NYC Stormwater Management Program



2023 MS4 Annual Report









Municipal Separate Storm Sewer System of New York City SPDES Number: NY-0287890



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Heavy rainfall, Queens.

EXECUTIVE SUMMARY

Report Overview

When precipitation (rain, snow) falls on impervious surfaces like rooftops, streets, and sidewalks, and the ground cannot absorb all the precipitation naturally, stormwater runoff results. This runoff flows over streets and sidewalks, potentially collecting pollutants such as oils, chemicals, sediment, debris and pathogens before entering the sewer system through the catch basins. In municipal separate storm sewer system (MS4) areas, the runoff flows into local waterways without receiving treatment. To reduce potential stormwater pollution in MS4 areas, the City developed the NYC Stormwater Management Program (SWMP) Plan. This Annual Report describes the activities the City performed throughout calendar year 2023 to implement the SWMP and to comply with the MS4 permit in an effort to manage urban sources of stormwater runoff, both to protect overall water quality and to improve water quality in impaired waters.

2023 Program Updates

1. Public Education and Outreach

This effort includes education and outreach initiatives to inform the public on the MS4.

The City distributed approximately 10,000 coloring books on NYC's "water story" to schools, partner organizations, and the public.

2. Public Involvement and Participation

This effort includes initiatives to get the public involved in MS4 related activities.

The City participated in 370 park stewardship events that involved more than 6,100 participants.

2023 Major Accomplishments

- The City completed and timely submitted to DEC MS4 Permit deliverables due in 2023: the MS4 IDDE Plan and the NYC MS4 Outfall Monitoring Program Report.
- Environmental Compliance Outreach (ECO) conducted door-to-door environmental education outreach in south Brooklyn reaching 19,256 households or nearly 49,000 residents.
- The City took more than 750 enforcement actions against entities responsible for illicit discharges and abated almost 1,350 illicit discharges.
- The City held/participated in 317 community clean-up events and 10 SAFE (Solvents, Automotive, Flammables, and Electronics) disposal events with more than 20,000 participants.
- The City swept more than 985,000 miles of streets citywide, inspected more than 25,000 catch basins, and cleaned more than 10,000 catch basins.

3. Mapping

This ongoing effort includes identifying and mapping the MS4 outfalls and drainage areas.

The City provides an interactive, public map – view the map at <u>nyc.gov/dep/ms4map</u>.

4. Illicit Discharge Detection and Elimination (IDDE)

This effort includes finding, fixing, and preventing illicit discharges.

The City abated 205 illicit discharges in the MS4 area, including an illicit discharge to outfall TI-008 in Alley Creek.

5. Construction and Post-Construction

This effort includes managing pollution risks from development and redevelopment projects in MS4 and combined sewer areas draining to the city-owned sewer system.

The City reviewed 154 SWPPPs and issued 97 Stormwater Construction Permits. there are now a total of 127 active construction sites.

6. Pollution Prevention/Good Housekeeping (PP/GH) for Municipal Operations and Facilities

This effort includes managing pollution risks at the City's own facilities and during its off-site operations conducted in the streets.

The City assessed 530 City-owned facilities to evaluate stormwater controls associated with the facilities' operations and to assess the facilities' stormwater pollution potential.

7. Industrial and Commercial Stormwater Sources

This effort includes managing pollution risks from industrial and commercial facilities that engage in certain activities that may cause stormwater pollution.

The City assessed 31 unpermitted facilities for potential SPDES permitting by DEC and inspected 16 MSGP -permitted facilities to evaluate their implementation of stormwater controls.

8. Control of Floatable and Settleable Trash and Debris

This effort includes measures taken to reduce NYC's litter and keep trash and debris from reaching waterbodies.

The City continued work on a study to determine the loading rate of trash and debris from the MS4 to floatables-impaired waterbodies.

9. Monitoring

This effort includes analyses that will facilitate evaluation of long-term trends in water quality.

The City initiated the Harbor Survey data analysis to establish a baseline for future evaluation of long-term trends in water quality.

10. Special Conditions for Impaired Waters

This effort incudes identifying any impaired waterbody with an approved CSO LTCP that does not predict compliance with applicable water quality standards, where stormwater pollution from the MS4 is expected to significantly contribute to the impairment.

Upon DEC's approval of the Jamaica Bay LTCP, the City determined that Bergen Basin, Thurston Basin and Fresh Creek have met the criteria that will require the City to create a plan for each waterbody to address the pollutants of concern.

Plans for 2024

1. Public Education and Outreach

Continue to implement programs including Harbor Protectors, SAFE Disposal events, and various environmental education programming.

2. Public Involvement and Participation

Continue to engage with local stakeholder groups and to participate in community events.

3. Mapping

Continue to update GIS datasets for the next MS4 map due 8/1/27.

4. Illicit Discharge Detection and Elimination (IDDE)

Continue implementing the Shoreline Survey, Harbor Survey, Sentinel Monitoring, and Emergency Response Unit programs, including abatement of identified illicit discharges.

5. Construction and Post-Construction

Continue outreach efforts to the construction community, the review and approval of SWPPPs, and inspections of sites that have construction permits.

6. Pollution Prevention/Good Housekeeping (PP/GH) for Municipal Operations and Facilities

Continue to self-assess facilities and off-site operations and provide appropriate training to staff; inspect and maintain municipally constructed Gl.

7. Industrial and Commercial Stormwater Sources

Continue the assessment of unpermitted facilities and inspection of permitted facilities and take any necessary enforcement actions.

8. Control of Floatable and Settleable Trash and Debris

Continue to analyze data obtained as part of the Floatables Loading Rate Study and continue floatables control programs, including PEO efforts, street sweeping, catch basin inspections and cleaning, and booming/ netting.

9. Monitoring

Complete Harbor Survey baseline analysis and report on progress in development of Urban Stormwater Quality (USWQ) Models.

10. Special Conditions for Impaired Waters

Create waterbody plans for Bergen Basin, Thurston Basin and Fresh Creek, and continue to implement and refine enhanced BMPs in the Coney Island Creek area.





itter Clean Up Earth Day Event

Background

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Municipal Separate Storm Sewer System (MS4) Permit (No. NY-0287890), first issued to the City of New York (City or NYC) in 2015 and renewed as of August 1, 2022, the City implements a Stormwater Management Program (SWMP) Plan,¹ which sets forth 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 wellmaintained to reduce the risk of stormwater runoff's contributing pollution to NYC's waterbodies. 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.

New York City's iconic waterfront and beloved waterbodies are cleaner and healthier than they have been since the 1860s. Whales and seals are returning to the harbor, wetland and mussel restoration projects

1 https://www1.nyc.gov/assets/dep/downloads/pdf/water/stormwater/ms4/ nyc-swmp-plan-full.pdf are thriving, and New Yorkers are enjoying recreational activities in our local waterways. These improvements are in no small part a testament to the City's substantial investments in upgrading our wastewater infrastructure over the last five decades.

Building on these investments, fourteen City agencies now implement the SWMP in the areas served by the City's MS4, which carries stormwater runoff directly to nearby waterbodies instead of to a wastewater resource recovery facility (WRRF) for treatment; water that flows on the streets and into catch basins or directly into waterbodies may carry pollution such as pathogens and debris.

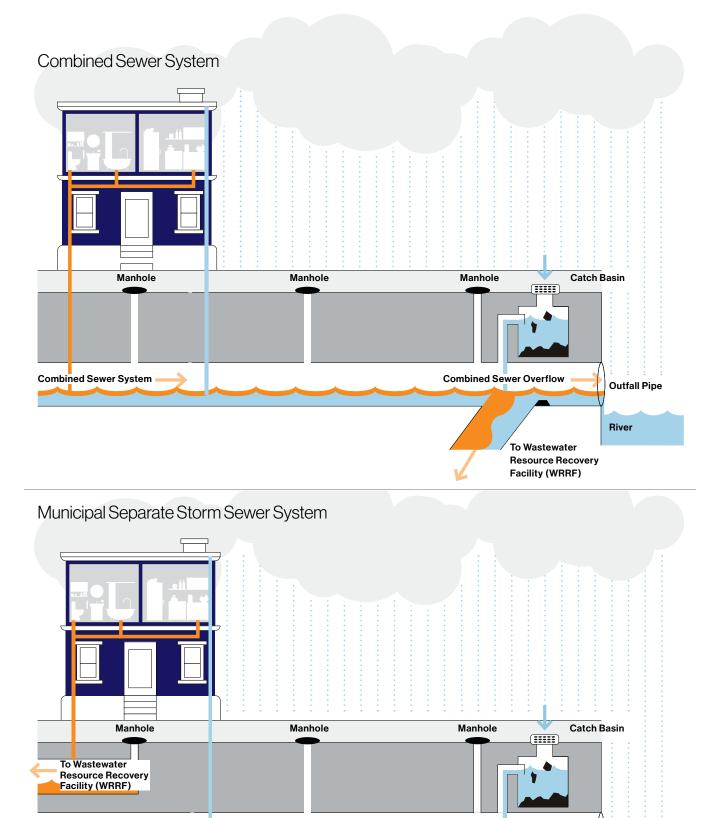
Each year, the City prepares an MS4 annual report, as required by Part IV.M of the MS4 Permit, to inform NYSDEC and the public of the City's progress in implementing the SWMP and the status of its compliance with the MS4 Permit. This MS4 Annual Report, covering January 1 through December 31, 2023, includes a brief description of the SWMP activities completed during the 2023 reporting year, measurable goals, and specific reporting requirements included in the MS4 Permit. If applicable, this report also includes activities planned for the 2024 calendar year and any proposed changes to the SWMP.



New Creek, Gateway to Bluebelt in Staten Island.

Introduction

Each component of the SWMP Plan includes best management practices (BMPs) and associated measurable goals, 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 assessment of the effectiveness of the SWMP on the achievement of the stated measurable goals for each program.



Separate Storm Sewer System

Regulated by the NYC MS4 Permit:

- Separate storm sewers owned or operated by NYC that discharge to NYS waters through MS4 outfalls or that connect to combined sewer outflow pipes downstream of the regulator owned or operated by NYC,
- High level storm sewers and Bluebelts that ultimately discharge to waters of NYS through MS4 outfalls owned or operated by NYC,
- SPDES general permitted construction and industrial stormwater facilities that ultimately discharge to waters of NYS through MS4 outfalls and combined sewer overflow pipes downstream of the regulator owned or operated by NYC,

Outfall Pipe

River

• NYC municipal operations and facilities that drain by overland flow to waters of NYS.

Administration of the SWMP

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):

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)

NYC Law Department (LAW)

Economic Development Corporation (EDC)

Mayor's Office of Management and Budget (OMB)

Mayor's Office of Climate and Environmental Justice (MOCEJ)

MS4 Annual Reports

Each year, the City reports on SWMP implementation and MS4 Permit compliance. Reporting years are full calendar years (January 1 to December 31). The MS4 annual reports reflect the structure of the City's MS4 Permit and the SWMP Plan, both of 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 objectives for the ongoing implementation of applicable programs during the next reporting cycle.
- 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.

Every spring, the City publishes a draft MS4 Annual Report online for public comment and holds a public meeting during the comment period. Following the public review of the draft MS4 Annual Report, the City revises the Report, as needed, and includes responses to public comments. 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.²



2023 Art and Poetry, Grades 10-12.

Public Education and Outreach

The City implements a public education and outreach program (PEO Program) as part of its MS4 Permit obligations.³ 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.

2023 Program Assessment

As part of the PEO Program, the City implemented 15 programs that included more than 2,300 events, 85,000 individuals, and the distribution of approximately 4,000,000 materials. These metrics are drawn from activities conducted citywide.

Program Highlights

Environmental Education. Through the NYC Department of Design and Construction's Town+Gown Program, DEP partnered with the Fashion Institute of Technology to design and distribute a new educational resource. *Drippy's Water Adventure* is an engaging coloring book with activities, vocabulary and concepts highlighting NYC's extensive water and wastewater infrastructure. The coloring book illustrates water use, the City's wastewater treatment system, stormwater management and green infrastructure, harbor protection and stewardship opportunities. Approximately 10,000 coloring books were distributed to schools, partner organizations, and the public in 2023.

In 2023, DEP hosted and participated in multiple professional learning opportunities engaging over 300 classroom teachers and non-formal educators. DEP partnered with numerous organizations to highlight educational programs and resources about NYC's sewer systems, stormwater resiliency, and environmental stewardship, including South Street Seaport Museum, Brooklyn Public Library, Idlewild Park Preserve, NY Sea Grant, NY State Parks, Math for America, and the NYC Department of Education.

DEP continued to enhance, distribute, and workshop the following three educational resources, which were shared with thousands of educators citywide.

- Understanding NYC's Water Story: A Curriculum Guide for the Classroom – This comprehensive guide for K-8 teachers explores various content related to our shared water resources. The guide includes six units and features a variety of lessons and activities to enhance teaching styles and learning about the New York City water cycle. These lessons and activities are centered on science, technology, engineering, and math (STEM) concepts and humanity subjects, and are designed to support an interdisciplinary, hands-on approach to teaching.
- NYC Water Virtual Tours Designed using ArcGIS StoryMaps, these virtual tours offer a collection of historical imagery, in-the-field footage, interactive maps, and staff interviews for a fun and easy way to discover the New York City drinking water supply, sewer system, wastewater treatment system, and harbor protection.
- Jamaica Bay Education Resource Directory This guide provides an important teaching tool for educators and features partner organizations and educational opportunities, such as resources and program opportunities in and around the Jamaica Bay watershed. In 2023, the guide was updated and reprinted to include new organizations and opportunities throughout the watershed.

Harbor Protectors. This innovative stewardship program recruits volunteers from schools and community groups to participate in activities such as clearing off catch basin gratings, stenciling educational/informational messages on the sidewalks near catch basins, caring for rain gardens and participating in shoreline cleanups. In addition to beautifying communities and keeping pollution out of NYC's waterways, these stewardship actions also aid DEP in its critical mission to protect and improve water quality across the five boroughs. The Harbor Protectors program hosted 1 event with 25 students cleaning and stenciling 12 catch basins.

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 prevention. The City distributed more than 4 million mailers to residents and held 10 events covering all NYC boroughs with more than 20,000 participants.

Urban Park Ranger Programs. NYC Parks Urban Park Rangers offered to approximately 16,000 participants, through several programs, more than 700 events focused on ecology, stormwater, and waterbodies. These programs include The Natural Classroom: People, Place and Parks for school groups; Custom Adventures for summer camp and youth groups; and free Weekend Adventures and Pop-Up Adventures for the public. Each park in New York City is unique and is shaped by its natural features, the plants and animals that live there, and the communities it serves. Through these programs students enjoy exploring these unique urban spaces in active and engaging on-site learning experiences that highlight real-world examples of concepts, ideas, and content learned in the classroom.

During the educational tours, students investigate the diversity of parks and green spaces in the City, how these spaces improve the daily lives of New Yorkers, and how Parks maintains the parks and recreational spaces. Over the years, these types of immersive, on-site outdoor environmental programs have been shown to advance academic achievement, build character, promote wellness and good health, cultivate environmental stewardship, and foster community and ecological resilience.

Environmental Compliance Outreach (ECO) to Business

Community. ECO has continued to work with its primary partners including local business groups, trade associations and city agencies to conduct business outreach reaching 3,133 business citywide. ECO has attended business resource fairs organized by local BIDs (Business Improvement Districts) and partners like the Queens, Bronx, & Brooklyn Chambers of Commerce where direct one-onone engagement with businessowners and prospective businessowners was conducted around BMPs and local environmental regulations on safe disposal. Local partners have promoted DEP's resources in newsletters and other public facing materials throughout the year including DEP's "Trash It. Don't Flush It." PSA campaign.

ECO initiated a new environmental compliance education program in Summer 2023, titled "Mercury Free NYC" which aims to mitigate mercury contamination and pollution in the environment from business industries that work with mercury-containing materials. The outreach conducted consisted of direct outreach to 152 automotive businesses where safe disposal and BMP resources were shared in multiple languages with business management. Additionally, 503 automotive businesses were directly mailed these DEP resources. ECO also conducted direct citywide outreach with Mobile Food Vendors, informing them on local environmental regulations and BMPs, reaching 143 mobile food vendor businesses.

Southeast Queens Outreach. ECO conducted extensive door-to-door residential environmental education outreach to reduce sewer backups, reaching nearly 24,000 residents in 9,314 households. Outreach materials were provided in multiple languages to the residential community and were prioritized in various sectors of Southeast Queens between Community Boards 12 and 13, where DEP data indicated sewer backups were most prevalent. Outreach in 2023 was conducted so that ECO reached most neighborhoods in Southeast Queens from Queens Village, Hollis, Springfield Gardens to Cambria Heights.

South Brooklyn Outreach. ECO continued to conduct significant door-to-door residential environmental education outreach in South Brooklyn's Community Boards 13 & 15 to reduce sewer backups reaching 19,256 households or nearly 49,000 residents. By Fall 2023, ECO has completed block by block direct outreach in both Community Boards marking the first-time DEP has covered the entire geographic area through this outreach since the program began. Outreach materials were provided in multiple languages to the residential community and prioritized sectors of South Brooklyn between CBs 13 and 15 where sewer backups were most prevalent, based on DEP data. Outreach was conducted with a focus on completing neighborhoods like Gravesend, Brighton Beach and Sheepshead Bay while engaging the communities of Manhattan Beach and Gerritsen Beach.

Staten Island Outreach. ECO continued to conduct business outreach in Staten Island reaching 26 businesses in 2023, participating in a business fair with the local Staten Island Chamber of Commerce as well as working with local agencies to reduce sewer backups in Northern Staten Island.

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

BMP	Measurable Goals	Measures	Status
Provide an ongoing public education and	Develop, implement, and assess an ongoing public education and outreach program	List of education and outreach programs/ events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	 Adopt-a-Highway (72 materials distributed) Annual Art and Poetry Contest (4 events; 2,430 participants) Automotive Association Outreach (157 businesses visited; 497 materials distributed) Community Clean-ups (317 events) DEP Environmental Education (121 events; 14,301 participants; 23,174 materials distributed) Parks Environmental Education (14 events; 4,520 participants) Forgot Your Bag? (231 canine waste dispensers in the MS4 area) Harbor Protectors (1 events; 12 catch basin cleanup; 12 catch basin stenciling; 25 participants) Operation PO.O.P. (26 events; 2,000 participants) Park Stewardship (370 events; 6,159 participants) SAFE Disposal Events (10 events; 20,522 participants; 4,056,797 materials distributed) "Trash it, Don't Flush It" Outreach (29,848 households contacted) Urban Park Rangers Natural Classroom (705 events; 15,995 participants) Visitor Center at Newtown Creek (208 events; 5,917 participants) Weekend, Pop-up, and Custom Adventures (529 events; 14,012 participants)
		List of planned educational and outreach programs/ activities to be undertaken in the next reporting cycle	 Annual Art and Poetry Contest Automotive Associations Outreach Community Clean-ups DEP Environmental Education Parks Environmental Education Forgot Your Bag? Operation P.O.O.P. Park Stewardship Harbor Protectors "Trash It, Don't Flush It" Outreach Urban Park Rangers Natural Classroom Visitor Center at Newtown Creek Weekend, Pop-up and Custom Adventures
awareness program	Develop and imple- ment educational and informational activities related to illicit discharges for businesses and the public	List of education and outreach programs/ events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	 Annual Art and Poetry Contest (4 events; 2,430 participants) Automotive Association Outreach (157 businesses visited; 497 materials distributed) Community Clean-ups (317 events) DEP Environmental Education (121 events; 14,301 participants; 23,174 materials distributed) Parks Environmental Education (4 events; 1,120 participants) Forgot Your Bag? (231 canine waste dispensers in the MS4 area) Harbor Protectors (1 events; 12 catch basin cleanup; 12 catch basin stenciling; 25 participants) Park Stewardship (370 events; 6,159 participants) SAFE Disposal Events (10 events; 20,522 participants: 4,056,797 materials distributed) "Trash it, Don't Flush It" Outreach (29,848 households contacted) Urban Park Rangers Natural Classroom (705 events; 15,995 participants) Visitor Center at Newtown Creek (208 events; 5,917 participants) Weekend, Pop-up, and Custom Adventures (529 events; 14,012 participants)
		List of planned educational and outreach programs/activities to be undertaken in the next reporting cycle	 Annual Art and Poetry Contest Automotive Associations Outreach Community Clean-ups DEP Environmental Education Parks Environmental Education Forgot Your Bag? Harbor Protectors Park Stewardship "Trash It, Don't Flush It" Outreach Urban Park Rangers Natural Classroom Visitor Center at Newtown Creek Weekend, Pop-up and Custom Adventures

Table 1: Public Education and Outreach 2023 Status of Implementation

BMP	Measurable Goals	Measures	Status
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 received 97,464 service requests for the 311 complaint types listed in this report as relevant to stormwater pollution.

Goals for 2024

The City will continue to implement the programs listed as "planned" in Table 1, including Harbor Protectors, SAFE Disposal events, and various environmental education programming. DEP will also continue to collaborate with other agencies on outreach and MS4-related materials. The City will continue to develop educational materials and will increase our efforts to collaborate with stakeholders.



Educators sail from South Street Seaport Museum.

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 the public as open data online.

Currently, the public can 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.





Trout in the classroom trout stripping demonstration at Newtown Creek.

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 enjoy recreation 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.

2023 Program Assessment

The City continued to engage the public using virtual platforms, including on SWMP implementation. DEP published the draft 2022 MS4 Annual Report (which covered activities completed in 2022) on the DEP website and hosted the 2022 MS4 Annual Report meeting as a hybrid event (in-person and virtual) in June 2023 with the in-person event space in Coney Island. The public was encouraged to provide comments on the draft MS4 Annual Report. These comments were addressed in Appendix 1 of the final 2022 MS4 Annual Report submitted to NYSDEC on September 30, 2023, and published on the DEP website.

The City published this draft MS4 Annual Report on the DEP website on May 22, 2024. This report covers SWMP implementation for the 2023 calendar year. The City hosted the MS4 Annual Report meeting at 4:00 pm on June 10, 2024. The public submitted comments from May 22, 2024, through July 2, 2024, by email to MS4@dep.nyc.gov.

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

Table 2. Public Involvement And Participation	2023 Status Of Implementation
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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 <u>MS4@dep.</u> nyc.gov	The City responded to inquiries on various SWMP activities including construction/ post-construction permitting, potential construction projects, USWR and general stormwater discharge inquiries.
		Date and location of draft Annual Report posted for public review and comment period	On June 2, 2023, the City posted on the DEP website the draft 2022 MS4 Annual Report, which was available for public comment through July 13, 2023.
		Date and time of draft Annual Report stake- holder meeting and number of participants	June 13, 2023, at 4:00 pm. 60 individuals participated. (Online and in person)
	o participate SWMP implementation and provide public access to Annual Reports	Summary of comments received on draft Annual Report and City responses	See Appendix 1 of 2022 MS4 Annual Report
Provide public opportunity to participate in SWMP implementation		List of involvement and participation activi- ties (e.g., programs, events, key stakeholder meetings)	 2022 MS4 Annual Report Public Meeting (1 event, 60 participants) DCP-USWR Briefing and Coordination (1 event, 64 participants) Stormwater Management Lunch and Learn (1 event, 50 participants) Community Clean-ups (317 events) Park Stewardship (370 events; 6,159 participants)
		Status and location of final Annual Report and the SWMP Plan	The SWMP Plan and final MS4 Annual Reports are available at <u>www.nyc.gov/dep/ms4.</u>
		List of planned partici- pation and involvement programs/activities to be undertaken in next reporting cycle	 Presentation of this 2023 MS4 Annual Report Community Clean-ups Park Stewardship

Goals for 2024

The City plans to continue engaging with local stakeholder groups and participating in community events. In compliance with MS4 Permit requirements, the City also plans to publish and respond to comments on this Annual Report.

Mapping

The City maintains a GIS-based map of the urbanized area and its MS4 outfalls. The map together with supportive documentation satisfies each of the requirements listed in the MS4 Permit (see IV. Stormwater Management Program Requirements (C) (2) (a-h)). The City has several programs that document and map important information about NYC, including all of its outfalls and drainage areas. Much of the information gathered by these programs is available to the public through NYC Open Data at opendata.cityofnewyork. us.

As required by the 2015 MS4 Permit, the City submitted with the SWMP Plan the Preliminary MS4 Map, which showed the MS4 drainage areas and outfalls known as of August 1, 2018. The 2015 MS4 Permit further required the City to update and submit the final MS4 map of the permit cycle on August 1, 2020. The next update of the MS4 map will be due on August 1, 2027, 5 years from the effective date of the current MS4 Permit.

2023 Program Assessment

The current MS4 Map (as submitted to NYSDEC on August 1, 2020) is available to the public in an interactive format at nyc.gov/dep/ms4map. The Map includes 764 outfalls, more specifically 693 MS4 outfalls and 71 CSO outfalls with MS4 connections.

As stated in the SWMP Plan, GIS datasets are dynamic and change over time as updates are received and processed. As a result, the MS4 Map may be periodically updated as new information becomes available.

Table 3 lists measurable goals and measures with the implementation status of the City's Mapping BMPs.

Table 3. Mapping Program 2023 Status Of Implementation

BMP	Measurable Goals	Measures	Status
	Final Map required by 2015 MS4 Permit submitted August 1, 2020	Status and location of the MS4 Map	The MS4 Map is online and available to the public at <u>nyc.gov/dep/ms4map</u>
Map the MS4 Area		Number of known MS4 outfalls mapped	764 outfalls mapped
	Update MS4 Map 5 years from EDP	Date of latest updated MS4 Map	Current map dated 8/1/20; updated map due August 1, 2027

Goals for 2024

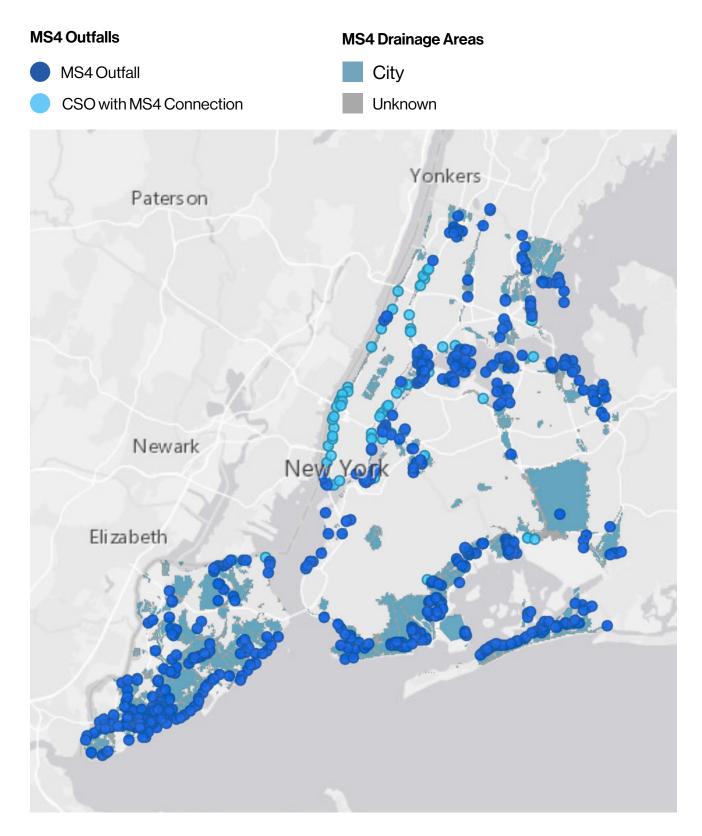
The City will continue to update GIS datasets for the next map due 8/1/27.



Staten Island Bluebelt.

2020 MS4 Drainage Areas and Outfalls

The information shown on this map is the best available information as of August 1, 2020.



Illicit Discharge Detection and Elimination (IDDE)

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 programs include the Shoreline Survey, Sentinel Monitoring Program, Harbor Survey Program, and Emergency Response Units. City agencies also detect and abate illicit discharges discovered and confirmed to be originating from their properties.

The City has PEO 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. City employees working offsite and the public are encouraged to call 311 if they see a potential illicit discharge.

Typically, once the City identifies a potential illicit discharge, it initiates a trackdown to find the source and then takes steps to abate the discharge, if confirmed to be illicit. The trackdown process may include a series of complex steps both in the office and in 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.

2023 Program Assessment

During this reporting period, the City continued to implement its citywide IDDE Program: characterizing outfalls, sampling receiving waterbodies, source tracking, and eliminating illicit discharges. The City detected illicit discharges and eliminated them citywide through the DEP Response and Compliance 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 illicit discharges that are within the City's jurisdiction that were detected in 2023 but not eliminated within the calendar year. Some illicit discharges reported as detected will not have an accompanying abatement record because of circumstances such as an investigation's resulting in the determination that the discharge was not illicit or that the matter should be turned over to NYSDEC.

Under the Shoreline Survey Program, the City conducts an outfall reconnaissance inventory (ORI), surveying 100 percent of shoreline outfalls every 10 years.⁴ MS4 outfalls are not evenly distributed throughout the shoreline; therefore, the number of outfalls the City inventories each year depends on the area of shoreline inventoried.⁵ In 2023, DEP inventoried 92 MS4 outfalls included in the Shoreline Survey and sent to NYSDEC an updated list of the DEP-owned CSO and MS4 outfalls.

Established as an enhancement to the Shoreline Survey, the DEP Sentinel Monitoring Program entails the regular monitoring and sampling of waterbodies throughout NYC. The purpose of the program is to detect continuous, intermittent, and/or transitory illicit discharges. Using a set list of Global Positioning System (GPS) coordinates, DEP goes to sentinel stations quarterly, collects water for samples, and analyzes the samples for pathogens. DEP may also use Harbor Survey data for this effort. The results of the mini-shoreline investigations and sampling are included in the Integrated Sentinel Monitoring Reports.

Program Highlights

Elimination of Illicit Discharge to Outfall TI-008. DEP

performed a walk-through of the storm sewer tributary to TI-008 in Alley Creek and collected samples. All the samples collected were low for fecal coliform and the outfall is now in compliance. DEP also collected samples at this outfall during different tide cycles and all results are now in compliance.

Table 4 lists measurable goals and measures with the status

- 4 As required in the 14 WRRF SPDES permits, DEP conducts the Shoreline Survey Program by surveying 50 percent of the shoreline every five years so that 100 percent of shoreline is completed every 10 years, as required by the MS4 Permit. DEP may also re-visit target drainage areas due to anticipated or identified changes to outfalls.
- 5 The most recent Shoreline Survey report covered the 2018-2022 period (report submitted March 2023). The 2013-2022 period represented the ten-year period during which 100% of MS4 outfalls were surveyed in compliance with the MS4 Permit.



DEP conducts dye test to track down illicit discharge.

Table 4. IDDE Program 2023 Status Of Implementation

BMP	Measurable Goals	Measures	Status
		Number of illicit discharges detected	213*
	Detect and eliminate illicit discharges including	Number of illicit discharges abated	205*
Detect and eliminate illicit	illegal dumping	Number of and type of enforce- ment actions	DEP issued 92 summonses and 354 Commissioner's Orders; DSNY issued 307 summonses [†]
discharges	Conduct an outfall recon-	Updated outfall spreadsheet submitted to NYSDEC	Appendix 2 – SPDES outfall listing [‡]
	naissance inventory with 100% completed every 10 years	Number of MS4 outfalls for which an outfall reconnaissance inventory (ORI) was performed	92
Prepare reports	Prepare an annual Special Report on waterbod- ies with fecal coliform above 200 colonies/100 Sentinel Monitoring Report Available on the DEP well Monitoring Program: http://www.above.com/doi/101/101/101/101/101/101/101/101/101/10		Available on the DEP website under the header Sentinel Monitoring Program: <u>https://www1.nyc.gov/site/dep/</u> water/harbor-water-quality.page
		List of education activities for public employees	PP/GH agency staff training
Provide an ongoing public education and awareness program	education program on	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 (4 events; 2,430 participants) Automotive Association Outreach (157 businesses visited; 497 materials distributed) Community Clean-ups (317 events) DEP Environmental Education (121 events; 14,301 participants; 23,174 materials distributed) Parks Environmental Education (4 events; 1,120 participants) Forgot Your Bag? (231 canine waste dispensers in the MS4 area) Harbor Protectors (1 events; 12 catch basin cleanup; 12 catch basin stenciling; 25 participants) Park Stewardship (370 events; 6,159 participants SAFE Disposal Events (10 events; 20,522 participants: 4,056,797 materials distributed) "Trash it, Don't Flush It" Outreach (29,848 households contacted) Urban Park Rangers Natural Classroom (705 events; 15,995 participants) Visitor Center at Newtown Creek (208 events; 5,917 participants) Weekend, Pop-up, and Custom Adventures (529 events; 14,012 participants)
	List of planned educational and outreach programs/activities to be undertaken in the next report- ing cycle	 Annual Art and Poetry Contest Automotive Associations Outreach Community Clean-ups DEP Environmental Education Parks Environmental Education Forgot Your Bag? Harbor Protectors Park Stewardship "Trash It, Don't Flush It" Outreach Urban Park Rangers Natural Classroom Visitor Center at Newtown Creek Weekend, Pop-up and Custom Adventures 	

BMP	Measurable Goals	Measures	Status
Provide	Implement a staff training	Number of staff training opportunities/events	14 events
training for staff	program on IDDE	Number of staff trained on IDDE	89 participants tota ^{II§}

* Number includes illicit discharges detected/abated by DEP in the MS4 area and illicit discharges detected/abated by City agencies on-site at municipal facilities in the PP/GH Inventory. The total number of illicit discharges detected may not be counted by the City as abated if the resolution action includes transferring a case to DEC. (The number published in the draft MS4 Annual Report was a citywide number.)

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 DEP CSO and MS4 outfalls.

§ Participant total includes those who attended multiple training events.

Goals for 2024

The City will continue its IDDE program, including the Shoreline Survey, Harbor Survey, Sentinel Monitoring, Emergency Response Units, and responding to issues discovered on-site at municipally owned facilities.

Non-stormwater discharges (e.g., water line flushing potable water, AC unit condensate, water from crawl spaces, dechlorinated swimming pool discharges) into the 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."



Nikkitta Caban and Alejandra Diaz, Biology Lab.

Construction and Post-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 SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-020-001) (CGP).

The City's Construction and Post-Construction (C/PC) Program complements the NYSDEC CGP program in the NYC MS4 area⁶ by reviewing and approving stormwater pollution prevention plans (SWPPPs) and inspecting construction sites both for stormwater impacts and for operation of postconstruction 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.

Rules governing the C/PC Program first went into effect on June 1, 2019, and were amended in February 2022 to meet the reduced threshold identified in the Lot Size Soil Disturbance

6 The City program was extended to the combined sewer area by Local Law 91 of 2020, effective March 26, 2021.

Threshold Study required by the 2015 MS4 Permit. The 2022 Unified Stormwater Rule (USWR) aligned and streamlined stormwater-related requirements throughout NYC. It expanded the C/PC program to include combined sewer system areas, lowered the soil disturbance threshold that triggers the program from one acre to 20,000 square feet, and included as an additional trigger for construction permitting the creation of 5,000 square feet of new impervious surface. For more information on the USWR, visit <u>https://www.nyc.gov/site/dep/</u> water/unified-stormwater-rule.page.

2023 Program Assessment

The City reviewed 154 SWPPPs and issued 97 Stormwater Construction Permits, bringing the total number of active Stormwater Construction Permits to 127. A list of active Stormwater Construction Permits is available through the Stormwater Permitting and Tracking System (SWPTS) at https://deppermits.microsoftcrmportals.com/. SWPTS is also the site for applicants to submit and then track the review and approval of their SWPPPs and issuance of their permits.

The City inspected 93% of active construction sites at least once in 2023, issuing 2 stop work orders, 2 notices of non-compliance, and 35 summonses.

Of the 154 new projects received by the City, 111 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 preclude any potential increase in pollutant loading.



BMP	Measurable Goals	Measures	Status
	Review and approve SWPPPs	Number of SWPPPs reviewed	154*
		Number of active construction sites	75
		The percentage of active Stormwater Construction Permit sites inspected once	93%
Construction Site Stormwater Runoff Control	Inspect construction sites	The percentage of active Stormwater Construction Permit sites inspected more than once	37%
	and enforce Stormwater Construction Permits	Number and type of enforcement actions	 Stop Work Orders: 2 issued Notice of non-compliance: 2 issued Summons: 35 issued
		Number of construction site stormwater control trainings planned or completed	Completed: 9 Planned: 1
	Construction Stormwater Maintenance Permits	Number and type of enforcement actions	 Stop work order: 0 Summons: 0 Commissioner's Order: 0 Notice of Non-Compliance: 0 Penalties: 0
Post-		Number of post-construction stormwater management practices (P-C SMPs), including the type of practice and the contributing impervious area managed by each practice within the MS4 areas.	0
Stormwater Management		Number and type of P-C SMPs inspected	0
		Number and type of P-C SMPs properly maintained as determined by inspections	0
		Number of individuals trained in inspection of long-term operation and maintenance of post- construction SMPs	15

Table 5. C/PC Program 2023 Status of Implementation

*This number is reflects only MS4 data. The citywide number was published in the Draft MS4 Annual Report.

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

Goals for 2024

DEP's Stormwater Permitting Group plans to continue outreach efforts to the construction community, to review and approve SWPPPs, and to inspect 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.

Pollution Prevention/ Good Housekeeping (PP/GH) 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, which:

- Maintains an inventory of municipal facilities and operations, prioritizes them 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 (SCMs) to reduce stormwater pollution from municipal facilities and operations;
- Evaluates runoff reduction techniques including green infrastructure (GI) in planned municipal upgrades (PMUs); and
- Trains City staff on PP/GH practices.

The City also updates the facility inventory and priority ratings, as they are not static and can change from year to year based on new information.

2023 Program Assessment

Inventory. The facility inventory is dynamic in nature: facilities can be consolidated or separated, newly occupied or vacated, or confirmed served by the MS4 or combined sewers. The City

updates the inventory annually. At the end of 2023, there were 530 facilities in the inventory: 34 high priority, 272 medium priority, and 224 low priority.

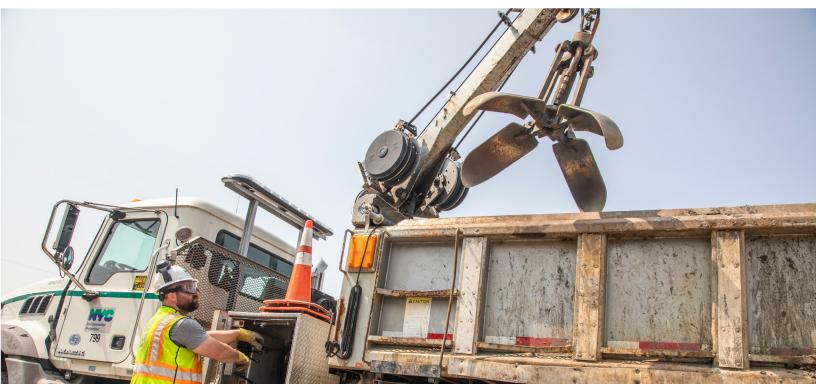
Facility and Off-site Assessments. Facility assessments evaluate stormwater controls associated with a facility's operations and assess stormwater pollution potential. Based on pollution potential, a facility may be categorized as a high, medium, or low priority site. The City assessed 100 facilities including sites owned or operated by DSNY, DOE, Parks, NYPD, FDNY, DOT, and DOC.

The City also assessed off-site operations. Off-site operations are municipal activities generally performed in the right of way (ROW), including, but not limited to, pavement cleaning, road repairs, and catch basin cleaning. The off-site operations are assessed against the potential risk of impacts to stormwater runoff due to activities associated specifically with the operations. Typically, this assessment includes evaluation of waste-generating activities and their management, as well as stormwater controls.

Stormwater Control Practices. City agencies continued to implement stormwater control practices such as cleaning catch basins, sweeping pavement and practicing proper storage of materials.

Pollution Prevention Training. The City continued to administer the PP/GH Training in both classroom (in-person and virtual), and computer-based environments. 7,847 municipal employees received PP/GH training through DEP virtual, classroom-based sessions and through their agencies.

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



Catch Basin Cleaning Mania Competition

Table 6. PP/GH Program 2023 Implementation Status

ВМР	Measurable Goals	Measures	Status
	Maintain an inventory of municipal	Number of facilities, by priority	High–34 Medium–272 Low–224
	operations and facilities	Number of off-site operations, by priority	Medium – 16 Low – 3
		Acres of parking lot swept	6,763.7*
		Miles of street swept	988,751.7*
Provide program for		Number of catch basins inspected	25,091 ⁺
pollution prevention and good housekeeping		Number of catch basins cleaned	10,404 ⁺
(PP/GH) for municipal operations and facilities	Implement the PP/GH	Number of catch basins maintained	755†
	Program	Miles of storm sewers inspected	510.9 [‡]
		Miles of storm sewers cleaned	516.3‡
		Number of self-assessments conducted, high priority facilities	28
		Number of self-assessments conducted, medium priority	49
		Number of self-assessments conducted, low priority	23
Provide staff awareness	Implement a PP/GH	Number of staff trained in-person	194
training	Training Program	Number of staff trained computer-based	7,653
Consider runoff reduction and green infrastructure	Consider runoff reduction techniques and green infrastructure in PMUs	Number of municipal upgrade projects where green infrastructure or runoff reduction techniques were incorporated	0
Provide training to responsible staff	Implement a GI inspection and maintenance training program	Number of staff trained in inspection and maintenance of municipally constructed green infrastructure assets and post-con- struction SMPs.	0
Inspect and maintain green infrastructure (GI)	Implement a Gl inspection and maintenance	Number of municipally constructed green infrastructure assets and post-construction SMPs inspected.	6
assets	program	Number of municipally constructed green infrastructure assets and post-construc- tion SMPs maintained.	6

* Based on citywide numbers for ROW, arterial highways, bridge roadways, tunnels, and underpasses, and work done by agencies at their facilities listed in the inventory.

t Data include the DEP ROW catch basin program based on the 2020 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.

Goals for 2024

The City will continue to assess facilities and off-site operations based on their priority status; refine the facility and off-site operation inventory; inspect and maintain municipally constructed GI; and administer staff trainings. DEP and DSNY plan to implement a roadway porous pavement cleaning pilot. Field activities for the pilot are anticipated to start in Spring/Summer 2024.

Industrial and Commercial (I/C) 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-0-23-001) (MSGP). While NYSDEC issues the MSGP, DEP is responsible for the associated inspections and enforcement of the MSGP at privately owned MSGP-covered facilities in the MS4 area. DEP also assesses unpermitted industrial and commercial facilities in the MS4 area and sends its 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.

2023 Program Assessment

Unpermitted Facility Assessments. In 2023, DEP continued assessing for SPDES applicability the remaining 24 unpermitted facilities from its original inventory, while also supplementing its inventory with 4 newly identified unpermitted facilities. During the 2023 reporting period, DEP conducted field assessments of 31 unpermitted facilities for SPDES permit applicability. Of the 31 facilities assessed, DEP identified 9 facilities for referral to NYSDEC for potential MSGP no-exposure, full MSGP or other SPDES permitting. The remaining 22 facilities did not meet the criteria for referral and have been classified as requiring no further action, which includes a total of 16 facilities that were identified as inactive (i.e., out of business). These facilities were removed from the inventory and classified as no further action. Furthermore, an additional 20 facilities were assessed as being located outside of the MS4 area.

Since the start of the I/C Program, DEP has assessed 1,434 unpermitted facilities. Except for 24 unpermitted sites from the original inventory that still required field



DEP and Stantec inspected MSGP permitted sites, such as this concrete manufacturing facility.

assessment, facilities in the inventory have either been identified as referrals to NYSDEC for SPDES coverage, or as "no further action." Assessments of no further action were made for a variety of reasons: facilities did not meet the criteria for SPDES referral; facilities were abandoned; buildings were demolished, replaced, or occupied by a new business unrelated to the previous enterprise or industrial sector; facilities were determined not to be in the MS4 area and, therefore, not subject to the I/C program; or facilities had already obtained SPDES MSGP coverage or applied for permit coverage, making assessment to determine SPDES permit applicability unnecessary.

To date, DEP has finalized classification of 14 facilities as potential significant contributors of Pollutants of Concern (POCs), and these have been reported to NYSDEC.

Table 7 summarizes the results of unpermitted assessments performed.

Permitted Facility Inspections. During 2023, the City inspected 16 MSGP-permitted facilities. Table 8 summarizes the MSGP-permitted site inspections

Table 7. Unpermitted Assessment Summary

Assessment Results	Number of Facilities in Reporting Period (2023)	Cumulative Number of Facilities to Date (2019-2023)
Unpermitted facilities with no further action needed*	22	1,272
Unpermitted facilities to be referred to NYSDEC for SPDES Permit Determination [†]	9	162
Total	31	1,434

* Includes inventory listings deemed inactive or where no industrial activity was observed; and inventory listings that did not meet criteria for SPDES permitting referral.

† Includes facilities that may be eligible for MSGP coverage, may qualify for no exposure waiver, or may need an individual SPDES permit.

completed during this reporting period. These findings will be memorialized in inspection reports and associated enforcement (corrective action letters) to be completed after the reporting period. Inspection frequencies dictated by the MS4 Permit were met during this reporting period.

Complaint-Driven Inspections. By calling 311, the public may make a variety of complaints related to industrial activity. DEP received and evaluated 26 complaints received via 311 tickets for potential applicability to the I/C program. All 26 Infor Public Sector (IPS) tickets were referred to other DEP response programs for appropriate action.

Two additional complaints were received via other referrals to the I/C program. One of the 2 resulted in an enforcement action (by DEP Emergency Response Unit (ERU)), and the other was referred to other DEP response programs.

Enforcement. During the 2023 reporting period, DEP I/C issued 7 Commissioner's Orders (COs) to facilities in the I/C inventory. A CO, under the I/C program, is an order issued by DEP to enforce its rules for the use of and discharges to the MS4; the Order explains the nature of the violation and provides a deadline for taking corrective action. Four COs were issued to unpermitted facilities and 3 COs to permitted facilities. There were several categories of COs

issued: most, considered "precautionary" COs, prohibited non-stormwater discharge to the street and sidewalk; some related to investigation and elimination of illicit discharges; one required a recipient to clean up the street and sidewalk of waste discharged from the site; and several were related to MSGP compliance deficiencies.

DEP sent 17 formal corrective action letters to MSGPpermitted facilities in 2023. These letters directed facilities to make improvements to SWPPPs and/or housekeeping practices. Seven of the letters were linked to inspections conducted during the prior reporting period (2022). An additional 6 corrective action letters stemming from inspections conducted in 2023 are still pending final completion and are expected to be completed in 2024.

DEP did not observe any active, unauthorized nonstormwater discharges to the MS4 while performing MSGP compliance inspections or unpermitted facility assessments. Therefore, in 2023, the City issued no enforcement actions with penalties (i.e., summonses) for observed, active, illicit discharges.

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

BMP	Measurable Goals	Measures	Status	
	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 31 unpermitted facility assessments in 2023. 9 of these facilities will be referred to NYSDEC for SPDES coverage. DEP issued 4 Commissioner's Orders to unpermitted facilities.	
		Number of SPDES MSGP facilities inspected, high priority	7	
		Number of SPDES MSGP facilities inspected, medium priority	8	
Provide an	Iustrial and mmercialImplement an inspection program for MSGP Permit holders based on priority and evaluate stormwater		Number of SPDES MSGP facilities inspected, low priority	1
industrial and commercial		Number of non-compliant SPDES MSGP facilities	6	
pollution control		Number of repeat non-compliant SPDES MSGP facilities	10	
program	Number and type of enforcement actions completed and penalties issued	 17 completed formal letters to permittees identifying deficiencies & associated corrective actions. A portion of these were tied to inspections completed during the prior reporting period. DEP issued 3 Commissioner's Orders to permitted facilities. 6 formal letters in progress to permittees identifying deficiencies & associated corrective actions. 2 Commissioner's Orders are in progress to permittees. 		
	Track significant contribu- tors of POCs	Number of facilities identified as significant contributors of POCs	14	

Table 8. I/C Program 2023 Implementation Status

Goals for 2024

DEP plans to continue the assessment of unpermitted facilities and inspection of permitted facilities. In addition, DEP plans to finalize SPDES assessment report referrals from the prior year and take any necessary enforcement actions stemming from assessments and inspections done in 2023.

Control of Floatable and Settleable Trash and Debris

Stormwater runoff can transport trash and debris from streets and sidewalks 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. The key programs to control trash and debris and to intercept materials that could potentially discharge via storm sewer through outfalls include street sweeping, catch basin hooding and maintenance, and catch basin inspection. The City also implements in-water floatable containment facilities such as booming, netting, and skimming to collect floatables in waterbodies. Public education, outreach, involvement, and participation are also important parts of the City's holistic 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.

2023 Program Assessment

During this reporting period, the City implemented the floatables control programs described in the Plan. These programs included sweeping 988,751.7 miles of streets citywide, inspecting 25,091 catch basins and cleaning 10,404 catch basins. DEP maintained 23 in-water floatable containment facilities. DEP is working closely with DSNY to share and review street sweeping information, as an important floatables control measure.

Loading Rate Study. The City developed and conducted a Floatables Loading Rate (FLR) Study to determine the loading rate of trash and debris from the MS4 to floatablesimpaired waterbodies. The primary goal of this study was to use data collection and analysis to quantify a loading rate at monitored catch basins and to use statistical modeling to predict the floatables loads at MS4 catch basins and outfalls discharging to floatables-impaired waterbodies throughout the City.

DEP conducted data analysis and reporting between December 2021 and December 2023. The monitoring data will be analyzed to compute loading rates at the monitored catch basins and investigate the relationships among the loading rates, factors affecting loads (street litter level, street sweeping frequency, catch basin hood status, drainage area and curb length), and additional predictors or variables such as demographics and land use. These relationships will be used in a statistical analysis to predict the corresponding floatables loads at unmonitored catch basin locations within the MS4.

Table 9 lists measurable goals and measures with the status of the City's implementation of the Control of Floatable and Settleable Trash and Debris program BMPs.

BMP	Measurable Goals	Measures	Status
	Determine Loading Rate of Floatable Trash and Debris dis- charged from MS4 to waterbod- ies impaired for floatables	Status of Loading Rate Study	Floatables Loading Rate (FLR) Study analysis in progress
	Continue DEP's Catch Basin	Number of catch basins inspected, and cleaned	25,091 catch basins inspected, 10,404 catch basins cleaned
Provide a	Inspection, Cleaning, and Hood Replacement Program	Number of catch basin hoods installed, or replaced	686 catch basin hoods installed
Floatable and Settleable Trash and Debris Management Program	Implement a public education program on floatables	List of education & outreach pro- grams/events and relevant metric(s) for each (e.g., number of participants, events, or materials distributed)	 Adopt-a-Highway (72 materials distributed) Automotive Association Outreach (157 businesses visited; 497 materials distributed) Community Clean-ups (317 events) Parks Environmental Education (2 events; 40 participants) Harbor Protectors (1 events; 12 catch basin cleanup; 12 catch basin stenciling; 25 participants) Park Stewardship (370 event; 6,159 participants) SAFE Disposal Events (10 events; 20,522 participants: 4,056,797 materials distributed) "Trash it, Don't Flush It" Outreach (29,848 households contacted)

Goals for 2024

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.

FLR Study⁷ information will be applied to the Urban Stormwater Quality (USWQ) modeling effort currently being piloted to assess the effectiveness of different stormwater BMPs including floatables controls (see the Monitoring section for more information on USWQ modeling).⁸

- 7 The MS4 Permit requires the FLR Study to be completed by August 1, 2025.
- 8 DEP will use information from the FLR Study and USWQ models to propose, before the end of the permit term in 2027, a methodology for selecting, sizing, and siting floatables controls to reduce trash and debris that discharges to the City's waterbodies.



Loading Rate Study Lab.



Materials collected from Loading Rate Study.

Monitoring

To assess the quality of stormwater runoff from the MS4, the City developed and implemented an MS4 Outfall Monitoring Program that combined data collected from existing monitoring programs with additional water quality and flow data collected in manholes upstream of select outfalls. An important goal for the MS4 Outfall Monitoring Program was to collect and analyze water quality data to determine whether a relationship exists between land use type and pollutant concentrations in the City's stormwater. The City collected water quality and flow data during wet weather events to assess the influence of land use on stormwater discharge and pollutant concentrations. The MS4 outfall sampling locations were 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 the City sampled had to meet the criteria for a "gualifying rain event":

- No storm equal to or greater than 0.1 inches 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 at least 0.2 inches of rain.

2023 Program Assessment

NYC MS4 Outfall Monitoring Program. Sampling for the MS4 Outfall Monitoring Program was conducted between 2019 and 2022, resulting in the collection of a total of 64 samples over the 41-month monitoring period. The City performed statistical analysis to comprehensively characterize and evaluate the quality of stormwater discharges to determine whether there were significant differences among the outfalls. The NYC MS4 Outfall Monitoring Program Report outlining the study was completed and submitted to NYSDEC in June, in accordance with the MS4 Permit requirement.

USWQ Hydrologic and Hydraulic (H&H) Model. The City initiated a pilot to develop an USWQ model for the MS4 areas of the Tallman Island WRRF sewershed. Existing hydraulic and hydrologic (H&H) models developed under the Citywide Stormwater Engineering Analysis and Planning (CSEAP) project are being used to add a water quality modeling component. These models will then be used to assess the build-up and wash-off of POCs identified in the MS4 Permit and the effectiveness of different structural and non-structural BMPs. The City expanded the H&H model network for the Tallman Island sewershed based on the 2020 MS4 Map, updated the hydrology approach within the model and performed a hydraulic recalibration of the model network.

Harbor Survey Trend Analysis. The City also initiated the development of the Harbor Survey Trends Analysis toward its goal of evaluating long-term water quality trends. The planned Harbor Survey Trends Analysis will utilize data from the Harbor Survey, which measures a variety of water quality parameters that generally describe the overall condition of water quality in NYC's receiving waterbodies. Per MS4 Permit requirements, the City will develop an initial data analysis for the five-year period prior to the implementation of the SWMP (i.e., 2014 to 2018) to establish baseline water quality conditions to satisfy the permit requirement.

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

BMP	Measureable Goals	Measures	Status
	Analyze outfall monitoring data collected	Results of monitoring data collected and analyzed	Outfall monitoring data was analyzed, and a compre- hensive report was submitted to NYSDEC in June 2023.
Monitoring and Assessment Program	Evaluate long-term trends in receiving water quality	Analyze 5 years of Harbor Survey data to establish baseline conditions prior to SWMP implementation (2014-2018)	Due 8/1/24
	Develop urban stormwater quality models	Report on progress	1st report due 8/1/24

Table 10. MS4 Monitoring Program 2023 Implementation Status

Goals for 2024

Stormwater concentration data from the MS4 Outfall Monitoring Program will be used to calibrate USWQ models as model development continues throughout 2024. The City will provide to DEC a progress report on development of the models by August 2024, as required by the MS4 Permit.

The City will perform a baseline analysis of Harbor Survey data from the five years prior to SWMP implementation. The City will review and evaluate Harbor Survey data, including parameters, depths and recording times, from 195 monitoring stations. The data analysis will be completed by August 2024, as required by the MS4 Permit.

Special Conditions for Impaired Waters

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

- Impaired waters without TMDLs;
- Impaired waters with NYSDEC-approved CSO LTCPs that have identified stormwater as a significant contributor to the impairment.

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 contributions from the MS4 are expected to be a significant contributor to the impairment, require the City to implement enhanced BMPs. In 2022, Coney Island Creek was the only waterbody to meet these criteria.

In January 2023, DEC approved the Jamaica Bay and Tributaries LTCP. Accordingly, Thurston Basin, Bergen Basin and Fresh Creek likewise now meet the criteria, requiring the City to determine, for those waterbodies, the priority source categories for the POCs causing the impairments; what additional or customized non-structural BMPs should be implemented and on what schedule; and any opportunities for implementing cost effective and feasible green infrastructure projects and other structural retrofits. Future annual reports will include information on the City's progress in implementing the program in these additional waterbodies.

For Coney Island Creek, the MS4 Permit lists pathogens (fecal coliform) and floatables (garbage and refuse) as the POCs causing impairments.

Table 11 shows a summary of the source categories of the POCs and the City's proposed control measures for Coney Island Creek.



Jamaica Bay goose with babies.

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

Table 11. Source Categories Of POCS Proposed Control Measures For Coney Island Creek(CIC)

2023 Program Assessment

The City continued to implement enhanced BMPs in the Coney Island Creek watershed.

Table 12 provides status updates on the enhanced BMPs the City included in the SWMP Plan.

Table 12. Special Conditions Program Status Updates

Program	Description	Update	
Pet waste management	Maintain pet waste bag dispens- ers and signage as part of Parks' "Forgot Your Bag?" Program, to minimize the presence of exposed pet waste.	Parks continued to maintain the pet waste bag dispensers and signage in both Calvert, Vaux, and Kaiser Parks.	
Catch basin marking	Include a "no dumping" message on the iron curb piece on new and replaced 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 administers a Harbor Protectors Program in Coney Island Creek, providing 4 different stencil designs and guidance to the local community.	
Source Tracking/ IDDE		DEP Compliance Monitoring Section (CMS) has done multiple investigations near Coney Island Creek and has resolved a number of cases, including broken sanitary sewer line and illicit discharge via overland flow from NYCHA Gravesend property to catch basins con- nected to the storm sewer.	
Public education and outreach	Conduct education and out- reach in the Coney Island Creek Community on pollution source controls.	 On April 24, 2023, DEP Harbor Protectors Program participated in a "Canarsie Earth Day Event." 25 students were engaged in cleaning and stenciling 12 catch basins. Harbor Protectors are DEP volunteers (students or community groups) who engage in steward- ship activities in their neighborhoods. These activities help keep our communities clean and pollution out of our waterways. Volunteers participate in one or more activities that support stormwater management: Clean Catch Basins: New York City has more than 144,000 catch basins! Catch basins collect rainwater that flows down streets and sidewalks. Harbor Protectors remove litter and leaves that can cover catch basins causing flooding and pollution in nearby waterways. Stencil Catch Basins: Sometimes people pour oils or dump garbage down catch basins. Those oils and debris can end up as pollution in nearby waterways. Harbor Protectors stencil an educational message on the sidewalk near a catch basin to remind their neigh- bors not to dump anything there. Care for Rain Gardens: Rain Gardens are built in City sidewalks and are designed to col- lect rainwater before it gets to the catch basins. Harbor Protectors care for rain gardens by removing litter and debris, clearing inlets and outlets, and helping City maintenance staff care for plants. On July 15, 2023, Parks hosted the It's MY Park event in Coney Island at Kaiser Park for a park Clean-up in honor of World Water Day and removed approximately 83 lbs. of debris. 	
Green infrastructure	Identify potential GI opportunities in Coney Island Creek MS4 areas by prioritizing City-owned sites based on their potential to capture runoff.	 DEP identified 5 schools suitable for SMP projects. K095: Gravesend – subsurface retention practice K238: Anne Sullivan – bioretention practice and subsurface retention practice K234: W. A. Cunningham – subsurface stormwater chamber K212: Lady Deborah Moody – synthetic turf practice with subsurface stone storage K303: I.S. 303 Herbert S. Eisenberg – Green Roof Construction is complete at K238 and K234; construction will be starting at K095 by Summer 2024. For the fourth school, K212 Lady Deborah Moody, synthetic turf practice with subsurface stone storage has been included in a separate construction contract with other synthetic turf projects, and is set to start construction Summer/Fall 2024. The fifth school, I.S. 303 Herbert S. Eisenberg, has entered the Basis of Design Report stage of early design as of January 2024. 	

Goals for 2024

The City will work on developing a Plan for implementing enhanced BMPs in Thurston Basin, Bergen Basin and Fresh Creek areas.

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 the MS4 Annual Report to NYSDEC by September 30 following each reporting year. The public can also request information related to the SWMP by emailing MS4@dep.nyc.gov.

This report documents activities related to MS4 Permit compliance for the 2023 reporting period and serves as the Annual Effectiveness Assessment required by the permit. The City assesses SWMP effectiveness through its achievement of the measurable goals included in the BMP tables. In addition, the annual report includes a narrative highlighting and explaining important activities conducted during the reporting year. The City also periodically refines its measurable goals with information gained from program planning and implementation, interagency working groups, and public input. Continuing to refine and update the measurable goals allows the City to better quantify and accurately represent the effectiveness of each one.

Table 13 shows the 2023 recordkeeping and reporting implementation status.

Table 13. Recordkeeping and Reporting 2023 Implementation Status

BMP	Measurable Goals	Measures	Status
Provide annual reports to document compliance with the	Develop Annual Report 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.
MS4 permit		Municipal Compliance Certification submission	 Appendix 3 – Municipal Compliance Certification (City to include with final draft)



Installation of New Catch Basins for Willowbrook/Westerleigh.



Tallman Island landscaping and green infrastructure for storm water management.

Related Initiatives

NYC Green Infrastructure Program

Over the past decade, DEP has developed 11 drainage basin-specific Long Term Control Plans (LTCP) with federal and state regulators for NYC waterways impacted by combined sewer overflows (CSOs). Since the New York State Department of Environmental Conservation (DEC) issued the 2012 CSO Consent Order, DEP has administered the NYC Green Infrastructure Program as part of the regulatory milestones to complement traditional gray infrastructure investments. DEP has been leading the NYC Green Infrastructure Program in areas served by the combined sewer system, constructing green infrastructure practices in the public right-of-way, on City-owned property, on private property through financial incentive programs, and through stormwater regulations. The use of green infrastructure is expanding on public and private properties through updates to stormwater regulations, such as the implementation of the Unified Stormwater Rule in 2022.

In 2023, DEP and DEC signed a modification to the Consent Order. Major changes between the 2012 CSO Order and the 2023 Citywide Green Infrastructure Modification (2023 Modification)⁹ include expanding the definition of green infrastructure, extending the NYC Green Infrastructure Program's timeline, updating the Program's certification metrics and interim milestones, and increasing the Program's total funding commitment to include projects located citywide. The Program's regulatory goal is to reduce CSOs by 1.67 billion gallons per year (BGY) in combined sewer areas by December 2040 and to expend \$3.5 billion on green infrastructure in combined and separately sewered areas (MS4) by December 2045.

The modification allows DEP to track green infrastructure constructed in MS4 areas toward the new financial milestones. Prior to the 2023 Modification, DEP had been strategically constructing green infrastructure in MS4 areas for MS4 Permit obligations, as well as through DEP's financial incentives and partnerships, and roadway median projects. Going forward, DEP will consider multiple benefits of green infrastructure for neighborhoods, in addition to CSO volume reduction, such as flood management and water quality improvements.

The Green Infrastructure Program currently offers two citywide financial incentive programs for private property owners in combined and separately sewered areas of NYC. The Green Infrastructure Grant Program¹⁰ funds the design and construction of green roof retrofits on private property, and Resilient NYC Partners¹¹ funds the design and

- 9 <u>https://extapps.dec.ny.gov/docs/water_pdf/2023nycgiordermod.pdf</u>
- 10
 https://www.nyc.gov/site/dep/water/green-infrastructure-grant-program.page

 11
 https://www.nyc.gov/site/dep/whats-new/resilient-nyc-partners.page

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construction of site-level GI practices on private properties with large areas of impervious surface. In 2023, Resilient NYC Partners funded the design and construction of a new subsurface storage and porous pavement system at T-Mina Supply Inc., a 1.3-acre supply yard along College Point Boulevard. The GI practices will capture 1.26 million gallons of stormwater annually, which will reduce flooding, ease pressure on the area's sewers, and improve the water quality discharging to nearby Flushing Creek from the T Mina site.

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 qualityrelated compliance programs

For more information on the NYC Green Infrastructure Program, visit the DEP website <u>https://www1.nyc.gov/</u> <u>site/dep/water/green-infrastructure.page.</u>

Southeast Queens

Southeast Queens has already seen flooding events caused by extreme rain and is anticipating that flooding may become worse with climate change. Flooding has been a chronic issue for more than 70 years and has been exacerbated by increasing rainfall and rapid residential and commercial growth through which many of the natural watercourses that previously drained the area were paved by developers. Over the past ten years, Queens Community Boards 12 and 13 have had more flooding complaints than any other areas of New York City. DEP's 10-Year Capital Budget allocates \$1.5 billion to plan and initiate full sewer build-out and to provide short-term relief wherever possible. Full build-out requires completion over many years of approximately 450 miles of new storm sewer, and



Southeast Queens sewer build out.

upgrades to 260 miles of sanitary sewer and 30 miles of combined sewer.

DEP identified two pilot projects in Southeast Queens to help demonstrate the feasibility of implementing the cloudburst approach. These projects aim to supplement ongoing sewer buildouts and act as a buffer for storms that are not captured by sewers due to the size of the storm or the lack of fully built-out storm sewer infrastructure. This effort would reduce flooding in areas where grey infrastructure takes longer to implement and would alleviate chronic flooding of upstream areas. More information on these projects is provided in the Cloudburst section.

Cloudburst Projects

A "cloudburst," as seen in 2021 during Hurricane Ida, is a sudden, heavy downpour that occurs in a short amount of time and may lead to flooding, property damage, disruptions to critical infrastructure, and pollution of NYC's waterways. Cloudburst management¹² implements a combination of methods that absorb, store, and transfer stormwater to reduce flooding. Using gray infrastructure (e.g., drainage pipes and underground storage tanks) and green infrastructure (e.g., rain gardens and porous pavement), cloudburst management can minimize damage by reducing the strain on the municipal sewer system.

DEP is designing cloudburst projects capable of capturing greater quantities of stormwater than traditional green infrastructure projects capture. In addition to managing localized flooding, these cloudburst projects will help DEP meet its stormwater management water quality goals to reduce CSOs in CSS areas and to reduce the risk of polluted stormwater discharging to local waterways in MS4 areas.

DEP and NYCHA are designing two cloudburst pilot projects at South Jamaica Houses in Queens and Clinton Houses in Manhattan to combat these high-intensity rain events. The South Jamaica Houses project is expected to break ground in 2024 and design for the Clinton Houses project, which is currently underway, is expected to be completed in Fall 2024. NYCHA has continued to advance cloudburst strategies across its portfolio, completing design at Jefferson Houses in Manhattan and evaluating proposals for cloudburst infrastructure design services at five additional developments with high vulnerability to flooding.

In Southeast Queens, DEP is working with Parks on two cloudburst projects that are currently advancing designs: Archie Spigner Park in the neighborhood of St. Albans, and Rufus King Park. These projects are designed to

12 https://www.nyc.gov/site/dep/environment/cloudburst.page

improve drainage conditions in the park and on select adjacent streets where possible. Additionally in St. Albans, DDC and DOT have partnered with DEP on a roadway improvement project to address frequent flooding issues near the intersection of 177th Street and 112th Ave. The proposed cloudburst design for this project involves green infrastructure in the roadway and includes roadway changes that will also improve roadway safety for pedestrians and vehicles.

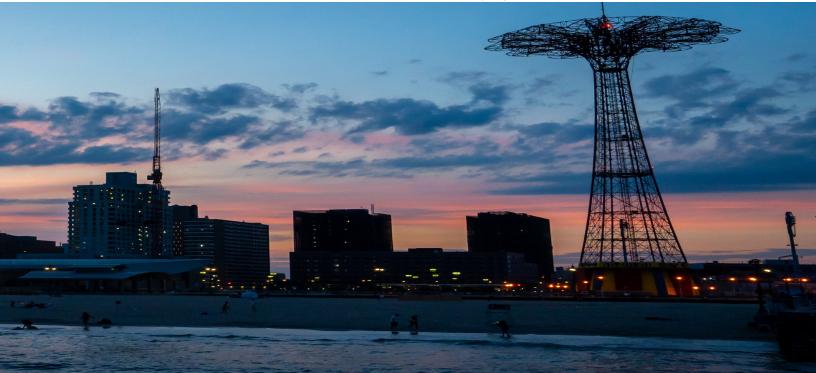
In January 2023, Mayor Eric Adams' administration announced an expansion of the cloudburst program to four new neighborhoods. Supported with \$390 million in City capital funds - and in partnership with DEP, DOT, and Parks - these specially designed, built, and engineered infrastructure projects will be an important component of a larger multi-layered strategy to manage extreme rainfall in Corona and Kissena Park, Queens; Parkchester, Bronx; and East New York, Brooklyn. In Fall 2023, DEP kicked off design contracts for these four initial projects. DEP is currently working with the design teams to conduct targeted outreach to inform design, which is anticipated to be completed in late 2025. More than two dozen additional locations are also being evaluated for inclusion. This investment, and continued advocacy for Federal and State funds, cements NYC's status as a global leader in stormwater resilience.

Coney Island Resiliency Study

The Department of City Planning is leading a Coney Island resiliency study with a Community Development Block Grant for Disaster Recovery funded by the U.S. Department of Housing and Urban Development. DCP will catalog current conditions in Coney Island, past/ present/future climate change initiatives, and the remaining climate change risks. The purpose of the study is to help city agencies understand the possibilities for and the limits of resiliency efforts in Coney Island and to guide strategies for addressing flooding, stormwater runoff, urban heat, as well as public realm and mobility strategies. In summary, this study seeks to achieve the following goals:

- Snapshot of existing conditions: Research and analyze socioeconomic conditions, zoning and land use conditions, urban design and public realm conditions, transportation and mobility conditions, and climate risk conditions.
- Catalog of past, current, and future initiatives and identification of remaining gaps: Investigate areaspecific precedent and projected public research and planning, investments, and regulations and identify remaining resiliency gaps.
- Proposal of near-term recommendations. Identify built and social environment alterations, and quality of life and hazard mitigation improvements to reduce negative impacts from future flooding and urban heat.
- Early development of a potential long-term land-use, zoning, and planning outlook. Guide new development and public realm upgrades to maximize community resilience and reduce climate change risks.

As part of the study, DCP will develop an existing conditions analysis as well as near-term recommendations and potential long-term planning outlooks based on public agency input, outreach, and engagement with local stakeholders (including residents, business owners, community organizations, and area workers, local elected



Coney Island shoreline.

Definitions

Annual Report: The City publishes, by September 30 of each calendar year, a report on SWMP implementation. The report summarizes activities performed throughout the reporting period (January 1 to December 31) by all agencies with obligations under the MS4 Permit; and reports on BMPs, measurable goals and their measures, as detailed in each chapter of the Plan and in Part IV.M of the MS4 Permit.

Applicant: The term "applicant" means the person filing the online application for Stormwater Permitting. This person may be the owner, developer, qualified professional, or other registered user in the online application system.

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 permit.

Combined Sewer Overflow (CSO): Sometimes, during heavy rain and snowstorms, a combined sewer system receives higher than normal flows. WRRFs are unable to handle flows that are greater than twice their design capacity, and, when such a flow occurs, a mix of excess stormwater and untreated wastewater discharges directly into the City's waterway at certain outfalls to prevent upstream flooding. This discharge is called a combined sewer overflow (CSO).

Combined Sewer System: A sewer system used to convey both wastewater and stormwater in a single pipe to the WRRF. During times of heavy precipitation, the combined sewer system may discharge into surface waters. See also Combined Sewer Overflow.

Covered development project: The term "covered development project" means development activity, private or public, that involves or results in an amount of soil disturbance greater than or equal to 20,000 square feet; or creation of 5,000 square feet or more of impervious surface; or is a covered maintenance activity (roadway maintenance that involves 20,000 square feet or more). Such term includes development activity that is part of a larger common plan of development or sale involving or resulting in soil disturbance area greater than or equal to 20,000 square feet; or creation of 5,000 square feet; or creation of 5,000 square feet or more).

or more of impervious surface. Such term includes all development activity that requires a SWPPP pursuant to the New York State Department of Environmental Conservation (NYSDEC) construction general permit.

CSO Outfall: The physical point where a municipally owned or operated combined sewer discharges to surface waters of the state.

CSO Regulator: A flow control structure in a combined sewer system that diverts a controlled portion of flow from the collection system to an intercepting sewer and allows the remaining flow to discharge to nearby waters as a combined sewer overflow.

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: Created prior to issuance of the first NYC MS4 Permit in 2015, the Historical MS4 Map was unrefined and contained some inaccuracies but represented the City's best understanding of the MS4 area at that time. In developing the SWMP, the City relied upon the Historical MS4 Map to define the MS4 area. The Historical MS4 Map 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. The Historical MS4 Map is no longer in use.

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), as defined by 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 (TMDLs) 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): An LTCP identifies appropriate CSO controls to achieve applicable water quality standards consistent with the Federal CSO Policy and Clean Water Act.

Measurable Goals: 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. The City identified its goals, both qualitative and quantitative, using an integrated approach that addresses the requirements and intent of the provisions of the MS4 Permit.

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 SPDESpermitted or subject to No Exposure Exclusion (that industrial activities are not exposed to stormwater).

Municipal Operations and Facilities: Any operation or facility serving a New York City governmental purpose and over which New York City has operational control.

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, floatables 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, effective date August 1, 2022, that defined 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 causing the impairment of an impaired water segment listed in Appendix 2 of MS4 Permit, including nitrogen, phosphorous,

pathogens, and floatables.

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

ASP Alternate Side Parking **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 **PMU** Planned Municipal Upgrade **POC** Pollutant of Concern **PP/GH** Pollution Prevention/Good Housekeeping **ROW** Right of Way **SAFE** Solvents, Automotive, Flammables, and Electronics SCM Stormwater Control Measure **SMP** Stormwater Management Practice 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 **USWR** Unified Stormwater Rule WRRF Wastewater Resource Recovery Facility

Appendix 1 – Public Comments on the Draft Annual Report

General

Comment: In general, how does DEP plan to measure and report on the cumulative impact of these various related initiatives, including the potential contribution of cloudburst pilots and large-scale GI towards the goals of the MS4 SWMP? Are there measures in place to ensure that each specific project or initiative is only counted once, so there's no "double dipping"?

Response: The goal of the MS4 SWMP is to reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). It is not possible to factor out the contribution of any one initiative to the achievement of that goal. Accordingly, any measurement of that achievement is cumulative.

However, the permit requires the City to annually show SWMP effectiveness by identifying measurable goals and assessment methods for each major program included in the SWMP. The City then annually assesses the program by reviewing its activities and/or control measures to identify modifications and improvements to maximize SWMP effectiveness along with a plan to implement those modifications and improvements to the MEP.

Public Education and Outreach (PEO)

Comment: The NYC Water Virtual Tour is a great idea, but how is this resource being shared, i.e., is this being shared in public meetings/classrooms/or other settings?

Response: The NYC Water Virtual Tour is a widely accessible, comprehensive online resource. Our Education Office developed this resource for 3rd-12th grade educators and their students and DEP staff across the agency often reference the Tour when they meet with partner organizations and community members. We also share the Tour with all new staff and interns so they can become acquainted with the agency's work.

Comment: Please include view and download counts for the public outreach and education materials you have developed and disseminated as metrics, understanding the full reach of each download may be undercounted.

Response: Since DEP published its NYC Water Virtual Tour in February 2021, the Tour has recorded 43,742 views.

In addition, the public has accessed many other educational resources during 2023:

- Jamaica Bay Education resource directory 19 downloads
- NYC DEP education curriculum guide 142 downloads
- Drippy's Water Adventure coloring book 116 downloads

Public Involvement and Participation

Comment: Park Stewardship and Community Clean-up events are listed as fulfilling a variety of metrics. Along with the number of events and participants, what other metrics were collected (e.g., number of items removed, volume removed, length of shoreline cleaned, etc.), and can they be included in reporting out the impact of these events? Where were these events held and what percentage is that of the total MS4 area in the city?

Response: NYC Parks Stewardship team hosted 28 coastal cleanup events in 2023. The coastal cleanups were held in 12 different parks: Bayswater, Bush Terminal, Calvert Vaux, Kaiser, Conference House, Idlewild, Marine, Pelham Bay, Pugsley Creek, Rockaway, Seagirt Ave Wetlands, and Soundview.

All cleanups were held in one of the 133 designated MS4 areas for which NYC Parks is responsible. Eight cleanups were hosted along Coney Island Creek per its designation under the 2015 MS4 permit as a "priority waterbody" for its floatables impairment.

During coastal cleanups in 2023, Parks removed 578 bags of debris with an estimated volume of 86.75 cubic yards (cy) (Parks calculated volume assuming each bag had a volume of .15 cy). In July 2023, Stewardship obtained a scale to weigh debris. During the second half of 2023, cleanups collected 1,847.5 pounds of debris.

The length and square footage of the shoreline cleaned and the percentage of total Parks MS4 area cleaned are metrics that may become available in future reporting years.

Comment: We understand that, as of this year, DEP is communicating through email newsletters, and that people have had some issues signing up for and receiving these newsletters. Hopefully these glitches have been resolved. How are stakeholders made aware of the newsletters, and how to register?

Response: We have messaging about our newsletter sign-up opportunities on the <u>Newsletters page</u> and the <u>Stormwater</u> <u>Management page</u> of the DEP website.

We believe that the issue to which you refer was that some people who registered for the newsletter misunderstood or failed to follow through on the instructions that required registrants to click on a link in a confirmatory email in order to complete their registrations. We have confirmed that there is no other glitch with delivering the newsletters to those who have appropriately signed up.

DEP's Education Office disseminates a monthly e-newsletter to more than 3,000 contacts, including classroom teachers, professors, non-formal educators, and agency partners. These e-newsletters promote free educational resources, programs, professional learning opportunities, and events hosted by DEP and our partners. We further promote the newsletter through our education networks with NYC Public Schools, other City agencies, and community organizations.

Comment: How many people, overall, does DEP estimate to engage with regarding its MS4 plans, permits, projects, and performance through public comments, 311 complaints, public meetings, etc? It would be good to get a sense of the overall numbers, as is shown in the outreach section.

Response: It is difficult to calculate an "overall" number of people with whom DEP engages on MS4-related matters as many of the outreach activities and other avenues of communicating with or hearing from the public may have repeat participants. The Annual Report does provide additional information on numbers of participants in individual activities. Furthermore, in addition to DEP, other agencies with obligations under the MS4 permit conduct public outreach (and participation) programs.

The City does hold an annual public meeting at which we present the MS4 Annual Report, and DEP keeps its MS4 website updated as to all opportunities for public input.

With respect to some specific numbers, the City received more than 97,464 calls/complaints related to stormwater issues and responded to them, as appropriate. The 2023 Annual Report public presentation reached 56 participants. Overall, the 2023 assessment of the City's Public Education and Outreach program estimated that its programming engaged approximately 85,000 individuals.

Mapping

Comment: The report indicates 7% of the outfalls are still unmapped, listing the same number of mapped outfalls as last year. We understand that SPDES outfall lists complement the map, but the map itself is a key public resource, and should be kept up to date. Are there plans to map these additional outfalls at a regular interval to inform the public, ahead of the next 2027 required map update?

Response: The map is updated as required by the MS4 permit, and, as noted in the comment, the next update is due in August 2027. The City provides to DEC an annual update on any changes or additions to its outfall list. Additionally, DEP provides a map of citywide outfalls on NYC OpenData at https://data.cityofnewyork.us/Environment/Citywide-Outfalls/b9ze-z4u4.

Illicit Discharge Detection and Elimination (IDDE)

Comment: In the presentation you mention the illicit discharge program and some of the statistics citywide. Can you share details on any illicit discharges in south Brooklyn or in Coney Island?

Response: Last March, DEP identified an illicit discharge at the Gravesend NYCHA buildings, where sanitary lines were overflowing to the storm sewer and discharging to Coney Island Creek. Additionally, DEP investigated and found two illegal connections to the storm sewers from buildings 13 and 17 at the NYCHA Marlboro Houses. NYCHA has abated these discharges.

More information on illicit discharges can be found in the 2023 Sentinel Monitoring report. <u>2023 Integrated Sentinel</u> <u>Monitoring Report</u>

Comment: Your testing is mostly concerned with pathogens. What about the heavy metal testing?

Response: The WRRF SPDES permits require sampling for numerous parameters, including many metals. Effluent sampling results are transmitted to DEC in monthly Discharge Monitoring Reports (DMRs) and in an annual priority pollutant report.

With respect to sampling under the MS4 permit's IDDE program: typically, an illicit discharge is the result of an illegal connection of a building's sanitary line to a storm sewer, and any discharge will contain high fecal coliform (pathogens). Since we would expect minimal levels of fecal coliform in stormwater itself, testing for fecal is a highly effective measure for our trackdown efforts.

Comment: Why do we have 3 superfund sites that are concentrated with metals then?

Response: Those sites are unique and have been impacted by historical upland uses and facilities such as incinerators, oil companies, etc. Sediment data from the Gowanus Canal or Newtown Creek reflect the periods of time that those waterbodies were impacted by contamination traced to such upland uses.

Comment: There are other sites that have concentration of heavy metals such as Flushing Bay, which is heavily contaminated, and no one has turned it into a superfund site yet. There were talks about putting Coney Island Creek under the superfund program and there's also the Far Rockaways.

Response: The City appreciates the comment. USEPA has not designated any of these locations as Superfund sites. The City works to eliminate illicit discharges of pollutants, including heavy metals, through implementation of the SWMP.

Pollution Prevention Good Housekeeping (PPGH)

Comment: Could DEP please provide more clarity on the "Green Infrastructure Inspection and Maintenance Program" listed in this section? Does this refer only to municipal facilities, or is it also inclusive of R.O.W. green infrastructure installations in MS4 areas? If so, are there plans for expansion of this program?

Response: Per the 2022 MS4 permit, each agency must consider, and, if feasible and cost-effective, incorporate runoff reduction techniques and green infrastructure (GI) during planned municipal upgrades, including in municipal rights of way. Most of those installations will be subject to Stormwater Maintenance permitting and must then be inspected and maintained so that they operate as designed in perpetuity.

Each agency that has constructed GI must also establish a training program for those employees tasked with inspection and maintenance of GI and post-construction stormwater management practices (SMPs).

Industrial/Commercial

Comment: Please include and describe in this and future reports: measures in place to address repeat non-compliant SPDES MSGP facilities, increasing deterrents in place to help enforce compliance, particularly for repeat offenders.

Response: The City developed and implements an Enforcement Response Plan, as required by Part III.C of the MS4 permit. The Plan sets out the City's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance.

As required by Part IV.H of the MS4 permit, the City tracks I/C inspection findings to highlight and document any chronically noncompliant facilities, and to aid follow-up and enforcement activities.

Facilities with a written violation occurring in the previous year must be inspected within a year of the violation or as per the provisions in the enforcement action until compliance is achieved.

Floatables

Comment: Most of the activities listed, while worthwhile, are retroactive, meaning collecting litter right before it enters the sewer system or the waterway. Notable exceptions are the new plastic straws law and plastic bag ban. These policy level changes will actually lead to reductions in plastic litter. Has the DEP noticed any changes to the types of plastic floatables as the result of the policy changes? Are there any updates stemming from DEP's interagency collaboration and state-level advocacy on policy level prevention measures to floatables?

Response: It would be difficult to parse out changes to the types of floatables or the volume of any reduction in plastic litter since the policy changes went into effect as we do not have detailed information from a period prior to the changes to use as a baseline to which to compare.

DEP has advocated for other statewide policy or legislative changes that could lead to reductions in litter such as an increase in the amount of the deposit on bottles and cans to encourage their return.

Comment: What is the current status of the "in progress" Floatables Loading Rate Study, in more detail (i.e., which actions remain)? It is good to know that data analysis and reporting has been completed. Could the remainder of the study be completed prior to its 2025 MS4 permit designated deadline, thereby expediting the revision and implementation of improved methodologies for selecting, sizing, and siting floatables controls?

Response: The data obtained during the study are still being analyzed; the study will be completed by its due date on August 1, 2025. The City has begun its research into methodologies for selecting, sizing and siting the additional best management practices (BMPs) and controls it will implement to reduce floatables.

The City continues to implement its key programs to manage trash and debris including street sweeping, catch basin inspections and maintenance, and booms and nets that catch materials discharged from outfalls.

Comment: I read the 2016 LTCP plan and that plan identified floatables reduction as a priority for improving water quality. Floatables at Coney Island Creek were also highlighted as an issue in the 2021-2022 SWMP Plan. Is there a particular problem with floatables in Coney Island and is there a particular reason why that area is highlighted?

Response: When Coney Island Creek (CIC) was designated a "priority waterbody" under the 2015 MS4 permit, "floatables" was listed as one of the Pollutants of Concern (POCs) causing its impairment. Accordingly, the City was required to implement enhanced BMPs to minimize and reduce floatables in CIC.

There are many factors that impact floatables pollution. For example, commercial areas and areas with a lot of pedestrian traffic are likely to have more floatables. One of the most effective BMPs for addressing floatables is DSNY's street sweeping program.

Monitoring

Comment: Which parameters are measured in the MS4 Monitoring Program? We would appreciate your listing the MS4 Monitoring Program parameters in this and future reports.

Response: The MS4 Outfall Monitoring Program measured 22 parameters including temperature, salinity, dissolved oxygen (DO), pH, fecal coliform, enterococci, total dissolved solids (TDS), total suspended solids (TSS), total phosphorus, total ammonia, nitrate+nitrite, total Kjeldahl nitrogen (TKN), total cadmium, total chromium, total copper, total lead, total nickel, total arsenic, total mercury, total zinc, oil, and grease.

Green Infrastructure

Comment: I know one of the challenges to bring green infrastructure to Coney Island is because of the height of the groundwater table. I heard something was being piloted at the NYCHA Nostrand Houses.

Response: Groundwater can be a challenge for GI implementation. NYCHA is conducting a preliminary investigation to assess the feasibility of cloudburst infrastructure at NYCHA Sheepshead Bay Houses and Bruekelen Houses. A previous investigation at Nostrand houses was transferred across the street to Sheepshead Bay.

Comment: The GI Grant program and the Resilient NYC Partners program are a good start for addressing green infrastructure in private properties; however, are there any plans to prioritize certain MS4 community districts similar to the GRTA program to encourage infrastructure in parts that will result in the most impact? If so, what criteria will be used to prioritize these districts and interventions?

Response: Green infrastructure in MS4 areas is supported in Part II.B.2 of the MS4 Permit, in the eligibility criteria for DEP's financial incentive programs, in stormwater regulations for development and re-development, and in resiliency planning through Cloudburst management.

The Unified Stormwater Rule (USWR) requires stormwater permitting for certain development and re-development projects. With respect to MS4 areas, the USWR encourages the use of "retention first" GI /SMPs and requires "no net increase" of pollutants to impaired waterbodies.

Coney Island Creek, Fresh Creek, Bergen Basin, and Thurston Basin meet the criteria set forth in the MS4 permit Part II.B.2, which requires the City to implement enhanced stormwater controls in those catchment areas and to identify opportunities for implementing GI projects that are cost-effective and feasible.

Special Conditions for Impaired waters

Comment: We continue to express our concern that waterways such as Westchester Creek and Hutchinson River are not included in the Special Conditions although the CSO LTCPs for these waterbodies expect non-attainment of primary contact water quality criteria. In Westchester Creek, the LTCP does not make any investments beyond what was planned under the waterbody/watershed facilities plan, because of the significant contribution from the MS4.

Can you clarify the thresholds of what is considered a "significant" contribution to water quality impairment by the MS4, and how this was assessed for each water body in question?

Could you include summary maps or tables as an appendix depicting relevant waterbodies and keyed to a legend showing which criteria are met by each, and which waterbodies are then eligible for Special Conditions Programs?

Response: Both Westchester Creek and the Hutchinson River do not meet the criteria for inclusion in the MS4 permit Part II.B.2 impaired waters program: "waterbody with an approved CSO LTCP that does not predict compliance with applicable water quality standards, and where stormwater pollution from the Permittee's MS4 is expected to be a significant contributor to the impairment identified in the CSO LTCP." For both Westchester Creek and the Hutchinson River, the approved LTCP does project compliance with applicable water quality criteria (WQC). A recommended plan with 95% or greater predicted attainment of applicable WQC for fecal coliform during the recreational season (May 1 to October 31) constitutes compliance with existing water quality standards.

Whether the MS4 is considered a "significant contributor" is determined, on a case-by-case basis, using information from the LTCPs and additional analyses, as applicable, to evaluate all sources discharging to a waterbody and the annual fecal coliform load of each source as a percentage of the total annual fecal coliform load to the waterbody. So, for one waterbody, a 30% load from the MS4 may be considered significant, for another a 50% load, depending on what the other sources are and contribute.

In In the case of the Hutchison River, the NYC MS4 is not a significant contributor to the impairment. Rather, impacts on the river are largely from non-NYC-controlled sources. For example, iln 2023, DEC and the City of Mount Vernon executed a consent decree to address Mount Vernon's non-compliance with Clean Water Act requirements for their municipal storm sewers, which caused raw sewage to be discharged into the Bronx and Hutchinson Rivers.

MS4 is likewise not a significant contributor to the impairment in to Westchester Creek, which is largely impacted by certain physical characteristics of the waterbody: it is a narrow, highly channelized, navigable waterway surrounded primarily by industrial land uses and receives no natural freshwater flow.

As of January 2023, DEC had approved all required LTCPs. Pursuant to Part II.B.2 of the MS4 pPermit, NYC has now identified all 4 waterbodies for which the approved LTCP does not project compliance with applicable WQC and MS4 is a significant contributor to the impairment: Coney Island Creek, Thurston Basin, Bergen Basin, and Fresh Creek.

Comment: Do you have a combined report to show the pollution at Coney Island Creek for both pathogens and heavy metals?

Response: The DEC website provides that information at NYS Section 303(d) List Of Impaired/TMDL Waters

Comment: How does a community (like Coney Island) become part of the cloudburst hub?

Response: DEP selected the Cloudburst management hubs by identifying inland flooding hotspots and clustering them based on the sewer network, then analyzing where surface-level intervention, such as porous pavement, could have a meaningful impact on flooding. Once the hubs were identified, DEP prioritized the locations based on physical vulnerability, social vulnerability, operational feasibility, and capital project synergies.

DEP did analyze the flooding hotspot clusters in Coney Island and found that there were limited opportunities for siting cloudburst interventions that would provide sufficient flood mitigation benefits. One reason for this determination was that the potential locations are in low-lying areas, which have limited capacity to drain stormwater.

While DEP is currently prioritizing cloudburst projects in other parts of the city where cloudburst solutions are more likely to provide substantial flooding benefits, DEP is actively working on other stormwater management projects in Coney Island, including construction of green infrastructure retrofits at select schools through our partnership with the School Construction Authority. DEP's in-house design team is evaluating potential green infrastructure projects in large street medians as well.

Appendix 2 – SPDES Outfalls¹

26th Ward

		L	ATITUD	Ε	LO	NGITU	DE			CONTRIBUTORS	DOOM		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
26W-001	26TH WARD WRRF OUTFALL	40	39	2	73	52	36	10' X 6'	HENDRIX CREEK				
26W-003	WILLIAMS AVE (REG #2)	40	38	57	73	53	25	180" X 120"	FRESH CREEK BASIN	REG #2		YES	YES
26W-004	HENDRIX CREEK & HENDRIX ST	40	39	15	73	52	46	4BL 11' X 7'6"	HENDRIX CREEK	REG #1	YES		YES
26W-005	SPRING CREEK AUXILIARY W.P.C.P	40	39	28	73	51	44	72BL 7'6" X 2'5"	OLD MILL CREEK	REG #3, JAM REG #2			YES (ON 3 & JAM REG #2)

		L	ATITUE	E	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
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	52	36	66" DIA	HENDRIX CREEK
26W-603	FOUNTAIN ST	40	39	26	73	51	46	78" DIA	OLD MILL CREEK
26W-604	BORDER AVE	40	38	27	73	52	48	8' X 4'	FRESH CREEK BASIN
26W-605	800' E/O SITE DRIVE (GATEWAY MALL)	40	38	59	73	52	12	42" DIA	Belt Parkway/Shore Parkway
26W-606	E/O SITE DRIVE (GATEWAY MALL)	40	39	2	73	52	7	36" DIA	Belt Parkway/Shore Parkway
26W-607	W/O SITE DRIVE (GATEWAY MALL)	40	39	5	73	52	3	30" DIA	BELT PARKWAY / SHORE PARKWAY
26W-608	6W-608 320' S/O FLATLANDS AVE ANI WILLIAMS AVENUE		38	58	73	53	25	11' X 4' 6"	FRESH CREEK BASIN

1 This list for 2023 includes DEP outfalls. Future annual reports will include outfalls from other agencies.

Bowery Bay

		L	ATITUC	E	LONGITUDE								
OUTFALL ID	OUTFALL LOCATION	DEG	мін	SEC	DEG	мін	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
BB-001	BOWERY BAY WRRF OUTFALL	40	46	51	73	53	30	90" DIA	EAST RIVER				
BB-002	45TH ST (REG # 2)	40	46	46	73	53	32	9' X 9' FT	BOWERY BAY	REG #2			
BB-003	HAZEN ST (REG # 13)	40	46	34	73	53	29	10' 6" X 5' 9" FT	BOWERY BAY	REG #3			YES
BB-004	BORDEN AVE	40	44	20	73	56	31	6' 6" X 3' 3"	DUTCH KILLS	REG #L-3, L-41			
BB-005	E/O 81ST ST (REG # 14)	40	46	24	73	53	21	14' 7" X 8' FT	BOWERY BAY	REG #4	YES		
BB-006	114TH ST (REG # 10, 12 & 13)	40	45	36	73	51	16	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	51	44	11' X 7'	EAST RIVER	REG #5			
BB-008	31ST DRIVE (REG # 6, 7, 8, 9)	40	45	44	73	51	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	26	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	3	73	56	25	24" DIA	NEWTOWN CREEK	REG #L-2			
BB-013	11TH ST (REG # L-8)	40	44	22	73	57	9	72" DIA	NEWTOWN CREEK	REG #L-8			
BB-014	VERNON BOULEVARD (REG # L-9)	40	44	23	73	57	17	22" DIA	NEWTOWN CREEK	REG #L-9			
BB-015	5TH ST (REG # L-10)	40	44	21	73	57	27	15" DIA	NEWTOWN CREEK	REG #L-10			
BB-017	50TH AVE (REG # L-12)	40	44	37	73	57	34	15" DIA	EAST RIVER	REG #L-12			
BB-018	49TH AVE (REG # L-12A)	40	44	39	73	57	32	16" DIA	EAST RIVER	REG #L-12A			
BB-021	47TH AVE (REG # L-15)	40	44	47	73	57	31	48" DIA	EAST RIVER	REG #L-15			
BB-022	5TH ST (REG # L-16)	40	44	52	73	57	17	18" DIA	EAST CHANNEL	REG #L-16			
BB-023	44TH DRIVE (REG # L-17)	40	44	58	73	57	20	66" DIA	EAST CHANNEL	REG #L-17			
BB-024	43RD AVE (REG # L-18)	40	45	13	73	57	7	7' 8" X 7' 7" ARCH	EAST CHANNEL	REG #L-18			
BB-025	41ST AVE (REG # L-19)	40	45	26	73	56	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)

Bowery Bay (continued)

		L	ATITUD	θE	LO	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
BB-027	38TH AVE (REG # L-20)	40	45	32	73	56	51	72" DIA	EAST CHANNEL	REG #L-20			
BB-028	37TH AVE (REG # L-21)	40	45	41	73	56	44	DBL 12' X 8' 2"	EAST CHANNEL	REG #L-21			YES
BB-029	BROADWAY(REG # L-22)	40	46	6	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	5	DBL 9' 6" X 6'	EAST CHANNEL	REG #L-23			YES
BB-032	MAIN AVE (REG # L-29 A, # MH-15)	40	46	27	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	36	73	55	41	10' 8" X 7' 4" ARCH	EAST RIVER	REG #L-30			YES
BB-035	DITMARS BLVD (REG # L-31)	40	46	57	73	55	11	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	54	55	48" DIA	EAST RIVER	REG #L-33			
BB-040	49TH AVE (REG # L-5)	40	44	27	73	56	26	24" DIA	DUTCH KILLS	REG #L-5			
BB-041	19TH AVE (REG # 1)	40	46	48	73	54	8	66" DIA	LUYSTER CREEK	REG #1			
BB-042	W/O 27TH ST (REG # L-6)	40	44	20	73	56	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	55	47	18" DIA	EAST RIVER	REG #L-25			
BB-053	SHORE BLVD AND 20 AVE	40	47	10	73	54	55	48"	EAST RIVER	N/A			
BB-054	ROOSEVELT ISLAND NORTH PUMPING STATION	40	46	7	73	56	32	18" DIA	EAST CHANNEL	ROOSEVELT ISL. P.S.			
BB-055	ROOSEVELT ISLAND MIDDLE PUMPING STATION	40	45	56	73	56	41	30" DIA	EAST CHANNEL	ROOSEVELT ISL. P.S.			
BB-056	ROOSEVELT ISLAND SOUTH PUMPING STATION	40	45	10	73	57	25	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			

Bowery Bay (continued)

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	Ε	LO	NGITU	DE	OUTFALL SIZE	RECEIVING WATER
OUTFALLID	OUTPALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
BB-601	127TH ST	40	45	45	73	50	40	60" DIA	EAST RIVER
BB-602	126TH ST	40	45	40	73	50	48	60" DIA	EAST RIVER
BB-603	STEINWAY ST	40	46	53	73	53	43	7' X 6' 6" FT	EAST RIVER
BB-606	49TH AVE	40	44	39	73	57	32	60" DIA	EAST RIVER
BB-607	47TH ROAD	40	44	44	73	57	30	36" DIA	EAST RIVER
BB-608	70TH ROAD	40	43	29	73	50	7	60" X 24"	MEADOW LAKE
BB-609	S/O 28TH STS	40	44	35	73	56	22	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
BB-613	26TH AVE	40	46	38	73	56	9	48" DIA	EAST RIVER

Coney Island

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	E	LONGITUDE			OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	воом	NET	TELEMETRY
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
CI-001	CONEY ISLAND WRRF OUTFALL	40	33	58	73	55	50	96" DIA	ROCKAWAY INLET				
CI-002	CONEY ISLAND WRRF OUTFALL	40	33	57	73	55	50	72" DIA	ROCKAWAY INLET				
CI-004	FLATLANDS AVE (REG # 5, TG # 5)	40	37	53	73	55	2	DBL 10' X 9'	PAERDEGAT BASIN	TG #5	YES		YES (ON TG-5)
CI-005	FLATLANDS AVE (REG # 1-4)	40	37	54	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	51	73	55	1	DBL 84" DIA	PAERDEGAT BASIN	REG #6	YES		YES
CI-008A	RALPH AVE (PAERDEGAT BASIN CSORF OVERFLOW)	40	37	49	73	54	58	3BL 10' x 6'	PAERDEGAT BASIN	PAERDEGAT BASIN CSORF OVERFLOW			
CI-008B	RALPH AVE (PAERDEGAT BASIN CSORF OVERFLOW)	40	37	49	73	54	58	3BL 10' x 6'	PAERDEGAT BASIN	PAERDEGAT BASIN CSORF OVERFLOW			
CI-008C	RALPH AVE (PAERDEGAT BASIN CSORF OVERFLOW)	40	37	49	73	54	58	3BL 10' x 6'	PAERDEGAT BASIN	PAERDEGAT BASIN CSORF OVERFLOW			
CI-008D	RALPH AVE (PAERDEGAT BASIN CSORF OVERFLOW)	40	37	49	73	54	58	3BL 10' x 6'	PAERDEGAT BASIN	PAERDEGAT BASIN CSORF OVERFLOW			

		L	ATITUD	Ε	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
CI-601	W 28TH ST	40	34	48	73	59	43	5' X 4'	CONEY ISLAND CREEK
CI-602	W 33RD ST	40	34	52	74	0	2	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	56	73	57	11	14' X 7'	SHEEPSHEAD BAY
CI-607	E 21ST ST (UNDER PIER 1)	40	35	0	73	56	50	12" DIA	SHEEPSHEAD BAY
CI-608	E 22ND ST (10' W/O PIER 3)	40	35	0	73	56	47	12" DIA	SHEEPSHEAD BAY
CI-610	E 27TH ST	40	35	0	73	56	28	DBL 13' X 7' 6"	SHEEPSHEAD BAY
CI-611	DEVON AVE	40	35	29	73	55	49	36" DIA	SHELL BANK CREEK
CI-612	EVERETT AVE	40	35	24	73	55	48	36" DIA	SHELL BANK CREEK
CI-613	FLATBUSH AVE	40	36	12	73	54	54	DBL 10' 6 "X 8'	MILL BASIN
CI-614	E/O E 58TH ST	40	36	48	73	54	58	60" DIA	MILL BASIN

Coney Island (continued)

		L	ATITUE	Ε	LC	ONGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
CI-615	E 61ST ST	40	36	52	73	54	52	8' X 8' FT	MILL BASIN
CI-616	STRICKLAND AVE	40	36	25	73	54	59	4' X 4' FT	MILL BASIN
CI-617	E 64TH ST	40	36	18	73	54	53	48" DIA	MILL BASIN
CI-618	DAKOTA PLACE	40	36	23	73	54	29	42" DIA	MILL BASIN
CI-619	INDIANA PLACE	40	36	18	73	54	16	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	40	73	54	12	3' X 3' FT	EAST MILL BASIN
CI-622	OHIO WALK	40	36	50	73	54	24	4' X 4'	EAST MILL BASIN
CI-623	STRICKLAND AVE	40	36	56	73	54	32	4' X 4' FT	EAST MILL BASIN
CI-624	E 68TH ST	40	37	2	73	54	30	7' X 7'	EAST MILL BASIN
CI-625	AVE V	40	37	0	73	54	27	5' X 5' FT	EAST MILL BASIN
CI-626	AVE W	40	36	54	73	54	21	4' X 4' FT	EAST MILL BASIN
CI-627	AVE X	40	36	48	73	54	15	4' X 4' FT	EAST MILL BASIN
CI-628	AVE L	40	37	43	73	54	45	66" DIA	PAERDEGAT BASIN
CI-629	PAERDEGAT 4TH ST	40	37	46	73	54	41	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-630	PAERDEGAT 7TH ST	40	37	42	73	54	32	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-631	PAERDEGAT 10TH ST	40	37	38	73	54	23	5' X 5' FT	PAERDEGAT BASIN
CI-632	PAERDEGAT 13TH ST	40	37	34	73	54	14	6' 6" X 6' 6"	PAERDEGAT BASIN
CI-633	CANARSIE ROAD	40	37	42	73	53	8	9' 6" X 7'	JAMAICA BAY
CI-634	AVE N	40	38	28	73	52	57	6' 6" X 6' 6"	FRESH CREEK BASIN
CI-636	AVE L	40	38	39	73	53	11	6' 6" X 6' 6"	FRESH CREEK BASIN
CI-637	AVE K	40	38	45	73	53	17	6' X 6'	FRESH CREEK BASIN
CI-639	W 12TH ST	40	34	47	73	58	46	108"	CONEY ISLAND CREEK

Coney Island (continued)

		L	ATITUE	ЭE	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
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	52	73	58	34	7' 6" X 6'	CONEY ISLAND CREEK
CI-654	BRAGG COURT	40	34	58	73	55	57	84" DIA	SHEEPSHEAD BAY
CI-655	AVE Y	40	35	33	73	55	53	10' X 8'	SHELL BANK CREEK
CI-656	GERRITSEN AVE (HEAD OF SHELL BANK CANAL)	40	35	28	73	55	26	15" DIA	SHELL BANK CREEK
CI-657	GARLAND COURT	40	35	40	73	55	55	18" DIA	SHELL BANK CREEK
CI-659	SHORE BLVD	40	34	56	73	57	11	9' 6" X 7'	SHEEPSHEAD BAY
CI-660	E 66TH ST	40	36	15	73	54	49	2' 6" X 2' 6" FT	MILL BASIN
CI-661	SEAVIEW AVE	40	38	22	73	52	50	66" DIA	FRESH CREEK BASIN
CI-662	W 32ND ST	40	34	17	73	59	52	42" DIA	ATLANTIC OCEAN
CI-663	W 23RD ST	40	34	18	73	59	21	42" DIA	ATLANTIC OCEAN
CI-664	W 15TH ST	40	34	57	73	59	3	5' X 4'	CONEY ISLAND CREEK
CI-665	W. 21ST ST	40	34	43	73	59	18	13' 3" X 7' 6"	CONEY ISLAND CREEK
CI-666	N/O WEST END AVE PIER	40	34	55	73	57	11	72" DIA	SHEEPSHEAD BAY
CI-668	CHANNEL AVE	40	35	36	73	55	47	3' 6" X 3' 6" FT	SHELL BANK CREEK
CI-669	FLORENCE AVE	40	35	21	73	55	44	36" DIA	SHELL BANK CREEK
CI-670	BARTLETT PLACE	40	35	18	73	55	38	3' X 3' FT	SHELL BANK CREEK
CI-671	CYRUS AVE	40	35	14	73	55	36	3' X 3' FT	SHELL BANK CREEK
CI-672	SEBA AVE	40	35	10	73	55	31	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	11	73	55	5	3' 6" X 3' 6" FT	PLUM BEACH CHANNEL
CI-676	56TH DRIVE	40	36	14	73	54	32	24" DIA	MILL BASIN
CI-677	OCEAN AVE	40	35	0	73	56	53	DBL 8' 7" X 8'	SHEEPSHEAD BAY

Coney Island (continued)

		L	ATITUE	ЭE	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
CI-678	W 35TH ST	40	34	52	74	0	6	60" DIA	GRAVESEND BAY
CI-679	OXFORD ST	40	34	51	73	56	17	36" DIA	SHEEPSHEAD BAY
CI-680	MACKENZIE ST	40	34	51	73	56	24	48" DIA	SHEEPSHEAD BAY
CI-681	KENSINGTON ST	40	34	51	73	56	31	24" DIA	SHEEPSHEAD BAY
CI-682	BIJOU AVE	40	35	40	73	55	51	3' X 3'	SHELL BANK CREEK
CI-683	HASTINGS STREET	40	34	53	73	56	41	60"" DIA	SHEEPSHEAD BAY
CI-684	FALMOUTH STREET	40	34	54	73	56	48	24"" DIA	SHEEPSHEAD BAY
CI-685	SHEEPSHEAD BAY SHORELINE	40	34	55	73	57	6	24"" DIA	SHEEPSHEAD BAY
CI-686	Dooley Street	40	35	0	73	56	41	12"" DIA	SHEEPSHEAD BAY
CI-688	CYRUS AVENUE	40	35	0	73	56	38	10"" DIA	SHELL BANK CREEK
CI-687	E 23RD STREET	40	35	14	73	55	36	12"" DIA	SHEEPSHEAD BAY
CI-689	LANDIS PLACE	40	35	16	73	55	38	18"" DIA	SHELL BANK CREEK
CI-690	MERIT COURT	40	35	15	73	55	37	18"" DIA	SHELL BANK CREEK
CI-691	KEEN COURT	40	35	13	73	55	35	18"" DIA	SHELL BANK CREEK
CI-692	LESTER COURT	40	35	12	73	55	34	18"" DIA	SHELL BANK CREEK
CI-693	MELBA COURT	40	35	11	73	55	33	18"" DIA	SHELL BANK CREEK
CI-694	Nova Court	40	35	11	73	55	32	18"" DIA	SHELL BANK CREEK
CI-695	Seba Avenue	40	35	10	73	55	32	18"" DIA	SHELL BANK CREEK
CI-696	s/o Post Court	40	35	8	73	55	29	18"" DIA	PLUM BEACH CHANNEL
CI-697	MADOC AVENUE	40	35	9	73	55	27	18"" DIA	PLUM BEACH CHANNEL
CI-698	Frank Court	40	35	9	73	55	14	18"" DIA	PLUM BEACH CHANNEL
CI-699	Canton Court	40	35	9	73	55	13	18"" DIA	PLUM BEACH CHANNEL
CI-700	BEACON COURT	40	35	10	73	55	8	18"" DIA	PLUM BEACH CHANNEL
CI-701	ABBEY COURT	40	35	10	73	55	6	18"" DIA	PLUM BEACH CHANNEL

Hunts Point

		L	ATITUD	E	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
HP-001	HUNTS POINT WRRF OUTFALL	40	48	8	73	52	56	84" DIA	EAST RIVER				
HP-002	TIFFANY ST (REG # 9, 9A)	40	48	18	73	53	23	DBL 5' 6" X 9'	EAST RIVER	REG #9, 9A			YES (ON 9)
HP-003	FARRAGUT ST (REG # 10)	40	48	4	73	52	29	DBL 12' X 9' 5-3/4"	EAST RIVER	REG #10	YES		YES
HP-004	WEST FARM ROAD	40	50	17	73	52	45	8' X 8'	BRONX RIVER	CSO-28, 28A	YES		
HP-005	HOLLARS AVE (PUMP STATION)	40	53	12	73	49	13	12" DIA	EASTCHESTER BAY	HOLLERS AVE P.S.			
HP-006	BARTOW AVE (CO-OP CITY SOUTH PS)	40	52	7	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	52	43	DBL 11' 6" X 6' 6"	BRONX RIVER	CSO-27, 27A	YES		
HP-008	LAFAYETTE AVE & COLGATE AVE	40	49	8	73	52	53	54" DIA	BRONX RIVER	CSO-26			
HP-009	RANDALL AVE & METCALF AVE (REG #13)	40	48	52	73	52	14	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	26	73	50	27	12' X 8'	WESTCHESTER CREEK	CSO-23A			
HP-013	NEWMAN AVE (CSO- 24)	40	48	49	73	51	10	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	14	73	50	21	4' 9" X 4'	WESTCHESTER CREEK	CSO-22			
HP-016	BRUCKNER EXPRESSWAY (REG #4)	40	49	42	73	50	31	10' X 8'6"	WESTCHESTER CREEK	REG #4			YES
HP-017	EMERSON AVE (REG #11)	40	48	40	73	49	34	14' X 8'	EAST RIVER	REG #11			YES
HP-018	ROBINSON AVE (REG #12)	40	48	42	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	48	39	8' X 6' 6"	EAST RIVER	REG #2A			
HP-021	PENNYFIELD AVE (REG #2)	40	48	30	73	48	13	6' 3" X 6' 6"	EAST RIVER	REG #2			YES
HP-022	E 177TH ST (REG #1)	40	48	56	73	47	51	8' X 8'	LONG ISLAND SOUND	REG #1			YES
HP-023	CONNOR ST (REG #15)	40	52	49	73	49	17	12'0" X 6'6"	EASTCHESTER BAY	REG #15, CONNOR ST.PS			

Hunts Point (continued)

		L	ATITUD	Ε	LONGITUDE			OUTFALL SIZE			DOOM		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
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	22	73	53	32	11' 6" X 7' 3"	EAST RIVER	REG #8			YES
HP-026	ELLESWORTH AVE (REG #14)	40	49	27	73	48	50	9' X 8'	LONG ISLAND SOUND	REG #14			YES
HP-028	OUTLOOK AVE (CSO #20)	40	50	38	73	48	59	12" DIA	EASTCHESTER BAY	CSO-20			
HP-029	WATT AVE (CSO #21)	40	50	54	73	48	55	15" DIA	EASTCHESTER BAY	CSO-21			
HP-031	BELLAMY LOOP (NORTH)	40	52	25	73	49	24	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	40	73	50	33	DBL 16' X 5'	WESTCHESTER CREEK	CSO-23			
HP-034	NEWBOLD AVE (COMMERCE ST PS)	40	50	5	73	50	22	60" DIA	WESTCHESTER CREEK	COMMERCE AVE P.S.			
HP-037	ORCHARD BEACH PUMPING STATION	40	52	0	73	48	5	15" DIA	LAGOON	ORCHARD BEACH P.S.			
HP-039	N/O HUNTS POINT	40	48	14	73	52	11	72" DIA	EAST RIVER	HUNT'S PONT MARKET P.S.			

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	Ε	LO	NGITU	DE	OUTFALL SIZE	RECEIVING WATER
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
HP-602	LAFAYETTE AVE	40	50	0	73	48	58	36" DIA	LONG ISLAND SOUND
HP-608	S/O E. FORDHAM RD (BOTANICAL GDNS)	40	51	16	73	52	38	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	39	73	51	45	36" DIA	BRONX RIVER
HP-631	RANDALL AVE	40	49	47	73	48	50	48" DIA	LONG ISLAND SOUND
HP-632	BEACH ST (CITY ISLAND)	40	51	6	73	47	24	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	19	30" DIA	WESTCHESTER CREEK
HP-636	UNDER BOSTON ROAD BRIDGE	40	53	16	73	49	25	48" DIA	EASTCHESTER BAY

Hunts Point (continued)

		L	ATITUE	ЭE	LO	NGITU	DE			
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	
HP-637	PEARTREE AVE	40	52	46	73	49	18	72" DIA	EASTCHESTER BAY	
HP-638	BELLAMY LOOP (SOUTH)	40	52	19	73	49	25	36" DIA	EASTCHESTER BAY	
HP-639	N/O BARTOW AVE	40	52	12	73	49	24	66" DIA	EASTCHESTER BAY	
HP-640	EINSTEIN LOOP NORTH	40	51	53	73	49	11	48" DIA	EASTCHESTER BAY	
HP-641	ERSKINE PLACE	40	51	46	73	49	10	42" DIA	EASTCHESTER BAY	
HP-648	LAYTON AVE	40	50	9	73	48	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	41	73	50	45	24" DIA	WESTCHESTER CREEK	
HP-652	ERSKINE PLACE	40	51	45	73	49	9	30" DIA	EASTCHESTER BAY	
HP-653	SUTHERLAND ST (CITY ISLAND)	40	51	22	73	47	19	2' 6" X 1' 7"	LONG ISLAND SOUND	
HP-655	WILCOX AVE	40	49	36	73	48	49	30" DIA	LONG ISLAND SOUND	
HP-656	SE/O HUTCHINSON RIVER PARKWAY (E)	40	52	3	73	49	13	30" DIA	EASTCHESTER BAY	
HP-657	KILROE ST	40	51	18	73	47	18	18" DIA	LONG ISLAND SOUND	
HP-658	AGAR PLACE	40	50	19	73	48	55	42" DIA	LONG ISLAND SOUND	
HP-659	CITY ISLAND AVE	40	50	14	73	46	58	18" DIA	LONG ISLAND SOUND	
HP-660	SCHOFIELD ST AND LANDING WAY	40	50	44	73	46	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	
HP-664	CORNELL AVE	40	48	29	73	50	59	24" DIA	EAST RIVER	
HP-665	SCHLEY AVE	40	48	59	73	50	24	36" DIA	WESTCHESTER CREEK	

Jamaica

		L	ATITUD	E	LC	NGITU	DE				DOOM		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
JAM-001	JAMAICA WRRF OUTFALL	40	37	52	73	47	53	84" DIA	GRASSY BAY				
JAM-003	123RD ST (REG # 3)	40	39	43	73	49	7	DBL 8' X 9'	BERGEN BASIN	REG #3	YES		YES
JAM-003A	123RD ST (REG # 14)	40	39	43	73	49	6	DBL 13' 6" X 9'	BERGEN BASIN	REG #14	YES		YES
JAM-005	230TH ST (REG # 6, 7, 8 & 9)	40	38	51	73	45	17	4BL 16' X 8'	THURSTON BASIN	REG #6, 7, 8, 9	YES		YES (ON 9)
JAM-006	155TH AVE (JAMAICA WRRF SECONDARY OUTFALL & REG # 1)	40	39	37	73	48	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	16	4BL 17' X 6'	THURSTON BASIN	REG #6, 7, 8, 9	YES		YES (ON 9)

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	Ε	LC	NGITU	DE	OUTFALL SIZE	RECEIVING WATER
OUTPALLID	OUTPALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
JAM-601	165TH AVE	40	38	56	73	50	12	36" DIA	SHELLBANK BASIN
JAM-602	164TH AVE	40	39	3	73	50	14	30" DIA	SHELLBANK BASIN
JAM-603	163RD AVE	40	39	8	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	39	73	50	19	6' 6" X 6' FT	SHELLBANK BASIN
JAM-629	164TH AVE	40	39	6	73	49	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	27	73	50	16	12" DIA	SHELLBANK BASIN
JAM-632	162ND AVE	40	39	15	73	50	13	12" DIA	SHELLBANK BASIN
JAM-633	163RD AVE	40	39	9	73	50	12	12" DIA	SHELLBANK BASIN
JAM-634	164TH AVE	40	39	з	73	50	10	12" DIA	SHELLBANK BASIN

Jamaica (continued)

		L	ATITUD	E	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
JAM-635	100TH ST	40	39	29	73	49	58	18" DIA	HAWTREE BASIN
JAM-636	161ST AVE	40	39	24	73	49	59	12" DIA	HAWTREE BASIN
JAM-637	162ND AVE	40	39	18	73	49	57	12" DIA	HAWTREE BASIN
JAM-638	164TH DRIVE	40	39	3	73	49	48	18" DIA	HAWTREE BASIN
JAM-640	147TH AVE & 184TH ST	40	39	34	73	45	47	24" DIA	SPRINGFIELD PARK
JAM-648	S/O 137TH AVE	40	40	14	73	44	13	15" DIA	LAURELTON
JAM-649	HUXLEY ST	40	38	57	73	44	12	13' 6" X 7' 0"	HOOK CREEK
JAM-652	WELLER LANE	40	38	59	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	0	73	43	55	12" DIA	HOOK CREEK
JAM-655	HOOK CREEK BLVD	40	39	5	73	43	36	54" DIA	HOOK CREEK
JAM-656	101ST ST	40	39	29	73	49	54	18" DIA	HAWTREE BASIN
JAM-657	163RD AVE & PEDESTRIAN BRIDGE	40	39	12	73	49	55	24" DIA	HAWTREE BASIN
JAM-659	OPPOSITE OF 65TH AVE	40	45	8	73	44	33	36" DIA	ALLEY CREEK
JAM-660	125' N/O LONG ISLAND WB EXIT 31S RAMP NEAR CROSS ISLAND PARKWAY	40	45	18	73	44	43	30" DIA	ALLEY CREEK
JAM-661	259TH ST	40	39	1	73	43	49	54" DIA	HOOK CREEK
JAM-662	119TH AVE	40	40	48	73	47	12	24" DIA	BAISLEY POND
JAM-663	ARTHUR ST	40	39	49	73	45	38	54" DIA	BAY/OCEAN
JAM-664	ROCKAWAY BLVD AND 183RD ST	40	39	16	73	45	49	16'6" x 5'0"	Stream wider than 8 feet
JAM-665	119 DR & LAKEVIEW BLVD E	40	40	48	73	47	5.8	42" DIA	BAISLEY POND
JAM-666	BROOKEVILLE BLVD & 140' S/O 133RD AVE	40	40	30	73	43	57	4'6" X 2'10"	LAURELTON
JAM-667	BROOKEVILLE BLVD & 200' S/O 128TH RD	40	40	50	73	43	41	24" DIA	LAURELTON
JAM-668	BROOKEVILLE BLVD & 129TH AVE	40	40	47	73	43	43	24" DIA	LAURELTON
JAM-669	BROOKVILLE PARK	40	39	27	73	44	49	10 FT DIA	Hook Creek

Newtown Creek

		L	ATITUD	θE	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NCB-001	NEWTOWN CREEK WRRF OUTFALL	40	43	54	73	57	55	144" DIA	EAST RIVER				
NCB-002	NEWTOWN CREEK WRRF SECONDARY OUTFALL	40	44	з	73	56	48	3BL 7' X 8'	WHALE CREEK	WRRF OVERFLOW			
NCB-003	GREENPOINT AVE (REG # B-11)	40	43	46	73	57	40	24" DIA	EAST RIVER	REG #B-11			
NCB-004	QUAY ST (REG # B-10)	40	43	33	73	57	42	66" DIA	EAST RIVER	REG #B-10			
NCB-006	NORTH 12TH ST (REG # B-9)	40	43	30	73	57	43	13' X 13'	EAST RIVER	REG #B-9		YES	YES
NCB-007	NORTH 5TH ST (REG # B-8)	40	43	12	73	57	51	36" DIA	EAST RIVER	REG #B-8			
NCB-008	METROPOLITAN AVE (REG # B-7)	40	43	6	73	57	57	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	24	73	58	9	10' X 8'	WALLABOUT CHANNEL	REG #B-5	YES		YES
NCB-014	KENT AVE (REG # B-4)	40	42	21	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	55	49	16' X 10'	ENGLISH KILLS	REG #B-1	YES		YES
NCB-019	METROPOLITAN AVE (REG B-2)	40	42	50	73	55	26	36" DIA	NEWTOWN CREEK	REG #B-2	YES		
NCB-021	MCGUINESS BOULEVARD	40	44	19	73	57	9	36" DIA	NEWTOWN CREEK	CSO NEXT TO B-17			
NCB-022	MCGUINESS BOULEVARD (REG # B-17)	40	44	20	73	57	10	6' 3" X 4' 6"	NEWTOWN CREEK	REG #B-17			
NCB-024	DUPONT ST (REG # B-15)	40	44	8	73	57	40	18" DIA	EAST RIVER	REG #B-15			
NCB-025	FREEMAN ST (REG # B-14)	40	44	1	73	57	44	24" DIA	EAST RIVER	REG #B-14			
NCB-026	GREEN ST (REG # B-13)	40	43	58	73	57	44	2' X 2' 6"	EAST RIVER	REG #B-13			
NCB-082	SOUTH 8TH ST (REG # B-6)	40	42	36	73	58	10	36" DIA	WALLABOUT CHANNEL	REG #B-5A			
NCB-083	METROPOLITAN AVE / SCOTT AVE	40	42	50	73	55	27	11' X 10'	NEWTOWN CREEK	DB OC			
NCB-084	COMMERCIAL ST (REG # B-16)	40	44	13	73	57	35	24" DIA	NEWTOWN CREEK	REG#B-16			
NCB-084	HURON STREET (REG # B-12)	40	43	56	73	57	43	5' x 4'	EAST RIVER	REG#B-12			
NCM-005	N/O E 63RD ST (REG # M-51)	40	45	39	73	57	20	24" DIA	EAST RIVER	REG #M-51			

		L	ATITUD	E	LO	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	МІМ	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NCM-011	E 48TH ST (REG # M-47A)	40	45	6	73	57	53	4' X 2' 8" EGG	EAST RIVER	REG #M-47A			
NCM-016	E 46TH ST (REG # M-46)	40	45	1	73	57	57	4' X 4' FT	EAST RIVER	REG #M-46			
NCM-017	E 42ND ST (REG # M-45A)	40	44	52	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	5	4' X 2' 8" FT	EAST RIVER	REG #M-45			
NCM-020	E HOUSTON ST (REG # M-31)	40	43	6	73	58	25	6' X 4' 6" FT	EAST RIVER	REG #M-31			
NCM-028	DELANCY ST (REG # M-28)	40	42	53	73	58	30	4' X 4' FT	EAST RIVER	REG #M-28			
NCM-030	E 71ST ST (REG # M-51C)	40	45	54	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	26	DBL 6' 6" X 5'	EAST RIVER	REG #M-50			YES
NCM-033	E 57TH ST (REG # M-49)	40	45	25	73	57	35	4' X 2' 4" FT	EAST RIVER	REG #M-49			
NCM-034	E 54TH ST (REG # M-48)	40	45	18	73	57	41	5' X 4' FT	EAST RIVER	REG #M-48			
NCM-035	E 53RD ST (REG # M-48A)	40	45	16	73	57	44	4' X 2' 4" FT	EAST RIVER	REG #M-48A			
NCM-036	E 49TH ST (REG # M-47)	40	45	7	73	57	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	43	73	58	11	5' X 4' FT	EAST RIVER	REG #M-43B			
NCM-038A	E 38TH ST (REG # M-43B)	40	44	43	73	58	12	5' X 4' FT	EAST RIVER	REG #M-43B			
NCM-039	E 37TH ST (REG # M-43A)	40	44	41	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	58	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	21	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

		L	ATITUD	E	LO	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NCM-046	E 24TH ST (REG # M-39)	40	44	7	73	58	21	48" DIA	EAST RIVER	REG #M-39, M-39A			
NCM-047	E 23RD ST (REG # M-38B)	40	44	6	73	58	27	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	24	6' X 8' FT	EAST RIVER	REG #M-37			YES
NCM-051	OLD SLIP (REG # M-12)	40	42	10	74	0	27	48" DIA	EAST RIVER	REG #M-12			
NCM-052	E 14TH ST (REG # M-36)	40	43	36	73	58	17	DBL 6' X 7'	EAST RIVER	REG #M-36			YES
NCM-053	E 11TH ST (REG # M-35)	40	43	27	73	58	19	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	16	73	58	22	5' 6" X 4' FT	EAST RIVER	REG #M-33			
NCM-056	E 3RD ST (REG # M-32)	40	43	7	73	58	24	6' 6" X 6' FT	EAST RIVER	REG #M-32			
NCM-057	STANTON ST (REG # M-30)	40	43	2	73	58	26	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	58	34	6' X 3' FT	EAST RIVER	REG #M-26			
NCM-060	S/O CORLEARS HOOK PARK (REG # M-25)	40	42	37	73	58	41	5' X 4' FT	EAST RIVER	REG #M-25			
NCM-061	JACKSON ST (REG # M-23)	40	42	37	73	58	49	4' X 3' EGG	EAST RIVER	REG #M-23			
NCM-062	GOVERNEUR SLIP E (REG # M-22)	40	42	34	73	58	58	48" DIA	EAST RIVER	REG #M-22			
NCM-063	JEFFERSON ST (NORTH SIDE) (REG # M-21)	40	42	32	73	59	17	48" DIA	EAST RIVER	REG #M-21			YES
NCM-064	MARKET SLIP (REG # M -20)	40	42	33	73	59	37	54" DIA	EAST RIVER	REG #M-20			
NCM-065	S/O CATHERINE ST (REG # M-18)	40	42	32	73	59	46	4' 6" X 4' FT	EAST RIVER	REG #M-18			
NCM-066	ROBERT F WAGNER PLACE (REG # M -17)	40	42	29	73	59	55	48" DIA	EAST RIVER	REG #M-17			
NCM-067	MAIDEN LANE (REG # M -13A)	40	42	17	74	0	15	6' X 6' FT	EAST RIVER	REG #M-13			
NCM-068	COENTIES SLIP (REG # M -11)	40	42	6	74	0	33	4' 6" X 3' 8"	EAST RIVER	REG #M-11			
NCM-069	BROAD ST (REG # M-10)	40	42	5	74	0	39	5' X 4' FT	EAST RIVER	REG #M-10			YES

		L	ATITUD	E	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
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	34	74	1	6	96" DIA	HUDSON RIVER	REG #M-6, M-7			
NCM-072	VESEY ST (REG # M-5)	40	42	54	74	1	2	96" DIA	HUDSON RIVER	REG #M-5			
NCM-073	DUANE ST (REG # M-4)	40	43	6	74	1	0	54" DIA	HUDSON RIVER	REG #M-4			
NCM-074	VESTRY ST (REG # M-3)	40	43	22	74	0	44	5' X 3' 8"	HUDSON RIVER	REG #M-3			
NCM-075	N/O WATTS ST (REG # M-2)	40	43	29	74	0	42	66" DIA	HUDSON RIVER	REG #M-2			YES
NCM-076	CLARKSON ST (REG # 1)	40	43	48	74	0	50	12' X 6' 3" FT	HUDSON RIVER	REG #M-1			YES
NCM-078	N/O DOVER ST (REG # M -16)	40	42	27	73	59	58	12' X 6'	EAST RIVER	REG #M-16			YES
NCM-080	N/O VANDAM ST (REG # TG-2)	40	43	37	74	0	41	48" DIA	HUDSON RIVER	REG #TG-2			
NCM-081	S/O CHARLES ST (REG # TG-1)	40	44	0	74	0	38	5' X 4'	HUDSON RIVER	REG #TG-1			
NCM-087	E 22ND ST (REG # M-38A)	40	44	3	73	58	27	5' X 3' 6" FT	EAST RIVER	REG #M-38A			
NCQ-029	43RD ST (REG # Q-2)	40	43	35	73	55	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		

		L	ATITUE	θE	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
NCB-629	SCHOLES ST	40	42	38	73	55	51	60" DIA	ENGLISH KILLS
NCB-630	MEEKER ST & GARDNER AVE	40	43	41	73	55	56	DBL 16" DIA	NEWTOWN CREEK
NCB-631	N/O HENRY ST	40	44	10	73	56	39	90" DIA	NEWTOWN CREEK
NCB-635	10' S/O GRAND ST BRIDGE	40	42	51	73	55	51	42" DIA	ENGLISH KILLS
NCB-636	5' N/O GRAND ST BRIDGE	40	42	51	73	55	53	60" DIA	ENGLISH KILLS
NCB-638	GARDENER AVE	40	43	3	73	55	40	54" DIA	ENGLISH KILLS
NCB-639	MASPETH AVE & NEWTOWN CREEK	40	43	11	73	55	28	22"	NEWTOWN CREEK
NCM-628	RECTOR PLACE	40	42	34	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	39	73	58	17	42" DIA	EAST RIVER
NCM-641	E 16TH STREET	40	43	42	73	58	17	5' 6" X 4'	EAST RIVER
NCB-642	HURON STREET, DEAD END	40	43	56	73	57	43	5' x 4' FT	EAST RIVER
NCQ-632	GRAND AVE	40	43	35	73	55	38	54" DIA	NEWTOWN CREEK
NCQ-633	300' N/O GRAND AVE BRIDGE	40	43	25	73	55	13	60" DIA	NEWTOWN CREEK
NCQ-637	LAUREL HILL BLVD & REVIEW AVE	40	42	59	73	55	20	72" DIA	NEWTOWN CREEK

North River

		L	ATITUD	E	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NR-001	NORTH RIVER WRRF OUTFALL	40	49	31	73	57	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	56	57	48" DIA	HUDSON RIVER	REG #N-19			
NR-004	W 171ST ST (REG # N-18)	40	50	45	73	56	47	6' X 10' 6" FT	HUDSON RIVER	REG #N-18			YES
NR-005	W 190TH ST (REG # N-17)	40	51	27	73	56	21	18" DIA	HUDSON RIVER	REG #N-17			
NR-006	DYCKMAN ST (REG # N-16)	40	52	9	73	55	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	8	4' 0" X 2' 4" FT	SPUYTEN DUYVIL CREEK	REG #N-15			
NR-008	W 216TH ST (REG # N-14)	40	52	7	73	54	40	5' X 4' EGG	HARLEM RIVER	REG #N-14			
NR-009	W 215TH ST (REG # N-13)	40	52	5	73	54	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	55	73	54	47	54" DIA	HARLEM RIVER	REG #N-10, N-11, N-12			
NR-011	W 209TH ST (REG # N-9)	40	51	52	73	54	53	24" DIA	HARLEM RIVER	REG #N-9			
NR-012	W 207TH ST (SOUTH SIDE) (REG # N-7)	40	51	46	73	54	56	36" DIA	HARLEM RIVER	REG #N-7			
NR-013	W 206TH ST (REG # N-6)	40	51	44	73	54	58	3' 6" X 2' 4" EGG	HARLEM RIVER	REG #N-6			
NR-014	W 205TH ST (REG # N-5)	40	51	42	73	55	1	48" DIA	HARLEM RIVER	REG #N-5			
NR-016	W 203RD ST (REG # N-4)	40	51	38	73	55	4	3' 6" X 2' 4" EGG	HARLEM RIVER	REG #N-4			
NR-017	W 201ST ST (REG # N-3)	40	51	34	73	55	7	6' X 4' FT	HARLEM RIVER	REG #N-3			YES
NR-018	HIGHBRIDGE PARK (REG # N-1)	40	51	25	73	55	17	48" DIA	HARLEM RIVER	REG #N-1			
NR-019	BANK ST (REG # N-56)	40	44	10	74	0	38	48" DIA	HUDSON RIVER	REG #N-56			
NR-020	JANE ST (REG # N-55)	40	44	17	74	o	39	48" DIA	HUDSON RIVER	REG #N-55			
NR-021	GANSEVOORT ST (REG # N-54)	40	44	21	74	0	40	48" DIA	HUDSON RIVER	REG #N-54			
NR-022	S/O W 17TH ST (REG # N-51)	40	44	40	74	0	31	54" DIA	HUDSON RIVER	REG #N-51			
NR-023	W 18TH ST (REG # 50)	40	44	45	74	0	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	0	40	48" DIA	HUDSON RIVER	REG #N-48, N-49			

North River (continued)

		L	ATITUD	E	LO	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NR-025	W 24TH ST (REG # N-47)	40	45	2	74	0	39	42" DIA	HUDSON RIVER	REG #N-47			
NR-026	W 26TH ST (REG# N-46)	40	45	8	74	0	33	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	9	74	0	9	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	49	74	0	3	54" DIA	HUDSON RIVER	REG #N-38			
NR-032	W 46TH ST (REG # N-36)	40	45	56	74	0	7	48" DIA	HUDSON RIVER	REG #N-36, N-37			
NR-033	N/O W 48TH ST (REG # N-34, N-33)	40	45	57	73	59	52	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	6	74	0	4	4' X 4' FT	HUDSON RIVER	REG #N-32			
NR-035	W 56TH ST (REG # N-31)	40	46	16	73	59	43	6' X 4' 6" FT	HUDSON RIVER	REG #N-31			
NR-036	W 59TH ST (REG # N-30)	40	46	26	73	59	45	48" DIA	HUDSON RIVER	REG #N-30			
NR-037	N/O W 72ND ST (REG # N-29)	40	46	53	73	59	16	60" DIA	HUDSON RIVER	REG #N-29			
NR-038	W 80TH ST (REG # N-28)	40	47	11	73	59	4	10' 6" X 6' 0" FT	HUDSON RIVER	REG #N-28			YES
NR-039	W 91ST ST (REG # N-27)	40	47	37	73	58	46	48" DIA	HUDSON RIVER	REG #N-27			
NR-040	W 96TH ST (REG # N-26, 26A)	40	47	49	73	58	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	16	73	58	18	4' 0" X 4' 0"	HUDSON RIVER	REG #N-25			
NR-042	W 115TH ST (REG # N-24)	40	48	32	73	58	6	4' 6" X 4' 0"	HUDSON RIVER	REG #N-24			
NR-043	SAINT CLAIRS PLACE (REG # N-23)	40	49	5	73	57	43	DBL 8' 8" X 7'	HUDSON RIVER	REG #N-23			YES
NR-044	W 138TH ST (REG # N-22)	40	49	25	73	57	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	59	54	4' X 2' 8" FT	HUDSON RIVER	REG #N-35			

North River (continued)

OUTFALL ID	OUTFALL LOCATION	L	LATITUDE			ONGITU	DE	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
OUTPALLID	OUTFALL LOCATION	DEG	ΜΙΝ	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
NR-048	W 42ND ST (REG # N-40 & N-41)	40	45	43	74	0	6	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	0	32	6' X 4' FT	HUDSON RIVER	REG #N-52			
NR-050	BLOOMFIELD ST (REG # N-53)	40	44	26	74	0	40	3' 6" X 2' 4" EGG	HUDSON RIVER	REG #N-53			
NR-051	W 49TH ST (CSO)	40	45	59	73	59	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	54	55	36" DIA	HARLEM RIVER	REG #N-7, N-8			
NR-056	W 142ND ST (REG # N-22A)	40	49	32	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
OUTPALL ID	OUTPALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
OB-001	OAKWOOD BEACH WRRF OUTFALL	40	32	51	74	6	45	96" DIA	LOWER NEW YORK BAY				
OB-001A	OAKWOOD BEACH WRRF PLANT BYPASS	40	32	57	74	6	52	60" DIA	LOWER NEW YORK BAY	PLANT BYPASS			

		L	ATITUE	ЭE	LC	NGITU	DE		RECEIVING WATER	
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	
OB-605	450' N/O RICHMOND ROAD BRIDGE	40	34	19	74	8	51	5' X 3' 2"	RICHMOND CREEK	
OB-607	SEAVIEW AVE	40	34	40	74	4	30	DBL 15' X 6'	LOWER NEW YORK BAY	
OB-609	EBBITTS ST	40	33	32	74	5	57	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	16	42" DIA	GREAT KILLS HARBOR	
OB-613	S/O WIMAN AVE	40	32	13	74	8	37	60" DIA	RARITAN BAY	
OB-614	ARMSTRONG AVE	40	32	7	74	8	45	9' X 4' 6"	RARITAN BAY	
OB-615	WOODS OF ARDEN ROAD	40	31	44	74	9	24	48" DIA	RARITAN BAY	

		L	ATITUD	E	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-618	S/O ELMTREE AVE	40	33	59	74	5	28	3' X 2'7"	LOWER NEW YORK BAY
OB-619	N/O NEW DORP LANE	40	33	45	74	5	38	13' X 5' 6"	LOWER NEW YORK BAY
OB-622	HOLDRIDGE PLACE	40	31	35	74	9	49	48" DIA	RARITAN BAY
OB-623	150' N/O ARBUTUS AVE	40	31	34	74	10	44	6' 6" X 6'	RARITAN BAY
OB-625	HUGUENOT AVE	40	31	11	74	10	59	42" DIA	RARITAN BAY
OB-627	BEDELL AVE	40	30	6	74	13	52	36" DIA	RARITAN BAY
OB-628	S. GOFF & STATEN ISLAND RAILROAD	40	31	21	74	12	42	18" DIA	LEMON CREEK
OB-629	STATEN ISLAND RAILROAD & W/O SHARROTT AVE	40	31	21	74	12	48	5' 8" X 3' 7"	LEMON CREEK
OB-630	STATEN ISLAND RAILROAD & W/O WOODVALE AVE	40	31	27	74	12	35	4' X 2' FT	LEMON CREEK
OB-631	15 HASTINGS COURT	40	31	26	74	12	24	48" DIA	AR-10 DEC WETLAND
OB-633	EAST DRUMGOOLE ROAD & ADDISON AVE	40	31	58	74	11	56	66" DIA	LEMON CREEK
OB-635	MAGUIRE AVE & FONDA PLACE	40	31	42	74	12	38	50" DIA	LEMON CREEK
OB-636	PAGE AVE & STATEN ISLAND RAILROAD	40	31	7	74	14	4	42" DIA	MILL CREEK
OB-638	BOSCOMBE AVE & E/O WEST SHORE EXPRESSWAY	40	31	28	74	13	35	42" DIA	MILL CREEK
OB-639	BOSCOMBE AVE & E/O WEST SHORE EXPRESSWAY	40	31	27	74	13	35	18" DIA	MILL CREEK
OB-641	ARTHUR KILL ROAD & PARK DRIVE SOUTH	40	33	50	74	10	38	48" DIA	RICHMOND CREEK
OB-642	RICHMOND AVE & N/O ARTHUR KILL ROAD	40	33	42	74	10	10	72" DIA	RICHMOND CREEK
OB-643	RICHMOND AVE & N/O ARTHUR KILL ROAD	40	33	42	74	10	10	8' X 7'	RICHMOND CREEK
OB-644	ARTHUR KILL ROAD & E/O RIDGEWOOD AVE	40	33	37	74	9	58	3'9" X 2'5"	RICHMOND CREEK
OB-645	ABINGDON AVE & N/O ARTHUR KILL ROAD	40	33	55	74	9	50	3BL 16' X 6'6"	RICHMOND CREEK
OB-645A	GREAVES AVE & ISLINGTON ST	40	33	42	74	9	1	24" DIA	AR-38 DEC WETLAND
OB-646	ARTHUR KILL ROAD & S/O TANGLEWOOD DRIVE	40	34	3	74	9	7	6' 6" X 3'	RICHMOND CREEK
OB-647	RICHMOND AVE & RICHMOND HILL ROAD	40	35	24	74	10	6	16' X 6'	SPRINGVILLE CREEK

		L	ATITUD	ЭE	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-648	RICHMOND AVE & RICHMOND HILL ROAD	40	35	21	74	10	3	42" DIA	SPRINGVILLE CREEK
OB-649	RICHMOND AVE & RICHMOND HILL ROAD	40	35	21	74	10	3	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	26	74	9	57	6'11" X 4'5"	SPRINGVILLE CREEK
OB-653	TRAVIS AVE & DRAPER AVE	40	35	35	74	9	50	8'10" X 5'8"	SPRINGVILLE CREEK
OB-654	TRAVIS AVE & FREEDOM AVE	40	35	36	74	9	53	36" DIA	SPRINGVILLE CREEK
OB-655	TRAVIS AVE & W/O MULBERRY AVE	40	35	38	74	10	9	42" DIA	MARSH
OB-656	CLEVELAND AVE	40	32	32	74	8	32	9' X 5' 6"	GREAT KILLS HARBOR
OB-657	POILLON AVE	40	31	21	74	10	24	36" DIA	RARITAN BAY
OB-660	ROSSVILLE AVE	40	33	21	74	12	47	4' 8" X 2'	ARTHUR KILL
OB-661	ARTHUR KILL ROAD & HERVEY ST	40	33	12	74	13	4	9' 6" X 6'	ARTHUR KILL
OB-662	HUGUENOT AVE	40	33	22	74	12	11	DBL 8'10" X 6'	ARTHUR KILL
OB-663	SHARON LANE & W/O HELENE COURT	40	32	9	74	12	55	36" DIA	LEMON CREEK
OB-664	INDEPENDENCE AVE & N/O FOREST HILL ROAD	40	34	16	74	10	6	78" DIA	RICHMOND CREEK
OB-666	LUTEN AVE & EYLANDT ST & JANSEN ST	40	31	32	74	11	26	48" DIA	LEMON CREEK
OB-668	CINDRA AVE	40	32	23	74	8	33	4' X 1' 6"	GREAT KILLS HARBOR
OB-669	RICHMOND AVE	40	31	57	74	9	4	4' X 3'	RARITAN BAY
OB-670	ARDEN AVE	40	31	38	74	9	35	48" DIA	RARITAN BAY
OB-671	ARBUTUS AVE	40	31	35	74	10	49	60" DIA	RARITAN BAY
OB-672	W/O SHARROTT AVE	40	30	38	74	12	42	4' X 3' 6" EGG	MARSH
OB-673	JOLINE AVE	40	30	4	74	13	59	5' X 3'	RARITAN BAY
OB-674	SPRAGUE AVE	40	30	0	74	14	10	36" DIA	RARITAN BAY
OB-675	LORETTO AVE	40	29	57	74	14	16	13' 6" X 5'	RARITAN BAY

		L	ATITUE	E	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-676	TRACY AVE	40	30	56	74	14	43	4' X 3'	ARTHUR KILL
OB-677	NASSAU PLACE	40	31	9	74	14	25	36" DIA	ARTHUR KILL
OB-678	SAND LANE	40	35	17	74	3	51	10' X 6'	LOWER NEW YORK BAY
OB-679	ATLANTIC AVE	40	34	53	74	4	14	DBL 10' X 6' 6"	LOWER NEW YORK BAY
OB-680	GREELEY AVE	40	34	1	74	5	21	DBL 15' X 6' 3"	LOWER NEW YORK BAY
OB-682	SEGUINE AVE	40	30	46	74	11	48	36" DIA	LEMON CREEK
OB-685	850' E/O ARTHUR KILL ROAD & PAGE AVE	40	31	47	74	13	35	48" DIA	MILL CREEK
OB-686	MAIN ST	40	30	50	74	15	6	30" DIA	ARTHUR KILL
OB-687	QUINTARD ST	40	35	17	74	4	29	10' X 6'	MARSH
OB-688	NAUGHTON AVE	40	34	30	74	4	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	36	74	14	10	24" DIA	ARTHUR KILL
OB-691	MILL POND	40	34	20	74	8	36	3' X 2'6"	RICHMOND CREEK
OB-691A	RICHMOND HILL RD & MACE ST	40	34	21	74	8	40	6'0" x 2'6"	RICHMOND CREEK
OB-692	ST. ANDREWS ROAD	40	34	24	74	8	32	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	32	74	8	0	4' X 2'	RICHMOND CREEK
OB-696	BOYLE PLACE / NUGENT ST	40	34	35	74	7	59	5' X 3'	RICHMOND CREEK
OB-697	MEISNER AVE & LIGHTHOUSE AVE	40	34	57	74	7	50	36" DIA	RICHMOND CREEK
OB-698	BOOTH AVE	40	32	10	74	10	33	5' X 3'2"	BLUE HERON
OB-699	EYLANDT ST	40	31	58	74	10	23	5'8" X 3'7"	BLUE HERON

		L	ATITUD	ЭE	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-700	KOCH POND	40	32	1	74	10	4	3'9" X 2'5"	BLUE HERON
OB-701	SHIRLEY AVE	40	31	47	74	10	15	4'5" X 2'10"	BLUE HERON
OB-702	2 NEWTON ST		31	41	74	10	20	3'9" X 2'5"	BLUE HERON
OB-703	DOLE ST	40	31	39	74	10	17	18" DIA	BLUE HERON
OB-704	POILLON AVE	40	31	45	74	10	33	30" DIA	BLUE HERON
OB-705	BENNETT POND	40	32	7	74	11	14	3'9" X 2'6"	ARBUTUS CREEK
OB-706	PHILIP AVE	40	32	1	74	10	50	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	22	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	55	74	11	10	3'2" X 2'	ARBUTUS CREEK
OB-711	RUGGLES ST	40	32	0	74	10	58	18" DIA	MARSH
OB-712	CONVENT AVE	40	32	24	74	12	47	6'11" X 4'5"	LEMON CREEK
OB-713	EDGEGROVE AVE	40	32	0	74	12	27	4' X 2'	LEMON CREEK
OB-714	DARLINGTON AVE	40	31	58	74	12	26	3' 2" X 2'	LEMON CREEK
OB-715	MAGUIRE AVE	40	31	55	74	12	39	4' X 2'	LEMON CREEK
OB-716	FOSTER ROAD	40	31	38	74	12	6	5' X 3' 2"	LEMON CREEK
OB-717	AMBOY ROAD	40	31	30	74	12	33	4'5" X 2'10"	LEMON CREEK
OB-718	BAYVIEW AVE	40	31	11	74	12	15	5' X 2'6"	LEMON CREEK
OB-719	BAYVIEW AVE	40	31	17	74	12	16	4' X 4'	LEMON CREEK
OB-720	KOREAN WAR VETERANS MEMORIAL PARKWAY	40	32	1	74	11	57	60" DIA	WOLFE'S POND
OB-721	CHISHOLM AVE	40	31	33	74	11	35	8'10" X 5'8" EGG	WOLFE'S POND
OB-722	CLERMONT AVE / FINLAY ST	40	30	2	74	14	52	DBL 7'3" X 3'6"	RARITAN BAY

		L	ATITUE	ЭE	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-723	HOPKINS AVE	40	33	20	74	7	43	36" DIA	GREAT KILLS HARBOR
OB-724	BAY TERRACE	40	33	7	74	7	58	66" DIA	GREAT KILLS HARBOR
OB-725	CLARK AVE & ARUTHUR KILL RD	40	34	15	74	8	52	7' 3" X 3' 6"	MARSH
OB-726	REDGRAVE AVE	40	33	3	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	13	33	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	16	42"	STREAM WIDER THAN 8 FEET
OB-731	HYLAN BLVD AND BUFFALO ST	40	33	23	74	7	38	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	34	74	5	46	10' X 3'	Stream wider than 8 feet
OB-734	N/O Patten Street	40	30	36	74	15	11	12"" DIA	ARTHUR KILL
OB-735	SOUTH BRIDGE STREET	40	31	27	74	14	21	36"" DIA	ARTHUR KILL
OB-736	HYLAN BOULEVARD & BERMUDA PLACE	40	34	56	74	5	48	24"" DIA	River Stream
OB-737	HYLAN BOULEVARD & BERMUDA PLACE	40	34	56	74	5	49	24"" DIA	Pond
OB-738	PURDY PLACE	40	30	45	74	11	38	5' X 3'	LEMON CREEK
OB-739	AMBOY ROAD	40	31	10	74	13	42	12"" DIA	MARSH
OB-740	HYLAN BLVD & BUFFALO STREET	40	33	23	74	7	38	20" DIA	GREAT KILLS HARBOR
OB-741	AULTMAN AVE & ST GEORGE RD	40	34	30	74	8	12	18" DIA	LIGHTHOUSE HILL STREAM
OB-742	SIGNS ROAD	40	36	9	74	10	17	36""DIA	MARSH
OB-743	NUGENT STREET	40	34	37	74	7	54	3.5' X 3'	Stream wider than 8 feet
OB-744	LINCOLN AVENUE	40	34	32	74	6	4	60""DIA	Stream wider than 8 feet
OB-745	AMBOY ROAD	40	31	16	74	13	3	24""DIA	MARSH

		L	ATITUD	ЭE	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-746	OCEANIC AVENUE	40	31	58	74	9	2	20""DIA	RARITAN BAY
OB-747	GRANTWOOD AVENUE	40	33	17	74	10	58	48""DIA	MARSH
OB-748	HUGUENOT AVENUE	40	31	30	74	11	12	15""DIA	MARSH
OB-749	IONIA AVENUE	40	32	30	74	10	59	4.5' X 11'	Stream wider than 8 feet
OB-750	KINGDOM AVENUE	40	31	35	74	11	8	24""DIA	MARSH
OB-751	COLON STREET	40	31	50	74	11	10	20""DIA	Stream wider than 8 feet
OB-752	SHOTWELL AVE	40	33	17	74	10	55	42" DIA	ARDEN HEIGHTS WOODS MARSH
OB-753	LIPSETT AVENUE	40	32	4	74	10	26	30""DIA	MARSH
OB-754	EDGEGROVE AVENUE	40	32	29	74	10	56	4.5' X 11'	Stream wider than 8 feet
OB-755	CARLTON BOULEVARD & JEFFERSON BOULEVARD	40	32	34	74	10	46	20""DIA	Stream wider than 8 feet
OB-756	WOODROW ROAD & SHOTWELL AVENUE	40	33	20	74	10	55	20""DIA	MARSH
OB-757	SHELDON AVENUE	40	32	36	74	11	16	7.6' X 5.8'	MARSH
OB-758	FINGAL STREET	40	32	11	74	10	20	20""DIA	MARSH
OB-759	ARDEN AVENUE & SNEDEN AVE	40	32	29	74	10	15	20""DIA	Pond
OB-760	ARDEN AVENUE & SNEDEN AVE	40	32	29	74	10	15	2.5' X 1.6'	Pond
OB-761	LACONIA AVENUE	40	34	52	74	5	39	12"" DIA	River Stream
OB-762	MASON AVENUE	40	34	47	74	5	34	42"" DIA	River Stream
OB-764	GRAHAM BOULEVARD	40	34	31	74	5	9	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

Oakwood Beach (continued)

		L	ATITUD	E	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
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-774	GOFF AVE	40	31	40	74	12	46	38" x 24"	MARSH
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
OB-787	Kramer Ave and Maguire Ave	40	32	33	74	12	44	24" DIA	POND
OB-788	RICHMOND RD & INDEPENDENCE AVE	40	34	25	74	10	13	24" DIA	MARSH
OB-789	RICHMOND RD & FOREST HILL RD	40	34	17	74	10	13	24" DIA	MARSH
OB-790	ROSSVILLE AVE	40	32	35	74	12	31	8" DIA	AR105 DEC WETLAND
OB-791	MERRICK AVE DEAD END	40	36	6	74	6	29	24" DIA	Reed's Basket Willow Swamp Park
OB-792	OLYMPIA BLVD & BUEL AVE	40	34	52	74	5	8	36" DIA	NA-9 DEC WETLAND

Oakwood Beach (continued)

		L	ATITUE	ЭE	LC	ONGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OB-793	ITHACA ST & HYLAN BLVD	40	33	33	74	7	17	42" DIA	NA-10 DEC WETLAND
OB-794	LOUISE ST	40	31	41	74	10	56	45" x 29"	AR-12 DEC WETLAND
OB-795	PLATINUM AVE & RICHMOND AVE	40	34	47	74	10	11	34" x 53"	FRESH KILLS MARSH
OB-796	160' NW/O ARTHUR KILL RD AND ERIKA LOOP	40	33	53	74	11	9	48" DIA	FRESH KILLS MARSH
OB-797	KYLE CT & ARDEN AVE	40	33	29	74	11	48	12" DIA	AR-5 DEC WETLAND
OB-798	ARDEN AV (200' NW/O HALPIN AV)	40	33	4	74	11	21	36"DIA	AR-5 DEC WETLAND
OB-799	FAIRLAWN AVE	40	32	49	74	8	13	24" DIA	GREAT KILLS HARBOR
OB-1600	BROOK AVE (120' NE/O FARIBANKS AVE)	40	33	23	74	7	19	36" DIA	NA-10 DEC WETLAND
OB-1601	WOODROW RD (300' SW/O ERIKA LOOP)	40	33	21	74	10	58	24" DIA	AR-5 DEC WETLAND
OB-1602	PEMBROOK LOOP	40	32	6	74	13	12	36" DIA	AR-10 DEC WETLAND
OB-1603	ALVERSON AVE & POND ST	40	33	9	74	12	35	24" x 38"	POND
OB-1604	SHARON LANE	40	32	9	74	12	53	36" DIA	AR-10 DEC WETLAND
OB-1605	IONIA AVE	40	32	43	74	10	50	120" x 30"	AR-28 DEC WETLAND
OB-1606	ALVERSON AVE & AARON LANE	40	33	18	74	12	39	12" DIA	Arthur Kill and minor tribs
OB-1607	GRASMERE LAKE	40	36	15	74	4	42	18" DIA	NA-4 DEC WETLAND
OB-1608	263 MACE ST	40	34	26	74	8	17	15" DIA	AR-3 DEC WETLAND
OB-1609	CODY PLACE (175' S/O ARTHUR KILL RD)	40	33	20	74	12	8	128" x 82"	Arthur Kill and minor tribs
OB-1610	COMMODORE DR	40	30	47	74	12	4	36" DIA	RARITAN BAY
OB-1611	CODY PLACE	40	33	18	74	12	2	90" DIA	Arthur Kill and minor tribs
OB-1612	MADSEN AVE & RICHMOND VALLEY RD	40	31	14	74	14	2	5' X 3' 6"	MILL CREEK
OB-1613	115' N/O ALEXANDER AVE AND WOODROW RD	40	33	30	74	10	50	2' x 4'	AR-5 DEC WETLAND
OB-1614	HYLAN BLVD	40	30	32	74	13	16	6' X 3'	AR-15 DEC WETLAND
OB-1615	HYLAN BLVD	40	30	31	74	13	23	30" DIA	AR-15 DEC WETLAND
OB-1616	HYLAN BLVD	40	32	36	74	13	8	24" DIA	MARSH

Owls Head

		L	ATITUD	E	LO	LONGITUDE							
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
OH-001	OWLS HEAD WRRF OUTFALL	40	38	30	74	2	13	96" DIA	UPPER NEW YORK BAY				
OH-002	64TH ST (REG #6A,B,C)	40	38	41	74	1	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	9	74	1	16	11' X 8' FT	UPPER NEW YORK BAY	REG #7A, 7B, 7C			YES (ON 7A)
OH-004	43RD ST (REG #7D)	40	39	19	74	1	1	6' X 4'	UPPER NEW YORK BAY	REG #7D, 19TH ST. PS			YES
OH-006	19TH ST (NORTH SIDE)	40	40	3	74	0	1	36" DIA	GOWANUS CANAL	3RD AVE SEWER RELIEF			
OH-007	2ND AVE	40	40	31	73	59	27	78" DIA	GOWANUS CANAL	2ND AVE P.S.			
OH-015	17TH AVE (REG #9A, B, C)	40	36	5	74	o	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	29	3BL 7' 4" X 7' 4"	UPPER NEW YORK BAY	REG #1			YES
OH-018	79TH ST (REG #3)	40	37	53	74	2	25	12' X 7'	UPPER NEW YORK BAY	REG #2, 3			YES (ON 3)
OH-019	71ST ST (REG #4)	40	38	12	74	2	16	48" DIA	UPPER NEW YORK BAY	REG #4			YES
OH-020	BAY RIDGE AVE (REG #5)	40	38	20	74	2	12	3' X 3' FT	UPPER NEW YORK BAY	REG #5			
OH-021	W 15TH ST	40	34	59	73	59	1	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	28	11' X 6' FT	GOWANUS BAY	2ND AVE SEWER RELIEF			
OH-024	23RD ST	40	39	48	74	0	0	3' 6" X 2' 3"	GOWANUS BAY	3RD AVE SEWER RELIEF			
OH-025	29TH ST (BUSH TERMINAL COMPLEX)	40	39	42	74	0	22	66" DIA	GOWANUS BAY	BUSH TERMINAL PS			
OH-026	22ND ST	40	39	51	73	59	58	36" DIA	GOWANUS BAY	3RD AVE SEWER RELIEF			

Owls Head (continued)

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	θE	LC	NGITU	DE		
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
OH-606	W 15TH ST	40	35	0	73	59	1	5' X 5'	CONEY ISLAND CREEK
OH-610	20TH AVE	40	35	51	74	0	19	3' 6" X 3' 6" FT	GRAVESEND BAY
OH-611	BAY PARKWAY	40	35	38	74	0	6	60" DIA	GRAVESEND BAY
OH-612	25TH AVE	40	35	23	73	59	54	8' X 8'	GRAVESEND BAY
OH-613	15TH AVE	40	36	8	74	1	6	24" DIA	GRAVESEND BAY
OH-614	27TH AVE (S/O BELT PARKWAY)	40	35	14	73	59	33	54" DIA	GRAVESEND BAY
OH-615	BAY 43RD ST (S/O BELT PARKWAY)	40	35	19	73	59	35	5' 6" X 5' 6"	GRAVESEND BAY
OH-616	21ST ST	40	39	54	74	0	3	24" DIA	GOWANUS BAY
OH-619	39TH ST	40	39	27	74	0	52	48" DIA	UPPER NEW YORK BAY
OH-620	E/O 9TH STREET	40	40	27	73	59	47	42" DIA	GOWANUS CANAL

Port Richmond

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	E	LO	NGITU	DE	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
PR-001	PORT RICHMOND WRRF OUTFALL	40	38	28	74	7	29	96" DIA	KILL VAN KULL				
PR-002	E/O TAYLOR ST	40	38	24	74	7	26	20" DIA	KILL VAN KULL	REG #R-34			
PR-003	BROADWAY	40	38	29	74	7	6	15" DIA	KILL VAN KULL	REG #R-33			
PR-004	BARD AVE	40	38	44	74	6	31	18" DIA	KILL VAN KULL	REG #R-29			
PR-005	30' N/O KISSEL AVE	40	38	43	74	6	24	20" DIA	KILL VAN KULL	REG #R-28			
PR-006	CLINTON AVE	40	38	43	74	5	54	36" DIA	KILL VAN KULL	REG #R-23			
PR-007	SAILOR SNUG HARBOR (BRENTWOOD AVE)	40	38	43	74	6	7	15" DIA	KILL VAN KULL	REG #R-27			
PR-008	FRANKLIN AVE	40	38	45	74	5	35	15" DIA	KILL VAN KULL	REG #R-21			
PR-009	JERSEY ST	40	38	50	74	5	21	6' X 4'6"	KILL VAN KULL	REG #R-20			

Port Richmond (continued)

		L	ATITUD	ЭE	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
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	48	74	4	35	30" DIA	UPPER NEW YORK BAY	REG #R-18			
PR-013	VICTORY BOULEVARD	40	38	16	74	4	21	7' 1" X 4' 1"	UPPER NEW YORK BAY	REG #R-17			
PR-014	BALTIC ST	40	37	50	74	4	23	DBL 6'2" X 3'6"	UPPER NEW YORK BAY	REG #R-15			
PR-015	S/O DOCK ST	40	37	32	74	4	20	3' 6" X 2' 4"	UPPER NEW YORK BAY	REG #R-11			
PR-016	MARINE HOSPITAL	40	37	28	74	4	19	20" DIA	UPPER NEW YORK BAY	REG #R-10			
PR-017	NORWOOD AVE	40	37	20	74	4	14	48" DIA	UPPER NEW YORK BAY	REG #R-9			
PR-018	N/O CAMDEN ST	40	37	14	74	4	8	36" DIA	UPPER NEW YORK BAY	REG #R-8			
PR-019	LYNHURST AVE	40	37	9	74	4	1	13' X 6' FT	UPPER NEW YORK BAY	REG #R-7			YES
PR-020	N/O SYLVA LANE	40	37	2	74	3	53	15" DIA	UPPER NEW YORK BAY	REG #R-5			
PR-021	HYLAN BOULEVARD	40	36	56	74	3	46	10" DIA	UPPER NEW YORK BAY	REG #R-4			
PR-023	NAUTILUS ST	40	36	43	74	3	35	6'6" X 5'11"	UPPER NEW YORK BAY	REG #R-3			
PR-023A	NAUTILUS ST	40	36	42	74	3	36	20" DIA	UPPER NEW YORK BAY	REG #R-2			
PR-023B	NAUTILUS ST	40	36	42	74	3	36	20" DIA	UPPER NEW YORK BAY	REG #R-1			
PR-024	W/O HOLLAND AVE	40	38	40	74	10	18	16" DIA	KILL VAN KULL	REG #R-1W			
PR-025	SOUTH AVE	40	38	28	74	9	56	10" DIA	KILL VAN KULL	REG #R-2W			
PR-026	HARBOR ROAD	40	38	18	74	9	36	52" DIA	KILL VAN KULL	REG #R-3W			
PR-027	UNION AVE	40	38	16	74	9	28	12" DIA	KILL VAN KULL	REG #R-4W			
PR-028	HOUSEMAN AVE	40	38	14	74	8	54	DBL 5' 11-1/2" X 2'9"	KILL VAN KULL	REG #R-5W			
PR-029	NICHOLAS ST	40	38	26	74	8	21	DBL 8' 6" X 6'	KILL VAN KULL	REG #R-6W			YES
PR-030	SYLVATON TERRANCE	40	37	4	74	3	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	13	24" DIA	UPPER NEW YORK BAY	REG #16			

Port Richmond (continued)

		LATITUDE		E	LO	NGITU	DE				20014		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
PR-033	ELIZABETH AVE	40	38	37	74	6	47	12" DIA	KILL VAN KULL	REG #R-31			
PR-034	BEMENT AVE	40	38	36	74	6	50	12" DIA	KILL VAN KULL	REG #R-32			
PR-035	BODINE ST	40	38	24	74	7	33	18" DIA	KILL VAN KULL	REG #R-35			YES
PR-036	RECTOR ST	40	38	14	74	7	40	9' X 4'	KILL VAN KULL	REG #R-36			
PR-037	PORT RICHMOND AVE	40	38	27	74	7	51	5' X 3'	KILL VAN KULL	REG #R-37			

		L	ATITUD	Ε	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
PR-603	DAVIS AVE	40	38	42	74	6	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	14	74	7	40	DBL13' 10" X 5' 4"	KILL VAN KULL
PR-614	CLOVE ROAD	40	37	5	74	6	28	7' X 4' 8"	CLOVE LAKE
PR-615	LOGAN AVE	40	36	55	74	6	22	8' 10" X 5' 8"	CLOVE LAKE
PR-616	MANOR ROAD	40	36	53	74	7	25	36" DIA	CLOVE LAKE
PR-617	CLOVE ROAD	40	37	22	74	7	4	42" DIA	MARTLING LAKE
PR-618	FOREST AVE	40	37	38	74	7	21	36" DIA	BROOKS LAKE
PR-619	FOREST AVE	40	37	38	74	7	21	12' X 5'6"	BROOKS LAKE
PR-621	GARRICK ST	40	37	21	74	10	15	DBL 16' X 6'6"	OLD PLACE CREEK
PR-622	END OF SWAN ST AND MURRAY HULBERT AV	40	38	5	74	4	22	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	36	74	6	50	48"	KILL VAN KULL
PR-625	RICHMOND TERRACE & BROADWAY	40	38	26	74	7	5	10' X 4.5'	KILL VAN KULL
PR-626	KILL VAN KULL SHORELINE	40	38	43	74	5	54	12" DIA	KILL VAN KULL

Port Richmond (continued)

		L	ATITUD	E	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
PR-627	LAFAYETTE AVENUE	40	38	43	74	5	46	54" DIA	Stream wider than 8 feet
PR-628	FOREST HILL ROAD	40	35	58	74	8	24	18" DIA	Pond
PR-629	HIRSCH LANE	40	36	53	74	10	6	12" DIA	MARSH
PR-630	GRAHAM AVENUE	40	36	49	74	10	9	12" DIA	MARSH
PR-631	MEREDITH AVENUE	40	35	55	74	11	32	18" DIA	MARSH
PR-632	FOREST HILL RD & FIELD ST	40	35	38	74	8	36	3.75' x 2.4'	WILLOWBROK WETLAND
PR-633	WESTBURY AVE & HENDERSON AVE	40	38	21	74	6	14	"96"" X 84""	SNUG HARBOR
PR-634	AVON LN & WILLARD PL	40	36	54	74	8	7	53" x 34"	POND
PR-635	5 CHESHIRE PLACE	40	37	16	74	6	8	18" DIA	VALLEY LAKE
PR-636	LOGAN AVE	40	36	56	74	6	23	84" x 74"	NA-1 DEC WETLAND
PR-637	GOETHALS RD N	40	37	25	74	10	25	15" DIA	E-3 DEC WETLAND
PR-638	MARTLING LAKE	40	37	22	74	7	7	30" DIA	NA-1 DEC WETLAND
PR-639	WATCHOGUE ROAD & VOGEL LOOP	40	36	54	74	7	57	18" DIA	WATCHOGUE ROAD
PR-640	2800 VICTORY BOULEVARD	40	36	24	74	9	8	4 pipes of 10"	STREAM
PR-641	MEREDITH AVE & NECK CREEK	40	35	47	74	11	26	96" x 72"	NECK CREEK
PR-642	136 LIVINGSTON AVE	40	36	8	74	7	43	76" x 48"	STREAM
PR-643	WEST SHORE PLAZA (230' NE/O MEREDITH AVE)	40	35	59	74	11	31	53" x 34"	AR-52 DEC WETLAND
PR-644	66 SIDEVIEW AVE	40	36	23	74	10	3	24" DIA	STREAM
PR-645	WESTWOOD AVE & HAWTHORNE AVE	40	36	24	74	8	59	30" DIA	STREAM
PR646	MEREDITH AVE AND SOUTH AVE	40	36	2	74	11	41	45" X 29"	AR-52 WETLAND

Red Hook

		L	ATITUD	ЭE	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
RH-001	RED HOOK WRRF OUTFALL	40	42	15	73	58	38	96" DIA	NAVY YARD BASIN				
RH-002	HUDSON AVE (REG # R-21A)	40	42	21	73	58	51	15" DIA	EAST RIVER	REG #R-21A			YES
RH-003	HUDSON AVE (REG # R-21)	40	42	20	73	58	52	4' 6" X 7' 3"	EAST RIVER	REG #R-21			
RH-005	GOLD ST (REG # R-20A)	40	42	20	73	58	56	168" DIA	EAST RIVER	REG #R-20A			YES
RH-006	PEARL ST (REG # R-19A)	40	42	18	73	59	14	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	17	73	59	22	60" DIA	EAST RIVER	REG #R-18A			
RH-009	MAIN ST (REG # R-18)	40	42	15	73	59	26	2' X 2'	EAST RIVER	REG #R-18			
RH-010	ORANGE ST (REG # R-16)	40	42	0	73	59	50	18" DIA	EAST RIVER	REG #R-16			
RH-011	MONTAGUE ST (REG # R-15)	40	41	45	73	59	58	4' 0" X 4' 0"	EAST RIVER	REG #R-15			
RH-012	CADMAN PLAZA (REG # R-17)	40	42	11	73	59	42	6' X 6' FT	EAST RIVER	REG #R-17			
RH-013	JORALEMON ST (REG # R-14)	40	41	38	74	0	3	18" DIA	EAST RIVER	REG #R-14			
RH-014	ATLANTIC AVE (REG # R-13)	40	41	28	74	0	3	24" DIA	BUTTERMILK CHANNEL	REG #R-13			
RH-016	AMITY ST (REG # R-12)	40	41	25	74	0	2	8' 6" X 8' 6"	BUTTERMILK CHANNEL	REG #R-12			
RH-018	KANE ST (REG # R-11)	40	41	20	74	0	14	5' 7" X 3' 9"	BUTTERMILK CHANNEL	REG #R-11			
RH-019	HAMILTON AVE (REG # R-9)	40	41	10	74	0	29	72" DIA	BUTTERMILK CHANNEL	REG #R-9	(HAMILTON AVE PS?)		
RH-020	DEGRAW ST (REG # R-10)	40	41	11	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	59	74	0	35	24" DIA	BUTTERMILK CHANNEL	REG #R-8			
RH-023	COMMERCE ST (REG # R-7)	40	40	57	74	0	38	24" DIA	BUTTERMILK CHANNEL	REG #R-7			
RH-024	VERONA ST (REG # R-6)	40	40	52	74	0	43	24" DIA	BUTTERMILK CHANNEL	REG #R-6			
RH-025	PIONEER ST (REG # R-5)	40	40	49	74	0	46	30" DIA	BUTTERMILK CHANNEL	REG #R-5			
RH-028	WOLCOTT ST (REG # R-2)	40	40	50	74	1	3	72" DIA	BUTTERMILK CHANNEL	REG #R-2			YES

Red Hook (continued)

		L	ATITUD	E	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
RH-029	VAN BRUNT ST (REG # R-1)	40	40	24	74	1	2	24" DIA	UPPER NEW YORK BAY	REG #R-1, VAN BLANT ST. PS			
RH-030	HICKS ST	40	40	6	74	0	25	54" DIA	GOWANUS BAY	CSO-2			
RH-030A	W/O HENRY ST	40	40	6	74	0	25	54" DIA	GOWANUS BAY	CSO-2			
RH-031	CREAMER ST	40	40	17	73	59	56	72" DIA	GOWANUS CANAL	BOND-LORRAINE SWR RELIEF			
RH-033	DOUGLASS ST (REG # R-25)	40	40	52	73	59	12	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	59	33	DBL 24" DIA	GOWANUS CANAL	CSO-3, BOND- LORRAINE SWR RELIEF			
RH-036	PRESIDENT ST (REG # R-23)	40	40	43	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	50	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	58	38	72" DIA	NAVY YARD BASIN	3RD AVENUE SEWER RELIEF			
RH-041	S/O CARROLL ST BRIDGE. 212' W/O NEVINS ST	40	40	41	73	59	20	42" DIA	GOWANUS CANAL				

OUTFALL ID	OUTFALL LOCATION	L	ATITUC	E	LC	NGITU	DE	OUTFALL SIZE	
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
RH-602	SULLIVAN ST	40	40	51	74	1	1	15" DIA	BUTTERMILK CHANNEL
RH-603	BEACH 5TH ST	40	40	28	73	59	47	18" DIA	GOWANUS CANAL
RH-604	1 ST AND DEAD END BY GOWANUS CANAL	40	40	39	73	59	22	30" DIA	GOWANUS CANAL
RH-605	S/O CARROLL ST BRIDGE. 212' W/O NEVINS ST	40	40	41	73	59	20	42" DIA	GOWANUS CANAL

Rockaway

OUTFALL ID	OUTFALL LOCATION	L	ATITUD	θE	LC	NGITU	DE	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	воом	NET	TELEMETRY
OUTPALLID	OUTPALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
ROC-001	ROCKAWAY WRRF OUTFALL	40	35	4	73	49	47	72" DIA	GRASS HASSOCK CHANNEL				
ROC-001A	ROCKAWAY WRRF DISINFECTION SYSTEM BYPASS	40	35	5	73	49	44	72" DIA	GRASS HASSOCK CHANNEL	PLANT DISINFECTION SYSTEM BYPASS			
ROC-001B	BEACH 106TH ST	40	35	5	73	49	43	72" DIA	GRASS HASSOCK CHANNEL	REG #1, 2, EMERGENCY BYPASS			YES (ON 1 & 2)

		L	ATITUD	E	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
ROC-601	BEACH 5TH ST	40	35	45	73	44	25	42" DIA	HEMPSTEAD BAY
ROC-611	BEACH 147TH ST	40	34	29	73	51	54	48" DIA	ROCKAWAY INLET
ROC-614	BEACH 145TH ST	40	34	32	73	51	48	48" DIA	ROCKAWAY INLET
ROC-617	BEACH 141ST ST	40	34	38	73	51	37	48" DIA	ROCKAWAY INLET
ROC-618	BEACH 140TH ST	40	34	39	73	51	35	20" DIA	ROCKAWAY INLET
ROC-619	BEACH 139TH ST	40	34	41	73	51	32	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	53	73	51	7	7' 7" X 4' 10"	ROCKAWAY INLET
ROC-627	BEACH 126TH ST	40	34	55	73	50	54	54" DIA	ROCKAWAY INLET
ROC-629	BEACH 121ST ST	40	34	54	73	50	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	49	42	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	42	73	48	13	24" DIA	VERNAM BASIN
ROC-635	ELIZABETH AVE	40	35	45	73	47	20	42" DIA	SOMMERVILLE BASIN
ROC-636	THURSBY AVE	40	35	42	73	47	21	DBL 7' X 4'	SOMMERVILLE BASIN
ROC-637	BEACH 40TH ST	40	35	55	73	46	26	7' X 5'	GRASS HASSOCK CHANNEL

Rockaway (continued)

		L	ATITUE	ЭE	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
ROC-638	BEACH 38TH ST	40	35	53	73	46	15	54" DIA	GRASS HASSOCK CHANNEL
ROC-641	EGMONT PLACE	40	36	44	73	45	54	54" DIA	NEGRO BAR CHANNEL
ROC-648	BEACH 49TH ST	40	35	48	73	46	48	8' 6" X 5' FT	CONCH BASIN
ROC-649	ALAMEDA AVE	40	35	52	73	46	52	66" DIA	CONCH BASIN
ROC-651	FAR ROCKAWAY BOULEVARED	40	35	52	73	46	4	DBL 12' 9" X 6'	GRASS HASSOCK CHANNEL
ROC-652	DICKENS ST	40	36	36	73	45	34	24" DIA	NEGRO BAR CHANNEL
ROC-653	BEACH 77TH ST	40	35	28	73	48	15	7' 6" X 4' 6"	BARBADOES BASIN
ROC-656	BEACH 87TH ST	40	35	28	73	48	45	18" DIA	GRASS HASSOCK CHANNEL
ROC-657	BEACH 84TH ST	40	35	32	73	48	35	11' X 4' 6"	GRASS HASSOCK CHANNEL
ROC-658	BEACH 72ND ST	40	35	56	73	48	4	12" DIA	GRASS HASSOCK CHANNEL
ROC-659	BEACH 68TH ST	40	35	57	73	47	52	16" DIA	GRASS HASSOCK CHANNEL
ROC-666	CHURCH ROAD	40	36	15	73	49	5	18" DIA	BROAD CHANNEL
ROC-667	CHURCH ROAD	40	36	18	73	49	5	24" DIA	BROAD CHANNEL
ROC-670	FALCON AVE	40	35	54	73	46	8	9' X 4' FT	GRASS HASSOCK CHANNEL
ROC-671	BEACH 127TH ST	40	34	55	73	50	57	5' 8" X 3' 7"	ROCKAWAY INLET
ROC-672	BEACH 125TH ST	40	34	54	73	50	49	5' X 3' 2"	ROCKAWAY INLET
ROC-674	BEACH 136TH ST	40	34	46	73	51	21	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	55	73	51	1	18" DIA	ROCKAWAY INLET
ROC-678	BEACH 124TH ST	40	34	54	73	50	45	5' X 3' 2"	ROCKAWAY INLET
ROC-679	BEACH 122ND ST (REG # D-18)	40	34	53	73	50	38	5' X 3' 2"	ROCKAWAY INLET
ROC-680	BEACH 108TH ST (REG # D-14)	40	35	3	73	49	51	6' X 4' FT	GRASS HASSOCK CHANNEL

Rockaway (continued)

		L	ATITUE	ЭE	LO	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
ROC-684	BEACH 137 ST AND BEACH CHANNEL DR	40	34	43	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	6	18"	BROAD CHANNEL
ROC-688	THURSBY AVE	40	35	42	73	47	27	13' X 5' FTRC	SOMMERVILLE BASIN
ROC-689	BEACH CHANNEL DR AND BEACH 138 ST	40	34	42	73	51	30	53" X 34"	ROCKAWAY INLET
ROC-690	E 9 RD AND LANARK RD	40	36	24	73	48	56	30" X 19"	BROAD CHANNEL
ROC-691	BEACH CHANNEL SHORELINE	40	35	15	73	49	10	12" DIA	GRASS HASSOCK CHANNEL
ROC-692	BEACH CHANNEL SHORELINE	40	35	14	73	49	13	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-694	Dwight Ave - Norton Basin Shoreline	40	36	0	73	46	16	24" DIA	GRASS HASSOCK CHANNEL
ROC-695	Mott Basin Shoreline - North of Battery Rd and Chandler Street intersection (NAMEOKE PS EMERGENCY BYPASS)	40	36	37	73	45	20	DBL 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
ROC-702	512 CROSS BAY BLVD	40	36	40	73	49	7	18" DIA	MARSH
ROC-703	ARDEN AVE	40	36	39	73	49	10	15" DIA	BROAD CHANNEL
ROC-704	525 CROSS BAY BLVD	40	36	39	73	49	10	15" DIA	BROAD CHANNEL
ROC-705	526 CROSS BAY BLVD	40	36	39	73	49	6	15" DIA	MARSH
ROC-706	BAYSWATER AVE (BAYSWATER PS EMERGENCY BYPASS)	40	36	26	73	46	12	60" DIA	GRASS HASSOCK CHANNEL
ROC-707	BEACH 3RD STREET (SEAGIRT PS EMERGENCY BYPASS)	40	35	51	73	44	19	DBL 13' 6" X 5'	HEMPSTEAD BAY

Rockaway (continued)

OUTFALL ID	OUTFALL LOCATION	L	ATITUE	Ε	LC	NGITU	DE	OUTFALL SIZE	RECEIVING WATER
OUTFALLID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
ROC-708	9 WEST 16TH ROAD	40	36	7	73	49	15	15" DIA	JAMAICA BAY, EASTERN, AND TRIBS (QUEENS)
ROC-709	205 AVENUE	40	36	2	73	49	16	15" DIA	JAMAICA BAY, EASTERN, AND TRIBS (QUEENS)
ROC-710	9 19TH ROAD	40	35	59	73	49	16	15" DIA	JAMAICA BAY, EASTERN, AND TRIBS (QUEENS)
ROC-711	SEAGIRT AV & BEACH 5TH STREET	40	35	46	73	44	26	42" DIA	MARSH
ROC-712	-712 W 10 RD & SHAD CREEK RD		36	22	73	49	21	30" X 19"	JAMAICA BAY, EASTERN, AND TRIBS (QUEENS)
ROC-713	ROC-713 322 CROSS BAY BOULEVARI		36	48	73	49	11	15" DIA	MARSH

Tallman Island

		L	ATITUD	E	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
TI-001	TALLMAN ISLAND WRRF OUTFALL	40	47	51	73	50	25	60" DIA	EAST RIVER				
TI-003	N/O 7TH AVE (REG # 10A)	40	47	34	73	49	45	11' X 7'	EAST RIVER	REG #10A, 10B			YES (ON 10B)
TI-004	151ST ST (REG # 11)	40	47	49	73	48	46	42" DIA EGG	EAST RIVER	REG #11			
TI-005	154TH ST (REG # 12)	40	47	47	73	48	23	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	46	73	45	6	18" DIA	ALLEY CREEK	old doug P.S.			
TI-008	46TH AVE (REG # 46, 47, 48, 49)	40	45	42	73	45	3	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	19	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	20	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	50	59	10" DIA	EAST RIVER	122ND ST P.S.			
TI-014	23RD AVE (REG # 7)	40	46	42	73	50	58	12" DIA	EAST RIVER	REG #7			
TI-015	22ND AVE (REG # 6)	40	46	48	73	51	1	12" DIA	EAST RIVER	REG #6			
TI-016	20TH AVE (REG # 5)	40	46	54	73	50	57	60" DIA	EAST RIVER	REG #5			

Tallman Island (continued)

		L	ATITUD	E	LONGITUDE						DOOM		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
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	7	73	51	32	7' 7" X 4' 10" EGG	EAST RIVER	REG #3			
TI-022	40TH ROAD (REG # 55 - 58)	40	45	21	73	50	18	8' 6" X 6'	FLUSHING CREEK	REG #55, 56, 57, 58	YES		
TI-023	CRYDERS LANE (REG # 13)	40	47	20	73	47	36	13' 6" X 8'	EAST RIVER	REG #13, CLEARVIEW P.S.			YES (ON 13)
TI-025	400' SOUTH OF LIRR BRIDGE	40	45	50	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	L	ATITUD	Ε	LO	NGITU	DE	OUTFALL SIZE	RECEIVING WATER
OUTFALLID	OUTPALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
TI-601	NORTHERN BOULEVARD (SOUTH SIDE)	40	45	45	73	50	11	30" DIA	FLUSHING CREEK
TI-603	NORTHERN BOULEVARD (NORTH SIDE)	40	45	46	73	50	11	30" DIA	FLUSHING CREEK
TI-605	300' W/O WHITESTONE EXPRESSWAY	40	45	59	73	50	24	DB 6' 9" X 4' 11"	FLUSHING CREEK
TI-609	121ST ST	40	47	46	73	50	46	36" DIA	EAST RIVER
TI-610	147TH ST	40	47	51	73	49	25	48" DIA	EAST RIVER
TI-615	9TH AVE	40	47	33	73	47	41	54" DIA	EAST RIVER
TI-616	12TH AVE	40	47	30	73	47	41	24" DIA	EAST RIVER
TI-617	12TH ROAD	40	47	25	73	47	40	18" DIA	EAST RIVER
TI-618	14TH AVE	40	47	23	73	47	38	18" DIA	EAST RIVER
TI-619	CRYDERS LANE	40	47	20	73	47	37	18" DIA	EAST RIVER
TI-623	28TH AVE	40	46	45	73	46	5	24" DIA	LITTLE NECK BAY
TI-624	35TH AVE	40	46	19	73	45	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	8	73	46	26	54" DIA	LITTLE NECK BAY

Tallman Island (continued)

		L	ATITUD	ЭE	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
TI-634	FORT TOTTEN SOUTH JETTY	40	47	28	73	46	53	24" DIA	EAST RIVER
TI-653	SANDHILL ROAD	40	46	19	73	44	38	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	48	73	45	7	18" DIA	ALLEY CREEK
TI-656	39TH AVE	40	46	7	73	45	15	60" DIA	LITTLE NECK BAY
TI-658	233RD PLACE	40	46	19	73	45	14	39" DIA	LITTLE NECK BAY
TI-660	39TH AVE & 248TH ST	40	46	22	73	44	39	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	49	53	48" DIA	EAST RIVER
TI-670	100' N/O NORTH SHORE M.T.S.	40	46	15	73	50	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	50	56	48" DIA	EAST RIVER
TI-674	9TH AVE	40	47	20	73	50	14	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
TI-680	POPPENHUSEN AV AND 115TH ST	40	47	28	73	51	10	5'6" x 3'0"	EAST RIVER
TI-681	POPPENHUSEN AV AND COLLEGE PL	40	47	36	73	50	55	4'6" x 3'6"	EAST RIVER
TI-682	20TH AVE	40	46	53	73	49	52	48" DIA	MARSH
TI-683	20TH AVE	40	46	53	73	50	8	24" DIA	MARSH
TI-684	61ST AVE	40	45	24	73	44	40	DBL 6' X 6'	ALLEY CREEK
TI-685	SEAGIRT AV & BEACH 5TH STREET	40	46	53	73	49	58	54" DIA	FL-2 DEC WETLAND

Tallman Island (continued)

		L	ATITUD	E	LC	NGITU	DE		
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER
TI-686	SHORE RD AND MANOR RD	40	46	33	73	45	16	36" DIA	LITTLE NECK BAY
TI-687	SHORE RD, 35 N/O WESTMORELAND PL	40	46	36	73	45	18	36" DIA	LITTLE NECK BAY
TI-688	SHORE RD AND KNOLLWOOD AVE	40	46	49	73	45	12	24" DIA	LITTLE NECK BAY
TI-689	SHORE RD, 110' S/O BAYVIEW AVE	40	46	52	73	45	11	18" DIA	LITTLE NECK BAY
TI-690	SHORE RD AND WEST DR	40	46	57	73	45	4	16" DIA	LITTLE NECK BAY

Wards Island

		L	ATITUD	θE	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
WIB-053	W 255TH ST (REG # R-3)	40	54	18	73	54	49	7' X 4'	HUDSON RIVER	REG #R-3			
WIB-054	W 248TH ST (REG # R-2)	40	53	50	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	12	73	54	33	DBL 15' X 9' 2"	HARLEM RIVER	REG #67			YES
WIB-057	LANDING ROAD (REG # 66)	40	51	47	73	54	45	66" DIA	HARLEM RIVER	REG #66			YES
WIB-058	W 178TH ST (REG # 65)	40	51	20	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	55	45	DB 12' X 7' 4"	HARLEM RIVER	REG #62			
WIB-061	WEST 167TH ST (REG # 61)	40	50	25	73	55	49	42" DIA	HARLEM RIVER	REG #61			
WIB-062	JEROME AVE (REG # 60)	40	49	42	73	55	59	10' X 7'	HARLEM RIVER	REG #60, 60A			YES
WIB-063	S/O MCCOMBS DAM BRIDGE (REG # 72)	40	49	40	73	55	58	48" DIA	HARLEM RIVER	REG #72			
WIB-064	E 149TH ST (REG # 59)	40	49	10	73	55	56	7' X 7'	HARLEM RIVER	REG #59			
WIB-065	PARK AVE (REG # 57)	40	48	38	73	55	57	36" DIA	HARLEM RIVER	REG #57			

Wards Island (continued)

		L	ATITUD	Ε	LC	NGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
WIB-066	THIRD AVE BRIDGE (NORTH SIDE) (REG # 56)	40	48	28	73	55	54	4' X 2' 8" EGG	HARLEM RIVER	REG #56			
WIB-067	LINCOLN AVE (REG # 55)	40	48	23	73	55	49	60" DIA	HARLEM RIVER	REG #55			
WIB-068	BROOK AVE (REG # 53, 54)	40	48	8	73	55	22	12' X 9' 10"	BRONX KILL	REG #53, 54			YES (ON 53)
WIB-069	CYPRESS AVE (REG # 71)	40	47	56	73	55	9	2' 2" X 3'	BRONX KILL	REG #71			
WIB-070	E 134TH ST (REG # 70)	40	47	56	73	54	29	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	17	73	54	8	9' X 6' 6"	EAST RIVER	REG #68			YES
WIB-073	SAINT ANN'S AVE (REG # 73)	40	48	5	73	55	18	DBL 144" DIA	BRONX KILL	REG #73			
WIB-075	E 138TH ST (REG # 58)	40	48	50	73	55	56	12' X 6' 3"	HARLEM RIVER	REG #58			YES
WIB-076	W/O BRADLEY TERRACE (REG # MH-1)	40	52	43	73	55	20	54" DIA	SPUYTEN DUYVIL CREEK	REG #MH-1			
WIB-077	TEUNISSEN PLACE (REG # MH-2)	40	52	32	73	54	58	8' 6" X 7'	SPUYTEN DUYVIL CREEK	REG #MH-2			
WIB-078	BROADWAY BRIDGE (NORTH SIDE) (REG # MH-3)	40	52	26	73	54	39	5' X 4' 6"	SPUYTEN DUYVIL CREEK	REG #MH-3			
WIB-079	750' N/O W 261ST ST (REG # R-4)	40	54	53	73	54	38	18" DIA	HUDSON RIVER	REG #R-4			
WIM-001	WARDS ISLAND WRRF OUTFALL	40	47	11	73	55	14	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	56	58	3' 6" X 2' 0" EGG	EAST RIVER	REG #3			
WIM-005	E 76TH ST (REG # 4)	40	46	5	73	56	56	3' 6" X 2' 0" EGG	EAST RIVER	REG #4			
WIM-006	E 77TH ST (REG # 5)	40	46	8	73	56	55	3' 6" X 3' 0" EGG	EAST RIVER	REG #5			
WIM-007	E 78TH ST (REG # 6)	40	46	10	73	56	53	3' X 2' EGG	EAST RIVER	REG #6			
WIM-008	E 79TH ST (REG # 7)	40	46	12	73	56	50	60" DIA	EAST RIVER	REG #7			YES

Wards Island (continued)

		L	ATITUD	Ε	LC	ONGITU	DE						
OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
WIM-009	E 83RD ST (REG # 8)	40	46	20	73	56	42	16" DIA	EAST RIVER	REG #8			
WIM-010	E 84TH ST (REG # 9)	40	46	22	73	56	39	16" DIA	EAST RIVER	REG #9			
WIM-011	E 86TH ST (REG # 10)	40	46	27	73	56	35	5' X 5'	EAST RIVER	REG #10			
WIM-012	E 89TH ST (REG # 11)	40	46	34	73	56	31	60" DIA	EAST RIVER	REG #11			
WIM-013	E 90TH ST (REG # 12)	40	46	39	73	56	33	4' X 2' 4" EGG	EAST RIVER	REG #12			
WIM-014	E 91ST ST (REG # 13)	40	46	42	73	56	34	15" DIA	EAST RIVER	REG #13			
WIM-015	E 92ND ST (REG # 14)	40	46	47	73	56	36	48" DIA	EAST RIVER	REG #14			
WIM-016	E 95TH ST (REG # 15)	40	46	55	73	56	37	48" DIA	EAST RIVER	REG #15			
WIM-017	E 96TH ST (REG # 16)	40	46	57	73	56	37	42" DIA	EAST RIVER	REG #16			
WIM-018	E 100TH ST (REG # 17)	40	47	5	73	56	25	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	19	4' X 2' 4" EGG	EAST RIVER	REG #20			
WIM-021	E 104TH ST (REG # 21)	40	47	13	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	18	73	56	14	DBL 6' X 7' 6"	EAST RIVER	REG #23			YES
WIM-024	E 110TH ST (REG # 24)	40	47	27	73	56	8	DBL 8' 6" X 7' 6"	EAST RIVER	REG #24			YES
WIM-025	E 114TH ST (REG # 25)	40	47	35	73	55	58	5' 3" X 8'	EAST RIVER	REG #25			
WIM-026	E 115TH ST (REG # 26)	40	47	37	73	55	54	15" DIA	EAST RIVER	REG #26			
WIM-027	E 116TH ST (REG # 27)	40	47	38	73	55	51	15" DIA	EAST RIVER	REG #27			
WIM-030	E 119TH ST (REG # 30)	40	47	45	73	55	45	4' 6" X 2' 4" FT	EAST RIVER	REG #30			
WIM-031	E 120TH ST (REG # 31)	40	47	48	73	55	44	5' X 4' 6" FT	EAST RIVER	REG #31			
WIM-032	E 121ST ST (REG # 32)	40	47	51	73	55	44	4' X 2' 4" FT	EAST RIVER	REG #32			
WIM-033	E 122ND ST (REG # 33)	40	47	53	73	55	44	4' 9" X 4' FT	BRONX KILL	REG #33			

Wards Island (continued)

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OUTFALL ID	OUTFALL LOCATION	DEG	MIN	SEC	DEG	MIN	SEC	OUTFALL SIZE	RECEIVING WATER	CONTRIBUTORS	BOOM	NET	TELEMETRY
WIM-034	E 124TH ST (REG # 34)	40	47	59	73	55	44	3' 6" X 2' 4"	BRONX KILL	REG #34			
WIM-035	E 125TH ST (REG # 35)	40	48	3	73	55	44	4' X 2' 8" EGG	BRONX KILL	REG #35			
WIM-036	E 129TH ST (REG # 36)	40	48	19	73	55	53	42" DIA	HARLEM RIVER	REG #36			
WIM-037	E 130TH ST (REG # 37)	40	48	24	73	55	58	4' X 2' 8"	HARLEM RIVER	REG #37			
WIM-038	E 135TH ST (REG # 38)	40	48	40	73	56	3	6' X 8' 6" FT	HARLEM RIVER	REG #38			YES
WIM-039	W 140TH ST (REG # 39)	40	48	56	73	56	1	4' X 2' 8" EGG	HARLEM RIVER	REG #39			
WIM-040	W 141ST ST (REG # 40)	40	48	58	73	56	1	5' X 2' 4" FT	HARLEM RIVER	REG #40			
WIM-041	W 142ND ST (REG # 41)	40	49	1	73	56	1	6' X 4' FT	HARLEM RIVER	REG #41			
WIM-042	W 143RD ST (REG # 42)	40	49	4	73	56	1	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	1	6' X 2' 8" FT	HARLEM RIVER	REG #44			
WIM-045	W 149TH ST (REG # 45)	40	49	21	73	56	2	6' X 5' 6"	HARLEM RIVER	REG #45			YES
WIM-046	W 151TH ST (REG # 46)	40	49	29	73	56	3	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	41	73	56	4	4' X 2' 4" FT	HARLEM RIVER	REG #48			
WIM-050	W 156TH ST (REG # 50)	40	49	44	73	56	4	15" DIA	HARLEM RIVER	REG #50			
WIM-051	W 167TH ST (REG # 51)	40	50	13	73	56	1	48" DIA	HARLEM RIVER	REG #51			YES
WIM-052	W 176TH ST (REG # 52)	40	50	35	73	55	50	5' X 5'	HARLEM RIVER	REG #52			YES

Appendix 3 – Municipal Compliance Certification

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MS4 Annual Report Cover Page

MCC form for period ending December 31, 2 0 2 3

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



Choose one:

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

Fill in SPDES ID in upper right hand corner.

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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

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Cover Page 1 of 2

MS4 Annual Report Cover Page

MCC form for period ending December 31, 2 0 2 3

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

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MCC form for period ending December 31, 2 0 2 3

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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)
- O A Joint Report

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

If Joint Report, enter coalition name:

MCC Page 1

MCC form for period ending December 31, 2 0 2

Name of MS4 CITY OF NEW YORK

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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
- O Duly Authorized Representative
- O Local Stormwater Public Contact
- O Stormwater Management Program (SWMP) Coordinator
- Report Preparer

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Name of MS4 CITY OF NEW YORK

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Section 2 - Contact Information

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- 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).

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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:

O Principal Executive Officer/Chief Elected Official

- Duly Authorized Representative
- Local Stormwater Public Contact
- Stormwater Management Program (SWMP) Coordinator

○ Report Preparer

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MCC form for period ending December 31, 2 0 2 3

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Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for <u>each</u> 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).
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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:

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

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Section 3 - Partner Information

Did your MS4 work with partners/coalition to complete some or all permit requirements during this reporting period?

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.

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

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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	MI Last Name
M e l i s s a	E n o c h
Title (Clearly print title of individual signing report)	
A c t i n g A S S I S T A N T	C O M M I S S I O N E R
Signature MEnoch	$\begin{array}{c c} Date \\ \hline 0 & 9 \\ \hline 2 & 7 \\ \hline 2 & 0 \\ 2 & 4 \\ \end{array}$

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