NYC Stormwater Management Program

2019 MS4 Annual Report

NYC Environmental Protection

Bill de Blasio
Mayor

Vincent Sapienza, P.E.
Commissioner

Municipal Separate Storm
Sewer Systems of New York City

SPDES Number: NY-0287890

Contents

Photo Credit: Don Riepe / American Littoral Society

New York City's iconic waterfront and beloved waterbodies are cleaner and healthier than they have been since the Civil War. Whales and seals are returning to the harbor, wetland and mussel restoration projects are thriving, and New Yorkers are enjoying recreational activities in our local waterways. This is in no small part a testament to the City of New York's (City) substantial investments in upgrading our wastewater infrastructure over the last four decades.

Building on these investments, fourteen City agencies now implement the NYC Stormwater Management Program (SWMP) in the areas served by the municipal separate storm sewer system (MS4). Approximately 40% of NYC is served by the MS4, including much of Staten Island, south Brooklyn, southeast Queens, and many City-owned parks. Managing stormwater in these areas is important because the MS4 carries stormwater runoff directly to nearby waterbodies instead of to a wastewater resource recovery facility for treatment. Therefore, water that flows on the streets and into catch basins or directly into waterbodies may carry pollution such as pathogens and debris.

The NYC SWMP consists of the City's measures to reduce pollution in stormwater runoff discharging into and from the MS4. Through proper management and increased awareness, the City works to keep our streets and facilities maintained to reduce the risk of contributing pollution to stormwater runoff. The City developed and now implements the SWMP in compliance with its MS4 Permit, which was issued by the New York State Department of Environmental Conservation (NYSDEC) in 2015. As most waterbodies in NYC receive stormwater from both the combined and separate sewer systems, the SWMP is an important component of the City's comprehensive integrated planning approach to protecting and improving our waterbodies.

Each year, the City prepares an MS4 annual report to inform NYSDEC and the public of the City's progress in implementing the SWMP and the status of compliance with the MS4 Permit. In 2019, the City met its program goals through coordination, planning, implementation, financing, operation of stormwater management projects, and the development and enforcement of rules with respect to regulated entities. This MS4 Annual Report, covering January 1 through December 31, 2019, includes a brief description of the SWMP activities completed during the 2019 reporting year, measurable goals, and specific reporting requirements included in the MS4 Permit. If applicable, this report also includes activities planned for the following year and any proposed changes to SWMP.

Introduction

On August 1, 2015, the City received a State Pollutant Discharge Elimination System (SPDES) MS4 Permit (No. NY-0287890) from the New York State Department of Environmental Conservation (NYSDEC). This permit required the City to develop a SWMP, which includes numerous programs designed to reduce pollution potential in stormwater runoff. The SWMP Plan[1] (Plan) describes the ways in which the City satisfies the requirements of the MS4 Permit by managing stormwater discharges into and from the City's separate storm sewers. The City submitted the Plan to NYSDEC on August 1, 2018, and NYSDEC approved the Plan on March 14, 2019.

The Plan includes measurable activities/efforts and goals for best management practices (BMPs), which the City reports on annually. The City periodically refines the measurable goals based on lessons learned from implementation of the programs, interagency working groups, and public input. Continuing to refine and update the measurable goals allows the City to better quantify and more accurately represent the effectiveness of the SWMP. The City bases its Annual Effectiveness Assessment on the achievement of the stated measurable goals for each program. The main sections of the SWMP Plan are as follows:

1. **Public Education and Outreach (PEO)**
2. **Public Involvement and Participation**
3. **Mapping**
4. **Illicit Discharge Detection and Elimination (IDDE)**
5. **Construction and Post-Construction (C/PC)**
6. **Pollution Prevention/Good Housekeeping for Municipal Operations and Facilities (PP/GH)**
7. **Industrial and Commercial Stormwater Sources (I/C)**
8. **Control of Floatable and Settleable Trash and Debris**
9. **Monitoring and Assessment of Controls**
10. **Special Conditions for Impaired Waters**
11. **Recordkeeping and Reporting**

1. https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/ms4/nyc-swmp-plan-full.pdf

Administration of the SWMP

The individual designated to act as the liaison between the City and NYSDEC for the implementation of this permit is:

Pinar Balci, PhD

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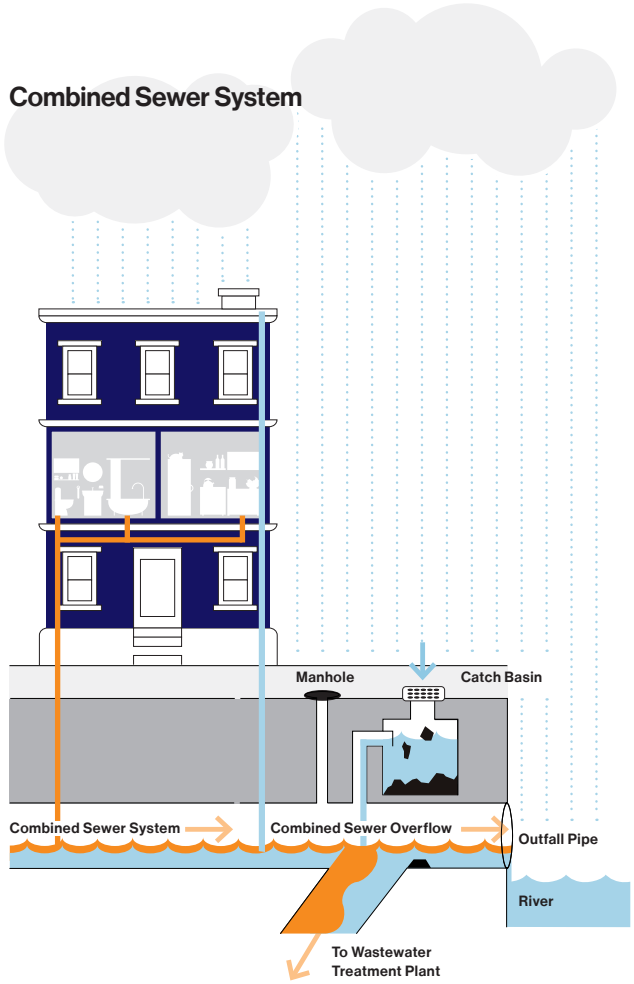
The New York City Department of Environmental Protection (DEP) coordinates the implementation of the SWMP with the assistance of and contributions from the Stormwater Controls Working Group. The Stormwater Controls Working Group is a team of representatives from the following New York City agencies that collaborate on MS4 programs (a subset of these agencies has obligations under the MS4 Permit):

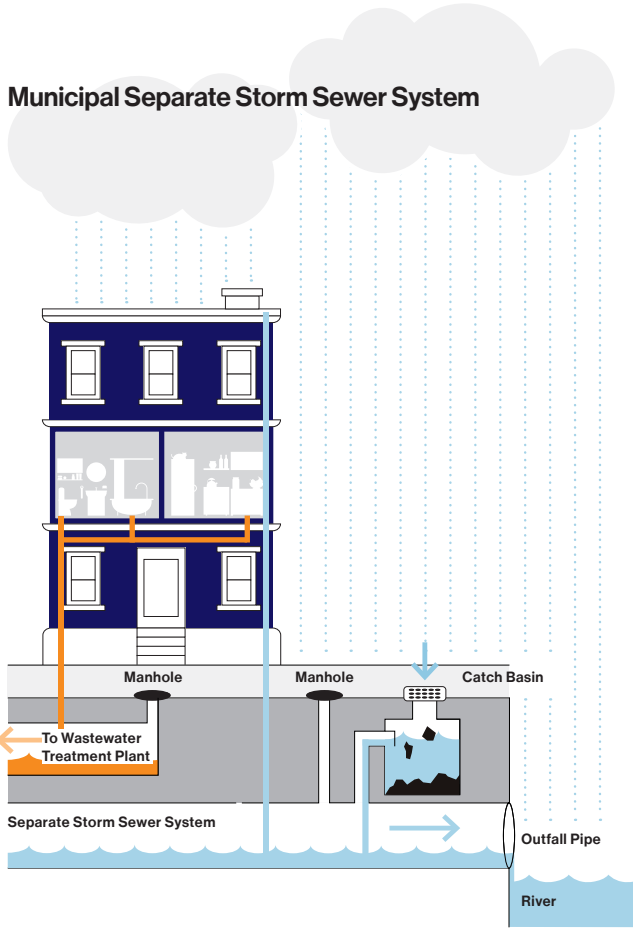
Agencies with MS4 Permit Obligations

- Department of Citywide Administrative Services (DCAS)
- Department of City Planning (DCP)
- Department of Design and Construction (DDC)
- Department of Environmental Protection (DEP)
- Department of Buildings (DOB)
- Department of Correction (DOC)
- Department of Education (DOE)
- Department of Health and Mental Hygiene (DOHMH)
- Department of Transportation (DOT)
- Department of Parks and Recreation (Parks)
- Department of Sanitation (DSNY)
- Fire Department (FDNY)
- Police Department (NYPD)
- Small Business Services (SBS)

Collaborators

- NYC Law Department (LAW)
- Economic Development Corporation (EDC)
- Mayor's Office of Management and Budget (OMB)
- Mayor's Office of Recovery and Resiliency (ORR)





MS4 Annual Reports

Each year, the City reports on SWMP implementation and MS4 Permit compliance. Reporting years are full calendar years[2] (January 1 to December 31). The MS4 annual reports reflect the structure of the City's MS4 Permit and the SWMP Plan, which are organized by program. For each program, these MS4 annual reports include the following sections:

- **Introduction**. This section includes an overview of the program and context for the activities completed within a reporting year. For more information on the programs, refer to the SWMP Plan.
- **Program assessment.** This section includes information on activities completed during the reporting year. Tables that present the measurable goals and measures of a program for the reporting year are complemented by a narrative that highlights and explains important activities.
- **Goals for the next reporting cycle.** This section includes the City's aspirations for applicable programs during the next reporting cycle. To the extent that the City has identified potential impacts on its programs from COVID-19, such impacts are also noted in this section.
- **Program updates.** This section includes information on SWMP updates that the City is proposing as part of refining and adapting its program. The program updates section does not appear if no changes are required for a program. The City updates the SWMP Plan text annually, but implements as soon as practicable any necessary changes identified during the reporting year.

The City publishes a draft MS4 annual report online in the spring of each year for public comment, and holds a public meeting during the comment period. Because of the COVID-19 pandemic, the City held the draft 2019 MS4 Annual Report meeting as a webinar, as allowed by the Governor's March 2020 Executive Order 202.1, which suspended requirements of the Open Meetings Law to allow attendance at meetings telephonically. The City responds to public comments and updates the MS4 annual reports accordingly. The final version of the report is due to NYSDEC on September 30 of each year. The MS4 Annual Reports are available on the DEP website.[3]

2. The 2018 MS4 Annual Report reporting period did not cover a full year, but rather began when the City submitted its first SWMP plan on August 1, 2018 and ended on December 31, 2018.
3. https://www1.nyc.gov/site/dep/water/municipal-separate-storm-sewer-system.page

Newtown Creek Nature Walk

Public Education and Outreach

The City implements a public education and outreach program (PEO Program) as part of its MS4 Permit obligations. The PEO Program has many education and outreach initiatives that inform a broad range of stakeholders and the public about stormwater, the sources of pollutants associated with stormwater, and stormwater's potential impacts on water quality.

Program Assessment

During the 2019 reporting period, as part of the PEO Program, the City implemented 15 programs that included over 1,700 events, 250,000 individuals, 2,500 businesses, and distribution of approximately 4.4 M materials. The types of materials distributed include but are not limited to grease pouches, flyers, posters, brochures, and bookmarks. These metrics include activities conducted citywide.

Table 1 lists measurable goals, measures, and the status of the City's implementation of each Public Education and Outreach BMP.

Notable examples of programs that the City implemented during 2019 include:

Newtown Creek Nature Walk. The Newtown Creek Nature Walk allows the public to enjoy Newtown Creek, connect with the local environment, and explore the history of the waterfront. In 2019, the City began work on the expansion of the Newtown Creek Nature Walk. When completed in 2021, the expansion will connect the existing Newtown Creek Nature Walk in Greenpoint, Brooklyn to the eastern side of Whale Creek, providing accessibility to the public from either side.

SAFE Disposal Events. SAFE Disposal events provide a designated location for New Yorkers to dispose of waste, including harmful household products. These events help the City reduce the risk of pollution in stormwater runoff through trash management and illegal dumping avoidance. In 2019, the City held events in all five boroughs, and more than 200,000 New Yorkers participated.

Trucks of Art Project. DSNY's first "Trucks of Art" Project allowed artists to publicize their artwork focusing on sustainability or the City's workforce. This artwork included canvases on recycling, water conservation, diversity, and zero waste.

New York City Artists Painted a Collection of Trucks to Encourage Sustainability and to Honor New York's Streets

Parks involved in the DOE Science Showcase program for high schoolers

Environmental Education. Parks partners with and attends events hosted by a variety of organizations including community groups, schools, GrowNYC, and the New York Rangers. Notably, in 2019, Parks participated in the DOE Science Showcase, a hands-on workshop for teachers and high school students in the Science and Research program. These events are designed to build awareness of the City's environmental science initiatives and highlight practices students can adopt for their own science projects. Using Van Cortlandt Park as a classroom, Parks taught interested students about how stormwater interacts with the built and natural environments.

Goals for Next Reporting Cycle

During the 2020 reporting cycle, the City will continue implementing the programs listed as planned in Table 1. However, due to COVID-19, the City anticipates a decrease in the number of events, participants, and materials distributed during the 2020 reporting year. The City will also continue to develop education and collaboration efforts with stakeholders. Additionally, the City plans to enhance an exhibit at the Visitor Center at Newtown Creek to educate the public about the New York City sewer systems, including information about pollutants found in stormwater and steps people can take to reduce pollution.

311 is New York City's main source of government information and non-emergency services.

It provides the public with quick, easy access to all New York City government services and information. The public may connect with 311 24 hours a day, 7 days a week, 365 days a year by:

- Visiting **311** online at nyc.gov/311;
- Calling 311 or (212) NEW-YORK, (212) 639-9675, from outside New York City;
- Texting 311-692;
- Downloading the NYC 311 mobile app for Apple or Android devices; or
- Tweeting to @nyc311

311 is accessible to non-English speakers, available online in over 50 languages and by phone in over 170 languages.

311 facilitates transparency and accountability. Service requests and agency responses are available to public as open data online.

Currently, the public is able to use 311 to access information on many topics relevant to stormwater pollution and water quality. The public is also encouraged to use 311 to report information relevant to stormwater pollution. Through 311, the public can report:

- **Waterway Complaint**—Report floatables, trash, oil, gasoline, sewage, or an unusual color in a waterway; report a potential illicit discharge from an MS4 outfall.
- **Dry Weather Sewage Discharge Complaint**—Report water flowing through a sewer outfall pipe during dry weather.
- **Dumping in Catch Basin or Sewer**—Report grease, gasoline, natural gas, cement, oil, sewage, chemicals, or other liquids going into a sewer or catch basin.
- **Oil Spill**—Report an oil spill.
- **Illegal Dumping Complaint**—Report the dumping of large amounts of trash.
- **Catch Basin Complaint**—Report a storm drain that is missing its cover, clogged, sunken, raised, damaged, or defective.

Table 1. Public Education and Outreach 2019 Status of Implementation

BMP	Measurable Goals	Measures	Status
Provide an ongoing public education and awareness program	Develop, implement, and assess an ongoing public education and outreach program	List of education & outreach programs/ events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	• Adopt-a-Highway/Greenway (2 events; 410 participants)* • Annual Art and Poetry Contest (2 events; 2,050 participants)* • Automotive Associations (6 events; 2,523 businesses)* • Cease the Grease Outreach (7 events; 35 workshops; 51 businesses, 808 apartment units; 3,453 materials distributed including grease pouches, posters, and book marks)* • Community Clean-ups (4 events; 150 materials distributed; 335 participants)* • DEP Environmental Education (91 events; 9,624 participants)* • Parks Environmental Education (19 events; 2,998 materials distributed; 6,654 participants)* • Forgot Your Bag? (231 canine waste dispensers in the MS4 area) • Park Stewardship (394 events; 128 materials distributed; 11,149 participants)* • SAFE Disposal Events (15 events; 4,466,600 materials distributed; 208,831 participants)* • School Sustainability Coordinator Trainings (6 events) • STEAM Initiatives Program (2 events; 17 participants)* • Urban Park Rangers Natural Classroom (763 events; 17,812 participants)* • Visitor Center at Newtown Creek (206 events; 7,799 participants)* • Weekend, Pop-up, and Custom Adventures (262 events; 150 materials distributed; 4,696 participants)*
		List of planned educational and outreach programs/activities to be undertaken in the next reporting cycle	• Annual Art and Poetry Contest • Catch Basin Adoption/Stenciling Program • DEP Environmental Education • Forgot Your Bag? • Park Stewardship • SAFE Disposal Events • Urban Park Rangers Natural Classroom • Visitor Center at Newtown Creek • Weekend, Pop-up and Custom Adventures
	Develop and implement educational and information- al activities related to illicit discharges for businesses and the general public	List of education & outreach programs/ events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	• Annual Art and Poetry Contest (2 events, 2,050 participants)* • Cease the Grease Outreach (7 events; 35 workshops; 51 businesses, 808 apartment units; 3,453 materials distributed including grease pouches, posters, and book marks)* • Community Clean-ups (4 events; 150 materials distributed; 335 participants)* • DEP Environmental Education (91 events; 9,624 participants)* • Parks Environmental Education (18 events; 2,983 materials distributed; 6,654 participants)* • Forgot Your Bag? (231 canine waste dispensers in the MS4 area) • Park Stewardship (394 events; 128 materials distributed; 11,149 participants)* • SAFE Disposal Events (15 events; 4,466,600 materials distributed; 208,831 participants)* • School Sustainability Coordinator Trainings (5 events) • Urban Park Rangers Natural Classroom (763 events; 17,812 participants)* • Visitor Center at Newtown Creek (206 events; 7,799 participants)* • Weekend, Pop-up, and Custom Adventures (262 events; 150 materials distributed; 4,696 participants)*
		List of planned educational and outreach programs/activities to be undertaken in the next reporting cycle	• Annual Art and Poetry Contest • DEP Environmental Education • Forgot Your Bag? • Park Stewardship • SAFE Disposal Events • Urban Park Rangers Natural Classroom • Visitor Center at Newtown Creek • Weekend, Pop-up, and Custom Adventures
Facilitate public reporting of illicit discharges	Promote, publicize, and facilitate public reporting of illicit discharges and potential water quality impacts	Summary of public reports received by 311	The City responded to 100% of the 9,384 service requests it received for the 311 complaint types listed in this report as relevant to stormwater pollution.

* These metrics reflect activities conducted citywide.

DEP participates in community-led workshop

Public Involvement and Participation

Involving the public in the implementation of the SWMP is a fundamental requirement of the City's MS4 Permit. Whether it is NYC residents who recreate in local waterbodies, real-estate developers who build in the MS4 area, groups who organize waterbody cleanups, or environmentalists who advocate for a healthier harbor, there is a wide range of stakeholders who participate in the City's efforts to improve water quality.

Program Assessment

During this reporting period, the City continued to engage with the public about the implementation of the SWMP through both meetings and webinars. Over 200 participants attended, including stakeholders from the environmental community; the industrial and commercial community; and the design, construction, and development community.

The City reached over

200

individuals through meetings and webinars

To engage the public on the general implementation of the SWMP, the City partnered with the Stormwater Infrastructure Matters environmental group to host the 2018 MS4 Annual Report public meeting on May 21, 2019. A draft of the 2018 MS4 Annual Report was posted on the DEP website and was available for public comment from May 8, 2019 through June 26, 2019. The public was notified by email and through an event webpage of the availability of the draft 2018 MS4 Annual Report and the meeting.

The City also engaged the public and key stakeholders by providing an overview of the new DEP Stormwater Rule that went into effect on June 1, 2019. This rule applies to inspection and enforcement at industrial and commercial facilities in the MS4 area, and permitting of construction activities in the MS4 area. The MS4 Construction Permitting program offered several meetings and webinars to introduce the new Stormwater Permitting and Tracking System.

In Coney Island, the City participated for the third year in a row in a community-led workshop on the beautification of the area. The City provided an update on enhanced stormwater management controls for sources of illicit discharges and trash, and the new green infrastructure practices the City has planned for local schools.

Table 2 lists measurable goals, measures, and the status of the City's implementation of Public Involvement and Participation BMPs.

Goals for Next Reporting Cycle

In the 2020 reporting cycle, the City will continue engagement with local stakeholder groups and participation in community events in order to educate and involve the public with respect to stormwater management and water quality. The City held a public meeting on the draft 2019 MS4 Annual Report on May 21, 2020. Public comments and responses are included in Appendix 1 of this final report. The City will continue to focus on expanding partnerships, and providing educational information and webinars for construction and post-construction stormwater controls.

The City published the draft 2019 MS4 Annual Report on the DEP website on Thursday, May 7, 2020. The City hosted the 2019 MS4 Annual Report meeting as a webinar from 4 pm to 6 pm on Thursday, May 21, 2020. The public was encouraged to submit comments from May 7, 2020 through June 25, 2020 by email to MS4@dep.nyc.gov.

Table 2. Public Involvement and Participation 2019 Status of Implementation

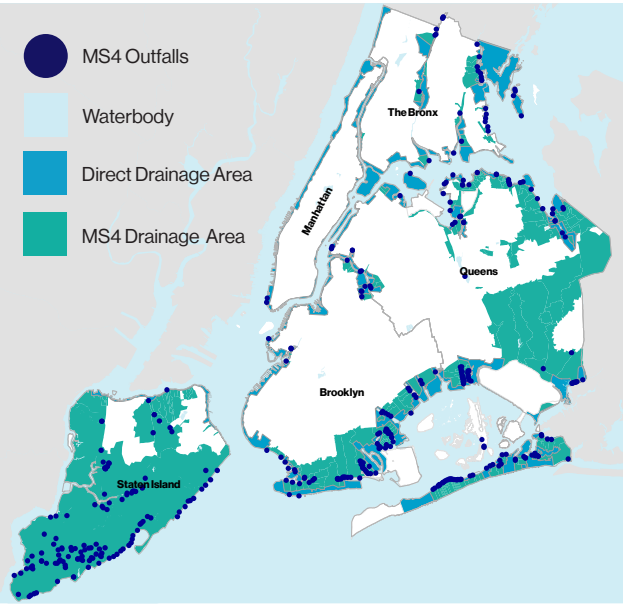
BMP	Measurable Goals	Measures	Status
Provide and promote the opportunity to report and receive stormwater information	Identify mechanism for public to report and request stormwater related information including contact process to receive and respond to requests	Summary of public reports and requests received by MS4@dep.nyc.gov	The City responded to inquiries on different SWMP activities including MS4 construction project design standards, MS4 area location questions, PEO program summary, and the process of uploading industrial facility information to DEP.
Provide public opportunity to participate in SWMP implementation	Seek public input on SWMP implementation and provide public access to Annual Reports	Date and location of draft Annual Report posted for public review and comment period	On May 8, 2019, the City posted on the DEP website the draft 2018 MS4 Annual Report. It was available for public comment through June 26, 2019.
		Date and time of draft Annual Report stakeholder meeting and number of participants	May 21, 2019 at 6:30pm. Approximately 25 individuals participated.
		Summary of comments received on draft Annual Report and City responses	Appendix 1 – Public Comments on the 2019 MS4 Annual Report
		List of involvement and participation activities (e.g., programs, events, key stakeholder meetings)	• 2018 MS4 Annual Report Public Meeting (25 participants) • Coney Island Creek Community Workshop (50 participants) • How to Get a Stormwater Construction Permit in NYC (28 participants) • Overview of New DEP Stormwater Rules for Construction (30 participants) • How to Use the Stormwater Permitting and Tracking System (6 events, 73 participants)
		Status and location of final Annual Report and the Plan	The SWMP Plan and final MS4 annual reports are available at www.nyc.gov/dep/ms4
		List of planned participation and involvement programs/activities to be undertaken in next reporting cycle	• 2019 MS4 Annual Report meeting • Staten Island Builders Association Construction/Post-Construction Workshop

Mapping

The City has several programs that document and map important information about NYC. Much of the information gathered by these programs is available to the public through NYC Open Data at opendata.cityofnewyork.us. As part of the SWMP, the City is mapping MS4 outfalls and drainage areas. Before NYSDEC issued the MS4 Permit in 2015, DEP had developed the Historical MS4 Map, which represented the City's best understanding of the MS4 area and outfalls at that time. The City used this map throughout the development of the SWMP. Pursuant to the MS4 Permit, the City is in the process of refining the MS4 Map. With the submission of the Plan, the City included the Preliminary MS4 Map, which shows the known MS4 drainage areas and outfalls as of August 1, 2018. An interactive version is available to the public at www.nyc.gov/dep/ms4map. The Preliminary MS4 Map also contains supplemental information that may be relevant to stormwater management.

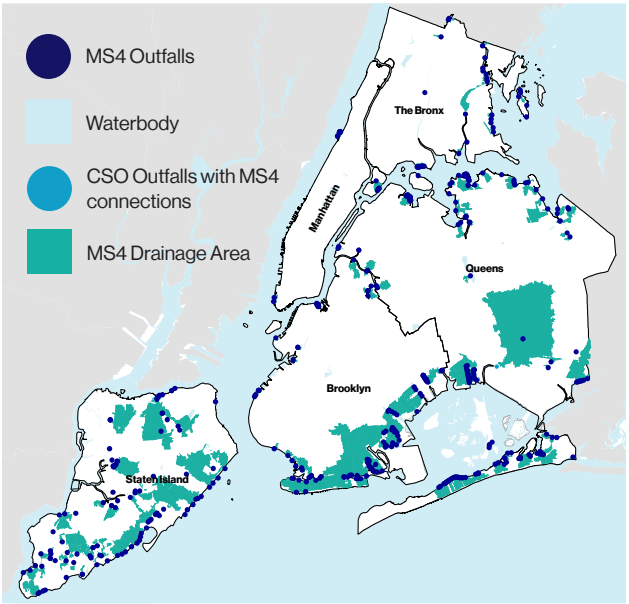
Program Assessment

Since the submission of the Preliminary MS4 Map, the City has continued to refine the datasets for MS4 outfalls and drainage areas. These refinements were included in the update of the MS4 Map submitted to NYSDEC by August 1, 2020. Table 3 lists measurable goals and measures with the implementation status of the City's Mapping BMPs.



Historical MS4 Map

The information shown on this map was the best available as of August 1, 2015. This information was used for planning purposes during SWMP development and has been superseded by the Preliminary MS4 Map as of August 1, 2018.



Preliminary MS4 Drainage Areas and Outfalls

The information shown on this map is the best available information as of August 1, 2018.

Table 3. Mapping Program 2019 Status of Implementation

BMP	Measurable Goals	Measures	Status
Map the MS4 area	Map in GIS-format; MS4 outfalls, and drainage areas (Preliminary MS4 Map to be submitted by August 1, 2018 and Final Map to be submitted by August 1, 2020)	Status and location of the MS4 Map	Preliminary MS4 Map is online and available to the public at nyc.gov/dep/ms4map
		Number and percent of MS4 outfalls mapped	460; 90.2%*
	Update Final MS4 Map every 5 years	Date of latest MS4 Map updated submittal	August 1, 2018

* As of March 2018, DEP had classified 460 outfalls as MS4 outfalls. The Preliminary MS4 Map, submitted to NYSDEC in August 2018, included those 460 outfalls. Accordingly, the 2018 MS4 Annual Report reported that 100% of MS4 outfalls had been mapped. By March 2019, DEP had classified 510 outfalls as MS4 outfalls. Because the City will not update the MS4 Map until 2020, this 2019 MS4 Annual Report reflects that the current map depicts approximately 90% of known outfalls (the 460 included in the Preliminary Map out of the 510 classified as MS4). After 2020, the City must update the map every 5 years. In years in which the City does not update the map, similar discrepancies may exist

Illicit Discharge Detection and Elimination

Illicit discharges are non-stormwater, unauthorized discharges into and from the MS4. Examples include sanitary pipes illegally connected to storm sewers and substances like oils dumped into catch basins. The City has longstanding, effective programs for detecting, identifying, and eliminating illicit discharges citywide. These include the Shoreline Survey, Sentinel Monitoring Program, Harbor Survey Program, and Emergency Response Units. The City also has public education and outreach programs for the public, businesses, and City employees on the hazards of improper disposal of materials and actions to take to reduce the risk of an illicit discharge. The general public and City employees working off-site are encouraged to call 311 if they see a potential illicit discharge.

Once the City identifies a potential illicit discharge, it initiates a trackdown to find the source and then takes steps to abate the discharge. The trackdown process may include a series of complex steps both in the office and the field. Each trackdown investigation is unique; some can take a few hours, while others can take days or months depending on the location, the number of sources, the logistics and the complexity of the drainage area. All City agencies that own or operate facilities within the MS4 area conduct IDDE activities on their properties, while DEP conducts IDDE activities citywide.

Program Assessment

During this reporting period, the City continued to implement its citywide IDDE Program: characterizing outfalls, sampling in receiving waterbodies, source tracking, and eliminating illicit discharges. The City detected 1,102 illicit discharges and eliminated 1,090 citywide through the DEP Response Units; Sentinel Monitoring and Shoreline Survey programs; and agency actions at their municipal facilities in the MS4 area. The City is working to investigate the 12 illicit discharges detected in 2019, but not eliminated within the calendar year.

Under the Shoreline Survey Program, DEP surveys 100 percent of City-owned outfalls every 10 years. MS4 outfalls are not evenly distributed throughout the shoreline; therefore, the percentage of outfalls DEP inventories each year depends on the area of shoreline inventoried. In 2019, DEP inventoried 6% of known MS4 outfalls and sent an updated outfall list of CSO and MS4 outfalls to NYSDEC.

The City also continued to explore options for conducting an enhanced source tracking pilot program in Alley Creek. Alley Creek is a challenging waterbody in which to conduct source tracking as there are accessibility issues created by the presence of wetlands, muddy conditions, and shallow waters at low tide. DEP has successfully eliminated sources of illicit discharges in the past, but this new effort incorporates modern technologies to build on those past efforts, including the use of drones to develop a thermal map. The goal of a drone survey is to find areas with relative water temperature differences where DEP can investigate further for potential illicit discharges. Illicit discharges are typically warmer than the receiving waterbody and this temperature difference is captured by thermal sensors installed on the drone.

DEP conducted a drone survey of Alley Creek in the spring of 2019, but the data collected were not reliable. The sensor malfunctioned, and, as a result, collected inconsistent temperature data. DEP is planning to repeat the drone survey in the fall of 2020, if conditions allow. Through the 2019 drone survey, DEP learned that for best results the drone survey should be conducted at night to remove light interference as a factor and during a time period while people are at home and using their kitchens and bathrooms. Using a sensor that measures relative instead of absolute temperature will also provide better results. DEP may apply the lessons learned from this pilot program to future source trackdown efforts in waterbody areas that have challenges similar to those at Alley Creek, if appropriate.

Table 4 lists measurable goals and measures with the status of the City's implementation of IDDE BMPs and represents citywide metrics.

Pilot remote thermal screen of the drone flyover

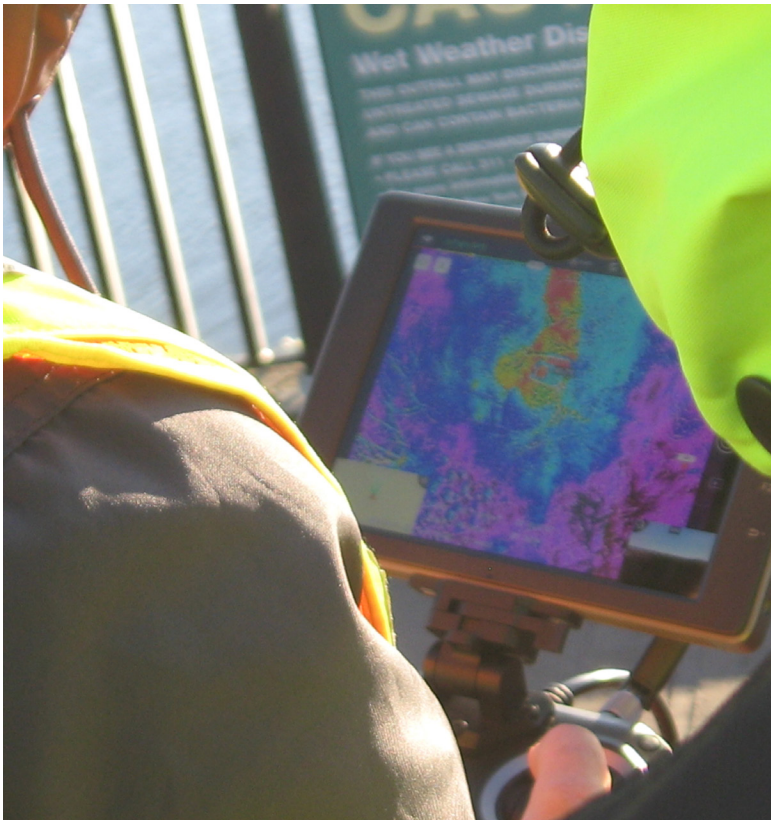


Table 4. IDDE Program 2019 Status of Implementation

BMP	Measurable Goals	Measures	Status
Detect and eliminate illicit discharges	Detect and eliminate illicit discharges including illegal dumping	Number of illicit discharges detected	1,102*
		Number of illicit discharges abated	1,090*
		Number of and type of enforcement actions and penalties issued	DEP issued 147 summons ($102,645 in penalties) and 2 Commissioner's Orders; DSNY issued 417 summons†
	Conduct an outfall reconnaissance inventory with 100% completed every 10 years	Updated outfall spreadsheet submitted to NYSDEC	Appendix 2 – SPDES outfall listing
		Percent of known MS4 outfalls inventoried	6%
Prepare reports	Prepare a Special Report for waterbodies with fecal coliform above 200 colonies/100 ml and for unauthorized non-stormwater discharges within 3 years of August 1, 2015 and annually thereafter.	Date Integrated Sentinel Monitoring Report submitted to NYSDEC	June 30, 2019
Provide an ongoing public education and awareness program	Implement a public education program on potential hazards of illicit discharges	List of education activities for public employees	PP/GH agency staff training
		List of education and outreach programs/events for the general public and businesses, and relevant metric(s) for each (e.g., number of participants, event, or materials distributed)	• Annual Art and Poetry Contest (2 events, 2,050 participants) ¶ • Cease the Grease (7 events; 35 workshops; 51 businesses, 808 apartment units; 3,453 materials distributed including grease pouches, posters, and book marks) ¶ • Community Clean-ups (4 events; 150 materials distributed; 335 participants) ¶ • DEP Environmental Education (91 events; 9,624 participants) ¶ • DPR Environmental Education (18 events; 2,983 materials distributed; 6,654 participants) ¶ • Forgot Your Bag? (231 canine waste dispensers in the MS4 area) • Park Stewardship (394 events; 128 materials distributed; 11,149 participants) ¶ • SAFE Disposal Events (15 events; 4,466,600 materials distributed; 208,831 participants) ¶ • School Sustainability Coordinator Trainings (5 events) • Urban Park Rangers Natural Classroom (763 events; 17,812 participants) ¶ • Visitor Center at Newtown Creek (206 events; 7,799 participants) ¶ • Weekend, Pop-up, and Custom Adventures (262 events; 150 materials distributed; 4,696 participants) ¶
		List of planned educational and out to be under taken in next reporting cycle	• Annual Art and Poetry Contest • DEP Environmental Education • Forgot Your Bag? • Park Stewardship • SAFE Disposal Events • Urban Park Rangers Natural Classroom • Visitor Center at Newtown Creek • Weekend, Pop-up and Custom Adventures
Provide training for staff	Implement a staff training program on IDDE	Number of staff training opportunities/events	11 events
		Number of DEP staff trained on IDDE	67 participants total§

* Number includes illicit discharges detected/abated by DEP citywide and illicit discharges detected/abated by City agencies on-site at municipal facilities in the PP/GH inventory.
† Excludes cases DEP referred to NYSDEC; DSNY summons are for vehicle spillage and the extrusion of noxious liquids.
‡ The spreadsheet is a full listing of CSO and MS4 outfalls.
¶ These metrics reflect activities conducted citywide.
§ Participants total includes those who attended multiple training events.

Alley Creek drone image

Goals for Next Reporting Cycle

For the 2020 reporting cycle, the City will continue its IDDE program, which includes the Shoreline Survey, Harbor Survey, Sentinel Monitoring, and Emergency Response Units. The City will integrate the Sentinel and Harbor Survey monitoring programs in order to manage resources more efficiently and to reduce the redundancies of monitoring stations while continuing consistent monitoring of the NY harbor. Due to COVID-19, the City anticipates a reduction in some IDDE metrics, such as the percent of known MS4 outfalls inventoried and the number of education and outreach events.

For Alley Creek, the City is planning to conduct another drone survey that incorporates the lessons learned in 2019. Also, the City is partnering with the USGS to conduct a microbial source tracking study. The objective of the study is to identify the source(s) and relative host contribution of bacteria contamination seasonally and spatially, during both wet and dry conditions, and during low and high tide in Alley Creek.

1,090

illicit discharges were eliminated citywide

Program Updates

In future MS4 annual reports, to make information on the Sentinel Monitoring Program more accessible to the public, the City will provide information on where the public can access the latest report instead of when the report was last submitted to NYSDEC. In the BMP table, the measurable goal “Prepare a Special Report for waterbodies with fecal coliform above 200 colonies/100 ml and for unauthorized non-stormwater discharges within 3 years of August 1, 2015 and annually thereafter” will have “Status and location of Integrated Sentinel Monitoring Report” as the measure instead of “Date Integrated Sentinel Monitoring Report submitted to NYSDEC." This report is available to the public on the DEP website at https://www1.nyc.gov/site/dep/water/harbor-water-quality.page under the header Sentinel Monitoring Program.

Non-stormwater discharges (e.g., water line flushing, potable water, AC unit condensate, water from crawl spaces, dechlorinated swimming pool discharges) into the municipal separate storm sewer system (MS4) are generally considered illicit. However, some non-stormwater discharges are allowed including those from firefighting activities, and discharges determined by DEP not to be significant contributors of pollutants. DEP makes the determination on a case-by-case basis. To obtain DEP approval to discharge non-stormwater into the MS4, email DEP at MS4@dep.nyc.gov with the subject line Non-stormwater Discharge Inquiry.

Construction and Post-Construction

NYSDEC requires development or redevelopment projects disturbing an acre or more of soil to obtain coverage for stormwater discharges under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002)(NYSDEC CGP).

The City's Construction and Post-Construction (C/PC) Program complements the NYSDEC CGP program in the NYC MS4 area by reviewing and approving stormwater pollution prevention plans (SWPPPs), and inspecting construction sites both for stormwater impacts and for operation of post-construction stormwater management practices (SMPs). The C/PC Program also requires developers to install adequate controls to ensure no net increase (NNI) of a pollutant of concern causing the impairment of an impaired water without a total maximum daily load (TMDL). As part of the C/PC Program, DEP issues two types of stormwater permits for covered development projects: the Stormwater Construction Permit and the Stormwater Maintenance Permit.

Program Assessment

Rules governing the C/PC Program went into effect on June 1, 2019, enabling the City to administer the program by reviewing SWPPPs; issuing stormwater construction and maintenance permits; inspecting and enforcing during and after construction; and responding to public complaints. Similarly, DEP's online application system for developers, the Stormwater Permitting and Tracking System (SWPTS), came online on June 1, 2019. SWPTS includes access to a list of issued construction permits as well as a list of projects with post- construction practices approved under the NYSDEC CGP. SWPTS is also the site for applicants to submit and track the review and approval of their SWPPPs and to track permit progress. It is accessible at https://deppermits.microsoftcrmportals.com/.

Program implementation began with zero submissions between June and August. However, between September and December the City reviewed 18 SWPPPs, issuing 3 approvals and 9 disapprovals for proposed projects. The other 6 applications were amended by new submissions before the City issued determinations. One of the approved projects began construction in late December.

Of the applications received by the City, 5 projects met the criteria for the NNI requirement. NNI is a requirement in the Special Conditions section of the MS4 Permit (II.B.1), under which projects that discharge to waters that are impaired but do not have a TMDL allocation, must implement SMPs that negate any potential increase in pollutant loading. DEP approved one project; the remaining four are either disapproved or still in review. The approved project includes an infiltration system with a maintenance plan that meets the manufacturer specifications. Following construction, the project will require a Stormwater Maintenance Permit to ensure proper long-term operation and maintenance.

The City reviewed

18

stormwater pollution prevention plans

Table 5 lists measurable goals and measures with the status of the City's implementation of C/PC Program BMPs.

Goals for Next Reporting Cycle

During the 2020 reporting cycle, DEP's MS4 Construction Permitting Group plans to continue outreach efforts to the construction community, review and approval of SWPPPs, and inspection of sites that have construction permits. Additionally, City staff will continue to respond to inquiries and provide applicants with information and training, as needed or requested. The City will also prepare a schedule for developing and implementing a 20,000 square foot soil disturbance threshold to trigger the C/PC stormwater management requirements. For municipal ROW projects, the one-acre threshold under the CGP will continue to apply, but the City, pending NYSDEC review and approval, plans to exempt ROW projects from the 20,000 square foot soil disturbance requirement.

https://www1.nyc.gov/site/dep/water/construction-post-construction-program-ms4.page

Table 5. C/PC Program 2019 Status of Implementation

BMP	Measurable Goals	Measures	Status
Construction Site Stormwater Runoff Control	Review and Approve SWPPPs	Number of SWPPPs reviewed	18
		Number of SWPPPs approved with and without post-construction stormwater management facilities	3
		Number of Stormwater Construction Permits issued	2
	Inspect construction sites and enforce Stormwater Construction Permits	Number of active construction sites	1
		The percentage of active Stormwater Construction Permit sites inspected once	0*
		The percentage of active Stormwater Construction Permit sites inspected more than once	0*
		Number and type of enforcement actions and penalties issued	0
		Number of construction site stormwater control trainings planned or completed	8 completed, 1 planned
Post-Construction Stormwater Management	Inspect post-construction sites and enforce Stormwater Maintenance Permits	Number of Stormwater Maintenance Permits issued	0†
		Number of Flood Management Projects and existing structural flood control devices evaluated	0†
		Number and type of enforcement actions and penalties issued	0†
		Number of post-construction SMPs, including type of practice and contributing impervious area	0†
		Number and type of SMPs inspected	0†
		Number and type of SMPs properly maintained as determined by inspections	0†
		Number of individuals trained in inspection of long-term operation and maintenance of post- construction SMPs	6 events, 22 participants total‡

* Construction at the permitted site did not begin until December 2019.
† No projects with MS4 construction permits have reached a stage that would require maintenance of SMPs.
‡ Participants total includes those who attended multiple training events.

Pollution Prevention/Good Housekeeping for Municipal Operations and Facilities

The City has an extensive network of municipal facilities and operations that serve New Yorkers and keep vital infrastructure functioning properly. To help reduce the potential for these facilities and operations to pollute stormwater, the City implements a comprehensive PP/GH Program. The PP/GH Program maintains an inventory of municipal facilities and operations; prioritizes these facilities and operations for their potential to contribute pollution to stormwater runoff and assesses them on 2, 5 and 7 year-cycles for high, medium and low priority, respectively; provides guidance on stormwater control measures to reduce stormwater pollution from municipal facilities and operations; evaluates runoff reduction techniques including green infrastructure in planned municipal upgrades; and trains City staff on PP/GH practices. The City recognizes that the inventory and priority ratings are not static, and can change from year to year based on new information.

Program Assessment

During this reporting period, a number of agencies (Parks, NYPD, DOE, DOC, DSNY, DOT and FDNY) assessed facilities they operate. These include Parks athletic fields, tennis courts, swimming pools, and playgrounds; NYPD precinct station houses, aviation unit, traffic enforcement unit, harbor units and transit unit offices, vehicle shops, parking areas, and horse stables; DOE schools, playgrounds, and athletic fields; DOC correctional facilities; FDNY firehouses, harbor units and training facilities; DSNY and DOT field equipment maintenance shops and material storage yards. Operations assessed at these facilities include material stockpile management, vehicle fueling and storage, vehicle and equipment cleaning, drum storage management, spill prevention and response, waste management and disposal, catch basin inlet cleaning and repair, and aboveground fuel storage. These assessments included evaluation of controls associated with these facilities' operations.

Agencies assigned an initial priority (high, medium, or low) to each of their facilities, based on the facilities' stormwater pollution potential, and then revised many of these priorities, as appropriate, upon assessment. The stormwater pollution potential of a facility is determined by evaluation of conditions at the facility, such as quantities of materials stored, frequency of use of those materials, exposure of materials to stormwater, and proximity to waterbodies. Designating a facility as high priority does not necessarily mean that the facility is a contributor of pollutants, but rather that the facility has an inherently high risk of contributing pollutants. High risk facilities include large salt storage sites, and garages and yards with large volumes of petroleum or chemical storage. Medium risk facilities include schools, storage buildings in parks, marine terminals, and fire stations. During 2019, the City assessed 257 municipal facilities for stormwater pollution potential; these included 21 high priority sites, 145 medium priority sites, and 91 low priority sites.

In 2019, assessments included only municipal facilities; the City did not assess the pollution potential of common off-site operations relevant to the PP/GH Program. Such off-site operations include storm sewer system maintenance; winter pavement maintenance; pavement cleaning (sweeping); herbicide, pesticide, and fertilizer application; roadway resurfacing; and curbside garbage removal. Some of these off-site operations provide stormwater quality benefits by removing or controlling potential pollution sources, which in turn reduces their inherent risk of contributing pollutants.

Because the facility inventory is dynamic in nature, as facilities are consolidated or separated, occupied or vacated, or confirmed served by combined sewers or the MS4, the City updates the inventory each year. As such, the facility inventory decreased from 708 in 2018 to 567 in 2019. The prioritization or the pollution potential associated with the sites in the inventory is also dynamic: agencies might add or remove materials that could be the source of pollutants or operational areas could have more or less exposure. At the end of 2019, there were 30 high priority facilities, 341 medium priority facilities, and 196 low priority facilities in the inventory.

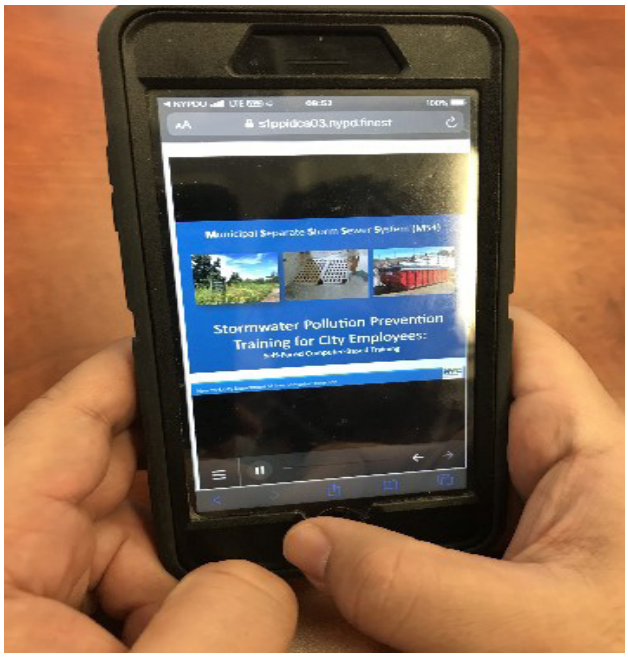
The City has met the high priority 2-year re-assessment cycle requirement for applicable high priority facilities; the City is on track to meet the 5-year and 7-year time frames for the medium and low priority facilities.

Agencies are required to consider, and, if feasible and cost effective, incorporate run-off reduction techniques and green infrastructure (GI) during planned municipal upgrades. In 2019, the City evaluated six planned municipal upgrade projects for potential GI opportunities using a standardized matrix. The City also completed construction of seven GI projects during planned municipal upgrades, including 4 green roofs, 1 permeable paver project, 1 landscape restoration and tree planting, and 1 rain garden.

The City continued to administer the PP/GH Training in both classroom and computer-based environments. During the reporting period, more than 10,000 municipal employees received PP/GH training. Some agencies have also developed innovative ways to help training reach the key personnel responsible for implementing stormwater controls. NYPD linked the computer-based training to staff's mobile devices, allowing personnel to refresh on stormwater training anywhere, anytime and as needed.

Table 6 lists measurable goals and measures with the status of the City's implementation of PP/GH Program BMPs.

Green roof being installed at a Parks playground at Rockaway Beach



NYPD environmental manager demonstrates mobile application of PP/GH training

With respect to data reported in the 2018 MS4 Annual Report, the City must update a number of metrics with new information received in 2019. Corrected metrics for the 2018 reporting period of August 1, 2018 to December 31, 2018 are listed below:

- Acres of parking lot swept, originally reported as 6,337, were 7,061;
- Number of catch basins inspected, originally reported as 10,461 was 10,404;
- Number of catch basins cleaned, originally reported as 4,873, was 4,872;
- Number of catch basins maintained, originally reported as 622, was 621
- Miles of street swept, originally reported as 269,251, were 215,886 citywide, including right-of-way, arterial highways, bridge roadways, tunnels, and underpasses, and on-site at facilities listed in the PPGH inventory.
- Total number of self-assessments completed, originally reported as 78, was 79 (36 low priority facilities and 43 medium priority facilities).
- Percentage of self-assessments completed of the total number of sites, originally reported as 5.2% and 5.8% for low and medium priority facilities, was 5.1% and 6.1%, respectively.

Further, in 2018, the metrics for the number and percentage of self-assessments completed by priority included only municipal facilities. The City did not assess any off-site operations in 2018.

Goals for Next Reporting Cycle

For the 2020 reporting cycle, the City will continue assessing high, medium and low priority sites; refining the facility and off-site operation inventory; and administering staff trainings. The City will also begin assessments for pollution potential of off-site operations such as winter and pavement operations. Due to COVID-19, the City anticipates there may be some reductions in some PP/GH metrics, such as miles of street swept.

Program Updates

In future MS4 annual reports, the City will provide status updates on progress in completing assessments in accordance with the 2/5/7-year cycles for high, medium, and low priority facilities, respectively. The City will include facility inventory totals, by priority, instead of reporting on the percentage of completed assessments. In the BMP table, the measurable goal “Maintain an inventory of municipal operations and facilities” will include “Number of facilities, by priority” instead of the measurable goal “Implement the PP/GH Program” including “Percent of self-assessments completed of the total number of sites in the inventory, by priority."

Table 6. PP/GH Program 2019 Implementation Status

BMP	Measurable Goals	Measures	Status
Provide program for pollution prevention and good housekeeping for municipal operations and facilities	Maintain an inventory of municipal operations and facilities	Number of facilities	567
		Number of off-site operations	10
	Implement the PP/GH Program	Acres of parking lots swept	15,097
		Miles of street swept	512,996*
		Number of catch basins inspected	9,407†
		Number of catch basins cleaned	11,254†
		Number of catch basins maintained	3,459†
		Miles of storm sewers inspected	671‡
		Miles of storm sewers cleaned	633‡
		Number of self-assessments completed of facilities in the inventory, high priority	21
		Number of self-assessments completed of facilities in the inventory, medium priority	145
		Number of self-assessments completed of facilities in the inventory, low priority	91
		Percent of self-assessments completed of the total number of facilities in the inventory, high priority	4%
		Percent of self-assessments completed of the total number of facilities in the inventory, medium priority	26%
		Percent of self-assessments completed of the total number of sites in the inventory, low priority	16%
		Number of facilities electing MS4 coverage that would otherwise be subject to MSGP	0
Provide for staff training	Implement a PP/GH Training Program	Number of staff trained in-person	8,266
		Number of staff trained computer-based	2,689
Consider runoff reduction and green infrastructure	Consider runoff reduction techniques and green infrastructure	Number of runoff reduction/green infrastructure opportunities evaluated	6
		Number of runoff reduction/green infrastructure opportunities implemented	7

* Based on citywide numbers for right-of-way (ROW), exit ramps, arterial highways, bridge roadways, tunnels, and underpasses, and work done by agencies at their facilities listed in the inventory.
† Data include the DEP ROW catch basin program based on the preliminary MS4 map and work done by agencies at their facilities listed in the inventory.
‡ Based on work done by DEP for all sewers citywide and work done by agencies at their facilities listed in the inventory.

Industrial and Commercial Stormwater Sources

NYSDEC requires certain industrial facilities to obtain coverage for stormwater discharges under the State Pollution Discharge Elimination System (SPDES) Multi-Sector General Permit for Stormwater Discharge from Industrial Activities (GP-0-17-004) (MSGP). While NYSDEC issues the MSGP, DEP is responsible for the associated inspections and enforcement of the MSGP at both publicly and privately owned MSGP-covered facilities in the MS4 area. DEP is also assessing unpermitted industrial and commercial facilities in the MS4 area and sending observations to NYSDEC to facilitate NYSDEC's determination of the facilities' potential need for SPDES permit coverage. DEP maintains a list of these permitted and unpermitted facilities, referred to as the I/C Facility Inventory.

Program Assessment

The rules governing this program became effective on June 1, 2019, enabling the City to assess unpermitted facilities and inspect permitted facilities. On June 17, EPA provided classroom training for 26 DEP inspectors prior to DEP's shadowing EPA inspectors in facility inspections. On June 18, 17 DEP inspectors observed inspections led by EPA and NYSDEC at two permitted facilities. Between August and December, DEP performed 83 site assessments and inspections: 79 assessments at unpermitted facilities and 4 inspections of permitted facilities. Three unpermitted facilities were referred to DEC for SPDES coverage.

Assessments at unpermitted facilities at which DEP finds that additional stormwater controls are needed may result in DEP's sending observations to NYSDEC to determine potential SPDES coverage and/or DEP's enforcing against observed illicit discharges. The majority of the unpermitted facilities assessed in 2019 fell under SIC Code Sector P, Land Transportation and/or Warehousing. During the assessments, DEP verified that the businesses were performing industrial activities within the range of the sectors requiring MSGP coverage.

With respect to the 79 unpermitted facility assessments conducted in 2019, DEP has found that the I/C Facility Inventory is more dynamic than originally anticipated,

Table 7. I/C Program 2019 Implementation Status

BMP	Measurable Goals	Measures	Status
Provide an industrial and commercial pollution control program	Implement an inspection and assessment program for unpermitted industrial and commercial sources	Status of the inspection program and stormwater controls for unpermitted industrial and commercial facilities	DEP performed 79 unpermitted facility assessments. Three of these facilities were referred to NYSDEC for SPDES no-exposure coverage.
	Implement an inspection program for MSGP Permit holders based on priority	Number of SPDES MSGP facilities inspected, high priority	2
		Number of SPDES MSGP facilities inspected, medium priority	0
		Number of SPDES MSGP facilities inspected, low priority	2
		Number of non-compliant SPDES MSGP facilities	4
		Number of repeat non-compliant SPDES MSGP facilities	0
		Number and type of enforcement actions completed and penalties issued	0

especially due to the high rate of turnover of businesses at leased facilities in NYC. Consequently, assessments at 70 facilities resulted in findings that the businesses listed in the inventory were inactive at those locations. Six facilities were found not to need SPDES coverage because they were not performing industrial activities that were within range of coverage. Three facilities were found to be conducting industrial activities that warranted referral to NYSDEC.

In the fall of 2019, DEP performed inspections at 4 MSGP-permitted facilities, of which 2 were MSGP high priority facilities and 2 were MSGP low priority facilities. NYSDEC initially assigned priority rankings to all MSGP facilities. DEP may re-prioritize a facility as appropriate to what DEP observes during its inspection.

DEP inspectors evaluating fueling area best management practices at a permittedfacility

NYSDEC senior inspectors observed DEP's inspections at the two MSGP high priority facilities. There were no enforcement actions issued during these inspections, and one high priority facility was re-prioritized to medium. The re-prioritization was made in response to removal of sources/activities that triggered the original determination of high risk.

Based on the inspections of permitted facilities conducted in 2019, compliance issues were mostly recordkeeping-related deficiencies. For instance, Stormwater Pollution Prevention Plans (SWPPPs) were not kept up-to-date, site maps were at times incomplete or lacking accuracy, and permit-required records were not kept on site with the SWPPP.

DEP provided an online tool for the regulated community available at https://deppermits.microsoftcrmportals.com/ic-documentupload/. It consists of the MSGP File Uploader, which enables active permitted facilities to share documents with DEP. During this reporting period, permitted facilities began to use the system, providing a more efficient process for document submittal from facility to DEP.

Goals for Next Reporting Cycle

During the 2020 reporting cycle, DEP plans to continue the assessment of unpermitted facilities and inspection of permitted facilities. DEP will prepare to submit its I/C training certification due to NYSDEC in March 2021. MS4 Permit Section IV.O, Table 2 Deliverables, requires the City to certify, every 2 years after SPDES MSGP inspection program approval, completion of training of inspectors to conduct industrial stormwater facility inspections.

Control of Floatable and Settleable Trash and Debris

Stormwater runoff can transport trash and debris from urban areas into local waterbodies. Once waterborne, these materials are referred to as "floatables." The SWMP relies on many existing programs to control trash and debris stemming from the MS4 area. Public education, outreach, involvement and participation are important parts of the City's efforts to control floatables. A variety of programs encourage the public to help manage trash and debris, including a suite of stewardship programs (e.g., Parks Community Cleanups) and 311, which enables New Yorkers to report to the City dirty conditions they observe. Other key programs include street sweeping, catch basin hooding and maintenance, catch basin inspection and cleaning, and booming and netting to catch materials that could potentially discharge via the outfalls.

In addition to these programs, the City developed a work plan to determine the loading rate of trash and debris from the MS4 to floatables-impaired waterbodies. This work plan, included as Appendix 9.1 of the SWMP Plan, has an overview of other municipalities' loading rate study methodologies and details of the City's planned study.

The City's loading rate study is a hybrid approach that combines field monitoring with model analysis. The City proposed to measure trash and debris discharging from 63 catch basins representing 21 categories. Each category will likely have a different loading rate as each represents a different combination of representative catch basin attributes and catchment characteristics or unique land use types. To determine these categories, the City considered data representing street litter level, street sweeping frequency, and catch basin hood status.

Program Assessment

During this reporting period, the City implemented the floatables control programs described in the Plan. These programs included sweeping over 500,000 miles of street citywide, inspecting over 9,400 catch basins and cleaning over 11,200 catch basins. DEP maintained 23 in-water floatable containment facilities.

The City also made progress on item bans and fees that can reduce the prevalence and persistence of floatables:

- **Styrofoam Ban.** As of January 1, 2019, New York City stores, food service establishments, and mobile food commissaries were no longer permitted to offer, sell, or possess single-use foam food containers. Enforcement of this ban began July 1, 2019.
- **Executive Order on Single-Use Plastic.** In April 2019, Mayor de Blasio signed an Executive Order (EO) that ended the direct City purchase of unnecessary single-use plastics in favor of compostable or recyclable alternatives. This EO is expected to reduce NYC carbon emissions, decrease plastic pollution, and reduce risks to wildlife.
- **Paper Bag Fee.** In 2019 New York State passed the Bag Waste Reduction Law making New York State one of eight states in the country to implement a plastic-bag-ban. In 2019, the New York City Council approved a five-cent paper bag fee to complement the ban. Three cents of the fee will go to the state Environmental Protection Fund and the other two cents will go toward the production of reusable bags. The fee and ban encourage New Yorkers to use reusable bags, reducing the number of single use bags that might end up in the environment. The New York State ban follows the City's 2016 NYC Carryout Bag Law, which sought to impose a fee of at least five cents on all carryout merchandise bags.

The City cleaned over

11,200

MS4 catch basins

DEP hosts the Trash Free Waters Challenge

In October 2019, DEP concluded the Trash Free Waters Challenge, which encouraged retailers and consumers to shift from single-use to reusable bags, ahead of the March 2020 statewide single-use plastic bag ban. The challenge asked participating supermarkets and grocery stores to reduce their distribution of single-use bags by 5% over the course of a year. To support participating retailers and their customers, DEP distributed nearly 10,000 reusable bags and educational posters.

During this reporting period, the City submitted to NYSDEC an implementation schedule for the Loading Rate Study. In accordance with Permit requirements, the schedule anticipates that the Loading Rate Study will start by March 14, 2021 and conclude by March 14, 2024.

In preparation for the commencement of the Loading Rate Study, the City analyzed collected data to categorize MS4 catch basins and identify potential monitoring sites. The City conducted field reconnaissance at 136 potential catch basins in the right-of-way and 17 catch basins in parks. In response to conditions observed during field reconnaissance, the City devised and tested monitoring equipment that would work well for the configuration of MS4 manholes and catch basins. At the close of 2019, the City was conducting further desktop analyses of catch basins to identify more potential monitoring sites for field reconnaissance.

Table 8 lists measurable goals and measures with the status of the City's implementation of the Floatables Program BMPs.

Goals for Next Reporting Cycle

During the 2020 reporting cycle, the City plans to continue its key floatables control programs, including public education and outreach, street sweeping, catch basin inspections and cleaning, and DEP's boom and netting program. Due to COVID-19, the City anticipates decreases in some Floatables metrics, such as education and outreach events and miles of street swept.

In 2020, the City intends to execute the bag ban/fee and City agencies will move away from purchases of single-use plastics. Additionally, the City plans to increase fines for alternate side parking (ASP) violations. This action is expected to increase compliance with ASP rules, which in turn increases efficacy of the street sweeping program and reduces the amount of trash on the street that could end up in our waterbodies. The City will finalize monitoring sites and equipment for the Loading Rate Study.

Program Updates

In future MS4 annual reports, to make information on DEP's boom and netting program more accessible to the public, the measure for "Continue DEP's boom and netting program" will change from "Date of Combined Sewer Overflows Best Management Practices Annual Report with Floatables Control Program results" to "Status and location of Combined Sewer Overflows Best Management Practices Annual Report with Floatables Control Program results" This report is currently online and available to the public at https://www1.nyc.gov/site/dep/water/combined-sewer-overflows.page

Table 8. Control of Floatable and Settleable Trash and Debris 2019 Status of Implementation

BMP	Measurable Goals	Measures	Status
Provide a Floatables and Settleable Trash and Debris Management Program	Determine Loading Rate of Floatable Trash and Debris discharged from MS4 to waterbodies impaired for floatables	Status of Loading Rate Study	During this reporting period, the City analyzed collected data to identify catch basins that may be suitable monitoring sites for the Loading Rate study, began field reconnaissance of potential monitoring sites, and conducted equipment testing. The City also submitted a schedule for the loading rate study which anticipates that the study will commence by March 14, 2021 and conclude by March 14, 2024.
	Continue DEP's Catch Basin Inspection, Cleaning, and Hood Replacement Program	Number of catch basins inspected, cleaned, and retrofitted	9,407* catch basins inspected, 11,254* catch basins cleaned, and 0 catch basins retrofitted
		Number of catch basin hoods repaired, installed, or replaced	872
	Continue DEP's boom and netting program	Date of Combined Sewer Overflows Best Management Practices Annual Report with Floatables Control Program results	May 1, 2019
	Implement a public education program on floatables	List of education & outreach programs/events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	• Adopt-a-Highway/Greenway (2 events; 410 participants) † • Automotive Associations (6 events; 2,523 businesses) † • Community Clean-ups (4 events; 150 materials distributed; 335 participants)† • Parks Environmental Education (2 events; 125 materials distributed; 160 participants)† • Park Stewardship (15 events; 128 materials distributed; 1,757 participants)† • SAFE Disposal Events (15 events; 4,466,600 materials distributed; 208,831 participants)†

* Data include the DEP ROW catch basin program based on the preliminary MS4 map and work done by agencies at their facilities listed in the PP/GH inventory.
† These metrics reflect activities conducted citywide.
With respect to data reported in the 2018 MS4 Annual Report, the City updated the catch basin metrics. Refer to the footnotes in the PP/GH section of this Report.

Parks hosted beach clean up

Monitoring and Assessment of Controls

To assess the quality of stormwater runoff from the MS4, the City developed and is implementing an MS4 Monitoring Program that combines data collected from existing monitoring programs with additional MS4 outfall or manhole water quality and flow data collected specifically for the MS4 program. The City designed this program as an adaptive management approach using a phased method to assess the pollutant contribution from the MS4 area and its influence on New York Harbor water quality.

In Phase 1, DEP installed flow meters and collected quarterly flow and water quality data during wet weather at MS4 outfalls representative of six land use types within NYC: mixed; high-density residential; low-density residential; industrial; open space; and highway. The wet weather events during which DEP samples are taken must meet the definition of a "qualifying rain event." Qualifying rain events are storms that meet the following criteria:

- no storm in excess of 0.1 inch occurred in the outfall catchment area within 48 hours preceding the rain event;
- weather forecasts at least a day in advance predict rain with 80 percent probability of occurrence; and
- the event is predicted to result in greater than 0.2 inches of rain.

Phase 1 is a two-year program and is scheduled to conclude in February 2021. The purpose of Phase 1 is to assess the influence of land use on stormwater discharge and pollutant concentrations.

Program Assessment

DEP started Phase 1 of the monitoring program in February 2019. During the 2019 reporting period, DEP collected a total of 23 samples. Table 9 shows the total number of samples collected from each sampling location.

DEP planned to take 32 samples during 2019. However, a variety of factors, including weather, construction, and potential illicit discharges prevented DEP from achieving this target.

As samples can only be collected during a qualifying rain event, the MS4 monitoring program is inherently dependent on the weather. The variability and unpredictability of the weather in 2019, including periods of heavy storms and dry spells, meant that DEP was unable to reach the target of one sample per quarter at each outfall.

Collecting stormwater samples for the monitoring program

Further, DEP had to pause monitoring at two outfall locations, OH-607 and TI-633, in the summer of 2019 because of construction activity and the discovery of a potential illicit discharge, respectively.

The manhole monitoring location for outfall OH-607, which discharges to the Gowanus Canal, was under construction during most of 2019. The ongoing construction made monitoring at the site unsafe and infeasible. Therefore, DEP was only able to sample once from the site during 2019 and could not collect flow meter data.

The manhole monitoring location for the outfall TI-633 had higher than expected pathogen levels. Because of these results, DEP paused sampling and investigated the associated drainage area for potential illicit discharges. DEP discovered a connected catch basin that also tested high for pathogens. DEP cleaned the catch basin, and the sampling results after the cleaning showed low pathogen numbers. DEP suspects improper disposal of pet waste caused the issue and has resumed sampling at that location.

Table 10 lists measurable goals and measures with the status of the City's implementation of the Monitoring Program BMPs.

Goals for Next Reporting Cycle

For the 2020 reporting cycle, DEP will continue tracking the weather to identify qualifying storm events. As conditions permit, DEP will continue collecting samples for Phase 1 of the Monitoring Program.

Program Updates

DEP continues to sample when feasible with the goal of collecting 8 samples per land use type. However, given the number of samples collected thus far during Phase 1, DEP will have to modify the SWMP Plan. Phase 1 of the MS4 Monitoring Program, as described in Chapter 10 and Appendix 10.1 of the SWMP Plan, included sampling during qualifying rain events once per quarter, for two years at 8 MS4 outfalls representative of 6 land use types, for a total of 64 samples. DEP has found that unforeseen conditions surrounding data collection require more flexibility in this sampling program. The distribution and frequency of qualifying rain events is not equal among quarters or seasons, and predictions are not always accurate because of great variability in local conditions. In addition, unanticipated construction activity and potential IDDE issues arose at sampling sites.

Accordingly, in the first year of Phase 1, DEP was not able to sample at each site during each quarter (4 quarters total for 2019) because of this variability and unpredictability in the weather, including periods of heavy storms and dry spells, as well as the unforeseen construction projects and IDDE issues. At the end of the second year of Phase 1, DEP plans to analyze the data to determine whether it is necessary to extend sampling beyond two years, or if the number of samples collected is sufficient to reveal a correlation between land use and pollutant load. DEP will continue to sample when feasible with the goal of collecting 8 samples per land use type; however, based on current trends, it is highly unlikely that DEP will be able to collect 64 samples within two years of its initiating Phase 1.

Table 9. Number of samples collected from sampling locations

Outfall	Borough	Land Use	Total Samples 2019	Flow Meter Data
HP-640	Bronx	Mixed	3	Yes
HP-627	Bronx	Open Space	3	Yes
TI-604	Queens	Highway	3	Yes
TI-633	Queens	High-Density Residential	3	Yes
TI-658	Queens	Low-Density Residential	4	Yes
NCQ-632	Queens	Industrial	3	Yes
OH-607	Brooklyn	Industrial	1	No
OB-722	Staten Island	Low-Density Residential	3	Yes

Table 10. MS4 Monitoring Program 2019 Implementation Status

BMP	Measurable Goals	Measures	Status
Monitoring and Assessment Program	Conduct wet weather sampling from outfalls/manholes	Results of monitoring data collected and analyzed	Phase 1 monitoring began in February 2019 and DEP was able to collect 23 samples total.

4 Mixed, high-density residential, low-density residential, industrial, open space and highway.

Parks employees demonstrating the fate of pollutants in the city using the EnviroScape model

Special Conditions for Impaired Waters

In addition to the programs and practices to reduce or remove pollutants in stormwater runoff that the City administers throughout the MS4 area, there are special conditions for specific impaired waterbodies:

- Impaired waters without Total Maximum Daily Loads (TMDLs)
- Impaired waters with NYSDEC-approved Combined Sewer Overflow Long Term Control Plans (CSO LTCPs) that have identified stormwater as a significant contributor

Information on impaired waters without TMDLs is included in the Construction and Post-Construction section of this report. Impaired waters with approved CSO LTCPs that do not predict compliance with applicable water quality standards, and where stormwater contributions from the MS4 are expected to be a significant contributor to the impairment[4] require the City to implement enhanced BMPs. In 2019, Coney Island Creek was the only waterbody to meet these criteria. If DEC approves additional CSO LTCPs for waterbodies that meet these criteria, the City will develop waterbody-specific plans and summarize them in an MS4 annual report.

In Coney Island Creek, the MS4 Permit lists pathogens and floatables as the pollutants of concern (POCs) causing impairments. Table 11 below shows a summary of the source categories of the POCs and the City's proposed control measures for Coney Island Creek.

Program Assessment

The City is committed to implementing enhanced stormwater control measures in Coney Island. Table 12 includes status updates on the stormwater control measures the City proposed in the SWMP Plan.

Parks demonstrating the fate of pollutants in the city using the EnviroScape model

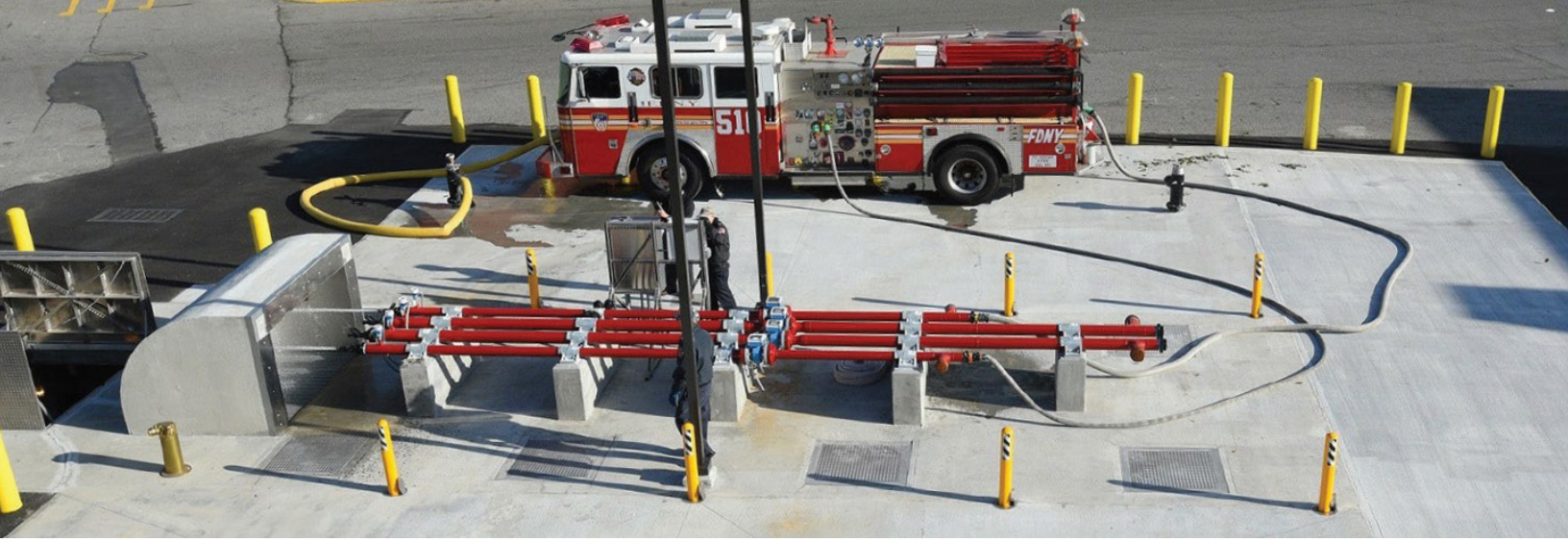
Table 11. Source categories of POCs proposed control measures for Coney Island Creek

Pollutant of Concern	Targeted MS4 Source Categories	Proposed Control Measures and Projects for CIC
Floatables	Highly impervious area (littering)	Catch basin marking Source control Public education and outreach
Pathogens	Illicit discharges Pet waste	Catch basin marking Sentinel Monitoring Source tracking and control Public education and outreach

5 The 2015 MS4 Permit refers to waterbodies that meet these criteria as Priority MS4 Waterbodies. DEC and the City have decided to no longer use this term.

Table 12. Special Conditions Program Status Updates

Program	Description	Update
Pet waste management	Maintain pet waste bag dispensers and signage as part of Parks' "Forgot Your Bag?" Program, to minimize the presence of exposed pet waste.	Pet waste bag dispensers and signage were maintained in both Calvert Vaux and Kaiser Park.
Catch basin marking	Include a "no dumping" message stamped in the iron curb piece on new and replacement catch basins in the MS4 area. Provide catch basin stenciling opportunities for local organizations.	The City continued to include a "no dumping" message on newly installed catch basin curb pieces throughout the City. DEP also continued to internally explore the feasibility of a volunteer catch basin stenciling program. DEP planned to provide stenciling materials and guidance to local communities in 2020. However, this may be delayed due to COVID-19.
Signage deployment	Deploy signs to facilitate public reporting of dry weather discharges.	DEP placed signage at key MS4 outfalls in Coney Island Creek in 2017. The City evaluated the pilot in 2019. Based on the low volume of 311 reports citywide for dry weather discharges and only one report submitted for Coney Island Creek during the two years the signs were installed, the City will discontinue with MS4 outfall signage. The City will update the SWMP Plan to include the results of the pilot.
Monitoring	Explore modifications to existing sampling programs to allow the City to refine its source trackdown efforts in Coney Island Creek.	DEP had identified a location for an additional Sentinel Monitoring station in Coney Island Creek as part of its proposed revisions to the Sentinel Monitoring Program. Pending approval by NYSDEC, DEP plans to implement the revised program in 2020, which includes an additional monitoring station in Coney Island Creek.
Source tracking	Develop a pilot project to evaluate additional source tracking tools beyond those used in the citywide IDDE program.	DEP is assessing a variety of enhanced source trackdown methods for waterbodies that have proven to be particularly challenging. In these cases, traditional source trackdown methods may benefit from the use of supplemental new technologies or approaches. DEP may apply lessons learned from that program to future source trackdown efforts, if applicable.
Public education and outreach	Conduct education and outreach in the Coney Island Creek Community on pollution source controls.	On Saturday July 13th, Parks tabled at the Coney Island Beautification Fair on City of Water Day 2019 in Kaiser Park. The fair was a fun-filled day of water theme activities, presented by illustrious waterfront enthusiasts and community representatives. Parks tabled at the event featuring the EnviroScape, as pictured, to illustrate how pollution ends up in the sewer system and waterbodies. On Monday July 15, DEP, DSNY, and Parks joined the U.S. Environmental Protection Agency in Coney Island to launch "Clean Streets = Clean Beaches", a public information campaign and beach clean-up program aimed at reducing littering and improving the cleanliness and aesthetics of New York City beaches. This campaign reminds New Yorkers that when it rains, trash and debris discarded on city streets and sidewalks can be washed down storm drains and end up on beaches. During the summer of 2019, "Clean Streets = Clean Beaches" posters were displayed at area beaches and on approximately 5,000 Sanitation vehicles citywide. The campaign's message was also featured on both DEP and DSNY's social media channels. The program was launched at MCU Park in Coney Island, home of the Brooklyn Cyclones. In 2019, DEP engaged with businesses, apartment building management companies, and residents on proper grease disposal through door-to-door communications; over-the-phone consultations; and the distribution of posters, stickers, sink strainers, and grease pouches. In August 2019, DEP also attended family day events at the Surfside Gardens West, Coney Island Houses, and Carey Gardens NYCHA developments to engage with residents, provide materials on proper grease disposal, and distribute water bottles and grease pouches.
Green infrastructure	Identify potential GI opportunities in Coney Island Creek MS4 areas by prioritizing City-owned sites based on their potential to capture runoff.	In 2019, the City finalized conceptual design memos for eight schools and two parks and proceeded with geotechnical investigations at those sites. Based on the results, the City rejected half the sites mostly due to the presence of high groundwater. Of the school sites in which it was technically feasible to proceed, the City began designing the following GI practices: • K095 – Gravesend – subsurface retention practice • K212 – Lady Deborah Moody - synthetic turf practice with subsurface stone storage • K238 – Anne Sullivan – bioretention practice and subsurface retention practic • K234 – W. A. Cunningham – subsurface stormwater chamber



FDNY water recovery facility

Recordkeeping and Reporting

Each year, the City prepares an MS4 annual report documenting the status of compliance activities related to the MS4 Permit. The City submits these MS4 annual reports to NYSDEC by September 30 following each reporting year. The public can request information related to the City's stormwater management plan by emailing MS4@dep.nyc.gov.

Program Assessment

The City releases this report to publicly document activities related to MS4 Permit compliance for the 2019 reporting period. The program assessment included in each section of this report serves as the Annual Effectiveness Assessment. The assessment of each program includes a summary of the program activities during the reporting period, stated BMPs and the status of the measurable goals for each BMP. The City assesses the effectiveness of the program through the achievement of the measurable goals included in the BMP tables. Refinements to the BMPs, measurable goals, or measures are included in the program updates sections of this report. Table 13 shows the 2019 recordkeeping and reporting implementation status.

2019 Case Study

The case study section highlights exemplary SWMP implementation initiatives in detail. Each MS4 Annual Report may include examples from different programs and highlight different measures of success.

FDNY and DEP partnered to identify and fund a project at FDNY's Randall's Island Training Facility. The new water recovery facility recycles water needed to test and calibrate the meters and equipment of the fleet's pumper truck rig. These vehicles need to be tested prior to their being accepted into the fleet to make sure they are in working order. Once a rig is in service, it requires testing and calibration once a year. These tests require water pumped from a hydrant, for which FDNY would typically use City water that would then drain directly to the East River or to catch basins connected to a sewer. To improve this process, the new water recovery facility creates a closed loop system, so that used water can be recovered and reused, instead of relying solely on potable water that gets discharged into the ground carrying potential pollutants that eventually end up in the waterways. This project saves an estimated 30,000 gallons of potable water per day and significantly prevents run-off and pollutants generated from this operation from getting into the waterways.

Table 13. Recordkeeping and Reporting 2019 Implementation Status

BMP	Measurable Goals	Measures	Status
Provide annual reports to document compliance with the MS4 permit	Develop Annual Reports after submission of the Plan due September 30 following each reporting year.	Summary of annual effectiveness assessment	See effectiveness assessment of each program under pertinent sub-sections of this report.
		Municipal Compliance Certification submission	Appendix 3 – Municipal Compliance Certification


NYC
RAIN GARDEN

Related Initiatives

NYC Green Infrastructure Program

Building upon the successes and lessons of earlier efforts, the City established the NYC Green Infrastructure Program (GI Program) in 2010. GI practices such as green roofs and rain gardens collect, treat, and infiltrate stormwater runoff. The goal of the GI Program is to reduce CSOs into the waterbodies of NYC by using GI technologies to manage stormwater from impervious surfaces. DEP works with partner agencies to design, construct, and maintain GI on City streets, sidewalks, and other public property.

The GI Program also offers grants to private property owners to install green roof retrofits citywide (including in separately sewered areas of NYC). The GI program includes a research and development effort, which reviews GI performance over time, ensures performance-based maintenance and operations, and conducts cost-benefit analyses of various GI designs. The data analysis supports the City's water-quality related compliance programs and fills data gaps that DEP has identified through previous monitoring activities. This work is critical to the success of GI implementation in both combined and separate sewer areas of NYC. For more information on the NYC Green Infrastructure Program visit the DEP website: https://www1.nyc.gov/site/dep/water/green-infrastructure.page.

Southeast Queens and Cloudburst Pilot Projects

DEP remains focused in our effort to implement GI throughout the Southeast areas of Queens, where the Mayor has made a commitment to improving drainage issues. DEP continues to identify areas in Southeast Queens suitable for stormwater reduction and implements the best management practices utilizing various GI practices to maximize stormwater management objectives within existing contexts. In 2019, DEP solicited bids for two green infrastructure projects aimed at reducing the amount of stormwater that enters the sewer system in the Southeast Queens. One of the projects is the construction of right-of-way GI and the other is an on-site project in Roy Wilkins Park. In areas where a typical sewer solution is unlikely to resolve chronic flooding, DEP has partnered with DDC and DOT to design and construct stormwater management systems utilizing GI to mitigate nuisance flooding and improve public spaces, as well as natural areas.

At the New York City Housing Authority's South Jamaica Houses, DEP has been working with community members to develop a "cloudburst" green infrastructure pilot project to manage runoff from extreme rain events. This project will allow stormwater to collect in a series of shallow retention areas, as well as a recessed basketball court that will incorporate both underground and above-ground storage to minimize local flooding. Aside from flood mitigation, another focus of this pilot is to show how cloudburst infrastructure can go beyond just managing stormwater and offer many co-benefits by reimagining the urban fabric of communities. Following extensive community engagement and several design charrettes in 2018, design will take place through early 2020 with construction expected to begin in 2021.

Jamaica Bay CSO Long-Term Control Plan

Stormwater management has reduced the volume of stormwater and combined sewer overflows (CSOs) to the Bay since 2010, and as a result has reduced the loading of pathogens and emerging contaminants. DEP's June 2018 Jamaica Bay and Tributaries CSO Long-Term Control Plan (LTCP) included a detailed Recommended Plan to improve and protect water quality through the expansion of green infrastructure, wetland creation, ribbed mussel colony creation, and environmental dredging in Bergen and Thurston Basins in addition to DEP's ongoing work to reduce CSO volume.

DEP estimates 202 million gallons a year in CSO reduction as a benefit of ongoing and planned green infrastructure projects, and an additional reduction of 15 million gallons a year under the LTCP Recommended Plan.

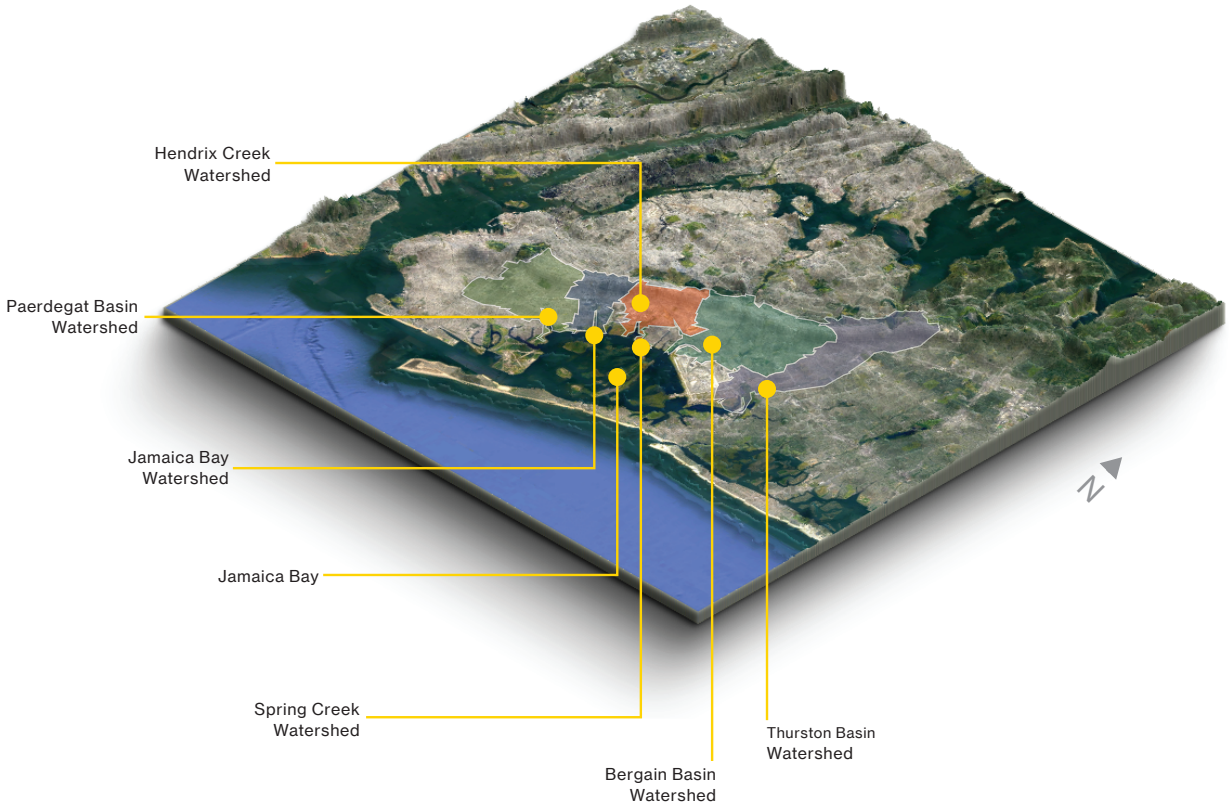
The LTCP Recommended Plan, as proposed to NYSDEC, includes 379 Greened Acres in Bergen and Thurston Basins, seven acres of ribbed mussel colonies, and 50 acres of wetland restoration. DEP expects these initiatives to provide increased co-benefits for the watershed in the form of improved air quality, reduced carbon footprint, reduced urban heat island effect, increased habitat creation, and improved water quality. The LTCP Recommended Plan remains under NYSDEC review.

Historically, Jamaica Bay has served as an important ecological resource for flora and fauna. The Bay has evolved as an important and complex network of open water, salt marsh, grasslands, coastal woodlands, maritime shrub lands, brackish and freshwater wetlands. Jamaica Bay, one of the largest coastal wetland ecosystems in New York State, is a component of the National Park Service's Gateway National Recreation Area.

This LTCP has been developed in an effort to better understand and address CSO impacts on water quality within Jamaica Bay. Throughout the process for developing this LTCP, DEP collected water quality data, performed extensive collection system and water quality modeling, held multiple public meetings and analyzed potential CSO control alternatives based on costs and model predicted water quality improvement.

The selection of the Recommended Plan was based on multiple considerations including:

- Public input
- Environmental and water quality benefits
- Community and societal impacts
- Issues related to implementation, operation and maintenance (O&M)
- Cost-performance and cost-attainment evaluations



Water Quality Impressions

Achieved through strategic investments

$600 Million Biological Nutrient Removal (BNR)

Upgrades across four wastewater resource recovery facilities (JA, 26W, RK, and discharge to Jamaica Bay

$32 Million Ecosystem Restoration and Research Efforts

Support pathogen reduction and dissolved oxygen improvement under the Jamaica Bay Watershed Protection plan

$1 Billion Past and Existing Grey Infrastructure

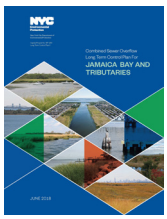
Investments to reduce combined sewer overflows

$1.9 Billion Southeast Queens Sewer Buildout

Commitment over the next decade under the OneNYC Plan

$300 Million Existing and Planned Green Infrastructure

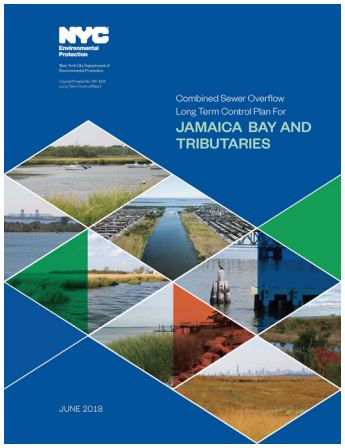
Commitment over the next decade under the OneNYC plan



LTCP Recommended Plan

Will build upon these past investments and provided further water quality improvements.

THE RECOMMENDED PLAN



- Can be implemented in 14 years as opposed to retained grey alternatives projected to take over 25 years.
- Provides higher levels of water quality attainment at much lower cost than grey alternatives.
- Supplements prior grey infrastructure improvements while providing holistic environmental, social, and economic benefits.

Wildlife Preserves

Parks

Marinas

Recreational Boating & Fishing

Additional 379 greened acres in Bergen and Thurston Basin tributary areas

7 acres of ribbed mussel colony creation

50,000 CY of environmental dredging in Bergen Basin

50 acres of wetland restoration

Reduce CSO discharges to Bergen and Thurston Basin by 15MGY

Stormwater discharges by 234 MGY

Provide air quality improvement

Carbon footprint reduction

Habitat creation

Heat island construction reduction

Property value improvement

Water quality improvement through the filtering of the ribbed mussels

Definitions

Annual Report: After submission of the Plan, DEP will publish a report by September 30 of each calendar year on SWMP implementation. The report will summarize activities performed throughout the reporting period (January 1 to December 31) by all agencies with obligations under the MS4 Permit; and will report on best management practices, measurable goals, and their measures stated in each chapter of the Plan, as well as Part IV.M of the MS4 Permit

Best Management Practice (BMP): Schedules, activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements (if determined necessary by DEP), operating procedures, and practices to control runoff, spillage, and leaks; sludge or waste disposal; or drainage from areas that could contribute pollutants to stormwater discharges. BMPs are referred to in EPA fact sheets and other materials. BMPs are also referred to as "activities" or "management practices" throughout the MS4 requirements under this SPDES individual permit. As such, BMPs are a sub-element of the SWMP Plan that describe the specific actions that will be taken to achieve the requirements of one or more sub-paragraphs of the SWMP Plan Element (e.g., the BMP "Identify Target Audiences for the pollutants of concern to each waterbody/sewershed of concern" would address the requirements of paragraph IV.A.1 of the SPDES MS4 Permit).

Covered development project: The term "covered development project" means development activity, private or public, that involves or results in an amount of soil disturbance within the MS4 area greater than or equal to one acre. Such term includes development activity that is part of a larger common plan of development or sale involving or resulting in soil disturbance within the MS4 area greater than or equal to one acre. Such term shall include all development activity within the MS4 area that requires a SWPPP pursuant to the New York State Department of Environmental Conservation (NYSDEC) construction general permit.

Floatables: Manmade materials, such as plastics, papers, or other products which, when disposed of onto streets or into catch basins, can ultimately find their way to waterbodies and may create nuisance conditions with regard to aesthetics, recreation, navigation, and waterbody ecology.

Green Infrastructure (GI): Green infrastructure infiltrates, evapotranspires, or reuses stormwater, with significant use of soils and vegetation rather than traditional hardscape collection, conveyance, and storage structures. Common green infrastructure approaches include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains.

Historical MS4 Map: DEP created the Historical MS4 Map prior to permit issuance in 2015. While the Historical MS4 Map is unrefined and contains some inaccuracies, it represented the City's best understanding of the MS4 area at that time. In developing the SWMP, the City has relied upon the Historical MS4 Map to define the MS4 area. The Historical MS4 Map has also served as a starting point for the process of mapping the City's MS4 drainage areas and MS4 outfalls as required by the MS4 Permit.

Illicit Discharge: Illicit discharge is any discharge to an MS4 that is not composed entirely of stormwater, except allowable discharges pursuant to a SPDES permit and/or to DEP rules. Examples of illicit discharges are unauthorized sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit discharge could be any other unauthorized discharge which the City or NYSDEC has determined to be a significant contributor of pollutants to the MS4.

Impaired Waters: A water is impaired if it does not meet its designated use(s) defined by the NYSDEC, generally determined by violations of state water quality standards. For purposes of this permit, 'impaired' refers to waters for which Total Maximum Daily Loads (TMDL) have been established, for which existing controls such as permits are expected to resolve the impairment, or for which a TMDL is needed. Impaired water compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed.

Long-Term Control Plan (LTCP): Prepared in response to a consent agreement with the US Environmental Protection Agency (EPA), and developed using the EPA CSO Control Policy, an LTCP identifies and selects appropriate CSO controls to achieve applicable NYSDEC water quality standards consistent with the Federal CSO Policy and Clean Water Act.

Measurable Goal: One or more statements characterizing the goals of the SWMP that reflect the needs and characteristics of the City and the areas served by its MS4. Furthermore, the goals were chosen using an integrated approach that addresses the requirements and intent of the provisions of the MS4 Permit. Goals may be qualitative or quantitative.

Multi-Sector General Permit (MSGP): The Clean Water Act provides that stormwater discharges associated with industrial activity to waters of the United States (including discharges through a municipal separate storm sewer system) are unlawful, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. In New York, the EPA-approved State Pollutant Discharge

Elimination System (SPDES) program provides that industrial facilities engaged in activities defined in 40 CFR 122.26(b)(14)(i-ix) and (xi) must obtain permit coverage for stormwater discharges to waters of the United States through the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP), unless the facilities are individually SPDES-permitted or subject to No Exposure Exclusion (that industrial activities are not exposed to stormwater).

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a state, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA, that discharges to surface waters of the state;
- Designed or used for collecting or conveying stormwater;
- Which is not a combined sewer; and
- Which is not part of a Publicly Owned Treatment Works as defined at 40 CFR 122.2

MS4 Area: The term "MS4 area" means those portions of the City of New York served by separate storm sewers and separate stormwater outfalls owned or operated by the City of New York or areas served by separate storm sewers owned or operated by the City of New York that connect to combined sewer overflow pipes downstream of the regulator owned or operated by the city of New York, and areas in which municipal operations and facilities drain by overland flow to waters of the state, as determined by DEP and described on maps of the MS4 area set forth in DEP's rules and available on DEP's website.

MS4 Outfall: Defined as any point where a municipally owned or operated separate storm sewer system discharges to either surface waters of the state or to another MS4 (an MS4 owned or operated by another regulated entity). Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow. However, areas of non-concentrated (sheet) flow which drain to surface waters of the state or to another MS4 (owned or operated by another regulated entity) are not considered outfalls.

MS4 Permit: The New York State Pollutant Discharge Elimination System (SPDES) permit, issued to the City of New York on August 1, 2015, that defines the requirements to discharge stormwater from the City's MS4.

Pollutants: Dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, and agricultural waste discharged into water which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 New York Code of Rules and Regulations (NYCRR) Part 750-1.2a.

Pollutant of Concern (POC): A pollutant that might reasonably be expected to be present in stormwater in quantities that may cause or contribute to a water quality violation in waters of the State. These pollutants include but are not limited to nitrogen, phosphorus, silt and sediment, pathogens, floatables, petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs).

Priority MS4 Waterbodies: Those waterbodies for which an approved CSO LTCP does not predict compliance with applicable water quality standards and where stormwater contributions from the City's MS4 are expected to be a significant contributor to the impairment identified in the CSO LTCP.

Settleables: Manmade materials that may sink depending on the ambient conditions to which they are subject. Floatables include settleable materials.

Standard Operating Procedure (SOP): A set of instructions for carrying out routine operations to achieve a specific outcome.

Stormwater Construction Permit: The term "stormwater construction permit" means a permit issued by DEP which authorizes development activity on land on which there is a covered development project with an approved SWPPP.

Stormwater Controls Working Group: An interagency group formed in 2013 in accordance with the Mayor's Executive Order Number 429. This group meets quarterly or as needed to discuss all updates involving the MS4 Permit and SWMP implementation.

Total Maximum Daily Load (TMDL): A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates waste load allocations for point source discharges, load allocations for nonpoint sources, and a margin of safety.

Acronyms

BMP Best Management Practice

CGP Construction General Permit

C/PC Construction and Post-Construction

CSO Combined Sewer Overflow

CWA Clean Water Act

GI Green Infrastructure

GIS Geographic Information System

I/C Industrial/Commercial

IDDE Illicit Discharge Detection and Elimination

LTCP Long-Term Control Plan

MS4 Municipal Separate Storm Sewer System

MSGP Multi-Sector General Permit

NNI No Net Increase

NOI Notice of Intent

NYC New York City

NYS New York State

NYSDEC New York State Department of Environmental Conservation

POC Pollutants of Concern

PP/GH Pollution Prevention/Good Housekeeping

ROW Right-of-Way

SAFE Solvents, Automotive, Flammables, and Electronics

SPDES State Pollutant Discharge Elimination System

SWMP Stormwater Management Program

SWPPP Stormwater Pollution Prevention Plan

SWPTS Stormwater Permitting and Tracking System

TMDL Total Maximum Daily Load

Appendix 1 – Public Comments on the 2019 Annual Report

The City has reviewed and responded to all feedback and comments submitted on the draft 2019 MS4 Annual Report. In some cases, when questions were incomplete or unclear, the City interpreted them to the best of our understanding. In some instances, we re-worded incomplete statements [re-worded language in brackets] to reflect our understanding of their intent and our approach to providing appropriate responses.

General

1. **In general, what are the greatest impacts you expect COVID-19 to have on the SWMP, besides those on in-person educational events? How does DEP expect to adapt its SWMP plan in 2020 and 2021 given the COVID-19 crisis? Does DEP expect any decrease in spending on SWMP implementation in the 2020, 2021, 2022 fiscal years?** (Riverkeeper/ SWIM Coalition)

   The City of New York is in a period of fiscal uncertainty. Unemployment in New York City was 19.8% in July 2020 as compared to 3.9% in July 2019. The City projects a reduction in revenue over the next four years caused by COVID-19. NYC Agencies are all facing harsh, fiscal impacts of COVID-19 and must prioritize to maintain sufficient funding for critical services and infrastructure projects. In addition to the obvious effects on Public Education and Outreach programming, there have been some delays or changes in initiatives and operations that may impact SWMP implementation: delays in MS4-specific projects (e.g., microbial source tracking study); changes in routine agency operations (e.g., decrease in DSNY street cleaning as a result of changes in alternate side street parking regulations); and postponement/delays in other programmatic agency efforts (e.g., DEP shoreline survey). We will continue to keep the public informed if and when other impacts on SWMP implementation emerge.

   As a direct result of COVID-19, processing and registering of contracts slowed citywide at the end of FY 2020. At this time, it is too early to project spending on SWMP implementation for fiscal years 2021 and 2022. In addition to uncertainties imposed by COVID-19, we are currently re-negotiating with DEC renewal of the MS4 permit, which may have additional requirements (to those in the current permit) that will impact spending.

2. **Can I get [a response via email]?** (Public Meeting)

   You can submit questions and comments on the 2019 MS4 Annual Report via email to ms4@dep.nyc.gov. Responses to all comments will be provided in the Final Annual Report submission to DEC is due on September 30, 2020. This submission will also be available on the DEP website at nyc.gov/dep/ms4

3. **Can you share that video of cleaning a catch basin for us to post as well? We get a lot of questions and that would be great to be able to use.** (Bronx River Alliance)

   The link to the video of cleaning a catch basin is posted on the MS4 webpage, which directs you to the NYC Water YouTube page.

4. **Would you please send out the exact url where this presentation will be published?** (Waterfront Alliance)

   https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/ms4/2019-ms4-annual-report-presentation.pdf

5. **Will the PowerPoint be available after this presentation?** (Office of the NYC Public Advocate)

   Yes, the presentation is available online at nyc.gov/dep/ms4

6. **Do you have any initial evaluation of the Cloudburst pilot project or is it still under construction?** (NYC Environmental Justice Alliance)

   The pilot project is still in the design phase.

7. **How, if at all, do the Bluebelts relate to this? Are they a "Related Initiative" or do they fit in some other way?** (Public Meeting)

   Bluebelts and areas that discharge to Bluebelts are part of the MS4 area, as defined in the permit; therefore, all parts of the SWMP are applicable to these areas.

8. **How are the Direct Drainage Areas addressed in the SWMP plan?** (NYC Environmental Justice Alliance)

   The SWMP Plan states that direct drainage is runoff that is discharged directly to waters of New York State without entering or passing through the MS4. The MS4 Permit covers municipal facilities and operations that drain by overland flow to waters of New York State, but does not cover private direct drainage facilities and operations. Requirements for these municipal facilities and operations are the same as those for areas served by the NYC MS4.

9. **Any news on the Hutchinson River?** (Public Meeting)

   The Hutchinson River has an approved Long-Term Control Plan (LTCP). https://www1.nyc.gov/assets/dep/downloads/pdf/water/nyc-waterways/hutchinson-river/2017-03-07-dec-app-hutch-river-ltcp.pdf

10. **What is going on with Alley Creek plans for chlorination?** (Public Meeting)

    DEP has submitted to DEC the Basis of Design Report for Alley Creek LTCP and is working on the proposed ecological and programmatic controls and pilot studies. As presented at the stakeholder meeting in March 2020, DEP is working on alternative technologies such as Alley Creek tidal wetland restoration/monitoring, source control initiatives and a ceramic membrane filtration pilot.

Part II. Special Conditions for Impaired Waters

11. **Page 14 of this presentation shows fecal and entero samples from MS4 outfalls in Newtown Creek that are off the chart. How can Newtown Creek have these sorts of numbers but not be identified as a priority waterbody for MS4? https://www1.nyc.gov/assets/dep/downloads/pdf/water/nyc-waterways/newtown-creek/ltcp-newtown-creek-public-data-review-meeting-presentation.pdf** (Newtown Creek Alliance)

    For a waterbody to be identified as a priority waterbody for MS4, two criteria must be met: (1) Approved CSO LTCP does not predict compliance with applicable water quality standards, and (2) Stormwater contributions from the MS4 are expected to be a significant contributor to the impairment identified in the CSO LTCP.

    We determined, during development of the LTCP, that the NYC MS4-attributable load contribution of fecal coliform to Newtown Creek is less than 2% of the total load, and is divided among 10 outfalls. In any case, the City is proceeding with a number of initiatives, which are included in the approved LTCP and are expected to significantly improve water quality in Newtown Creek.

12. **What are DEP's priority impaired waters for which it will set site-specific BMP conditions in the SWMP Plan? How many waters does DEP expect to set site specific BMP conditions for in 2020?** (Riverkeeper)

    Coney Island Creek meets the criteria for a "priority MS4 waterbody," as set forth in Part II.B.2 of the MS4 Permit. The City included customized, non-structural BMPs for this watershed in Chapter 11 of the SWMP Plan submitted in 2018. In each annual report, the City provides updates on the implementation of these BMPs.

    The City is currently determining whether there are additional waterbodies that meet the criteria for designation as "priority waterbodies."

13. **What is the difference between Coney Island Creek and other waters impaired by both CSO and stormwater runoff? How does DEP intend to remedy the SWMP deficiency? What waterbodies will it list as Priority MS4 waterbodies in 2020? For each listed Priority Waterbody will DEP undertake the analysis required by the MS4 permit?** (SWIM Coalition)

    The difference between Coney Island Creek and other CSO LTCP-approved waterbodies that the City has not designated as "priority waterbodies" is tied to the difference between the LTCPs: the approved LTCP for Coney Island Creek predicts non-attainment of applicable water quality standards during the recreational season and finds that the MS4 significantly contributes to that non-attainment. The approved LTCPs for non-designated waterbodies either predict compliance with applicable water quality standards based on recreational season attainment, or find that the MS4 contribution does not significantly impact the waterbody's predicted non-compliance with applicable water quality standards. Thus far, the City has determined that Coney Island Creek met both criteria and appropriately included in the SWMP additional, customized BMPs specific to the Coney Island Creek watershed.

    Please note that all ten, core MS4 programs, including public education, public participation, IDDE, Industrial/Commercial stormwater management, construction/post construction stormwater management, pollution

prevention/good housekeeping and floatables control, apply to all waterbodies; these programs are associated with specific metrics targeting water quality improvements. The Special Conditions section of the MS4 permit includes requirements supplementary to these programs to target specific impaired waterbodies with customized BMPs. However, it is the core MS4 provisions that drive the major improvements in water quality.

The City is currently determining whether there are additional waterbodies that meet the criteria for "priority waterbodies." (Also, as DEC approves additional LTCPs, to the extent that a waterbody meets both criteria, DEP will undertake the analysis required to inform its consideration of implementation of customized BMPs specific to the watershed of the impaired waterbody.)

14. **Can you speak to the specific GI projects in Coney Island Creek?** (SWIM Coalition)

    As stated in the 2019 MS4 Annual report, the City finalized conceptual design memos for GI installations at eight schools and two parks and proceeded with geotechnical investigations at those sites in 2019. Based on the results of those investigations, the City rejected half the sites, mostly due to the presence of high groundwater. For the school sites at which it was technically feasible to proceed, the City began designing the following GI practices: K095 Gravesend – subsurface retention practice; K212 Lady Deborah Moody – synthetic turf practice with subsurface stone storage; K238 Anne Sullivan – bio-retention practice and subsurface retention practice; K234 W. A. Cunningham – subsurface stormwater chamber.

15. **Does DEP intend to set additional site-specific BMP conditions for other water quality impairments that will not be cured by the LTCPs, besides those impairments in Coney Island Creek?** (Riverkeeper)

    The City is currently determining whether there are additional waterbodies with approved CSO LTCPs that meet the criteria for designation as "priority waterbodies": (1) approved LTCP does not predict compliance with applicable water quality standards during recreational season, and (2) stormwater contributions from the MS4 are expected to be a significant contributor to the impairment identified in the LTCP.

    In addition, as DEC approves additional LTCPs, to the extent that a waterbody meets the criteria, DEP will consider implementation of additional BMPs for such waterbody.

Part III. Program Administration

16. **Can you tell us how many staff members are needed to administer your MS4 program?** (Pittsburgh Water & Sewer Authority)

    The number of staff will vary across agencies and internal bureaus, but each agency with MS4 obligations has at least one employee who facilitates SWMP implementation and reporting. New York City Law Department personnel also provide guidance to all the agencies on compliance with the MS4 permit and on SWMP implementation.

    DEP has approximately 14 employees in its Bureau of Environmental Planning and Analysis assigned to MS4 Program tasks, but many employees in other bureaus – including the Bureaus of Wastewater Treatment, Water and Sewer Operations, Engineering Design and Construction, Public Affairs and Communication, and Legal Affairs – have MS4 responsibilities and contribute to the program.

17. **Do you have an agreement with the other organizations outlining the different roles and responsibilities each agency is responsible for?** (Pittsburgh Water & Sewer Authority)

    While DEP administers the overall MS4 program, each City agency is responsible for implementing specific SWMP components applicable to its own activities, facilities, and/or operations. For more information, see Chapter 1 of the SWMP: Legal Authority and Program Administration.

18. **What responsibilities [does] the Department of Correction [have?]** (Public Meeting)

    The Department of Correction (DOC), like other City agencies, is responsible for implementing specific SWMP components applicable to its own activities, facilities, and/or operations (e.g., IDDE, PPGH etc.).

Part IV. A and B. Public Education and Outreach/Involvement and Participation

19. **Have there been any adjustments to the messaging due to prevalence of disposed PPE as a result of COVID?** (Parks)

    Yes, both DEP and DSNY have increased anti-littering messaging to encourage New Yorkers to dispose of PPE properly.

20. **Just wondering about the storm drain awareness - "only rain down the drain" which drains are chosen? Can they be requested by citizens? What is the process of requesting the catch basin stencils?** (NYC Power)

    We are working on initiating a pilot Catch Basin Stenciling Program in certain MS4 areas (e.g., Coney Island Creek, Alley Creek), and will post more details on our website soon, including how we will encourage community involvement.

21. **How will DEP adapt its PEO program in 2020 to account for the COVID-19 crisis? Will DEP use online educational materials/events? How will DEP measure success? Would it be helpful to have a stakeholder discussion about new methods to reach target audiences? (Page 4)** (Riverkeeper/ SWIM Coalition)

    DEP has continued to work with other City agencies and the public on various public events and outreach through 2020. The City has expanded its online educational materials in response to the pandemic-imposed restrictions on in-person events. The City will gauge the success of the adapted programs by evaluating virtual education curriculums, soliciting feedback from educators and students via surveys, e-newsletters, professional learning opportunities, virtual programming, resource sharing, and collecting website activity on education pages. We welcome any suggestions from stakeholders on methods/ opportunities for furthering the PEO Program given COVID-19 limitations.

22. **Does DEP meet with Community Boards to present on MS4?** (Public Meeting)

    DEP regularly meets with all NYC Community Boards (CB) on a variety of issues and topics. MS4 briefings and updates are provided to CBs in predominantly MS4 areas (Staten Island, Coney Island etc.) or upon request. DEP also regularly sends invites to CBs for SWMP public meetings.

23. **Understanding the constraints posed by the pandemic, what plans does NYC DEP have to engage Coney Island residents in the activities associated with reducing impacts from pet waste and litter?** (WCS)

    DEP will continue to engage with communities on reducing the impacts of pet waste and litter on water quality. Despite constraints of COVID-19, the City launched its annual campaign to raise public awareness of the connection between littering and impaired water quality. This year's "Trash Free NYC Waters" message will be featured on social media, and print ads will be featured on DSNY trucks. DEP will continue to look for creative ways to spread the message. The Parks Department "Forgot Your Bag Program" in Coney Island Creek park areas, maintains dispensers that inform the public to pick up pet waste and allows the public to take bags for proper disposal of pet waste (as well as add their own bags for other members of the community).

Part IV.C. Mapping

24. **What do the purple and the green dots on the map signify?** (Riverkeeper)

    The purple points are Municipal Solid Waste Facilities and the green points are Bluebelt BMPs.

25. **Are MS4 areas assigned based on runoff areas? So those areas not included are less at risk?** (NYC Recovery and Resilience)

    "MS4 area" means the portions of the City of New York served by separate storm sewers owned or operated by the City of New York, and areas in which municipal operations and facilities drain by overland flow to waters of the state.

26. **Does the MS4 mapping involve field inspections to confirm the location and extent of the separate system?** (NYS DEC)

    Yes.

27. **When I go to the interactive map there isn't a legend visible – maybe some instructions for that would be helpful.** (SWIM Coalition)

    In the upper right-hand corner, there are four icons; clicking the leftmost icon will display the legend. In addition, hovering the mouse over any icon, without clicking it, will display a small "hover box" with information about the icon.

28. **Will DEP include direct drainage areas as a layer on its 2020 map?** (Riverkeeper/ SWIM Coalition)

    The 2020 Map includes (as will future, updated maps) municipal properties that drain directly to surface waters of the state by overland flow. Privately-owned facilities/lands draining to surface waters of the state by overland flow are also "direct drainage areas;" however, these privately-owned areas are not within permit coverage and will not be included in the MS4 map.

29. **It's difficult to read the Preliminary Drainage Areas and Outfalls map on page 9, as the "MS4 outfalls" and "CSO outfalls with MS4 connections" are both identified by blue dots. Where are the CSO outfalls with MS4 connections situated? (Page 9)** (SWIM Coalition)

    The Preliminary MS4 Map included one such "CSO outfall with MS4 connection" (JAM-006) near JFK Airport. The final MS4 Map of this permit term, which supersedes the Preliminary Map and is accurate as of August 1, 2020, shows additional CSO outfalls with MS4 connection. The current map is publicly available in an interactive format at nyc.gov/dep/ms4map.

30. **Regarding the figures on page 9 depicting the Historical MS4 map and the Preliminary MS4 Drainage Areas and Outfalls maps, has the infrastructure changed and these areas are now part of the combined sewer, or what is the explanation for why the MS4 areas have decreased substantially?** (SWIM Coalition)

    Infrastructure and its identification as CSO or MS4 can be updated based on confirmatory field investigation. In addition, the Historical MS4 Map, which was used for planning purposes during SWMP development, showed as MS4 most of the City's shoreline area, including privately owned facilities/lands draining either by overland flow or by point source; these areas are not covered by the MS4 Permit, and, therefore, no longer appear as MS4 area on the map.

    The 2018 Preliminary MS4 Map reflected areas the City had confirmed (as of August 2018) to be covered by the MS4 permit. The map submitted to DEC on 8/1/20 (available at nyc.gov/dep/ms4map), and future MS4 Map updates (due every 5 years), will further define and refine the MS4 areas.

Part IV.D. IDDE

31. **Why would an organization want to connect a sanitary pipe to the MS4 system? What would the benefits be for the organization to bypass the WRRFs?** (Public Meeting)

    It is not legal to connect a sanitary service line to an MS4 system. Such connections are deemed "illicit" and can be subject to fines and penalties. There are many reasons why an illicit connection may exist, and often property owners are not aware of the problem. DEP's Illicit Detection Determination & Elimination (IDDE) Program exists to identify any illicit connection and to work with a property owner until the property owner corrects the condition.

32. **Most of SI east shore is MS4, but parts are in the National Park Service and, therefore, not on the 311 system. Can you work with the feds to help put it on the 311 system? Also, are there any new programs that DEP has in the works for problems in this area (e.g., litter and feminine hygiene products brought onto our beaches from the waterways)?** (Public Meeting)

    NYC311 is specific to NYC government services and resources. Unfortunately, 311 is not applicable to federal parks. For concerns about those areas please contact the National Parks Service.

    During its Shoreline Survey investigations, when DEP observes debris on the shoreline, DEP will notify the entity with jurisdiction over the area to take appropriate follow-up action to address the issue.

33. **Will you also be using drones to document unauthorized discharges?** (Waterfront Alliance)

    In 2019, DEP did a drone flyover for an enhanced illicit discharge detection pilot. The drone flyover resulted in unreliable data. If funding is available in 2020, DEP may redo the flyover for Alley Creek.

34. **What about discovering unknown and illegal pipes; there will be temp[erature] differences from discharge water to the receiving water.** (Waterfront Alliance)

    The goal of a drone survey is to find areas with relative water temperature differences, which DEP can then investigate further for potential illicit discharges. Illicit discharges are typically warmer than the receiving waterbody; thermal sensors installed on the drone capture this temperature difference.

35. **How do we get a suspected illicit discharge investigated? Call 311 or how?** (Bronx River Alliance)

    Call 311.

36. **Regarding the figures listed in the IDDE table on page 11, as well as in all of the other tables throughout the update document, it would help if DEP identified the timeframe during which its actions were taken. Do some figures include actions taken before the SWMP was established, as opposed to only those actions taken within 2019?** (SWIM Coalition)

    The 2019 MS4 Annual Report accounts for actions taken during the calendar year, January 1, 2019 to December 31, 2019 (CY 2019). The IDDE metrics represent activities of DEP's compliance monitoring unit and DEP's emergency response unit, and IDDE events at municipally-owned facilities. The numbers represent all types of illicit discharges, including

illegal connections, illegal dumping, spills, and other un-permitted, non-stormwater discharges that DEP determines are significant sources of pollutants.

Other tables throughout the Annual Report likewise reflect activities during CY 2019.

37. **What area of shoreline was surveyed in 2019? Was it a stretch of shoreline with fewer than average outfalls? Why were only 6% of outfalls inventoried, as opposed to 10%? (Page 11)** (SWIM Coalition)

In 2018, DEP surveyed 21.5% of known MS4 outfalls and, in 2019, 6% of the known MS4 outfalls. The distribution of MS4 outfalls along the shoreline is not even throughout the City, and depending on the area surveyed within a year, the percentage of MS4 outfalls inventoried will vary.

38. **Could DEP discuss any preliminary conclusions of its microbial source tracking study?** (Page 12) (SWIM Coalition)

The City originally planned to commence the study in spring 2020. USGS delayed the project due to COVID-19 restrictions. We will report on progress once the City initiates the study.

39. **What can DEP and community members do to prevent "toxic flooding" from industrial contaminants being stored on our shorelines and in our floodplains?** (Riverkeeper/ SWIM Coalition)

The NYC Community Right-to-Know Law authorizes DEP's Division of Emergency Response and Technical Assessment (DERTA) to regulate the storage, use, and handling of hazardous substances. As part of the enforcement of the law, DERTA oversees the use and storage of hazardous substances that pose a threat to public health and the environment in NYC. This program manages the reporting and storage of hazardous substances by requiring businesses and facilities throughout the five boroughs to file a report annually detailing the quantity, location, and chemical nature of hazardous substances stored within their facilities. Regulated facilities must also have spill prevention plans. These plans generally include requirements for installation of secondary containment for outdoor storage of such materials.

After Hurricane Sandy, DERTA prepared and distributed brochures to facilities in storm-prone locations. The brochure provides recommendations for proper storage and handling of their chemicals to prevent spillage during adverse weather conditions.

In 2018, the City Council passed Local Law (LL) 143, which added a new Section 41-14 to the Community Right-to-Know Law. LL 143 requires spillage prevention measures for all portable containers of hazardous substances in order to prevent releases of hazardous substances in case of an extreme weather event, and to impose spillage prevention requirements for facilities located in a Special Flood Hazard Area. The rule also authorizes DEP to perform inspections at facilities and to issue summonses for violations of the rule.

The community can help by reporting to 311 any issues with industrial contaminants they witness:

- improper chemical storage or disposal (https://portal.311.nyc.gov/article/?kanumber=KA-01982)
- chemical spills (https://portal.311.nyc.gov/article/?kanumber=KA-02239
- oil spills (https://portal.311.nyc.gov/article/?kanumber=KA-02270
- dumping in a catch basin (including chemicals) https://portal.311.nyc.gov/article/?kanumber=KA-02202
- industrial discharge into waterways/unusual waterway color/odor (https://portal.311.nyc.gov/article/?kanumber=KA-01784
- improper commerical waste disposal https://portal.311.nyc.gov/article/?kanumber=KA-02135

The public can also report conditions that might contribute to flooding generally, such as blocked catch basins or culverts.

Part IV.E, F. Construction/Post-Construction

40. **Is coverage under this permit required if there is a waterfront project site (e.g., Manhattan) that discharges runoff into a waterbody (e.g., river) even though the interactive map indicates that the site is not within the MS4 area?** (AKRF)

If you are asking whether a project requires coverage under the DEP Construction/Post-Construction permitting program, the map is not dispositive of whether a project site is within the MS4 area. If you have a question as to the project's location, you must complete and submit a Request for Records Form to DEP's Bureau of Water and Sewer Operations (BWSO) at https://www1.nyc.gov/site/dep/about/request-records.page.

41. **Will the SWPPP permits and reviews be online? It looks like you have to sign in, but can the public review the SWPPP?** (Public Meeting)

    SWPPPs are not available to the public for review. However, lists of projects that have received Stormwater Construction and Stormwater Maintenance Permits are publicly available on the Stormwater Permit Tracking System (SWPTS) portal.

42. **On Construction/Post-Construction, it's good to see DEP reviewing SWPPPs. That said, 18 SWPPPs reviewed in 2019 does not seem to be overly burdensome for the agency. How many SWPPPs would DEP have reviewed if the threshold area were the more stringent 20,000 square feet or 15,000 square feet, as opposed to the current one-acre threshold? What is the status of the legislation to strengthen the threshold?** (Riverkeeper/ SWIM Coalition)

    Please note that the new rule establishing the NYC Construction/Post-Construction program became effective on June 1, 2019; hence, the 18 applications received in 2019 reflect 7 months of activity. Since January 2020, we have already received more than 30 applications.

    The program expects twice as many applications in the MS4 area when DEP reduces the threshold, and 4-8 times as many applications when DEP extends the program to the combined sewer area. The legislation that allows reduction of the disturbance threshold and the legislation to extend the program citywide are already in place. DEP will include the necessary changes to the threshold and the program expansion in a unified stormwater rule, which it expects to have in place by 2022.

43. **Is there a minimum sq ft for paver [installation]?** (Park Terrace Gardens)

    You have provided insufficient details in your question to enable DEP to provide an appropriate response. Please send your question (with additional details) to MS4 Construction Permitting at ms4construction@dep.nyc.gov.

44. **Does a new development require coverage under this permit if stormwater runoff from the site discharges into a DEP combined sewer outfall downstream of a regulator?** (AKRF)

    Yes, a discharge to a CSO outfall downstream of the regulator goes into the waterbody through the City-owned MS4.

Part IV.G. PPGH

45. **At what point are employees trained-- is there a continued education portion/re-up?** (City of Pittsburgh)

    The permit does not specify the training frequency; however, the SWMP requires agencies to train employees at least once per permit cycle. The City has developed three types of training, as well as a training plan. The plan sets forth various training deployment methods that agencies may use. One of these methods is to embed PPGH training into other ongoing/recurring agency trainings. Accordingly, the re-training frequency could vary from agency to agency. However, the computer-based, self-paced training serves as a review for employees who may need refresher training on stormwater pollution prevention topics.

46. **Will DEP continue to assess municipal facilities for stormwater pollution potential during the COVID-19 crisis?** (SWIM Coalition)

    DEP's third party contractor will continue to perform assessments as planned for 2020, implementing government-mandated COVID-19 and other applicable health and safety protocols.

47. **The goals set for 2020 in the update are not measurable. (Page 16) Can DEP set forth its projected numbers of assessments as goals?** (Riverkeeper/ SWIM Coalition)

    As provided in the SWMP, the assessments are on an inspection cycle of 2/5/7 years, depending on facility ranking as high/medium/low priority, respectively. It is up to the agencies to determine the best way to meet the assessment timeframes. Agencies have been meeting the assessment schedule established in the SWMP.

48. **Why were only 4% of the high priority self-assessments completed of the total number of facilities in the inventory? (Page 17)** (SWIM Coalition)

    The way this metric was framed is misleading: the 4% represents the number of high priority facilities assessed in 2019 out of the total # of facilities in the inventory. High priority facilities must be assessed at the frequency established in the SWMP (every 2 years). All the high priority facilities due to be assessed during the reporting period were timely assessed.

    Please note also, that both the number of high priority facilities in the inventory and the total number of facilities in the inventory can change from year to year as facilities' operations and designated priorities may change and as agencies add or remove facilities. Accordingly, this metric is not a useful way to report on progress in completing assessments.

    Going forward, the City will replace this metric with reporting on the total numbers and timeliness of assessments of each priority completed during the reporting year, and will note fluctuations in the number of facilities in the inventory and in each priority category.

Part IV.H. Industrial/Commercial

49. **Is it correct that of the 79 unpermitted facilities assessed, none required SPDES permit coverage, besides the three facilities that needed to seek a no-exposure exemption? Given Riverkeeper's experiences with dozens of unpermitted facilities, that number is surprisingly low. Does DEP expect similar results as it continues its assessments?** (Riverkeeper)

    DEP has found the Industrial/Commercial (I/C) Facility Inventory to be more dynamic than originally anticipated, with a high rate of business turnover at leased facilities in New York City. DEP found businesses listed in the inventory to be inactive at almost 90% of the unpermitted facilities that DEP assessed in 2019. When DEP found replacement businesses at the same locations as the original listings to be conducting operations that could be subject to SPDES coverage, DEP added those replacement businesses to the inventory for future assessment.

    We continue to expect a significant rate of turnover (and therefore inactive businesses) as we assess the remainder of the inventory; however, we expect that we will see a higher proportion of SPDES coverage referrals (e.g., no exposure or MSGP) in the future, as we assess the newly identified facilities.

50. **Will DEP continue industrial facility assessments and inspections during 2020?** (Riverkeeper/SWIM Coalition)

    Inspections will continue in accordance with MS4 permit requirements. Personnel inspecting these facilities will implement COVID-19 and other applicable, government-mandated health and safety protocols.

Part IV.I. Floatables

51. **I'm wondering how we can partner to advocate for covered litter receptacles along the waterfront. This could prevent trash from entering the water from heavily utilized litter baskets. Keep in mind that some litter is not intentional. Because some trash such as plastic bags and snack packages are lightweight and buoyant, they can be picked up by wind and eventually end up somewhere else, especially when waste receptacles are overflowing.** (NYC Community Boards)

    A variety of entities own and/or manage litter baskets along the waterfront: City agencies such as DPR and DSNY; State Department of Parks, Recreation & Historic Preservation; National Parks Service; community-based organizations; business improvement districts; and private property owners. Accordingly, types of and standards for litter baskets can vary greatly. DEP has shared this suggestion for covered litter receptacles along the waterfront with relevant agencies. DSNY recently held a public competition to invite redesigns of street litter baskets.

52. **Furthermore, no matter what, people will go for single-use items for convenience. Part of preventing litter in the first place is not going for that single-use item. I'm wondering if there's any conversation around reducing and reusing and using alternative items.** (Public Meeting)

    In recent years, the City has undertaken measures to address the prevalence of single-use items. Public awareness campaigns have encouraged New Yorkers to use reusable items. In the summer months, DEP typically sets up portable "water on the go" fountains so the public can fill up reusable water bottles. Further, the City has banned single-use foam food containers and instituted a paper bag fee to complement the NYS plastic bag ban. These measures not only reduce floatables, but also help the City meet its zero waste goals.

53. **When catch basins are inspected, what criteria are used to flag them for cleaning?** (NYS DEC)

    DEP has a wide variety of catch basin types. The criteria for when a catch basin requires cleaning vary based on the catch basin type.

Part IV.J. Monitoring

54. You said the samples can only be taken weather permitting - is that any time there is an overflow event? (Public Meeting)

Sampling is not dependent on occurrence of overflow (CSO) events. DEP collects samples at identified locations in the MS4 area during wet weather events that meet the definition of "qualifying rain events." Qualifying rain events are storms that meet the following criteria:

- no storm in excess of 0.1 inch occurred in the outfall catchment area within 48 hours preceding the rain event;
- weather forecasts at least a day in advance predict rain with 80 percent probability of occurrence; and
- the event is predicted to result in greater than 0.2 inches of rain.

The goal of the monitoring program is to sample from each monitoring location on a quarterly basis.

55. Is the monitoring data available online? Is this information included in the Open data map? (Public Meeting)

The monitoring data are not available online. The plan is to continue collecting quarterly samples as described in the above response, analyze collected data after the completion of this outfall monitoring program and publish the results.

Unified Stormwater Rule

56. Are you planning to speak to the status of Intro 1851 today? (SWIM Coalition)

The City Council passed Intro 1851 (citywide expansion of DEP Construction/Post-Construction program) on August 27, 2020.

57. Expand existing stormwater management controls under the City's oversight of the MS4 program to all citywide sites that meet criteria for a covered development site. Provide DEP with enhanced legal authority for further implementation under the City's Rulemaking process, known as the City Administrative Procedure Act or CAPA. (Gowanus Canal Conservancy)

Now that the City Council has passed Intro 1851, the City will proceed to issue rules for the citywide expansion of the DEP Construction/Post-Construction program. As required by CAPA, we will continue to engage stakeholders in the process, and will give the public an opportunity to comment on the rules before their finalization.

Appendix 2 – SPDES Outfall Listing

26TH WARD

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
26W-001	26TH WARD W.P.C.P.OUTFALL	40	39	3	73	53	37	10' X 6'	HENDRIX CREEK				
26W-002	26TH WARD PLANT OUTFALL	40	39	2	73	53	37	4BL 11' X 7' 6"	HENDRIX CREEK	PLANT BYPASS			
26W-003	WILLIAMS AVE (REG #2)	40	38	57	73	53	26	180'' X 120''	FRESH CREEK BASIN	REG #2		YES	YES
26W-004	HENDRIX CREEK & HENDRIX ST	40	39	17	73	52	49	4BL 11' X 7'6"	HENDRIX CREEK	REG #1	YES		YES
26W-005	SPRING CREEK AUXILIARY W.P.C.P	40	39	26	73	52	43	72BL 7'6" X 2'5"	OLD MILL CREEK	REG #3, JAM REG #2			YES (ON 3 & JAM REG #2)

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
26W-601	HENDRIX CREEK & 575' S/O FOUNTAIN ST	40	38	57	73	52	31	42" DIA	HENDRIX CREEK
26W-602	375' S/O FOUNTAIN ST	40	39	5	73	53	36	66" DIA	HENDRIX CREEK
26W-603	FOUNTAIN ST	40	39	27	73	52	47	78" DIA	OLD MILL CREEK
26W-604	BORDER AVE	40	38	27	74	7	12	8' X 4'	FRESH CREEK BASIN
26W-605	800' E/O SITE DRIVE (GATEWAY MALL)	40	38	60	74	7	48	42" DIA	Belt Parkway/Shore Parkway
26W-606	E/O SITE DRIVE (GATEWAY MALL)	40	39	2	74	7	52	36" DIA	Belt Parkway/Shore Parkway

BOWERY BAY

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
BB-001	BOWERY BAY W.P.C.P. OUTFALL	40	46	51	73	54	31	90" DIA	EAST RIVER				
BB-002	45TH ST (REG # 2)	40	46	46	73	54	33	9' X 9' FT	BOWERY BAY	REG #2			
BB-003	HAZEN ST (REG # 13)	40	46	35	73	53	29	10' 6" X 5' 9" FT	BOWERY BAY	REG #3			YES
BB-004	BORDEN AVE	40	44	21	73	57	31	6' 6" X 3' 3"	DUTCH KILLS	REG #L-3, L-41			
BB-005	E/O 81ST ST (REG # 14)	40	46	25	73	53	21	14' 7" X 8' FT	BOWERY BAY	REG #4	YES		
BB-006	114TH ST (REG # 10, 12 & 13)	40	45	37	73	51	17	4BL 10' 6" X 9' 2"	EAST RIVER	REG #10, 12, 13	YES		
BB-007	E/O 27TH AVE (REG # 5)	40	45	59	73	52	45	11' X 7'	EAST RIVER	REG #5			
BB-008	31ST DRIVE (REG # 6, 7, 8, 9)	40	45	45	73	52	32	DBL 13' 9" X 8'	EAST RIVER	REG #6, 7, 8, 9	YES		YES (ON 6 & 9)
BB-009	HUNTERS POINT AVE (REG # L-3B, L-37, L-38, L-41, L-3A)	40	44	27	73	56	25	11' X 4' 6"	DUTCH KILLS	REG #L-3B, L-37, L-38, L-41, L-3A			
BB-010	QUEENS-MIDTOWN EXPRESSWAY (REG # L-3C)	40	44	22	73	56	29	30" DIA	DUTCH KILLS	REG #L-3C			
BB-011	GREENPOINT AVE BRIDGE (REG # L-1)	40	44	1	73	56	24	24" DIA	NEWTOWN CREEK	REG #L-1			
BB-012	35TH ST (REG # L-2)	40	44	4	73	56	25	24" DIA	NEWTOWN CREEK	REG #L-2			
BB-013	11TH ST (REG # L-8)	40	44	23	73	57	10	72" DIA	NEWTOWN CREEK	REG #L-8			
BB-014	VERNON BOULEVARD (REG # L-9)	40	44	23	73	57	18	22" DIA	NEWTOWN CREEK	REG #L-9			
BB-015	5TH ST (REG # L-10)	40	44	22	73	57	28	15" DIA	NEWTOWN CREEK	REG #L-10			
BB-017	50TH AVE (REG # L-12)	40	44	38	73	58	35	15" DIA	EAST RIVER	REG #L-12			
BB-018	49TH AVE (REG # L-12A)	40	44	40	73	58	32	16" DIA	EAST RIVER	REG #L-12A			
BB-021	47TH AVE (REG # L-15)	40	44	47	73	58	32	48" DIA	EAST RIVER	REG #L-15			
BB-022	5TH ST (REG # L-16)	40	44	53	73	57	17	18" DIA	EAST CHANNEL	REG #L-16			
BB-023	44TH DRIVE (REG # L-17)	40	44	59	73	57	20	66" DIA	EAST CHANNEL	REG #L-17			
BB-024	43RD AVE (REG # L-18)	40	45	13	73	57	8	7' 8" X 7' 7" ARCH	EAST CHANNEL	REG #L-18			

BB-025	41ST AVE (REG # L-19)	40	45	26	73	57	57	57″ DIA	EAST CHANNEL	REG #L-19			
BB-026	BETWEEN 28TH & 29TH ST. (REG # L- (4, 39, 40 & 42)	40	44	35	73	56	21	9′ X 4′ 6″	DUTCH KILLS	REG #L-4, L-39, L-40, L-42			YES (ON L-4)
BB-027	38TH AVE (REG # L-20)	40	45	36	73	57	49	72″ DIA	EAST CHANNEL	REG #L-20			
BB-028	37TH AVE (REG # L-21)	40	45	41	73	57	45	DBL 12′ X 8′ 2″	EAST CHANNEL	REG #L-21			YES
BB-029	BROADWAY(REG # L-22)	40	46	7	73	56	16	14′ 6″ X 8′ 10″ FT	EAST CHANNEL	REG #L-22			YES
BB-030	30TH ROAD (REG # L-23)	40	46	16	73	56	6	DBL 9′ 6″ X 6′	EAST CHANNEL	REG #L-23			YES
BB-032	MAIN AVE (REG # L-29 A, # MH-15)	40	46	28	73	56	16	48″ DIA	EAST RIVER	REG #L-29, L-29A, MH-15			
BB-033	27TH AVE (REG # L-27)	40	46	33	73	56	13	15″ DIA	EAST RIVER	REG #L-27			
BB-034	HOYT AVE (REG # L-30)	40	46	37	73	56	42	10′ 8″ X 7′ 4″ ARCH	EAST RIVER	REG #L-30			YES
BB-035	DITMARS BLVD (REG # L-31)	40	46	58	73	55	12	18″ DIA	EAST RIVER	REG #L-31			
BB-036	21ST AVE (REG # L-32)	40	47	3	73	55	2	24″ DIA	EAST RIVER	REG #L-32			
BB-037	20TH AVE	40	47	10	73	55	56	48″ DIA	EAST RIVER	REG #L-33			
BB-040	49TH AVE (REG # L-5)	40	44	27	73	56	27	24″ DIA	DUTCH KILLS	REG #L-5			
BB-041	19TH AVE (REG # 1)	40	46	49	73	54	8	66″ DIA	LUYSTER CREEK	REG #1			
BB-042	W/O 27TH ST (REG # L-6)	40	44	20	73	57	35	12″ DIA	DUTCH KILLS	REG #L-6			
BB-043	11TH ST (REG # L-7)	40	44	22	73	57	8	54″ DIA	NEWTOWN CREEK	REG #L-7			
BB-045	9TH ST (REG # L-25)	40	46	34	73	56	47	18″ DIA	EAST RIVER	REG #L-25			
BB-053	SHORE BLVD AND 20 AVE	40	47	10	73	55	56	48′′	EAST RIVER	N/A			
BB-054	ROOSEVELT ISLAND NORTH PUMPING STATION	40	46	7	73	57	32	18″ DIA	EAST CHANNEL	ROOSEVELT ISL. P.S.			
BB-055	ROOSEVELT ISLAND MIDDLE PUMPING STATION	40	45	57	73	57	42	30″ DIA	EAST CHANNEL	ROOSEVELT ISL. P.S.			
BB-056	ROOSEVELT ISLAND SOUTH PUMPING STATION	40	45	10	73	57	26	24″ DIA	EAST CHANNEL	ROOSEVELT ISL. P.S.			
BB-057	BORDEN AVE (REG #L-11)	40	44	33	73	57	40	48″ DIA	EAST RIVER	REG #L-11			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
BB-601	127TH ST	40	45	46	73	51	41	60″ DIA	EAST RIVER
BB-602	126TH ST	40	45	41	73	51	49	60″ DIA	EAST RIVER
BB-603	STEINWAY ST	40	46	54	73	54	43	7′ X 6′ 6″ FT	EAST RIVER
BB-606	49TH AVE	40	44	40	73	58	32	60″ DIA	EAST RIVER
BB-607	47TH ROAD	40	44	45	73	58	30	36″ DIA	EAST RIVER
BB-608	70TH ROAD	40	43	30	73	50	8	60″ X 24″	MEADOW LAKE
BB-609	S/O 28TH STS	40	44	35	73	56	23	48″ DIA	DUTCH KILLS
BB-610	BETWEEN 28TH & 29TH STS	40	44	35	73	56	23	48″ DIA	DUTCH KILLS
BB-611	CENTER BLVD & BORDERN AVE	40	44	33	73	57	40	42″ DIA	EAST RIVER
BB-612	CENTER BLVD & 54 AVE	40	44	28	73	57	40	42″ DIA	EAST RIVER

CONEY ISLAND

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
CI-001	CONEY ISLAND W.P.C.P OUTFALL	40	33	58	73	56	51	96″ DIA	ROCKAWAY INLET				
CI-002	CONEY ISLAND WPCP PLANT OUTFALL	40	33	58	73	56	51	72″ DIA	ROCKAWAY INLET				
CI-004	FLATLANDS AVE (REG # 5, TG # 5)	40	37	54	73	55	3	DBL 10′ X 9′	PAERDEGAT BASIN	TG #5	YES		YES (ON TG-5)
CI-005	FLATLANDS AVE (REG # 1-4)	40	37	55	73	55	1	5BL 12′ 0″ X 9′ 0″	PAERDEGAT BASIN	REG #1, 2, 3, 4	YES		YES (ON 4)
CI-006	RALPH AVE (REG # 6)	40	37	52	73	55	2	DBL 84″ DIA	PAERDEGAT BASIN	REG #6	YES		YES

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
CI-601	W 28TH ST	40	34	48	73	60	44	5' X 4'	CONEY ISLAND CREEK
CI-602	W 33RD ST	40	34	53	74	0	3	6' 6" X 4'	CONEY ISLAND CREEK
CI-603	DOVER ST	40	34	56	73	57	0	72" DIA	SHEEPSHEAD BAY
CI-605	SHORE BLVD (140' N/O WEST END AVE PIER)	40	34	57	73	57	12	14' X 7'	SHEEPSHEAD BAY
CI-607	E 21ST ST (UNDER PIER 1)	40	35	1	73	57	51	12" DIA	SHEEPSHEAD BAY
CI-608	E 22ND ST (10' W/O PIER 3)	40	35	1	73	57	47	12" DIA	SHEEPSHEAD BAY
CI-610	E 27TH ST	40	35	0	73	56	29	DBL 13' X 7' 6"	SHEEPSHEAD BAY
CI-611	DEVON AVE	40	35	30	73	56	50	36" DIA	SHELL BANK CREEK
CI-612	EVERETT AVE	40	35	24	73	56	49	36" DIA	SHELL BANK CREEK
CI-613	FLATBUSH AVE	40	36	13	73	55	54	DBL 10' 6 "X 8'	MILL BASIN
CI-614	E/O E 58TH ST	40	36	49	73	55	59	60" DIA	MILL BASIN
CI-615	E 61ST ST	40	36	53	73	55	53	8' X 8' FT	MILL BASIN
CI-616	STRICKLAND AVE	40	36	26	73	55	60	4' X 4' FT	MILL BASIN
CI-617	E 64TH ST	40	36	19	73	55	54	48" DIA	MILL BASIN
CI-618	DAKOTA PLACE	40	36	23	73	54	30	42" DIA	MILL BASIN
CI-619	INDIANA PLACE	40	36	18	73	54	17	30" DIA	MILL BASIN
CI-620	BASSET AVE	40	36	30	73	54	7	4' X 4' FT	EAST MILL BASIN
CI-621	UTAH WALK	40	36	41	73	54	13	3' X 3' FT	EAST MILL BASIN
CI-622	OHIO WALK	40	36	51	73	54	24	4' X 4'	EAST MILL BASIN
CI-623	STRICKLAND AVE	40	36	57	73	55	32	4' X 4' FT	EAST MILL BASIN
CI-624	E 68TH ST	40	37	2	73	55	31	7' X 7'	EAST MILL BASIN
CI-625	AVE V	40	37	1	73	54	28	5' X 5' FT	EAST MILL BASIN
CI-626	AVE W	40	36	55	73	54	22	4' X 4' FT	EAST MILL BASIN
CI-627	AVE X	40	36	49	73	54	15	4' X 4' FT	EAST MILL BASIN
CI-628	AVE L	40	37	44	73	55	45	66" DIA	PAERDEGAT BASIN
CI-629	PAERDEGAT 4TH ST	40	37	47	73	55	42	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-630	PAERDEGAT 7TH ST	40	37	43	73	55	33	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-631	PAERDEGAT 10TH ST	40	37	39	73	54	24	5' X 5' FT	PAERDEGAT BASIN
CI-632	PAERDEGAT 13TH ST	40	37	35	73	54	15	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-633	CANARSIE ROAD	40	37	43	73	53	8	9' 6" X 7'	JAMAICA BAY
CI-634	AVE N	40	38	29	73	53	57	6' 6" X 6' 6"	FRESH CREEK BASIN
CI-636	AVE L	40	38	40	73	53	11	6' 6" X 6' 6"	FRESH CREEK BASIN
CI-637	AVE K	40	38	46	73	53	18	6' X 6'	FRESH CREEK BASIN
CI-639	W 12TH ST	40	34	47	73	59	47	108"	CONEY ISLAND CREEK
CI-641	25' S/O SHORE PARKWAY (HEAD OF CREEK)	40	34	57	73	58	29	12' X 5' 6"	CONEY ISLAND CREEK
CI-653	W 8TH ST	40	34	53	73	59	34	7' 6" X 6'	CONEY ISLAND CREEK
CI-654	BRAGG COURT	40	34	59	73	56	58	84" DIA	SHEEPSHEAD BAY
CI-655	AVE Y	40	35	33	73	56	54	10' X 8'	SHELL BANK CREEK
CI-656	GERRITSEN AVE (HEAD OF SHELL BANK CANAL)	40	35	28	73	55	27	15" DIA	SHELL BANK CREEK
CI-657	GARLAND COURT	40	35	41	73	56	55	18" DIA	SHELL BANK CREEK
CI-659	SHORE BLVD	40	34	57	73	57	12	9' 6" X 7'	SHEEPSHEAD BAY
CI-660	E 66TH ST	40	36	15	73	55	50	2' 6" X 2' 6" FT	MILL BASIN
CI-661	SEAVIEW AVE	40	38	23	73	53	51	66" DIA	FRESH CREEK BASIN
CI-662	W 32ND ST	40	34	17	73	60	52	42" DIA	ATLANTIC OCEAN
CI-663	W 23RD ST	40	34	19	73	59	21	42" DIA	ATLANTIC OCEAN
CI-664	W 15TH ST	40	34	58	73	59	3	5' X 4'	CONEY ISLAND CREEK

CI-665	W. 21ST ST	40	34	44	73	59	18	13′ 3″ X 7′ 6″	CONEY ISLAND CREEK
CI-666	N/O WEST END AVE PIER	40	34	56	73	57	12	72″ DIA	SHEEPSHEAD BAY
CI-668	CHANNEL AVE	40	35	37	73	56	48	3′ 6″ X 3′ 6″ FT	SHELL BANK CREEK
CI-669	FLORENCE AVE	40	35	21	73	56	44	36″ DIA	SHELL BANK CREEK
CI-670	BARTLETT PLACE	40	35	18	73	56	39	3′ X 3′ FT	SHELL BANK CREEK
CI-671	CYRUS AVE	40	35	14	73	56	36	3′ X 3′ FT	SHELL BANK CREEK
CI-672	SEBA AVE	40	35	10	73	56	32	3′ X 3′ FT	SHELL BANK CREEK
CI-673	LOIS AVE	40	35	9	73	55	22	2′ 6″ X 2′ 6″ FT	PLUM BEACH CHANNEL
CI-674	GERRITSEN AVE	40	35	12	73	55	5	3′ 6″ X 3′ 6″ FT	PLUM BEACH CHANNEL
CI-676	56TH DRIVE	40	36	14	73	55	33	24″ DIA	MILL BASIN
CI-677	OCEAN AVE	40	35	1	73	57	54	DBL 8′ 7″ X 8′	SHEEPSHEAD BAY
CI-678	W 35TH ST	40	34	53	74	0	7	60″ DIA	GRAVESEND BAY
CI-679	OXFORD ST	40	34	52	73	56	17	36″ DIA	SHEEPSHEAD BAY
CI-680	MACKENZIE ST	40	34	52	73	56	25	48″ DIA	SHEEPSHEAD BAY
CI-681	KENSINGTON ST	40	34	52	73	57	32	24″ DIA	SHEEPSHEAD BAY
CI-682	BIJOU AVE	40	35	40	73	56	51	3′ X 3′	SHELL BANK CREEK
CI-683	HASTINGS STREET	40	34	53	74	3	18	60″″ DIA	SHEEPSHEAD BAY
CI-684	FALMOUTH STREET	40	34	54	74	3	11	24″″ DIA	SHEEPSHEAD BAY
CI-685	SHEEPSHEAD BAY SHORELINE	40	34	56	74	2	53	24″″ DIA	SHEEPSHEAD BAY
CI-686	Dooley Street	40	35	1	74	3	18	12″″ DIA	SHEEPSHEAD BAY
CI-688	CYRUS AVENUE	40	35	14	74	4	23	10″″ DIA	SHELL BANK CREEK
CI-687	E 23RD STREET	40	35	0	74	3	22	12″″ DIA	SHEEPSHEAD BAY
CI-689	LANDIS PLACE	40	35	16	74	4	22	18″″ DIA	SHELL BANK CREEK
CI-690	MERIT COURT	40	35	15	74	4	22	18″″ DIA	SHELL BANK CREEK
CI-691	KEEN COURT	40	35	14	74	4	24	18″″ DIA	SHELL BANK CREEK
CI-692	LESTER COURT	40	35	13	74	4	25	18″″ DIA	SHELL BANK CREEK
CI-693	MELBA COURT	40	35	12	74	4	26	18″″ DIA	SHELL BANK CREEK
CI-694	Nova Court	40	35	11	74	4	27	18″″ DIA	SHELL BANK CREEK
CI-695	Seba Avenue	40	35	10	74	4	28	18″″ DIA	SHELL BANK CREEK
CI-696	s/o Post Court	40	35	8	74	4	31	18″″ DIA	PLUM BEACH CHANNEL
CI-697	MADOC AVENUE	40	35	10	74	4	33	18″″ DIA	PLUM BEACH CHANNEL
CI-698	Frank Court	40	35	10	74	4	45	18″″ DIA	PLUM BEACH CHANNEL
CI-699	Canton Court	40	35	10	74	4	47	18″″ DIA	PLUM BEACH CHANNEL
CI-700	BEACON COURT	40	35	10	74	4	52	18″″ DIA	PLUM BEACH CHANNEL
CI-701	ABBEY COURT	40	35	11	74	35	53	18″″ DIA	PLUM BEACH CHANNEL

HUNTS POINT

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
HP-001	HUNTS POINT W.P.C.P. OUTFALL	40	48	8	73	53	57	84″ DIA	EAST RIVER				
HP-002	TIFFANY ST (REG # 9, 9A)	40	48	19	73	53	23	DBL 5′ 6″ X 9′	EAST RIVER	REG #9, 9A			YES (ON 9)
HP-003	FARRAGUT ST (REG # 10)	40	48	5	73	52	29	DBL 12′ X 9′ 5-3/4″	EAST RIVER	REG #10	YES		YES
HP-004	WEST FARM ROAD	40	50	18	73	53	46	8′ X 8′	BRONX RIVER	CSO-28, 28A	YES		
HP-005	HOLLARS AVE (PUMP STATION)	40	53	13	73	49	13	12″ DIA	EASTCHESTER BAY	HOLLERS AVE P.S.			
HP-006	BARTOW AVE (CO-OP CITY SOUTH PS)	40	52	8	73	49	18	15′ 0″ X 8′ 6″	EASTCHESTER BAY	CO-OP CITY SOUTH P.S., ELY AVE PS			
HP-007	E 177TH ST (CSO-27,27A)	40	50	20	73	53	43	DBL 11′ 6″ X 6′ 6″	BRONX RIVER	CSO-27, 27A	YES		
HP-008	LAFAYETTE AVE & COLGATE AVE	40	49	8	73	53	53	54″ DIA	BRONX RIVER	CSO-26			
HP-009	RANDALL AVE & METCALF AVE (REG #13)	40	48	52	73	52	15	14′ X 8′	BRONX RIVER	REG #13			YES
HP-010	LACOMBE AVE	40	48	48	73	52	11	9′ X 6′	BRONX RIVER	CSO-25			

HP-011	WHITE PLAINS ROAD (REG #5)	40	48	16	73	51	15	DBL 13' X 9'	EAST RIVER	REG #5, 6, 7	YES		YES (ON 5 & 6)
HP-012	LAFAYETTE AVE (CSO-23A)	40	49	27	73	50	27	12' X 8'	WESTCHESTER CREEK	CSO-23A			
HP-013	NEWMAN AVE (CSO-24)	40	48	52	73	51	19	12' X 8'	PUGSLEY'S CREEK	CSO-24			
HP-014	E.TREMONT AVE (CSO-29, 29A)	40	50	22	73	50	24	DBL 14' X 8' 6"	WESTCHESTER CREEK	CSO-29, 29A			
HP-015	LATTING ST (CSO-22)	40	50	15	73	50	22	4' 9" X 4'	WESTCHESTER CREEK	CSO-22			
HP-016	BRUCKNER EXPRESSWAY (REG #4)	40	49	42	73	51	32	10' X 8'6"	WESTCHESTER CREEK	REG #4			YES
HP-017	EMERSON AVE (REG #11)	40	48	41	73	50	35	14' X 8'	EAST RIVER	REG #11			YES
HP-018	ROBINSON AVE (REG #12)	40	48	43	73	49	28	6' 4" X 4'	EAST RIVER	REG #12			YES
HP-019	CALHOUN AVE (REG #3)	40	48	49	73	49	1	7' X 5' 6"	EAST RIVER	REG #3			YES
HP-020	THROGS NECK BOULEVARD (REG #2A)	40	48	46	73	49	39	8' X 6' 6"	EAST RIVER	REG #2A			
HP-021	PENNYFIELD AVE (REG #2)	40	48	31	73	48	14	6' 3" X 6' 6"	EAST RIVER	REG #2			YES
HP-022	E 177TH ST (REG #1)	40	48	56	73	48	52	8' X 8'	LONG ISLAND SOUND	REG #1			YES
HP-023	CONNOR ST (REG #15)	40	52	50	73	49	17	12'0" X 6'6"	EASTCHESTER BAY	REG #15, CONNOR ST.PS			
HP-024	E. 233RD ST (REG #15A)	40	53	16	73	49	27	12' 6" X 10'	EASTCHESTER BAY	REG #15A			
HP-025	TRUXTON ST (REG # 8)	40	48	23	73	54	32	11' 6" X 7' 3"	EAST RIVER	REG #8			YES
HP-026	ELLESWORTH AVE (REG #14)	40	49	27	73	49	50	9' X 8'	LONG ISLAND SOUND	REG #14			YES
HP-028	OUTLOOK AVE (CSO #20)	40	50	35	73	49	52	12" DIA	EASTCHESTER BAY	CSO-20			
HP-029	WATT AVE (CSO #21)	40	50	55	73	49	55	15" DIA	EASTCHESTER BAY	CSO-21			
HP-031	BELLAMY LOOP (NORTH)	40	52	26	73	49	25	72" DIA	EASTCHESTER BAY	CSO-32, CO-OP CITY N. P.S.			
HP-032	RIKERS ISLAND NORTH PUMPING STATION	40	47	51	73	53	10	14" DIA	EAST RIVER	RIKER'S ISLAND N. P.S.			
HP-033	S/O BRUCKNER BLVD & E/O ZEREGA AVE (CSO-23)	40	49	41	73	51	34	DBL 16' X 5'	WESTCHESTER CREEK	CSO-23			
HP-034	NEWBOLD AVE (COMMERCE ST PS)	40	50	6	73	50	23	60" DIA	WESTCHESTER CREEK	COMMERCE AVE P.S.			
HP-037	ORCHARD BEACH PUMPING STATION	40	52	1	73	48	5	15" DIA	LAGOON	ORCHARD BEACH P.S.			
HP-039	N/O HUNTS POINT	40	48	15	73	52	11	72" DIA	EAST RIVER	HUNT'S PONT MARKET P.S.			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
HP-602	LAFAYETTE AVE	40	50	0	73	49	59	36" DIA	LONG ISLAND SOUND
HP-608	S/O E. FORDHAM RD (BOTANICAL GDNS)	40	51	18	73	53	40	18" DIA	BRONX RIVER (W)
HP-626	242ND ST	40	54	26	73	51	18	36" DIA	BRONX RIVER
HP-627	S/O 233RD ST	40	53	40	73	52	46	36" DIA	BRONX RIVER
HP-631	RANDALL AVE	40	49	48	73	49	51	48" DIA	LONG ISLAND SOUND
HP-632	BEACH ST (CITY ISLAND)	40	51	6	73	47	25	15" DIA	LONG ISLAND SOUND
HP-634	E. TREMONT AVE	40	50	22	73	50	23	3' X 7' 4"	WESTCHESTER CREEK
HP-635	RANDALL AVE	40	49	11	73	50	20	30" DIA	WESTCHESTER CREEK
HP-636	UNDER BOSTON ROAD BRIDGE	40	53	17	73	49	26	48" DIA	EASTCHESTER BAY
HP-637	PEARTREE AVE	40	52	46	73	49	18	72" DIA	EASTCHESTER BAY
HP-638	BELLAMY LOOP (SOUTH)	40	52	20	73	49	25	36" DIA	EASTCHESTER BAY
HP-639	N/O BARTOW AVE	40	52	12	73	49	25	66" DIA	EASTCHESTER BAY
HP-640	EINSTEIN LOOP NORTH	40	51	54	73	49	12	48" DIA	EASTCHESTER BAY
HP-641	ERSKINE PLACE	40	51	46	73	49	10	42" DIA	EASTCHESTER BAY
HP-648	LAYTON AVE	40	50	10	73	49	57	16' X 6'	LONG ISLAND SOUND
HP-650	ABBOTT ST (BRADELEY ST)	40	54	23	73	51	20	30" DIA	BRONX RIVER
HP-651	50' E/O CASTLE HILL AVE	40	48	42	73	51	46	24" DIA	WESTCHESTER CREEK
HP-652	ERSKINE PLACE	40	51	46	73	49	10	30" DIA	EASTCHESTER BAY
HP-653	SUTHERLAND ST (CITY ISLAND)	40	51	23	73	47	19	2' 6" X 1' 7"	LONG ISLAND SOUND
HP-655	WILCOX AVE	40	49	37	73	49	50	30" DIA	LONG ISLAND SOUND

HP-656	SE/O HUTCHINSON RIVER PARKWAY (E)	40	52	3	73	49	14	30" DIA	EASTCHESTER BAY
HP-657	KILROE ST	40	51	18	73	47	19	18" DIA	LONG ISLAND SOUND
HP-658	AGAR PLACE	40	50	20	73	49	55	42" DIA	LONG ISLAND SOUND
HP-659	CITY ISLAND AVE	40	50	15	73	47	58	18" DIA	LONG ISLAND SOUND
HP-660	SCHOFIELD ST AND LANDING WAY	40	50	45	73	47	57	60''	LONG ISLAND SOUND
HP-661	BUTLER PL & FERRIS PL	40	50	18	73	50	24	24" DIA	WESTCHESTER CREEK
HP-662	BEACH ST & KING AVE	40	51	9	73	47	12	30" DIA	LONG ISLAND SOUND
HP-663	ZEREGA AVE & LACOMBE AVE	40	49	3	73	50	32	5' X 3' 2"	WESTCHESTER CREEK

JAMAICA

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
JAM-001	JAMAICA W.P.C.P. OUTFALL	40	37	52	73	48	54	84" DIA	GRASSY BAY				
JAM-003	123RD ST (REG # 3)	40	39	44	73	49	7	DBL 8' X 9'	BERGEN BASIN	REG #3	YES		YES
JAM-003A	123RD ST (REG # 14)	40	39	44	73	49	7	DBL 13' 6" X 9'	BERGEN BASIN	REG #14	YES		YES
JAM-005	230TH ST (REG # 6, 7, 8 & 9)	40	38	52	73	45	18	4BL 16' X 8'	THURSTON BASIN	REG #6, 7, 8, 9	YES		YES (ON 9)
JAM-006	155TH AVE (REG # 1)	40	39	38	73	49	40	3BL 19' X 9'	BERGEN BASIN	REG #1, 4, 10, SECONDARY PLANT EFFLUENT	YES		YES (ON 1 & 10)
JAM-007	HEAD OF THURSTON BASIN (REG # 6, 7, 8 & 9)	40	38	52	73	45	17	4BL 17' X 6'	THURSTON BASIN	REG #6, 7, 8, 9	YES		YES (ON 9)

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
JAM-601	165TH AVE	40	38	57	73	50	13	36" DIA	SHELLBANK BASIN
JAM-602	164TH AVE	40	39	3	73	50	14	30" DIA	SHELLBANK BASIN
JAM-603	163RD AVE	40	39	9	73	50	15	84" DIA	SHELLBANK BASIN
JAM-604	162ND AVE	40	39	15	73	50	17	33" DIA	SHELLBANK BASIN
JAM-605	161ST AVE	40	39	21	73	50	18	36" DIA	SHELLBANK BASIN
JAM-606	160TH AVE	40	39	27	73	50	20	8' X 5' 6"	SHELLBANK BASIN
JAM-607	158TH AVE	40	39	39	73	50	23	10' X 5' 6"	SHELLBANK BASIN
JAM-609	158TH AVE	40	39	40	73	50	19	6' 6" X 6' FT	SHELLBANK BASIN
JAM-629	164TH AVE	40	39	6	73	50	54	12" DIA	HAWTREE BASIN
JAM-630	159TH AVE (REG # TG-12)	40	39	33	73	50	21	42" DIA	SHELLBANK BASIN
JAM-631	160TH AVE	40	39	28	73	50	17	12" DIA	SHELLBANK BASIN
JAM-632	162ND AVE	40	39	16	73	50	14	12" DIA	SHELLBANK BASIN
JAM-633	163RD AVE	40	39	10	73	50	12	12" DIA	SHELLBANK BASIN
JAM-634	164TH AVE	40	39	4	73	50	11	12" DIA	SHELLBANK BASIN
JAM-635	100TH ST	40	39	29	73	50	58	18" DIA	HAWTREE BASIN
JAM-636	161ST AVE	40	39	24	73	50	59	12" DIA	HAWTREE BASIN
JAM-637	162ND AVE	40	39	18	73	50	57	12" DIA	HAWTREE BASIN
JAM-638	164TH DRIVE	40	39	3	73	50	48	18" DIA	HAWTREE BASIN
JAM-640	147TH AVE & 184TH ST	40	39	35	73	46	48	24" DIA	SPRINGFIELD PARK
JAM-648	S/O 137TH AVE	40	40	15	73	44	14	15" DIA	LAURELTON
JAM-649	HUXLEY ST	40	38	57	73	44	13	13' 6" X 7' 0"	HOOK CREEK
JAM-652	WELLER LANE	40	38	60	73	44	2	30" DIA	HOOK CREEK
JAM-653	256TH ST	40	39	0	73	44	59	36" DIA	HOOK CREEK
JAM-654	257TH ST	40	39	1	73	44	56	12" DIA	HOOK CREEK
JAM-655	HOOK CREEK BLVD	40	39	6	73	44	37	54" DIA	HOOK CREEK

JAM-656	101ST ST	40	39	30	73	50	55	18″ DIA	HAWTREE BASIN
JAM-657	163RD AVE & PEDESTRIAN BRIDGE	40	39	12	73	50	56	24″ DIA	HAWTREE BASIN
JAM-659	OPPOSITE OF 65TH AVE	40	45	8	73	45	33	36″ DIA	ALLEY CREEK
JAM-660	125′ N/O LONG ISLAND WB EXIT 31S RAMP NEAR CROSS ISLAND PARKWAY	40	45	18	73	45	43	30″ DIA	ALLEY CREEK
JAM-661	259TH ST	40	39	2	73	44	49	54″ DIA	HOOK CREEK
JAM-662	119TH AVE	40	40	48	73	47	13	24″ DIA	BAISLEY POND
JAM-663	ARTHUR ST	40	39	50	73	46	38	54″ DIA	BAY/OCEAN

NEWTOWN CREEK

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
NCB-001	NEWTOWN CREEK W.P.C.P. OUTFALL	40	43	54	73	58	56	144″ DIA	EAST RIVER				
NCB-002	NEWTOWN CREEK WPCP	40	44	4	73	57	48	3BL 7′ X 8′	WHALE CREEK	WPCP OVERFLOW			
NCB-003	GREENPOINT AVE (REG # B-11)	40	43	46	73	58	40	24″ DIA	EAST RIVER	REG #B-11			
NCB-004	QUAY ST (REG # B-10)	40	43	33	73	58	42	66″ DIA	EAST RIVER	REG #B-10			
NCB-006	NORTH 12TH ST (REG # B-9)	40	43	31	73	58	43	13′ X 13′	EAST RIVER	REG #B-9		YES	YES
NCB-007	NORTH 5TH ST (REG # B-8)	40	43	12	73	58	52	36″ DIA	EAST RIVER	REG #B-8			
NCB-008	METROPOLITAN AVE (REG # B-7)	40	43	6	73	58	58	60″ DIA	EAST RIVER	REG #B-7			
NCB-010	GRAND ST (REG # B-6A)	40	42	59	73	58	2	12″ DIA	EAST RIVER	REG #B-6A			
NCB-012	SOUTH 5TH ST (REG # B-6)	40	42	46	73	58	6	144″ DIA	EAST RIVER	REG #B-6			YES
NCB-013	DIVISION AVE (REG # B-5)	40	42	25	73	58	9	10′ X 8′	WALLABOUT CHANNEL	REG #B-5	YES		YES
NCB-014	KENT AVE (REG # B-4)	40	42	22	73	58	9	DBL 13′ 6″ X 11′ 6″	WALLABOUT CHANNEL	REG #B-3, B-4	YES		YES (ON B-4)
NCB-015	JOHNSON AVE (REG # B-1)	40	42	31	73	56	49	16′ X 10′	ENGLISH KILLS	REG #B-1	YES		YES
NCB-019	METROPOLITAN AVE (REG B-2)	40	42	51	73	55	26	36″ DIA	NEWTOWN CREEK	REG #B-2	YES		
NCB-021	MCGUINESS BOULEVARD	40	44	20	73	57	10	36″ DIA	NEWTOWN CREEK	CSO NEXT TO B-17			
NCB-022	MCGUINESS BOULEVARD (REG # B-17)	40	44	20	73	57	11	6′ 3″ X 4′ 6″	NEWTOWN CREEK	REG #B-17			
NCB-023	FRANKLIN ST (REG # B-16)	40	44	14	73	58	35	24″ DIA	NEWTOWN CREEK	REG #B-16			
NCB-024	DUPONT ST (REG # B-15)	40	44	8	73	58	40	18″ DIA	EAST RIVER	REG #B-15			
NCB-025	FREEMAN ST (REG # B-14)	40	44	2	73	58	44	24″ DIA	EAST RIVER	REG #B-14			
NCB-026	GREEN ST (REG # B-13)	40	43	59	73	58	44	2′ X 2′ 6″	EAST RIVER	REG #B-13			
NCB-027	HURON ST (REG # B-12)	40	43	57	73	58	43	84″ DIA	EAST RIVER	REG #B-12			
NCB-082	SOUTH 8TH ST (REG # B-6)	40	42	36	73	58	11	36″ DIA	WALLABOUT CHANNEL	REG #B-5A			
NCB-083	METROPOLITAN AVE / SCOTT AVE	40	42	51	73	55	27	11′ X 10′	NEWTOWN CREEK	DB OC			
NCM-005	N/O E 63RD ST (REG # M-51)	40	45	40	73	57	21	24″ DIA	EAST RIVER	REG #M-51			
NCM-011	E 48TH ST (REG # M-47A)	40	45	6	73	58	53	4′ X 2′ 8″ EGG	EAST RIVER	REG #M-47A			
NCM-016	E 46TH ST (REG # M-46)	40	45	1	73	58	57	4′ X 4′ FT	EAST RIVER	REG #M-46			
NCM-017	E 42ND ST (REG # M-45A)	40	44	53	73	58	4	4′ X 2′ 8″	EAST RIVER	REG #M-45A			
NCM-018	E 41ST ST (REG # M-45)	40	44	50	73	58	6	4′ X 2′ 8″ FT	EAST RIVER	REG #M-45			
NCM-020	E HOUSTON ST (REG # M-31)	40	43	7	73	58	25	6′ X 4′ 6″ FT	EAST RIVER	REG #M-31			
NCM-028	DELANCY ST (REG # M-28)	40	42	54	73	59	30	4′ X 4′ FT	EAST RIVER	REG #M-28			
NCM-030	E 71ST ST (REG # M-51C)	40	45	55	73	57	6	3′ X 2′ EGG	EAST RIVER	REG #M-51C			
NCM-031	E 70TH ST (REG # M-51B)	40	45	52	73	57	8	3′ X 2′ EGG	EAST RIVER	REG #M-51A, M-15B			
NCM-032	E 61ST ST (REG # M-50)	40	45	34	73	57	27	DBL 6′ 6″ X 5′	EAST RIVER	REG #M-50			YES
NCM-033	E 57TH ST (REG # M-49)	40	45	25	73	58	35	4′ X 2′ 4″ FT	EAST RIVER	REG #M-49			
NCM-034	E 54TH ST (REG # M-48)	40	45	18	73	58	41	5′ X 4′ FT	EAST RIVER	REG #M-48			
NCM-035	E 53RD ST (REG # M-48A)	40	45	17	73	58	44	4′ X 2′ 4″ FT	EAST RIVER	REG #M-48A			
NCM-036	E 49TH ST (REG # M-47)	40	45	8	73	58	51	54″ DIA	EAST RIVER	REG #M-47			YES

NCM-037	E 41ST ST (REG # M-44)	40	44	50	73	58	6	9′ X 7′ FT	EAST RIVER	REG #M-44			YES
NCM-038	E 38TH ST (REG # M-43B)	40	44	44	73	58	12	5′ X 4′ FT	EAST RIVER	REG #M-43B			
NCM-038A	E 38TH ST (REG # M-43B)	40	44	44	73	58	12	5′ X 4′ FT	EAST RIVER	REG #M-43B			
NCM-039	E 37TH ST (REG # M-43A)	40	44	42	73	58	13	5′ 6″ X 2′ 8″ FT	EAST RIVER	REG #M-43A			
NCM-040	E 36TH ST (REG # M-43)	40	44	40	73	58	15	5′ 6″ X 2′ 8″ FT	EAST RIVER	REG #M-43			
NCM-041	E 33RD ST (REG # M-42)	40	44	33	73	58	18	DBL 8′ X 6′	EAST RIVER	REG #M-42			YES
NCM-042	BROOME ST (REG # M-27)	40	42	49	73	59	32	4′ X 4′ FT	EAST RIVER	REG #M-27			
NCM-043	E 30TH ST (REG # M-41)	40	44	24	73	58	20	4′ X 2′ 4″ FT	EAST RIVER	REG #M-41			
NCM-044	E 29TH ST (REG # M-41A)	40	44	22	73	58	21	5′ 6″ X 4′ FT	EAST RIVER	REG #M-41A			
NCM-045	E 26TH ST (REG # M-40)	40	44	13	73	58	21	DBL 6′ 6″ X 6′	EAST RIVER	REG #M-40			YES
NCM-046	E 24TH ST (REG # M-39)	40	44	7	73	58	22	48″ DIA	EAST RIVER	REG #M-39, M-39A			
NCM-047	E 23RD ST (REG # M-38B)	40	44	7	73	58	28	5′ X 4′ FT	EAST RIVER	REG #M-38B			
NCM-048	E 21ST ST (REG # M-38)	40	43	59	73	58	25	54″ DIA	EAST RIVER	REG #M-38			
NCM-049	E 18TH ST (REG # M-37)	40	43	53	73	58	25	6′ X 8′ FT	EAST RIVER	REG #M-37			YES
NCM-051	OLD SLIP (REG # M-12)	40	42	11	74	0	28	48″ DIA	EAST RIVER	REG #M-12			
NCM-052	E 14TH ST (REG # M-36)	40	43	36	73	58	18	DBL 6′ X 7′	EAST RIVER	REG #M-36			YES
NCM-053	E 11TH ST (REG # M-35)	40	43	28	73	58	20	5′ X 8′ 9″ FT	EAST RIVER	REG #M-35			
NCM-054	E 8TH ST (REG # M-34)	40	43	21	73	58	21	6′ 6″ X 5′ FT	EAST RIVER	REG #M-34			
NCM-055	E 6TH ST (REG # M-33)	40	43	17	73	58	22	5′ 6″ X 4′ FT	EAST RIVER	REG #M-33			
NCM-056	E 3RD ST (REG # M-32)	40	43	8	73	58	25	6′ 6″ X 6′ FT	EAST RIVER	REG #M-32			
NCM-057	STANTON ST (REG # M-30)	40	43	2	73	58	27	5′ 6″ X 5′ FT	EAST RIVER	REG #M-30			
NCM-058	IRVINGTON ST (REG # M-29)	40	42	57	73	58	28	5′ 6″ X 5′ FT	EAST RIVER	REG #M-29			
NCM-059	50′ S/O GRAND ST (REG # M-26)	40	42	45	73	59	34	6′ X 3′ FT	EAST RIVER	REG #M-26			
NCM-060	S/O CORLEARS HOOK PARK (REG # M-25)	40	42	38	73	59	41	5′ X 4′ FT	EAST RIVER	REG #M-25			
NCM-061	JACKSON ST (REG # M-23)	40	42	37	73	59	50	4′ X 3′ EGG	EAST RIVER	REG #M-23			
NCM-062	GOVERNEUR SLIP E (REG # M-22)	40	42	35	73	59	59	48″ DIA	EAST RIVER	REG #M-22			
NCM-063	JEFFERSON ST (NORTH SIDE) (REG # M-21)	40	42	33	73	59	18	48″ DIA	EAST RIVER	REG #M-21			YES
NCM-064	MARKET SLIP (REG # M -20)	40	42	33	73	60	38	54″ DIA	EAST RIVER	REG #M-20			
NCM-065	S/O CATHERINE ST (REG # M-18)	40	42	32	73	60	47	4′ 6″ X 4′ FT	EAST RIVER	REG #M-18			
NCM-066	ROBERT F WAGNER PLACE (REG # M -17)	40	42	29	73	60	56	48″ DIA	EAST RIVER	REG #M-17			
NCM-067	MAIDEN LANE (REG # M -13A)	40	42	18	74	0	16	6′ X 6′ FT	EAST RIVER	REG #M-13			
NCM-068	COENTIES SLIP (REG # M -11)	40	42	7	74	1	34	4′ 6″ X 3′ 8″	EAST RIVER	REG #M-11			
NCM-069	BROAD ST (REG # M-10)	40	42	5	74	1	40	5′ X 4′ FT	EAST RIVER	REG #M-10			YES
NCM-070	BATTERY PLACE (S/O PIER - A) (REG # M-9)	40	42	15	74	1	3	84″ DIA	HUDSON RIVER	REG #M-9			
NCM-071	RECTOR ST (REG # M-6, M-7)	40	42	35	74	1	6	96″ DIA	HUDSON RIVER	REG #M-6, M-7			
NCM-072	VESEY ST (REG # M-5)	40	42	54	74	1	3	96″ DIA	HUDSON RIVER	REG #M-5			
NCM-073	DUANE ST (REG # M-4)	40	43	7	74	1	0	54″ DIA	HUDSON RIVER	REG #M-4			
NCM-074	VESTRY ST (REG # M-3)	40	43	23	74	1	44	5′ X 3′ 8″	HUDSON RIVER	REG #M-3			
NCM-075	N/O WATTS ST (REG # M-2)	40	43	29	74	1	43	66″ DIA	HUDSON RIVER	REG #M-2			YES
NCM-076	CLARKSON ST (REG # 1)	40	43	48	74	1	51	12′ X 6′ 3″ FT	HUDSON RIVER	REG #M-1			YES
NCM-078	N/O DOVER ST (REG # M -16)	40	42	28	73	60	58	12′ X 6′	EAST RIVER	REG #M-16			YES
NCM-080	N/O VANDAM ST (REG # TG-2)	40	43	38	74	1	41	48″ DIA	HUDSON RIVER	REG #TG-2			
NCM-081	S/O CHARLES ST (REG # TG-1)	40	44	0	74	1	39	5′ X 4′	HUDSON RIVER	REG #TG-1			
NCM-087	E 22ND ST (REG # M-38A)	40	44	4	73	58	27	5′ X 3′ 6″ FT	EAST RIVER	REG #M-38A			
NCQ-029	43RD ST (REG # Q-2)	40	43	36	73	56	38	66″ DIA	NEWTOWN CREEK	REG #Q-2			
NCQ-077	49TH ST (REG # Q-1)	40	43	25	73	55	13	DBL 11′ X 7′	MASPETH CREEK	REG #Q-1	YES		

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
NCB-629	SCHOLES ST	40	42	38	73	56	52	60″ DIA	ENGLISH KILLS
NCB-630	MEEKER ST & GARDNER AVE	40	43	41	73	56	57	DBL 16″ DIA	NEWTOWN CREEK
NCB-631	N/O HENRY ST	40	44	10	73	57	39	90″ DIA	NEWTOWN CREEK
NCB-635	10′ S/O GRAND ST BRIDGE	40	42	51	73	56	51	42″ DIA	ENGLISH KILLS
NCB-636	5′ N/O GRAND ST BRIDGE	40	42	52	73	56	54	60″ DIA	ENGLISH KILLS
NCB-638	GARDENER AVE	40	43	4	73	56	41	54″ DIA	ENGLISH KILLS
NCB-639	MASPETH AVE & NEWTOWN CREEK	40	43	11	73	55	29	22′′	NEWTOWN CREEK
NCM-628	RECTOR PLACE	40	42	35	74	1	6	54″ DIA	HUDSON RIVER
NCM-634	FIRST PLACE	40	42	24	74	1	9	54″ DIA	HUDSON RIVER
NCM-640	E 15TH STREET (CO ED-NORTH)	40	43	40	73	58	18	42″ DIA	EAST RIVER
NCM-641	E 16TH STREET	40	43	42	73	58	17	5′ 6″ X 4′	EAST RIVER
NCQ-632	GRAND AVE	40	42	60	73	55	20	54″ DIA	NEWTOWN CREEK
NCQ-633	300′ N/O GRAND AVE BRIDGE	40	43	5	73	55	24	60″ DIA	NEWTOWN CREEK
NCQ-637	LAUREL HILL BLVD & REVIEW AVE	40	43	43	73	56	53	72″ DIA	NEWTOWN CREEK

NORTH RIVER

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
NR-001	NORTH RIVER W.P.C.P. OUTFALL	40	49	31	73	58	30	96″ DIA	HUDSON RIVER				
NR-002	W 152ND ST (REG # N-20, 21, 21A, 21B)	40	49	57	73	57	4	60″ DIA	HUDSON RIVER	REG #N-20, N-21, N-21A, N-21B			
NR-003	W 158TH ST (REG # N-19)	40	50	12	73	57	57	48″ DIA	HUDSON RIVER	REG #N-19			
NR-004	W 171ST ST (REG # N-18)	40	50	45	73	57	47	6′ X 10′ 6″ FT	HUDSON RIVER	REG #N-18			YES
NR-005	W 190TH ST (REG # N-17)	40	51	28	73	56	22	18″ DIA	HUDSON RIVER	REG #N-17			
NR-006	DYCKMAN ST (REG # N-16)	40	52	9	73	56	56	DBL 7′ 0″ X 5′ 0″	HUDSON RIVER	REG #N-16			YES
NR-007	W 218TH ST (REG # N-15)	40	52	29	73	55	9	4′ 0″ X 2′ 4″ FT	SPUYTEN DUYVIL CREEK	REG #N-15			
NR-008	W 216TH ST (REG # N-14)	40	52	8	73	55	41	5′ X 4′ EGG	HARLEM RIVER	REG #N-14			
NR-009	W 215TH ST (REG # N-13)	40	52	5	73	55	42	3′ 6″ X 2′ 4″ EGG	HARLEM RIVER	REG #N-13			
NR-010	W 211TH ST (REG # N-10, N-11, N-12)	40	51	56	73	55	48	54″ DIA	HARLEM RIVER	REG #N-10, N-11, N-12			
NR-011	W 209TH ST (REG # N-9)	40	51	52	73	55	54	24″ DIA	HARLEM RIVER	REG #N-9			
NR-012	W 207TH ST (SOUTH SIDE) (REG # N-7)	40	51	47	73	55	56	36″ DIA	HARLEM RIVER	REG #N-7			
NR-013	W 206TH ST (REG # N-6)	40	51	45	73	55	58	3′ 6″ X 2′ 4″ EGG	HARLEM RIVER	REG #N-6			
NR-014	W 205TH ST (REG # N-5)	40	51	43	73	55	1	48″ DIA	HARLEM RIVER	REG #N-5			
NR-016	W 203RD ST (REG # N-4)	40	51	39	73	55	5	3′ 6″ X 2′ 4″ EGG	HARLEM RIVER	REG #N-4			
NR-017	W 201ST ST (REG # N-3)	40	51	34	73	55	8	6′ X 4′ FT	HARLEM RIVER	REG #N-3			YES
NR-018	HIGHBRIDGE PARK (REG # N-1)	40	51	26	73	55	18	48″ DIA	HARLEM RIVER	REG #N-1			
NR-019	BANK ST (REG # N-56)	40	44	11	74	1	38	48″ DIA	HUDSON RIVER	REG #N-56			
NR-020	JANE ST (REG # N-55)	40	44	18	74	1	40	48″ DIA	HUDSON RIVER	REG #N-55			
NR-021	GANSEVOORT ST (REG # N-54)	40	44	21	74	1	41	48″ DIA	HUDSON RIVER	REG #N-54			
NR-022	S/O W 17TH ST (REG # N-51)	40	44	40	74	1	32	54″ DIA	HUDSON RIVER	REG #N-51			
NR-023	W 18TH ST (REG # 50)	40	44	45	74	1	41	5′ 0″ X 4′ 6″	HUDSON RIVER	REG #N-50			YES
NR-024	W 21ST ST (REG # N-48, N-49)	40	44	52	74	1	41	48″ DIA	HUDSON RIVER	REG #N-48, N-49			
NR-025	W 24TH ST (REG # N-47)	40	45	3	74	1	39	42″ DIA	HUDSON RIVER	REG #N-47			
NR-026	W 26TH ST (REG# N-46)	40	45	9	74	1	34	DBL 4′ X 3′	HUDSON RIVER	REG #N-46			
NR-027	W 30TH ST (REG # N-45)	40	45	17	74	0	26	11′ X 6′	HUDSON RIVER	REG #N-45			YES
NR-028	W 36TH ST (REG # N-43)	40	45	34	74	0	24	48″ DIA	HUDSON RIVER	REG #N-43			

NR-029	W 40TH ST (REG # N-42)	40	45	40	74	0	10	30″ DIA	HUDSON RIVER	REG #N-42			
NR-030	W 43RD ST (REG # N-39 & N-40)	40	45	49	74	0	13	54″ DIA	HUDSON RIVER	REG #N-39, N-40			
NR-031	W 44TH ST (REG # N-38)	40	45	50	74	0	3	54″ DIA	HUDSON RIVER	REG #N-38			
NR-032	W 46TH ST (REG # N-36)	40	45	57	74	0	8	48″ DIA	HUDSON RIVER	REG #N-36, N-37			
NR-033	N/O W 48TH ST (REG # N-34, N-33)	40	45	58	73	60	53	4′ X 2′ 8″ FT	HUDSON RIVER	REG #N-33, N-34			YES (ON N-33)
NR-034	W 50TH ST (REG # N-32)	40	46	7	74	0	5	4′ X 4′ FT	HUDSON RIVER	REG #N-32			
NR-035	W 56TH ST (REG # N-31)	40	46	16	73	60	43	6′ X 4′ 6″ FT	HUDSON RIVER	REG #N-31			
NR-036	W 59TH ST (REG # N-30)	40	46	26	73	60	46	48″ DIA	HUDSON RIVER	REG #N-30			
NR-037	N/O W 72ND ST (REG # N-29)	40	46	54	73	59	17	60″ DIA	HUDSON RIVER	REG #N-29			
NR-038	W 80TH ST (REG # N-28)	40	47	12	73	59	5	10′ 6″ X 6′ 0″ FT	HUDSON RIVER	REG #N-28			YES
NR-039	W 91ST ST (REG # N-27)	40	47	37	73	59	47	48″ DIA	HUDSON RIVER	REG #N-27			
NR-040	W 96TH ST (REG # N-26, 26A)	40	47	49	73	59	38	10′ X 6′ FT	HUDSON RIVER	REG #N-26, N-26A			YES (ON N-26)
NR-041	W 108TH ST (REG # N-25)	40	48	17	73	58	19	4′ 0″ X 4′ 0″	HUDSON RIVER	REG #N-25			
NR-042	W 115TH ST (REG # N-24)	40	48	33	73	58	7	4′ 6″ X 4′ 0″	HUDSON RIVER	REG #N-24			
NR-043	SAINT CLAIRS PLACE (REG # N-23)	40	49	5	73	58	43	DBL 8′ 8″ X 7′	HUDSON RIVER	REG #N-23			YES
NR-044	W 138TH ST (REG # N-22)	40	49	25	73	58	34	42″ DIA	HUDSON RIVER	REG #N-22			
NR-045	ACADEMY ST (REG # N-2)	40	51	36	73	55	16	DBL 6′ X 7′	HARLEM RIVER	REG #N-2			
NR-046	W 66TH ST (REG # N-29A)	40	46	39	73	59	27	10′ 8″ X 6′ 10″	HUDSON RIVER	REG #N-29A			YES
NR-047	W 47TH ST	40	45	54	73	60	55	4′ X 2′ 8″ FT	HUDSON RIVER	REG #N-35			
NR-048	W 42ND ST (REG # N-40 & N-41)	40	45	44	74	0	7	DBL 8′ 0″ X 2′ 0″	HUDSON RIVER	REG #N-40, N-41			
NR-049	W 14TH ST (REG # N-52)	40	44	33	74	1	33	6′ X 4′ FT	HUDSON RIVER	REG #N-52			
NR-050	BLOOMFIELD ST (REG # N-53)	40	44	27	74	1	40	3′ 6″ X 2′ 4″ EGG	HUDSON RIVER	REG #N-53			
NR-051	W 49TH ST (CSO)	40	45	59	73	60	51	DBL 12′ 0″ X 6′ 0″	HUDSON RIVER	N/A			
NR-052	N/O W 33RD ST (REG # N-44)	40	45	24	74	0	21	4′ 9″ X 4′ 6″ FT	HUDSON RIVER	REG #N-44			
NR-055	W 207TH ST (NORTH SIDE) (REG # N-8)	40	51	47	73	55	56	36″ DIA	HARLEM RIVER	REG #N-7, N-8			
NR-056	W 142ND ST (REG # N-22A)	40	49	33	73	57	18	5′ X 4′	HUDSON RIVER	REG #N-22A			

OAKWOOD BEACH

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
OB-001	OAKWOOD BEACH W.P.C.P OUTFALL	40	32	51	74	7	45	96″ DIA	LOWER NEW YORK BAY				
OB-001A	OAKWOOD BEACH PLANT BYPASS	40	32	57	74	7	53	60″ DIA	LOWER NEW YORK BAY	PLANT BYPASS			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
OB-605	450′ N/O RICHMOND ROAD BRIDGE	40	34	20	74	9	52	5′ X 3′ 2″	RICHMOND CREEK
OB-607	SEAVIEW AVE	40	34	41	74	5	31	DBL 15′ X 6′	LOWER NEW YORK BAY
OB-609	EBBITTS ST	40	33	32	74	6	58	10′ X 5′	LOWER NEW YORK BAY
OB-610	TYSENS LANE	40	33	20	74	6	5	11′ X 8′	LOWER NEW YORK BAY
OB-612	200′ S/O FAIRLAWN AVE	40	32	45	74	8	14	42″ DIA	GREAT KILLS HARBOR
OB-613	S/O WIMAN AVE	40	32	14	74	9	38	60″ DIA	RARITAN BAY
OB-614	ARMSTRONG AVE	40	32	7	74	9	46	9′ X 4′ 6″	RARITAN BAY
OB-615	WOODS OF ARDEN ROAD	40	31	45	74	9	25	48″ DIA	RARITAN BAY
OB-618	S/O ELMTREE AVE	40	33	59	74	5	29	3′ X 2′7″	LOWER NEW YORK BAY
OB-619	N/O NEW DORP LANE	40	33	46	74	6	39	13′ X 5′ 6″	LOWER NEW YORK BAY
OB-622	HOLDRIDGE PLACE	40	31	35	74	10	50	48″ DIA	RARITAN BAY
OB-623	150′ N/O ARBUTUS AVE	40	31	35	74	11	45	6′ 6″ X 6′	RARITAN BAY
OB-625	HUGUENOT AVE	40	31	12	74	11	60	42″ DIA	RARITAN BAY

OB-627	BEDELL AVE	40	30	7	74	14	52	36″ DIA	RARITAN BAY
OB-628	S. GOFF & STATEN ISLAND RAILROAD	40	31	21	74	13	43	18″ DIA	LEMON CREEK
OB-629	STATEN ISLAND RAILROAD & W/O SHARROTT AVE	40	31	22	74	13	49	5′ 8″ X 3′ 7″	LEMON CREEK
OB-630	STATEN ISLAND RAILROAD & W/O WOODVALE AVE	40	31	27	74	13	36	4′ X 2′ FT	LEMON CREEK
OB-633	EAST DRUMGOOLE ROAD & ADDISON AVE	40	31	59	74	12	57	66″ DIA	LEMON CREEK
OB-635	MAGUIRE AVE & FONDA PLACE	40	31	43	74	13	39	50″ DIA	LEMON CREEK
OB-636	PAGE AVE & STATEN ISLAND RAILROAD	40	31	7	74	14	4	42″ DIA	MILL CREEK
OB-637	PAGE AVE & RICHMOND VALLEY ROAD	40	31	14	74	14	5	42″ DIA	MARSH
OB-638	BOSCOMBE AVE & E/O WEST SHORE EXPRESSWAY	40	31	28	74	14	36	42″ DIA	MILL CREEK
OB-639	BOSCOMBE AVE & E/O WEST SHORE EXPRESSWAY	40	31	28	74	14	36	18″ DIA	MILL CREEK
OB-641	ARTHUR KILL ROAD & PARK DRIVE SOUTH	40	33	51	74	11	39	48″ DIA	RICHMOND CREEK
OB-642	RICHMOND AVE & N/O ARTHUR KILL ROAD	40	33	43	74	10	10	72″ DIA	RICHMOND CREEK
OB-643	RICHMOND AVE & N/O ARTHUR KILL ROAD	40	33	43	74	10	10	8′ X 7′	RICHMOND CREEK
OB-644	ARTHUR KILL ROAD & E/O RIDGE-WOOD AVE	40	33	38	74	10	59	3′9″ X 2′5″	RICHMOND CREEK
OB-645	ABINGDON AVE & N/O ARTHUR KILL ROAD	40	33	55	74	10	51	3BL 16′ X 6′6″	RICHMOND CREEK
OB-646	ARTHUR KILL ROAD & S/O TANGLE-WOOD DRIVE	40	34	4	74	9	8	6′ 6″ X 3′	RICHMOND CREEK
OB-647	RICHMOND AVE & RICHMOND HILL ROAD	40	35	24	74	10	6	16′ X 6′	SPRINGVILLE CREEK
OB-648	RICHMOND AVE & RICHMOND HILL ROAD	40	35	21	74	10	4	42″ DIA	SPRINGVILLE CREEK
OB-649	RICHMOND AVE & RICHMOND HILL ROAD	40	35	21	74	10	4	5′ X 3′2″	SPRINGVILLE CREEK
OB-650	RICHMOND AVE & W/O RICHMOND HILL ROAD	40	35	22	74	10	5	30″ DIA	SPRINGVILLE CREEK
OB-652	RICHMOND AVE & NOME AVE	40	35	27	74	10	58	6′11″ X 4′5″	SPRINGVILLE CREEK
OB-653	TRAVIS AVE & DRAPER AVE	40	35	36	74	10	51	8′10″ X 5′8″	SPRINGVILLE CREEK
OB-654	TRAVIS AVE & FREEDOM AVE	40	35	36	74	10	53	36″ DIA	SPRINGVILLE CREEK
OB-655	TRAVIS AVE & W/O MULBERRY AVE	40	35	39	74	10	9	42″ DIA	MARSH
OB-656	CLEVELAND AVE	40	32	32	74	9	32	9′ X 5′ 6″	GREAT KILLS HARBOR
OB-657	POILLON AVE	40	31	22	74	10	25	36″ DIA	RARITAN BAY
OB-660	ROSSVILLE AVE	40	33	21	74	13	47	4′ 8″ X 2′	ARTHUR KILL
OB-661	ARTHUR KILL ROAD & HERVEY ST	40	33	18	74	13	5	9′ 6″ X 6′	ARTHUR KILL
OB-662	HUGUENOT AVE	40	33	23	74	12	11	DBL 8′10″ X 6′	ARTHUR KILL
OB-663	SHARON LANE & W/O HELENE COURT	40	32	10	74	13	55	36″ DIA	LEMON CREEK
OB-664	INDEPENDENCE AVE & N/O FOREST HILL ROAD	40	34	17	74	10	6	78″ DIA	RICHMOND CREEK
OB-666	LUTEN AVE & EYLANDT ST & JANSEN ST	40	31	33	74	11	26	48″ DIA	LEMON CREEK
OB-668	CINDRA AVE	40	32	23	74	9	34	4′ X 1′ 6″	GREAT KILLS HARBOR
OB-669	RICHMOND AVE	40	31	58	74	9	5	4′ X 3′	RARITAN BAY
OB-670	ARDEN AVE	40	31	39	74	10	36	48″ DIA	RARITAN BAY
OB-671	ARBUTUS AVE	40	31	36	74	11	50	60″ DIA	RARITAN BAY
OB-672	W/O SHARROTT AVE	40	30	39	74	13	42	4′ X 3′ 6″ EGG	MARSH
OB-673	JOLINE AVE	40	30	4	74	14	59	5′ X 3′	RARITAN BAY
OB-674	SPRAGUE AVE	40	30	1	74	14	11	36″ DIA	RARITAN BAY
OB-675	LORETTO AVE	40	29	58	74	14	16	13′ 6″ X 5′	RARITAN BAY
OB-676	TRACY AVE	40	30	57	74	15	44	4′ X 3′	ARTHUR KILL
OB-677	NASSAU PLACE	40	31	9	74	14	26	36″ DIA	ARTHUR KILL

OB-678	SAND LANE	40	35	18	74	4	52	10′ X 6′	LOWER NEW YORK BAY
OB-679	ATLANTIC AVE	40	34	54	74	4	14	DBL 10′ X 6′ 6″	LOWER NEW YORK BAY
OB-680	GREELEY AVE	40	34	2	74	5	21	DBL 15′ X 6′ 3″	LOWER NEW YORK BAY
OB-682	SEGUINE AVE	40	30	47	74	12	48	36″ DIA	LEMON CREEK
OB-685	850′ E/O ARTHUR KILL ROAD & PAGE AVE	40	31	47	74	14	35	48″ DIA	MILL CREEK
OB-686	MAIN ST	40	30	51	74	15	6	30″ DIA	ARTHUR KILL
OB-687	QUINTARD ST	40	35	18	74	4	30	10′ X 6′	MARSH
OB-688	NAUGHTON AVE	40	34	30	74	5	43	DBL 10′ X 6′ 6″	LOWER NEW YORK BAY
OB-688A	NAUGHTON AVE	40	35	8	74	5	51	42″ DIA	LAST CHANCE POND PARK MARSH
OB-689	MIDLAND AVE	40	34	7	74	5	10	8′ 6″ X 5′	LOWER NEW YORK BAY
OB-690	ARTHUR KILL & PAGE AVE	40	31	39	74	14	7	24″ DIA	ARTHUR KILL
OB-691	MILL POND	40	34	20	74	9	37	3′ X 2′6″	RICHMOND CREEK
OB-692	ST. ANDREWS ROAD	40	34	25	74	9	33	4′ X 2′	RICHMOND CREEK
OB-693	LIGHTHOUSE AVE	40	34	25	74	8	29	18″ DIA	RICHMOND CREEK
OB-694	MACE ST & LIGHTHOUSE AVE	40	34	24	74	8	23	24″ DIA	RICHMOND CREEK
OB-695	ST. GEORGES ROAD	40	34	33	74	8	1	4′ X 2′	RICHMOND CREEK
OB-696	BOYLE PLACE / NUGENT ST	40	34	35	74	8	60	5′ X 3′	RICHMOND CREEK
OB-697	MEISNER AVE & LIGHTHOUSE AVE	40	34	58	74	8	51	36″ DIA	RICHMOND CREEK
OB-698	BOOTH AVE	40	32	10	74	11	34	5′ X 3′2″	BLUE HERON
OB-699	EYLANDT ST	40	31	58	74	10	24	5′8″ X 3′7″	BLUE HERON
OB-700	KOCH POND	40	32	2	74	10	5	3′9″ X 2′5″	BLUE HERON
OB-701	SHIRLEY AVE	40	31	48	74	10	15	4′5″ X 2′10″	BLUE HERON
OB-702	NEWTON ST	40	31	41	74	10	20	3′9″ X 2′5″	BLUE HERON
OB-703	DOLE ST	40	31	39	74	10	18	18″ DIA	BLUE HERON
OB-704	POILLON AVE	40	31	46	74	11	34	30″ DIA	BLUE HERON
OB-705	BENNETT POND	40	32	8	74	11	15	3′9″ X 2′6″	ARBUTUS CREEK
OB-706	PHILIP AVE	40	32	1	74	11	51	3′9″ X 2′5″	ARBUTUS CREEK
OB-707	HUGUENOT POND	40	31	50	74	11	24	3′9″ X 2′5″	ARBUTUS CREEK
OB-708	ANDROVETTE POND	40	31	34	74	11	23	4′ X 2′8″	ARBUTUS CREEK
OB-709	LUTEN POND	40	31	29	74	11	19	6′4″ X 4″	MARSH
OB-710	SALA COURT	40	31	56	74	11	11	3′2″ X 2′	ARBUTUS CREEK
OB-711	RUGGLES ST	40	32	0	74	11	59	18″ DIA	MARSH
OB-712	CONVENT AVE	40	32	25	74	13	48	6′11″ X 4′5″	LEMON CREEK
OB-713	EDGEGROVE AVE	40	32	1	74	12	28	4′ X 2′	LEMON CREEK
OB-714	DARLINGTON AVE	40	31	58	74	12	27	3′ 2″ X 2′	LEMON CREEK
OB-715	MAGUIRE AVE	40	31	56	74	13	40	4′ X 2′	LEMON CREEK
OB-716	FOSTER ROAD	40	31	39	74	12	6	5′ X 3′ 2″	LEMON CREEK
OB-717	AMBOY ROAD	40	31	31	74	13	33	4′5″ X 2′10″	LEMON CREEK
OB-718	BAYVIEW AVE	40	31	11	74	12	16	5′ X 2′6″	LEMON CREEK
OB-719	BAYVIEW AVE	40	31	17	74	12	17	4′ X 4′	LEMON CREEK
OB-720	KOREAN WAR VETERANS MEMORIAL PARKWAY	40	32	2	74	12	57	60″ DIA	WOLFE'S POND
OB-721	CHISHOLM AVE	40	31	33	74	12	35	8′10″ X 5′8″ EGG	WOLFE'S POND
OB-722	CLERMONT AVE / FINLAY ST	40	30	3	74	15	52	DBL 7′3″ X 3′6″	RARITAN BAY
OB-723	HOPKINS AVE	40	33	21	74	8	43	36″ DIA	GREAT KILLS HARBOR
OB-724	BAY TERRACE	40	33	8	74	8	58	66″ DIA	GREAT KILLS HARBOR
OB-725	CLARK AVE & ARUTHUR KILL RD	40	34	16	74	9	52	7′ 3″ X 3′ 6″	MARSH
OB-726	REDGRAVE AVE	40	33	4	74	8	3	24″ DIA	GREAT KILLS
OB-727	NE/O AINSWORTH AVE	40	33	1	74	8	8	36″ DIA	GREAT KILLS
OB-728	VETERANS RD W AND TYRELLAN AVE	40	31	39	74	14	34	15′′	MARSH
OB-729	BILLIOU ST AND STECHER ST	40	31	55	74	11	13	90′′ X 42′′	POND

OB-730	ITHACA ST AND HYLAN BLVD	40	33	33	74	7	17	42''	STREAM WIDER THAN 8 FEET
OB-731	HYLAN BLVD AND BUFFALO ST	40	33	24	74	8	39	42''	MARSH
OB-732	STOBE AVE AND ZOE ST	40	35	3	74	6	0	72'' X 48''	RIVER
OB-733	MASON AV & BEDFORD AVE	40	34	33	75	34	13	10' X 3'	Stream wider than 8 feet
OB-734	N/O Patten Street	40	30	37	75	30	48	12"" DIA	ARTHUR KILL
OB-735	SOUTH BRIDGE STREET	40	31	28	75	31	24	36"" DIA	ARTHUR KILL
OB-736	HYLAN BOULEVARD & BERMUDA PLACE	40	34	56	75	34	12	24"" DIA	River Stream
OB-737	HYLAN BOULEVARD & BERMUDA PLACE	40	34	57	75	34	10	24"" DIA	Pond
OB-738	PURDY PLACE	40	30	45	75	30	22	5' X 3'	LEMON CREEK
OB-739	AMBOY ROAD	40	31	10	75	31	17	12"" DIA	MARSH
OB-740	HYLAN BLVD & BUFFALO STREET	40	31	12	75	52	22	20" DIA	GREAT KILLS HARBOR
OB-741	AULTMAN AVE & ST GEORGE RD	40	34	31	74	8	13	18" DIA	LIGHTHOUSE HILL STREAM
OB-742	SIGNS ROAD	40	36	9	75	36	42	36""DIA	MARSH
OB-743	NUGENT STREET	40	34	38	75	34	6	3.5' X 3'	Stream wider than 8 feet
OB-744	LINCOLN AVENUE	40	34	32	75	34	55	60""DIA	Stream wider than 8 feet
OB-745	AMBOY ROAD	40	31	16	75	31	56	24""DIA	MARSH
OB-746	OCEANIC AVENUE	40	31	58	75	31	58	20""DIA	RARITAN BAY
OB-747	GRANTWOOD AVENUE	40	33	18	75	33	2	48""DIA	MARSH
OB-748	HUGUENOT AVENUE	40	31	30	75	31	47	15""DIA	MARSH
OB-749	IONIA AVENUE	40	32	30	75	32	0	4.5' X 11'	Stream wider than 8 feet
OB-750	KINGDOM AVENUE	40	31	35	75	31	51	24""DIA	MARSH
OB-751	COLON STREET	40	31	51	75	31	50	20""DIA	Stream wider than 8 feet
OB-752	SHOTWELL AVE	40	33	18	75	49	5	42" DIA	ARDEN HEIGHTS WOODS MARSH
OB-753	LIPSETT AVENUE	40	32	4	75	32	33	30""DIA	MARSH
OB-754	EDGEGROVE AVENUE	40	32	30	75	32	4'	4.5' X 11'	Stream wider than 8 feet
OB-755	CARLTON BOULEVARD & JEFFERSON BOULEVARD	40	32	34	75	32	13	20""DIA	Stream wider than 8 feet
OB-756	WOODROW ROAD & SHOTWELL AVENUE	40	33	21	75	33	4	20""DIA	MARSH
OB-757	SHELDON AVENUE	40	32	37	75	32	43	7.6' X 5.8'	MARSH
OB-758	FINGAL STREET	40	32	11	75	32	39	20""DIA	MARSH
OB-759	ARDEN AVENUE & SNEDEN AVE	40	32	29	75	32	45	20""DIA	Pond
OB-760	ARDEN AVENUE & SNEDEN AVE	40	32	29	75	32	45	2.5' X 1.6'	Pond
OB-761	LACONIA AVENUE	40	34	52	75	34	20	12"" DIA	River Stream
OB-762	MASON AVENUE	40	34	48	75	34	26	42"" DIA	River Stream
OB-764	GRAHAM BOULEVARD	40	34	31	75	34	51	45"" DIA	River Stream
OB-765	MILL CREEK	40	31	15	74	13	19	5' x 3'	MILL CREEK
OB-766	ARDEN AVE	40	32	46	74	10	47	48" DIA	ANNADALE STREAM
OB-767	ARDEN AVE	40	32	46	74	10	47	48" DIA	ANNADALE STREAM
OB-768	ARDEN AVE	40	32	48	74	10	42	12" DIA	ANNADALE STREAM
OB-769	GRANTWOOD AVE	40	32	53	74	10	33	36" DIA	ANNADALE STREAM
OB-770	GRANTWOOD AVE	40	32	53	74	10	32	24" DIA	ANNADALE STREAM
OB-771	ARTHUR KILL ROAD	40	34	20	74	8	48	18" DIA	LATOURETTE PARK RIVER
OB-772	SHADYSIDE AVE & WOODVALE AVE	40	31	17	74	12	29	10" DIA	LEMON CREEK MARSH
OB-773	BAYVIEW AVENUE	40	31	18	74	12	17	4' X 4'	LEMON CREEK
OB-775	BALSAM PL & GERVIL ST	40	32	54	74	12	45	48" DIA	WOODBROOKE ESTATES COMMUNITY PARK STREAM
OB-776	MAGUIRE AVE & MC BAINE AVE	40	32	35	74	12	42	6.3' x 2'	ROSSVILLE POND
OB-777	HUGUENOT AVE & ARTHUR KILL RD	40	33	20	74	12	10	6.3' x 4'	ARTHUR KILL STREAM
OB-778	LEMON CREEK PARK	40	31	6	74	11	57	4'2" x 2'	LEMON CREEK MARSH
OB-779	BMP LC-15 (Lemon Creek)	40	31	22	74	12	4	30" DIA	LEMON CREEK MARSH
OB-780	BMP LC-17 (Lemon Creek)	40	31	22	74	12	0	4' X 3'	LEMON CREEK MARSH
OB-781	BMP LC-18 (Lemon Creek)	40	31	12	74	12	0	4'2" x 2'	LEMON CREEK MARSH

OB-782	FOREST HILL RD & YUKON AVE	40	34	26	74	9	49	18″ DIA	LATOURETTE PARK STREAM
OB-783	ROBERTS DRIVE	40	33	32	74	6	41	30″ DIA	GREAT KILLS PARK MARSH
OB-784	HYLAN BLVD	40	31	25	74	11	15	15″ DIA	WOLFE'S POND PARK MARSH
OB-785	LUTEN AVE	40	31	26	74	11	21	3.75' x 2.4'	WOLFE'S POND PARK MARSH
OB-786	BARCLAY AVE & SANDBORN ST	40	31	59	74	10	17	12″ DIA	BLUE HERON PARK POND

OWLS HEAD

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
OH-001	OWLS HEAD W.P.C.P OUTFALL	40	38	31	74	2	14	96″ DIA	UPPER NEW YORK BAY				
OH-002	64TH ST (REG #6A,B,C)	40	38	42	74	2	51	3BL 7' 6″ X 8' 10″	UPPER NEW YORK BAY	REG #6A, 6B, 6C			YES (ON 6C)
OH-003	49TH ST (REG #7A,B,C)	40	39	10	74	1	17	11' X 8' FT	UPPER NEW YORK BAY	REG #7A, 7B, 7C			YES (ON 7A)
OH-004	43RD ST (REG #7D)	40	39	20	74	1	1	6' X 4'	UPPER NEW YORK BAY	REG #7D, 19TH ST. PS			YES
OH-005	CARROLL ST BRIDGE	40	40	41	73	59	20	42″ DIA	GOWANUS CANAL	3RD AVE SEWER RELIEF			
OH-006	19TH ST (NORTH SIDE)	40	40	3	74	0	2	36″ DIA	GOWANUS CANAL	3RD AVE SEWER RELIEF			
OH-007	2ND AVE	40	40	32	73	59	27	78″ DIA	GOWANUS CANAL	2ND AVE P.S.			
OH-015	17TH AVE (REG #9A, B, C)	40	36	5	74	1	44	4BL 14' 6″ X 10'	GRAVESEND BAY	REG #9A, 9B, 9C			YES (ON 9A & 9B)
OH-017	92ND ST (REG #1)	40	37	14	74	2	30	3BL 7' 4″ X 7' 4″	UPPER NEW YORK BAY	REG #1			YES
OH-018	79TH ST (REG #3)	40	37	54	74	2	25	12' X 7'	UPPER NEW YORK BAY	REG #2, 3			YES (ON 3)
OH-019	71ST ST (REG #4)	40	38	13	74	2	16	48″ DIA	UPPER NEW YORK BAY	REG #4			YES
OH-020	BAY RIDGE AVE (REG #5)	40	38	21	74	2	12	3' X 3' FT	UPPER NEW YORK BAY	REG #5			
OH-021	W 15TH ST	40	34	60	73	59	2	3BL 15' X 9' 9″	CONEY ISLAND CREEK	REG #10, 11, AVE.V P.S.	YES		YES (ON 10 & 11)
OH-022	32ND ST (BUSH TERMINAL COMPLEX)	40	39	36	74	0	29	11' X 6' FT	GOWANUS BAY	2ND AVE SEWER RELIEF			
OH-024	23RD ST	40	39	49	74	0	1	3' 6″ X 2' 3″	GOWANUS BAY	3RD AVE SEWER RELIEF			
OH-025	29TH ST (BUSH TERMINAL COMPLEX)	40	39	43	74	0	23	66″ DIA	GOWANUS BAY	BUSH TERMINAL PS			
OH-026	22ND ST	40	39	51	73	60	59	36″ DIA	GOWANUS BAY	3RD AVE SEWER RELIEF			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
OH-606	W 15TH ST	40	35	0	73	59	2	5' X 5'	CONEY ISLAND CREEK
OH-607	E/O 9TH ST	40	40	27	73	60	47	12″ DIA	GOWANUS CANAL
OH-610	20TH AVE	40	35	51	74	0	20	3' 6″ X 3' 6″ FT	GRAVESEND BAY
OH-611	BAY PARKWAY	40	35	39	74	0	7	60″ DIA	GRAVESEND BAY
OH-612	25TH AVE	40	35	24	73	60	55	8' X 8'	GRAVESEND BAY
OH-613	15TH AVE	40	36	9	74	1	7	24″ DIA	GRAVESEND BAY
OH-614	27TH AVE (S/O BELT PARKWAY)	40	35	14	73	60	33	54″ DIA	GRAVESEND BAY
OH-615	BAY 43RD ST (S/O BELT PARKWAY)	40	35	20	73	60	35	5' 6″ X 5' 6″	GRAVESEND BAY
OH-616	21ST ST	40	39	55	74	0	3	24″ DIA	GOWANUS BAY

PORT RICHMOND

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
PR-001	PORT RICHMOND WPCP OUTFALL	40	38	29	74	7	29	96″ DIA	KILL VAN KULL				
PR-002	E/O TAYLOR ST	40	38	24	74	7	27	20″ DIA	KILL VAN KULL	REG #R-34			
PR-003	BROADWAY	40	38	30	74	7	7	15″ DIA	KILL VAN KULL	REG #R-33			
PR-004	BARD AVE	40	38	44	74	7	32	18″ DIA	KILL VAN KULL	REG #R-29			
PR-005	30' N/O KISSEL AVE	40	38	44	74	6	24	20″ DIA	KILL VAN KULL	REG #R-28			
PR-006	CLINTON AVE	40	38	43	74	6	54	36″ DIA	KILL VAN KULL	REG #R-23			

PR-007	SAILOR SNUG HARBOR (BRENTWOOD AVE)	40	38	44	74	6	7	15″ DIA	KILL VAN KULL	REG #R-27			
PR-008	FRANKLIN AVE	40	38	46	74	6	35	15″ DIA	KILL VAN KULL	REG #R-21			
PR-009	JERSEY ST	40	38	50	74	5	22	6′ X 4′6″	KILL VAN KULL	REG #R-20			
PR-010	ST. PETERS PLACE	40	38	55	74	5	3	30″ DIA	UPPER NEW YORK BAY	REG #R-19			
PR-011	HAMILTON AVE	40	38	49	74	5	36	30″ DIA	UPPER NEW YORK BAY	REG #R-18			
PR-013	VICTORY BOULEVARD	40	38	17	74	4	21	7′ 1″ X 4′ 1″	UPPER NEW YORK BAY	REG #R-17			
PR-014	BALTIC ST	40	37	51	74	4	23	DBL 6′2″ X 3′6″	UPPER NEW YORK BAY	REG #R-15			
PR-015	S/O DOCK ST	40	37	33	74	4	21	3′ 6″ X 2′ 4″	UPPER NEW YORK BAY	REG #R-11			
PR-016	MARINE HOSPITAL	40	37	28	74	4	20	20″ DIA	UPPER NEW YORK BAY	REG #R-10			
PR-017	NORWOOD AVE	40	37	21	74	4	14	48″ DIA	UPPER NEW YORK BAY	REG #R-9			
PR-018	N/O CAMDEN ST	40	37	15	74	4	9	36″ DIA	UPPER NEW YORK BAY	REG #R-8			
PR-019	LYNHURST AVE	40	37	10	74	4	2	13′ X 6′ FT	UPPER NEW YORK BAY	REG #R-7			YES
PR-020	N/O SYLVA LANE	40	37	2	74	4	53	15″ DIA	UPPER NEW YORK BAY	REG #R-5			
PR-021	HYLAN BOULEVARD	40	36	56	74	4	47	10″ DIA	UPPER NEW YORK BAY	REG #R-4			
PR-023	NAUTILUS ST	40	36	43	74	4	35	6′6″ X 5′11″	UPPER NEW YORK BAY	REG #R-3			
PR-023A	NAUTILUS ST	40	36	43	74	4	36	20″ DIA	UPPER NEW YORK BAY	REG #R-2			
PR-023B	NAUTILUS ST	40	36	43	74	4	36	20″ DIA	UPPER NEW YORK BAY	REG #R-1			
PR-024	W/O HOLLAND AVE	40	38	41	74	10	18	16″ DIA	KILL VAN KULL	REG #R-1W			
PR-025	SOUTH AVE	40	38	28	74	10	57	10″ DIA	KILL VAN KULL	REG #R-2W			
PR-026	HARBOR ROAD	40	38	18	74	10	37	52″ DIA	KILL VAN KULL	REG #R-3W			
PR-027	UNION AVE	40	38	17	74	9	28	12″ DIA	KILL VAN KULL	REG #R-4W			
PR-028	HOUSEMAN AVE	40	38	15	74	9	55	DBL 5′ 11-1/2″ X 2′9″	KILL VAN KULL	REG #R-5W			
PR-029	NICHOLAS ST	40	38	27	74	8	21	DBL 8′ 6″ X 6′	KILL VAN KULL	REG #R-6W			YES
PR-030	SYLVATON TERRANCE	40	37	5	74	4	55	16″ DIA	UPPER NEW YORK BAY	REG #R-6			
PR-031	CANAL ST	40	37	37	74	4	22	DBL 3′1″ X 3′6″	UPPER NEW YORK BAY	REG #13			YES
PR-032	VICTORY BOULEVARD	40	38	14	74	4	14	24″ DIA	UPPER NEW YORK BAY	REG #16			
PR-033	ELIZABETH AVE	40	38	38	74	7	47	12″ DIA	KILL VAN KULL	REG #R-31			
PR-034	BEMENT AVE	40	38	37	74	7	50	12″ DIA	KILL VAN KULL	REG #R-32			
PR-035	BODINE ST	40	38	25	74	8	34	18″ DIA	KILL VAN KULL	REG #R-35			YES
PR-036	RECTOR ST	40	38	15	74	8	40	9′ X 4′	KILL VAN KULL	REG #R-36			
PR-037	PORT RICHMOND AVE	40	38	28	74	8	52	5′ X 3′	KILL VAN KULL	REG #R-37			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
PR-603	DAVIS AVE	40	38	42	74	7	39	84″ DIA	KILL VAN KULL
PR-612	SIGNS ROAD (100′ W/O DINSMORE ST)	40	36	8	74	10	18	DBL 12′ X 5′ 6″	MAIN CREEK
PR-613	RECTOR ST	40	38	15	74	8	40	DBL13′ 10″ X 5′ 4″	KILL VAN KULL
PR-614	CLOVE ROAD	40	37	6	74	6	29	7′ X 4′ 8″	CLOVE LAKE
PR-615	LOGAN AVE	40	36	56	74	6	23	8′ 10″ X 5′ 8″	CLOVE LAKE
PR-616	MANOR ROAD	40	36	53	74	7	26	36″ DIA	CLOVE LAKE
PR-617	CLOVE ROAD	40	37	23	74	7	5	42″ DIA	MARTLING LAKE
PR-618	FOREST AVE	40	37	39	74	7	21	36″ DIA	BROOKS LAKE
PR-619	FOREST AVE	40	37	39	74	7	22	12′ X 5′6″	BROOKS LAKE
PR-621	GARRICK ST	40	37	21	74	10	16	DBL 16′ X 6′6″	OLD PLACE CREEK
PR-622	END OF SWAN ST AND MURRAY HULBERT AV	40	38	6	74	4	23	21″ DIA	KILL VAN KULL
PR-623	RICHMOND TER AND TOMPKINS CT	40	38	26	74	7	21	96′′ X 60′′	KILL VAN KULL
PR-624	BEMENT AVE AND RICHMOND TER	40	38	37	74	7	50	48′′	KILL VAN KULL
PR-625	RICHMOND TERRACE & BROADWAY	40	38	26	75	38	54	10′ X 4.5′	KILL VAN KULL

PR-626	KILL VAN KULL SHORELINE	40	38	43	75	54	5	12″ DIA	KILL VAN KULL
PR-627	LAFAYETTE AVENUE	40	38	43	75	38	14	54″ DIA	Stream wider than 8 feet
PR-628	FOREST HILL ROAD	40	35	58	75	35	35	18″ DIA	Pond
PR-629	HIRSCH LANE	40	36	53	75	36	53	12″ DIA	MARSH
PR-630	GRAHAM AVENUE	40	36	50	75	36	51	12″ DIA	MARSH
PR-631	MEREDITH AVENUE	40	35	55	75	35	28	18″ DIA	MARSH
PR-632	FOREST HILL RD & FIELD ST	40	35	38	74	8	36	3.75′ x 2.4′	WILLOWBROK WETLAND

RED HOOK

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
RH-001	RED HOOK W.P.C.P. OUTFALL	40	42	15	73	59	38	96″ DIA	NAVY YARD BASIN				
RH-002	HUDSON AVE (REG # R-21A)	40	42	21	73	59	52	15″ DIA	EAST RIVER	REG #R-21A			YES
RH-003	HUDSON AVE (REG # R-21)	40	42	21	73	59	52	4′ 6″ X 7′ 3″	EAST RIVER	REG #R-21			
RH-005	GOLD ST (REG # R-20A)	40	42	20	73	59	57	168″ DIA	EAST RIVER	REG #R-20A			YES
RH-006	PEARL ST (REG # R-19A)	40	42	19	73	59	15	36″ DIA	EAST RIVER	REG #R-19A			
RH-007	ADAMS ST (REG # R-19)	40	42	16	73	59	18	15″ DIA	EAST RIVER	REG #R-19			
RH-008	WASHINGTON ST (REG # R-18A)	40	42	18	73	59	23	60″ DIA	EAST RIVER	REG #R-18A			
RH-009	MAIN ST (REG # R-18)	40	42	16	73	59	26	2′ X 2′	EAST RIVER	REG #R-18			
RH-010	ORANGE ST (REG # R-16)	40	42	0	73	60	50	18″ DIA	EAST RIVER	REG #R-16			
RH-011	MONTAGUE ST (REG # R-15)	40	41	46	73	60	59	4′ 0″ X 4′ 0″	EAST RIVER	REG #R-15			
RH-012	CADMAN PLAZA (REG # R-17)	40	42	11	73	60	42	6′ X 6′ FT	EAST RIVER	REG #R-17			
RH-013	JORALEMON ST (REG # R-14)	40	41	39	74	0	4	18″ DIA	EAST RIVER	REG #R-14			
RH-014	ATLANTIC AVE (REG # R-13)	40	41	29	74	0	3	24″ DIA	BUTTERMILK CHANNEL	REG #R-13			
RH-016	AMITY ST (REG # R-12)	40	41	26	74	0	3	8′ 6″ X 8′ 6″	BUTTERMILK CHANNEL	REG #R-12			
RH-018	KANE ST (REG # R-11)	40	41	20	74	0	15	5′ 7″ X 3′ 9″	BUTTERMILK CHANNEL	REG #R-11			
RH-019	HAMILTON AVE (REG # R-9)	40	41	11	74	0	29	72″ DIA	BUTTERMILK CHANNEL	REG #R-9	(HAMIL-TON AVE PS??)		
RH-020	DEGRAW ST (REG # R-10)	40	41	12	74	0	20	18″ DIA	BUTTERMILK CHANNEL	REG #R-10			
RH-021	SACKETT ST (REG # R-9A)	40	41	13	74	0	27	48″ DIA	BUTTERMILK CHANNEL	REG #R-9A			
RH-022	S/O BOWNE ST (REG # R-8)	40	40	60	74	1	35	24″ DIA	BUTTERMILK CHANNEL	REG #R-8			
RH-023	COMMERCE ST (REG # R-7)	40	40	57	74	1	38	24″ DIA	BUTTERMILK CHANNEL	REG #R-7			
RH-024	VERONA ST (REG # R-6)	40	40	53	74	1	43	24″ DIA	BUTTERMILK CHANNEL	REG #R-6			
RH-025	PIONEER ST (REG # R-5)	40	40	50	74	1	47	30″ DIA	BUTTERMILK CHANNEL	REG #R-5			
RH-028	WOLCOTT ST (REG # R-2)	40	40	50	74	1	4	72″ DIA	BUTTERMILK CHANNEL	REG #R-2			YES
RH-029	VAN BRUNT ST (REG # R-1)	40	40	25	74	1	2	24″ DIA	UPPER NEW YORK BAY	REG #R-1, VAN BLANT ST. PS			
RH-030	HICKS ST	40	40	7	74	0	26	54″ DIA	GOWANUS BAY	CSO-2			
RH-030A	W/O HENRY ST	40	40	7	74	0	25	54″ DIA	GOWANUS BAY	CSO-2			
RH-031	CREAMER ST	40	40	17	73	60	56	72″ DIA	GOWANUS CANAL	BOND-LORRAINE SWR RELIEF			
RH-033	DOUGLASS ST (REG # R-25)	40	40	53	73	59	13	42″ DIA	GOWANUS CANAL	REG #R-25	YES		
RH-034	HEAD OF GOWNAUS CANAL (GOWANUS PUMPING STATION)	40	40	54	73	59	13	4BL 10′ X 10′	GOWANUS CANAL	GOWANUS PS	YES		
RH-035	BOND ST	40	40	34	73	60	33	DBL 24″ DIA	GOWANUS CANAL	CSO-3, BOND-LORRAINE SWR RELIEF			
RH-036	PRESIDENT ST (REG # R-23)	40	40	44	73	59	19	18″ DIA	GOWANUS CANAL	REG #R-22			
RH-037	SACKETT ST (REG # R-23)	40	40	48	73	59	16	18″ DIA	GOWANUS CANAL	REG #R-23			
RH-038	DEGRAW ST (REG # R-24)	40	40	51	73	59	14	12′ 0″ X 5′ 2-1/2″	GOWANUS CANAL	REG #R-24			
RH-040	EAST RIVER & NAVY YARD	40	42	12	73	59	39	72″ DIA	NAVY YARD BASIN	REG #R-26			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
RH-601	GOWANUS CANAL & W.9TH ST	40	40	28	73	60	47	12"DIA	GOWANUS CANAL
RH-602	SULLIVAN ST	40	40	51	74	1	1	15" DIA	BUTTERMILK CHANNEL

ROCKAWAY

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
ROC-001	FAR ROCKAWAY W.P.C.P OUTFALL	40	35	4	73	50	47	72" DIA	GRASS HASSOCK CHANNEL				
ROC-003	PLANT OUTFALL (FAR ROCKAWAY WPCP)	40	35	5	73	50	44	72" DIA	GRASS HASSOCK CHANNEL	PLANT BYPASS			
ROC-013	BEACH 93RD ST (CSO)	40	35	18	73	49	5	12'" DIA	GRASS HASSOCK CHANNEL				
ROC-014	BEACH 91ST STREET (REG #D-2)	40	35	21	73	48	59	16" DIA	GRASS HASSOCK CHANNEL				
ROC-016	BAYSWATER AVE	40	36	26	73	46	12	60" DIA	GRASS HASSOCK CHANNEL	BAYSWATER P.S.			
ROC-017	BEACH 3RD ST	40	35	51	73	44	19	DBL 13' 6" X 5'	HEMPSTEAD BAY	SEAGIRT AVE. P.S.			
ROC-029	BEACH 106TH ST (REG # D-1, 2)	40	35	5	73	50	43	72" DIA	GRASS HASSOCK CHANNEL	REG #1, 2			YES (ON 1 & 2)
ROC-031	REDFERN AVE	40	36	37	73	45	20	8' X 6' 6"	NEGRO BAR CHANNEL				

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
ROC-601	BEACH 5TH ST	40	35	46	73	44	26	42" DIA	HEMPSTEAD BAY
ROC-611	BEACH 147TH ST	40	34	29	73	52	55	48" DIA	ROCKAWAY INLET
ROC-614	BEACH 145TH ST	40	34	32	73	52	49	48" DIA	ROCKAWAY INLET
ROC-617	BEACH 141ST ST	40	34	38	73	52	38	48" DIA	ROCKAWAY INLET
ROC-618	BEACH 140TH ST	40	34	40	73	52	35	20" DIA	ROCKAWAY INLET
ROC-619	BEACH 139TH ST	40	34	41	73	52	33	48" DIA	ROCKAWAY INLET
ROC-624	BEACH 136TH ST	40	34	45	73	51	24	60" DIA	ROCKAWAY INLET
ROC-625	BEACH 130TH ST	40	34	54	73	51	8	7' 7" X 4' 10"	ROCKAWAY INLET
ROC-627	BEACH 126TH ST	40	34	56	73	51	54	54" DIA	ROCKAWAY INLET
ROC-629	BEACH 121ST ST	40	34	54	73	51	35	5' X 3' 2"	ROCKAWAY INLET
ROC-630	BEACH 118TH ST	40	34	54	73	50	25	8' X 6' 6"	ROCKAWAY INLET
ROC-631	BEACH 106TH ST	40	35	5	73	50	43	60" DIA	GRASS HASSOCK CHANNEL
ROC-633	BEACH 74TH ST	40	35	33	73	48	9	12' 6" X 4' FT	VERNAM BASIN
ROC-634	ELIZABETH AVE	40	35	43	73	48	13	24" DIA	VERNAM BASIN
ROC-635	ELIZABETH AVE	40	35	46	73	47	21	42" DIA	SOMMERVILLE BASIN
ROC-636	THURSBY AVE	40	35	43	73	47	21	DBL 7' X 4'	SOMMERVILLE BASIN
ROC-637	BEACH 40TH ST	40	35	56	73	46	26	7' X 5'	GRASS HASSOCK CHANNEL
ROC-638	BEACH 38TH ST	40	35	54	73	46	16	54" DIA	GRASS HASSOCK CHANNEL
ROC-641	EGMONT PLACE	40	36	44	73	46	54	54" DIA	NEGRO BAR CHANNEL
ROC-648	BEACH 49TH ST	40	35	49	73	47	48	8' 6" X 5' FT	CONCH BASIN
ROC-649	ALAMEDA AVE	40	35	52	73	47	53	66" DIA	CONCH BASIN
ROC-651	FAR ROCKAWAY BOULEVARED	40	35	53	73	46	5	DBL 12' 9" X 6'	GRASS HASSOCK CHANNEL
ROC-652	DICKENS ST	40	36	37	73	46	35	24" DIA	NEGRO BAR CHANNEL
ROC-653	BEACH 77TH ST	40	35	29	73	48	16	7' 6" X 4' 6"	BARBADOES BASIN
ROC-656	BEACH 87TH ST	40	35	29	73	49	46	18" DIA	GRASS HASSOCK CHANNEL
ROC-657	BEACH 84TH ST	40	35	32	73	49	35	11' X 4' 6"	GRASS HASSOCK CHANNEL
ROC-658	BEACH 72ND ST	40	35	57	73	48	5	12" DIA	GRASS HASSOCK CHANNEL
ROC-659	BEACH 68TH ST	40	35	58	73	48	52	16" DIA	GRASS HASSOCK CHANNEL
ROC-666	CHURCH ROAD	40	36	16	73	49	5	18" DIA	BROAD CHANNEL
ROC-667	CHURCH ROAD	40	36	19	73	49	5	24" DIA	BROAD CHANNEL

ROC-670	FALCON AVE	40	35	54	73	46	7	9′ X 4′ FT	GRASS HASSOCK CHANNEL
ROC-671	BEACH 127TH ST	40	34	56	73	51	57	5′ 8″ X 3′ 7″	ROCKAWAY INLET
ROC-672	BEACH 125TH ST	40	34	55	73	51	50	5′ X 3′ 2″	ROCKAWAY INLET
ROC-674	BEACH 136TH ST	40	34	47	73	51	22	5′ X 3′ 2″	ROCKAWAY INLET
ROC-675	BEACH 134TH ST	40	34	48	73	51	19	5′ X 3′ 2″	ROCKAWAY INLET
ROC-676	BEACH 132ND ST	40	34	51	73	51	13	54″ DIA	ROCKAWAY INLET
ROC-677	BEACH 128TH ST (REG # D-20)	40	34	56	73	51	1	18″ DIA	ROCKAWAY INLET
ROC-678	BEACH 124TH ST	40	34	54	73	51	46	5′ X 3′ 2″	ROCKAWAY INLET
ROC-679	BEACH 122ND ST (REG # D-18)	40	34	54	73	51	39	5′ X 3′ 2″	ROCKAWAY INLET
ROC-680	BEACH 108TH ST (REG # D-14)	40	35	3	73	50	52	6′ X 4′ FT	GRASS HASSOCK CHANNEL
ROC-684	BEACH 137 ST AND BEACH CHANNEL DR	40	34	44	73	51	27	60′′ X 38′′	ROCKAWAY INLET
ROC-685	BURCHELL AVE AND BARBADOES DR	40	35	45	73	48	15	12′′	VERNAM BASIN
ROC-686	CHANNEL RD AND E 14 RD	40	36	10	73	49	7	18′′	BROAD CHANNEL
ROC-688	THURSBY AVE	40	35	43	73	47	27	13′ X 5′ FTRC	SOMMERVILLE BASIN
ROC-689	BEACH CHANNEL DR AND BEACH 138 ST	40	34	42	73	52	30	53′′ X 34′′	ROCKAWAY INLET
ROC-690	E 9 RD AND LANARK RD	40	36	25	73	49	56	30′′ X 19′′	BROAD CHANNEL
ROC-691	BEACH CHANNEL SHORELINE	40	35	16	74	10	49	12″ DIA	GRASS HASSOCK CHANNEL
ROC-692	BEACH CHANNEL SHORELINE	40	35	14	74	10	46	12″ DIA	GRASS HASSOCK CHANNEL
ROC-693	BEACH 88th STREET	40	35	26	73	48	52	8′ 2″ x 5′ 3″	GRASS HASSOCK CHANNEL
ROC-695	Mott Basin Shoreline - North of Battery Rd and Chandler Street intersection	40	36	37	73	45	20	9.5′ x 4.5′	NEGRO BAR CHANNEL
ROC-696	BEACH 106TH STREET	40	35	5	73	49	42	36″ DIA	GRASS HASSOCK CHANNEL
ROC-697	BEACH 98TH ST (REG # D-7,D-8,D-9,D-10,D-11)	40	35	12	73	49	16	36″ DIA	GRASS HASSOCK CHANNEL
ROC-698	BEACH 98TH ST (REG # D-6)	40	35	13	73	49	16	24″ DIA	GRASS HASSOCK CHANNEL
ROC-699	MOTT AVE	40	36	46	73	46	17	4″ DIA	GRASS HASSOCK CHANNEL WETLAND
ROC-700	MOTT AVE	40	36	27	73	45	45	12″ DIA	NEGRO BAR CHANNEL WETLAND
ROC-701	BEACH CHANNEL DR & ROCKAWAY FREEWAY	40	34	59	73	50	5	18″ DIA	GRASS HASSOCK CHANNEL

TALLMAN ISLAND

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
TI-001	127TH ST (WPCP OUTFALL)	40	47	52	73	50	25	60″ DIA	EAST RIVER	PLANT OUTFALL			
TI-003	N/O 7TH AVE (REG # 10A)	40	47	35	73	50	45	11′ X 7′	EAST RIVER	REG #10A, 10B			YES (ON 10B)
TI-004	151ST ST (REG # 11)	40	47	50	73	49	47	42″ DIA EGG	EAST RIVER	REG #11			
TI-005	154TH ST (REG # 12)	40	47	47	73	48	24	24″ DIA	EAST RIVER	REG #12			
TI-006	24TH AVE	40	46	56	73	46	15	10′ X 7′ 6″	LITTLE NECK BAY	24 AVE P.S.			
TI-007	NORTHERN BLVD	40	45	47	73	45	7	18″ DIA	ALLEY CREEK	OLD DOUG P.S.			
TI-008	46TH AVE (REG # 46, 47, 48, 49)	40	45	42	73	45	4	10′ X 7′ 6″	ALLEY CREEK	REG #46, 47, 48, 49			YES (ON 46, 47, & 49)
TI-010	ROOSEVELT AVE (REG # 30, 31, 40, 44)	40	45	20	73	50	19	3BL 18′ 6″ X 10′	FLUSHING CREEK	REG #30, 31, 40, 44	YES		YES (ON 30 & 40)
TI-011	32ND AVE (REG # 51 - 54)	40	45	57	73	50	21	DB 96″ DIA	FLUSHING CREEK	REG #9, 51, 52, 53, 54		YES	YES (ON 9)
TI-012	29TH AVE (REG # 9)	40	46	19	73	51	59	10″ DIA	EAST RIVER	122ND ST P.S.			
TI-014	23RD AVE (REG # 7)	40	46	43	73	51	58	12″ DIA	EAST RIVER	REG #7			
TI-015	22ND AVE (REG # 6)	40	46	49	73	51	1	12″ DIA	EAST RIVER	REG #6			
TI-016	20TH AVE (REG # 5)	40	46	54	73	51	57	60″ DIA	EAST RIVER	REG #5			
TI-017	15TH AVE (REG # 4)	40	47	1	73	51	29	12″ DIA	EAST RIVER	REG #4			
TI-018	14TH AVE (REG # 3)	40	47	8	73	52	32	7′ 7″ X 4′ 10″ EGG	EAST RIVER	REG #3			
TI-019	9TH AVE (REG # 2)	40	47	21	73	51	16	15″ DIA	EAST RIVER	REG #2			
TI-020	COLLEGE PLACE (REG # 1)	40	47	40	73	51	56	54″ DIA	EAST RIVER	REG #1			
TI-022	40TH ROAD (REG # 55 - 58)	40	45	22	73	50	19	8′ 6″ X 6′	FLUSHING CREEK	REG #55, 56, 57, 58	YES		

TI-023	CRYDERS LANE (REG # 13)	40	47	21	73	48	37	13′ 6″ X 8′	EAST RIVER	REG #13, CLEARVIEW P.S.			YES (ON 13)
TI-024	61ST AVE	40	45	24	73	45	41	DB 6′ X 6′	ALLEY CREEK	NEW DOUG P.S.			
TI-025	400′ SOUTH OF LIRR BRIDGE	40	45	51	73	45	10	52′ 6″ X 9′ 0″	ALLEY CREEK	ALLEY CREEK CSO STORAGE FACILITY			
TI-026	W/O 154TH STREET	40	47	47	73	48	23	48″ DIA	EAST RIVER	REG #			

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER
		DEG	MIN	SEC	DEG	MIN	SEC		
TI-601	NORTHERN BOULEVARD (SOUTH SIDE)	40	45	45	73	50	11	30″ DIA	FLUSHING CREEK
TI-603	NORTHERN BOULEVARD (NORTH SIDE)	40	45	47	73	50	11	30″ DIA	FLUSHING CREEK
TI-605	300′ W/O WHITESTONE EXPRESSWAY	40	45	60	73	50	25	DB 6′ 9″ X 4′ 11″	FLUSHING CREEK
TI-609	121ST ST	40	47	46	73	51	47	36″ DIA	EAST RIVER
TI-610	147TH ST	40	47	52	73	49	26	48″ DIA	EAST RIVER
TI-615	9TH AVE	40	47	34	73	48	41	54″ DIA	EAST RIVER
TI-616	12TH AVE	40	47	30	73	48	42	24″ DIA	EAST RIVER
TI-617	12TH ROAD	40	47	26	73	48	40	18″ DIA	EAST RIVER
TI-618	14TH AVE	40	47	23	73	48	39	18″ DIA	EAST RIVER
TI-619	CRYDERS LANE	40	47	21	73	48	38	18″ DIA	EAST RIVER
TI-623	28TH AVE	40	46	46	73	46	5	24″ DIA	LITTLE NECK BAY
TI-624	35TH AVE	40	46	20	73	46	48	10′ X 4′	LITTLE NECK BAY
TI-631	31ST ROAD	40	46	1	73	50	22	48″ DIA	FLUSHING CREEK
TI-633	250′ S/O 17TH AVE	40	47	9	73	46	26	54″ DIA	LITTLE NECK BAY
TI-634	FORT TOTTEN SOUTH JETTY	40	47	28	73	47	54	24″ DIA	EAST RIVER
TI-646	POPPENHUSEN AVE	40	47	28	73	51	10	30″ DIA	EAST RIVER
TI-653	SANDHILL ROAD	40	46	19	73	45	39	48″ DIA	UDALL'S COVE
TI-654	20′ N/O NORTHERN BOULEVARD	40	45	49	73	45	6	54″ DIA	ALLEY CREEK
TI-655	223RD ST & NORTHERN BOULEVARD	40	45	49	73	45	7	18″ DIA	ALLEY CREEK
TI-656	39TH AVE	40	46	8	73	45	16	60″ DIA	LITTLE NECK BAY
TI-658	233RD PLACE	40	46	20	73	45	14	39″ DIA	LITTLE NECK BAY
TI-660	39TH AVE & 248TH ST	40	46	23	73	45	40	12″ DIA	AURORA POND (E)
TI-661	208TH ST	40	47	26	73	47	2	30″ DIA	EAST RIVER
TI-666	9TH AVE	40	47	21	73	50	53	48″ DIA	EAST RIVER
TI-670	100′ N/O NORTH SHORE M.T.S.	40	46	16	73	51	56	83″ X 53″ EGG	EAST RIVER
TI-671	W/O 8TH AVE	40	47	23	73	51	16	36″ DIA	EAST RIVER
TI-673	FLUSHING BAY & 25TH AVE	40	46	37	73	51	57	48″ DIA	EAST RIVER
TI-674	9TH AVE	40	47	21	73	50	15	18″ DIA	EAST RIVER
TI-675	131ST ST	40	47	20	73	50	14	72″ DIA	EAST RIVER
TI-676	POWELLS COVE BLVD	40	47	32	73	50	12	4′ 5″ X 2′ 10″ EGG	EAST RIVER
TI-677	SANDHILL RD	40	46	21	73	44	40	72″ DIA	UDALLS COVE PARK POND
TI-678	40 AVE & 247 ST	40	46	20	73	44	37	30″ DIA	UDALLS COVE PARK POND
TI-679	BROOKSIDE ST & 34 AVE	40	46	35	73	44	40	5.5′ x 2′	UDALLS COVE PARK POND

WARDS ISLAND

OUTFALL ID	OUTFALL LOCATION	LATITUDE			LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
		DEG	MIN	SEC	DEG	MIN	SEC						
WIB-053	W 255TH ST (REG # R-3)	40	54	18	73	55	50	7′ X 4′	HUDSON RIVER	REG #R-3			
WIB-054	W 248TH ST (REG # R-2)	40	53	51	73	55	0	8′ X 6′	HUDSON RIVER	REG #R-2			

WIB-055	W 236TH ST (REG # R-1)	40	53	18	73	55	12	6′ X 4′ 6″	HUDSON RIVER	REG #R-1			
WIB-056	W 192ND ST (REG # 67)	40	52	13	73	55	33	DBL 15′ X 9′ 2″	HARLEM RIVER	REG #67			YES
WIB-057	LANDING ROAD (REG # 66)	40	51	47	73	55	46	66″ DIA	HARLEM RIVER	REG #66			YES
WIB-058	W 178TH ST (REG # 65)	40	51	21	73	55	13	57″ DIA	HARLEM RIVER	REG #65			
WIB-059	W 176TH ST (REG # 64)	40	51	2	73	55	27	72″ DIA	HARLEM RIVER	REG #64			
WIB-060	200′ N/O HIGH BRIDGE (REG # 62)	40	50	34	73	56	45	DB 12′ X 7′ 4″	HARLEM RIVER	REG #62			
WIB-061	WEST 167TH ST (REG # 61)	40	50	25	73	56	50	42″ DIA	HARLEM RIVER	REG #61			
WIB-062	JEROME AVE (REG # 60)	40	49	42	73	56	59	10′ X 7′	HARLEM RIVER	REG #60, 60A			YES
WIB-063	S/O MCCOMBS DAM BRIDGE (REG # 72)	40	49	40	73	56	59	48″ DIA	HARLEM RIVER	REG #72			
WIB-064	E 149TH ST (REG # 59)	40	49	11	73	56	56	7′ X 7′	HARLEM RIVER	REG #59			
WIB-065	PARK AVE (REG # 57)	40	48	39	73	56	58	36″ DIA	HARLEM RIVER	REG #57			
WIB-066	THIRD AVE BRIDGE (NORTH SIDE) (REG # 56)	40	48	29	73	56	54	4′ X 2′ 8″ EGG	HARLEM RIVER	REG #56			
WIB-067	LINCOLN AVE (REG # 55)	40	48	23	73	56	50	60″ DIA	HARLEM RIVER	REG #55			
WIB-068	BROOK AVE (REG # 53, 54)	40	48	9	73	55	23	12′ X 9′ 10″	BRONX KILL	REG #53, 54			YES (ON 53)
WIB-069	CYPRESS AVE (REG # 71)	40	47	57	73	55	10	2′ 2″ X 3′	BRONX KILL	REG #71			
WIB-070	E 134TH ST (REG # 70)	40	47	56	73	54	30	4′ 2″ X 3′ 2″ EGG	EAST RIVER	REG #70			
WIB-071	E 138TH ST (REG # 69)	40	48	5	73	54	22	60″ DIA	EAST RIVER	REG #69			
WIB-072	E 149TH ST (REG # 68)	40	48	18	73	54	8	9′ X 6′ 6″	EAST RIVER	REG #68			YES
WIB-073	SAINT ANN'S AVE (REG # 73)	40	48	6	73	55	18	DBL 144″ DIA	BRONX KILL	REG #73			
WIB-075	E 138TH ST (REG # 58)	40	48	50	73	56	56	12′ X 6′ 3″	HARLEM RIVER	REG #58			YES
WIB-076	W/O BRADLEY TERRACE (REG # MH-1)	40	52	43	73	55	21	54″ DIA	SPUYTEN DUYVIL CREEK	REG #MH-1			
WIB-077	TEUNISSEN PLACE (REG # MH-2)	40	52	32	73	55	58	8′ 6″ X 7′	SPUYTEN DUYVIL CREEK	REG #MH-2			
WIB-078	BROADWAY BRIDGE (NORTH SIDE) (REG # MH-3)	40	52	27	73	55	39	5′ X 4′ 6″	SPUYTEN DUYVIL CREEK	REG #MH-3			
WIB-079	750′ N/O W 261ST ST (REG # R-4)	40	54	54	73	55	38	18″ DIA	HUDSON RIVER	REG #R-4			
WIM-001	WARDS ISLAND W.P.C.P. OUTFALL	40	47	11	73	55	15	144″ DIA	EAST RIVER				
WIM-002	E 73RD ST (REG # 1)	40	45	59	73	57	2	3′ 6″ X 2′ 0″ EGG	EAST RIVER	REG #1			
WIM-003	E 74TH ST (REG # 2A, 2B)	40	46	1	73	57	0	72″ DIA	EAST RIVER	REG #2A, 2B			YES (ON 2A)
WIM-004	E 75TH ST (REG # 3)	40	46	3	73	57	58	3′ 6″ X 2′ 0″ EGG	EAST RIVER	REG #3			
WIM-005	E 76TH ST (REG # 4)	40	46	6	73	57	57	3′ 6″ X 2′ 0″ EGG	EAST RIVER	REG #4			
WIM-006	E 77TH ST (REG # 5)	40	46	8	73	57	55	3′ 6″ X 3′ 0″ EGG	EAST RIVER	REG #5			
WIM-007	E 78TH ST (REG # 6)	40	46	10	73	57	53	3′ X 2′ EGG	EAST RIVER	REG #6			
WIM-008	E 79TH ST (REG # 7)	40	46	13	73	57	51	60″ DIA	EAST RIVER	REG #7			YES
WIM-009	E 83RD ST (REG # 8)	40	46	21	73	57	42	16″ DIA	EAST RIVER	REG #8			
WIM-010	E 84TH ST (REG # 9)	40	46	23	73	57	40	16″ DIA	EAST RIVER	REG #9			
WIM-011	E 86TH ST (REG # 10)	40	46	27	73	57	36	5′ X 5′	EAST RIVER	REG #10			
WIM-012	E 89TH ST (REG # 11)	40	46	35	73	57	31	60″ DIA	EAST RIVER	REG #11			
WIM-013	E 90TH ST (REG # 12)	40	46	40	73	57	33	4′ X 2′ 4″ EGG	EAST RIVER	REG #12			
WIM-014	E 91ST ST (REG # 13)	40	46	42	73	57	34	15″ DIA	EAST RIVER	REG #13			
WIM-015	E 92ND ST (REG # 14)	40	46	47	73	57	36	48″ DIA	EAST RIVER	REG #14			
WIM-016	E 95TH ST (REG # 15)	40	46	55	73	57	38	48″ DIA	EAST RIVER	REG #15			
WIM-017	E 96TH ST (REG # 16)	40	46	58	73	57	37	42″ DIA	EAST RIVER	REG #16			
WIM-018	E 100TH ST (REG # 17)	40	47	6	73	56	26	3′ 6″ X 2′ 4″ EGG	EAST RIVER	REG #17			
WIM-019	E 101ST ST (REG # 18)	40	47	7	73	56	23	4′ X 2′ 4″ EGG	EAST RIVER	REG #18			
WIM-020	E 103RD ST (REG # 20)	40	47	11	73	56	20	4′ X 2′ 4″ EGG	EAST RIVER	REG #20			
WIM-021	E 104TH ST (REG # 21)	40	47	14	73	56	17	3′ 6″ X 2′ 4″ EGG	EAST RIVER	REG #21			
WIM-022	E 105TH ST (REG # 22)	40	47	16	73	56	16	4′ X 2′ 4″ EGG	EAST RIVER	REG #22			
WIM-023	E 106TH ST (REG # 23)	40	47	19	73	56	15	DBL 6′ X 7′ 6″	EAST RIVER	REG #23			YES
WIM-024	E 110TH ST (REG # 24)	40	47	28	73	56	9	DBL 8′ 6″ X 7′ 6″	EAST RIVER	REG #24			YES

WIM-025	E 114TH ST (REG # 25)	40	47	35	73	56	58	5′ 3″ X 8′	EAST RIVER	REG #25			
WIM-026	E 115TH ST (REG # 26)	40	47	37	73	56	55	15″ DIA	EAST RIVER	REG #26			
WIM-027	E 116TH ST (REG # 27)	40	47	39	73	56	52	15″ DIA	EAST RIVER	REG #27			
WIM-030	E 119TH ST (REG # 30)	40	47	46	73	56	45	4′ 6″ X 2′ 4″ FT	EAST RIVER	REG #30			
WIM-031	E 120TH ST (REG # 31)	40	47	48	73	56	45	5′ X 4′ 6″ FT	EAST RIVER	REG #31			
WIM-032	E 121ST ST (REG # 32)	40	47	52	73	56	44	4′ X 2′ 4″ FT	EAST RIVER	REG #32			
WIM-033	E 122ND ST (REG # 33)	40	47	54	73	56	44	4′ 9″ X 4′ FT	BRONX KILL	REG #33			
WIM-034	E 124TH ST (REG # 34)	40	47	59	73	56	44	3′ 6″ X 2′ 4″	BRONX KILL	REG #34			
WIM-035	E 125TH ST (REG # 35)	40	48	4	73	56	45	4′ X 2′ 8″ EGG	BRONX KILL	REG #35			
WIM-036	E 129TH ST (REG # 36)	40	48	20	73	56	54	42″ DIA	HARLEM RIVER	REG #36			
WIM-037	E 130TH ST (REG # 37)	40	48	25	73	56	59	4′ X 2′ 8″	HARLEM RIVER	REG #37			
WIM-038	E 135TH ST (REG # 38)	40	48	41	73	56	3	6′ X 8′ 6″ FT	HARLEM RIVER	REG #38			YES
WIM-039	W 140TH ST (REG # 39)	40	48	57	73	56	2	4′ X 2′ 8″ EGG	HARLEM RIVER	REG #39			
WIM-040	W 141ST ST (REG # 40)	40	48	58	73	56	2	5′ X 2′ 4″ FT	HARLEM RIVER	REG #40			
WIM-041	W 142ND ST (REG # 41)	40	49	1	73	56	2	6′ X 4′ FT	HARLEM RIVER	REG #41			
WIM-042	W 143RD ST (REG # 42)	40	49	4	73	56	2	3′ 6″ X 2′ EGG	HARLEM RIVER	REG #42			
WIM-043	E 102ND ST (REG # 19)	40	47	9	73	56	21	42″ DIA	EAST RIVER	REG #19			
WIM-044	W. 145TH ST (REG # 44)	40	49	10	73	56	2	6′ X 2′ 8″ FT	HARLEM RIVER	REG #44			
WIM-045	W 149TH ST (REG # 45)	40	49	22	73	56	3	6′ X 5′ 6″	HARLEM RIVER	REG #45			YES
WIM-046	W 151ST ST (REG # 46)	40	49	29	73	56	4	8′ 6″ X 8′	HARLEM RIVER	REG #46			YES
WIM-047	W 154TH ST (REG # 47)	40	49	39	73	56	4	6′ X 4′ FT	HARLEM RIVER	REG #47			
WIM-048	W 155TH ST (REG # 48)	40	49	42	73	56	5	4′ X 2′ 4″ FT	HARLEM RIVER	REG #48			
WIM-050	W 156TH ST (REG # 50)	40	49	44	73	56	5	15″ DIA	HARLEM RIVER	REG #50			
WIM-051	W 167TH ST (REG # 51)	40	50	14	73	56	2	48″ DIA	HARLEM RIVER	REG #51			YES
WIM-052	W 176TH ST (REG # 52)	40	50	36	73	56	50	5′ X 5′	HARLEM RIVER	REG #52			YES

Appendix 3 - Municipal Compliance Certification

MS4 Annual Report Cover Page

MCC form for period ending December 31, 2019

This cover page must be completed by the report preparer.
Joint reports require only one cover page.

SPDES ID: NY0287890

Choose one:

◉ **This report is being submitted on behalf of an individual MS4.**

Fill in SPDES ID in upper right hand corner.

Name of MS4: CITY OF NEW YORK

OR

◯ **This report is being submitted on behalf of a Single Entity**

(Per Part II.E of GP-0-10-002)

Name of Single Entity:

OR

◯ **This is a joint report being submitted on behalf of a coalition.**

Provide SPDES ID of each permitted MS4 included in this report. Use page 2 if needed.

Name of Coalition:

SPDES ID:

MS4 Annual Report Cover Page

MCC form for period ending December 31, 2019

Provide SPDES ID of each permitted MS4 included in this report.

SPDES ID	SPDES ID	SPDES ID
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MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending December 31, 2019

Name of MS4: CITY OF NEW YORK

SPDES ID: NY0287890

Each MS4 must submit an MCC form.

Section 1 - MCC Identification Page

Indicate whether this MCC form is being submitted to certify endorsement or acceptance of:

- ● An Annual Report for a single MS4
- ○ A Single Entity (Per Part II.E of GP-0-10-002)
- ○ A Joint Report

Joint reports may be submitted by permittees with legally binding agreements.

If Joint Report, enter coalition name:

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending December 31, 2019

Name of MS4: CITY OF NEW YORK

SPDES ID: NY0287890

Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for ***each*** of the following positions as indicated below:

1. Principal Executive Officer, Chief Elected Official or other qualified individual (per GP-0-08-002 Part VI.J).
2. Duly Authorized Representative (Information for this contact must only be submitted if a Duly Authorized Representative is signing this form)
3. The Local Stormwater Public Contact (required per GP-0-08-002 Part VII.A.2.c & Part VIII.A.2.c).
4. The Stormwater Management Program (SWMP) Coordinator (Individual responsible for coordination/implementation of SWMP).
5. Report Preparer (Consultants may provide company name in the space provided).

A separate sheet must be submitted for each position listed above unless more than one position is filled by the same individual. If one individual fills multiple roles, provide the contact information once and check all positions that apply to that individual.

If a new Duly Authorized Representative is signing this report, their contact information must be provided and a signature authorization form, signed by the Principal Executive Officer or Chief Elected Official must be attached.

For each contact, select all that apply:

- ● Principal Executive Officer/Chief Elected Official
- ○ Duly Authorized Representative
- ○ Local Stormwater Public Contact
- ○ Stormwater Management Program (SWMP) Coordinator
- ○ Report Preparer

First Name: VINCENT | MI: | Last Name: SAPIENZA

Title: COMMISSIONER

Address: 59-17 JUNCTION BLVD

City: FLUSHING | State: NY | Zip: 11373-

eMail: VSAPIENZA@DEP.NYC.GOV

Phone: (718) 595-6565 | County: QUEENS

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending December 31, 2019

Name of MS4: CITY OF NEW YORK

SPDES ID: NY0287890

Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for ***each*** of the following positions as indicated below:

1. Principal Executive Officer, Chief Elected Official or other qualified individual (per GP-0-08-002 Part VI.J).
2. Duly Authorized Representative (Information for this contact must only be submitted if a Duly Authorized Representative is signing this form)
3. The Local Stormwater Public Contact (required per GP-0-08-002 Part VII.A.2.c & Part VIII.A.2.c).
4. The Stormwater Management Program (SWMP) Coordinator (Individual responsible for coordination/implementation of SWMP).
5. Report Preparer (Consultants may provide company name in the space provided).

   A separate sheet must be submitted for each position listed above unless more than one position is filled by the same individual. If one individual fills multiple roles, provide the contact information once and check all positions that apply to that individual.

   If a new Duly Authorized Representative is signing this report, their contact information must be provided and a signature authorization form, signed by the Principal Executive Officer or Chief Elected Official must be attached.

For each contact, select all that apply:

○ Principal Executive Officer/Chief Elected Official

● Duly Authorized Representative

● Local Stormwater Public Contact

● Stormwater Management Program (SWMP) Coordinator

● Report Preparer

First Name: PINAR | MI: | Last Name: BALCI

Title: ASSISTANT COMMISSIONER

Address: 59-17 JUNCTION BLVD

City: FLUSHING | State: NY | Zip: 11373 -

eMail: PBALCI@DEP.NYC.GOV

Phone: (718) 595-6565 | County: QUEENS

MS4 Municipal Compliance Certification (MCC) Form

MCC form for period ending December 31, 2019

Name of MS4: CITY OF NEW YORK

SPDES ID: NY0287890

Section 3 - Partner Information

Did your MS4 work with partners/coalition to complete some or all permit requirements during this reporting period? ○ Yes ● No

If Yes, complete information below.

Submit a separate sheet for each partner. Information provided in other formats will not be accepted. If your MS4 cooperated with a coalition, submit one sheet with the name of the coalition. It is not necessary to include a separate sheet for each MS4 in the coalition.

If No, proceed to Section 4 - Certification Statement.

Partner/Coalition Name

Partner/Coalition Name (con't.)

SPDES Partner ID - If applicable

Address

City

State

Zip -

eMail

Phone ( ) -

Legally Binding Agreement in accordance with GP-0-08-002 Part IV.G.? ○ Yes ○ No

What tasks/responsibilities are shared with this partner (e.g. MM1 School Programs or Multiple Tasks)?

○ MM1

○ MM2

○ MM3

○ MM4

○ MM5

○ MM6

Additional tasks/responsibilities

○ *Watershed Improvement Strategy Best Management Practices* required for MS4s in impaired watersheds included in GP-0-08-002 Part IX.

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending December 31, 2019

Name of MS4: CITY OF NEW YORK

SPDES ID: NY0287890

Section 4 - Certification Statement

"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 gathered and evaluated 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, 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."

This form must be signed by either a principal executive officer or ranking elected official, or duly authorized representative of that person as described in GP-0-08-002 Part VI.J.

First Name: PINAR | MI: | Last Name: BALCI

Title (Clearly print title of individual signing report): ASSISTANT COMMISSIONER

Signature: Pinar Balci

Digitally signed by Pinar Balci
DN: cn=Pinar Balci, o, ou, email=pbalci@dep.nyc.gov, c=US
Date: 2020.09.28 12:43:23 -04'00'

Date: 09/30/2020

Send completed form and any attachments to the DEC Central Office at:

MS4 Permit Coordinator
Division of Water
4th Floor
625 Broadway
Albany, New York 12233-3505

nyc.gov/dep/ms4

Printed on post-consumer recyled paper