO Consent Order Milestones" for projects dealing with installing or improving bending weirs, parallel sewers, regulator modifications, interceptors, main sewage pumps, and wet weather stabilization.

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

3. Industrial Pretreatment *6 NYCRR 750-2.7(f) and 2.9(a)(4* ☐ **N/A** *(EPA NMC: Review and Modify Pretreatment Requirements)*	**YES**	**NO**	**N/A**
Has the impact on CSOs from nondomestic users that discharge toxic pollutants been evaluated, and steps taken to minimize such impacts?	☑	☐	☐
Is there an approved pretreatment or mini-pretreatment program?	☑	☐	☐
If there is no pretreatment or min-pretreatment program, are there any nondomestic users? If No to both of the previous questions, go to BMP 4.	☐	☐	☐
Is there an inventory of industrial dischargers? Is the following information included?	☐	☐	☐
Volume of discharge?	☐	☐	☐
Pollutants in discharge?	☐	☐	☐
Are any pollutants classified as "persistent toxics" or bioaccumulative?	☐	☐	☐
Is the location included on the collection system map?	☐	☐	☐
Are there any industrial discharges that could reach CSO outfalls?	☐	☐	☐
If yes, have any industrial dischargers been identified as contributing to a water quality impairment?	☐	☐	☐
If yes, does the industry have a holding tank or EQ tank to store wastewater prior to discharge to the collection system?	☐	☐	☐
If yes, does the industry have a written plan to store or hold discharges during rain events?	☐	☐	☐
If yes, has the industry been asked to prepare a written plan to store or hold discharges?	☐	☐	☐
In the past year, have there been negotiations or changes to agreements with industrial dischargers which will potentially reduce impacts during CSO events? Describe below.	☐	☐	☐
In the upcoming year, are any negotiations or changes to agreements with industrial dischargers planned which will potentially reduce impacts during CSO events? Describe below.	☐	☐	☐

BMP 3 Industrial Pretreatment

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

4. Maximize Flow to POTW *6 NYCRR 750-2.7(f), 2.8(a)(2), and 2.8(a)(5)* ☐ N/A *(EPA NMC: Maximum Flow to POTW for Treatment)*	YES	NO	N/A
In the past year, was the headworks, primary treatment works and disinfection works able to pass the flows specified in the permit for all wet weather flows?	☐	☑	☐
In the past year, was the secondary treatment works able to treat the flows specified in the permit for all wet weather flows?	☐	☑	☐
If the answer to either of the above questions was No, has a plan and schedule to accomplish this been submitted to the Department?	☑	☐	☐
In the past year have there been any physical modifications to the collection system which have allowed more flow to reach the POTW? Describe below.	☐	☑	☐
Are any physical modifications planned for the upcoming year?	☐	☑	☐
Are there areas of the collection system, including pump stations, that need additional study to evaluate capacity, condition, or to determine if illegal connections (i.e. inflow) exist? List below.	☑	☐	☐
In the past year, have any new problem areas been identified that restrict flow to the plant? List locations below.	☐	☑	☐
In the upcoming year, are there plans to address hydraulic restrictions or bottlenecks?	☐	☑	☐
Pipe replacement	☐	☑	☐
Construction of relief sewer	☐	☑	☐
Construction of overflow tank	☐	☑	☐
Pump station improvements	☐	☑	☐
Pump replacement	☐	☑	☐
Weir adjustment	☐	☑	☐
Smoke testing, dye testing to identify illicit connections	☐	☑	☐
Other:	☐	☐	☐

For a description of the planned inflow and infiltration study, see 2010 CSO BMP Order DEC File No. R2-20080312-14; Compliance Schedule Item #6.

BMP 4 Maximize Flow to POTW

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

5. Wet Weather Operating Plan (WWOP) *6 NYCRR 750-2.8(a)* ☐ N/A *(EPA NMC: None)*	YES	NO	N/A
Has a WWOP been developed, specifying procedures for unit operations, to maximize treatment during wet weather events while not diminishing effluent quality or destabilizing treatment upon return to dry weather operation?	☑	☐	☐
In the past year, did treatment of wet weather flows cause any effluent violations or destabilize treatment upon return to normal service?	☑	☐	☐
Has the WWOP been developed in accordance with the DEC guidance, "Wet Weather Operating Practices for POTWs with Combined Sewers"? If no, describe changes needed.	☑	☐	☐
Has the WWOP been submitted to the Regional Office and Bureau of Water Permits (Albany) for review and approval?	☑	☐	☐
If the collection system or plant has been modified or upgraded, has the WWOP been modified to reflect new flow rates or new procedures?	☑	☐	☐
If yes, has the revised plan been submitted to the Regional Office for approval?	☑	☐	☐
Does the plan identify the maximum flows through preliminary, primary, secondary treatment, tertiary, and disinfection units?	☐	☑	☐
In the upcoming year, are changes to the plan expected?	☑	☐	☐

Describe the status or attach a copy of any updated plan:

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

6. Prohibition of Dry Weather Overflows *6 NYCRR 750-2.7 and 2.8(b)(2)* ☐ N/A *(EPA NMC: Eliminate Dry Weather Overflows)*	YES	NO	N/A
In the past year, were there any dry weather overflows? If no, skip to BMP 7.	☑	☐	☐
Were all dry weather overflows reported in accordance with 6 NYCRR Part 750-2.7 (incident reporting)?	☑	☐	☐
If dry weather overflows occurred, indicate which procedures or equipment have been improved or replaced.			
Schedule for routine inspections	☐	☑	☐
Capacity, management, operation and maintenance program	☐	☐	☑
Modification of existing or issuance of new inter-municipal agreements	☐	☐	☑
FOG program	☐	☑	☐
Removal of illicit connections	☐	☑	☐
I/I Control program	☐	☑	☐
Leaky tidegates	☐	☑	☐
Adjustment and/or repair of regulators	☐	☑	☐
Pumps	☐	☑	☐
Auxiliary power	☐	☑	☐
Elimination of hydraulic bottlenecks	☐	☐	☑
Adequate dry weather flow capacity at the treatment plant	☐	☑	☐
Other, list below	☐	☐	☐
Has additional staff training been provided?	☐	☐	☑
Has the likelihood of future dry weather overflows been eliminated? If not, describe additional information below.	☐	☑	☐

BMP 6 Prohibition of Dry Weather Overflows

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

7. Control of Floatables and Settleable Solids *6 NYCRR 750-2.8(a)(4)* ☐ N/A *(EPA NMC: Control of Solid and Floatable Materials in CSOs)*	YES	NO	N/A
In the past year, did any outfalls discharge floating solids, oil and grease, or solids of sewage origin?	☑	☐	☐
Have BMPs been implemented to eliminate or minimize the discharge of floatables and settleable solids?	☑	☐	☐
Have any of the following measures been implemented (either existing from previous years, in the past year) or will any be implemented in the upcoming year? If significant progress has been made in implementing these, or if significant improvements have occurred, describe below.			
Floatables quantification	Existing		
Booming and skimming of open waters	Existing		
Source controls (street cleaning, public education, household hazardous waste collection, solid waste collection, recycling, and/or composting of lawn/leaf/roadkill deer)	Existing		
In-line netting	Existing		
Screens	Existing		
Catch basin hoods	Existing		
Other (Explain Below):	Existing		
Are any changes needed or planned for the upcoming year? Describe additional information below.	☐	☑	☐

BMP 7 Control of Floatable and Settleable Solids

PERMITTEE NAME: _____ SPDES PERMIT NO.: NY-See Cover Letter

8. Combined Sewer System Replacement *6 NYCRR 750-2.10(i)* ☐ N/A *(EPA NMC: None)*	YES	NO	N/A
In the past year, were any combined sewers designed or constructed that were not approved by DEC?	☐	☐	☑
If yes, was the combined sewer replaced by separate sanitary and storm sewers to the greatest extent possible?	☐	☐	☐
If yes, were the separate sanitary and storm sewers designed and constructed simultaneously but without interconnections to the maximum extent practicable?	☐	☐	☐
Is the combined portion of the collection system completely identified on maps or GIS?	☑	☐	☐
Are there any plans or current projects to separate combined sewers into sanitary and storm sewers?	☐	☑	☐
Is there an approved engineering plan for this project?	☐	☐	☐
In the past year, how many feet of combined sewer were separated? _____ ft			
In the upcoming year, how many feet of combined sewer are scheduled to be separated? ____ ft			
Are the sewer replacement projects on schedule? If no, describe below.	☐	☐	☐
Overall, has the implementation of this BMP resulted in fewer overflow events and/or less volume discharged? Describe below.	☐	☑	☐

BMP 8 Combined Sewer System Replacement

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

9. Combined Sewer Extension *6 NYCRR 750-2.10(i)* ☐ N/A *(EPA NMC: None)*	YES	NO	N/A
In the past year, were any combined sewers extended not using separate sewers?	☑	☐	☐
Were sanitary and storm sewers extensions designed and constructed simultaneously but without interconnections?	☐	☑	☐
Were any new sources of stormwater added to a separate sewer anywhere in the collection system?	☐	☑	☐
If separate sewers were extended from combined sewers, was it demonstrated that the sewerage system had the ability to convey, and the treatment plant had the ability to adequately treat, the increased dry-weather flows?	☑	☐	☐
If determined necessary by the Regional Water Engineer, was an assessment made of the effects of the increased flow of sanitary sewage or industrial waste on the strength of CSOs and their frequency of occurrence, including the impacts upon best usage of the receiving water?	☐	☐	☑
Has a recent combined sewer extension resulted in increased discharge from a CSO?	☐	☐	☐
Has a recent combined sewer extension resulted in increased flow to the POTW? Describe any CSO impacts below.	☐	☐	☐
Is any development planned upstream of a combined sewer?	☑	☐	☐
If yes, has a sewer extension plan been submitted for review and approval?	☐	☐	☑
If the approval contained a flow credit requiring removal of I/I, what was the requirement or ratio?	☐	☐	☑
Does the plan include any flow retention structures?	☐	☐	☑

Describe additional information here:

BMP 9 Combined Sewer Extension

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

10. Connection Prohibitions *6 NYCRR750-2.9(a)(5)* ☐ **N/A** *(EPA NMC: None)*	**YES**	**NO**	**N/A**
In the past year, were any sewer connections approved, in spite of a notice from DEC to prohibit further connections due to documented, recurrent instances of sewage backing up into houses or discharges of raw sewage onto the ground surface from surcharging manholes?	☐	☐	☑
Are new connections prohibited by the DEC? If no, skip to BMP 11.	☐	☑	☐
Is this due to basement backups?	☐	☐	☐
Is this due to surcharging manholes?	☐	☐	☐
In the upcoming year, is any work planned to either increase capacity or reduce hydraulic loading ? Describe below.	☐	☐	☐

BMP 10 Connection Prohibitions

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

11. Septage and Hauled Waste *6 NYCRR750-2.7(f) and 2.8(a)(1)* ☐ N/A *(EPA NMC: None)*	YES	NO	N/A
In the past year, has there been any discharge or release of septage or hauled waste into the collection system upstream of a CSO?	☐	☑	☐
Does the facility have authorization from DEC to accept hauled waste or septage at a location other than the POTW? Describe below.	☐	☐	☑
Are any of these locations upstream of a CSO?	☐	☐	☐
Are there any agreements with haulers to accept waste at a location other than at the POTW?	☐	☐	☐
In the past year, was any hauled waste or septage accepted at a location other than at the POTW?	☐	☐	☐
What was the total volume received at locations other than the POTW? (Gallons)			
Is there a dedicated location to discharge septage at the POTW?	☑	☐	☐
Are there restrictions on when the plant accepts hauled waste or septage?	☑	☐	☐
Have there been any changes to the POTW's policy on septage and hauled waste in the past year? Are any changes needed or planned in the upcoming year?	☐	☑	☐

If yes, describe additional information below:

BMP 11 Septage & Hauled Waste

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

12. Control of Run-off *6 NYCRR750- 2.1(e)* ☐ N/A *(EPA NMC: None)*	YES	NO	N/A
Is sediment in runoff from construction zones entering catch basins in the combined sewer system?	☐	☐	☑
Is there adequate communication between the local municipal department that enforce local stormwater codes and ordinances and the collection system staff regarding stormwater runoff?	☐	☐	☑
Do the municipalities within the combined sewer system have adequate storm water pollution prevention programs to reduce pollutants in stormwater?	☐	☐	☑
Annual household hazardous waste collection	☐	☐	☑
Autumn leaf collection	☐	☐	☑
Lawn clippings	☐	☐	☑
Christmas tree pickup	☐	☐	☑
Roadkill deer composting	☐	☐	☑
Fertilizer and pesticide management	☐	☐	☑
Enforcement of litter laws	☐	☐	☑
Public education programs on composting	☐	☐	☑
Are any changes needed in the implementation of this BMP to reduce the number of CSO events, the volume discharged, or pollutants in the discharge? If yes, describe below.	☐	☑	☐

BMP 12 Control of Runoff

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

13. Public Notification *6 NYCRR 750-1.12* ☐ N/A *(EPA NMC: Public Notification)*	YES	NO	N/A
Have identification signs been installed and maintained at all CSO outfalls owned and operated by the permittee?	☑	☐	☐
Are all signs placed at or near the outfall?	☑	☐	☐
Are the signs easily readable by the public?	☑	☐	☐
Are the signs a minimum size of 18" by 24"?	☑	☐	☐
Do the signs have white letters on a green background?	☑	☐	☐
Do all the signs contain the following information:			
SPDES permit number	☑	☐	☐
Outfall number	☑	☐	☐
Permittee name, contact name and phone number at business office or NYSDEC Division of Water regional contact address and phone number	☑	☐	☐
For waters that are Class B or higher, is a public notification program implemented to inform citizens of the location and occurrence of CSO events?	☐	☐	☑
Does this program include a mechanism (public media broadcast, standing beach advisories, newspaper notice, etc) to alert potential users of the receiving waters affected by CSOs?	☐	☐	☑
Does this program include a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to CSOs?	☐	☐	☑
Were there any problems in the past year with missing or damaged signs? Describe below.	☑	☐	☐
Is there a written public notification plan?	☑	☐	☐
Does the plan list all methods used to notify the public of CSO events?	☑	☐	☐
Does the plan list outfalls where signs are posted?	☑	☐	☐

BMP 13 Public Notification

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY-See Cover Letter

14. Characterization and Monitoring *6 NYCRR 750-1.11(a), 2.5(a) and 2.7(g)* ☐ N/A *(EPA NMC: Monitoring)*		YES	NO	N/A
If required in the permit, has the combined sewer system been characterized to determine the frequency of overflows, and identify CSO impacts?		☐	☐	☑
Was a baseline sampling program established as part of the LTCP development?		☑	☐	☐
Are all outfalls monitored during discharge events for:				
Flow Volume:	MG/year	☐	☐	☑
Frequency:	Times/year	☐	☐	☑
Duration:	Hours/year	☐	☐	☑
If all outfalls are not monitored, explain below how sufficient data is obtained to document the success of the BMPs.				
List locations of rain gauges or the source of data, below.				
Has a Post Construction Modeling and Monitoring plan been submitted to the Department for review and approval?		☑	☐	☐
Has the Department approved the Post Construction Modeling and Monitoring plan?		☑	☐	☐
Has post construction monitoring and modeling of the receiving water begun? Attach results if this has not already been provided.		☑	☐	☐

Describe in details the status of Post Construction Monitoring Plan

BMP 14 Characterization & Monitoring

PERMITTEE NAME: NYC Dept. of Environmental Protection SPDES PERMIT NO.: NY- See Cover Lett

15. Annual Report *6 NYCRR 750-2.1(i)* ☐ **N/A** *(EPA NMC: None; Required in LTCP permit)*	**YES**	**NO**	**N/A**
Is this report being used to satisfy BMP 15, Annual report, and the BMP checklist?	☐	☑	☐
Is existing documentation of implementation of the BMPs included?	☑	☐	☐
Is this annual report submitted by January 31 to the Regional Office and the Bureau of Water Permits (Albany)?	☐	☐	☑
Attach any additional information necessary to document the implementation of BMPs in the past year or list plans for the upcoming year.			
Overall, was implementation of the BMPs effective in controlling and minimizing CSO discharges?	☑	☐	☐
If no, list below any improvements needed that have not been described elsewhere.			

BMP 15 Annual Report

SECTION D: GLOSSARY/ACRONYMS

For the purposes of this annual report, the following terms and acronyms are described below:

Best Management Practice (BMP): Permit condition used in place of or in conjunction with effluent limitations to prevent or control the discharge of pollutants. May include schedule of activities, prohibition of practices, maintenance procedure, or other management practice. BMPs may include, but are not limited to, treatment requirements, operating procedures, or practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass: A discharge of wastewater, stormwater, or combination of both, around a treatment unit designed for the removal of pollutants.

Catch Basin: A chamber usually built at the curbline of a street, which admits surface water for discharge into a storm drain

Collection System: A wastewater collection system which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and stormwater through a single pipe to a publicly owned treatment works for treatment prior to discharge to surface waters.

Combined Sewer: A sewer designed to carry wastewater and stormwater runoff.

Combined Sewer Overflows (CSO): A discharge of untreated wastewater from a combined sewer system at a point prior to the headworks of a publicly owned treatment works. CSOs generally occur during wet weather (rainfall or snowmelt). During periods of wet weather, these systems become overloaded, bypass treatment works, and discharge directly to receiving waters.

Combined Sewer System (CSS): A wastewater collection system that conveys sanitary wastewaters and storm water through a single pipe to a publicly owned treatment works for treatment prior to discharge to surface waters.

Demonstrative Regulatory Approach: Control approach where a permittee develops and implement an LTCP that meets the state water quality standards. A permittee could develop an LTCP that would provide for attainment of water quality standar ds, or it could use a total maximum daily load (TMDL) to demonstrate that water quality standards can be attained through a combination of CSO controls and other controls.

EPA: Environmental Protection Agency

EQ Tank: Equalization Tank often used to smooth hydraulic peaks to a POTW or WWTP.

Fats Oil & Grease (FOG)

Geographic Information System (GIS): A computer-based tool for mapping and analyzing features in the environment. GIS support a wide range of activities including water quality modeling, watershed planning, and wetlands permitting and mitigation.

GI: "Green" Infrastructure

Infiltration/Inflow (I/I): Rainwater, snowmelt, or groundwater flowing into separate sanitary or combined sewers, typically introduced via connected roof downspouts and/or building footing drains or infiltrating into the pipe through cracks in the pipe walls or joints.

This Period: Period covering the last 12 months from January to December.

Last Period: Activities covering the 12 calendar months prior to the end of the current period.

Long Term Control Plan (LTCP): An engineering document that characterizes and assesses CSO discharge to a receiving waterbody. The goal of the Plan is to comply with the water quality standards of the receiving waterbody.

Million Gallons per Day (MGD): A unit of flow commonly used for wastewater discharges. One MGD is equivalent to 1.547 cubic feet per second.

Nine Minimum Controls (NMC) provide information on nine minimum technology-based controls that permittees are expected to use to address CSO problems, without extensive engineering studies or significant construction costs, before long-term measures are taken.

NYSDEC: New State Department of Environmental Conservation (interchangeably uses as DEC)

Publicly Owned Treatment Works (POTW): Also commonly referred to as "treatment facility, WWTP (Wastewater Treatment Plant)

SPDES Permit: State Pollutant Discharge Elimination System Permit. A permit issued by DEC, authorized under the federal Clean Water Act, to discharge treated wastewater to waters of the United States.

Overflow Events: An event starts once an overflow starts from an outfall, and ends once the overflow stops and the pumpback to treatment facility have ended.

Presumptive Approach: The presumption approach is based on the assumption that an LTCP that meets certain minimum defined performance criteria. The "presumption approach," under which achievement of certain performance criteria (i.e., 4-6 untreated overflow events or 85 percent by volume capture) would be presumed to provide an adequate level of control to attain water quality standards

Raw Sewage: Untreated sanitary sewage.

Sanitary Sewer Overflow (SSO): An untreated or partially treated sewage discharge from the sanitary sewer collection system.

Separate Sewer (SS): A pipe or conduit intended to convey only sanitary sewage to a wastewater treatment facility.

SPDES: State Pollutant Discharge Elimination System

Sewer System: A public or privately owned wastewater collection facility designed and used to convey or treat sanitary sewage or sanitary sewage and storm water. Sewer system does not include an on-site wastewater treatment system serving one residential unit or duplex.

Supervisory Control And Data Acquisition (SCADA): A complex computer system that provides automatic control of stormwater storage and overflows at various locations within the sewer system.

Volume Discharged: Total discharge volume for the event (in millions of gallons) from each CSO outfall within this reporting period.

Volume Captured: Total discharge volume for the event (in millions of gallons) that were either captured via an offline treatment facility before discharge or diverted to the WWTP for treatment.

WWOP: Wet Weather Operating Plan

Water Quality Standards (WQS): Regulations that establish the uses for which surface waters of the state are protected and include numeric and narrative criteria to protect those uses.

Upcoming 2015 CSO Consent Order Milestones

	Milestone	Item	Action
1	Feb 2015	**IH**: Flushing Tunnel Modernization	Construction Completion
2	Feb 2015	**IH**: Gowanus PS Reconstruction	Construction Completion
3	Mar 2015	**PB**: Environmental Dredging	Dredging Completion (Completed in 2014)
4	Mar 2015	**JB**: 26th Ward High Level Sewer Separation	Phase 1 – Design Completion
5	Mar 2015	**WI**: Wards Island WWTP MSP Replacement	Construction NTP
6	Apr 2015	**JB**: 26th Ward Low Level MSP	Construction Completion
7	Apr 2015	**JB**: 26th Ward High Level Sewer Separation	Phase 2 – Initiate Design
8	Apr 2015	Annual GI Report	Submit Annual Report
9	***May 2015****	**NC**: Bending Weirs / Floatables Control	Construction NTP
10	Jun 2015	**NC**: Enhanced Aeration Dutch Kills/Lower NC	Design Completion
11	Jun 2015	**NC:** Enhanced Aeration East Branch/Upper NC	Construction NTP
12	Jun 2015	**WC:** Pugsley Creek Parallel Sewer	Design Completion
13	Jun 2015	**IH:** Inner Harbor CSO	Submit Approvable Gowanus Canal LTCP
14	Jun 2015	**BR:** Bronx River CSO	Submit Approvable Bronx River LTCP
15	Jun 2015	**JB:** 26th Ward High Level MSP	Construction NTP
16	Jul 2015	**FB:** Tallman Island Whitestone Interceptor	Construction Completion
17	Nov 2015	**JB**: 26th Ward Wet Weather Stabilization	Update WWOP
18	Dec 2015	**FB**: Regulator Modifications	Construction NTP
19	Dec 2015	**WC**: Modifications to CSO-29 and CSO-29A	Construction NTP

CY 2013/2014 CSO Summary

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
RH-002	0	0	0	0
RH-003	5	6	0	0
RH-005	22	24	143	181
RH-006	34	28	9	10
RH-007	20	17	1	1
RH-008	18	17	3	3
RH-009	20	17	2	2
RH-010	5	4	0	0
RH-011	17	15	3	3
RH-012	18	17	8	9
RH-013	12	10	0	0
RH-014	52	51	38	40
RH-016	19	23	17	21
RH-018	20	19	5	6
RH-019	29	25	9	12
RH-020	12	10	0	0
RH-022	23	23	2	3
RH-023	22	24	2	3
RH-024	21	24	2	3
RH-025	30	24	6	7
RH-028	19	16	12	12
RH-029	23	22	3	3
RH-030	28	74	33	56
RH-031	33	81	50	168
RH-033	16	12	0	1
RH-034	42	47	212	232
RH-035	74	76	148	140
RH-036	18	21	2	2
RH-037	17	13	1	1
RH-038	13	14	1	1
RH-040	23	25	24	29
NR-037	5	5	2	3
NR-038	9	11	8	8
NR-039	0	0	0	0
NR-040	12	13	26	32
NR-041	10	11	2	2
NR-042	12	14	3	3
NR-043	17	18	85	110
NR-044	11	14	1	1
NR-045	12	18	15	19
NR-046	12	14	9	9
NR-047	8	14	0	0
NR-048	25	15	4	6
NR-049	46	52	11	14
NR-050	5	3	0	0
NR-052	7	8	1	1
NR-055	10	10	1	1
HP-002	47	38	36	66
HP-003	50	35	193	253
HP-004	26	20	17	38
HP-007	23	21	78	155
HP-008	26	21	3	9
HP-009	50	37	460	551
HP-010	0	2	0	3
HP-011	65	46	310	376
HP-012	15	16	27	59
HP-013	26	31	155	246
HP-014	53	44	449	616
HP-015	1	4	0	1

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
HP-016	46	28	63	90
HP-017	60	36	50	66
HP-018	37	24	4	5
HP-019	49	31	14	19
HP-020	12	2	0	0
HP-021	63	42	250	296
HP-022	49	33	32	43
HP-023	65	42	161	210
HP-024	43	39	177	259
HP-025	74	48	84	118
HP-026	30	30	46	90
HP-029	34	33	4	4
HP-031	44	35	18	26
HP-033	7	10	6	23
BB-04	2	4	0	0
BB-09	32	39	57	127
BB-10	11	15	1	2
BB-11	18	20	2	4
BB-12	2	5	0	0
BB-13	33	34	20	25
BB-14	28	29	2	3
BB-15	30	33	2	2
BB-16	27	26	2	3
BB-17	23	28	1	2
BB-18	21	21	1	1
BB-21	31	36	19	29
BB-22	28	18	1	2
BB-23	31	33	15	21
BB-24	31	32	30	48
BB-25	27	29	8	13
BB-26	37	42	170	197
BB-27	28	25	5	8
BB-28	41	44	285	417
BB-29	30	27	77	125
BB-30	44	45	12	17
BB-31	34	44	22	33
BB-32	27	36	-1	4
BB-33	29	33	5	7
BB-34	46	60	162	231
BB-35	29	26	3	4
BB-36	25	23	5	8
BB-37	8	10	0	0
BB-38	30	32	88	6
BB-40	19	24	2	3
BB-42	28	32	3	4
BB-43	32	35	9	14
BB-45	0	1	0	0
BB-46	29	33	6	8
BB-47	22	25	2	2
BB-002	28	47	71	98
BB-003	28	31	26	41
BB-005	51	63	708	988
BB-006L	16	22	125	208
BB-006U	48	59	702	934
BB-007	12	16	1	3
BB-008	48	57	449	582
BB-041	47	55	64	84

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
NC-003	12	12	0	1
NC-004	36	39	16	21
NC-006	14	21	94	129
NC-007	34	27	7	9
NC-008	35	30	21	29
NC-010	1	0	0	0
NC-012	23	25	36	52
NC-013	30	26	49	75
NC-014	26	27	418	568
NC-015	35	34	438	587
NC-019	19	20	2	3
NC-021	3	3	-1	1
NC-022	41	30	8	10
NC-023	9	7	1	1
NC-024	2	0	0	0
NC-025	11	13	1	1
NC-026	10	10	0	0
NC-027	35	32	20	28
NC-029	43	47	30	34
NC-077	39	43	351	403
NC-082	11	11	1	1
NC-083	59	71	812	908
NC-005	44	39	53	54
NC-011	0	0	0	0
NC-016	16	12	3	2
NC-017	0	0	0	0
NC-018	42	40	14	14
NC-020	32	26	14	16
NC-028	0	2	0	0
NC-030	17	17	0	0
NC-031	30	26	4	5
NC-032	15	9	4	3
NC-033	9	10	1	1
NC-034	10	10	2	2
NC-035	18	18	4	4
NC-036	19	21	90	98
NC-037	5	5	2	3
NC-038	20	20	10	11
NC-039	22	7	1	1
NC-040	17	1	0	0
NC-041	22	20	28	29
NC-042	17	12	2	4
NC-043	18	18	5	5
NC-044	14	2	0	0
NC-045	21	21	24	26
NC-046	29	20	7	8
NC-047	13	11	1	1
NC-048	36	26	16	17
NC-049	18	19	23	22
NC-050	33	23	28	27
NC-051	18	5	1	0
NC-052	20	19	31	34
NC-053	22	18	3	3
NC-054	12	13	1	1
NC-055	25	20	2	2
NC-056	43	42	63	64
NC-057	29	20	8	9
NC-058	37	31	30	32
NC-059	41	34	23	23

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
NC-060	27	19	2	2
NC-061	19	16	2	2
NC-062	53	49	14	15
NC-063	24	23	28	31
NC-064	21	19	6	6
NC-065	5	5	2	7
NC-066	26	23	17	19
NC-067	19	15	6	6
NC-068	17	3	0	0
NC-069	18	13	8	7
NC-070	17	11	1	1
NC-071	18	18	8	9
NC-072	19	18	9	9
NC-073	25	23	31	34
NC-074	19	16	8	8
NC-075	23	19	64	68
NC-076	44	40	196	208
NC-078	23	21	9	10
NC-079	18	12	1	1
NC-080	27	18	9	10
NC-081	27	20	19	17
NC-087	18	16	6	6
PR-002	0	0	0	0
PR-003	0	0	0	0
PR-004	0	0	0	0
PR-005	0	1	0	0
PR-006	27	23	7	9
PR-007	0	0	0	0
PR-008	0	0	0	0
PR-009	0	0	0	0
PR-010	10	6	1	1
PR-011	3	2	0	0
PR-013	37	43	56	64
PR-014	39	47	42	48
PR-015	16	16	2	2
PR-016	19	21	2	2
PR-017	42	51	15	18
PR-018	31	34	3	4
PR-019	46	53	64	74
PR-020	42	48	10	11
PR-021	15	18	1	1
PR-023	0	0	0	0
PR-024	0	0	0	0
PR-025	0	0	0	0
PR-026	6	6	1	2
PR-027	8	7	1	2
PR-028	34	40	17	19
PR-029	94	108	211	249
PR-030	39	41	3	3
PR-031	40	54	223	259
PR-032	15	14	1	2
PR-033	0	0	0	0
PR-034	0	0	0	0
PR-035	0	0	0	0
PR-036	0	0	0	0
PR-037	16	15	3	4
PR-23A	54	68	126	147
26-003	8	17	114	255
26-004	12	19	39	58

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
26-005	1	5	100	334
CI-006		3		18
CI-004	2	2	0.4	25
CI-005		15		32
CI-TKO	8	11	451	922
JA-003	65	55	909	877
JA-005	57	68	1,116	1834
JA-007	39		39	
OH-002	28	39	354	675
OH-003	39	47	358	586
OH-005	0	2	0	2
OH-006	18	29	9	23
OH-007	38	48	47	85
OH-015	43	24	668	1367
OH-017	24	35	257	439
OH-018	31	43	142	255
OH-019	27	37	44	83
OH-020	7	18	1	4
OH-021	13	26	36	187
OH-024	21	30	15	31
WI-002	43	44	8	9
WI-003	43	48	102	126
WI-004	39	38	8	9
WI-005	31	32	6	7
WI-006	35	35	7	8
WI-007	30	33	6	8
WI-008	43	46	176	204
WI-009	0	0	0	0
WI-010	0	0	0	0
WI-011	12	17	3	4
WI-012	28	30	25	31
WI-013	13	19	0	0
WI-014	20	22	1	1
WI-015	26	27	9	12
WI-016	31	32	22	29
WI-017	28	27	10	13
WI-018	17	22	1	1
WI-019	16	19	1	1
WI-021	11	17	0	1
WI-022	13	19	1	2
WI-023	28	27	59	67
WI-024	24	25	77	100
WI-025	45	44	33	39
WI-026	12	18	1	1
WI-027	9	16	0	1
WI-028	19	21	1	1
WI-029	25	26	2	3
WI-030	21	22	1	1
WI-031	24	25	6	7
WI-032	8	17	0	0
WI-033	22	24	4	5
WI-034	20	22	1	1
WI-035	24	27	8	10
WI-036	23	26	2	3
WI-037	26	27	9	11
WI-038	28	28	29	38
WI-039	22	27	3	4
WI-040	25	26	2	3
WI-041	29	28	9	12

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
WI-042	27	26	2	3
WI-043	31	31	5	6
WI-043	15	18	0	1
WI-044	27	27	4	6
WI-045	36	35	49	62
WI-046	40	41	163	192
WI-047	42	40	23	25
WI-048	42	43	13	14
WI-049	36	40	76	95
WI-050	40	45	19	20
WI-051	33	39	22	28
WI-052	42	45	44	52
WI-053	64	78	65	72
WI-054	47	56	47	52
WI-055	51	67	24	27
WI-056	54	63	1,065	1,200
WI-057	53	64	183	211
WI-058	36	41	48	60
WI-059	18	23	10	13
WI-060	37	44	363	451
WI-061	13	18	5	10
WI-062	35	35	156	192
WI-063	23	23	12	14
WI-064	26	11	34	43
WI-065	16	21	2	3
WI-066	12	17	2	2
WI-067	20	21	12	17
WI-068	31	33	114	164
WI-068	5	5	0	0
WI-069	2	3	0	0
WI-070	28	27	12	15
WI-071	25	24	25	2
WI-072	32	29	46	58
WI-073	4	7	1	1
WI-075	29	29	106	139
WI-076	45	48	76	82
WI-077	37	44	108	129
WI-078	40	47	42	47
TI-003	63	57	158	89
TI-004	15	17	2	6
TI-005	0	3	0	0
TI-007	0	58	0	55
TI-008	0	0	0	0
TI-009	0	0	0	0
TI-011	56	66	292	398
TI-014	32	39	11	16
TI-015	23	26	3	5
TI-016	39	43	31	40
TI-017	22	26	3	4
TI-018	31	37	5	7
TI-019	16	17	2	3
TI-020	30	33	6	9
TI-022	57	67	70	95
TI-023	39	39	115	139
TI-025	25	25	155	203
TI-010	15	19	94	479
TI-T10	15	27	500	394

Total			20,496	28,184

CSO outfall #	# of Overflow Events		Annual CSO Volume	
	CY2013	CY2014	CY2013	CY2014
Max	94	108	1,116	1,834