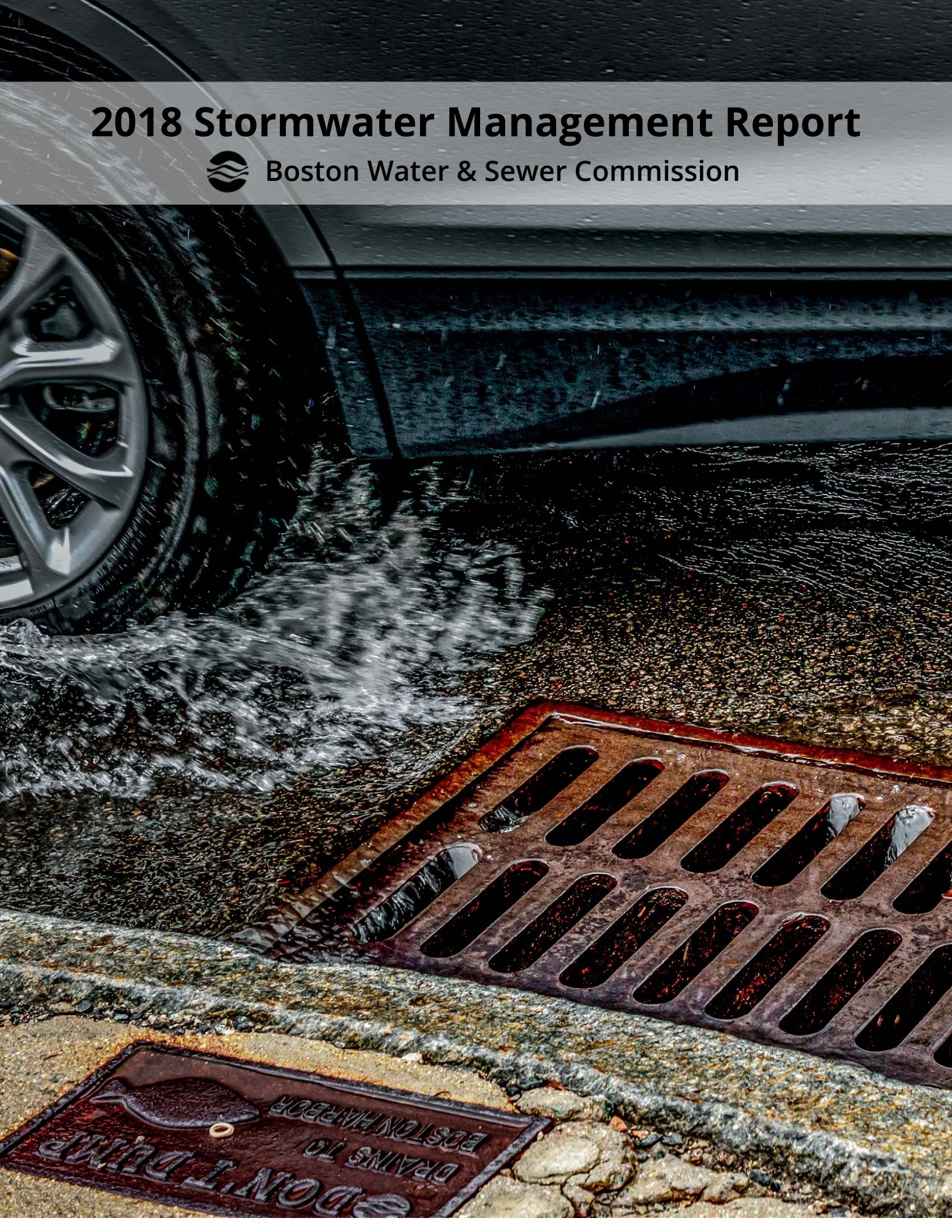


2018 Stormwater Management Report



Boston Water & Sewer Commission



Municipality/Organization: Boston Water and Sewer Commission

EPA NPDES Permit Number: MAS010001

Report/Reporting Period: January 1, 2018-December 31, 2018

NPDES Phase I Permit Annual Report

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1.0 INTRODUCTION

1.1 PERMIT HISTORY

Discharges to the Boston Water and Sewer Commission's (Commission) municipal separate storm sewer system (MS4) are regulated under the U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Regulations. The Commission's NPDES Stormwater Permit (MAS010001) was issued by the EPA and the Massachusetts Department of Environmental Protection (DEP) on September 29, 1999, and became effective on October 29, 1999. The five year permit expired on October 29, 2004, but the EPA administratively continued the permit as allowed by the regulation and its terms remain in effect until a new permit is issued. The Commission's 2003 Stormwater Management Report, which was submitted to the EPA on February 27, 2004, constituted the Commission's reapplication for an NPDES Stormwater Permit.

In August 2012, the Commission entered into a Consent Decree following two years of negotiations with the U.S. Environmental Protection Agency, U.S. Department of Justice and the Conservation Law Foundation (CLF) regarding discharges of pollutants from the Commission's MS4 and wastewater collection system. The Consent Decree, lodged in the U.S. District Court on August 23, 2012, outlines a series of short-term and long-term remedial measures that the Commission is implementing to further its compliance with its existing NPDES permit and the Clean Water Act. They include enhancements to the Commission's Illicit Discharge Detection and Elimination Program and its Capacity, Management Operation and Maintenance (CMOM) Program; expansion of the Commission's stormwater related public education and outreach activities; requirements for developing and implementing Green Infrastructure and Stormwater Best Management Projects within the City; updating the Commission's stormwater model; executing intergovernmental agreements with various state and local agencies; improvements to the tracking and reporting of sewer system overflows and development of an SSO Emergency Response Plan; and development of programs to inspect Construction Sites and Industrial Facilities to confirm that they are in compliance with the terms of their own NPDES Stormwater Permits.

1.2 ANNUAL REPORT REQUIREMENTS

In accordance with the NPDES Stormwater Permit (Permit), the Commission is required to report annually to EPA and DEP regarding the status of its pollution prevention and stormwater management programs. This report provides a summary of the stormwater management program activities undertaken by the Commission in 2018. Provided herein

are descriptions of the Commission's outfall monitoring and illicit discharge remediation programs, stormwater related enforcement actions, discussions regarding modifications to these programs, annual expenditures, water quality improvements and an assessment of structural controls.

Many of the programs, plans and activities described in this report are required under the Consent Decree. Separate Consent Decree compliance reports are submitted to EPA, the U.S. Department of Justice, DEP and the CLF on a semi-annual basis. Some of the deadlines for submittals of reports, plans and implementation of programs required under the Consent Decree occurred before and after 2018. To the extent they occurred in 2018, they are reported herein..

1.3 COMMISSION JURISDICTION AND LEGAL AUTHORITY FOR DRAINAGE SYSTEM AND STORMWATER MANAGEMENT

The Commission was created pursuant to an act of the Massachusetts Legislature under Chapter 436 of the Acts of 1977, as a political subdivision of the Commonwealth, separate and apart from the City of Boston. The enabling act charged the Commission with the responsibility for the operation and maintenance of the water distribution system and the wastewater collection and stormwater drainage systems which serve the City of Boston. Through its enabling legislation the Commission is empowered to promulgate rules and regulations in order to perform its statutory functions and duties. The Commission's Regulations Governing the Use of Sanitary and Combined Sewers and Storm Drains and Requirements for Site Plans are briefly described below. Downloadable copies of the documents are available from the Commission's web site located at www.bwsc.org.

Pursuant to the Consent Decree, the Commission is exercising greater authority over stormwater discharges originating from construction sites and industrial facilities. These programs are discussed further in Section 3.

Sewer Use Regulations: The majority of the Commission's stormwater management controls are enforced through its Regulations Governing the Use of Sanitary and Combined Sewers and Storm Drains (the Sewer Use Regulations). The Sewer Use Regulations were adopted in 1983 and amended in 1989. They were amended again in 1998 to strengthen and clarify the requirements, particularly as they pertain to stormwater discharges. In 1998, the Commission also amended its Penalty Schedule by adding and increasing the fines for several Sewer Use Regulation violations.

General Service Applications and Requirements for Site Plans: The Commission requires that a General Service Application and a site plan be submitted for every new or reconstructed water, sewer, or storm drain service connection. The Requirements for Site Plans are to assist developers, builders, architects, engineers, and others in preparing site plans that conform to the Commission's Sewer Use Regulations and to help them secure the necessary approvals from the Commission.

The site plan must be approved by the Commission's Chief Engineer before construction may begin, and it will not be approved unless it complies with the Commission's Requirements for Site Plans and Sewer Use Regulations. The site plan review provides an opportunity to review the components of the project and condition the approval on compliance with the Commission's Sewer Use Regulations, Requirements for Site Plans, and other requirements. The Commission's Requirements for Site Plans are updated as needed, generally about once a year. In accordance with Section VII, Part K of the Consent Decree, the Commission revised its Requirements for Site Plans to require developers of Construction Sites (over 1 acre or plan to disturb more than 1 acre) to apply for a Notice of Intent with EPA for a Construction General Permit and also require the submission of a Stormwater Pollution Prevention Plan (SWPPP), which will be summarily reviewed by the Commission with the site plan application.

1.4 STORM DRAINS OWNED AND STORMWATER ACTIVITIES PERFORMED BY OTHERS

The Commission controls most of the municipal storm drains in Boston. However, some storm drains and outfalls are owned by other city agencies. For example, drains and outfalls located in the Marine Industrial Park in South Boston are owned and operated by the Economic Development and Industrial Corporation of Boston; the Boston Parks Department owns drains in Franklin Park and Boston Common, and in other city parks.

Other storm drains and outfalls in the city are owned by state agencies, such as the Massachusetts Department of Transportation and the Department of Conservation and Recreation; these drains and outfalls are not controlled by the Commission. In several locations Commission owned storm drains interconnect with those owned by the Town of Brookline, Town of Dedham, Town of Milton, the City of Newton and the City of Somerville. The Commission does not have jurisdiction or control over the discharges originating from these municipalities, nor does it have jurisdiction and/or control over roadways, roadway maintenance, city parks or city or state facilities which may impact the Commission's separate storm system. Further, the Commission does not manage or control some of the stormwater programs and activities required under its NPDES. For example, the Household Hazardous Waste Collection Program is managed by the Boston Public Works Department.

To help address jurisdictional issues, and in compliance with terms of the Consent Decree, in 2013, the Commission established Memorandums of Understanding (MOUs) with the following: Boston Public Works Department, Boston Parks and Recreation Department, Boston Inspectional Services Department, Boston Redevelopment Authority (now called the Boston Planning and Development Agency), Economic Development and Industrial Corporation, Boston Housing Authority, Brookline, Dedham, Milton and Newton, Massachusetts Department of Transportation and Massachusetts Department of Conservation and Recreation. In 2016, the Commission executed Amendment No. 1 to the Memorandums of Agreement with each of the twelve (12) existing inter-agency agreements to extend the term of the agreements through December 31, 2021. The

Commission also executed a MOU with the Boston Public Schools Department for a pilot Best Management Practice, Green Infrastructure project.

The Commission coordinates with these entities as necessary to meet the requirements of the Commission's NPDES Stormwater Permit and the Consent Decree.

1.5 CHARACTERIZATION OF SEPARATED SUB-CATCHMENT AREAS

The Commission's storm drain outfalls are listed in Table 1-1. There are currently 207 storm drain outfalls in the Commission's drainage system. Table 1-2 lists locations where Commission owned storm drains interconnect with (discharge to) storm drains owned by others. There are currently 18 interconnection locations. Table 1-3 lists the Commission's 30 combined sewer overflow outfalls. Combined sewer overflow 19MCSO083 has been eliminated from the Commission's combined sewer system; however, it is still listed in the Commission's NPDES CSO Permit; therefore, it is included on the list.

1.6 MAPPING OF SUB-CATCHMENT AREAS AND OUTFALL LOCATIONS

Figure 1-1 in Appendix B contains a map showing the locations of the Commission's storm drain outfalls, the interconnections and the combined sewer overflow (CSO) outfalls. The sub-catchment areas tributary to the storm drain outfalls, the interconnections and the separated portion of the Stony Brook Conduit are also shown.

2.0 FIELD SCREENING, SUB-CATCHMENT AREA INVESTIGATIONS AND ILLICIT DISCHARGE REMEDIATION

Under the terms of the Consent Decree the Commission is required to: annually perform wet and dry weather field screening of its storm drain outfalls, CSO outfalls and storm drain manholes that discharge (interconnect) with other MS4 drain systems; establish priorities and schedules for investigating sub-catchment areas that demonstrate contamination; implement a sub-catchment investigation program based on the priorities and schedules established; and, correct or repair illicit discharges within deadlines established in the Consent Decree. The Commission performed illicit discharge investigations and elimination prior to entry of the Consent Decree in 2012, and continued to do so in 2018, under the Consent Decree requirements.

2.1 FIELD SCREENING

Protocols have been developed for both dry and wet weather screening of sub-catchments. The screening protocols were established for conducting visual inspections; screening and sampling of outfalls/interconnections; monitoring weather conditions and tides in order to select appropriate days to conduct screening and sampling visits; and mobilizing field staff. The protocols also define required sampling procedures, including: specific parameters to be sampled in the field vs. in the lab, equipment calibration and operation, communications, record keeping, and health and safety concerns. The documents also include analytical requirements for collecting water quality samples, sample blanks, and duplicates; sample preservation and holding time requirements; and laboratory analytical quality assurance/quality control (QA/QC) procedures. In general, the following protocols were followed in 2018:

- Visual inspections were conducted to confirm outfall/interconnection locations, collect inspection data, and plan sampling.
- Screening and sampling was performed during dry and wet weather for collection of samples for field and lab analysis.
- Ammonia, surfactants, pH, temperature, specific conductivity, total chlorine and salinity were measured using field test kits.
- Samples were delivered by courier to G&L Laboratories for bacterial analysis.
- Bacterial analysis consisted of *E. coli* for freshwater samples and *Enterococci* for marine water samples.
- All samples were taken as grab samples. No confined space entry was required.

All the screening data in 2018 were collected by Commission's consultant, Stacey DePasquale Engineering, under sub-contract to CH2M/Jacobs.

The purpose of the dry weather sub-catchment screening and inventory effort was to:

- Confirm the location of the outfalls/interconnections.
- Characterize the current condition (size, material, flow, etc.) of each outfall or interconnection.
- Identify outfalls/interconnections with dry weather flow and determine if the flow was potentially contaminated.

The purpose of the wet weather screening was to collect a wet weather sample at all locations where flow was not observed during dry weather screening, as well as locations where dry weather flow was below the Illicit Discharge Detection and Elimination (IDDE) limits established by the Consent Decree. The 2018 wet weather screening followed the modified program set forth in the Commission's Proposed Wet Weather Outfall Monitoring Program, which was approved by EPA in a letter dated April 22, 2014. Under the modified program the same wet weather protocols, parameters and thresholds identified in the Consent Decree were used. However, in order to start wet weather screening earlier in the year the selection of sub-catchments included in the 2018 wet weather program were based on the 2017 dry weather screening data.

Field screening during 2018 included inspection and sampling of 254 Commission-owned sub-catchments, which include 207 storm drain outfalls (SDOs), 18 storm drain manholes where storm drainage is conveyed to other municipalities' MS4s or non-BWSC outfalls (referred to as "interconnections"), and 29 Combined Sewer Overflow (CSO) outfalls.¹

All the results of the 2018 dry weather screening program are provided in Appendix A, Table 2-1, and a summary of dry weather screening and sampling performed during 2018 is shown in Table 2-2 below. Dry weather field screening took place at 31 CSO locations² in 2018. Dry weather samples were collected at 6 (six) CSO locations. Twenty-five (25) locations were not sampled because there was no flow to sample (1 location); the outfall had standing water or was submerged and the upstream manholes also had standing water or were submerged (19 locations); or there was no access or suitable location to sample (5 locations).

Dry weather screening took place at 228 SDO and interconnection locations in 2018³. Dry weather samples were collected at 71 of the locations visited. The remaining 157 locations were not sampled because there was no flow to sample (42 locations), the outfall had standing water or was submerged and the upstream manholes also had

¹ There are still 30 CSO outfalls listed in the Commission's NPDES CSO Permit. However, CSO 19MCSO083 has been eliminated; therefore, it was not screened in 2018.

² The Stony Brook Conduit CSO 21HCSO046 was screened in three locations in 2018. All three locations are ranked in the 2019 prioritization.

³ There are 225 SDOs and interconnections in the Commission's system. Three storm drain sub-catchments were sampled two times in 2018 bringing the total screened up to 228.

standing water or were submerged (73 locations); or there was no access or suitable locations to sample (42 locations).

**TABLE 2-2
2018 Dry Weather Screening Samples Collected versus Not Collected**

Results of Dry Weather Sampling CSOs ¹	2018
Total CSO Screenings Performed	31
Samples Collected	6
Samples Not Collected	1
No flow, dry	1
No flow, standing water/submerged	19
Could not access outfall/no suitable sampling location	5
Results of Dry Weather Sampling SDO/Interconnections	2018
Total SDOs/Interconnect Screenings Performed	228
Samples Collected	71
Samples Not Collected	157
No flow, dry	42
No flow, standing water/submerged	73
Could not access outfall/no suitable sampling location	42

¹ There are still 30 CSO outfalls listed in the Commission's NPDES CSO Permit. However, CSO 19MCSO083 has been eliminated; therefore, it was not screened in 2018. The Stony Brook Conduit CSO 21HCSO046 was screened in three locations. All three locations are ranked in the 2019 prioritization.

All the results of the 2018 wet weather screening program are provided in Appendix A, Table 2-3, and a summary of the wet weather screening and sampling performed is shown in Table 2-4 below.

Wet weather field screening took place at seven (7) CSO locations in 2018. Wet weather samples were collected at two (2) of the CSO locations. Five (5) outfalls were not sampled during wet weather because the outfall had standing water or was submerged and the upstream manholes also had standing water or were submerged (3 locations); or there was no access or suitable locations to sample (2 locations).

Wet weather screening took place at 101 SDO and interconnection locations in 2018. Wet weather samples were collected at 49 of the locations visited. Samples could not be collected at 52 locations because there was no flow or insufficient flow to sample (1 location), the outfall had standing water or was submerged and upstream manholes also had standing water or were submerged (31 locations); or there was no suitable location to sample (20 locations).

TABLE 2-4
2017 Wet Weather Screening Samples Collected versus Not Collected

Results of Wet Weather Sampling CSOs		2018
Total CSO Screenings Performed		7
Samples Collected		2
Samples Not Collected		5
	No flow, dry	0
	No flow, standing water/submerged	3
	Could not access outfall/no suitable sampling location	2
Results of Wet Weather Sampling SDO/Interconnections		2018
Total SDOs/Interconnect Screenings Performed		101
Samples Collected		49
Samples Not Collected		52
	No flow, dry/insufficient flow	1
	No flow, standing water/submerged	31
	Could not access outfall/no suitable sampling location	20

2.2 SUB-CATCHMENT AREA PRIORITIZATION

On November 21, 2012, the Commission submitted to EPA, DEP and CLF the first required Sub-catchment Prioritization and Schedule for Completion of Investigations report (“Priority Report”). Revised Priority Reports were submitted in January 2013, 2014, 2015, 2016, 2017 and 2018.

The Priority Reports described the protocols used for collecting the screening data; the methodology for prioritizing sub-catchment areas for investigation; the priority ranking of the sub-catchments which resulted; and, a schedule for completing sub-catchment area investigations within the seven year time line established by the Consent Decree.

IDDE screening thresholds as defined in the Commission’s Consent Decree are as follows.

Bacteria:

Class A and Class B waters

E. coli: greater than 235 cfu/ 100 mL

Enterococcus: greater than 61 cfu/ 100 mL

Class SA and Class SB waters

Enterococcus: greater than 104 cfu/ 100 mL

Ammonia: = >0.5 mg/L

Surfactants: = > 0.25 mg/L via field kits; => 0.1 mg/L via laboratory analysis

Chlorine: greater than non-detect (0.02 mg/L method detection limit)

The results of the priority ranking for 2019 are shown in Appendix A. For comparison purposes the rankings from the 2013, 2014, 2015, 2016, 2017 and 2018 priority rankings are also shown. For the 2019 priority ranking sub-catchments were re-ranked within the same time frames (tiers) established in the 2018 priority ranking. This was done in order to maintain the schedule for completion already established by previous priority rankings, and to avoid fragmentation in the progress of investigations.

As required by the Consent Decree investigations in the six (6) Constitution Beach Priority 1 areas were completed in 2013, and investigations in the Dorchester Bay Priority 1 areas were completed in 2014. Investigations of an additional 65 sub-catchments were completed by August 23, 2015. Also, 28 areas were deemed completed prior to 2013. Priority 5 was given to those sub-catchments where investigations were completed. The remaining sub-catchments were re-ranked on based on bacteria results, according to the ranges presented in Table 3, although other parameters and factors were taken into consideration.⁴

TABLE 2-6
Bacteria Ranking

Bacteria	Priority 2	Priority 3	Priority 4
E. coli (CFU/100mL)	>10,000	1,000 - 10,000	<1,000
Enterococci (CFU/100mL)	>5,000	500 - 5,000	<500

Where bacteria concentrations for individual sub-catchments were the same, a secondary ranking using the ammonia results was completed. For locations that had a field duplicate sample collected or were sampled more than once, the higher bacteria result was used for prioritization purposes.

During the summer of 2014, the Commission and EPA engaged in discussions regarding the Prioritization Ranking. During those discussions EPA identified several sub-catchments they believed should receive higher priority. These were 10LSDO094, 20DSDO055, 20DSDO062, 23LSDO164, 25LSDO058, and 29JCSO017. These sub-catchments are highlighted in beige in Appendix A. Sub-catchments 10LSDO094 and 20DSDO055 were completed in 2015. Sub-catchments 20DSDO062, 23LSDO164, 25LSDO058 and 29JCSO017 were completed in 2018 and appear at the top of the 2018 tier. Municipal and other MS4 interconnections are highlighted in blue the priority ranking table.

There are currently 254 sub-catchments in the Commission’s drainage system. For the 2019 priority ranking 13 sub-catchments were placed in the Priority 2 category, 9 in the Priority 3 category, and 45 in the Priority 4 category. A total of 187 sub-catchments, or 74%, are now Priority 5 or conditionally complete. A map illustrating the 2019 rankings of the sub-catchments is provided in the pocket at the end of this report.

⁴ In the 2013 priority ranking SDOs and interconnections that had not been screened were ranked Priority 6, and CSOs that had not been screened were ranked Priority 7.

2.3 STATUS OF SUB-CATCHMENT INVESTIGATIONS

Tables 2-7 and 2-8 provide the “percent complete” for IDDE investigations within each sub-catchment area in the Commission’s system as of January 1, 2019. As required, the Commission completed investigations in the areas discharging to, or near, Constitution Beach on August 23, 2013, and in the areas discharging to, or near, Malibu and Tenean Beach on August 23, 2014. Investigations in a total of 186 sub-catchments were completed as of August 23, 2018.

The percent complete by manholes for Table 2-7 was calculated based on the total number of stormwater and common manholes in the sub-catchment area that were systematically investigated⁵, divided by the total number of stormwater and common manholes in the sub-catchment area. The percent complete by linear footage of pipe for Table 2-8 was calculated based on the total footage of storm drain pipe in the sub-catchment area that was systemically investigated, divided by the total footage of storm drain pipe in the sub-catchment.

2.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION PLAN

Under the Consent Decree the Commission was required to submit to EPA, DEP and CLF a revised Illicit Discharge Detection and Elimination Plan (IDDE Plan). The IDDE Plan was submitted to EPA, DEP and CLF on December 18, 2012. The IDDE Plan detailed and updated the Commission’s approach, including modifications as appropriate to address investigations of CSO outfalls. It described the investigation methods and analytical techniques that the Commission employs to locate and verify illicit discharges and methods by which sources of illicit discharges would be removed.

Most illicit discharge investigations are performed by Commission consultants. The contracts for investigations performed by consultants are described further below.

2.5 ILLICIT DISCHARGE INVESTIGATION CONTRACTS

Since 1999, the Commission has executed four contracts to have consultants perform illicit discharge investigations of the Commission’s drainage system. The Stony Brook Illegal Connection Investigation (SBI) Program was carried out between 1999 and 2005, at a cost of \$1,478,709. The Citywide Illegal Connection Investigation (CWI) Program overlapped with the SBI, and was carried out between 2004 and 2009. Total cost for the CWI program was \$1,536,000. The Citywide Illegal Connection Investigation Program, Phase 2 (CWI2) was carried out between 2009 and 2012. Total cost for the CWI2 contract was \$1,660,000. The Citywide Illegal Connection Investigation Program, Phase 3 (CWI3) was carried out between 2012 and 2016. Total cost for the CWI3 contract was \$3,147,817. A contract for the Citywide Illegal Connection Investigation Program, Phase 4 (CWI4) was executed June 14, 2016. The contract ceiling for CWI4 is \$2,105,414, and

⁵ As described in the Commission’s IDDE Plan, not every storm drain manhole in a sub-catchment area is inspected. Some manholes are inferred to be void of contamination based on the results of inspections of manholes upstream and downstream, or on dye tests of adjacent buildings.

the contract duration is four years. As of December 31, 2018, \$1,252,286 had been spent for services under the CWI4 contract. These costs for the SBI and CWI contracts do not include the cost to correct the illicit discharges found, nor do they include other costs borne by the Commission for activities such as testing sewer laterals to determine whether they leak; CCTV of sewers and drains; police details; performing additional dye tests; cleaning pipes and manholes; program management; and other support services.

2.6 CORRECTION/REPAIR OF ILLICIT DISCHARGES

Correction and repair of illicit discharges is discussed in the Commission's IDDE Plan, which was submitted to EPA, DEP and CLF on December 18, 2012. The Commission identifies two types of illicit discharges: direct illicit connections and sanitary sewer defects such as leaking sewer laterals. Direct illicit connections include sanitary sewer laterals that are directly connected to storm drains in the public way; these are usually corrected by a Commission contractor. Direct connections also include sanitary connections, such as from a single toilet or washing machine, to an internal building drain; these require the owner of the property to correct. The leaking sewer lateral illicit discharges are laterals that are properly connected to the sewer system; however, testing of the sewer laterals by the Commission confirm that they leak sewage into the drain system. The methods used by the Commission to eliminate illicit discharges are described in more detail in the IDDE Plan.

In November 2012, the Commission amended its Sewer Lateral Assistance Program to provide financial assistance to property owners to line or relay leaking sewer laterals, including those sections on private property. Under the program, owners of verified leaking sewer laterals may be reimbursed up to \$4,000 to have a licensed bonded contractor line or relay their leaking sewer lateral. A leaking lateral must be lined or relayed from inside the building foundation to the public sewer in the public way. To obtain reimbursement the lateral must be confirmed as leaking by the Commission and the owner must obtain three or more quotes from contractors to repair or relay the leaking lateral. The Commission reviews the submission, the owner signs a waiver, and the Commission authorizes the owner to proceed with the work. After the owner reports repair of the sewer lateral the Commission or its contractor performs a dye test to confirm that the lateral is not still leaking into the drain system.

2.7 SUPPLEMENTAL ENVIRONMENTAL PROJECT

In accordance with the terms of the Consent Decree, the Commission implemented a Sewer Lateral Lining Program Supplemental Environmental Project (SEP). The project was undertaken in connection with the settlement of an enforcement action, Conservation Law Foundation and the United States of America v. Boston Water and Sewer Commission, et al., taken on behalf of the U.S. Environmental Protection Agency under the Clean Water Act.

As required by Section VIII of the Consent Decree, the Commission agreed to line a minimum of twenty-five (25) laterals and spend a minimum of \$160,000.00 by December 31, 2014. The Commission completed all construction activities for the SEP contract on

December 10, 2014. The Commission structurally lined twenty-six (26) leaking laterals at a total cost of \$237,149.00. Two laterals inspected under the SEP could not be lined due to their condition. The two laterals were fully relayed at an additional cost \$33,195.00. Lining and repair of the laterals removed an estimated 1,950 gallons per day of sewage from the Commission’s drainage system. The Commission filed its SEP Completion Report pursuant to Section VIII, Paragraph 69 on December 23, 2014.

2.8 2017 ILLICIT DISCHARGE REMEDIATION SUMMARY

This section summarizes the Commission’s 2018 Illicit Discharge Identification and Elimination Program. Table 2-9 lists the direct illicit connections that were outstanding (not corrected) as of January 1, 2018; it includes those that were verified and corrected in 2018, and it includes those that were verified but not corrected at the end of 2018.

Table 2-10 lists the indirect illicit connections (verified leaking laterals) that were outstanding (not corrected) as of January 1, 2018; it includes those that were verified and corrected in 2018; and it includes those that were verified but not corrected at the end of 2018.

Below is a summary of 2018 Illicit Discharge Remediation Program.

2018 Illicit Discharge Remediation Program Summary

Direct Illicit Connections Outstanding as of January 1, 2018	16
Direct Illicit Connections Verified in 2018	25
Direct Illicit Connections Corrected in 2018	29
Direct Illicit Connections Outstanding December 31, 2018.....	12
Leaking Laterals Outstanding as of January 1, 2018.....	16
Leaking Laterals Verified in 2018	29
Verified Leaking Laterals Repaired in 2018.....	29
Verified Leaking Laterals Outstanding as of December 31, 2018.....	16

In 2018, a total of 25 new direct illicit connections were verified, and 29 direct illicit connections were corrected. Of the direct connections corrected in 2018, 21 were corrected by a Commission contractor and eight (8) were corrected by the property owner.

In 2018, a total of 29 leaking laterals were verified, and 29 leaking laterals were repaired by the property owners.

In total there were 54 direct connections or leaking laterals verified in 2018. In 2018, 58 locations had an illicit connection, a leaking lateral corrected/repaired. As of the end of 2018, 28 illicit discharges remained to be corrected/ repaired.

Calculations of cost to remove illicit discharges

Tables 2-9 and 2-10 also provide the costs to the Commission to correct or repair illicit discharges in 2018. The cost to the Commission to correct 29 direct illicit connections was \$468,441. The cost to the Commission to verify 29 leaking sewer laterals was \$50,175. The cost to the Commission to reimburse owners for repairing 29 leaking laterals was \$103,785.

In total, \$622,401 was expended by the Commission to verify and correct or repair illicit discharges in 2018. These costs do not include: the cost of permits, inspection fees, pavement restoration or police details; costs incurred by the Commission to clean and televise sewer mains adjacent to suspected leaking laterals before they were tested; costs covered by property owners who were responsible for making corrections to direct internal connections on their own property; and costs to owners to repair leaking laterals over and above what was reimbursed by the Commission.

Calculations of sewage removed

The Commission estimates the wastewater removed by elimination of an illicit discharge based upon water use records for the property where the illicit discharge was located. Average daily water consumption is calculated based on the previous 24 month period. For direct illicit connections it is assumed ten (10) percent of the water is consumed and only ninety (90) percent discharges to the drain system. If only a portion of the building contributed to the direct illicit discharge the figure is adjusted accordingly. It is not possible to know exactly how much sewage is leaking into a drain from a leaking sewer lateral. So the Commission makes a best estimate. For a leaking sewer lateral it is assumed that, because a proper sewer lateral exists at the location, only one-third (33%) of the sanitary flow is entering the drain system from the leaking lateral.

Due to the Commission's efforts in 2018, an estimated 21,430 gallons per day (gpd) of wastewater was removed from the storm drainage system and receiving waters by correcting direct illicit connections, and an estimated 15,675 gpd of wastewater was removed from the storm drainage system and receiving waters by repairing leaking laterals. In total, an estimated 37,105 gpd of wastewater was removed from the storm drainage system and receiving water by correcting or repairing illicit discharges in 2018.

3.0 STORMWATER MANAGEMENT ACTIVITIES

The Stormwater Management Program consists of a variety of programs, activities, and best management practices aimed at preventing the discharge of pollutants to storm drains and receiving waters. These measures include maintenance, structural, managerial, regulatory, and educational programs. Key elements of the Commission's Stormwater Management Program and Stormwater Management Plan implementation are described in this section.

3.1 OPERATION AND MAINTENANCE OF STRUCTURAL CONTROLS

Combined sewer overflows, sanitary sewer overflows, sewage infiltration into storm drains and system backups can be prevented by maintaining the capacity and structural integrity of the sewerage and drainage systems. The Commission accomplishes this by cleaning, repairing or replacing sanitary and combined sewers and storm drains, separating combined sewers, preventing and correcting sewer system overflows, and by preventing and removing infiltration and inflow to the sewer system. To determine where structural deficiencies exist and where repairs are needed the Commission performs television inspections of sewers and drains.

Pursuant to the Consent Decree the Commission performed a Capacity Management, Operations, and Maintenance Program (CMOM) Assessment or "Self-Assessment", and submitted a Self-Assessment Report and Corrective Action Plan to EPA in July, 2013. The purpose of the Self-Assessment was to assess the overall performance of the Commission's collections system and determine whether improvements were necessary to maintain the collection system and prevent future sewer system overflows. It included, but was not limited to, the evaluation of operations, maintenance, emergency response, collection system performance, communications, financial and capital planning. The Corrective Action Plan described the findings of the Self-Assessment and identified specific short and long-term actions to be taken by the Commission to remedy deficiencies identified by the Self-Assessment.

In 2014, the Commission completed a CMOM Program Document (Program Document). The Program Document summarized the Commission's existing and planned preventative, corrective and capital planning practices for supporting its CMOM Program going forward, and consolidated all of the Commission's collection system preventative maintenance and capital improvement plans into a single document.

a. Storm Drain and Sewer Maintenance by BWSC Staff

The Commission's Operations Division is responsible for smaller sewer and drain related repair, maintenance and cleaning jobs, as well as some television inspections of sewers and drains. In 2018, the Commission owned five (5) large and one (1) small "vactor" cleaning trucks to clean accumulated materials from sewers and drains; five (5) jet trucks; one (1) multi-rodder truck; and two (2) CCTV trucks. In 2018, the Commission jetted, vactored or rodded 396,917 linear feet of pipe. To determine where structural deficiencies exist and where repairs are needed, Commission crews and contract forces performed television inspections of 96 miles sewer and drain pipe in 2018.

In conjunction with the storm drain and catch basin cleaning programs, the Commission routinely clears debris from twelve (12) brook inlets and outlets throughout the City. Since the primary purpose of this practice is to prevent upstream flooding, the cleaning is typically performed immediately prior to major storm events and usually they are checked after storm events to determine if follow up cleaning is needed. The locations and frequency of cleaning is provided in Table 3-1.

b. Catch Basin Maintenance

The Commission has over 30,000 catch basins in its sewer and drainage systems. Other catch basins in the city are owned by other public agencies such as the state Department of Conservation and Recreation, Mass Department of Transportation, or are located on private property. The Commission currently owns six (6) clamshell trucks.

Commission catch basin cleaning forces have been augmented by contract resources and equipment since 2001. In 2018, the Commission and contract resources performed 20,235 inspections/cleanings of catch basins. Catch basin cleanings are transported to the Commission's Material Handling Facility where they are temporarily stored to de-water until transferred for proper off-site disposal/reuse at an approved disposal facility. In 2018, the Commission removed approximately 2,500 tons of debris from catch basins, as recorded at the Commission's Material Handling Facility.

c. Commission Particle Separators

The Commission currently owns sixteen (16) particle separators. Information regarding the various particle separators, including their locations, receiving waters, and inspection and cleaning dates in 2018 is summarized in Table 3-2. All sixteen (16) particle separators were inspected in 2018. Of those, 15 were cleaned although the amount of material removed from six (6) separators was not recorded. The recorded amount of material removed from particle separators in 2018 was 1.8 cubic yards.

d. Large Storm Drain and Sewer Programs under BWSC's CIP

Large cleaning and maintenance jobs are performed by outside contractors under the Commission's Capital Improvement Program. The Commission's three-year Capital

Improvement Program (CIP) is updated annually. The 2018-2020 CIP included \$103.4 million for sewer, drain and stormwater related projects, of which \$45.4 million was earmarked for 2018. A copy of the 2018-2020 Capital Improvement Program is available from the Commission's website and upon request from the Commission.

3.2 SEWER SYSTEM OVERFLOW CONTROL AND RESPONSE

In compliance with the Consent Decree the Commission has improved its response and oversight over sewer system overflows (SSOs). On September 23, 2012, the Commission instituted a program (including iPad application and Oracle SSO database) to track and report all public and private SSOs to EPA and DEP within 24 hours pursuant to Part E of the Consent Decree. Prior to the programs commencement, the Commission performed internal training of Commission personnel in Engineering Services and Operations Division related to SSO response.

On November 21, 2012, the Commission submitted an SSO Emergency Response Plan (SSOERP). The objective of the SSOERP is to provide a standardized set of actions for the Commission to follow in the event of an unpermitted discharge (overflow) from the sanitary and combined sewer system. In addition, the implementation of the SSOERP accomplishes the following objectives:

- Minimize an SSO's impact on public health, public safety, and property damage.
- Comply with regulatory and enforcement reporting and public notification requirements.
- Minimize the reoccurrence of SSOs.
- Minimize the Commission's liability.

The following elements are included in the SSOERP:

- Description of the types of sewers and discharges addressed by the SSOERP.
- An outline of the Commission's collection system inventory and staff, equipment and hardware/software for responding to SSOs.
- Procedures for receiving notifications of a possible SSO, and protocols for internal notifications about confirmed SSOs with the Commission's collection system and initial notifications to DEP, EPA and other authorities such as the MWRA.
- Procedures for responding to SSOs.
- Procedures for documenting and reporting SSOs.
- Descriptions of the means of notifying the public affected by an SSO.
- Description of the activities to be taken after an SSO has been remedied.
- Objectives and methods for training and preparing staff in regards to the SSOERP.

Once it has been confirmed that an SSO is the responsibility of the Commission, within 24 hours the Commission notifies EPA and DEP. EPA and DEP are notified for any privately caused SSO exceeding 100 gallons or any amount not contained inside the

building or discharging to the environment. Other parties may be notified depending on the extent and potential impact of the overflow.

Within five days of an SSO, BWSC completes a post-remediation investigation of the SSO and submits it to DEP. The report includes a characterization of the SSO and a discussion of the planned actions to prevent recurrence.

In 2018, the Commission responded to, investigated, and/or reported to EPA and DEP, a total of 230 SSO events. These included 113 reportable SSO events (51 public SSOs and 62 reportable private/building backups), and 117 non-reportable private/building backup events. There was one (1) dry weather combined sewer overflow during 2018. Details regarding SSOs addressed by the Commission are provided in the Commission's semi-annual Consent Decree Compliance Reports. Information regarding SSOs and maps showing the locations of recent SSO events are also provided on the Commission's website.

3.3 ILLEGAL DUMPING AND EMERGENCY SPILL RESPONSE

The Commission's Sewer Use Regulations prohibit the dumping of any material into a catch basin, including any solid waste, construction debris, paint or painting product, antifreeze, hazardous waste, oil, gasoline, grease and all other automotive and petroleum products, solvents and degreasers, drain cleaners, commercial and household cleaners, soap, detergent, ammonia, food and food waste, grass or yard waste, leaves, animal feces, dirt, sand, gravel or other pollutant. Illegal dumping to catch basins carries a fine of up to \$5,000 per day of violation under the Commission's Sewer Use Regulations.

Commission crews are available 24-hours a day to assist the Department of Environmental Protection, the Boston Fire Department and the U.S. Coast Guard in determining where a hazardous spill has entered or could potentially enter the Commission's wastewater or storm drainage systems. If the spill has entered either system, Commission personnel determine how far the contamination has traveled and whether there is the risk of an overflow to a waterway. The Commission also attempts to trace the spill upstream to locate and identify its source. When the source of the spill cannot be determined, the Commission pays for a licensed contractor to clean up the spill.

In 2018, the Commission responded to 36 reports of a potential spill, leak, or report of illicit dumping. Table 3-3 lists the incidences to which the Commission responded in 2018. One (1) violation/enforcement notice was issued in 2018.

3.4 DRAINAGE DISCHARGE PERMITS

Article C, Section 5 of the Commission's Sewer Use Regulations describes the discharge prohibitions and restrictions applicable to the Commission's storm drainage system. Under the Sewer Use Regulations any discharge of wastewater or other waters not composed entirely of stormwater into a building storm drain or a Commission storm drain is prohibited, except as authorized by the regulations. Authorized discharges

include discharges for which the owner has obtained both a Drainage Discharge Permit from the Commission and an NPDES Permit or NPDES Permit Exclusion from EPA, as well as such discharges as river or stream flow, rising groundwater, uncontaminated groundwater, waters from hydrant flushing, and other potable water sources associated with the maintenance of the water distribution system or firefighting, irrigation water, and street and pavement wash waters.

Discharges requiring a Drainage Discharge Permit include permanent subsurface drainage, non-contact cooling water, non-contact industrial process water, or waters associated with hydrological testing, groundwater treatment/remediation, and removal and installation of an underground storage tank. The Commission may deny or condition a Drainage Discharge Permit to prevent the discharge of contaminants to the storm drainage system. Failure to obtain a Drainage Discharge Permit from the Commission carries a fine of up to \$1,000 per day of violation under Sewer Use Regulations. In 2018, the Commission issued 24 Drainage Discharge Permits for discharges to storm drains.

The requirements for Drainage Discharge Permits are described in the Commission's Requirements for Site Plans, and developers and potential dischargers are informed of the requirements when they request a General Service Application for a building sewer or building storm drain connection. In addition, owners and developers are informed of the Drainage Discharge Permit requirements through comment letters submitted by the Commission to Massachusetts Environmental Policy Act (MEPA) Unit and the Boston Planning and Development Agency in response to Environmental Impact Reports.

3.5 DEVELOPMENT AND REDEVELOPMENT

a. Sewer Use Regulations and Site Plan Review

The majority of the Commission's stormwater management controls are enforced through its Regulations Governing the Use of Sanitary and Combined Sewers and Storm Drains (the Sewer Use Regulations). The Sewer Use Regulations were adopted in 1983 and amended in 1989. They were amended again in 1998 to strengthen and clarify the requirements, particularly as they pertain to stormwater discharges. In 1998, the Commission also amended its Penalty Schedule by adding and increasing the fines for several Sewer Use Regulation violations.

The Commission requires that a General Service Application and a site plan be submitted for every new or reconstructed water, sewer, or storm drain service connection. The Commission's Requirements for Site Plans assist developers, builders, architects, engineers, and others in preparing site plans that conform to the Commission's Sewer Use Regulations and to help them secure the necessary approvals from the Commission.

The site plan must be approved by the Commission's Chief Engineer before construction may begin, and it will not be approved unless it complies with the Commission's Requirements for Site Plans and Sewer Use Regulations. The site plan review provides an opportunity to review the components of the project and condition the approval on

compliance with the Commission's Sewer Use Regulations, Requirements for Site Plans, and other requirements. The Commission's Requirements for Site Plans are updated as needed. In 2018, 767 site plans were approved by the Commission's Chief Engineer.

Requirements contained in the Sewer Use Regulations and Requirements for Site Plans relating to developments in Boston include the following:

Filing Notices of Intent and Stormwater Pollution Prevention Plans

The Commission's Requirements for Site Plans include provisions for stormwater management at Construction Sites (as defined in the Consent Decree). The Requirements for Site Plans specifically require construction site operators, where applicable, to file Notices of Intent with EPA for NPDES General Construction Permits, and they must submit to the Commission Stormwater Pollution Prevention Plans (SWPPP). Also, construction site operators, where applicable, are required to use and maintain appropriate structural and non-structural BMPs to minimize the discharge of pollutants from construction sites to the Commission's MS4. The Commission's Construction Site Inspection and Enforcement Program also requires regular updates regarding developers SWPPP activities.

Drain Layers License: Persons installing new building sewers and storm drains, or repairing or maintaining existing pipes must possess a Drain Layers License issued by the Commission. To obtain a Drain Layers License, persons must pass a written test given by the Commission. Test questions are typically drawn from the requirements provided in the Commission's Sewer Use Regulations, including those pertaining to illegal sanitary connections to storm drains, non-stormwater discharges, requirements for new construction and catch basin dumping. Drain Layers Licenses are renewed annually. The Drain Layers Licensing requirement provides the opportunity to educate drain layers in Boston as to the Commission's rules and regulations, including those pertaining to stormwater. Thirteen (13) new Drain Layers Licenses were issued in 2018, and 192 were renewed.

Inspections of New Connections: Connection of a building sewer to a storm drain is prohibited under the Commission's Sewer Use Regulations and carries a fine of up to \$5,000 per day of violation. To ensure proper connection, the Commission requires that all new, repaired or modified service connections be inspected by a Commission inspector before the services are covered over by the contractor. Failure to have the connection inspected before covering it over carries a fine of up to \$750 per day under the Commission's Sewer Use Regulations.

As an added measure, new sewer connections must be dye tested by the Commission once construction is completed. Failure to have a new sewer connection dye tested carries a fine of up to \$500 per day. The Commission may require that a repaired or modified service connection be dye tested. In 2018, the Commission performed 512 GSA related dye tests.

On-site Retention of Stormwater: Under the Commission’s Site Plan Requirements and Sewer Use Regulations, developers of new projects are required to evaluate the feasibility of retaining stormwater on-site. On-site retainage of stormwater is required whenever site conditions permit as determined by the Commission. On-site retention of stormwater serves to limit peak discharge rates, recharge groundwater, and remove 80 percent of total suspended solids in the flow to the extent feasible. This requirement is consistent with the Department of Environmental Protection’s Stormwater Management Policy which establishes standards for stormwater management for development, and the Commission’s Stormwater BMP Guidance document.

In 2018, the Commission approved installations of 533 dry wells or other type of infiltration device. Table 3–4 provides the addresses of the devices approved in 2018.

Controls for New Parking Lots: In order to prevent oil, grease and sediments from discharging to open waterways, the Commission may require developers to install particle separators on newly constructed storm drains that serve large outdoor parking areas. The Commission may require particle separators on existing storm drains from existing outdoor parking areas, where appropriate. This requirement has been in place since 1992.

Parking lot particle separators are typically located on private property; therefore, their maintenance is the responsibility of the property owner. Design criteria for particle separators are set forth in the Commission’s *Guidelines for Developers for the Installation, Operation and Maintenance of Grit and Oil Separators*, a copy of which is included in the Commission’s Requirements for Site Plans.

In 2018, the Commission approved installation of 22 particle separators. Table 3–5 provides the addresses of the devices approved in 2018.

Drainage Discharge Permits: The Commission requires a Drainage Discharge Permit for all non-stormwater discharges to its drainage system, including construction site dewatering, permanent subsurface drainage, non-contact cooling water, non-contact industrial process water, and waters associated with hydrological testing, groundwater treatment/remediation, and removal and installation of an underground storage tank. The Commission may deny or condition a dewatering permit to prevent contaminated drainage from entering the sewer or drainage system. Failure to obtain a Drainage Discharge Permit carries a fine of up to \$1,000 a day under the Commission’s Sewer Use Regulations. In 2018, the Commission issued 24 Drainage Discharge Permits for discharges to storm drains.

Infiltration/Inflow Control: Newly constructed and substantially renovated buildings must be constructed so as to minimize inflow and infiltration to the Commission’s wastewater system. Stormwater, including roof runoff, must be kept separate from sanitary sewage at all times, and the connection of a building storm drain to a sanitary sewer is prohibited.

The Commission has a National Pollutant Discharge Elimination System (NPDES) Permit for its combined sewer overflows and is subject to the regulations [314 CMR 12.00, section 12.04(2)(d)]. The regulations require developers installing new sewer connections with design flows exceeding 15,000 gpd to mitigate the impacts of the development by removing four gallons of infiltration and inflow (I/I) for each new gallon of wastewater flow added. In this regard the Commission requires developers to develop consistent inflow reduction plans, or they can pay a fee to the Commission in lieu of implementing an I/I reduction project. The Commission uses the fees paid to implement capital programs for I/I reduction.

Erosion and Sedimentation Control: Under the Sewer Use Regulations, anyone seeking to construct, repair or modify a sewer or storm drain service connection to the Commission’s system, or to discharge under a Drainage Discharge Permit, may be required to prepare and implement an Erosion and Sedimentation Control Plan to prevent the introduction of sediments into the Commission’s sewers and storm drains.

Fuel Dispensing Areas: Under the Commission’s Requirements for Site Plans, stormwater runoff from fuel dispensing areas not covered by a canopy or other type of roof or enclosure must discharge through a particle separator or an approved oil trap before discharging to the Commission’s storm drainage system or receiving waters.

Catch Basin Castings: Commission contractors are required to install metal castings with a “Don’t Dump” message on sidewalks near new or reconstructed catch basins. City of Boston contractors also install the castings when new sidewalks are installed. The castings are provided to city hired contractors by the Commission at no cost. The Commission requires that private developers install permanent “Don’t Dump” catch basin castings next to any new catch basin installed as part of their projects. The developers, as well as other parties interested in obtaining the castings may purchase them from the Commission’s vendor. In 2018, the Commission issued 1,055 catch basin castings to contractors and other parties. Of those issued, 412 were for Boston Harbor, 392 for the Charles River and 251 were for the Neponset River.

b. Development/Redevelopment Coordination with Boston Planning and Development Agency

The Commission’s NPDES Stormwater Permit requires the Commission to “assist, coordinate, and cooperate” with city departments and agencies to ensure that development projects within Boston are conditioned on due consideration of stormwater quality impacts, that they conform to applicable state and local stormwater requirements, and that negative impacts to stormwater quality during the time construction is underway are prevented.

The Commission coordinates with the Boston Planning and Development Agency (BPDA) regarding reviews of Environmental Impact Reports (EIRs) and Master Plans for large projects in Boston. Comments were submitted to the BPDA and/or the MEPA Unit for 68 projects in 2018. Copies of the letters were also sent to the Boston Environment

Department and to the project proponents. The project proponents were also informed of the comments by the BRA and MEPA Unit via the Scoping Determinations issued in response to the EIRs and Master Plans for the projects. The Commission refers to these comment letters when proponents come forth with their site plans for the projects.

Letters for 11 projects contained comments regarding the Commission requirements for particle separators. Letters for 55 projects contained comments about the Commission's requirement for retaining stormwater on site. Letters for 66 projects contained comments regarding the requirement for Stormwater Management Plans. Sixty (60) letters contained comments regarding the requirement for 4 to 1 I/I reduction. If appropriate, the letters informed the proponent that a Drainage Discharge Permit may be required for any temporary or permanent non-stormwater discharge to the drainage system.

3.6 CONTROLS FOR CONSTRUCTION SITES

In compliance with its NPDES Permit and the Consent Decree, the Commission oversees stormwater discharges from construction sites. The Commission submitted to EPA a Construction Site Inspection and Enforcement Program (CSIEP) plan in 2012. The program plan set forth procedures for conducting inspection of construction sites, procedures for inspecting and monitoring stormwater Best Management Practices used at construction sites, described the means by which contractors and developers would comply with the Commission's requirements, EPA and DEP regulations and the Clean Water Act, and how the Commission would enforce its requirements. Implementation of the CSIEP commenced in December 2012.

The Commission Requirements for Site Plans specifically require construction site operators to file Notices of Intent (NOIs) with EPA for NPDES General Construction Permits, and submit to the Commission Stormwater Pollution Prevention Plans (SWPPP). Also, construction site operators, where applicable, are required to use and maintain appropriate structural and non-structural BMPs to minimize the discharge of pollutants from construction sites to the Commission's MS4.

In accordance with a 2012 Memorandum of Agreement (MOU) between the Commission and the City's Inspectional Services Department (ISD), the Commission and ISD continue to coordinate building permit issuance and site plan approval, whereby the Commission will not approve any construction site over one (1) acre unless the discharge permit has been approved. Also, ISD and the Commission continue to notify building permit and site plan applicants of the requirements to obtain NPDES Stormwater Permits for construction sites from EPA. The Commission notifies project planners of the requirement for NOIs and SWPPP when they submit site plans for projects and refers to the EPA's website to confirm whether NOIs have been submitted. The Commission also confirms that an NOI has been submitted and a SWPPP prepared when performing construction site visits. Information pertaining to the NOI and SWPPP requirements is included in the Commission's Requirements for Site Plans and are provided on the Commission's website.

In 2018, the Commission performed 203 site inspections of 40 construction projects. Two (2) violation notices were issued. Training for Commission staff on construction site inspections was provided via an American Society of Civil Engineers webinar on May 10, 2018.

3.7 INDUSTRIAL FACILITY STORMWATER POLLUTION PREVENTION

In compliance with its NPDES Permit and the Consent Decree, the Commission continues to implement the IFSP Program. Under the program the Commission identifies and inspects industrial facilities that discharge stormwater to the Commission's drainage system from municipal landfills, hazardous waste treatment, storage, disposal and recovery facilities, facilities that are subject to EPCRA Title III, Section 313, facilities that hold, or are required to hold NPDES stormwater permits, and other industrial or commercial discharger that the Commission determines is contributing a substantial pollutant load to its drainage system.

A consultant (Stantec), under the direction of the Commission, initially developed and implemented the IFSP program. In 2016, the Commission's Enforcement Department within the Operations Division assumed all duties with respect to inspections, enforcement and tracking of the IFSP program. The Commission also included fees for inspection of industrial dischargers into its 2016 Rate Schedule adopted in December 2015.

Under the program the Commission maintains an inventory of industrial facilities and a database to track relevant information, including enforcement and corrective actions. In February, 2013, there were 1,760 potential industrial facilities on the inventory list. During the course of the program the list of industrial facilities has been refined. Businesses that have moved out of the city, closed, or had the incorrect Standard Industrial Classification codes have been removed from the inventory and new facilities have been added as they were discovered through research of records and site visits. The inventory continues to be refined and updated as inspection reports are evaluated.

The active number of industrial facilities on the inventory list at the end of 2018 was 231. The Commission conducted a total of 96 inspections of industrial facilities in 2018. Summaries of inspections performed and enforcement action taken are provided in the Commission's semi-annual Consent Decree compliance reports.

3.8 ROADWAYS

As contained in its Enabling Act, the Commission's authority is limited to the operation and maintenance of the water distribution system and the wastewater collection and stormwater drainage systems which serve the City of Boston. The Commission's jurisdiction does not extend to the operation and maintenance of roadways. The Commission coordinates with officials from the agencies having the responsibility for the management of city roadways (Boston Public Works Department (PWD), Department of Conservation and Recreation (DCR), and Massachusetts Department of Transportation

(MassDOT) as necessary to meet the requirements of the Commission's NPDES Stormwater Permit and the Consent Decree.

a. City of Boston Snow Removal and Road Deicing Practices

Snow plowing and road deicing of most of the public roads in Boston are the responsibility of the PWD. The PWD performs some of the snow removal operations on city streets and also has snow removal contracts. Snow is plowed to the side of the streets, but is not typically removed. A sodium chloride salt/sand mixture is used as a deicing agent, and application rates vary based on temperature and precipitation. Contractors use the City's supply of salt and sand during deicing operations. PWD officials have emphasized that public safety is their primary concern in determining how much sand and salt is applied to roadways and that weather conditions dictate application levels.

b. City of Boston Street Cleaning

Sweeping of city owned streets is conducted by the PWD or by its contractors. According to the PWD, the City has two programs for street sweeping: Posted Street Cleaning and Non-posted Street Cleaning. All non-posted streets are cleaned once a week or more if necessary. The Posted Sweeping Program is separated between a Night Program and a Daily Program. Sweepers also clean up before and after special events, such as parades, road races and neighborhood festivals.

The Night Sweeping Program includes an area from Massachusetts Avenue to the Waterfront that is swept on a nightly basis year round. The Night Sweeping Program also covers the City's major arterial routes throughout the City, which are swept once a week at night year round.

The Daily Street Sweeping Program typically operates from April 1st through November 30th. PWD recently expanded the Daily Street Sweeping Program in the Beacon Hill, North End and South End, from March 1st through December 31st. Weather and budget conditions permitting, the program may begin earlier in the season and extend later into the fall. Each side of a posted city street on the Daily Street Cleaning Program is cleaned once every other week. Additional street sweepers may be contracted and city sweepers run more frequently during the fall leaf season.

Parking bans (signs) posted on streets serve to educate the public and to have vehicles removed on certain days so sweeping can be thorough. The parking bans are enforced by the Boston Transportation Department. If cars are not removed on designated days, owners can be fined. The fine for not removing cars on the designated days is currently \$40, plus an additional \$90 for tow, storage and fees.

Contractors are responsible for providing their own sweeping equipment and for disposal of the collected material. PWD requires its contractors to use vacuum type sweepers that have dust control systems and do not require water to operate. Because these types of

sweepers don't require water, they can be operated year round, even in freezing conditions. The vacuum sweepers are believed to be more efficient at collecting smaller grit particles and dust. The new sweepers have saved the city thousands of gallons in water usage, and are in compliance with DEP regulations.

The PWD also has several small broom sweepers used to sweep small alleys and sidewalks. These sweepers are typically assigned to the more densely developed parts of the City, such as Chinatown, Downtown Crossing, and the North End.

The composition of the material swept up varies seasonally with sand and sediments from winter deicing activities being most evident in the spring, leaf litter during the fall months, and light litter predominating during the summer.

c. DCR/DOT Street Sweeping, Snow Removal and Road Deicing Practices

Roads maintained by the DCR such as the Soldiers Field Road, VFW Parkway, Storrow Drive, the Riverway and the Fenway are served primarily by separate storm drains which are owned and maintained by the DCR. DCR drainage systems in Boston are subject to the EPA's Stormwater Phase 2 program. DCR's stormwater management program includes "good housekeeping" measures, such as street sweeping of parkways, cleaning street drains and associated drainage systems and using control measures to protect sensitive receiving waters. Snow removal and deicing of DCR owned roads are managed jointly by the DCR and MassDOT. Snow removal and deicing of the Massachusetts Turnpike and the Central Artery and Tunnels is the responsibility of MassDOT.

3.9 PESTICIDE, HERBICIDE AND FERTILIZER APPLICATION

In 2001, the Commission completed an evaluation of existing measures to reduce the discharge of pollutants related to the application of pesticides, herbicides and fertilizers (PHFs) applied by municipal or public agencies. The Commission also evaluated the necessity to implement controls to reduce the discharge of pollutants related to the application and distribution of PHFs by commercial and wholesale distributors and applicators. The Commission performed evaluations of existing programs and data in 2001, and reported the results in the 2001 Stormwater Management Report. From the results of the evaluation, it was concluded that additional monitoring and controls for PHF use by municipal agencies and their contractors and for commercial and wholesale distributors was not warranted. Discussion of this analysis can be found in Section 3.6 of the 2009 Stormwater Management Report.

3.10 OTHER NON-STRUCTURAL STORMWATER MANAGEMENT MEASURES

a. Used Motor Oil and Paint Collection Centers

To decrease the amount of illegally disposed of paint and motor oil, the City of Boston Public Works Department (PWD) hosted three (3) Saturday drop-offs for used motor oil and surplus paint from 9 AM to 1 PM in 2018, at the following locations:

- May 12, Roxbury Public Works Yard
- June 16, Hyde Park Public Works Yard
- July 14, Brighton Public Works Yard

The events were promoted through the City of Boston's web site, local newspapers, and on signs posted in neighborhood business centers. The Commission's May/June issue of *Currents* promoted these events. A copy of the May/June *Currents* is provided in Appendix B and on the Commission's website.

b. Household Hazardous Waste Collection

To decrease the amount of illegally disposed of household hazardous waste, the City of Boston Public Works Department (PWD) hosted four (4) Saturday drop-offs for household hazardous waste from 9 AM to 2 PM in 2018, at the following locations:

- June 9, UMass Boston
- July 21, West Roxbury Public Works Yard
- August 18, West Roxbury Public Works Yard
- October 27, Public Works Yard, Frontage Road

The events were promoted through the City's web site, local newspapers, and on signs posted in neighborhood business centers. The Commission's May/June issue of *Currents* included information promoting the City's hazardous waste drop-off days. A copy of the May/June issue of *Currents* is provided in Appendix B and on the Commission's website.

c. Yard Waste/Composting

The Boston Public Works Department provides curbside collection of leaves and grass clippings in the residential sections of the city each year between April and December. Yard waste is collected by Public Works on the same day of week that weekly recycling is picked up. The Commission's September/October issue of *Currents* promoted the 2018 collection effort. A copy of the September/October *Currents* issue is provided in Appendix B and on the Commission's website.

d. Pet Waste

The City’s dog fouling regulation, Section 16-1.10A of the Boston City Ordinances, also called the “pooper scooper law,” requires dog owners to remove and properly dispose of the waste left by their dog. Penalties under the ordinance are \$50.00 for failure to produce a means of removal and \$50.00 for failure to pick up the waste. The Animal Control Unit in the Boston Property and Construction Management Department is responsible for enforcing the dog fouling ordinance. It is also responsible for following up on reports of vicious dogs, ensuring dogs are properly licensed and leashed, and other animal control issues.

To encourage dog owners to pick up after their pets and properly dispose of the waste, the Commission’s website at: <https://beta.bwsc.org/environment-education/green-programs/good-neighbor-initiatives>

A copy of the May/June issue is provided in Appendix B and on the Commission’s website.

e. Site Cleanliness Ordinance

To address litter and rodent control problems, the City of Boston instituted a Site Cleanliness Ordinance in 2000. Under this ordinance, all businesses and large residential establishments using bulk dumpsters, including food and beverage establishments, automotive establishments, and bulk refuse container storage lots, must obtain a Site Cleanliness License from the Boston Inspectional Services Department (ISD). The application for a license must include a site plan showing the location of the dumpster, a plan and schedule for maintenance, a copy of the solid waste disposal contract, and a copy of a rodent/pest control contract. An additional license is required from the PWD if the dumpster is located on a public way.

Inspectional Services officials perform annual inspections of establishments with any license issued by the Department, including a Site Cleanliness license. The Site Cleanliness license will not be renewed unless and until the establishment’s dumpster complies with the city ordinance.

Failure to comply with the Site Cleanliness Ordinance and obtain a Site Cleanliness license may result in fines of up to \$1,000 a day. Repeated violations may result in closure of the business.

3.11 PUBLIC EDUCATION AND OUTREACH

On May 17, 2013, the Commission submitted a Public Education and Outreach Program (PEOP) Plan to EPA for review and approval. The document described the Commission’s plans for updating its public education and outreach efforts pursuant to Paragraphs 59, 60, 61 of the Consent Decree. The PEOP Plan was approved by EPA in a

letter dated April 22, 2014. Various components of the Commission's PEOP Program as they pertain to stormwater are described in this section.

a. Commission Web Site

The Commission continues to use its website to promote its environmental messaging by highlighting important environmental content in an interactive slideshow at the top of the home page for users to quickly see the highlights and take action.

The Commission previously launched its new "We Are All Connected" website with an interactive homepage to engage visitors. Icons and pop up messages provided a preview of the educational content within. The four new sections with videos imbedded are: Stormwater, Wastewater, Tap Water and Resources. The Commission has also added a Green Infrastructure/Low Impact Development resources page to its website.

In addition to the items described above, the Commission's web site, located at www.bwsc.org, provides a variety of information concerning the Commission's programs, activities, and requirements for BWSC customers and interested parties. Pertinent examples include the Commission's Sewer Use Regulations and Site Plan Requirements, a page on Stormwater Management with links to past annual stormwater reports, information regarding Stormwater BMP Guidance Document (http://www.bwsc.org/ABOUT_BWSC/systems/stormwater_mgt/Stormwater%20BMP%20Guidance_2013.pdf), a description of BWSC's Downspout Disconnection program, Grease Trap Guidelines; as well as, a community outreach and education section including pollution prevention advice for residents, businesses and construction, and pet owners.

b. Currents/Billing Inserts

On a bi-monthly basis in the water and sewer bills, the Commission provides customers with an informational newsletter called *Currents*. Copies are also available from the Commission's website and at neighborhood site visits. The newsletter is aimed at providing customers with useful information concerning the Commission's programs and activities. Issues of *Currents* announce upcoming events such as the Commission's community site visits and city sponsored events such as household hazardous waste, and oil and paint collections. In addition, articles feature tips on pollution prevention, and proper disposal of used motor oil, antifreeze, household hazardous materials, yard debris, pet waste and other wastes.

The Commission also inserts messages about water and sewer management into bills and it posts the inserts on its website.

Issues of *Currents* and billing inserts in 2018 featured the following items:

- March/April 2018 *Currents*
 - How to Use and Safely Dispose of Pesticides and Herbicides
 - Don't use these chemicals right before it rains or when its windy

- Green infrastructure for management of stormwater
- April 2018 Bill Insert
 - Don't Dump! Report Illegal Dumping
- May/June 2018 *Currents*
 - Help Improve Water Quality Scoop the Poop
 - Quick Tips for Disposing of Pet Waste
 - Motor Oil Drop Off and Paint Swap Shops
 - Household Hazardous Waste Drop-Off Day
- June 2018 Bill insert
 - Don't Dump
 - Report Illegal Dumping

c. Bill Messages

The Commission inserts messages onto its water/sewer bills to its customers to notify them of program and information that impacts the environment. The target audience is typically owners. The following messages were inserted on bills in 2018:

- June 2018 Bill Message – to prevent pollution of local waterways, pick up after your dogs and report illegal dumping into storm drains. If you observe someone dumping into a storm drain, report it immediately to BWSC at 617-989-7000
- October 2018 Bill Message – Check your vehicle for leaks. Automotive fluids can enter the storm drain system, contaminate runoff, and pollute local waterways.

d. Social Media

Consistent with the Commission's Public Education and Outreach Program, the Commission's social media profiles have helped to distribute its environmental effort. The Commission's Facebook page had a total of 114 "likes" and the Twitter account gained 659 followers in 2018. The Commission also engaged frequently with users on NextDoor, a hyper-local social media platform that allows for direct and proactive communication with residents in a particular neighborhood of the city.

In coordination with its social media profiles, the Commission also maintains a YouTube channel to host its public service announcements. The following public service announcement was viewed during 2018 on YouTube:

- Scoop the Poop

e. Educational Outreach

The Commission's Communications Department staff includes an Educational Coordinator that goes to a number of City of Boston public schools and camps to present information to students regarding water, sewer and stormwater. Communications staff also provide education presentations to adults in elderly housing development, as part of civic groups and neighborhood organizations. Presentations are provided in English, Spanish, Cantonese, and Portuguese Creole as needed. The Commission made presentations to the following number of groups/adults/schools/students in 2018:

- January – 3 groups, 110 students
- February – 4 groups, 77 students
- March – 6 group, 354 students
- April – 2 groups, 105 students
- May – 5 groups, 233 students
- June – 5 groups, 192 students
- July– 5 groups, 32 adults; 2 neighborhood groups, 63 students
- August – 2 groups, 22 adults; 1 school and 1 community center, 28 students
- September – 7 presentations, 14 adults; 3 schools, 77 students
- October – 7 presentations, 24 adults; 5 schools, 181 students
- November -- 14 presentations, 71 adults; 6 schools, 338 students
- December – 11 presentations, 29 adults; 5 schools, 236 students

f. Environmental Events

In 2018, the Commission was active at numerous public events and organized environmental functions relating to stormwater as follows:

January

- Participated in the New England Water Environment Association Annual Meeting. Hosted an informational table and conducted presentation to students about our water source and our Don't Dump and FOG environmental messages
- Represented the Commission at the Neponset River Watershed meeting to discuss collective efforts in addressing stormwater management

February

- Led environmental presentations to 30 residents at the Scholchet Company elderly housing complex which highlighted our FOG and Keep Wipes Out of Pipes campaigns

March

- Commemorated World Water Day in collaboration with the New England Aquarium through distribution of environmental materials and leading interactive

games which focused on educating participants of the importance of water source and quality

- Held a presentation in Mattapan with the Edgewater Community Organization. As the neighborhood abuts the Neponset River, the meeting focused our environmental messages of Scoop the Poop, Don't Dump, and Keeping Wipes Out of Pipes.
- Hosted a table and distributed pet waste dispensers and educational packets at the Annual Spring Planting sponsored by the Green Neighbors Education Committee

April

- Hosted table and shared information at the Annual Environmental Research Colloquium hosted by UMASS Boston
- Distributed materials at the Mayor's Roxbury Open House – Citywide Collaboration held at the Shelbourne Community Center
- Distributed information and materials at Nuestra Comunidad Senior Resource
- Joined environmental groups and residents at the Charles River Watershed Association's 19th Annual Earth Day Charles River Cleanup

May

- Conducted a neighborhood walk through and presentation with the Southwest Community Development Corporation in Hyde Park to discuss the importance of keeping the catch basins clear and discuss ways to broaden our Don't Dump message program.
- Led presentation and shared environmental information at the 6th Annual Massachusetts Water Youth Summit
- Hosted table and distributed grease can lids and informational brochures the Boston Public Schools Wellness Summit.
- Joined Foundation for a Green Future in sharing information at the Eco Youth Leadership Congress

June

- Conducted interactive storm drain game with youth. Distributed materials and shared information about our water system at the World Ocean Day Festival held at the Boston Harbor with the New England Aquarium
- Shared our "Don't Dump" and other environmental messages at a Family Day held at the Boston Harbor Islands
- Hosted presentation and distributed materials at a community family celebration with the HP10 organization in Hyde Park
- Hosted a table and distributed materials at the St. Joseph Community Center in Roxbury

July

- New England Aquarium LIVE BLUE volunteers storm drain decal

- Hosted table and distributed educational material at 1st Annual East Boston Marine Science & Maritime Festival held at Constitution Beach, East Boston
- Conducted a storm drain decaling seminar with the Hyde Park Green Team
- Held presentation for youth at Boston Centers for Youth and Families summer program
- Provided drinking water and educational materials through the BWSC water truck at the Neponset River Cleanup

August

- Distributed materials at International Green Summit/GreenFest event
- Environmental Summer Program with Grew Elementary School, Hyde Park
- LIVE BLUE Volunteers Program with the New England Aquarium

September

- Distributed environmental materials at University of Massachusetts Climate Adaptation program
- Held FOG presentation for elderly rental unit residents in West End

October

- Distributed materials at West Roxbury/Roslindale Mayor's Open House Citywide Collaboration
- Distributed materials and shared interactive storm drain game with your at Roslindale Annual Parade
- Hosted a storm drain decal presentation with students from the Munez High School in Jamaica Plain
- Distributed pet waste dispensers and shared FOG message at community meetings in East Boston and Mission Hill neighborhoods
- Joined New England Water Works Association in "Imagine a Day Without Water" campaign
- Conducted storm drain decal seminar with New England Aquarium

November

- Conducted a storm drain decaling seminar at the New England Aquarium and placed decals in the North End and Greenway area.
- Conducted presentation and distributed materials at the Deer Island Treatment Facility
- Hosted table and distributed grease can lids and brochures during FOG campaign at at the Stop and Shop grocery store South Bay Shopping Center in Dorchester.
- Attended Neponset River Stormwater Partnership meeting
- Led New England Aquarium Live Blue volunteers in storm drain decal activity
- Shared educational information with community residents at the Dorchester Unified Neighborhood Association

December

- Shared our FOG message in English, Mandarin and Spanish to residents and property managers at a senior housing development in Jamaica Plain
- Shared our “Don’t Dump” message in collaboration with the “Sons of Liberty’s” Re-enactment of the 245th Anniversary of the Boston Tea Party

In addition, the Commission continued use of its H2GO water wagon deployed at a number of public functions city-wide. The Commission’s H2GO water wagon provides free water to the public but also provides the Commission an opportunity to promote its public education messages including FOG and other messages. The Commission displayed a sandwich board with environmental messages at numerous community events featuring the H2Go trailer during 2018. Two messages were displayed: 1) Don’t Dump: Storm drains flow directly to Boston Harbor and our rivers, and 2) Scoop the Poop: Walking your dog? Take a plastic bag along to pick up pet waste.

g. Catch Basin Stenciling and Castings

Public awareness regarding the connection between catch basins and water quality is promoted through the Commission’s Catch Basin Stenciling Program. Through the Catch Basin Stenciling, volunteers are mobilized to stencil “Don’t Dump” messages next to catch basins. Upon request, the Commission coordinates stenciling projects and provides instruction, stencils, paint, rollers, brooms, informational leaflets, and safety equipment.

The Catch Basin Stenciling Program is promoted through the Commission’s web site and billing inserts and through press releases, community events and outreach meetings, presentations to public schools, and through local watershed associations. In 2018, the Commission continued to work with schools and groups within the City of Boston to mark curbs in their neighborhoods with stencils and decals.

Commission contractors are required to install metal castings with a “Don’t Dump” message on sidewalks near new or reconstructed catch basins. City of Boston contractors also install the castings when new sidewalks are installed. The castings are provided to city hired contractors by the Commission at no cost. The Commission requires that private developers install permanent “Don’t Dump” catch basin castings next to any new catch basin installed as part of their projects. The developers, as well as other parties interested in obtaining the castings may purchase them from the Commission’s vendor. In 2018, the Commission issued 1,055 catch basin castings to contractors and other parties. Of those issued, 412 were for Boston Harbor, 392 for the Charles River and 251 were for the Neponset River.

3.12 SUPPORT FOR WATERSHED AND ENVIRONMENTAL AGENCIES AND ORGANIZATIONS

Each year the Commission provides funding to Watershed Associations and Environmental Organizations to support their water quality monitoring programs and

public education efforts. The Charles River Watershed Association, Neponset River Watershed Association and Mystic River Watershed Association each received \$10,000 from the Commission in 2018. Boston Harbor Now received \$25,000, The Friends of Fort Point Channel received \$5,000, and the Boston Ground Water Trust received \$25,000 from the Commission in 2018.

As needed and requested the Commission shares monitoring and rain gauge data, investigates reports of illegal connections or other non-stormwater discharges to waterways, participates in planning meetings, and provides technical advice.

4.0 STRUCTURAL BEST MANAGEMENT PRACTICES AND GREEN INFRASTRUCTURE

Under the Consent Decree the Commission must implement structural Stormwater Best Management Practices (BMPs) and Green Infrastructure (GI) measures to reduce the discharge of pollutants from the drainage system. The BMP and GI measures and activities implemented by the Commission in 2018 are described in this section.

4.1 STORMWATER MODEL

On December 28, 2012, as required under the Consent Decree, the BWSC submitted a Stormwater Model Report (Model Report) to EPA for review and approval. The Stormwater Model Report contained evaluations of sub-catchments, including the quantification of impervious surface area, directly connected impervious area ("DCIA"), population density, land use classifications, pollutant loading, and availability of suitable property for the implementation of stormwater BMPs. The Model Report contained a discussion of potential BMPs and GI available for possible implementation. It contained a discussion as to how the BMPs/GI would assure consistency with applicable TMDL wasteload allocations and the extent to which the BMPs/GI would prevent BWSC discharges from causing or contributing to a violation of water quality standards. The EPA approved the Commission's Stormwater Model Report on July 14, 2015.

4.2 STORMWATER BMP PROPOSAL AND PHASE I BMP IMPLEMENTATION PLAN

On February 1, 2013, as required under the Consent Decree, the Commission submitted to EPA a Stormwater BMP Proposal and Guidance Document which contained a suite of generic BMPs for implementation. Also, on May 17, 2013, the Commission submitted to EPA, DEP and CLF a Phase I BMP Implementation Plan. The Phase I BMP Implementation Plan (BMP Plan) contained recommendations and schedules for the implementation of specific BMPs and GI demonstration projects at Central Square-East Boston, Audubon Circle (Beacon Street/Park Drive area), and City Hall Plaza. The Phase I BMP Plan is available from the Commission's website at www.bwsc.org.

In 2018, the Commission continued to coordinate with City of Boston agencies on the development of the GI demonstration projects at Central Square and Audubon Circle. Construction of the Central Square project was completed in 2017. The Audubon Circle project was bid, awarded, and construction began in late 2016. Construction continued through 2017 and 2018, and the project is expected to be completed in 2019. In 2018, the

Commission continued to coordinate with the Boston Planning and Development Agency and other parties regarding installation of Green Infrastructure at City Hall Plaza.

4.3 BMP RECOMMENDATIONS REPORT

Under the Consent Decree the Commission was required to submit a BMP Recommendations Report within 20 months following EPA's approval of the Commission's Stormwater Model Report. The EPA approved the Commission's Stormwater Model Report on July 14, 2015. Fifteen months later on October 12, 2016, the Commission submitted the BMP Recommendations Report (Recommendations Report) to EPA. The Recommendations Report was approved by EPA in a letter dated October 24, 2018.

The Recommendations Report is a watershed-scale stormwater management plan that evaluates systematic implementation of BMPs to cost effectively achieve water quality goals. The Recommendations Report includes plans and schedules for implementing structural BMPs/GI in Boston aimed at reducing pollutant loadings in stormwater discharges sufficient to meet applicable total maximum daily loads. The recommended BMP plan includes the following main components:

- Through the Commission's site plan review and approval process continue to require new development and redevelopment projects to incorporate priority BMPs with high pollutant removal rates to treat 1-inch of runoff from the site prior to discharging into the Commission's MS4.
- Reduce pollutant loads from roads and other large impervious areas by partnering with entities such as MassDOT and the Department of Conservation and Recreation to incorporate BMPs into major transportation projects and highways.
- Identify large impervious areas for retrofit such as parking lots with areas greater than 10,000 square feet that present BMP opportunities.
- Collaborate with the Boston Transportation Department to expand Boston's Complete Streets Initiative and to further define green design guidelines and emphasize implementation of priority BMPs with high pollutant removal efficiency.
- Continue current illicit discharge detection and elimination (IDDE) program.
- Coordinate with neighboring towns to protect and/or restore streams' natural assimilation capability for water quality improvement.
- Retrofit BMPs in large open spaces on public lands, such as those owned by the Boston Public Schools and Boston Parks and Recreation Department.
- Expand public outreach efforts to promote or incentivize implementation of BMPs on residential properties.

The plan provided in the Recommendations Report outlines an adaptive management process that is carried out in three phases over a 30-year period. Each phase adapts to the knowledge obtained from the previous phase(s) via a comprehensive monitoring program and effectiveness evaluations of the completed implementation projects.

4.4 GREEN INFRASTRUCTURE FOR THREE TRIBUTARY AREAS

In 2015 the Commission contracted with three separate consultants to develop conceptual designs and prepare cost estimates for installation of Green Infrastructure in three areas of Boston tributary to the Charles River. The three areas are: Canterbury Brook (1,115 acres); Lower Stony Brook (1,020 acres); and Allston/North Beacon Street (556 acres). The knowledge and experience gained pursuant to these projects will help guide Commission as it develops more detailed designs and schedules for installation of BMPs/GI citywide. The Canterbury Brook and Lower Stony Brook projects were completed in 2017. The Allston/North Beacon Street project was completed in 2018.

4.5 DAISY FIELD GREEN INFRASTRUCTURE

In 2015, the Commission contracted with the University of New Hampshire Stormwater Center to conduct a feasibility analysis and prepare a conceptual design for GI at Daisy Field in Jamaica Plain. Daisy Field is owned by the City of Boston Parks and Recreation Department. The upstream tributary area and Daisy Field discharges to Leverett Pond through the Commission's outfall 18GSDO233. The project will involve installation of a subsurface gravel filter under the baseball fields and a rain garden around the perimeter of the existing parking lot. The conceptual design was completed in 2016, and coordination with the Boston Parks and Recreation Department for final design and construction of the project continued through 2017 and 2018. The final cost for the conceptual design of the Daisy Field GI was \$47,000. The Commission's 2019-2021 CIP includes \$100,000 to prepare a final design for GI at Daisy Field.

4.6 GREEN INFRASTRUCTURE AT FIVE BOSTON PUBLIC SCHOOLS

In 2015, the Commission contracted with a consultant to conduct site analyses, perform feasibility assessments, and design GI for five Boston public schools. Designs for GI at the five schools were completed in 2017. Construction of GI at the Washington Irving Middle School and the Rafael Hernandez K-8 School is complete. Bids for the construction of GI at the remaining three schools were solicited in 2018. The Commission's 2019-2021 CIP includes funding to construct the GI at the five public schools.

In 2018, the Commission continued to work with Boston Public Schools to develop stormwater related curriculum for 5th and 7th graders. The curriculum was completed in 2018 and piloted in two 7th grade classrooms. The curriculum was designed to use the GI constructed at the schools to demonstrate various GI measures and to educate the students regarding GI benefits.

BWSC continues to work with other city agencies, including Boston Public Works Department ("PWD"), Boston Transportation, Boston Planning and Development Agency, and others, to design and construct GI/LID projects at various locations throughout the city. GI/LID designs for Harrison Avenue, which include enhanced

stormwater tree trenches, were finalized, bid and awarded in 2018. A bioretention area at the intersection of South Street and Bussey Street was constructed in 2018. Other collaborative projects include bump outs with rain gardens in Codman Square, a green streets project on Coolidge Road in North Allston and bioretention features along New England Avenue and Talbot Avenue. Plans for New England Avenue and Codman Square are nearing completion and PWD is expected to bid these projects in 2019. The 2019 – 2021 CIP contains a \$1,707,000 Green Infrastructure line item to complete GI/LID projects, in collaboration with other city departments and/or private land owners in the City of Boston, as they become available.

4.7 GREEN INFRASTRUCTURE/LOW IMPACT DEVELOPMENT ON-CALL CONTRACT

In 2017, the Commission executed a three-year contract with a consultant to provide on-call design services for GI/LID projects. The on-call contract is used to design GI/LID components to be incorporated into construction plans developed by other city agencies, such as the Boston Public Works Department, the Transportation Department, the Parks and Recreation Department, and the Boston Planning and Development Agency.

4.8 BOSTON COMPLETE STREETS INITIATIVE

The City of Boston has developed the Complete Streets Initiative, under which incorporation of green infrastructure into street designs is required. Green infrastructure includes greenscapes, such as trees, shrubs, grasses and other landscape plantings, as well as rain gardens and vegetative swales, infiltration basins, and paving materials and permeable surfaces. The Commission supports the City in this endeavor and coordinates with the City's Transportation Department as needed to implement the initiative. Information about the Complete Streets Initiative is available on the City's website at <http://bostoncompletestreets.org/>.

5.0 ASSESSMENT OF STRUCTURAL CONTROLS

Under the terms of its NPDES Stormwater Permit and to comply with the Consent Decree, the Commission must evaluate the effectiveness of structural Best Management Practices (BMPs) and Green Infrastructure (GI). This section describes the Commission's efforts in 2018 in that regard.

5.1 ASSESSMENT OF STORMWATER BMPS AND GI

The Central Square Project (described in Section 4) includes water quality sampling and monitoring to assess the effectiveness of the BMPs/GI structures installed. The Audubon Circle, City Hall Plaza, Daisy Field and Green Schools projects (also described in Section 4), will include water quality sampling and monitoring to assess the effectiveness of the BMPs/GI structures installed. Assessments of other BMPs/GI will be performed as the structures are designed and installed by the Commission.

5.2 CATCH BASINS

The Commission relies on catch basins as the primary means for preventing the transport of sediments, debris, and other contaminants to storm drains and receiving waters. In 2018, the Commission and contract resources performed 20,235 inspections/cleanings of catch basins. Catch basin cleanings are transported to the Commission's Material Handling Facility where they are temporarily stored to de-water until transferred for proper off-site disposal/reuse at an approved disposal facility. The amount of material removed from the Commission's catch basins in 2018 was approximately 2,500 tons, as recorded at the Commission's Material Handling Facility.

In 2001 through 2004, the Commission monitored sediment levels in several catch basins to evaluate their effectiveness in capturing solids. The results of the demonstration project (described in previous annual reports) indicated that a clean and well-maintained catch basin will remove between 10 to 33 percent of the total solids from stormwater flow through the basin. The data also suggested that a catch basin's ability to remove solids diminishes as the sump of the catch basin approaches half full. These findings are consistent with the conclusions of other similar studies reported in the literature.

Under the Commission's Catch Basin Inspection and Cleaning Program the sediment depths in one hundred catch basins were monitored between January 2002 and April 2003 to determine the factors that affect how quickly catch basins become full. Variables considered in selecting the catch basins to be monitored included slope, land use and the size of the tributary area, the type of road (highly traveled road vs. back road), and tree

cover. The selected catch basins were inspected four times each on a quarterly basis and the depth of sediment measured.

No statistically significant correlation between land use and accumulation rates was observed. Similarly, no correlation was observed based on slope, drainage area, or neighborhood characteristics. Some correlation with tree cover was observed, with the catch basins located in areas of denser tree coverage demonstrating as much as 50 percent higher accumulation rates as compared to basins with little or no tree cover. The data also exhibited a seasonal correlation, with the winter months demonstrating the highest accumulation rates.

Based on the findings of the Commission's catch basin effectiveness analyses, the Commission's catch basins should continue to effectively remove sediments from stormwater runoff, provided that sediment levels are not allowed to exceed one-half of the capacity of each catch basin's sump. In 2013, the Commission modified its catch basin and cleaning frequency consistent with its CMOM program.

5.3 PARTICLE SEPARATORS

The Commission currently owns 16 particle separators. All sixteen (16) particle separators were inspected in 2018. Of those, 15 were cleaned although the amount of material removed from six (6) separators was not recorded. One (1) particle separator was in need of repair. The recorded amount of material removed from particle separators in 2018 was 1.8 cubic yards.

Information regarding the various particle separators, including their locations, receiving waters, and amount of material removed at each cleaning between 2005 and 2018 is summarized in Table 5-1. Since 2005 a total of 78.26 cubic yards of material has been removed from the Commission's particle separators. The cleaning data indicates that there are significant differences in the amount of material removed from each separator from year to year, although the reasons were unclear. There are many variables which could affect the amount of material retained in a separator, including frequency and intensity of rain and snow storms, land use, topography and size of the area tributary to the particle separator, season during which the separator was cleaned, and design factors.

The Commission typically uses a vactor truck with a vacuum hose to clean its particle separators and this equipment is not conducive to accurate quantification of material removed. The amount of material removed is estimated by the operator and not measured. Each operator may estimate the amount of material removed differently than others. For these reasons it is difficult to establish which factor(s) determine how well a particle separator removes solids, or why one particle separator appears to capture more sediment than another.

6.0 WATER QUALITY MONITORING

Monitoring the quality of flows within, and discharged from the storm drainage system enables the Commission to establish water quality under existing conditions, and to evaluate changes in quality of discharges over time. This Section describes the Commission current and past water quality monitoring programs.

6.1 OUTFALL MONITORING

The Commission is required to annually perform wet and dry weather field screening of its storm drain outfalls, CSO outfalls and storm drain manholes that discharge (interconnect) with other MS4 drain systems. The field screening program is described in more details in Section 2. The results of the water quality sampling performed for the screening are presented Tables 2-1 and 2-3.

6.2 URBAN RUNOFF WATER QUALITY PROJECT

Implementation of the Commission's Urban Runoff Water Quality Project concluded in 2017. The project included water quality sampling from manholes, outfalls, and gutters. Samples were analyzed for bacterial indicators, Human DNA markers, Pharmaceuticals and Personal Care Products, nutrients and other commonly sampled stormwater parameters. The main purposes of the project was to explore the use and effectiveness of alternative parameters and methods for determining whether bacteria or ammonia in storm drains or outfalls are from non-human sources and to aid the Commission in determining where and to what extent non-human sources of bacteria and phosphorus may be contributing to contamination in the storm drain system. Total cost for the Project was \$581,939.

The Project included:

- 35 unique sampling locations
- Sampling during 6 dry and 6 wet weather sampling events
- 52 weekly sampling events
- 378 samples collected in total
- Up to 25 different parameters analyzed resulting in 2,362 unique sampling results

Major findings of the Project were as follows:

- The Human Marker (HF183) was detected in all sub-catchments during dry weather regardless of IDDE program status.
- FIB were correlated with human marker results during dry weather, confirming the utility of FIB for dry weather outfall prioritization and screening.
- FIB were not effective in detecting human waste during wet weather, when a mixture of waste types and other FIB sources are conveyed.
- Acetaminophen, atenolol, and caffeine were correlated with the human marker in dry weather outfall flows.
- IDDE test kit parameters (ammonia, surfactants, and residual chlorine) in outfall flows were not correlated with human marker results, and were prone to false positive and false negative signals.
- Sewage (as indicated by the HM) was a significant source of TMDL pollutants (FIB and phosphorous) in discharges from storm drains during dry weather, while non-sewage sources were more significant during wet weather.

Recommendations were:

- Consider discontinuing use of wet weather FIB sampling data for sub-catchment prioritization and use only dry weather FIB data for prioritizing sub-catchments for IDDE.
- Consider collecting multiple FIB dry weather samples from each outfall and geometrically average results for prioritization.

6.3 PAST WATER QUALITY MONITORING PROJECTS

On December 28, 2012, the Commission submitted a Stormwater Model Report to the EPA, DEP and CLF, as required under the Consent Decree. As part of the Stormwater Model (Model) development, the Commission and its contractor CDM Smith performed extensive water quality sampling of the storm drain system. The Drain Model was used to estimate flows and loads for 13 key parameters, including nutrients, bacteria and metals. It was used to analyze a set of alternatives that aim to reduce loading of pollutants from the drain system to receiving waters. That analysis was performed as a starting point for more in-depth studies into the feasibility and expected benefits of implementing stormwater Best Management Practices and Green Infrastructure measures in the City of Boston. The Drain Model was used to simulate the impacts of the alternatives on the loading of phosphorus and bacteria from select watersheds draining to different receiving waters.

In 2010, the Commission completed the Stormwater Quality Evaluation Program. Under the Stormwater Quality Evaluation Program, the same sites monitored during the first five years of the permit were monitored. The purpose of the monitoring was to evaluate how water quality had changed over time, and to try to determine pollutant sources. The

Stormwater Quality Evaluation Program was completed near the end of 2010 and the final report was completed in May 2011 and previously reported.

Other stormwater quality monitoring and demonstration programs required under the Commission NPDES Permit were completed within the Permit's first five years. Descriptions of those programs were provided in previous Stormwater Management Reports.

7.0 WATER QUALITY IMPROVEMENTS

The Commission's Stormwater Management Program is a compilation of programs, activities, and best management practices aimed at preventing the discharge of pollutants to storm drains and receiving waters. Water quality improvements attributable to the Commission's Stormwater Management Program are difficult to quantify, since many of the measures the program contains are non-structural, and are aimed at controlling the introduction of pollutants to the storm drain system at their sources, as opposed to end-of-pipe treatment. Therefore, the Commission typically assesses water quality improvements based on measures that are quantifiable, such as how much wastewater is removed from the drainage system when an illegal connection is eliminated, and how much sediment is removed from stormwater runoff by structural devices.

7.1 STORMWATER MODEL

In 2012, as required under the Consent Decree, the Commission used its Storm Drain Model to analyze a set of alternatives aimed at reducing loading of pollutants from the drain system to receiving waters. The analysis was performed as a starting point for more in-depth studies into the feasibility and expected benefits of implementing green infrastructure and low impact development (GI/LID) in the City of Boston. Alternatives considered included expansion of existing programs and policies, new GI/LID installations, street sweeping, baseline adjustments for illicit discharge removal, and combinations of various options. The alternatives modeling indicated that expansion of current programs and policies would measurably help the Commission comply with its NPDES Permit and meet the terms of the Total Maximum Daily Loads (TMDL) governing receiving waters. However, additional load reductions beyond what the existing programs and policies could achieve would be necessary.

The data and results of the Storm Drain Model analysis were included in the Stormwater Model Report submitted to EPA for review and approval in December 2012. The EPA approved the Commission's Stormwater Model Report on July 14, 2015.

The 2012 Storm Drain Model has the capability to evaluate pollutant loading reductions that result from the installation of stormwater (GI/LID). However, the 2012 Storm Drain Model has not been updated to include pollutant reductions resulting from GI/LID installed since March 2012. Since 2015, the Commission has been maintaining a database of public and private BMPs/GI installed city-wide since March 2012. The database currently contains about 2,500 public and private GI/LID features located throughout the city. Many of these GI/LID project locations contain multiple GI/LID

features. Pollutant removal estimates are in the process of being tabulated for each GI/LID location in the database. Pollutant reduction estimates from the database will be incorporated into the Commission’s Storm Drain Model, which will enable the Commission to evaluate water quality benefits resulting from the installation of BMP/GI installed since 2012.

7.2 POLLUTANT LOADINGS AND REDUCTIONS

In 2012, the Storm Drain Model was used to estimate mean annual loads for 13 water quality constituents, including nutrients, bacteria and metals. The annual loads were based on field data collected in 2011 and 2012. Table 7-1 presents the mean annual total loads for the Commission’s 27 sub-drainage areas (referred to as “reporting areas”), as they were calculated in 2012.

The Storm Drain Model has been used as the basis to estimate reductions in bacteria and phosphorus resulting from the elimination of illicit discharges each year since 2013. Tables 7-2 through 7-6 present the annual load reductions for each of the 27 reporting areas described in the 2012 Stormwater Model Report. Table 7-2 presents the load reduction for each reporting area as December 31, 2013, with the load reduction encompassing illicit discharge removal activities throughout 2012 and 2013. Table 7-3 presents the load reduction for each reporting area as of December 31, 2014, with the load reduction encompassing illicit discharge removal activities throughout 2014. Table 7-4 presents the load reduction for each reporting area as of December 31, 2015, with the load reduction encompassing illicit discharge removal activities throughout 2015. Table 7-5 presents the load reduction for each reporting area as of December 31, 2016, with the load reduction encompassing illicit discharge removal activities throughout 2016. Table 7-6 presents the load reduction for each reporting area as of December 31, 2017, with the load reduction encompassing illicit discharge removal activities throughout 2017. Table 7-7 presents the phosphorus load reduction for each reporting area as of December 31, 2018, with the load reduction encompassing illicit discharge removal activities throughout 2018. In these tables the total phosphorus values presented are the difference that can be attributed to illicit discharge removal in those years.

Table 7-8 presents the annual phosphorus loads by reporting area, based on conditions as of December 31, 2018. The numbers in Table 7-8 incorporate all phosphorus reductions due to illicit discharge removals in 2012 through 2018.

7.3 ILLICIT DISCHARGE ELIMINATION

The Commission believes that eliminating illicit discharges to storm drains is the most environmentally beneficial and cost-effective means of improving water quality. The 2012 Drain Model report demonstrated that removing illicit discharges has a significant impact on water quality, especially bacteria and phosphorus loadings.

In 2018, the Commission eliminated illicit discharges at 54 locations, thereby eliminating the discharge of an estimated 37,105 gallons per day (gpd) of wastewater to the drainage

system and receiving waters. Between 1986, when the Commission first began correcting illicit discharges, and the end of 2018, the Commission removed 1,790 illicit discharges, thereby eliminating the discharge of an estimated total of 820,142 gallons of wastewater per day to the storm drainage system and receiving waters.

7.4 SEWER, DRAIN, CATCH BASIN AND PARTICLE SEPARATOR CLEANING

Cleaning of catch basins and particle separators helps to maintain their sediment removal effectiveness, and cleaning of storm drains helps to maintain their hydraulic capacity. In 2018, the Commission and its contractors removed an estimated 2,500¹ tons of material from the Commission’s catch basins and particle separators that might have otherwise ended up in local rivers and waterways.

7.5 BMPS ON PRIVATE PROPERTY

Under the Commission’s Sewer Use Regulations and Requirements for Site Plans there are several provisions requiring the installation of structural BMPs by private entities. These are described below.

a. Privately Owned Retention/Infiltration Devices

On-site retainage and infiltration of stormwater is required for new and redevelopment projects, whenever site conditions permit, as determined by the Commission. Project developers are required to include a feasibility assessment for on-site retention of stormwater with the site plan submitted to the Commission for the project. On-site retention of stormwater serves to limit peak discharge rates, recharge groundwater, and remove 80 percent of total suspended solids in the flow to the extent feasible. This requirement is consistent with the DEP’s Stormwater Management Policy which establishes standards for stormwater management for development.

On-site retention devices are usually owned by the owner of the property where they are located; as such, the owner is responsible for cleaning and maintenance. Owners of on-site devices are not required to provide data regarding solids removal rates to the Commission. However, the devices are expected to remove solids consistent with their designs.

In 2018, the Commission approved 533 installations of dry wells or other type of infiltration devices. Table 3–4 provides the addresses of the devices approved in 2018. Since 2000, 4,269 private infiltration device installations have been approved by the Commission.

¹ Total for 2018, as measured at the Commission’s Material Handling Facility.

b. Privately Owned Particle Separators

In order to prevent oil, grease and sediments from discharging to open waterways, the Commission requires that developers install particle separators on all newly constructed storm drains that serve outdoor paved areas of 7,500 square feet in size or greater. The Commission ensures that particle separators on parking lots are included in the project design during site plan review. The Commission may require particle separators on existing storm drains from existing outdoor parking areas, where appropriate. This requirement has been in place since 1992.

Parking lot particle separators are usually owned by the owner of the property where they are located; as such the owner is responsible for their cleaning and maintenance. Owners of on-site particle separators are not required to provide data regarding solids removal rates to the Commission. However, the devices are expected to remove solids consistent with their designs.

In 2018, the Commission approved installation of 22 particle separators. The addresses of the devices approved in 2018 are listed on Table 3–5. Since 2000, 390 private particle separator installations have been approved by the Commission.

8.0 ENFORCEMENT

The Commission pursues enforcement as necessary against violators of its illicit discharge regulations to remove illicit discharges and connections from the Commission's MS4 system. Enforcement commences as follows:

Once the Commission verifies that an illicit discharge must be corrected by the owner of a property, the Commission mails an initial letter of enforcement to the owner. The letter directs the owner to contact the Commission within a given time frame (typically 10 days), submit a plan for correction within a designated time period (typically 30 days), and make the correction within a given time frame (typically 60 days). If the owner fails to respond, and/or does not correct the illicit discharge within those time frames, a second notice is issued. The second notice imposes a deadline or schedule for compliance (typically 30 days), and notifies the owners of fine assessments after a certain date for failure to comply.

If the owner still fails to respond or does not correct the illicit connection within the timeline or schedule the Commission may issue a third notice. The third letter also imposes a deadline or schedule for compliance (typically 10 days), and notifies the owner of fine assessments after a certain date for failure to comply.

If the owner still fails to respond or does not correct the illicit connections within the timeline or schedule identified in the third notice the Commission may issue a "Fifteen Day Notice", pursuant to Chapter 6, Section 6.3 of the Commission Billing, Termination and Appeal regulations for "Termination of Service". Under the Fifteen Day Notice, the owner is given 15 days to correct the illicit connection and notify the Commission. If the owner fails to respond to the Fifteen Day Notice and/or fails to correct the illicit discharge, the Commission mails to the owner, and posts on the premises of the illicit connection, a "Final Notice and Demand". If the owner fails to correct the internal connection within ten (10) days after the posting of the Final Notice and Demand, the Commission may issue fines to the owner and terminate water service.

In 2018, the Commission sent a total of 126 enforcement letters to 52 properties regarding illicit connections and discharges. Of the 126 letters, 32 were regarding direct illicit connections, and 94 were for verified leaking sewer laterals.

In 2018, the Commission responded to 54 reports of a potential spill, leak, or report of illicit dumping. Table 3-3 lists the incidences to which the Commission responded in 2018. No violation/enforcement notices or fines were issued for spills, leaks or dumping in 2018.

In 2018, the Commission performed 203 site inspections of 40 construction projects. Two (2) violation notices were issued to operators of construction projects for violations pertaining to proper operation or implementation of construction site BMPs or erosion controls.

9.0 FINANCING STORMWATER MANAGEMENT

The Commission's Enabling Act empowers the Commission to independently set rates and charges for the services that it provides. The Commission is required to establish fees, rates, rents, assessments, and other charges at a level and amount at least sufficient to pay the principal, premium, and interest on bonds issued by the Commission; to maintain its reserve funds as stipulated by its General Bond Resolution; to provide funds for paying the cost of all necessary repairs, replacements, and renewals of the water and sewer systems; and to pay any and all other amounts which the Commission, by law or by contract, is obligated to pay.

The Commission has sufficient funds and equipment to carry out the stormwater management programs and activities required under the NPDES Stormwater Permit. A major portion of the Commission's Stormwater Management Program and NPDES Stormwater Permit compliance activities are achieved using existing in-house staff and resources. Staffing and equipment are budgeted under the Commission's Current Expense Budget (CEB), which is updated annually. Larger sewer and drain projects are funded under the Commission's Capital Improvement Program Plan (CIP). The Commission's three-year CIP is updated annually.

9.1 CURRENT EXPENSE BUDGET

The 2018 Current Expense Budget totaled \$368.1 million in revenues, which was offset by an equal amount of expenses. The amount represented a 1.9% increase as compared to the 2017 budget.

Of the total budgeted for 2018, \$71.7 million was for direct expenses. The remaining funds were budgeted for the assessment by the Massachusetts Water Resources Authority (\$226.1 million), Debt Service (\$51.0 million), Capital Improvements (\$17.2 million), Contractual Funding Obligations (\$1.9 million), and the Safe Drinking Water Act Assessment (\$0.2 million).

In general, stormwater programs and activities are managed in-house by the Commission's Engineering and Operations Divisions. The Engineering Division consists of the sub-divisions of Planning and Sustainability, Engineering Design and Construction. Approximately \$31.77 million or 44 percent of the Commission's 2018 direct expense budget was for the Engineering and Operations Divisions. Of the Engineering and Operations Division's direct expense budget, about \$18.4 million was

for sewer and storm drain related operations. Thus, sewer and drain related work represents about 26 percent of the Commission's total direct expense budget.

The Current Expense Budget for 2019 had not been finalized as of the writing of this report but is expected to be similar to the 2018 budget.

Stormwater related programs and activities funded under the Current Expense Budget include:

- Illegal connection investigations and corrections
- Illegal connection prevention
- Illegal dumping and spill response
- SSO and spill response and remediation
- CMOM implementation
- Planning, designing and constructing capital improvements
- Green infrastructure planning and design
- Industrial facility pollution prevention program management
- Construction site pollution prevention inspections
- Sewer and storm drain maintenance and general repair
- Catch basin and particle separator cleaning and maintenance
- Site plan review
- New service inspections and dye tests
- Issuing drain layers licenses
- Issuing Drainage Discharge Permits
- System evaluations and Master Planning
- Infiltration and inflow identification and reduction
- Reviewing Environmental Notification Forms and Environmental Impact Reports
- Public education
- Rain data collection
- Enforcement of the Commission's Rules and Regulations

9.2 CAPITAL EXPENDITURES

The 2018-2020 CIP included \$103.4 million for sewer, drain and stormwater related projects, of which \$45.4 million was earmarked for 2018. The Commission's 2019-2021 CIP identifies \$100.7 million for sewer, drain and stormwater related projects, of which \$37.0 million is earmarked for 2019. The complete 2019-2021 CIP plan is available on the Commission's website at www.bwsc.org.

These costs do not include the cost of CSO separation projects that are funded by the MWRA under the MWRA's CSO Control Plan. However, they do include the Commission's costs for water and sewer work relating to the MWRA's CSO Control Plan that is not eligible for MWRA funding.

Programmatic activities covered under the 2019-2021 CIP include the following:

- Design and construction of stormwater BMPs and Green Infrastructure in Central Square East Boston, Audubon Circle, and at City Hall Plaza
- Evaluating implementing a stormwater fee
- Design and construction of a constructed wetland in Jamaica Plain
- Design and install green infrastructure at five Boston public schools
- Development of an inundation model to identify areas that may experience flooding during extreme weather events
- Design GI/Stormwater retention structures for low lying areas
- CSO Public Notification Program
- Citywide Illegal Connection Investigation Program
- Elimination of illicit discharges to storm drains
- CCTV of sewers/drains for CMOM and illicit discharge investigations
- System-wide Infiltration and Inflow analysis of the sewer system
- Implement improvements to the Union Park Pumping Station
- Metering and modeling of the Dorchester Interceptor
- Installation of tide gates on storm drain outfalls
- Replace and rehabilitate sewers and drains in the North End
- Sewer separation of flows along Massachusetts Avenue in Lower Roxbury/North Dorchester
- Sewer separation in the Dudley Square area
- Sampling and metering for storm drain recalibration
- Downspout disconnect programs
- Projects relating to sewer separation projects that are not eligible for funding by the MWRA. These include renewal and replacement of existing sewers and drains in the areas being separated, rehabilitation or relay of water mains in the areas and associated paving costs.

10.0 PROGRAM MODIFICATIONS

With the lodging of the Consent Decree in August 2012, the Commission has undertaken a number of remedial measures to improve and update its Stormwater Management Program, such as updating its IDDE methodology and practices, establishing a schedule for completing IDDE investigations of sub-catchments, enhanced SSO reporting and tracking, developing an SSO Emergency Response (ERP) plan, developing a Construction Site Inspection Program, developing an Industrial Facility Pollution Prevention Program, executing intergovernmental agreements, and other actions.

No formal modifications to the Commission's Stormwater Management Program were made in 2018 or are being requested at this time. Modifications made in prior years were described in previous annual Stormwater Management Reports.

APPENDIX A: TABLES

Table 1-1. BWSC Stormwater Outfalls

OUTFALL NUMBER		LOCATION	NEIGHBORHOOD	SIZE (INCHES)	RECEIVING WATER
01E024	MAJOR	EASEMENT/LAKESIDE	HYDE PARK	15	SPRAGUE POND/NEPONSET RIVER
01F031	MAJOR	EASEMENT/MILLSTONE RD	HYDE PARK	48X24	NEPONSET RIVER
02E086 (02E005)	NON MAJOR	WEST MILTON STREET	HYDE PARK	24	UNAMED WETLANDS
02F085	NON MAJOR	LAWTON STREET	HYDE PARK	12	NEPONSET RIVER RESERVATION
02F093	NON MAJOR	EASEMENT/SIERRA RD	HYDE PARK	15	NEPONSET RIVER
02F120	MAJOR	EASEMENT/WOLCOTT CT/HYDE PARK AVE EXT	HYDE PARK	54	NEPONSET RIVER
03E185	MAJOR	NORTON ST	HYDE PARK	2-18	WETLANDS/NEPONSET RIVER
03E186	NON MAJOR	RIVER STREET	HYDE PARK	24	MILL POND/MOTHER BROOK
03E207	NON MAJOR	RIVER STREET	HYDE PARK	UNKNOWN	MILL POND/MOTHER BROOK
04E064	NON MAJOR	ALVARDO AVE/RIVER ST BRIDGE	HYDE PARK	12	MILL POND/MOTHER BROOK
04E069	MAJOR	KNIGHT ST DAM	HYDE PARK	36	MOTHER BROOK
04F001	NON MAJOR	RESERVATION ROAD	HYDE PARK		MOTHER BROOK
04F016	NON MAJOR	EASEMENT RIVER ST	HYDE PARK	30	MOTHER BROOK/NEPONSET RIVER
04F118	NON MAJOR	MASON STREET EXT.	HYDE PARK	18	NEPONSET RIVER
04F119	MAJOR	EASEMENT/HYDE PARK AVE/RESERVATION RD	HYDE PARK	24	NEPONSET RIVER
04F189	MAJOR	RESERVATION RD	HYDE PARK	36	MOTHER BROOK/NEPONSET RIVER
04F203	NON MAJOR	GLENWOOD AVE	HYDE PARK	28	NEPONSET RIVER
04F204	MAJOR	TRUMAN HWY/CHITTICK ST	HYDE PARK	36	NEPONSET RIVER
05C110	MAJOR	EASEMENT/PLEASANTDALE ST EXT	WEST ROXBURY	60	CHARLES RIVER
05E180	NON MAJOR	GEORGETOWN DRIVE	HYDE PARK	12	NONE SHOWN/CHARLES RIVER
05E181	NON MAJOR	GEORGETOWN DRIVE	HYDE PARK	12	NONE SHOWN/CHARLES RIVER
05E182	NON MAJOR	DEDHAM STREET	HYDE PARK	21	UNNAMED STREAM/CHARLES RIVER
05E183	NON MAJOR	GEORGETOWN PLACE/DEDHAM ST	HYDE PARK	12	UNNAMED STREAM
05E184	NON MAJOR	TURTLE POND PARKWAY	HYDE PARK	21	UNAMED WETLANDS
05F117	MAJOR	EASEMENT/TRUMAN HWY/WILLIAMS AVE	HYDE PARK	33	NEPONSET RIVER
05F244	NON MAJOR	HYDE PARK AVE BRIDGE	HYDE PARK	20	MOTHER BROOK/NEPONSET RIVER
05F245	NON MAJOR	HYDE PARK AVE	HYDE PARK	33	MOTHER BROOK/NEPONSET RIVER
05F253	MAJOR	EASEMENT/BUSINESS ST, NEAR BUSINESS TER	HYDE PARK	48X24	MOTHER BROOK/NEPONSET RIVER
05F254	NON MAJOR	DANA AVENUE	HYDE PARK	12	NEPONSET RIVER
05G112	MAJOR	EASEMENT/RR ROW/WATER ST EXT	HYDE PARK	30	NEPONSET RIVER
05G115	MAJOR	FAIRMOUNT AVE BRIDGE (NORTH BANK)	HYDE PARK	24	NEPONSET RIVER
05G116	NON MAJOR	FAIRMOUNT AVE BRIDGE (SOUTH BANK)	HYDE PARK	24	NEPONSET RIVER
05G116A	NON MAJOR	WARREN AVENUE	HYDE PARK	24	NEPONSET RIVER
06D057	NON MAJOR	CEDAR CREST CIRCLE	WEST ROXBURY	21	CHARLES RIVER
06D083	NON MAJOR	MARGARETTA DRIVE	WEST ROXBURY	15	WETLANDS/CHARLES RIVER
06D084	NON MAJOR	EASEMENT/MARGARETTA DRIVE	WEST ROXBURY	12	WETLANDS/CHARLES RIVER
06D085	NON MAJOR	GEORGETOWN DRIVE	WEST ROXBURY	12	WETLANDS/CHARLES RIVER
06D086	NON MAJOR	GEORGETOWN DRIVE	WEST ROXBURY	10	WETLANDS/CHARLES RIVER
06D091	NON MAJOR	GEORGETOWN DRIVE	WEST ROXBURY	10	WETLANDS/CHARLES RIVER
06D184	NON MAJOR	GEORGETOWN DRIVE	WEST ROXBURY	18	WETLANDS/CHARLES RIVER
06D187	MAJOR	EASEMENT/GROVE ST	WEST ROXBURY	36	BROOK GROVE ST CEMETERY
06F233	NON MAJOR	MOUNT ASH ROAD	HYDE PARK	UNKNOWN	WETLAND - STONY BROOK RESERVATION
06G108	MAJOR	EASEMENT/WEST OF WOOD AVE EXT	HYDE PARK	69	NEPONSET RIVER
06G109	MAJOR	RIVER TER EXT, NEAR ROSA ST	HYDE PARK	48	NEPONSET RIVER
06G110	MAJOR	EASEMENT/WEST STREET EXT	HYDE PARK	30	NEPONSET RIVER
06G111	NON MAJOR	EASEMENT/VOSE ST EXT., TRUMAN HWY	HYDE PARK	24	NEPONSET RIVER
06G165	NON MAJOR	TRUMAN HWY/METROPOLITAN AVE	HYDE PARK	10	NEPONSET RIVER
06G166	MAJOR	ABOUT 30' FROM GUARDRAIL NORTH SIDE OF TRUMAN HWY NEAR MILTON	HYDE PARK	36X36	NEPONSET RIVER
06H106	NON MAJOR	OSCEOLA STREET	HYDE PARK	24	NEPONSET RIVER
06H107	NON MAJOR	EASEMENT/BELNEL RD	HYDE PARK	24	NEPONSET RIVER
07C006	MAJOR	EASEMENT/VFW PARKWAY/BELLE AVE	WEST ROXBURY	126X126	CHARLES RIVER
07H105	MAJOR	EASEMENT/EDGEWATER/S RIVER ST	NEPONSET/MATTAPAN	102X72	NEPONSET RIVER
07H285	MAJOR	BLUE HILL AVE	NEPONSET/MATTAPAN	106X63	NEPONSET RIVER
07H346	NON MAJOR	EDGEWATER DRIVE/HOLMFIELD AVE	HYDE PARK	18	NEPONSET RIVER
07H347	NON MAJOR	EDGEWATER DRIVE/BURMAH ROAD	NEPONSET/MATTAPAN	21	NEPONSET RIVER
07H348	NON MAJOR	EDGEWATER DRIVE/TOPALIAN STREET	NEPONSET/MATTAPAN	24	NEPONSET RIVER
08B122	MAJOR	EASEMENT/NORTH OF SPRING ST.	WEST ROXBURY	30	CHARLES RIVER
08B126	NON MAJOR	SPRING STREET EXTENDED	WEST ROXBURY	30	CHARLES RIVER
08C025	MAJOR	WEDGEMERE ROAD	WEST ROXBURY	24	CHARLES RIVER
08C026	NON MAJOR	WEDGEMERE ROAD	WEST ROXBURY	24	CHARLES RIVER
08E031	NON MAJOR	TURTLE POND PARKWAY	WEST ROXBURY	18	TURTLE POND
08E033	NON MAJOR	TURTLE POND PARKWAY	WEST ROXBURY	UNKNOWN	TURTLE POND
08E035	NON MAJOR	WASHINGTON STREET	WEST ROXBURY	15	TURTLE POND
08F001	NON MAJOR	SHERRIN STREET	HYDE PARK	24	WETLANDS/CHARLES RIVER
08I153	NON MAJOR	DUXBURY ROAD	NEPONSET/MATTAPAN	15	NEPONSET RIVER
08I154	NON MAJOR	EASEMENT/RIVER ST/GLADESIDE AVE	NEPONSET/MATTAPAN	18	NEPONSET RIVER
08I155	NON MAJOR	EASEMENT/RIVER ST/MAMELON CIR	NEPONSET/MATTAPAN	24	NEPONSET RIVER
08I156	NON MAJOR	EASEMENT/RIVER ST/MAMELON CIR	NEPONSET/MATTAPAN	24	NEPONSET RIVER
08I158	NON MAJOR	EASEMENT/RIVER ST/FREMONT ST	NEPONSET/MATTAPAN	18	NEPONSET RIVER
08I207	NON MAJOR	MEADOWBANK AVE EXT	NEPONSET/MATTAPAN	15	NEPONSET RIVER

Table 1-1. BWSC Stormwater Outfalls

OUTFALL NUMBER		LOCATION	NEIGHBORHOOD	SIZE (INCHES)	RECEIVING WATER
08I209	NON MAJOR	MEADOWBANK AVE EXT	NEPONSET/MATTAPAN	12	NEPONSET RIVER
08J041	NON MAJOR	RIVER STREET	DORCHESTER	18	NEPONSET RIVER
08J102	NON MAJOR	ADAMS STREET	DORCHESTER	15X15	NEPONSET RIVER
08J103	NON MAJOR	EASEMENT/CENTRAL AVE BRIDGE	DORCHESTER	30	NEPONSET RIVER
08J49/50	MAJOR	DESMOND RD	DORCHESTER	2-18&24	NEPONSET RIVER
08K049	NON MAJOR	BEARSE AVENUE	DORCHESTER	12	NEPONSET RIVER
09B049	MAJOR	EASEMENT/RIVERMOOR ST	WEST ROXBURY	30	COW ISLAND POND/CHARLES RIVER
09E229	NON MAJOR	GRANDVIEW STREET	WEST ROXBURY	12	NONE SHOWN
09E243	NON MAJOR	BLUE LEDGE TR/EASEMENT	WEST ROXBURY	30	UNNAMED STREAM
09K016	NON MAJOR	EASEMENT/BEARSE AVE EXT	DORCHESTER	15	NEPONSET RIVER
09K100	MAJOR	EASEMENT/MELLISH RD	DORCHESTER	34X24	NEPONSET RIVER
09K101	NON MAJOR	EASEMENT/HUNTOON ST EXT	DORCHESTER	24	NEPONSET RIVER
09L095	MAJOR	GRANITE AVENUE	DORCHESTER	36X48	NEPONSET RIVER
10B015	MAJOR	EASEMENT/CHARLES RIVER ROAD	WEST ROXBURY	21	COW ISLAND POND/CHARLES RIVER
10L094	MAJOR	EASEMENT/GALLIVAN BLVD	DORCHESTER	74X93	NEPONSET RIVER VIA DAVENPORT BROOK
10L096	MAJOR	HILLTOP & LEXONDALE STS	DORCHESTER	36	NEPONSET RIVER
11B123	MAJOR	EASEMENT/EAST OF BAKER ST EXT.	WEST ROXBURY	72	BROOK FARM BROOK/CHARLES RIVER
11G344 (11G318@MH11G247)	NON MAJOR	CULVERT UNDER WALK HILL STREET	ROSLINDALE	24	CANTERBURY BROOK
11G344 (11G319@MH11G246)	NON MAJOR	CULVERT UNDER WALK HILL STREET	ROSLINDALE	18	CANTERBURY BROOK
11I577	MAJOR	HARVARD ST	NEPONSET/MATTAPAN	102X102	CANTERBURY BROOK
11M093	MAJOR	NEPONSET AVE AT NW END OF NEPONSET AVE BRIDGE	DORCHESTER	48	NEPONSET RIVER
12B010	NON MAJOR	BAKER STREET	WEST ROXBURY	15	BROOK FARM BROOK
12B014	NON MAJOR	BAKER STREET	WEST ROXBURY	12	BROOK FARM BROOK
12B033	NON MAJOR	EASEMENT/BAKER STREET	WEST ROXBURY	18	BROOK FARM BROOK
12B124	MAJOR	EASEMENT/LAGRANGE STREET	WEST ROXBURY	120	BROOK FARM BROOK
12F305	NON MAJOR	EASEMENT/ARBOROUGH ROAD	ROSLINDALE	12	UNAMED WETLANDS
12E418	NON MAJOR	EASEMENT/WALTER STREET (renumbered from 12F322)	ROSLINDALE	18	NONE SHOWN
12H001 (12H085@MH12H26)	NON MAJOR	MORTON STREET	ROSLINDALE	15	CANTERBURY BROOK
12H001 (12H087@MH12H27)	NON MAJOR	MORTON STREET	ROSLINDALE	15	CANTERBURY BROOK
12H092	MAJOR	AMERICAN LEGION HIGHWAY	WEST ROXBURY	24	CANTERBURY BROOK
12L092	MAJOR	PINE NECK CREEK/TENEAN ST WEST OF LAWLEY	DORCHESTER	72	NEPONSET RIVER
12M091	MAJOR	ERICSSON/WALNUT ST	NEPONSET/MATTAPAN	36	NEPONSET RIVER
13B011	NON MAJOR	LAGRANGE STREET	WEST ROXBURY	12	UNNAMED STREAM
13D077	MAJOR	WEST ROXBURY PKY/VFW PKY	WEST ROXBURY	60	BUSSEY BROOK
13D078	MAJOR	WEST ROXBURY PKY/VFW PKY	WEST ROXBURY	60	BUSSEY BROOK
13E174	NON MAJOR	EASEMENT/VFW PARKWAY	ROSLINDALE	24	BUSSEY BROOK
13E175	MAJOR	EASEMENT/VFW PKY	ROSLINDALE	108X86	BUSSEY BROOK
13E176	NON MAJOR	EASEMENT/WELD ST	ROSLINDALE	15	NONE SHOWN
13F011	NON MAJOR	ALLANDALE STREET	ROSLINDALE	24	BUSSEY BROOK
13F093 (13F012)	NON MAJOR	WALTER STREET	ROSLINDALE	15	BUSSEY BROOK
13F095	NON MAJOR	EASEMENT/BUSSEY STREET	ROSLINDALE	12	BUSSEY BROOK
13F096	NON MAJOR	SOUTH STREET	ROSLINDALE	12	BUSSEY BROOK
13F097	NON MAJOR	SOUTH STREET	ROSLINDALE	6	BUSSEY BROOK
13L090	MAJOR	VICTORY RD. 200 FT SOUTH	DORCHESTER	144X180	DORCHESTER BAY
14C009	MAJOR	EASEMENT/WESTGATE RD	WEST ROXBURY	36	UNNAMED WETLANDS
15F288	MAJOR	ARNOLD ARBORETUM/MURRAY CIRCLE	JAMAICA PLAIN	54	GOLDSMITH BROOK
15L088	MAJOR	FREEMPT WAY EXTENDED	DORCHESTER	2-78"	DORCHESTER BAY
15L089	MAJOR	FOX POINT RD EXTENDED	DORCHESTER	2-90X82"	DORCHESTER BAY
16L097	NON MAJOR	EASEMENT/OFF SAVIN HILL AVE	DORCHESTER	24	PATTEN'S COVE
16L122	MAJOR	MORRISSEY BLVD DRAIN	DORCHESTER	TWIN 9X8	DORCHESTER BAY
17F012	NON MAJOR	FRANCIS PARKMAN DRIVE	JAMAICA PLAIN	15	JAMAICA POND
17M033	MAJOR	HARBOR POINT PARK (RELOCATED MT VERNON ST DRAIN)	DORCHESTER	72	OLD HARBOR
18G233	NON MAJOR	X-COUNTRY BTN WILLOW POND RD AND JAMAICAWAY	JAMAICA PLAIN	18	MUDDY RIVER-LEVERETT POND
19G043	MAJOR	HUNTINGTON AVE	ROXBURY/MISSION HILL	45X45	MUDDY RIVER
19G194	MAJOR	SOUTH HUNTINGTON AVE	ROXBURY/MISSION HILL	24	MUDDY RIVER
19G199	NON MAJOR	JAMAICA WAY	ROXBURY/MISSION HILL	10	MUDDY RIVER
20G161	MAJOR	EASEMENT/BROOKLINE AVE	ROXBURY/MISSION HILL	36	MUDDY RIVER
20G163	NON MAJOR	EASEMENT/RIVERWAY	ROXBURY/MISSION HILL	20	MUDDY RIVER
20G164	NON MAJOR	BROOKLINE AVENUE	ROXBURY/MISSION HILL	28	MUDDY RIVER
21C212	NON MAJOR	EASEMENT/LAKE SHORE ROAD	ALLSTON/BRIGHTON	30	CHANDLER POND
21H039 (21H045)	NON MAJOR	FENWAY	BOSTON PROPER	30X30	MUDDY RIVER
21H047	NON MAJOR	PALACE ROAD EXT	BOSTON PROPER	24	MUDDY RIVER
21H048	NON MAJOR	EASEMENT/FENWAY/EVANS WAY	BOSTON PROPER	15	MUDDY RIVER
21K069	MAJOR	125' NORTH OF W.FOURTH STREET (RELOCATED BY CA/T)	BOSTON PROPER	48	FORT POINT CHANNEL
21M010	MAJOR	D STREET EXTENDED	SOUTH BOSTON	30	RESERVED CHANNEL
21M050	MAJOR	SUMMER STREET	SOUTH BOSTON	72	RESERVED CHANNEL
22C384	MAJOR	EASEMENT/LAKE SHORE RD	ALLSTON/BRIGHTON	36	CHANDLER POND
22L580	MAJOR	NECCO STREET EXTENDED	SOUTH BOSTON	54	FORT POINT CHANNEL
23G132	MAJOR	EASEMENT/MASS TURNPIKE/WEST OF BU BRIDGE	ALLSTON/BRIGHTON	60	CHARLES RIVER
23H040	NON MAJOR	RALEIGH STREET EXT	BOSTON PROPER	24	CHARLES RIVER

Table 1-1. BWSC Stormwater Outfalls

OUTFALL NUMBER		LOCATION	NEIGHBORHOOD	SIZE (INCHES)	RECEIVING WATER
23H042	MAJOR	DEERFIELD ST	BOSTON PROPER	116X120	CHARLES RIVER
23L015	NON MAJOR	NORTHERN AVE	SOUTH BOSTON	24	BOSTON INNER HARBOR
23L074	NON MAJOR	SUMMER ST BRIDGE	SOUTH BOSTON	15	FORT POINT CHANNEL
23L075	MAJOR	CONGRESS ST BRIDGE	SOUTH BOSTON	54	FORT POINT CHANNEL
23L164	MAJOR	CONGRESS ST BRIDGE	BOSTON PROPER	48	FORT POINT CHANNEL
23L195	MAJOR	NORTHERN AVE	SOUTH BOSTON	36	BOSTON INNER HARBOR
23L196	MAJOR	NEW NORTHERN AVE BRIDGE	SOUTH BOSTON	36	FORT POINT CHANNEL
23L202	MAJOR	NORTHERN AVE	SOUTH BOSTON	36	BOSTON INNER HARBOR
24C039	NON MAJOR	NEWTON ST	ALLSTON/BRIGHTON	21	CHARLES RIVER
24C174	NON MAJOR	EASEMENT/NEWTON STREET	ALLSTON/BRIGHTON	24	CHARLES RIVER
24D032	MAJOR	N OF BEACON ST, ABOUT 800' E OF PARSONS ST	ALLSTON/BRIGHTON	119X130	CHARLES RIVER
24D150	MAJOR	SOLDIERS FIELD PLACE	ALLSTON/BRIGHTON	36	CHARLES RIVER
24G034	MAJOR	SOLDIERS FIELD ROAD, S OF CAMBRIDGE ST	ALLSTON/BRIGHTON	36	CHARLES RIVER
24G035	MAJOR	SOLDIERS FIELD ROAD/BABCOCK ST	ALLSTON/BRIGHTON	90X84	CHARLES RIVER
24L022	MAJOR	COURTHOUSE WAY	SOUTH BOSTON	48	BOSTON HARBOR
24L233	MAJOR	ROWE'S WHARF/ATLANTIC AVE	BOSTON PROPER	42	BOSTON HARBOR
25D040	MAJOR	ABOUT 390' N OF INTERSECTION OF SOLDIERS FIELD & WESTERN AVE	ALLSTON/BRIGHTON	36	CHARLES RIVER
25E037	MAJOR	EASEMENT/TELFORD ST	ALLSTON/BRIGHTON	66	CHARLES RIVER
25G041	NON MAJOR	SOLDIERS FIELD RD/NORTH OF WESTERN AVE BRIDGE	ALLSTON/BRIGHTON	24	CHARLES RIVER
25L058	MAJOR	CHRISTOPHER COLUMBUS PARK-WATERFRONT	BOSTON PROPER	84	BOSTON INNER HARBOR
25L144	NON MAJOR	CLARK STREET	BOSTON PROPER	12	BOSTON INNER HARBOR
25M006	MAJOR	MARGINAL ST EXT	EAST BOSTON	36	BOSTON INNER HARBOR
25M007	MAJOR	MARGINAL ST EXT (NEAR ORLEANS ST)	EAST BOSTON	42	BOSTON INNER HARBOR
26F038	MAJOR	HARVARD ST EXT	ALLSTON/BRIGHTON	36	CHARLES RIVER
26G001	MAJOR	SOLDIERS FIELD ROAD/EAST OF HARVARD UNIVERSITY	ALLSTON/BRIGHTON	36	CHARLES RIVER
26J049	MAJOR	NASHUA STREET	BOSTON PROPER	60	CHARLES RIVER
26J052	NON MAJOR	MONSIGNOR O'BRIEN HWY	BOSTON PROPER	12	CHARLES RIVER
26J101 (replaced 26J055)	MAJOR	LEVERETT CIRCLE	BOSTON PROPER	36	BOSTON INNER HARBOR
26K035	MAJOR	BEVERLY STREET NEAR WARREN BRIDGE	BOSTON PROPER	48X72	CHARLES RIVER
26K050	MAJOR	NASHUA STREET	BOSTON PROPER	36	CHARLES RIVER
26K052	NON MAJOR	COMMERCIAL STREET AT CHARTER ST.	BOSTON PROPER	16X24	CHARLES RIVER
26K099	MAJOR	WARREN ST EXT (FORMERLY CHELSEA ST/JOINER EXT)	CHARLESTOWN	84	CHARLES RIVER
26K254	MAJOR	NORTH WASHINGTON ST BRIDGE	CHARLESTOWN	36	BOSTON HARBOR
26L106	MAJOR	NEAR BATTERY WHARF	BOSTON PROPER	24X24	BOSTON INNER HARBOR
26L070	MAJOR	HANOVER ST EXT	BOSTON PROPER	36	BOSTON INNER HARBOR
26L084	MAJOR	LEWIS STREET	EAST BOSTON	18	BOSTON INNER HARBOR
27J001	MAJOR	EASEMENT/INTERSTATE 93	CHARLESTOWN	72	MILLERS RIVER
27J044	MAJOR	PRISON POINT BRIDGE	CHARLESTOWN	15	MILLERS RIVER
27J096	MAJOR	EASEMENT/INTERSTATE 93	CHARLESTOWN	54	MILLERS RIVER
27L020/22	MAJOR	PIER 4 EASEMENT - NAVY YARD	CHARLESTOWN	2-20&24	BOSTON INNER HARBOR
28K010	MAJOR	OLD LANDING WAY EXT	CHARLESTOWN	42	LITTLE MYSTIC CHANNEL
28K061	MAJOR	EASEMENT/MEDFORD ST/OLD IRONSIDE	CHARLESTOWN	42	LITTLE MYSTIC CHANNEL
28K386	MAJOR	EASEMENT/TERMINAL ST	CHARLESTOWN	30	LITTLE MYSTIC CHANNEL
28L073	NON MAJOR	EASEMENT/5TH AVE - NAVY YARD	CHARLESTOWN	6	LITTLE MYSTIC CHANNEL
28L074/075/076	MAJOR	16TH ST/5TH AVE - NAVY YARD	CHARLESTOWN	3-30	LITTLE MYSTIC CHANNEL
28L077	NON MAJOR	EASEMENT/16TH ST - NAVY YARD	CHARLESTOWN	10	LITTLE MYSTIC CHANNEL
28N156	NON MAJOR	COLERIDGE ST EXT	EAST BOSTON	12	BOSTON HARBOR
28N207	MAJOR	MOORE ST	EAST BOSTON	54X57	BOSTON HARBOR
28O025	NON MAJOR	COLERIDGE/WADSWORTH ST. EXT	EAST BOSTON	30	BOSTON HARBOR
28P001	NON MAJOR	EASEMENT/NANCIA STREET	EAST BOSTON	12	BOSTON HARBOR
29J029	NON MAJOR	ALFORD STREET/RYAN PLGD	CHARLESTOWN	15	MYSTIC RIVER
29J129	MAJOR	ALFORD STREET SOUTH	CHARLESTOWN	15	MYSTIC RIVER
29J212	MAJOR	EASEMENT/MEDFORD ST(NEXT TO CSO 017)	CHARLESTOWN	72	MYSTIC RIVER
29M049	MAJOR	CONDOR STREET	EAST BOSTON	48	CHELSEA RIVER
29N015	MAJOR	CHELSEA STREET	EAST BOSTON	42X44.5	CHELSEA RIVER
29N135	MAJOR	ADDISON ST	EAST BOSTON	30X30	CHELSEA RIVER
29O001	MAJOR	BENNINGTON ST (CONSTITUTION BEACH)	EAST BOSTON	66	BOSTON HARBOR NEAR CONSTITUTION BEACH
29P005	NON MAJOR	SARATOGA STREET	EAST BOSTON	12	BOSTON HARBOR
29P044	NON MAJOR	SHAWSHEEN ST	EAST BOSTON	12	BOSTON HARBOR
30J006	MAJOR	EASEMENT/ALFORD ST/EVERETT	CHARLESTOWN	18	MYSTIC RIVER
30J019	MAJOR	ALFORD ST/NORTH	CHARLESTOWN	15	MYSTIC RIVER
30J030	MAJOR	EASEMENT/ARLINGTON AVE	CHARLESTOWN	42	MYSTIC RIVER
30P062	NON MAJOR	PALERMO AVE EXT	EAST BOSTON	12	WETLANDS
30P107	NON MAJOR	WALDEMAR AVENUE	EAST BOSTON	15	WETLANDS
31O004	NON MAJOR	EASEMENT/WALDEMAR AVE	EAST BOSTON	15	CHELSEA RIVER
31P084	NON MAJOR	EASEMENT/BENNINGTON ST	EAST BOSTON	30	BELLE ISLE INLET, REVERE

Table 1-2. BWSC Interconnections

INTERCONNECTION	INTERCONNECT- ING MANHOLE NUMBER	LOCATION	NEIGHBORHOOD	RECEIVING WATER
DCR 02F099	02FMH120	NEPONSET VALLEY PARKWAY	HYDE PARK	DCR DRAIN TO NEPONSET
DCR 03F159	03FMH056	WAKEFIELD AVENUE	HYDE PARK	DCR DRAIN TO NEPONSET
DCR 03F162	04FMH090	FARADAY STREET	HYDE PARK	DCR DRAIN TO NEPONSET
Dedham Drains	06CMH117	WASHINGTON ST NEAR MESHAKA ST	WEST ROXBURY	INTO DEDHAM
Dedham Drains	06DMH097	EDGEMERE RD. EXTENDED	WEST ROXBURY	INTO DEDHAM
DCR 11B028	11BMH049	VFW PKWY @ GLENHAM ST	WEST ROXBURY	DCR DRAIN TO CHARLES
DOT 12L296	12LMH374	CONLEY STREET	DORCHESTER	DCR DRAIN TO DORCHESTER BAY
DCR 13L137	12LMH304	TENEAN STREET	DORCHESTER	DCR DRAIN TO DORCHESTER BAY
Brookline Drains	14EMH036	PAYSON ROAD @ HACKENSACK ROAD	WEST ROXBURY	TO BROOKLINE DRAINS
Brookline Drains	20DMH019	PRENDERGAST AVE (BC/CHESTNUT HILL RESERVOIR)	BRIGHTON	TO BROOKLINE DRAINS
Brookline Drains	20DMH055	VILLAGE BROOK-STRATHMORE	BRIGHTON	BROOKLINE DRAINS TO VILLAGE BROOK
Brookline Drains	20DMH062	VILLAGE BROOK-ENGLEWOOD AT KILSYTH	BRIGHTON	BROOKLINE DRAINS TO VILLAGE BROOK
Brookline Drains	21DMH319	VILLAGE BROOK-KILSYTH	BRIGHTON	BROOKLINE DRAINS TO VILLAGE BROOK
Brookline Drains	21EMH064	TANNERY BROOK	BRIGHTON	BROOKLINE DRAINS TO TANNERY BROOK
Brookline Drains	21EMH086	VILLAGE BROOK-CUMMINGS	BRIGHTON	BROOKLINE DRAINS TO VILLAGE BROOK
Newton Drains	23BMH089	HUNNEWELL AVENUE	BRIGHTON	TO NEWTON DRAINS
DCR 23I019	23HMH081	BEACON STREET	BACK BAY	DCR DRAIN TO MUDDY RIVER
Somerville Drains	28IMH015	ROLAND STREET	CHARLESTOWN	TO SOMERVILLE DRAINS

Table 1-3. Combined Sewer Overflow Outfalls

CSO OUTFALL NUMBER	STREET LOCATION	NEIGHBORHOOD	RECEIVING WATERS
18LCSO086	Day Blvd @ Carson Beach Bath	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
19LCSO084	Day Blvd @ H St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
19LCSO085	Day Blvd @ Babe Ruth Park Dr	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
19MCSO082	Day Blvd @ N St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
19MCSO083	Day BLVD @ N St	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
19NCSO081	Day Blvd @ Farragut Rd	SOUTH BOSTON	BOSTON HARBOR/DORCHESTER BAY
21KCSO070	West 4th Street	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL
21LCSO076	Pappas Way	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL
21MCSO078	East First Street	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL
21MCSO079	Summer St	SOUTH BOSTON	BOSTON HARBOR/RESERVED CHANNEL
21NCSO080	Conley Marine Terminal	EAST BOSTON	BOSTON HARBOR/RESERVED CHANNEL
22KCSO065	25 Dorchester Ave	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL
22KCSO068	Fort Point Channel North of Bro	CENTRAL	BOSTON HARBOR/FORT POINT CHANNEL
22KCSO072	Dorchester Avenue	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL
22LCSO073	1 Gillette Pk	SOUTH BOSTON	BOSTON HARBOR/FORT POINT CHANNEL
23LCSO062	Under Seaport Blvd Bridge	CENTRAL	BOSTON HARBOR/FORT POINT CHANNEL
23LCSO064	245 Summer St	CENTRAL	BOSTON HARBOR/FORT POINT CHANNEL
24LCSO060	Long Wharf/Aquarium	CENTRAL	BOSTON HARBOR/INNER HARBOR
24NCSO003	Harborside Drive near Hyatt	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
25LCSO057	Eastern Ave	CENTRAL	BOSTON HARBOR/INNER HARBOR
25MCSO005	Sumner Street/Porzio Park	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
25NCSO004	Maverick Street	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
26LCSO009	Sumner St at New St	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
27LCSO010	141 Border St	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
28LCSO012	Border St at Middle School	EAST BOSTON	BOSTON HARBOR/INNER HARBOR
28LCSO019	Chelsea St at 16th St	CHARLESTOWN	BOSTON HARBOR/INNER HARBOR
29JCSO017	545 Medford St	CHARLESTOWN	MYSTIC RIVER
29MCSO013	Under Meridian St Bridge	EAST BOSTON	CHELSEA CREEK
29NCSO014	Chelsea St. at East Eagle	EAST BOSTON	CHELSEA CREEK
21HCSO046	The Fenway	FENWAY	CHARLES VIA MUDDY RIVER

Table 2-7. Sub-Catchment Area Investigation Status by Manholes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
04F204	SDO	74	0	151	0	74	0%	100%
05G116A	SDO	61	3	18	16	61	26%	100%
06D057	SDO	12	6	6	12	12	100%	100%
06D091*	SDO	0	0	0	0	0	0%	0%
06G166	SDO	15	0	12	1	4	7%	27%
07C006	SDO	495	14	360	3	495	1%	100%
07H285	SDO	344	8	259	0	344	0%	100%
08B122	SDO	61	0	47	6	61	10%	100%
08C025/026	SDO	22	0	1	0	22	0%	100%
08I154	SDO	38	1	16	0	21	0%	55%
09K101	SDO	33	0	14	0	33	0%	100%
10B015	SDO	52	8	14	4	52	8%	100%
10L094	SDO	849	1	466	0	849	0%	100%
11B123	SDO	132	0	81	3	132	2%	100%
11G344	SDO	64	0	7	1	64	2%	100%
11I577	SDO	1354	27	785	0	1354	0%	100%
11M093	SDO	76	0	15	6	51	8%	67%
12B010*	SDO	0	0	0	0	0	0%	100%
12B014	SDO	4	4	4	4	4	100%	100%
12B124	SDO	497	0	298	0	497	0%	100%
12F418 (aka 12E418)	SDO	20	0	7	3	20	15%	100%
12H085	SDO	17	0	0	17	17	100%	100%
13B011	SDO	4	0	0	0	4	0%	100%
13D077/078	SDO	169	6	150	0	169	0%	100%
13E174	SDO	74	0	69	0	74	0%	100%
13F011 (aka 13F185)	SDO	48	2	23	0	48	0%	100%
13L090 (B)	SDO	982	47	425	0	982	0%	100%
15F288	SDO	200	3	99	13	200	6%	100%
19G043	SDO	80	0	76	0	80	0%	100%
19G194	SDO	58	4	30	0	36	0%	62%
20DMH19	Interconnect	106	1	24	86	106	81%	100%
20G161	SDO	62	2	45	0	62	0%	100%
21H047	SDO	145	0	84	50	145	34%	100%
22KCSO065DR	CSO	78	0	0	78	78	100%	100%
23BMH89	Interconnect	11	0	18	0	11	0%	100%
23H040	SDO	23	8	11	20	23	87%	100%
23H042	SDO	312	24	101	256	312	82%	100%
23L074	SDO	5	0	0	0	5	0%	100%
23L075	SDO	61	1	39	35	61	57%	100%
23L202	SDO	25	1	1	25	25	100%	100%
23LCSO064DR	CSO	9	0	0	0	9	0%	100%
24D032	SDO	1037	43	695	23	1037	2%	100%
24NCSO003DR	CSO	740	21	21	0	0	0%	0%
25D040	SDO	27	1	15	0	27	0%	100%
25E037	SDO	424	2	286	11	424	3%	100%
25L058	SDO	157	0	0	0	157	0%	100%
25LCSO057	CSO	14	0	0	0	5	0%	36%

Table 2-7. Sub-Catchment Area Investigation Status by Manholes

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Reporting Period 7/1/2018 - 12/31/2018

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No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
25MCSO005DR	CSO	0	1	1	0	0	0%	100%
26G001	SDO	198	0	78	21	198	11%	100%
26J049	SDO	157	0	0	3	157	2%	100%
26L084	SDO	6	2	2	0	0	0%	0%
26LCSO009	CSO	24	6	6	0	0	0%	0%
27J001	SDO	140	0	57	0	140	0%	100%
27J096	SDO	191	1	1	0	191	0%	100%
27L020/22	SDO	91	2	31	1	81	1%	89%
27LCSO010	CSO	17	3	3	2	17	12%	100%
28IMH15	Interconnect	9	0	0	9	9	100%	100%
28K010	SDO	26	1	18	5	26	19%	100%
28L073	SDO	1	0	0	1	1	100%	100%
28L074/076	SDO	92	8	42	11	92	12%	100%
29JCSO017	CSO	12	0	0	12	12	100%	100%
29MCSO013DR	CSO	12	3	3	12	12	100%	100%
29N015	SDO	11	2	2	0	0	0%	0%
Stony Brook-Middle (-)	CSO	1849	18	400	71	1112	4%	60%
Stony Brook-Upper	SDO	3158	4	124	0	3158	0%	100%
06F233*	SDO	0	0	0	0	0	0%	100%
20G164*	SDO	0	0	0	0	0	0%	100%
01E024	SDO	12	0	7	0	12	0%	100%
01F031	SDO	30	0	5	0	30	0%	100%
02E086 (aka 02E005)	SDO	9	0	6	0	9	0%	100%
02F085	SDO	4	0	2	0	4	0%	100%
02F093	SDO	6	0	6	0	6	0%	100%
02F120	SDO	39	0	22	0	39	0%	100%
03E185	SDO	61	0	41	0	61	0%	100%
03E186	SDO	13	0	5	0	13	0%	100%
04E064	SDO	3	0	3	0	3	0%	100%
04E069	SDO	41	0	18	0	41	0%	100%
04F016	SDO	17	0	4	0	17	0%	100%
04F118	SDO	9	0	5	0	9	0%	100%
04F119	SDO	15	0	2	0	15	0%	100%
04F189	SDO	31	0	12	0	31	0%	100%
05E182	SDO	13	0	7	0	13	0%	100%
05E183*	SDO	0	0	0	0	0	0%	100%
05E184 (aka 05E120)	SDO	79	0	31	0	79	0%	100%
05F117	SDO	52	0	34	0	52	0%	100%
05F244	SDO	25	0	5	0	25	0%	100%
05F245	SDO	28	0	10	1	28	4%	100%
05F253	SDO	43	0	14	0	43	0%	100%
05G112	SDO	27	0	27	0	27	0%	100%
05G115	SDO	17	0	4	0	17	0%	100%
05G116	SDO	25	0	6	0	25	0%	100%
06C110 (aka 05C110)	SDO	55	0	13	0	55	0%	100%
06D085	SDO	2	0	4	0	2	0%	100%
06D187	SDO	81	0	105	0	81	0%	100%

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Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
06G108	SDO	189	0	157	0	189	0%	100%
06G109	SDO	31	0	19	0	31	0%	100%
06G110	SDO	46	0	32	0	46	0%	100%
06G111	SDO	17	0	14	0	17	0%	100%
06G165	SDO	6	0	9	0	6	0%	100%
06H106	SDO	15	0	5	0	15	0%	100%
06H107	SDO	17	0	17	0	17	0%	100%
07H105	SDO	486	0	237	0	486	0%	100%
07H346	SDO	5	0	2	0	5	0%	100%
07H347	SDO	5	0	1	0	5	0%	100%
07H348	SDO	10	0	4	0	8	0%	80%
08B126	SDO	22	0	7	0	22	0%	100%
08E031	SDO	65	0	30	0	65	0%	100%
08E035	SDO	3	0	0	0	3	0%	100%
08I153	SDO	4	0	3	0	4	0%	100%
08I155	SDO	3	0	1	0	3	0%	100%
08I156	SDO	42	0	32	0	42	0%	100%
08I158	SDO	16	0	2	0	16	0%	100%
08I207	SDO	10	0	10	0	10	0%	100%
08I209	SDO	6	0	5	0	6	0%	100%
08J036/041	SDO	13	0	10	0	13	0%	100%
08J050/049	SDO	77	0	30	0	77	0%	100%
08J102	SDO	26	0	4	0	26	0%	100%
08J103	SDO	32	0	32	0	32	0%	100%
08K049	SDO	3	0	1	0	3	0%	100%
09E229	SDO	2	0	2	0	2	0%	100%
09K016	SDO	16	0	4	0	16	0%	100%
09K100	SDO	26	0	10	0	26	0%	100%
09L095	SDO	29	0	13	6	29	21%	100%
10L096	SDO	22	0	21	0	22	0%	100%
11BMH49 (DCR 11BSD)	Interconnect	12	0	0	0	12	0%	100%
12F305	SDO	13	0	4	0	13	0%	100%
12L092 (B)	SDO	163	0	33	0	163	0%	100%
12LMH304 (DCR 13LSD)	Interconnect	12	0	7	0	12	0%	100%
12LMH374 (DCR 12LSD)	Interconnect	38	0	17	0	38	0%	100%
12M091	SDO	10	0	10	0	10	0%	100%
13E175	SDO	22	0	6	0	22	0%	100%
13E176	SDO	5	0	9	0	5	0%	100%
13F012 (aka 13F093)	SDO	9	0	1	0	9	0%	100%
14C009	SDO	4	0	7	0	4	0%	100%
14EMH36	Interconnect	6	0	1	0	6	0%	100%
15L088 (B)	SDO	465	0	176	0	465	0%	100%
15L089 (B)	SDO	73	0	20	0	73	0%	100%
16L122	SDO	254	0	92	0	117	0%	46%
17F012	SDO	5	0	0	0	5	0%	100%
17M033	SDO	145	0	0	0	2	0%	1%
18G233	SDO	87	0	100	0	87	0%	100%

Table 2-7. Sub-Catchment Area Investigation Status by Manholes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
19G199	SDO	1	0	1	0	1	0%	100%
19LCSO084DR	CSO	13	0	0	0	13	0%	100%
19LCSO085DR	CSO	47	0	0	1	47	2%	100%
19MCSO083DR	CSO	4	0	0	0	2	0%	50%
20DMH62	Interconnect	15	0	11	0	15	0%	100%
20DNP140 (20DMH55)	Interconnect	55	0	67	0	55	0%	100%
21C212	SDO	15	0	6	0	15	0%	100%
21DMH319	Interconnect	66	0	93	0	66	0%	100%
21EMH64	Interconnect	83	0	51	0	83	0%	100%
21EMH86	Interconnect	17	0	18	0	17	0%	100%
21K069	SDO	98	0	34	0	98	0%	100%
21KCSO070DR	SDO	369	0	0	0	369	0%	100%
21M050	CSO	28	0	7	0	28	0%	100%
21NCSO080DR	SDO	10	0	0	4	10	40%	100%
22C384	SDO	13	0	0	0	13	0%	100%
22L580	SDO	44	0	16	0	44	0%	100%
23G132	SDO	67	0	23	0	67	0%	100%
23L164	SDO	37	0	12	14	37	38%	100%
23L195	SDO	21	0	0	0	21	0%	100%
23L196	SDO	15	0	0	0	15	0%	100%
24C174	SDO	54	0	8	0	54	0%	100%
24CMH014 (24CSDO03)	SDO	16	0	18	0	16	0%	100%
24D150	SDO	6	0	0	0	6	0%	100%
24G034	SDO	73	0	3	0	73	0%	100%
24G035	SDO	338	0	188	0	338	0%	100%
24LCSO060DR	SDO	58	0	0	0	0	0%	0%
25G041	SDO	19	0	3	0	19	0%	100%
25L144	SDO	5	0	0	0	5	0%	100%
25M006	SDO	19	0	0	0	0	0%	0%
25M007	SDO	25	0	7	0	25	0%	100%
26F038	SDO	34	0	3	0	34	0%	100%
26K035	SDO	48	0	0	0	20	0%	42%
26K050	CSO	23	0	0	0	23	0%	100%
26K052	SDO	1	0	0	0	1	0%	100%
26K099	SDO	206	0	53	0	206	0%	100%
26K254	SDO	7	0	0	0	7	0%	100%
26L055 (aka 26LSDO10)	SDO	4	0	0	0	4	0%	100%
26L070	SDO	6	0	0	0	6	0%	100%
28K061	SDO	98	0	41	0	98	0%	100%
28K386	SDO	5	0	0	0	5	0%	100%
28LCSO012DR	SDO	16	0	0	0	16	0%	100%
28N156 (B)	SDO	3	0	6	0	3	0%	100%
28N207 (B)	Interconnect	82	0	73	0	82	0%	100%
28O025 (B)	SDO	22	0	28	0	22	0%	100%
28P001 (B)	SDO	9	0	10	0	9	0%	100%
29J129	SDO	6	0	0	0	6	0%	100%
29J212	SDO	166	0	38	0	166	0%	100%

Table 2-7. Sub-Catchment Area Investigation Status by Manholes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
29M049	SDO	22	0	4	0	22	0%	100%
29N135	SDO	9	0	2	0	9	0%	100%
29O001 (B)	Interconnect	282	0	360	0	282	0%	100%
29P044 (B)	Interconnect	11	0	21	0	11	0%	100%
2FMH120 (DCR 2FSDO)	Interconnect	11	0	2	0	11	0%	100%
30J019	CSO	10	0	1	0	10	0%	100%
30J030	SDO	23	0	5	0	23	0%	0%
30P062	SDO	11	0	6	0	11	0%	100%
30P107	SDO	11	0	4	0	11	0%	100%
31O004	SDO	32	0	8	0	32	0%	0%
31P084	SDO	17	0	4	0	17	0%	0%
3FMH56 (DCR 3FSDO1)	SDO	27	0	17	0	27	0%	100%
4FMH90 (DCR 3FSDO1)	Interconnect	20	0	20	0	20	0%	100%
6DMH97	SDO	189	0	47	0	189	0%	100%
Stony Brook-Lower (21)	SDO	521	0	5	0	0	0%	0%
03E207*	SDO	0	0	0	0	0	0%	100%
04F001*	SDO	0	0	0	0	0	0%	100%
04F203	SDO	1	0	0	0	1	0%	100%
05E180*	SDO	0	0	0	0	0	0%	100%
05E181*	SDO	0	0	0	0	0	0%	100%
05F254	SDO	1	0	0	0	1	0%	100%
6CMH117	SDO	9	0	0	0	0	0%	100%
06D083	SDO	1	0	0	0	1	0%	100%
06D084	SDO	4	0	0	0	4	0%	100%
06D086*	SDO	0	0	0	0	0	0%	100%
06D184	SDO	2	0	0	0	2	0%	100%
09B049	CSO	1	0	0	0	1	0%	100%
09E243	CSO	35	0	0	0	35	0%	100%
12B033	CSO	3	0	0	0	3	0%	100%
12H087	SDO	38	0	0	0	38	0%	100%
12H092	SDO	80	0	0	0	0	0%	0%
13F095	CSO	2	0	0	0	2	0%	100%
13F096	CSO	2	0	2	0	2	0%	100%
13F097*	SDO	0	0	0	0	0	0%	100%
16L097	CSO	23	0	0	0	0	0%	0%
18LCSO086DR	CSO	14	0	0	0	6	43%	43%
19MCSO082DR	CSO	8	0	0	0	0	0%	0%
19NCSO081DR	CSO	10	0	0	0	0	0%	0%
20G163	CSO	13	0	0	0	13	0%	100%
21H048	Interconnect	3	0	0	0	3	0%	100%
21LCSO076DR	SDO	2	0	0	0	0	0%	0%
21M010	SDO	17	0	0	0	0	0%	0%
21MCSO078DR	CSO	0	0	0	0	0	0%	100%
21MCSO079DR	SDO	1	0	0	0	0	0%	100%
22KCSO068DR	SDO	28	0	0	0	0	0%	0%
22KCSO072DR	CSO	11	0	0	0	0	0%	0%
22LCSO073DR	SDO	44	0	0	0	0	0%	0%

Table 2-7. Sub-Catchment Area Investigation Status by Manholes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total # Storm Drain + Common Manholes	Total # Storm Drain + Common Manhole Inspections Performed ²		Total # Storm Drain + Manholes Investigated/Completed ⁵		% Investigated/Complete by Manholes	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
23HMH81 (DCR 23ISD)	CSO	4	0	0	0	4	0%	100%
23L015	SDO	30	0	0	0	0	0%	0%
23LCSO062DR	SDO	4	0	0	0	0	0%	0%
24L022 (aka 23LSDO02)	SDO	13	0	0	0	13	0%	100%
24L233	SDO	57	0	0	0	0	0%	0%
25NCSO004DR	SDO	23	0	0	0	23	0%	100%
26J052	SDO	2	0	0	0	0	0%	0%
26J055 (aka 26JSDO10)	SDO	20	0	0	0	0	0%	0%
27J044	SDO	6	0	1	0	6	0%	100%
28L077*	CSO	0	0	0	0	0	0%	100%
28LCSO019	SDO	12	0	0	0	0	0%	0%
29J029*	SDO	0	0	0	0	0	0%	100%
29NCSO014DR	CSO	1	0	0	0	0	0%	100%
29P005	SDO	3	0	0	0	3	0%	100%
30J006	SDO	20	0	0	0	0	0%	0%

¹(B) indicates a highest priority beach area; * indicates that there are no storm drain or common manholes located in the sub-catchment area.

²Total number of manholes performed includes all dye test records for manholes. Some manholes may have been inspected more than once.

³Reporting Period is July 1, 2018 through December 31, 2018

⁴To Date includes data from 11/10/2004 through the end of the reporting period 12/31/2018.

⁵Total number of manholes investigated/completed is based on a manual review process which analyzes the number of manholes that fall within areas designated as complete, therefore it includes manholes that are inferred to be void of contamination based on downstream manhole inspections and/or dye tests.

⁶The % complete estimate for the reporting period is calculated as the % complete to date minus the % complete calculated based on manual review conducted for the Compliance Report for the period of January 1, 2018 through June 30, 2017.

⁷The % complete estimate to date is calculated as the total number of storm drain and common manholes investigated/completed to date divided by the total number of storm drain and common manholes within each drainage area.

Table 2-8. Sub-Catchment Area Investigation Status by Pipes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total Linear Feet of Storm Drain Pipe	Total Linear Feet of Storm Drain Pipe Inspections Performed ²		Total Linear Feet of Storm Drain Pipe Investigated/Completed ⁵		% Investigated/Complete by Storm Drain Pipe	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
04F204	SDO	14,453	0	20,853	0	14,453	0%	100%
05G116A	SDO	11,234	516	2,942	2,722	11,234	24%	100%
06D057	SDO	2,418	1,873	1,873	2,418	2,418	100%	100%
06D091*	SDO	63	0	0	63	63	100%	100%
06G166	SDO	2,201	0	1,444	0	924	0%	42%
07C006	SDO	81,391	2,362	22,378	1,288	81,195	2%	100%
07H285	SDO	61,113	1,467	23,857	0	61,113	0%	100%
08B122	SDO	11,538	0	6,323	1,958	11,538	17%	100%
08C025/026	SDO	3,152	0	416	240	3,152	8%	100%
08I154	SDO	5,740	146	2,589	0	2,878	0%	50%
09K101	SDO	5,245	0	2,010	0	5,245	0%	100%
10B015	SDO	7,123	892	2,696	1,321	7,123	19%	100%
10L094	SDO	127,791	207	34,910	0	127,791	0%	100%
11B123	SDO	20,303	0	16,628	641	20,303	3%	100%
11G344	SDO	9,122	0	1,273	0	9,122	0%	100%
11I577	SDO	238,332	4,277	114,634	0	238,332	0%	100%
11M093	SDO	9,956	0	3,354	847	5,677	9%	57%
12B010*	SDO	16	0	0	0	16	0%	100%
12B014	SDO	717	589	589	717	717	100%	100%
12B124	SDO	80,035	0	22,666	0	80,035	0%	100%
12F418 (aka 12E418)	SDO	3,052	0	804	565	3,052	19%	100%
12H085	SDO	2,963	0	0	2,963	2,963	100%	100%
13B011	SDO	772	0	0	0	772	0%	100%
13D077/078	SDO	27,404	1,116	23,296	0	27,404	0%	100%
13E174	SDO	11,097	0	8,704	0	11,097	0%	100%
13F011 (aka 13F185)	SDO	6,716	316	2,359	0	6,716	0%	100%
13L090 (B)	SDO	154,041	6,909	70,579	0	154,041	0%	100%
15F288	SDO	29,831	423	11,718	2,655	29,831	9%	100%
19G043	SDO	11,554	0	5,613	0	11,554	0%	100%
19G194	SDO	9,005	245	2,842	(2)	4,851	0%	54%
20DMH19	Interconnecti	18,600	71	3,098	14,741	18,600	79%	100%
20G161	SDO	7,913	499	4,085	0	7,913	0%	100%
21H047	SDO	18,874	0	8,537	9,023	18,874	48%	100%
22KCSO065DR	CSO	8,188	0	0	8,188	8,188	100%	100%
23BMH89	Interconnecti	1,807	0	3,176	0	1,807	0%	100%
23H040	SDO	3,379	807	1,309	3,100	3,379	92%	100%
23H042	SDO	49,466	3,608	12,407	43,216	49,466	87%	100%
23L074	SDO	624	0	0	0	624	0%	100%
23L075	SDO	8,734	183	4,590	6,951	8,734	80%	100%
23L202	SDO	2,434	207	207	2,434	2,434	100%	100%
23LCSO064DR	CSO	1,227	0	0	0	1,227	0%	100%
24D032	SDO	160,361	6,932	71,458	5,176	160,361	3%	100%
24NCSO003DR	CSO	92,876	3,816	3,816	0	0	0%	0%
25D040	SDO	5,390	194	2,379	0	5,390	0%	100%
25E037	SDO	64,905	443	20,147	2,008	64,905	3%	100%
25L058	SDO	15,960	0	0	340	15,960	2%	100%
25LCSO057	CSO	1,219	0	0	0	309	0%	25%
25MCSO005DR	CSO	0	0	0	0	0	0%	100%
26G001	SDO	36,612	0	15,640	5,891	36,612	16%	100%
26J049	SDO	20,940	0	0	293	20,940	1%	100%
26L084	SDO	616	154	154	0	0	0%	0%
26LCSO009	CSO	2,476	1,046	1,046	0	0	0%	0%
27J001	SDO	18,240	0	7,779	0	18,240	0%	100%
27J096	SDO	15,671	0	0	0	15,671	0%	100%
27L020/22	SDO	12,358	157	5,211	169	9,761	1%	79%
27LCSO010	CSO	2,960	1,122	1,122	435	2,960	15%	100%
28IMH15	Interconnecti	1,207	0	0	1,207	1,207	100%	100%

Table 2-8. Sub-Catchment Area Investigation Status by Pipes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total Linear Feet of Storm Drain Pipe	Total Linear Feet of Storm Drain Pipe Inspections Performed ²		Total Linear Feet of Storm Drain Pipe Investigated/Completed ⁵		% Investigated/Complete by Storm Drain Pipe	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
28K010	SDO	4,212	254	3,834	1,656	4,212	39%	100%
28L073	SDO	242	0	0	242	242	100%	100%
28L074/076	SDO	13,535	860	6,924	2,466	13,535	18%	100%
29JCSO017	CSO	611	0	611	0	611	100%	100%
29MCSO013DR	CSO	1,541	473	473	1,541	1,541	100%	100%
29N015	SDO	1,297	148	148	0	0	0%	0%
Stony Brook-Middle (-	CSO	270,868	2,670	64,208	10,362	144,262	4%	53%
Stony Brook-Upper	SDO	515,603	352	14,101	39	515,603	0%	100%
06F233*	SDO	49	49	49	0	49	0%	100%
20G164*	SDO	73	73	73	0	73	0%	100%
01E024	SDO	2,155	0	1,143	0	2,155	0%	100%
01F031	SDO	5,710	0	2,209	0	5,710	0%	100%
02E086 (aka 02E005)	SDO	2,334	0	1,085	0	2,334	0%	100%
02F085	SDO	682	0	418	0	682	0%	100%
02F093	SDO	991	0	971	0	991	0%	100%
02F120	SDO	7,389	0	0	0	7,389	0%	100%
03E185	SDO	10,917	0	7,957	476	10,917	4%	100%
03E186	SDO	2,051	0	948	0	2,051	0%	100%
04E064	SDO	253	0	159	0	253	0%	100%
04E069	SDO	8,768	0	6,447	0	8,768	0%	100%
04F016	SDO	2,134	0	272	0	2,134	0%	100%
04F118	SDO	1,294	0	655	0	1,294	0%	100%
04F119	SDO	2,569	0	0	0	2,569	0%	100%
04F189	SDO	4,938	0	1,893	0	4,938	0%	100%
05E182	SDO	2,445	0	1,143	0	2,445	0%	100%
05E183*	SDO	58	0	0	0	58	0%	100%
05E184 (aka 05E120)	SDO	11,125	0	4,267	0	11,125	0%	100%
05F117	SDO	7,703	0	911	0	7,703	0%	100%
05F244	SDO	3,043	0	471	0	3,043	0%	100%
05F245	SDO	4,254	0	1,807	213	4,254	5%	100%
05F253	SDO	6,757	0	3,334	0	6,757	0%	100%
05G112	SDO	3,671	0	3,357	0	3,671	0%	100%
05G115	SDO	1,853	0	601	0	1,853	0%	100%
05G116	SDO	3,623	0	1,233	0	3,623	0%	100%
06C110 (aka 05C110)	SDO	9,579	0	2,695	0	9,579	0%	100%
06D085	SDO	236	0	121	0	236	0%	100%
06D187	SDO	11,280	0	9,196	0	11,280	0%	100%
06G108	SDO	30,068	0	11,592	0	30,068	0%	100%
06G109	SDO	4,716	0	3,035	0	4,716	0%	100%
06G110	SDO	6,695	0	4,604	0	6,695	0%	100%
06G111	SDO	4,292	0	3,526	0	4,292	0%	100%
06G165	SDO	807	0	1,460	0	807	0%	100%
06H106	SDO	2,278	0	985	0	2,278	0%	100%
06H107	SDO	2,453	0	2,378	0	2,453	0%	100%
07H105	SDO	73,303	0	15,980	0	73,303	0%	100%
07H346	SDO	705	0	527	0	705	0%	100%
07H347	SDO	519	0	279	0	519	0%	100%
07H348	SDO	743	0	470	1	407	0%	55%
08B126	SDO	3,474	0	1,542	0	3,474	0%	100%
08E031	SDO	10,096	0	3,675	0	10,096	0%	100%
08E035	SDO	899	0	0	0	899	0%	100%
08I153	SDO	425	0	228	0	425	0%	100%
08I155	SDO	399	0	101	0	399	0%	100%
08I156	SDO	5,764	0	3,508	0	5,764	0%	100%
08I158	SDO	1,963	0	476	0	1,963	0%	100%
08I207	SDO	1,400	0	1,210	0	1,400	0%	100%
08I209	SDO	820	0	906	0	820	0%	100%

Table 2-8. Sub-Catchment Area Investigation Status by Pipes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total Linear Feet of Storm Drain Pipe	Total Linear Feet of Storm Drain Pipe Inspections Performed ²		Total Linear Feet of Storm Drain Pipe Investigated/Completed ⁵		% Investigated/Complete by Storm Drain Pipe	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
08J036/041	SDO	2,439	0	1,643	0	2,439	0%	100%
08J050/049	SDO	12,006	0	5,567	0	12,006	0%	100%
08J102	SDO	3,447	0	898	0	3,447	0%	100%
08J103	SDO	6,382	0	6,799	0	6,382	0%	100%
08K049	SDO	513	0	258	0	513	0%	100%
09E229	SDO	322	0	80	0	322	0%	100%
09K016	SDO	2,062	0	555	0	2,062	0%	100%
09K100	SDO	4,330	0	2,025	0	4,330	0%	100%
09L095	SDO	4,789	0	2,498	1,110	4,789	23%	100%
10L096	SDO	2,893	0	3,428	0	2,893	0%	100%
11BMH49 (DCR	Interconnecti	2,130	0	0	0	2,130	0%	100%
12F305	SDO	2,175	0	674	0	2,175	0%	100%
12L092 (B)	SDO	25,084	0	5,828	0	25,084	0%	100%
12LMH304 (DCR	Interconnecti	1,617	0	358	0	1,617	0%	100%
12LMH374 (DCR	Interconnecti	4,151	0	2,358	0	4,151	0%	100%
12M091	SDO	1,238	0	992	0	1,238	0%	100%
13E175	SDO	4,331	0	986	0	4,331	0%	100%
13E176	SDO	863	0	714	0	863	0%	100%
13F012 (aka 13F093)	SDO	1,828	0	0	0	1,828	0%	100%
14C009	SDO	822	0	798	0	822	0%	100%
14EMH36	Interconnecti	991	0	131	0	991	0%	100%
15L088 (B)	SDO	79,592	0	32,331	0	79,592	0%	100%
15L089 (B)	SDO	13,671	0	2,555	0	13,671	0%	100%
16L122	SDO	40,954	0	13,476	555	13,896	1%	34%
17F012	SDO	1,157	0	0	0	1,157	0%	100%
17M033	SDO	15,103	0	0	0	276	0%	2%
18G233	SDO	12,689	0	12,880	0	12,689	0%	100%
19G199	SDO	230	0	0	0	230	0%	100%
19LCSO084DR	CSO	1,766	0	0	0	1,766	0%	100%
19LCSO085DR	CSO	5,550	0	0	229	5,550	4%	100%
19MCSO083DR	CSO	535	0	0	0	0	0%	0%
20DMH62	Interconnecti	1,542	0	1,002	0	1,542	0%	100%
20DNP140 (20DMH55)	Interconnecti	8,686	0	5,240	0	8,686	0%	100%
21C212	SDO	2,494	0	805	0	2,494	0%	100%
21DMH319	Interconnecti	9,847	0	9,771	0	9,847	0%	100%
21EMH64	Interconnecti	11,041	0	2,294	0	11,041	0%	100%
21EMH86	Interconnecti	3,263	0	377	0	3,263	0%	100%
21K069	SDO	14,839	0	5,296	0	14,839	0%	100%
21KCSO070DR	SDO	50,657	0	0	0	50,657	0%	100%
21M050	CSO	4,070	0	1,177	0	4,070	0%	100%
21NCSO080DR	SDO	552	0	0	0	552	0%	100%
22C384	SDO	2,193	0	0	0	2,193	0%	100%
22L580	SDO	5,861	0	2,527	0	5,861	0%	100%
23G132	SDO	9,997	0	2,254	0	9,997	0%	100%
23L164	SDO	3,305	0	1,053	1,532	3,305	46%	100%
23L195	SDO	2,899	0	0	0	2,899	0%	100%
23L196	SDO	1,397	0	0	0	1,397	0%	100%
24C174	SDO	12,066	0	925	0	12,066	0%	100%
24CMH014	SDO	2,236	0	1,214	0	2,236	0%	100%
24D150	SDO	872	0	0	0	872	0%	100%
24G034	SDO	13,437	0	873	0	13,437	0%	100%
24G035	SDO	56,096	0	19,929	0	56,096	0%	100%
24LCSO060DR	SDO	5,154	0	0	0	0	0%	0%
25G041	SDO	2,794	0	728	0	2,794	0%	100%
25L144	SDO	619	0	0	0	619	0%	100%
25M006	SDO	2,198	0	0	0	0	0%	0%
25M007	SDO	3,629	0	1,883	0	3,629	0%	100%

Table 2-8. Sub-Catchment Area Investigation Status by Pipes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total Linear Feet of Storm Drain Pipe	Total Linear Feet of Storm Drain Pipe Inspections Performed ²		Total Linear Feet of Storm Drain Pipe Investigated/Completed ⁵		% Investigated/Complete by Storm Drain Pipe	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
26F038	SDO	7,803	0	0	0	7,803	0%	100%
26K035	SDO	4,792	0	0	2,964	4,792	62%	100%
26K050	CSO	2,336	0	0	0	2,336	0%	100%
26K052	SDO	303	0	0	0	303	0%	100%
26K099	SDO	23,733	0	8,446	0	23,733	0%	100%
26K254	SDO	1,096	0	0	0	1,096	0%	100%
26L055 (aka	SDO	451	0	0	0	451	0%	100%
26L070	SDO	670	0	0	0	670	0%	100%
28K061	SDO	14,489	0	8,343	0	14,489	0%	100%
28K386	SDO	997	0	0	0	997	0%	100%
28LCSO012DR	SDO	3,279	0	0	0	3,279	0%	100%
28N156 (B)	SDO	376	0	1,040	0	376	0%	100%
28N207 (B)	Interconnecti	11,631	0	13,028	0	11,631	0%	100%
28O025 (B)	SDO	2,428	0	3,203	0	2,428	0%	100%
28P001 (B)	SDO	1,826	0	998	0	1,826	0%	100%
29J129	SDO	1,478	0	0	0	1,478	0%	100%
29J212	SDO	23,313	0	7,461	0	23,313	0%	100%
29M049	SDO	4,237	0	764	0	4,237	0%	100%
29N135	SDO	1,460	0	0	0	1,460	0%	100%
29O001 (B)	Interconnecti	47,076	0	35,885	0	47,076	0%	100%
29P044 (B)	Interconnecti	2,508	0	3,454	0	2,508	0%	100%
2FMH120 (DCR	Interconnecti	2,748	0	0	0	2,748	0%	100%
30J019	CSO	1,084	0	0	0	1,084	0%	100%
30J030	SDO	3,145	0	1,549	0	3,145	0%	100%
30P062	SDO	1,841	0	1,056	0	1,841	0%	100%
30P107	SDO	2,018	0	652	0	2,018	0%	100%
31O004	SDO	4,791	0	1,819	0	4,791	0%	100%
31P084	SDO	2,974	0	723	0	2,974	0%	100%
3FMH56 (DCR 3FSDO15	SDO	4,749	0	3,674	0	4,749	0%	100%
4FMH90 (DCR 3FSDO16	Interconnecti	4,638	0	4,749	0	4,638	0%	100%
6DMH97	SDO	29,408	0	10,113	0	29,408	0%	100%
Stony Brook-Lower (21	SDO	72,563	0	0	0	0	0%	0%
03E207*	SDO	0	0	0	0	0	0%	100%
04F001*	SDO	0	0	0	0	0	0%	100%
04F203	SDO	78	0	0	0	78	0%	100%
05E180*	SDO	99	0	0	99	99	100%	100%
05E181*	SDO	52	0	0	0	52	0%	100%
05F254	SDO	210	0	0	0	210	0%	100%
6CMH117	SDO	720	0	0	720	720	100%	100%
06D083	SDO	200	0	0	0	200	0%	100%
06D084	SDO	694	0	0	0	694	0%	100%
06D086*	SDO	64	0	0	0	64	0%	100%
06D184	SDO	149	0	0	0	149	0%	100%
09B049	CSO	135	0	0	0	135	0%	100%
09E243	CSO	6,318	0	0	0	6,318	0%	100%
12B033	CSO	729	0	0	0	729	0%	100%
12H087	SDO	6,747	0	0	0	6,747	0%	100%
12H092	SDO	21,371	0	0	21,371	21,371	100%	100%
13F095	CSO	205	0	0	0	205	0%	100%
13F096	CSO	117	0	117	0	117	0%	100%
13F097*	SDO	0	0	0	0	0	0%	0%
16L097	CSO	2,973	0	0	0	0	0%	100%
18LCSO086DR	CSO	2,143	0	0	1,378	2,143	0%	100%
19MCSO082DR	CSO	1,283	0	0	0	0	0%	0%
19NCSO081DR	CSO	2,039	0	0	0	0	0%	0%
20G163	CSO	1,433	0	0	0	1,433	0%	100%
21H048	Interconnecti	968	0	0	0	968	0%	100%

Table 2-8. Sub-Catchment Area Investigation Status by Pipes

Sub-Catchment Area Investigations Performed During this Reporting Period and To Date

Reporting Period 7/1/2018 - 12/31/2018

Work done in reporting period
Work done during CWI1, CWI2, CWI3 and/or CWI4 (since November 2004)
No work done during CWI1, CWI2, CWI3 or CWI4 (since November 2004)

Sub-Catchment Area ¹	Area Type	Total Linear Feet of Storm Drain Pipe	Total Linear Feet of Storm Drain Pipe Inspections Performed ²		Total Linear Feet of Storm Drain Pipe Investigated/Completed ⁵		% Investigated/Complete by Storm Drain Pipe	
			Reporting Period ³	To Date ⁴	Reporting Period ³	To Date	Reporting Period ^{3 6}	To Date ⁷
21LCSO076DR	SDO	818	0	0	0	0	0%	0%
21M010	SDO	4,053	0	0	0	0	0%	0%
21MCSO078DR	CSO	0	0	0	0	0	0%	100%
21MCSO079DR	SDO	0	0	0	0	0	0%	100%
22KCSO068DR	SDO	2,996	0	0	0	0	0%	0%
22KCSO072DR	CSO	549	0	0	0	0	0%	0%
22LCSO073DR	SDO	7,859	0	0	0	0	0%	0%
23HMH81 (DCR 23ISDC)	CSO	439	0	0	0	439	0%	100%
23L015	SDO	3,977	0	0	0	0	0%	0%
23LCSO062DR	SDO	82	0	0	0	0	0%	0%
24L022 (aka 23LSDO02)	SDO	2,096	0	0	0	2,096	0%	100%
24L233	SDO	5,373	0	0	0	0	0%	0%
25NCSO004DR	SDO	3,838	0	0	0	3,838	0%	100%
26J052	SDO	559	0	0	0	0	0%	0%
26J055 (aka 26JSDO10)	SDO	2,094	0	0	0	0	0%	0%
27J044	SDO	3,425	0	0	0	3,425	0%	100%
28L077*	CSO	602	0	0	0	0	0%	0%
28LCSO019	SDO	1,367	0	0	0	0	0%	0%
29J029*	SDO	553	0	0	0	553	0%	100%
29NCSO014DR	CSO	371	0	0	371	371	100%	100%
29P005	SDO	211	0	211	0	211	0%	100%
30J006	SDO	2,148	0	0	0	0	0%	0%

¹(B) indicates a highest priority beach area; * indicates that there are no storm drain or common manholes located in the sub-catchment area.

²Total linear feet of pipe inspections performed includes all dye test records for pipes. Some pipes may have been inspected more than once.

³Reporting Period is July 1, 2018 through December 31, 2018.

⁴To Date includes data from 3/16/2009 through the end of the reporting period 12/31/2018

⁵Total linear feet of pipe investigated/completed is based on a manual review process which analyzes the number of manholes that fall within areas designated as complete, therefore it includes manholes that are inferred to be void of contamination based on downstream manhole inspections and/or dye tests. If a pipe segment falls partially within an area designated as complete and partially within and area designated as incomplete, the entire length of pipe is considered to be incomplete.

⁶The % complete estimate for the reporting period is calculated as the % complete to date minus the % complete calculated based on manual review conducted for the Compliance Report for the period of January 1, 2018 through June 30, 2018.

⁷The % complete estimate to date is calculated as the total linear feet of storm drain pipe investigated/completed to date divided by the total linear feet of storm drain pipe within each drainage area.

Table 2-9. Direct Illicit Connections 2018

Status	Bldg Number	Address	Neighborhood	Bldg Type	Sub-Catchment Area	Subwatershed	Date Verified	Date Corrected	Days to Correct	Sewage Removed (gpd)	BWSC Cost
Corrected under BWSC contract	11	Bardwell Street	Jamaica Plain	R-3	15GMH065SB	Charles via Stony Brook Conduit	02/06/2018	14-May-18	97	194	\$7,624
Corrected under BWSC contract	44	Boynton Street	Jamaica Plain	R-3	15GMH208SB	Charles via Stony Brook Conduit	12/13/2017	22-Feb-18	71	224	\$10,784
Corrected under BWSC contract	58	Brook Street	Brighton	R-3	24D032 Faneuil Brook	Charles River	02/06/2018	09-May-18	92	325	\$22,470
Corrected under BWSC contract	102	Dunster Road	Jamaica Plain	R-2	15GMH065SB	Charles via Stony Brook Conduit	07/13/2018	12-Sep-18	61	153	\$14,024
Internal illicit corrected by owner	19	Dunster Road	Jamaica Plain	R-2	15GMH065SB	Charles via Stony Brook Conduit	01/26/2018	06-Mar-18	39	17	
Corrected under BWSC contract	140	Englewood Avenue	Brighton	Comm	20DMH019	Charles River	03/12/2018	08-May-18	57	37	\$32,713
Internal illicit corrected by owner	243-237	Faneuil Street	Brighton	Comm	24D032 Faneuil Brook	Charles River	02/12/2018	18-Jun-18	126	120	
Internal illicit corrected by owner	71	Glen Road	Jamaica Plain	R-3	15GMH298SB	Charles via Stony Brook Conduit	01/26/2018	01-May-18	95	20	
Corrected under BWSC contract	164	Gove Street	East Boston	R-4-6	24NCSO003DR	Boston Harbor	03/23/2018	20-Aug-18	150	758	\$1
Corrected under BWSC contract	80-82	Hammond Street	Roxbury	Comm	20IMH579	Charles via Stony Brook Conduit	12/08/2017	31-Jan-18	54	459	\$23,364
Corrected under BWSC contract	10	Hammond Street	Roxbury	Apts	20IMH579	Charles via Stony Brook Conduit	12/08/2017	21-Feb-18	75	7,481	\$34,874
Corrected under BWSC contract	926	Hyde Park Avenue	Hyde Park	R-3	23IO23 Greenwood	Charles via Stony Brook Conduit	12/08/2017	13-Feb-18	67	440	\$22,647
Corrected under BWSC contract	2-4	Jamaica Street	Jamaica Plain	Exempt	15GMH065SB	Charles via Stony Brook Conduit	10/31/2017	18-Jan-18	79	3,109	\$15,901
Corrected under BWSC contract	18	Keane Road	West Roxbury	R-1	12B124 LaGrange	Charles River	12/27/2017	23-Feb-18	58	126	\$19,850
Corrected under BWSC contract	80-76	Kilmarnock Street	Fenway/Kenmore	Comm	23H042	Charles River	08/30/2018	20-Oct-18	51	415	\$21,671
Corrected under BWSC contract	12	Marcella Street	Roxbury	R-1	18IMH200SB	Charles via Stony Brook Conduit	09/26/2017	25-Jan-18	121	123	\$17,714
Corrected under BWSC contract	30-28	Montebello Road	Jamaica Plain	R-3	16HMH026SB	Charles via Stony Brook Conduit	12/13/2017	01-Feb-18	50	321	\$13,183
Corrected under BWSC contract	9	Organ Park Street	Roslindale	R-1	23IO23 Philbrick	Charles via Stony Brook Conduit	09/29/2017	24-Jan-18	117	145	\$42,655
Corrected under BWSC contract	5	Organ Park Street	Roslindale	R-2	23IO23 Philbrick	Charles via Stony Brook Conduit	09/29/2017	22-Jan-18	115	251	\$25,474
Corrected under BWSC contract	1	Organ Park Street	Roslindale	R-1	23IO23 Philbrick	Charles via Stony Brook Conduit	09/29/2017	19-Jan-18	112	25	\$41,613
Internal illicit corrected by owner	10	Portina Road	Brighton	R-2	24D032 Faneuil Brook	Charles River	02/12/2018	16-Mar-18	32	84	
Corrected under BWSC contract	171	South Street	Jamaica Plain	Apts	14GMH130SB	Charles via Stony Brook Conduit	03/12/2018	08-Sep-18	180	2,214	\$44,816
Internal illicit corrected by owner	160	Southampton Street	South End	Comm	21KCSO070	Boston Harbor	01/17/2018	30-Oct-18	286	2,147	
Corrected under BWSC contract	266	Spring Street	West Roxbury	R-2	08B122 Spring Street	Charles River	03/19/2018	14-May-18	56	270	\$9,636
Internal illicit corrected by owner	1030-1070	Tremont Street	Roxbury	Apts	20IMH579	Charles via Stony Brook Conduit	12/12/2017	10-Jan-18	29	22	
Internal illicit corrected by owner	25-48	Walford Street	Charlestown	Apts	28K010	Boston Harbor	03/22/2018	29-Mar-18	7	20	
Corrected under BWSC contract	20	Wardman Road	Roxbury	R-3	18HMH226SB	Charles via Stony Brook Conduit	12/13/2017	29-Jan-18	47	405	\$20,485
Internal illicit corrected by owner	2875	Washington Street	Roxbury	Apts	18HMH226SB	Charles via Stony Brook Conduit	07/13/2018	30-Oct-18	109	1,258	
Corrected under BWSC contract	2	Woodland Road	Jamaica Plain	R-1	15F288 Arboretum	Charles via Goldsmith Brook	08/30/2018	10-Nov-18	72	267	\$26,942
Internal illicit-owner has been notified	15	Butler Street	Dorchester	R-2	09K101 Huntoon	Neponset River	09/13/2018				
Internal illicit-owner has been notified	1476-1478	Commonwealth Avenue	Brighton	Condos	24G035 Salt Creek	Charles River	12/12/2017				
Included under BWSC Contract	177	Delhi Street	Mattapan	R-1	07H285 Blue Hill Ave	Neponset River	09/24/2018				
Internal illicit-owner has been notified	384-376	Dorchester Avenue	South Boston	Comm	21KCSO070	Boston Harbor	11/26/2018; 12/10/18				
Included under BWSC Contract	542	Dorchester Avenue	South Boston	Apts	21KCSO070	Boston Harbor	12/08/2017				
Included under BWSC Contract	32	Fifth Street	Charlestown	Comm	27L020/022	Boston Harbor	07/20/2018				
Internal illicit-owner has been notified	28-30	Gay Head Street	Jamaica Plain	R-3	18HMH271SB	Charles via Stony Brook Conduit	03/12/2018				
Included under BWSC Contract	284	Pond Street	Jamaica Plain	R-1	15F288 Arboretum	Charles via Goldsmith Brook	11/26/2018				
Included under BWSC Contract	21-23	Rockwood Street	Jamaica Plain	R-1	15F288 Arboretum	Charles via Goldsmith Brook	12/26/2018				
Internal illicit-owner has been notified	27	Round Hill Street	Jamaica Plain	R-1	18HMH271SB	Charles via Stony Brook Conduit	12/13/2017				
Included under BWSC Contract	30	Shanely Street	Brighton	R-1	24D032 Faneuil Brook	Charles River	11/26/2018				
Internal illicit-owner has been notified	27	Vogel Street	West Roxbury	R-1	07C006 Belle Avenue	Charles River	11/27/2018				

Illicit Connection was Corrected
Correction of Illicit Connection is Pending

Total Sewage Removed (gpd)	21,430
BWSC Cost to Correct Illicit Connection*	\$468,441

* Costs do not include costs for manhole inspections or dye tests used to locate the illicit discharge

Table 2-10. Indirect Illicit Discharges 2018

Status	Bldg Number	Address	Neighborhood	Bldg Type	Sub-Catchment Area	Subwatershed	Date Verified	Date Corrected	Days to Correct	Sewage Removed (gpd)	BWSC Cost to Plug Test Lateral	Reimbursed to Owner
Lateral repaired by owner	27	Banfield Avenue	Mattapan	R-1	07H285 Blue Hill Ave	Neponset River	12/30/2014	23-May-18	1240	845	\$2,375	\$4,000
Lateral repaired by owner	3	Bardwell Street	Jamaica Plain	R-6	15GMH2315B	Charles via Stony Brook Conduit	06/20/2018	07-Dec-18	170	346	\$1,929	\$4,000
Lateral repaired by owner	140	Bellevue Street	West Roxbury	R-2	07C006 Belle Avenue	Charles River	08/06/2018	13-Sep-18	38	14	\$1,943	\$4,000
Lateral repaired by owner	31-33	Bothwell Road	Brighton	R-2	24D032 Faneuil Brook	Charles River	06/22/2018	26-Sep-18	96	77	\$1,933	\$4,000
Lateral repaired by owner	50-52	Burton Street	Brighton	R-2	23B089	Charles River	07/26/2018	17-Sep-18	53	57	\$1,902	\$4,000
Lateral repaired by owner	44-46	Donnybrook Road	Brighton	R-2	24D032 Faneuil Brook	Charles River	12/26/2017	13-Feb-18	49	50	\$1,680	\$4,000
Lateral repaired by owner	79	Elm Hill Avenue	Roxbury	Apts	18HMH2265B	Charles via Stony Brook Conduit	07/11/2018	15-Aug-18	35	677	\$989	\$0
Lateral repaired by owner	75	Elm Hill Avenue	Roxbury	Apts	18HMH2265B	Charles via Stony Brook Conduit	07/11/2018	10-Aug-18	30	644	\$989	\$4,000
Lateral repaired by owner	6	Foodmart Road	South Boston	Warehouse	21KCSO070	Boston Harbor	10/10/2017	25-Jan-18	107	10,651	\$0	\$0
Lateral repaired by owner	2	Foodmart Road	South Boston	Warehouse	21KCSO070	Boston Harbor	10/10/2017	25-Jan-18	107	134	\$0	\$0
Lateral repaired by owner	59	Hampstead Road	Jamaica Plain	R-2	14GMH1305B	Charles via Stony Brook Conduit	06/22/2018	23-Aug-18	62	62	\$1,944	\$4,000
Lateral repaired by owner	289	Huntington Avenue	Hyde Park	R-2	23I023 Greenwood	Charles via Stony Brook Conduit	12/28/2017	31-Oct-18	307	89	\$1,340	\$4,000
Lateral repaired by owner	38	Johnston Road	Mattapan	R-3	11I577 Dorchester	Charles via Stony Brook Conduit	12/26/2017	07-May-18	132	148	\$1,760	\$4,000
Lateral repaired by owner	28	Malcolm Road	Jamaica Plain	R-1	13F011 Allandale	Charles via Goldsmith Brook	12/26/2017	19-Feb-18	55	38	\$1,540	\$4,000
Lateral repaired by owner	18	Malverna Road	Roslindale	R-1	23I023 Fallon Field	Charles via Stony Brook Conduit	12/26/2017	08-Feb-18	44	30	\$1,760	\$4,000
Lateral repaired by owner	5	Meyer Court	Roslindale	R-1	23I023 Philbrick	Charles via Stony Brook Conduit	12/26/2017	11-Apr-18	106	74	\$1,980	\$4,000
Lateral repaired by owner	23	Olmstead Street	Jamaica Plain	R-3	16HMH1325B	Charles via Stony Brook Conduit	12/26/2017	15-Feb-18	61	61	\$1,920	\$4,000
Lateral repaired by owner	44	Peter Parley Road	Jamaica Plain	R-1	16HMH1325B	Charles via Stony Brook Conduit	12/26/2017	05-Feb-18	41	99	\$1,900	\$4,000
Lateral repaired by owner	48	Presentation Road	Brighton	R-2	24D032 Faneuil Brook	Charles River	06/18/2018	08-Nov-18	143	75	\$4,860	\$4,000
Lateral repaired by owner	181-185	Ruthven Street	Roxbury	Apts	18HMH2265B	Charles via Stony Brook Conduit	12/26/2017	08-May-18	133	836	\$2,080	\$4,000
Lateral repaired by owner	119	Sedgewick Street	Jamaica Plain	R-3	15GMH2315B	Charles via Stony Brook Conduit	6/20/2018	07-Aug-18	48	51	\$1,925	\$4,000
Lateral repaired by owner	204	South Street	Jamaica Plain	R-2	14GMH1305B	Charles via Stony Brook Conduit	12/26/2017	28-Feb-18	64	67	\$1,360	\$4,000
Lateral repaired by owner	199	South Street	Jamaica Plain	Condo	14GMH1305B	Charles via Stony Brook Conduit	12/26/2017	09-May-18	134	178	\$1,940	\$4,000
Lateral repaired by owner	7	Summer Street	West Roxbury	R-2	07C006 Belle Avenue	Charles River	08/06/2018	03-Sep-18	28	50	\$1,915	\$4,000
Lateral repaired by owner	1075-1073	Tremont Street	Roxbury	Exempt	20IMH579	Charles via Stony Brook Conduit	12/26/2017	24-Apr-18	119	79	\$1,200	\$4,000
Lateral repaired by owner	40	Vogel Street	West Roxbury	R-1	07C006 Belle Avenue	Charles River	08/06/2018	07-Sep-18	32	21	\$1,906	\$4,000
Lateral repaired by owner	36	Vogel Street	West Roxbury	R-1	07C006 Belle Avenue	Charles River	08/13/2018	10-Dec-18	119	38	\$1,936	\$4,000
Lateral repaired by owner	24	Vogel Street	West Roxbury	R-1	07C006 Belle Avenue	Charles River	08/06/2018	27-Sep-18	52	29	\$1,929	\$3,785
Lateral repaired by owner	10	Wardman Road	Roxbury	R-3	18HMH2265B	Charles via Stony Brook Conduit	12/26/2017	10-Apr-18	105	155	\$1,240	\$4,000
Verified leaking lateral-owner has been notified	7	Bonad Road	West Roxbury	R-2	13D077/078	Charles via Bussey Brook	11/28/2018					
Verified leaking lateral-owner has been notified	113	Carolina Avenue	Jamaica Plain	R-2	15GMH2315B	Charles via Stony Brook Conduit	12/20/2012					
Verified leaking lateral-owner has been notified	127	Carolina Avenue	Jamaica Plain	R-1	15GMH2315B	Charles via Stony Brook Conduit	12/20/2018					
Verified leaking lateral-owner has been notified	382	Centre Street	Jamaica Plain	R-2	18HMH2715B	Charles via Stony Brook Conduit	08/17/2018					
Verified leaking lateral-owner has been notified	145	Englewood Avenue	Brighton	Condos	20DMH019	Charles River	08/23/2018					
Verified leaking lateral-owner has been notified	118	Gardner Street	West Roxbury	R-1	10B015 Charles River Rd.	Charles River	11/20/2018					
Verified leaking lateral-owner has been notified	62	Gordon Street	Brighton	R-2	25E037 Telford	Charles River	06/27/2018					
Verified leaking lateral-owner has been notified	31	Johnston Road	Dorchester	R-3	11I577 Dorchester	Charles via Stony Brook Conduit	11/15/2018					
Verified leaking lateral-owner has been notified	51	Mendum Street	Roslindale	R-1	12ESDO418	Unnamed Wetlands	11/28/2018					
Verified leaking lateral-owner has been notified	64	North Beacon Street	Brighton	R-2	25E037 Telford	Charles River	12/12/2018					

Table 2-10. Indirect Illicit Discharges 2018

Status	Bldg Number	Address	Neighborhood	Bldg Type	Sub-Catchment Area	Subwatershed	Date Verified	Date Corrected	Days to Correct	Sewage Removed (gpd)	BWSC Cost to Plug Test Lateral	Reimbursed to Owner
Verified leaking lateral-owner has been notified	20	Old Harbor Street	South Boston	Nursing Home	21KCSO070	Boston Harbor	12/10/2018					
Verified leaking lateral-owner has been notified	15	Olmstead Street	Jamaica Plain	R-1	16HMH132SB	Charles via Stony Brook Conduit	12/10/2018					
Verified leaking lateral-owner has been notified	19	Olmstead Street	Jamaica Plain	R-1	16HMH132SB	Charles via Stony Brook Conduit	10/19/2018					
Verified leaking lateral-owner has been notified	52	Ormond Street	Mattapan	R-2	111577 Dorchester	Charles via Stony Brook Conduit	08/06/2018					
Verified leaking lateral-owner has been notified	163	South Street	Jamaica Plain	R-6	14GMH130SB	Charles via Stony Brook Conduit	08/17/2018					
Verified leaking lateral-owner has been notified	153	South Street	Jamaica Plain	R-3	14GMH209SB	Charles via Stony Brook Conduit	08/28/2018					

	Leaking Lateral was Repaired
	Repair of Lateral is Pending

Total Sewage Removed (gpd)		15,675
BWSC Cost to Plug Test Lateral to Verify Leakage*		\$50,175
BWSC Cost to Reimburse Owner for Lateral Repair*		\$103,785
Total BWSC Cost to Verify Leaking Lateral and Reimburse Owner*		\$153,960

* Costs do not include costs for manhole inspections or dye tests used to locate the illicit discharge

Table 3 - 1. Brook Inlet and Outlet Cleaning

Waterway	Neighborhood	Frequency of Cleaning	Equipment Used
Arboretum Outfall	Jamaica Plain	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
Bussey Brook/Stony Brook Conduit/Treeland	Jamaica Plain	Checked before/after storms; cleaned as needed	Catch Basin Truck
Bussey Brook-Next to Church Of the Annunciation	West Roxbury	Checked before/after storms; cleaned as needed	Catch Basin Truck, Crane
Canterbury Brook Conduit @ American Legion Hwy	Roslindale	Checked before/after storms; cleaned as needed	Rodding/Flushing crew/ Catch Basin Truck
Canterbury Brook Outlet at Harvard Street	Mattapan	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
Centre Street/Lane	West Roxbury	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
Chandler Pond	Brighton	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
Grove Street-Wetlands (particle separator)	West Roxbury	Checked before/after storms; cleaned as needed	Catch Basin Truck, Vactor
Mother Brook	West Roxbury	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
Muddy River-Riverway and the Fenway/Grates	Boston	Checked before/after storms; cleaned as needed	Catch Basin Truck, Crane
Norton Street-intermittent stream	Hyde Park	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew
American Legion Hwy near Wilmot St	Hyde Park	Checked before/after storms; cleaned as needed	Flushing/Rodding Crew

Table 3 - 2. BWSC Particle Separator Cleaning 2018

Location	Neighborhood	Map #	Outfall #	Receiving Water	2017 Material Removed (cubic yards) Various dates	Comments
Bussey Street/Arboretum	Jamaica Plain	13F	13F011	Bussy Brook	0.20	
Centre Lane	WROX	8C	8C025,8C026	Wetlands	0.10	
Centre Street	WROX	6C	6C110	Wetlands	0.10	
Coleridge Street	East Boston	28O	28O025	Boston Harbor	0.20	
Coniston Road	Roslindale	12E	13I023	Stony Brook Conduit	NA	Amt removed not recorded
Denny Street	Dorchester	15L	15L089 (CSO)	Malibu Beach	NA	Separator needs repair
Ericsson Street	Dorchester	12M	12M091	Neponset River	0.20	
Fenwood Road	Roxbury	20G	20G161	Muddy River	0.30	
Lawley Street	Dorchester	12L	12L092	Pine Neck Creek	NA	Amt removed not recorded
Martha Road	Central	26J	26J100	Charles River	NA	Amt removed not recorded
Neponset Avenue	Dorchester	11M	11M093	Neponset River	0.20	
Norton Street	Hyde Park	3E	3E185	Open Channel	0.20	
Perkins Street	Jamaica Plain	17F	17F012	Jamaica Pond	NA	Amt removed not recorded
Waldemar Avenue	East Boston	30P	30P107	Belle Isle Inlet	0.20	
Waldemar Avenue	East Boston	31O	31O004	Belle Isle Inlet	NA	Amt removed not recorded
Walter Street	Roslindale	12F	12E418	Wetlands	0.10	Amt removed not recorded
TOTALS					1.80	

Table 3-3. 2018 HAZMAT SPILL & SEWER USE VIOLATIONS

	Date	Street	Complaint	BSWC Personnel	Type	Cause of Incident / Responsible Party
1	1/10/18	672 American Legion Hwy, ROS	Fuel Spill	Taylor	Diesel	A truck from Hogan Trucking ruptured it's tank and approximately a 100 gallons of diesel fuel spilled into loading dock area. Most of the fuel was covered by speedy dry from BFD, oil pads and a boom were placed into private CB, BWSC drain manhole 11GMH323 was boomed as a precaution, no signs of diesel in drain line. WO#1409113
2	2/15/18	274 Summer St, South Boston (rear)	Hydraulic Fluid	Taylor/Conran	Hydraulic Fluid	A trash truck owned by Casella, leaked about 40 gallons of hydraulic fluid, into the rear alley of 274 Summer St, South Boston. An environmental clean up company was called to clean the impacted area. Drain lines were checked and no product was found to have left the any of the impacted catch basins. (WO#1415691)
3	2/28/18	79 Fort Ave	liquid cement	Dorleans	dried cement runoff	Check Fort Ave Terrace for liquid cement runoff and nothing observed at construction site. Checked construction site across from 79 Fort Av and observed slight cement runoff from construction site. Contractor will clean site and place erosion control. Tuttle to follow up. WO#1415317
4	3/1/18	3411 Washington St, JP	Soap Suds	Taylor	Soap Suds	Found soapy water coming from Acme Collision building and flowing into the gutter. Told manager that he has to stop and discharge the soapy water into his sewer. Will check to make sure that he has complied. WO#1415503
5	3/3/18	24 Parkside Dr., JP	Transformer Fluid	McKinnon	Transformer Fluid	Transformer fluid had been contained prior to arrival. Clean Harbors used speedy dry to soak up the fluid and they also boomed the catch basins at the end of the street. Outfall 15FSDO0288 was boomed as well. Nothing observed in downstream drain manholes or in outfall. Site contained. WO#1415742
6	3/20/18	150 William F McClellan Hwy	Transformer Fluid	Dorleans	Transformer Fluid	Transformer fluid contained to bathroom in builidng. Clean Harbors was onsite conducting clean up. No Storm Drains impacted. WO#14116784
7	4/5/18	75 Westland Av, FEKE	Dumping solvent	Dorleans	Nothing	Observed Standing water in curb. No evidence of dumping in catch basin 211CB92. Spoke with the manager and he will inform his employees not to dump in public way. WO#1418167
8	4/9/18	1080 Boylston St, FEKE	Grease	Vivian/ Dorleans	Grease	Baystate Hood cleaning grease from hood of Boloco restaurant. The grease from the hood spilled on the pavement flowed towards a CB in the alley way. Company to clean grease on pavement and CB WO#1418405
9	4/9/18	40 Jamaica Wy	White Substance	James		BWSC lines are fine. The Source of the issue is from Brookline. Brookline Fire and DPW investigated. WO#1418435
10	4/10/18	15 Arlington St (Public Alley 437)	Unkown	Dorleans	grease	Grease was leaking from the Taj Hotel Dumpster in Public Alley 437. Spoke with Director of engineering and she will remedy the issue and clean up area and impacted CB. WO#1418472
11	4/21/18	49 Solcum Rd., JAPL	Hydraulic Fluid	McKinnon	Hydraulic Fluid	Hydraulic fluid from a tree cutter spilled onto the Solcum St. in front of house #49 and the end of the cur de-sac. Highlander Tree and Landscaping is the responsible party. They realize that they are responsible and will have area cleaned. Fluid was containd to curb, nothing made it into our catch basins or water bodies. Lt. Sifford to remain on site until clean up is complete. Nothing further to report at this time. WO: 1419559
12	4/25/18	Ruggles St & Parker St	Diesel Fule	Dorleans	Diesel Fuel	A dumpster truck was in a accident. Fuel spilled in roadway. The company Republic placed speed dr in roadway. The fuel appeared contained to CB185. placed spill pads in CB and boon at MH331. WO# 1419847
13	5/16/18	Shawmut Av&Union Park, South End	Grease	Taylor	Mud	Checked catch basins in area, saw no grease, there was some mud like substance on a nearby catch basin, took photo WO#1421857
14	5/17/18	17 Stillings St, South Boston	Sewage	Taylor	Oil water seperater sediment	Met BFD on site, building was pumping out their oil water seperater and the hose broke, approximately 800 gallons of water and sediment was spilled, BFD tested water and no oil found, building managers and CBRE will clean sediment on the sidewalk

Table 3-3. 2018 HAZMAT SPILL & SEWER USE VIOLATIONS

	Date	Street	Complaint	BSWC Personnel	Type	Cause of Incident / Responsible Party
15	6/23/18	39 Bellaire Rd., West Roxbury	Sewage	McKinnon	Mud/Clay	This is not a SSO. Upon getting to the site, the debris residual in the curb appears to be construction vehicle runoff. The substance had a clay consistency and most likely was dumped. This appears to be more of an illegal dumping issue. I dye tested the upstream sewer 12EMH16 and it was observed in 12DMH377. Line was down and running on arrival and departure. Will make a follow up to vactor 12DMH377 for minor debris in manhole. Otherwise, nothing further to report at this time.
16	6/22/18	19 Lee Hill Road, Roslindale	oil	Taylor	unknown	Met ISD inspector on site, he stated that a spill happened yesterday, no information on type of material and amount. Area catch basins and drain manholes were checked, no signs of any oil. WO#1425369
17	7/7/18	12 Dewey Street, Roxbury	Transformer Fluid (Mineral Oil)	McKinnon	Transformer Fluid (Mineral Oil)	An old tree rotted out, failing onto the power lines. This caused a verizon telephone pole to snap and fall to the street. There was an eversource transformer on the pole, which had its contents (transformer fluid - mineral oil) to spill onto the street when the pole fell. Most oil remained on the street with some making it to 17JCB35 but did not leave catch basin. Catch basin ties into combined line downstream. Eversource hired clean harbors to clean the area and vactor the catch basin. Chris cummins of boston hazmat was also on site. Tree company working on removing the tree and eversource trying to restore power. Nothing further to report at this time. WO: 1426669
18	7/17/18	146 Tremont St, Downtonw & Brighton	Grease	Dorleans/ Williams	Nothing	Call from ISD of a grease barrel exploding with no neighborhood for address. Went to both tremont Street and no signs of spill or dumping. WO# 1427830 & 1427991
19	7/26/18	Rear of 591 Albany St	Discharging in CB	Dorleans/Taylor	Grey water	Production trailer was discharging water from the sink and washer in the trailer to the CB. Informed the manager on site they cannot discharge into CB and they disconnected the hose. WO# 1428626
20	8/14/18	44 Binney St, FEKE	Hydraulic fuel	Dorleans	Hydraulic Fuel	Hydraulic fuel from waste compactor spilled onto roadway. Republic hired contractor to clean up impacted area, CB and Storm drain. WO#1439205
21	8/30/18	11 Shafter St, DOR	cement	Nesbitt/Taylor	stone dust	Found owners cutting patio stone in front yard, some of the water and dust was flowing into gutter and a BWSO catch basin, I told owners to cease impacting catch basin and to clean mud in the gutter. Will check street tomorrow. WO#1440464
22	9/13/18	35 Johnston Rd	Sewage	Williams	Nothing	Found no Evidence of Sewage Dumped in CB. Will send warning to Throne Depot. WO# 1441608
23	9/22/18	449 Poplar St., ROSI	Water Discharge	McKinnon	Dechlorinated Swimming Pool Water Discharge	Received call from Demetri about what appeared to be customers emptying their swimming pool. He had observed company at property. When I arrived they were no longer discharging to the street and a few wet spots remained. Did not observe any violations while present. Nothing further to report at this time. WO: 1457331
24	9/22/2018	243 Metropolitan Ave., ROSI	Water Discharge	McKinnon	Dechlorinated Swimming Pool Water Discharge	Received call from Demetri about what appeared to be customers emptying their swimming pool. When I arrived customer stated that he hasn't put chemicals in in months. Made sure he knew the importance of not discharging over chlorinated water. Water appeared to be fine. No violations observed. Nothing further to report at this time. WO: # 1457344
25	9/26/2018	467 Chelsea St., EBOS	Diesel Fuel	Bonilla	Diesel Fuel	Booms in 28NMH80 and 28NMH18. Respond to call of Hazmat spill. Upon arriving, noticed diesel fuel on street/curb and in 28NCB29. Boston Fire reported no high level hits. Place booms and spill pads in 28NCB29 and downstream combined sewer MH 28NMH18 and 28NMH80. Will remove in a few days. Todisco cleaned up roadway. Nothing further to report at this time.
26	10/4/18	Putnam @ Condor St, EBOS	Concrete	Dorleans/McSweeney	Residual Runoff from Concrete Work on Driveway	CB20 not impacted. CB22 had a small residual of concrete runoff from driveway work at 2 Putnam St. No one was actively dumping concrete into CBs WO#1470290

Table 3-3. 2018 HAZMAT SPILL & SEWER USE VIOLATIONS

	Date	Street	Complaint	BSWC Personnel	Type	Cause of Incident / Responsible Party
27	11/2/18	150 Seaport Blvd, SBOS	Oil Sheen	Dorleans	Oil Sheen	Near the outfall there was small remnant of the oil sheen near the outfall. Crew placed booms around the outfall. Checked upstream manholes MH201 and 217 and checked CBs CB147, CB136, and unmapped CB in front of 150 Seaport Blvd. Placed oil pads in the unmapped CB with odor. WO# 1477073
28	11/13/18	100 North Beacon St, ALBR	Hydraulic Fluid	Dorleans	Hydraulic Fluid	BWSC vendor, Blue Hill Towing, their tow truck's hydraulic line leaked and the tow operator left the area without cleaning area. Placed spill pads and booms to mitigate flow to private CB. BFD informed. Company is suppose to come and clean up area. WO# 1478456
29	11/16/18	State Street@Chatham Row, Boston, CENT	Diesel Fuel	Taylor	Diesel Fuel	Less than 5 gallons of fuel spilled from a truck on Chatham Row, cleanup company was cleaning impacted area, checked nearby sewer and drain lines, no signs of any fuel or odors
30	11/20/18	I @ East First Street, SBOS	Oil Sheen	Dorleans	Oil Sheen	Met DEP Chris Breshan, Oil sheen flowing from CSO outfall. Crew placed boom in MH and DEP hired company to clean oil.
31	11/25/18	600 Washington St, CENT	Heating Fuel	James	Heating Fuel	300 gallons of of heating fuel spilled in basement. Sump pump activated and pumped some fuel into BWSC sewer line. Clean Harbors was onsite cleaning impacted sewer line and area. WO# 1479710
32	12/4/18	1100 Massachusetts Av, NDOR	Fuel	Dorleans/Gobbi	Molasses	Responded to possible fuel spill. BFD Engine 21 met with BWSC and Security manager on site and determined it was molasses which was being used preserve the salt. The rain caused the separation of the molasses, which caused it to start flowing towards the CB. WO#1480776
33	12/5/18	69 Highland St, HYDE	oil	Dorleans	Nothing	Responded to a call of illegal dumping of oil in CB. Checked CB no odor or material found. WO#1480835
34	12/12/18	135 Dana Ave, HP	black substance	Taylor	Leaf debris	Inspected CB at 135 Dana Ave, looks like it was recently cleaned, some decomposing leaf material left on grate, no signs or any fuels or oils in or around the CB. WO#1481629
35	12/28/18	1670 Soldiers Field Rd, Brighton	fuel spill	Taylor/Conran	Diesel	Met BFD on scene, a small amount of fuel (less than a gallon) spilled onto parking lot surface causing an oil sheen, no BWSC facilities impacted, place oil absorbing pad in private CB as a precaution. WO#1483104
36	12/31/18	88 Black falcon Ave, SBOS	Diesel	James	Diesel	Responded fuel Spill. BFD, MassDep onsite. A truck's fuel tank was punctured and diesel fuel spilled in parking lot. Some fuel entered private unmapped CB and was contained. The storm drain in the area is owned by Massport. WO# 1483223

Table 3-4. Private Infiltration Devices Approved 2018

PROJECT NO	ADDRESS #	STREET NAME	NEIGHBORHOOD	SIGNATURE DATE	INFILTRATION SYSTEM
17384	162	HIGHLAND ST	ROXB	1/4/2018	BIO RETENTION
17409	260	COMMONWEALTH AV	BBBH	1/4/2018	STORMTANK
17454	358	ATHENS ST	SBOS	1/4/2018	CULTEC CHAMBER
17496	254-256	EVERETT ST	EBOS	1/4/2018	DRYWELL
17528	102	SAINT BOTOLPH ST	BBBH	1/4/2018	STORMTECH CHAMBERS
17621	32	NORTHEAST ABBOT ST	ROXB	1/4/2018	DRYWELL
17633	18	ARMANDINE ST	SDOR	1/4/2018	CULTEC CHAMBER
17432	26	CENTRE ST	ROXB	1/5/2018	CULTEC CHAMBER
17469	37	FARRAGUT RD	SBOS	1/5/2018	CULTEC CHAMBER
17484	61	WOODRUFF WY	MATP	1/5/2018	STORMTECH CHAMBERS
17554	3850	WASHINGTON ST	ROSL	1/5/2018	DRYWELL
17343	10	DURHAM ST	BBBH	1/8/2018	STORMTECH CHAMBERS
17394	5	ACORN ST	BBBH	1/8/2018	DRYWELL
17549	1153	CENTRE ST	JAPL	1/11/2018	MULTIPLE
13371	17	COMMONWEALTH AV	BBBH	1/12/2018	CULTEC CHAMBER
17514	10	GRIMES ST	SBOS	1/12/2018	CULTEC CHAMBER
17582	331	COLUMBIA RD	SDOR	1/12/2018	STORMTECH CHAMBERS
17411	50	STANIFORD ST	CENT	1/16/2018	PERFORATED PIPE
17301	533	EAST SECOND ST	SBOS	1/22/2018	CULTEC CHAMBER
17440	3521	WASHINGTON ST	JAPL	1/22/2018	PERFORATED PIPE
17458	100	EAST NEWTON ST	ALBR	1/22/2018	TANK/INJECTION WELL
17551	128	COLERIDGE ST	EBOS	1/22/2018	STORMTECH CHAMBERS
17556	1176	TREMONT ST	ROXB	1/22/2018	DRYWELL
17558	37	REDGATE RD	WROX	1/22/2018	CULTEC CHAMBER
17581	41	REDGATE RD	WROX	1/22/2018	CULTEC CHAMBER
17586		CHOICE WY	ROXB	1/22/2018	DRYWELL
17494	7-11	BALINA PL	MATP	1/24/2018	PERFORATED PIPE
17328	50	WAVERLY ST	ALBR	1/29/2018	STORMTECH CHAMBERS
17591	56	CEDAR ST	ROXB	1/29/2018	CULTEC CHAMBER
18018	67	LUBEC ST	EBOS	1/29/2018	DRYWELL
18031	56-58	BOYNTON ST	JAPL	1/29/2018	STORMTECH CHAMBERS
17274	458	COLUMBIA RD	NDOR	1/30/2018	CULTEC CHAMBER
17356	100	CABOT ST	ROXB	1/30/2018	MULTIPLE
17544	161	COTTAGE ST	EBOS	1/30/2018	STORMTECH CHAMBERS
17547	502	EAST THIRD ST	SBOS	1/30/2018	DRYWELL
17572	13	WEST MILTON PL	HYDE	1/30/2018	CULTEC CHAMBER
17313	231	GOLD ST	SBOS	2/1/2018	LEACHING BASIN
15030	20	PENNIMAN RD	ALBR	2/2/2018	CULTEC CHAMBER
16188	58	TOLMAN ST	SDOR	2/7/2018	DRYWELL
16484	19	DAWES ST	NDOR	2/7/2018	STORMTECH CHAMBERS
18042	92	LEXINGTON ST	EBOS	2/7/2018	STORMTECH CHAMBERS
17488	451	WASHINGTON ST	SDOR	2/8/2018	STORMTECH CHAMBERS
17466	930	BLUE HILL AV	MATP	2/12/2018	MULTIPLE
17567	46	MAYWOOD ST	ROXB	2/12/2018	CULTEC CHAMBER
17583	23	RUSKINDALE RD	HYDE	2/12/2018	MULTIPLE
17628	48	MAVERICK ST	EBOS	2/12/2018	STORMTECH CHAMBERS
17623	13	MONTROSE ST	ROXB	2/14/2018	STORMTECH CHAMBERS
17634	14	CORDIS ST	CHAR	2/14/2018	CULTEC CHAMBER
17223	56	UNION ST	CHAR	2/15/2018	CULTEC CHAMBER
17503	35	WALES ST	ROXB	2/15/2018	CULTEC CHAMBER

Table 3-4. Private Infiltration Devices Approved 2018

17520	25	WAYNE ST	ROXB	2/15/2018	CULTEC CHAMBER
17082	12	WESTERN AV	ALBR	2/16/2018	STORMTECH CHAMBERS
17325	402	WARREN ST	ROXB	2/16/2018	CULTEC CHAMBER
17360	3	STILLMAN PL	CENT	2/22/2018	DRYWELL
17362	2	STILLMAN PL	CENT	2/22/2018	DRYWELL
17502	249	HUMBOLDT AV	ROXB	2/22/2018	CULTEC CHAMBER
17525	358-360	WALNUT AV	ROXB	2/22/2018	CULTEC CHAMBER
18048	167	WEST NEWTON ST	BBBH	2/22/2018	STORMTECH CHAMBERS
18051	97-103	NORFOLK ST	SDOR	2/22/2018	CULTEC CHAMBER
17221	77	WARREN ST	ALBR	2/23/2018	DRYWELL
17273	246	WARREN AV	CHAR	2/23/2018	STORMTECH CHAMBERS
17523	546-550	WARREN ST	ROXB	2/23/2018	CULTEC CHAMBER
17524	39	SCHUYLER ST	ROXB	2/23/2018	CULTEC CHAMBER
17566	47-49	WALNUT ST	SDOR	2/23/2018	CULTEC CHAMBER
18041	48	CHELSEA ST	EBOS	2/23/2018	CULTEC CHAMBER
17361	65-67	BORDER ST	EBOS	2/26/2018	PERFORATED PIPE
17509	549	WASHINGTON ST	ALBR	2/26/2018	STORMTANK
17553	121	ADDISON ST	EBOS	2/26/2018	STORMTECH CHAMBERS
17565	245	CHELSEA ST	EBOS	2/26/2018	CULTEC CHAMBER
18049	9	WARNER ST	ROXB	2/26/2018	STORMTECH CHAMBERS
18050	7	WARNER ST	ROXB	2/26/2018	STORMTECH CHAMBERS
17477	76	STONLEY RD	JAPL	2/28/2018	LEACHING BASIN
17222	370-380	HARRISON AV	SEND	3/1/2018	LEACHING BASIN
17266	35	COMMONWEALTH AV	ALBR	3/1/2018	DRYWELL
18019	161	WASHINGTON ST	ALBR	3/1/2018	PERFORATED PIPE
18091	36	DWIGHT ST	SEND	3/1/2018	STORMTECH CHAMBERS
17350	55	SHATTUCK ST	FEKE	3/2/2018	STORMTANK
17548	64	RUTLAND ST	SEND	3/2/2018	CULTEC CHAMBER
18035	27	PARTRIDGE ST	WROX	3/2/2018	CULTEC CHAMBER
17535	92	AUCKLAND ST	NDOR	3/6/2018	CULTEC CHAMBER
17320	321	HARRISON AV	SEND	3/7/2018	MULTIPLE
17175	392-398	CAMBRIDGE ST	ALBR	3/8/2018	CULTEC CHAMBER
17459	198	HANOVER ST	CENT	3/8/2018	TANK/INJECTION WELL
18003	18	PORTER ST	ROXB	3/8/2018	STORMTECH CHAMBERS
18102	844	MORTON ST	CENT	3/8/2018	DRYWELL
17602	23	METROPOLITAN AV	ROSL	3/9/2018	DRYWELL
17254	1152	BENNINGTON ST	EBOS	3/12/2018	DRYWELL
17255	33	LEYDEN ST	EBOS	3/12/2018	STORMTECH CHAMBERS
18052	82	WOODROW AV	MATP	3/12/2018	CULTEC CHAMBER
17522	81	WALNUT PARK	ROXB	3/14/2018	CULTEC CHAMBER
18014	414	MERIDIAN ST	EBOS	3/14/2018	CULTEC CHAMBER
18113	15	RICHVIEW ST	SDOR	3/14/2018	CULTEC CHAMBER
17474	5	MAJOR MICHAEL J O'CONNOR	SBOS	3/15/2018	CULTEC CHAMBER
17085	92	RUSSELL ST	CHAR	3/16/2018	CULTEC CHAMBER
16232	1-3	SEWALL ST	JAPL	3/19/2018	DRYWELL
17229	108	DORCHESTER ST	SBOS	3/19/2018	STORMTECH CHAMBERS
17334	205	WEST EIGHTH ST	SBOS	3/19/2018	DRYWELL
18002	433	DUDLEY ST	ROXB	3/19/2018	STORMTECH CHAMBERS
17597	20	LITTLEDALE ST	ROSL	3/20/2018	CULTEC CHAMBER
18030	35	CHICKATAWBUT ST	SDOR	3/20/2018	DRYWELL
17314	21	DUNCAN ST	SDOR	3/21/2018	DRYWELL

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18044	75	SYDNEY ST	NDOR	3/22/2018	STORMTECH CHAMBERS
16207	54	DEDHAM ST	HYDE	3/26/2018	DRYWELL
16209	80	COMMONWEALTH AV	ALBR	3/26/2018	PERFORATED PIPE
17579	55	HULL ST	CENT	3/26/2018	DRYWELL
18083	28	BROWNING AV	ROXB	3/26/2018	CULTEC CHAMBER
18084	26	BROWNING AV	ROXB	3/26/2018	CULTEC CHAMBER
18085	24	BROWNING AV	ROXB	3/26/2018	CULTEC CHAMBER
18093	11	TILESBORO ST	SDOR	3/26/2018	STORMTECH CHAMBERS
17326	153	BOWEN ST	SBOS	3/28/2018	CULTEC CHAMBER
17333			HYDE	3/28/2018	CULTEC CHAMBER
17342	227	HAVRE ST	EBOS	3/28/2018	CULTEC CHAMBER
17624	217	D ST	SBOS	3/28/2018	PERFORATED PIPE
18001	7	BEAVER PL	BBBH	3/28/2018	DRYWELL
18125	1824-1826	RIVER ST	HYDE	3/28/2018	CULTEC CHAMBER
17534	2837	WASHINGTON ST	ROXB	3/29/2018	CULTEC CHAMBER
18013	287-291	OLD COLONY AV	SBOS	3/29/2018	CULTEC CHAMBER
18015	10	SPRING GARDEN ST	NDOR	3/29/2018	PERFORATED PIPE
18108	145	CENTRE ST	JAPL	3/29/2018	CULTEC CHAMBER
17110	584	CAMBRIDGE ST	ALBR	3/30/2018	STORMTECH CHAMBERS
17598	3193-3201	WASHINGTON ST	JAPL	3/30/2018	LEACHING BASIN
18025	295	BLUE HILL AV	ROXB	3/30/2018	LEACHING BASIN
17049	1-1A	LAMSON CT	EBOS	4/2/2018	CULTEC CHAMBER
17278	3-5	LAMSON CT	EBOS	4/2/2018	CULTEC CHAMBER
17197	306	WEST THIRD ST	SBOS	4/3/2018	STORMTECH CHAMBERS
17599	735-745	TRUMAN PKWY	HYDE	4/3/2018	CULTEC CHAMBER
18143	8	RUTLAND SQ	SEND	4/3/2018	STORMTECH CHAMBERS
16016	50-58	INDUSTRIAL DR	HYDE	4/4/2018	LEACHING BASIN
17410	155	PORTER ST	EBOS	4/6/2018	STORMTECH CHAMBERS
18080	136-138	NEPONSET AV	SDOR	4/6/2018	STORMTECH CHAMBERS
18092	91	WESTLAND AV	FEKE	4/6/2018	CULTEC CHAMBER
14334	39	A ST	SBOS	4/10/2018	LEACHING BASIN
17272	163	NEWBURY ST	BBBH	4/10/2018	CULTEC CHAMBER
17568	211	CONDOR ST	EBOS	4/10/2018	CULTEC CHAMBER
18011	156	WEST SELDEN ST	MATP	4/10/2018	CULTEC CHAMBER
18142	1272	MASSACHUSETTS AV	ROXB	4/10/2018	CULTEC CHAMBER
17495	175	BEACON ST	ALBR	4/13/2018	CULTEC CHAMBER
10221	395-425	MASSACHUSETTS AV	FEKE	4/20/2018	LEACHING BASIN
17392	340	WEST SECOND ST	SBOS	4/23/2018	STORMTECH CHAMBERS
17515	73	FALCON ST	EBOS	4/23/2018	CULTEC CHAMBER
17627	28	WALLINGFORD RD	ALBR	4/23/2018	CULTEC CHAMBER
17629	114-120	BROOKSIDE AV	JAPL	4/23/2018	STORMTECH CHAMBERS
18024	83	CHESTNUT ST	BBBH	4/23/2018	CULTEC CHAMBER
18029	142	BEACON ST	BBBH	4/23/2018	CULTEC CHAMBER
18043	86-88	F ST	SBOS	4/23/2018	CULTEC CHAMBER
18087	111	WESTERN AV	ALBR	4/23/2018	MULTIPLE
18088	58P	WACHUSETT ST	ROSL	4/23/2018	DRYWELL
18141	5245-5251	WASHINGTON ST	ROXB	4/23/2018	MULTIPLE
18145	24	HOWELL ST	NDOR	4/23/2018	DRYWELL
16479	77-79	HOMESTEAD ST	ROXB	4/26/2018	CULTEC CHAMBER
17511	75 - 85	NORTHERN AV	SBOS	4/26/2018	PERFORATED PIPE
17517	32	CUMMINS HWY	ROSL	4/26/2018	CULTEC CHAMBER

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17457	449	WEST BROADWAY	SBOS	4/30/2018	CULTEC CHAMBER
17635	280-282	MERIDIAN ST	EBOS	5/1/2018	CULTEC CHAMBER
18082	21	SENATOR BOLLING CIR	MATP	5/1/2018	PERFORATED PIPE
18122	37	BOUTWELL ST	SDOR	5/1/2018	CULTEC CHAMBER
18201	63	PERRIN ST	ROXB	5/1/2018	CULTEC CHAMBER
17055	16	BOARDMAN ST	EBOS	5/2/2018	MULTIPLE
18034	140	NORTH HARVARD ST	ALBR	5/2/2018	STORMTECH CHAMBERS
18074	18	MARBURY TER	ROXB	5/2/2018	STORMTECH CHAMBERS
18114	283	WEBSTER ST	EBOS	5/2/2018	STORMTECH CHAMBERS
16338	300	PIER 4 BLVD	SBOS	5/7/2018	PERFORATED PIPE
17070	497	EAST FOURTH ST	SBOS	5/7/2018	CULTEC CHAMBER
17178	19	OVERLOOK RD	WROX	5/7/2018	STORMTECH CHAMBERS
18073	2	BELLFLOWER ST	NDOR	5/7/2018	CULTEC CHAMBER
18105	10	WINTHROP SQ	CENT	5/7/2018	PERFORATED PIPE
18119	39	SENATOR BOLLING CIR	MATP	5/7/2018	PERFORATED PIPE
18161	11	BELLFLOWER ST	NDOR	5/7/2018	CULTEC CHAMBER
18172	113	HILLSIDE ST	JAPL	5/7/2018	STORMTECH CHAMBERS
18202	99	PEMBROKE ST	SEND	5/7/2018	STORMTECH CHAMBERS
17224	54	EAST ST	SDOR	5/8/2018	DRYWELL
18205	29	CARRUTH ST	SDOR	5/8/2018	DRYWELL
17412	284	BUNKER HILL ST	CHAR	5/10/2018	GREENROOF
15412	14	WEST BROADWAY	SBOS	5/14/2018	MULTIPLE
17196	25-29	ISABELLA ST	CENT	5/14/2018	DRYWELL
17323	178	THORNTON ST	ROXB	5/14/2018	DRYWELL
18079	11-19	WALLEY ST	EBOS	5/14/2018	STORMTECH CHAMBERS
18086	33	JOHNSWOOD RD	ROSL	5/14/2018	CULTEC CHAMBER
18174	32	SENATOR BOLLING CIR	MATP	5/14/2018	PERFORATED PIPE
18176	45	SENATOR BOLLING CIR	MATP	5/14/2018	PERFORATED PIPE
18216	40	SEMINOLE ST	HYDE	5/14/2018	STORMTECH CHAMBERS
16475	742-744	COLUMBUS AV	SEND	5/17/2018	PERFORATED PIPE
17456	381	CHESTNUT HILL AV	ALBR	5/17/2018	PERFORATED PIPE
18078	55	HUTCHINGS ST	ROXB	5/17/2018	STORMTECH CHAMBERS
16203	100	TYLER ST	CENT	5/21/2018	STORMTECH CHAMBERS
16318	20	TAFT HILL PARK	ROSL	5/21/2018	PERFORATED PIPE
18004	429	CHELSEA ST	EBOS	5/21/2018	STORMTECH CHAMBERS
18033	476-482	WEST BROADWAY	SBOS	5/21/2018	CULTEC CHAMBER
18154	54	PLEASANT ST	NDOR	5/21/2018	STORMTECH CHAMBERS
18175	18	SENATOR BOLLING CIR	MATP	5/21/2018	PERFORATED PIPE
18220	5	CEDAR ST	ROXB	5/22/2018	MULTIPLE
18221	9	CEDAR ST	ROXB	5/22/2018	MULTIPLE
15303	15	BALINA PL	MATP	5/24/2018	CULTEC CHAMBER
17397	23	DIX ST	SDOR	5/24/2018	CULTEC CHAMBER
17570	40	BEACON ST	BBBH	5/24/2018	CULTEC CHAMBER
18016	270	HUNTINGTON AV	FEKE	5/24/2018	CULTEC CHAMBER
18115	498	SUMNER ST	EBOS	5/24/2018	STORMTECH CHAMBERS
18138	259	GOLD ST	SBOS	5/24/2018	CULTEC CHAMBER
18165	4281-4283	WASHINGTON ST	ROSL	5/24/2018	CULTEC CHAMBER
17600	45	BURNETT ST	JAPL	5/29/2018	DRYWELL
17631	1	HANOVER ST	CENT	5/29/2018	STORMTECH CHAMBERS
18133	79	LINDEN ST	ALBR	5/29/2018	CULTEC CHAMBER
18156	27	DUDLEY ST	ROXB	5/29/2018	STORMTECH CHAMBERS

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18163	9-11	BELMONT ST	CHAR	5/29/2018	CULTEC CHAMBER
18173	73	CHESTNUT ST	BBBH	5/29/2018	STORMTECH CHAMBERS
16198	230-232	NEWBURY ST	BBBH	5/30/2018	CULTEC CHAMBER
18167	258	WEST NEWTON ST	BBBH	5/31/2018	STORMTECH CHAMBERS
13302	35	AUGUSTUS AV	ROSL	6/1/2018	CULTEC CHAMBER
17585	793	EAST SIXTH ST	SBOS	6/1/2018	STORMTECH CHAMBERS
18144	229	EAST EAGLE ST	EBOS	6/1/2018	DRYWELL
18118	43	SENATOR BOLLING CIR	MATP	6/5/2018	PERFORATED PIPE
18162	8	DARTMOUTH PL	SEND	6/5/2018	CULTEC CHAMBER
17184	256	GOLD ST	SBOS	6/6/2018	DRYWELL
18081	14B	GENEVA ST	EBOS	6/8/2018	CULTEC CHAMBER
18139	42	WAIT ST	JAPL	6/8/2018	STORMTECH CHAMBERS
16197	226-228	NEWBURY ST	BBBH	6/15/2018	CULTEC CHAMBER
16568	333	WEST THIRD ST	SBOS	6/15/2018	CULTEC CHAMBER
17155	1750	SOLDIERS FIELD RD	ALBR	6/15/2018	STORMTECH CHAMBERS
17161	1580	TREMONT ST	FEKE	6/15/2018	DRYWELL
18098	36	HALL ST	JAPL	6/15/2018	DRYWELL
18117	1-13	SHETLAND ST	NDOR	6/15/2018	CULTEC CHAMBER
18123	187-189	E ST	SBOS	6/15/2018	CULTEC CHAMBER
18137	79	CHESTNUT ST	BBBH	6/15/2018	PERFORATED PIPE
18182	200	SAINT THOMAS MORE R	ALBR	6/15/2018	STORMTECH CHAMBERS
17580	162	COTTAGE ST	EBOS	6/18/2018	UNKNOWN
18032	202	L ST	SBOS	6/18/2018	CULTEC CHAMBER
18104	631	VFW PKWY	WROX	6/18/2018	PERFORATED PIPE
18147	91	STANDARD ST	MATP	6/18/2018	CULTEC CHAMBER
17387	35	LOMASNEY WY	CENT	6/19/2018	PERFORATED PIPE
18129	11	ROBINWOOD AV	JAPL	6/20/2018	STORMTECH CHAMBERS
18256	217	COMMONWEALTH AV	FEKE	6/21/2018	CULTEC CHAMBER
18023	191	CONDOR ST	EBOS	6/25/2018	CULTEC CHAMBER
18261	35a	DACIA ST	ROXB	6/27/2018	DRYWELL
18262	9	LEEDSVILLE ST	SDOR	6/28/2018	CULTEC CHAMBER
18279	101	MILTON AV	HYDE	6/28/2018	CULTEC CHAMBER
17404	89	EAST DEDHAM ST	SEND	6/29/2018	PERFORATED PIPE
18232	5205	WASHINGTON ST	WROX	7/2/2018	CULTEC CHAMBER
18313	31	BUTTONWOOD ST	NDOR	7/3/2018	STORMTECH CHAMBERS
17309	145	STOUGHTON ST	NDOR	7/5/2018	STORMTECH CHAMBERS
18233	471-473	ALBANY ST	SEND	7/5/2018	CULTEC CHAMBER
18192	36	ROCKVALE CIR	JAPL	7/6/2018	CULTEC CHAMBER
18100	79-89	WEST BROADWAY	SBOS	7/11/2018	MULTIPLE
18124	338	MERIDIAN ST	EBOS	7/11/2018	CULTEC CHAMBER
18244	63-65	SEDGWICK ST	JAPL	7/12/2018	CULTEC CHAMBER
18181	105	FIRST AV	CHAR	7/15/2018	PERFORATED PIPE
15435	70	NORTH HARVARD ST	ALBR	7/16/2018	STORMTECH CHAMBERS
17622	3	COOK STREET CT	CHAR	7/16/2018	CULTEC CHAMBER
17626	62-64	O ST	SBOS	7/16/2018	CULTEC CHAMBER
17417	16-22	HAVILAND ST	FEKE	7/17/2018	PERFORATED PIPE
18178	66-68	EDSON ST	HYDE	7/18/2018	MULTIPLE
18225	150	ALFORD ST	CHAR	7/18/2018	PERFORATED PIPE
14278	46	WAREHAM ST	SEND	7/19/2018	PERFORATED PIPE
18227	62	PERKINS ST	JAPL	7/19/2018	CULTEC CHAMBER
18228	16	EVERETT ST	JAPL	7/19/2018	CULTEC CHAMBER

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15465	605	TREMONT ST	SEND	7/20/2018	STORMTECH CHAMBERS
17467	377	WEST FIRST ST	SBOS	7/20/2018	DRYWELL
17588	11	CLAREMONT PARK	BBBH	7/24/2018	DRYWELL
18177	73	DIX ST	SDOR	7/24/2018	STORMTECH CHAMBERS
18242	77	DIX ST	SDOR	7/24/2018	STORMTECH CHAMBERS
16594	611	COLUMBIA RD	NDOR	7/30/2018	MULTIPLE
17244	360	SARATOGA ST	EBOS	7/30/2018	DRYWELL
17288	5	RUTLAND SQ	SEND	7/30/2018	CULTEC CHAMBER
17308	65	WARREN ST	ROXB	7/30/2018	CULTEC CHAMBER
17357	28	DAMRELL ST	SBOS	7/30/2018	CULTEC CHAMBER
18020	189	TRENTON ST	EBOS	7/30/2018	CULTEC CHAMBER
18021	41-47	SPRING ST	WROX	7/30/2018	CULTEC CHAMBER
18053	86	WOODROW AV	MATP	7/30/2018	CULTEC CHAMBER
18057	97	WOODROW AV	MATP	7/30/2018	CULTEC CHAMBER
18245	8	WEST BELLFLOWER ST	NDOR	7/30/2018	STORMTECH CHAMBERS
18267	43	WORDSWORTH ST	EBOS	7/30/2018	STORMTECH CHAMBERS
18269	10-11	ARLINGTON ST	BBBH	7/30/2018	STORMTECH CHAMBERS
18283	19	WILLET ST	WROX	7/30/2018	CULTEC CHAMBER
18284	23	WILLET ST	WROX	7/30/2018	CULTEC CHAMBER
17319	1	RINGGOLD ST	SEND	7/31/2018	CULTEC CHAMBER
18072	275	DORCHESTER AV	CENT	7/31/2018	DRYWELL
18231	645	SUMMER ST	SBOS	7/31/2018	LEACHING BASIN
18247	71	TENNIS RD	MATP	7/31/2018	CULTEC CHAMBER
18248	75	TENNIS RD	MATP	7/31/2018	CULTEC CHAMBER
18250	77	TENNIS RD	MATP	7/31/2018	CULTEC CHAMBER
18152	575	ALBANY ST	CENT	8/2/2018	PERFORATED PIPE
18210	4-11	OXFORD PL	CENT	8/2/2018	DRYWELL
15194	110	BROAD ST	CENT	8/8/2018	TANK/INJECTION WELL
16174	89	BRIGHTON AV	ALBR	8/8/2018	STORMTECH CHAMBERS
17172	50	LAMARTINE ST	JAPL	8/8/2018	PERFORATED PIPE
17225	650	ATLANTIC AV	CENT	8/8/2018	MEDIA FILTERS
17575	1	CURTIS ST	EBOS	8/8/2018	DRYWELL
18203	9	GREENWOOD AV	HYDE	8/8/2018	LEACHING BASIN
18222	20	WEST FIFTH ST	SBOS	8/8/2018	DRYWELL
18246	222	ROSLINDALE AV	ROSL	8/8/2018	CULTEC CHAMBER
18252	44	WEST EAGLE ST	EBOS	8/8/2018	DRYWELL
18254	164-170	SUMNER ST	EBOS	8/8/2018	CULTEC CHAMBER
18277	29	GOLDSMITH ST	JAPL	8/8/2018	STORMTECH CHAMBERS
18291	7-9	SPARHAWK ST	ALBR	8/8/2018	DRYWELL
18308	47	MANSFIELD ST	ALBR	8/8/2018	STORMTECH CHAMBERS
18309	772	EAST SIXTH ST	SBOS	8/8/2018	CULTEC CHAMBER
18355	1	KNEELAND ST	CENT	8/8/2018	DRYWELL
18363	7	CLOVER ST	SDOR	8/8/2018	STORMTECH CHAMBERS
12255	458	WASHINGTON ST	ALBR	8/10/2018	LEACHING BASIN
16426	4981	WASHINGTON ST	WROX	8/10/2018	DRYWELL
17042	130	MOUNT VERNON ST	WROX	8/10/2018	CULTEC CHAMBER
17250	174	FISHER AV	JAPL	8/10/2018	STORMTECH CHAMBERS
18101	193	WEST BROOKLINE ST	SEND	8/10/2018	PERFORATED PIPE
18128	494	RUTHERFORD AV	CHAR	8/10/2018	MULTIPLE
18195	265	HANCOCK ST	BBBH	8/10/2018	CULTEC CHAMBER
17526	1837	COLUMBUS AV	ROXB	8/14/2018	CULTEC CHAMBER

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18056	587	ALBANY ST	SEND	8/14/2018	DRYWELL
18209	212	COMMONWEALTH AV	BBBH	8/14/2018	DRYWELL
12364	24	MAYWOOD ST	ROXB	8/15/2018	DRYWELL
17519	3012	WASHINGTON ST	ROXB	8/15/2018	MULTIPLE
17592	70	COLONIAL AV	SDOR	8/15/2018	LEACHING BASIN
17593	68	COLONIAL AV	SDOR	8/15/2018	LEACHING BASIN
17594	80	NEW ENGLAND AV	SDOR	8/15/2018	LEACHING BASIN
17596	131	SOUTHERN AV	SDOR	8/15/2018	LEACHING BASIN
17608	60	NEW ENGLAND AV	SDOR	8/15/2018	LEACHING BASIN
17609	90	NEW ENGLAND AV	SDOR	8/15/2018	LEACHING BASIN
17610	129	SOUTHERN AV	SDOR	8/15/2018	LEACHING BASIN
17611	63	COLONIAL AV	SDOR	8/15/2018	LEACHING BASIN
17613	30	NEW ENGLAND AV	SDOR	8/15/2018	LEACHING BASIN
17614	36	MALLARD AV	SDOR	8/15/2018	LEACHING BASIN
17615	28	MALLARD AV	SDOR	8/15/2018	LEACHING BASIN
17616	30	MALLARD AV	SDOR	8/15/2018	LEACHING BASIN
17617	32	MALLARD AV	SDOR	8/15/2018	LEACHING BASIN
17618	34	MALLARD AV	SDOR	8/15/2018	LEACHING BASIN
17497	62	RUTLAND ST	SEND	8/16/2018	CULTEC CHAMBER
18330	60-62	MAPLETON ST	ALBR	8/16/2018	STORMTECH CHAMBERS
18338	6	PARKSIDE DR	JAPL	8/16/2018	MULTIPLE
18288	105	CALL ST	JAPL	8/17/2018	CULTEC CHAMBER
16500	130-140	WESTERN AV	ALBR	8/21/2018	MULTIPLE
17292	2451	WASHINGTON ST	ROXB	8/22/2018	CULTEC CHAMBER
18168	58	STARBIRD AV	ROSL	8/22/2018	LEACHING BASIN
18194	375	MAVERICK ST	EBOS	8/22/2018	CULTEC CHAMBER
18282	74-76	WHITE ST	EBOS	8/22/2018	STORMTECH CHAMBERS
18294	60	STARBIRD AV	ROSL	8/22/2018	LEACHING BASIN
18324	49	STRATTON ST	MATP	8/22/2018	CULTEC CHAMBER
18325	124	CALLENDER ST	MATP	8/22/2018	CULTEC CHAMBER
18327	221	PARIS ST	EBOS	8/22/2018	LEACHING BASIN
18333	26	LYFORD ST	MATP	8/22/2018	CULTEC CHAMBER
18334	129	STRATTON ST	MATP	8/22/2018	CULTEC CHAMBER
16274	410	WEST BROADWAY	SBOS	8/23/2018	DRYWELL
18341	53	QUINT AV	ALBR	8/24/2018	CULTEC CHAMBER
17113	3,5, & 7	COTTAGE CT	ROXB	8/28/2018	CULTEC CHAMBER
18109	2731	WASHINGTON ST	ROXB	8/28/2018	CULTEC CHAMBER
18158	109	STANWOOD ST	ROXB	8/28/2018	CULTEC CHAMBER
18226	6	LONG TER	WROX	8/28/2018	STORMTECH CHAMBERS
18337	72	WASHINGTON ST	CHAR	8/28/2018	CULTEC CHAMBER
17562	42	WEST EAGLE ST	EBOS	8/29/2018	DRYWELL
18312	149	HILLSIDE ST	JAPL	8/29/2018	STORMTECH CHAMBERS
17595	70	NEW ENGLAND AV	SDOR	9/5/2018	LEACHING BASIN
17612	42	NEW ENGLAND AV	SDOR	9/5/2018	LEACHING BASIN
18005	240	NORWELL ST	SDOR	9/5/2018	LEACHING BASIN
18323	10	LYFORD ST	MATP	9/5/2018	CULTEC CHAMBER
18326	69-71	BORDER ST	EBOS	9/5/2018	DRYWELL
18006	169	I ST	SBOS	9/10/2018	STORMTECH CHAMBERS
18305	38	COLONIAL AV	SDOR	9/10/2018	STORMTECH CHAMBERS
18401	10	UNION PARK	SEND	9/10/2018	STORMTECH CHAMBERS
17433	1650	SOLDIERS FIELD RD	ALBR	9/11/2018	STORMTECH CHAMBERS

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18159	115	STANWOOD ST	ROXB	9/11/2018	CULTEC CHAMBER
18278	54-102	WEST NEWTON ST	BBBH	9/11/2018	STORMTECH CHAMBERS
18280	115	WINTHROP SQ	CENT	9/11/2018	STORMTANK
18298	1442	RIVER ST	HYDE	9/11/2018	STORMTECH CHAMBERS
18304	36	COLONIAL AV	SDOR	9/11/2018	STORMTECH CHAMBERS
18062	22	ANGELL ST	MATP	9/12/2018	LEACHING BASIN
18063	21	ANGELL ST	MATP	9/12/2018	LEACHING BASIN
18064	28	ANGELL ST	MATP	9/12/2018	LEACHING BASIN
18066	17-19	HELEN ST	ROXB	9/12/2018	LEACHING BASIN
18067	76	SPENCER ST	SDOR	9/12/2018	LEACHING BASIN
18068	12-14	LORNE ST	MATP	9/12/2018	LEACHING BASIN
18070	242	NORWELL ST	SDOR	9/12/2018	LEACHING BASIN
16257	6	TIDE ST	SBOS	9/13/2018	PERFORATED PIPE
16544	31	BURBANK ST	FEKE	9/13/2018	CULTEC CHAMBER
17156	298	MARGINAL ST	EBOS	9/14/2018	DRYWELL
17164	27	LEEDSVILLE ST	SDOR	9/14/2018	DRYWELL
18022	4	WENDOVER ST	NDOR	9/14/2018	CULTEC CHAMBER
18155	33-93	WEST MAIN ST	MATP	9/14/2018	MULTIPLE
16398	150	SEAPORT BLVD	SBOS	9/19/2018	TANK/INJECTION WELL
17097	201	BROOKLINE AV	FEKE	9/19/2018	MULTIPLE
17243	536	EAST EIGHTH ST	SBOS	9/19/2018	STORMTECH CHAMBERS
17557	13 & 17	ROGERS PARK AV	ALBR	9/19/2018	STORMTECH CHAMBERS
18153	86	BOARDMAN ST	EBOS	9/19/2018	PERFORATED PIPE
18184	33-93	WEST MAIN ST	MATP	9/19/2018	MULTIPLE
18317	136	ORANGE ST	ROSL	9/19/2018	STORMTECH CHAMBERS
18335	592-598	COLUMBIA RD	NDOR	9/19/2018	CULTEC CHAMBER
18348	40	WILCOCK ST	MATP	9/19/2018	CULTEC CHAMBER
18349	48	WILCOCK ST	MATP	9/19/2018	CULTEC CHAMBER
18353	114	WESTERN AV	ALBR	9/19/2018	DRYWELL
16133	4	STRONG PL	CENT	9/20/2018	STORMTECH CHAMBERS
17550	2	STRONG PL	CENT	9/20/2018	MULTIPLE
18204	15	SNOW HILL ST	CENT	9/20/2018	CULTEC CHAMBER
18243	52	HULL ST	CENT	9/20/2018	CULTEC CHAMBER
18331	47	HARVEST ST	NDOR	9/20/2018	STORMTECH CHAMBERS
18206	33-39	WARD ST	SBOS	9/28/2018	CULTEC CHAMBER
18268	1225	BENNINGTON ST	EBOS	9/28/2018	STORMTANK
18290	7A-7B	SPARHAWK ST	ALBR	10/2/2018	DRYWELL
16562	30-32	CAMBRIDGE ST	CHAR	10/3/2018	PERFORATED PIPE
18347	878	SOUTH ST	ROSL	10/3/2018	STORMTECH CHAMBERS
18371	9	BRAHMS ST	ROSL	10/3/2018	CULTEC CHAMBER
17057	921	EAST FOURTH ST	SBOS	10/4/2018	STORMTECH CHAMBERS
17510	194	TRENTON ST	EBOS	10/4/2018	CULTEC CHAMBER
18036	259	ALLANDALE ST	WROX	10/4/2018	DRYWELL
18321	477-479	COMMONWEALTH AV	FEKE	10/4/2018	CULTEC CHAMBER
18368	228	WEBSTER ST	EBOS	10/4/2018	CULTEC CHAMBER
18472	474	HYDE PARK AV	ROSL	10/4/2018	STORMTECH CHAMBERS
17329	240	MOUNT VERNON ST	NDOR	10/10/2018	CULTEC CHAMBER
17407	46	CLARENDON ST	SEND	10/10/2018	CULTEC CHAMBER
18365	77-85	LIVERPOOL ST	EBOS	10/10/2018	STORMTECH CHAMBERS
18453	11	SAWYER TER	ALBR	10/10/2018	LEACHING BASIN
18456	86	CHESTNUT ST	BBBH	10/10/2018	CULTEC CHAMBER

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18469	294	COLUMBUS AV	SEND	10/10/2018	CULTEC CHAMBER
18089	99	BLACKSTONE ST	CENT	10/11/2018	DRYWELL
18293	1173	ADAMS ST	SDOR	10/11/2018	RAIN GARDEN
18382	237		NDOR	10/11/2018	DRYWELL
17117	67	FOREST HILLS ST	ROXB	10/18/2018	CULTEC CHAMBER
17275	1465&1465A	COMMONWEALTH AV	ALBR	10/18/2018	PERFORATED PIPE
17555	217	PARIS ST	EBOS	10/18/2018	DRYWELL
17589	66	WEST RUTLAND SQ	BBBH	10/18/2018	DRYWELL
18120	39	HARVARD WY	ALBR	10/18/2018	MULTIPLE
18179	265	WEBSTER ST	EBOS	10/18/2018	STORMTECH CHAMBERS
18235	9	INGLESIDE ST	ROXB	10/18/2018	STORMTECH CHAMBERS
18297	450	SUMMER ST	SBOS	10/18/2018	LEACHING BASIN
18315	113-115	MARLBOROUGH ST	BBBH	10/18/2018	CULTEC CHAMBER
18362	1948-1950	WASHINGTON ST	SEND	10/18/2018	LEACHING BASIN
18379	75	BROOKLEY RD	JAPL	10/18/2018	CULTEC CHAMBER
18426	53R	BAILEY ST	SDOR	10/18/2018	CULTEC CHAMBER
18491	64-66	BENNETT ST	ALBR	10/18/2018	LEACHING BASIN
17379	232-248	WALDEMAR AV	EBOS	10/19/2018	PERFORATED PIPE
17382	40	VALLAR RD	EBOS	10/19/2018	PERFORATED PIPE
18107	660	SUMMER ST	CENT	10/19/2018	STORMTECH CHAMBERS
18435	666	DORCHESTER AV	SBOS	10/19/2018	STORMTECH CHAMBERS
13381	141	WEST SECOND ST	SBOS	10/24/2018	CULTEC CHAMBER
16527	95	ALLSTATE RD	NDOR	10/24/2018	CULTEC CHAMBER
17530	8-8A	VALENTINE ST	ROXB	10/24/2018	CULTEC CHAMBER
18012	94	CHESTNUT ST	BBBH	10/24/2018	CULTEC CHAMBER
18075	5082	WASHINGTON ST	WROX	10/24/2018	CULTEC CHAMBER
18130	152	THORNTON ST	ROXB	10/24/2018	CULTEC CHAMBER
18131	154	THORNTON ST	ROXB	10/24/2018	CULTEC CHAMBER
18378	24	WESTMINSTER AV	ROXB	10/24/2018	STORMTECH CHAMBERS
18408	125	AMORY ST	ALBR	10/24/2018	PERFORATED PIPE
18441	11	ISABELLA ST	CENT	10/24/2018	CULTEC CHAMBER
17492	966	HYDE PARK AV	HYDE	10/30/2018	CULTEC CHAMBER
17512	8-10	GRIMES ST	SBOS	10/30/2018	CULTEC CHAMBER
17561	90	BIGELOW ST	ALBR	10/30/2018	CULTEC CHAMBER
18132	46	HICHBORN ST	ALBR	10/30/2018	STORMTECH CHAMBERS
18215	6-8	PINE AV	HYDE	10/30/2018	CULTEC CHAMBER
18217	2-4	PINE AV	HYDE	10/30/2018	CULTEC CHAMBER
18281	89-89D	PRESCOTT ST	EBOS	10/30/2018	DRYWELL
18329	277	BORDER ST	EBOS	10/30/2018	STORMTECH CHAMBERS
18342	168	BIGELOW ST	ALBR	10/30/2018	STORMTECH CHAMBERS
18394	160	MORTON ST	MATP	10/30/2018	STORMTECH CHAMBERS
18423	736	CAMBRIDGE ST	ALBR	10/30/2018	PERFORATED PIPE
18508	231	NORTHAMPTON ST	FEKE	10/30/2018	MULTIPLE
16329	1457	TREMONT ST	JAPL	10/31/2018	CULTEC CHAMBER
17444	125	SUMNER ST	EBOS	10/31/2018	PERFORATED PIPE
17447	133	SUMNER ST	EBOS	10/31/2018	PERFORATED PIPE
17569	75	BEACON ST	CENT	11/1/2018	CULTEC CHAMBER
18494	8-10	LORING PL	HYDE	11/1/2018	STORMTECH CHAMBERS
18509	21	NORTON ST	HYDE	11/1/2018	CULTEC CHAMBER
14137	3	AKRON ST	ROXB	11/2/2018	RAIN GARDEN
18292	69-71	MAVERICK SQ	EBOS	11/6/2018	DRYWELL

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18299	233	HANCOCK ST	NDOR	11/6/2018	PERFORATED PIPE
18400	196	BOYLSTON ST	JAPL	11/6/2018	CULTEC CHAMBER
18500	133-135	CALLENDER ST	MATP	11/6/2018	CULTEC CHAMBER
18501	10-12	ASHTON ST	MATP	11/6/2018	CULTEC CHAMBER
18518	56	ARBOROUGH RD	ROSL	11/6/2018	CULTEC CHAMBER
14165	210	ENDICOTT ST	CENT	11/7/2018	STORMTECH CHAMBERS
18239	317-329	BELGRADE AV	ROSL	11/7/2018	DRYWELL
18372	36	DISTRICT AV	NDOR	11/7/2018	DRYWELL
18432	213	WEST SPRINGFIELD ST	SEND	11/7/2018	CULTEC CHAMBER
18446	56	MASCOT ST	MATP	11/7/2018	CULTEC CHAMBER
18513	66	FAWNSDALE RD	ROSL	11/7/2018	DRYWELL
18422	55	WEST FIFTH ST	SBOS	11/8/2018	CULTEC CHAMBER
18464	80	COTTAGE ST	EBOS	11/8/2018	CULTEC CHAMBER
18466	4	LUCY ST	NDOR	11/8/2018	FILTRATION BASINS
18515	173-177	MAVERICK ST	EBOS	11/8/2018	DRYWELL
18475	30	WARREN ST	ALBR	11/9/2018	CULTEC CHAMBER
14450	1-7	DALTON ST	BBBH	11/13/2018	TANK/INJECTION WELL
18318	132-134	ORANGE ST	ROSL	11/13/2018	STORMTECH CHAMBERS
18352	38	ARMANDINE ST	SDOR	11/13/2018	STORMTECH CHAMBERS
18473	27	CUMBERLAND ST	BBBH	11/13/2018	STORMTECH CHAMBERS
18499	335-337	MAVERICK ST	EBOS	11/13/2018	DRYWELL
18148	309R	SUMNER ST	EBOS	11/15/2018	PERFORATED PIPE
18160	194	K ST	SBOS	11/15/2018	LEACHING BASIN
18393	63	FALCON ST	EBOS	11/15/2018	STORMTECH CHAMBERS
18395	70		ALBR	11/15/2018	STORMTECH CHAMBERS
18455	2-6	SUTHERLAND RD	ALBR	11/15/2018	UNKNOWN
18471	58	NEPONSET AV	SDOR	11/15/2018	STORMTECH CHAMBERS
18476	66	FALCON ST	EBOS	11/15/2018	STORMTECH CHAMBERS
18493	608	SHAWMUT AV	SEND	11/15/2018	STORMTECH CHAMBERS
18514	108-110	LUCERNE ST	MATP	11/15/2018	CULTEC CHAMBER
16600	141	GLENWAY ST	ROXB	11/19/2018	LEACHING BASIN
18065	37	ANGELL ST	MATP	11/19/2018	LEACHING BASIN
17040	100	NEW SUDBURY ST	CENT	11/20/2018	PERFORATED PIPE
18487	226	NORTH BEACON ST	ALBR	11/21/2018	STORMTECH CHAMBERS
18490	5	SPARHAWK ST	ALBR	11/21/2018	DRYWELL
18112	37-39	JUNIPER ST	ROXB	11/28/2018	CULTEC CHAMBER
18241	256-260	NEWBURY ST	BBBH	11/28/2018	PERFORATED PIPE
18460	888	METROPOLITAN AV	HYDE	11/28/2018	CULTEC CHAMBER
18461	892	METROPOLITAN AV	HYDE	11/28/2018	CULTEC CHAMBER
18489	18	MURDOCK ST	ALBR	11/28/2018	DRYWELL
18504	55-57	BYRON ST	EBOS	11/28/2018	CULTEC CHAMBER
18439	301	BORDER ST	EBOS	11/29/2018	LEACHING BASIN
18481	21-23	WENSLEY ST	JAPL	11/29/2018	PERFORATED PIPE
18497	52	FISHER AV	JAPL	11/29/2018	CULTEC CHAMBER
16325	60	DEVONSHIRE ST	CENT	11/30/2018	TANK/INJECTION WELL
17423	159-201	WASHINGTON ST	ALBR	11/30/2018	STORMTANK
18055		SARGENT CWY	JAPL	11/30/2018	STORMTECH CHAMBERS
18450	5	WORCESTER SQ	SEND	11/30/2018	DRYWELL
18517	48-62	BROOKLINE AV	FEKE	11/30/2018	DRYWELL
18567	171	COMMONWEALTH AV	BBBH	11/30/2018	DRYWELL
18403	13-15	MCKONE ST	SDOR	12/3/2018	STORMTECH CHAMBERS

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18540	210	BREMEN ST	EBOS	12/3/2018	STORMTECH CHAMBERS
18584	48	PRESCOTT ST	HYDE	12/3/2018	CULTEC CHAMBER
18598	51	LAWLEY ST	SDOR	12/3/2018	CULTEC CHAMBER
18526	201	WEST EIGHTH ST	SBOS	12/5/2018	DRYWELL
18535	1	ROCKWOOD TER	JAPL	12/5/2018	CULTEC CHAMBER
17026	4945	WASHINGTON ST	WROX	12/11/2018	LEACHING BASIN
18071	26	DEWEY ST	ROXB	12/11/2018	STORMTECH CHAMBERS
18249	19-21	EVERETT AV	NDOR	12/11/2018	LEACHING BASIN
18385	29	CORDIS ST	CHAR	12/11/2018	CULTEC CHAMBER
18600	148	ATHENS ST	SBOS	12/11/2018	STORMTECH CHAMBERS
18601	33	O ST	SBOS	12/11/2018	DRYWELL
18296	119-141	HYDE PARK AV	HYDE	12/14/2018	DRYWELL
18351	346	MARLBOROUGH ST	BBBH	12/14/2018	STORMTECH CHAMBERS
18399	395-409	COLUMBIA RD	NDOR	12/14/2018	PERFORATED PIPE
18539	9	GLENCOE ST	ALBR	12/14/2018	STORMTECH CHAMBERS
18590	24	UNION PARK	SEND	12/14/2018	FILTRATION BASINS
16375	30	MILTON AV	SDOR	12/17/2018	LEACHING BASIN
18264	14-18	NEW ENGLAND AV	SDOR	12/18/2018	STORMTECH CHAMBERS
18531	56	LIVERPOOL ST	EBOS	12/18/2018	PERFORATED PIPE
18507	175	GOVE ST	EBOS	12/19/2018	DRYWELL
17006	4, 5, & 6	NORFOLK TER	MATP	12/20/2018	STORMTECH CHAMBERS
18525	2149	DORCHESTER AV	SDOR	12/21/2018	STORMTECH CHAMBERS
18300	400	BELGRADE AV	WROX	12/24/2018	MULTIPLE
18622	150	BAYSWATER ST	EBOS	12/24/2018	STORMTECH CHAMBERS

Table 3-5. Privately Owned Grit Chambers Approved 2018

PROJECT NO	ADDRESS NO	STREET NAME	NEIGHBORHOOD	SIGNATURE DATE
17328	50	WAVERLY ST	ALBR	1/29/2018
17356	100	CABOT ST	ROXB	1/30/2018
17222	370-380	HARRISON AV	SEND	3/1/2018
17320	321	HARRISON AV	SEND	3/7/2018
17599	735-745	TRUMAN PKWY	HYDE	4/3/2018
16016	50-58	INDUSTRIAL DR	HYDE	4/4/2018
17155	1750	SOLDIERS FIELD RD	ALBR	6/15/2018
17387	35	LOMASNEY WY	CENT	6/19/2018
18234	39	HARVARD WY	ALBR	6/25/2018
12255	458	WASHINGTON ST	ALBR	8/10/2018
18128	494	RUTHERFORD AV	CHAR	8/10/2018
16500	130-140	WESTERN AV	ALBR	8/21/2018
17433	1650	SOLDIERS FIELD RD	ALBR	9/11/2018
16257	6	TIDE ST	SBOS	9/13/2018
18208	99	SUMNER ST	EBOS	9/14/2018
17275	1465&1465A	COMMONWEALTH AV	ALBR	10/18/2018
17382	40	VALLAR RD	EBOS	10/19/2018
17444	125	SUMNER ST	EBOS	10/31/2018
17447	133	SUMNER ST	EBOS	10/31/2018
18296	119-141	HYDE PARK AV	HYDE	12/14/2018
18399	395-409	COLUMBIA RD	NDOR	12/14/2018
18264	14-18	NEW ENGLAND AV	SDOR	12/18/2018

TABLE 5-1. Particle Separator Cleaning-Material Removed 2005-2018

Location	Neighborhood	Receiving Water	2005-Material Removed (cubic yards)	2006-Material Removed (cubic yards)	2007-Material Removed (cubic yards)	2008-Material Removed (cubic yards)	2009-Material Removed (cubic yards)	2010 Material Removed (cubic yards) Misc. dates	3/10/2010	4/13/2010	5/25/2010	6/13/2010	7/20/2010	9/16/2010	10/21/2010	10/29/2010	2011 Material Removed (cubic yards) Various dates	2012 Material Removed (cubic yards) Various dates	2013 Material Removed (cubic yards) Various dates	2014 Material Removed (cubic yards) Various dates	2015 Material Removed (cubic yards) Various dates	2016 Material Removed (cubic yards) Various dates	2017 Material Removed (cubic yards) Various dates	2018 Material Removed (cubic yards) Various dates	TOTAL MATERIAL REMOVED (cubic yards)	
Bussey St./Arboretum	Jamaica Plain	Bussy Brook	not clear	1.00	2.50	0.25	1.00	3.00									1.50	0.50	0.50	Cleaning not needed	0.50	0.50	1.20	0.20	12.65	
Centre Lane	WROX	Wetlands	0.25	0.25	0.75	0.25	0.10	0.25									0.05	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.25	0.00	0.10	2.25	
Centre St.	WROX	Wetlands	0.50	0.50	0.50	0.00	0.50	0.00									0.25	NA	0.25	Cleaning not needed	Cleaning not needed	0.25	0.20	0.10	3.05	
Coleridge St.	East Boston	Boston Harbor	0.25	0.25	0.50	2.00	0.25	2.50									0.01	0.00	0.50	Cleaning not needed	2.00	0.50	0.10	0.20	9.06	
Coniston Rd.	Roslindale	Stony Brook Conduit	0.25	0.50	0.00	0.00	0.00	0.00									0.00	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	Cleaning not needed	Amt removed not recorded	Amt removed not recorded	0.75	
Denny St.	Dorchester	Malibu Beach	0.25	0.75	1.00	0.00	1.00	0.12									0.15	0.00	Cleaning not needed	0.25	Cleaning not needed	Cleaning not needed	Separator needs repair	Separator needs repair	3.52	
Ericsson St.	Dorchester	Neponset River	0.25	0.25	0.25	0.00	0.25	0.15									0.20	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.25	Amt removed not recorded	0.20	1.80	
Fenwood Rd.	Roxbury	Muddy River	2.00	4.00	0.50	0.25	2.25		0.25		0.02	1.50	0.15	0.15		0.12	0.25	0.00	0.25	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.25	0.20	0.30	12.44
Lawley St.	Dorchester	Pine Neck Creek	0.25	0.25	0.15	0.03	0.25	0.50									0.01	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.25	Amt removed not recorded	Amt removed not recorded	1.69	
Martha Rd.	Central	Charles River																0.25	0.25	Cleaning not needed	Cleaning not needed	Cleaned but amount not recorded	0.10	Amt removed not recorded	0.60	
Neponset Ave.	Dorchester	Neponset River	2.00	2.75	1.50	0.50	1.50	2.00									0.50	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.50	0.20	11.45	
Norton St.	Hyde Park	Open Channel	0.25	0.50	0.50	0.03	0.13	0.25									0.00	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.20	0.20	2.06	
Perkins St.	Jamaica Plain	Jamaica Pond	0.25	0.25	1.50	0.00	1.50	2.00									0.00	0.00	0.50	Cleaning not needed	Cleaning not needed	0.50	0.20	Amt removed not recorded	6.70	
Waldemar Ave.	East Boston	Belle Isle Inlet	1.00	0 or not	0.25	0.25	0.10	0.12									0.00	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.10	0.20	2.02	
Waldemar Ave.	East Boston	Belle Isle Inlet	1.00	0 or not	0.50	0.25	0.75	1.00									0.01	0.00	Cleaning not needed	Cleaning not needed	Cleaning not needed	0.25	2.00	Amt removed not recorded	5.76	
Walter St.	Roslindale	Wetlands	0.25	not clear	0.50	0.01	0.25		0.15	0.25	0.01		0.10	0.01	0.10		0.00	0.25	0.25	Cleaning not needed	0.25	0.00	Amt removed not recorded	0.10	2.48	
TOTALS			8.75	11.25	10.90	3.81	9.83	11.89	0.40	0.25	0.03	1.50	0.25	0.16	0.10	0.12	2.92	1.00	2.50	2.25	0.75	3.00	4.80	1.80	78.26	

Table 7-1. 2012 Stormwater Model - Mean Annual Pollutant Loads for Boston's 27 Reporting Areas

Reporting Area Name	Drainage Area	Mean Flow	BOD 5	COD	TKN	Nitrate-Nitrite as N	Ammonia as N	Total Phosphorus	Ortho-phosphate as P	Total Copper	Total Zinc	TSS	E Coli	Enterococcus	Fecal Coliform
	Acres	CFS/yr	lb/yr										10 ⁹ CFU/yr		
West Roxbury	889	2.37	14,028	63,894	2,215	7,695	679	308	82	19	63	29,427	115,093	73,017	99,765
Sawmill Brook	1277	6.12	25,223	111,598	4,610	21,366	1,481	689	194	35	107	53,139	169,381	111,714	147,072
Mid-Charles total	2166	8.49	39,251	175,492	6,824	29,061	2,160	998	276	54	170	82,566	284,474	184,731	246,837
Upper Stony	1832	4.76	25,517	116,162	4,537	11,003	1,462	610	176	35	108	56,961	195,192	118,118	163,714
Canterbury Brook	1889	7.01	102,193	376,759	16,955	21,891	9,627	2,812	909	74	234	145,004	635,362	295,512	890,923
Roslindale Branch	1199	2.09	38,913	165,714	5,930	5,686	2,677	835	249	36	113	70,307	306,891	140,819	314,951
Bussey Brook	839	1.13	6,704	17,754	1,031	2,313	405	148	45	7	15	9,885	18,068	13,573	21,458
Goldsmith Brook	746	1.36	13,530	64,412	2,085	4,068	651	295	69	18	58	30,010	109,971	68,121	87,133
Lower Stony	2165	5.54	72,827	277,964	11,330	16,228	6,266	1,803	601	76	268	110,565	420,530	179,517	491,573
Stony Brook total	8670	22	259,685	1,018,765	41,866	61,189	21,088	6,502	2,051	245	797	422,733	1,686,014	815,660	1,969,753
Village Brook Boston	787	2.65	14,590	50,106	2,390	8,624	1,206	450	130	14	47	20,440	95,024	63,473	139,033
Village Brook Brookline	2061	5.53	47,587	211,867	7,861	18,837	3,231	1,053	339	52	157	90,411	372,252	179,473	317,679
Other Muddy River	1785	7.95	82,671	270,542	12,683	7,733	6,658	2,600	645	99	362	120,510	344,192	212,280	365,787
Muddy River total	4633	16	144,847	532,515	22,935	35,195	11,096	4,103	1,114	165	565	231,362	811,468	455,225	822,499
Faneuil Brook	1316	2.66	40,450	186,467	6,960	7,030	2,750	990	264	47	152	88,573	336,100	169,342	294,366
Shepard Brook	415	1.25	22,114	106,379	3,116	2,876	911	591	90	29	117	48,529	199,314	130,916	152,862
Smelt Brook	846	1.64	32,776	175,163	4,911	4,035	1,168	834	117	47	170	81,245	331,610	211,548	206,479
Allston-Brighton	796	2.30	22,684	80,263	2,767	6,195	1,330	499	133	26	104	33,812	125,438	94,630	165,449
Millers River	208	1.57	15,716	65,888	1,891	3,732	575	383	60	18	76	29,967	119,979	88,372	95,414
Other Lower Charles total	3581	9	133,740	614,159	19,645	23,868	6,734	3,297	664	167	619	282,126	1,112,441	694,808	914,570
Lower Charles Basin total	19050	56	577,523	2,340,931	91,270	149,313	41,078	14,900	4,105	632	2,152	1,018,788	3,894,397	2,150,425	3,953,659
Mother Brook	441	0.89	10,303	40,028	1,604	2,757	775	239	75	9	27	16,586	72,716	39,695	88,018
Hyde Park	1766	3.68	47,075	224,150	7,358	10,903	2,528	1,030	256	54	187	101,006	388,464	213,159	304,092
Oakland Brook	519	1.78	18,211	79,542	2,951	5,882	1,254	407	127	19	57	33,949	149,837	71,668	150,633
Mattapan Brook	304	0.77	13,478	55,661	2,064	2,195	991	286	93	12	40	23,194	99,823	45,419	109,388
Lower Neponset	843	2.24	26,315	115,997	4,100	6,813	1,579	606	159	29	96	51,052	210,044	118,935	192,551
Tenean Creek	873	2.13	106,614	399,865	16,800	5,670	10,123	2,379	897	65	202	149,087	679,235	228,744	895,467
Davenport Creek	712	1.49	24,295	117,246	3,733	4,141	1,267	545	123	29	97	52,691	216,336	116,075	171,873
Neponset River total	5458	11	221,995	915,243	34,877	34,220	17,250	4,946	1,606	187	609	374,873	1,600,119	717,619	1,740,148
Charlestown	556	2.25	69,573	382,135	10,563	5,066	2,619	1,962	255	103	386	174,040	776,735	516,956	512,302
East Boston	438	1.51	43,225	223,062	6,964	4,154	2,250	1,102	214	54	185	99,394	431,965	251,732	313,268
Downtown	473	2.18	58,292	220,832	7,871	3,242	4,004	1,487	360	46	228	90,824	395,945	216,214	484,454
Dorchester	1124	3.79	84,325	372,297	12,981	10,311	5,532	2,303	520	88	334	158,255	689,410	400,141	684,621

Table 7-2. Annual¹ Load Reduction Based on Illicit Discharges Removed in 2012/2013

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus Removed	E Coli Removed	Enterococcus Removed	Fecal Coliform Removed
	Acres		gpd	lb/yr	10 ⁹ CFU/yr		
West Roxbury	889	4	349	9	2,119	316	3,864
Sawmill Brook	1,277	11	698	20	2,732	355	5,160
Mid-Charles total	2,166	15	1047	28	4,851	671	9,024
Upper Stony	1,832	20	1888	47	10,946	1,444	20,486
Canterbury Brook	1,889	16	12853	324	70,155	9,206	131,071
Roslindale Branch	1,199	17	1438	77	17,647	2,318	32,952
Bussey Brook	839	3	106	19	3,345	443	6,147
Goldsmith Brook	746	6	524	10	1,676	161	3,332
Lower Stony	2,165	4	1723	114	0	1,701	0
Stony Brook total	8,670	66	18532	591	103,769	15,273	193,988
Village Brook Boston	787	0	0	0	0	0	0
Village Brook Brookline	2,061	2	217	4	943	0	2,037
Other Muddy River	1,785	7	712	13	0	669	0
Muddy River total	4,633	9	929	17	835	659	1,288
Faneuil Brook	1,316	21	1739	51	12,378	1,765	22,730
Shepard Brook	415	2	657	16	3,755	462	7,092
Smelt Brook	846	8	904	25	5,911	737	11,097
Allston-Brighton	796	2	185	4	928	108	1,752
Millers River	208	1	27	1	316	32	607
Other Lower Charles total	3,581	34	3512	98	23,287	3,104	43,279
Lower Charles Basin total	19,050	124	24020	734	132,742	19,707	247,578
Mother Brook	441	2	1145	25	5,966	799	11,123
Hyde Park	1,766	17	5524	112	26,950	3,526	50,414
Oakland Brook	519	6	413	11	2,676	376	4,936
Mattapan Brook	304	7	1441	42	10,025	1,360	18,623
Lower Neponset	843	4	416	13	2,991	352	5,691
Tenean Creek	873	8	4856	109	25,112	3,238	47,097
Davenport Creek	712	3	277	9	2,021	246	3,825
Neponset River total	5,458	47	14072	321	75,740	9,896	141,709
Charlestown	556	4	486	10	2,482	389	4,484
East Boston	438	27	1840	42	10,047	1,291	18,857
Downtown	473	2	1168	32	7,548	1,007	14,071
Dorchester	1,124	2	508	14	3,193	421	5,944

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network

Table 7-3. Annual¹ Load Reduction Based on Illicit Discharges Removed in 2014

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus Removed	E Coli Removed	Enterococcus Removed	Fecal Coliform Removed
	Acres		gpd	lb/yr	10 ⁹ CFU/yr		
West Roxbury	889	3	53	1	322	55	564
Sawmill Brook	1,277	4	223	8	1,347	184	2,503
Mid-Charles total	2,166	7	276	9	1,669	239	3,067
Upper Stony	1,832	7	299	8	1,753	243	3,237
Canterbury Brook	1,889	10	1259	32	6,962	922	12,987
Roslindale Branch	1,199	3	115	8	2,409	293	4,682
Bussey Brook ²	839	1	366	9	1,236	203	2,014
Goldsmith Brook	746	2	126	4	685	133	1,155
Lower Stony	2,165	0	0	0	0	0	0
Stony Brook total	8,670	23	2165	56	9,888	1,159	18,558
Village Brook Boston	787	0	0	0	0	0	0
Village Brook Brookline	2,061	1	602	13	3,031	329	5,815
Other Muddy River	1,785	1	265	9	1,667	118	3,333
Muddy River total	4,633	2	867	22	2,212	447	4,478
Faneuil Brook	1,316	17	1938	47	10,921	1,208	20,996
Shepard Brook	415	2	525	14	3,265	430	6,084
Smelt Brook	846	3	221	3	696	93	1,297
Allston-Brighton	796	0	0	0	0	0	0
Millers River	208	0	0	0	0	0	0
Other Lower Charles total	3,581	22	2684	63	14,882	1,731	28,377
Lower Charles Basin total	19,050	54	5992	150	28,651	3,576	54,480
Mother Brook	441	5	393	10	2,361	311	4,364
Hyde Park ²	1,766	5	459	10	2,410	307	4,527
Oakland Brook	519	3	262	7	1,666	238	3,061
Mattapan Brook	304	4	447	11	2,477	284	4,737
Lower Neponset	843	2	193	4	1,012	133	1,891
Tenean Creek	873	8	776	19	4,274	526	8,084
Davenport Creek	712	0	0	0	0	0	0
Neponset River total	5,458	27	2530	52	12,063	1,519	22,672
Charlestown	556	0	0	0	0	0	0
East Boston ²	438	10	465	11	2,560	316	4,840
Downtown ²	473	2	32630	709	171,904	22,550	321,357
Dorchester	1,124	2	190	4	1,024	170	1,821

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network

Table 7-4. Annual¹ Load Reduction Based on Illicit Discharges Removed in 2015

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus	E Coli	Enterococcus	Fecal Coliform
	Acres		gpd	lb/yr	10 ⁹ CFU/yr		
West Roxbury	889	1	56	3	625	87	1,133
Sawmill Brook	1,277	8	409	20	3,047	417	5,691
Mid-Charles total	2,166	9	465	22	3,672	504	6,824
Upper Stony	1,832	4	156	10	2,171	297	4,028
Canterbury Brook	1,889	5	402	43	9,193	1,224	17,163
Roslindale Branch	1,199	6	258	19	5,084	742	9,472
Bussey Brook ²	839	12	1326	35	4,317	640	7,033
Goldsmith Brook	746	1	12	4	625	62	1,214
Lower Stony ³	2,165	0	0	96	15,379	1,943	28,051
Stony Brook total	8,670	28	2154	207	36,769	4,908	66,961
Village Brook Boston	787	0	0	0	0	0	0
Village Brook Brookline	2,061	1	188	17	3,925	417	7,604
Other Muddy River	1,785	3	1472	18	134	446	334
Muddy River total	4,633	4	1660	35	4,059	863	7,938
Faneuil Brook ²	1,316	9	1760	84	19,929	2,388	37,832
Shepard Brook	415	0	0	0	0	0	0
Smelt Brook	846	1	43	4	985	127	1,846
Allston-Brighton	796	0	0	0	0	0	0
Millers River	208	0	0	0	0	0	0
Other Lower Charles total	3,581	10	1803	89	20,914	2,516	39,678
Lower Charles Basin total	19,050	51	6082	353	65,414	8,790	121,400
Mother Brook	441	0	0	0	0	0	0
Hyde Park	1,766	0	0	0	0	0	0
Oakland Brook	519	3	517	21	4,894	660	9,101
Mattapan Brook	304	2	36	13	2,650	329	4,986
Lower Neponset ²	843	1	192	8	2,017	265	3,769
Tenean Creek	873	1	202	24	5,535	662	10,516
Davenport Creek	712	19	1536	88	20,580	2,678	38,491
Neponset River total	5,458	26	2483	154	35,677	4,595	66,863
Charlestown	556	0	0	0	0	0	0
East Boston ²	438	2	4328	100	22,740	2,999	42,487
Downtown	473	2	631	83	3,552	490	6,574
Dorchester	1,124	0	0	0	0	0	0
TOTAL	27,099	81	13,524	691	127,383	16,874	237,324

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network
 2. Includes additional flow not in model as summarized in Table 2.
- there is a flow split. A portion of this flow goes to the 231023 outfall in

Table 7-5. Annual¹ Load Reduction Based on Illicit Discharges Removed in 2016

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus	E Coli	Enterococcus	Fecal Coliform
	Acres		gpd	lb/yr	10 ⁹ CFU/yr		
West Roxbury	889	1	32	1	185	27	345
Sawmill Brook	1,277	3	114	1	96	10	207
Mid-Charles total	2,166	4	146	2	281	38	552
Upper Stony	1,832	0	0	0	0	0	0
Canterbury Brook	1,889	18	4,759	118	25,498	3,329	47,675
Roslindale Branch	1,199	1	234	26	4,491	476	8,463
Bussey Brook ²	839	9	654	4	2,617	349	4,837
Goldsmith Brook	746	4	365	9	2,096	324	3,786
Lower Stony	2,165	1	40	173	35,350	4,820	65,801
Stony Brook total	8,670	33	6052	330	70,052	9,298	130,563
Village Brook Boston	787	0	0	0	0	0	0
Village Brook Brookline	2,061	0	0	0	0	0	0
Other Muddy River	1,785	5	536	14	987	316	2,004
Muddy River total	4,633	5	536	14	987	316	2,004
Faneuil Brook	1,316	5	1,264	35	8,289	1,131	15,355
Shepard Brook	415	2	1,204	22	5,246	682	9,846
Smelt Brook	846	9	2,181	17	4,077	589	7,520
Allston-Brighton	796	2	632	12	2,992	383	5,612
Millers River	208	0	0	0	0	0	0
Other Lower Charles total	3,581	18	5281	86	20,604	2,785	38,334
Lower Charles Basin total	19,050	60	12015	432	91,924	12,437	171,452
Mother Brook	441	2	157	4	869	106	1,635
Hyde Park	1,766	1	63	1	331	39	630
Oakland Brook	519	2	382	4	1,005	103	1,961
Mattapan Brook	304	4	1,218	24	5,534	709	10,409
Lower Neponset	843	1	36	1	197	31	355
Tenean Creek	873	1	984	23	5,385	706	10,067
Davenport Creek ²	712	15	1448	15	8,458	1,092	15,826
Neponset River total	5,458	26	4288	72	21,780	2,787	40,882
Charlestown	556	0	0	0	0	0	0
East Boston	438	1	94	2	561	74	1,045
Downtown	473	2	528	12	2,827	291	5,443
Dorchester	1,124	4	484	11	2,664	357	4,973
TOTAL	27,099	93	17,409	529	119,755	15,945	223,795

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network
2. Includes additional flow not in model as summarized in Table 2.

Table 7-6: Annual¹ Load Reduction Based on Illicit Discharges Removed in 2017

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus	E Coli	Enterococcus	Fecal Coliform
	Acres		gpd	lb/yr	10 ⁹ CFU/yr		
West Roxbury	889	4	379	6	1,560	243	2,830
Sawmill Brook	1,277	3	134	4	229	27	441
Mid-Charles total	2,166	7	513	10	1,789	270	3,271
Upper Stony	1,832	0	0	0	0	0	0
Canterbury Brook	1,889	4	406	17	3,730	483	6,983
Roslindale Branch	1,199	0	0	0	0	0	0
Bussey Brook ²	839	2	91	1	61	9	89
Goldsmith Brook	746	3	467	10	2,060	342	3,653
Lower Stony	2,165	1	66	4	632	196	884
Stony Brook total	8,670	10	1030	32	6,483	1,030	11,609
Village Brook Boston	787	0	0	0	0	0	0
Village Brook Brookline	2,061	0	0	0	0	0	0
Other Muddy River	1,785	1	1,293	30	6,309	770	11,907
Muddy River total	4,633	1	1293	30	6,309	770	11,907
Faneuil Brook	1,316	6	459	10	2,500	577	4,003
Shepard Brook	415	5	702	10	2,459	283	4,689
Smelt Brook	846	0	0	0	0	0	0
Allston-Brighton	796	0	0	0	0	0	0
Millers River	208	0	0	0	0	0	0
Other Lower Charles total	3,581	11	1161	20	4,959	860	8,692
Lower Charles Basin total	19,050	29	3,997	92	19,540	2,930	35,479
Mother Brook	441	1	33	0	0	0	0
Hyde Park	1,766	1	162	4	904	116	1,694
Oakland Brook	519	3	219	10	2,351	311	4,387
Mattapan Brook	304	2	353	3	672	116	1,197
Lower Neponset	843	0	0	0	0	0	0
Tenean Creek	873	1	68	2	361	43	691
Davenport Creek ²	712	2	180	4	949	123	1,779
Neponset River total	5,458	10	1015	23	5,237	709	9,748
Charlestown	556	0	0	0	0	0	0
East Boston	438	0	0	0	0	0	0
Downtown	473	0	0	0	0	0	0
Dorchester	1,124	0	0	0	0	0	0
TOTAL	27,099	39	5,012	115	24,777	3,639	45,227

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network

Table 7-7: Annual¹ Load Reduction Based on Illicit Discharges Removed in 2018

Reporting Area Name	Drainage Area	Number Illicits Removed	Flow Removed	Total Phosphorus
	Acres		gpd	lb/yr
West Roxbury	889	7	501	11
Sawmill Brook	1,277	1	126	3
Mid-Charles total	2,166	8	627	14
Upper Stony	1,832	2	529	11
Canterbury Brook	1,889	1	148	3
Roslindale Branch	1,199	9	3,046	66
Bussey Brook ²	839	0	0	0
Goldsmith Brook	746	8	4,348	94
Lower Stony	2,165	12	4,683	101
Stony Brook total	8,670	32	12754	276
Village Brook Boston	787	1	37	1
Village Brook Brookline	2,061	0	0	0
Other Muddy River	1,785	1	415	9
Muddy River total	4,633	2	452	10
Faneuil Brook	1,316	6	704	15
Shepard Brook	415	0	0	0
Smelt Brook	846	0	0	0
Allston-Brighton	796	0	0	0
Millers River	208	0	0	0
Other Lower Charles total	3,581	6	704	15
Lower Charles Basin total	19,050	48	14,537	314
Mother Brook	441	0	0	0
Hyde Park	1,766	0	0	0
Oakland Brook	519	0	0	0
Mattapan Brook	304	1	845	18
Lower Neponset	843	0	0	0
Tenean Creek	873	0	0	0
Davenport Creek ²	712	0	0	0
Neponset River total	5,458	1	845	18
Charlestown	556	1	20	0
East Boston	438	1	164	4
Downtown	473	2	10,785	233
Dorchester	1,124	0	0	0
TOTAL	27,099	53	26,351	570

Notes:

1. Based on 2007-2009 precipitation using BWSC precipitation gage network

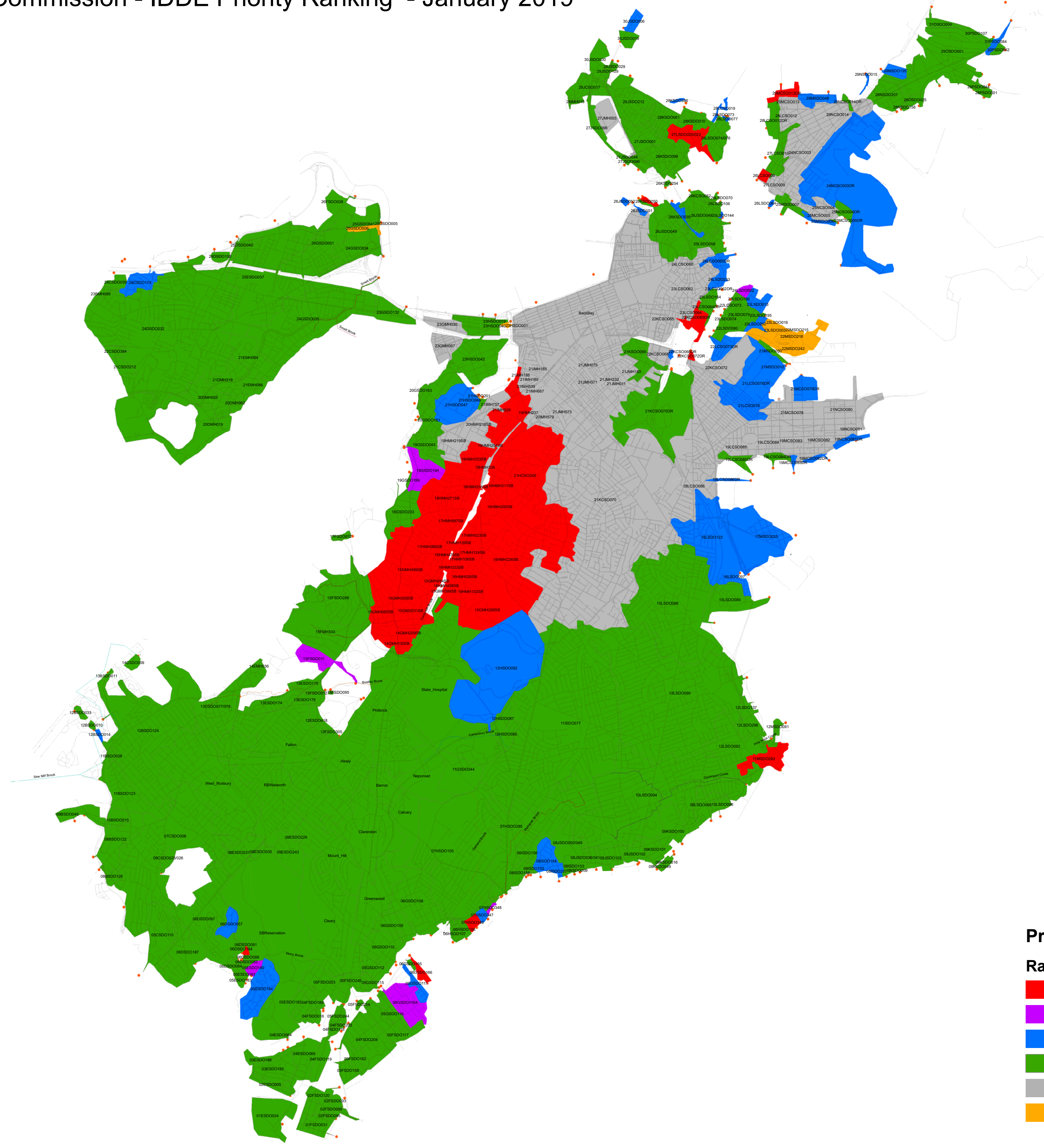
Table 7-8: Annual¹ Loads as of End 2018 Subsequent to Illicit Discharge Removal

Reporting Area Name	Drainage Area	Total Phosphorus
	Acres	lb/yr
West Roxbury	889	278
Sawmill Brook	1,277	635
Mid-Charles total	2,166	913
Upper Stony	1,832	534
Canterbury Brook	1,889	2,275
Roslindale Branch	1,199	638
Bussey Brook	839	90
Goldsmith Brook	746	164
Lower Stony	2,165	1,472
Stony Brook total	8,670	5,173
Village Brook Boston	787	449
Village Brook Brookline	2,061	1,018
Other Muddy River	1,785	2,508
Muddy River total	4,633	3,975
Faneuil Brook	1,316	751
Shepard Brook	415	530
Smelt Brook	846	785
Allston-Brighton	796	483
Millers River	208	382
Other Lower Charles total	3,581	2,931
Lower Charles Basin total	19,050	12,992
Mother Brook	441	200
Hyde Park	1,766	903
Oakland Brook	519	354
Mattapan Brook	304	175
Lower Neponset	843	581
Tenean Creek	873	2,202
Davenport Creek	712	428
Neponset River total	5,458	4,843
Charlestown	556	1,763
East Boston	438	1,029
Downtown	473	418
Dorchester	1,124	2,274
TOTAL	27,099	23,319

Notes: 1. Based on 2007-2009 precipitation using BWSC precipitation gage network

APPENDIX B: FIGURES

Boston Water and Sewer Commission - IDDE Priority Ranking - January 2019



- Prioritization Ranking**
- 2 - High
 - 3 - Medium
 - 4 - Low
 - 5 - Complete
 - 7 - Combined
 - 8 - Non-BWSC

Currents

NEWS FROM BOSTON WATER AND SEWER COMMISSION

March - April 2018

Martin J. Walsh, Mayor

Henry F. Vitale, CPA, Executive Director/ Treasurer

BWSC@Work

Notable events from the Boston Water and Sewer Commission

Green Infrastructure in Boston

The Boston Water and Sewer Commission is implementing eco-friendly projects designed to help manage stormwater and educate the public on our infrastructure. The goal is to mimic nature and treat the first inch of stormwater, which will substantially reduce pollution in our rivers and Boston Harbor. For most of Boston's history, stormwater management meant capturing stormwater and piping it quickly and efficiently to receiving waters, like the Charles, Muddy, Mystic and Neponset Rivers or Boston Harbor. In recent years the city has adopted a new "green" approach to stormwater management.

Keep an eye out for signage around Boston where green infrastructure is in place and explains how green features work. Signs are already up at East Boston's Central Square and soon will be installed at Audubon Circle, Washington Irving Middle School in Roslindale, Rafael Hernandez School and the David A. Ellis Elementary School, both in Roxbury.

As with the Washington Irving Middle School, BWSC has helped design "green" play and parking areas of four additional Boston Public Schools. The David A. Ellis, Jackson Mann K-8, Edward M. Kennedy Academy for Health Careers, and the Horace Mann School for the Deaf and Hard of Hearing all will be unveiled this year. BWSC is collaborating on a curriculum with Boston Public Schools for fifth and sixth grade classrooms that will be introduced during the 2018/2019 school year. The curriculum is designed to introduce students to green infrastructure at an early age and provide a better awareness of how infrastructure works within the community and what they can do to help the environment.



Eco-friendly outdoor learning and play space at the Rafael Hernandez school in Roxbury.

Other upcoming projects include bioretention featuring native plants to filter rain water on South Street and Bussey Street in Roslindale, and permeable pavers which will absorb rain and snow water that falls onto the sidewalks outside of BWSC's Headquarters on Harrison Avenue.



Residents stroll through Central Square in East Boston that feature permeable paver sidewalks designed to absorb rainwater.



Signage explains green infrastructure features in Central Square.

BWSC Construction Season to Begin

As warm weather returns to Boston, residents will see BWSC construction improvement projects start up again. One important project is the replacement of 3,640 feet of water main pipe on Brookline Ave from Riverway to Fenway. Want to know what's happening in your neighborhood? Log on to our homepage at www.bwsc.org and click on "projects". Also, join Nextdoor on social media where BWSC posts updates and notifications on improvements in your neighborhood.



Installing water meters on Brookline Avenue.



Boston Water and Sewer Commission Headquarters is open:

Monday - Friday, 8 AM - 5 PM

Wednesdays, 8 AM - 7 PM

980 Harrison Avenue, Boston, MA 02119

(617) 989-7000  www.bwsc.org



WE ARE ALL CONNECTED

Let's Protect Boston's Waterways



Spring Into Action!

Get involved in protecting the environment. Save the date for these upcoming events:

Fix a Leak Week - March 19-25

Save money and reduce your household water usage by finding and fixing leaks in your home. Boston residents can request a free water conservation kit to check for toilet leaks. Call us at 617-989-7500 to request one today!

World Water Day - March 22

Learn about the global importance of water in our lives. This year's theme looks at how green infrastructure can be a solution to water challenges we face in the 21st century. Visit www.worldwaterday.org for more info.

Earth Day - April 22

Do you know someone who deserves to be recognized for his or her contribution to the environment? Nominate them for a Greenovate Award! The Greenovate Awards ceremony takes place in April as part of our Earth Day celebrations. Visit www.greenovateboston.org for more details and to send in your nomination!

Spring Yard Waste Collection



Leaf and Yard Waste collection begins April 23, 2018. Bag, barrel, or tie yard waste for curbside collection on your regular recycling day. Visit www.boston.gov/trash-and-recycling-guide for more details.

Prevent Stormwater Pollution: Dispose of pesticides and herbicides properly

Insecticides and fertilizers help a garden grow and flourish. When used correctly, these chemicals can protect plants from damage. However, if disposed of improperly, chemicals can pollute stormwater runoff and ultimately contaminate our waterways. If you use fertilizers and pesticides, you will need to know the do's and don'ts of their use.

Follow label instructions carefully and only use the specified amount. Avoid watering plants right after applying unless instructions say to do so.

Don't use chemicals right before it is windy or rains. Excess chemicals can wash into waterways if not applied properly or too much is used.

Bring any remaining chemicals to a Boston Household Hazardous Waste Drop-off Day site for proper disposal. Visit www.boston.gov/trash-and-recycling-guide for more info. Never dispose of these chemicals in the trash.



Neighborhood Site Locations

- Pay your water bill with a check or money order -- no cash.
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Allston/Brighton

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Thursdays, 10 AM - 12 PM
3/22 & 4/19

Charlestown

Golden Age Center

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Tuesdays, 11 AM - 1 PM
3/27 & 4/24

Chinatown

CCBA

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Dorchester - Uphams Corner

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Jamaica Plain

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Mattapan

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Currents

NEWS FROM BOSTON WATER AND SEWER COMMISSION
May - June 2018

Martin J. Walsh, Mayor

Henry F. Vitale, CPA, Executive Director/ Treasurer

BWSC@Work

Notable events from the Boston Water and Sewer Commission

New Electronic Payment Service - Paymentus

As of April 30, 2018, BWSC began offering its customers a new electronic payment service, **Paymentus**. Customers who use electronic payment to pay their water and sewer bills on www.bwsc.org will see enhanced options with our new provider.

BWSC no longer offers *MyCheckFree* for online bill payments as of April 30, 2018. Customers who wish to pay online **will need to register with Paymentus** to continue seamless electronic billing payments.

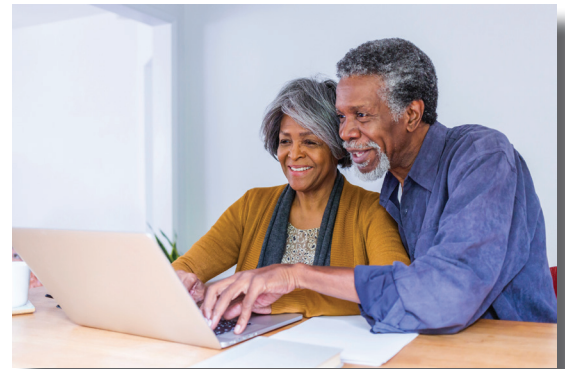
Registering with Paymentus is easy. It only takes a few minutes to sign up for this online service and there is no processing fee. Paymentus is one of the leading electronic payment providers in the country. Founded in 2004, they serve utilities, insurance providers, financial services firms, hospitals, and government agencies.

With the growth of options for electronic bill payments, customers may opt to use services through their banks or other financial institutions. Please contact these institutions directly if this is your preference for bill payments.

All BWSC customers will continue to receive a paper bill. If you mail a check as payment, or visit one of our neighborhood sites or our headquarters to pay your bill, these options remain available to our customers. If you have any questions, please contact BWSC's Customer Service Department at 617-989-7800.

May is Older Americans Month

To celebrate, Boston Water and Sewer Commission encourages residents to check their eligibility for a 30% discount on the water portion of their bill. You are eligible if you are a homeowner and are 65 years of age and older, or fully disabled, live in a 1-4 family home, or reside in a property held in a qualified trust and meet all of the above requirements. Call BWSC Customer Service for more information: (617) 989-7800 or visit one of BWSC's Neighborhood Site Visit Locations. May and June site visit information is listed on back.



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Currents

NEWS FROM BOSTON WATER AND SEWER COMMISSION
September - October 2018

Martin J. Walsh, Mayor

Henry F. Vitale, CPA, Executive Director/ Treasurer

BWSC@Work

Notable events from Boston Water and Sewer Commission

Getting the Lead Out!

BWSC's Lead Incentive Replacement Program provides grants to assist property owners with lead service line replacements to their home to reduce exposure to lead in drinking water. If you live in the City of Boston, and your property has a lead service line, this program may be for you!

Mayor Martin J. Walsh urged BWSC to double the financial incentives offered by the program. Qualified property owners receive a credit of up to \$2,000.00 toward the cost of the replacement AND any remaining costs for the work can be paid over a 48-month period, interest free. For more information, call the Lead Hotline at 617-989-7888.

11th Annual Boston Greenfest

Boston Water and Sewer Commission joined many of our partners in participating in the 11th Annual Boston Greenfest! Our water truck and educational team enjoyed sharing information about Boston's water, sewer, and drainage systems. Educating the public on these systems and how they work helps create a better understanding of our shared responsibility in protecting Boston's environment.

School is in!

Students and teachers are gearing up for another adventurous school year. BWSC's educational staff provides year-round, interactive presentations for students of all ages. The program is part of our outreach to schools interested in learning more about how Boston's water, sewer, and storm water systems work.



BWSC replaces lead lines through the Lead Incentive Replacement Program.



Save the date!
Imagine a Day Without Water is October 10!
Follow us on social media to see why Boston Water and Sewer Commission values water each day. Visit imagineadaywithoutwater.org to see how you can get behind the cause too!



Contact BWSC's Communications Dept. at 617-989-7349 to coordinate a visit to your school or neighborhood association.



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www.bwsc.org

WE ARE ALL CONNECTED

Let's Protect Boston's Waterways



Giving Water A Way

How Can I Find My Neighborhood's Storm Drains?

Autumn is a beautiful season to be in Boston. However, leaves that fall can collect on top of the city's catch basins, also known as storm drains. These leaves, and other debris, can block rainwater from entering into the storm drain system, potentially causing flooding in our neighborhoods.



Keeping catch basins clear of leaves and debris lets water flow through Boston's storm drain system.

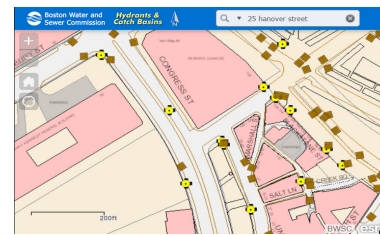
To prevent local flooding Boston Water and Sewer Commission and the Department of Public Works perform year round maintenance to keep catch basins clean and free of debris, but there are ways Boston residents can help too. **All that's needed is a rake, shovel, broom and receptacle.**

How You Can Help

- Use gloves or other protective gear.
- Clear leaves and other debris from catch basins in your neighborhood or near your business.
- Put leaves and other yard debris in large paper bags or open barrels labeled "YARD WASTE".
- Place barrels, bags and branches curbside **by 7 AM on your neighborhood's designated recycling day.**



Leaf and yard waste collection continues through the first week in December. For more information, call the DPW at 671-635-4900 or visit their website at boston.gov/trash-day-schedule.



BWSC's Hydrant and Catch Basin Locator Map can help you find them - visit www.bwsc.org.

Fixing Car Leaks Protects Our Waterways

Cars require different types of fluids. When cars have a leak, these fluids fall onto the road, wash into catch basins and end up polluting Boston Harbor and other local waterways.

Let's work together to protect Boston's waterways.

1. Check your car for drips or leaks regularly. See or smell something unusual? Get it fixed!
2. Put a drip pan or waterproof cloth under your car if you have a leak or are doing engine work.
3. Treat motor oil and other automotive fluids as household hazardous waste. Dispose of them at the next Boston Household Hazardous Waste Drop-Off (or Paint and Motor Oil Recycling Day Drop-Off) Day.

The next Boston Hazardous Waste Drop-Off Day is Saturday, October 27!

Drop off your paint, electronics, etc. from 9 AM - 2 PM at the DPW Central Facility located at 400 Frontage Road.

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Properly Dispose of Pet Waste

- Take a plastic bag with you when taking your dog for a walk to pick up pet waste. Be sure to place the bag directly into a trash can.
- Never dispose of pet waste in catch basins.
- Remember that dog waste cannot be used as fertilizer.
- Never place dog waste near a tree or in soil because the bacteria in pet waste is potentially harmful.



Scoop the Poop!

Prevent contamination of our local waterways, parks and Boston Harbor by picking up after your dog. Dog waste should be placed into a trash can or receptacle. It should never be placed into catch basins in the street, as these lead into Boston's storm drain system and flow directly to Boston Harbor and other local waterways.

The City of Boston's dog fouling ordinance requires that dog owners remove and properly dispose of all pet waste. This includes waste on sidewalks, streets, parks, and neighbors' lawns.



Martin J. Walsh, *Mayor* | Henry F. Vitale, CPA, *Executive Director/Treasurer*

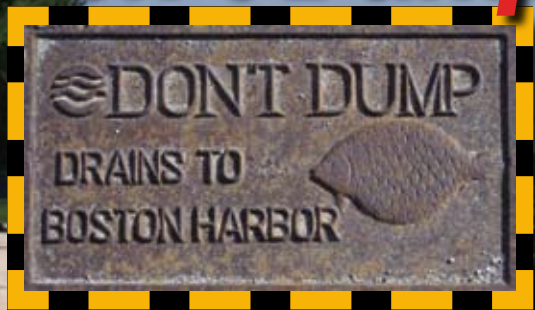


Boston Water and Sewer Commission | 980 Harrison Avenue, Boston, MA 02119 | www.bwsc.org | (617) 989-7000



Let's Protect Boston's Waterways

Don't Dump!



***Stormwater drains to
Boston Harbor and local rivers***

***Help protect our
water resources.***

Most catch basins in Boston connect to storm drains that discharge the runoff to the nearest brook, river or the Boston Harbor. Substances carelessly spilled or dumped onto our streets or directly into a catch basin can pollute Boston Harbor and the Charles, Neponset and Mystic Rivers.



Boston Water and Sewer Commission • 980 Harrison Ave • Boston, MA 02119 • (617) 989-7000 • www.bwsc.org

Report illegal dumping



The dumping of any substance into a catch basin is illegal in Boston. Prohibited substances include household chemicals, fertilizers, insecticides, automotive fluids, oils, paints, pet waste and commercial waste. Anything dumped into a catch basin can travel through storm drains to local streams, rivers and into Boston Harbor. These pollutants harm water quality and can kill aquatic life.

*To report an illegal dumping incident,
contact the Boston Water and Sewer
Commission immediately at **617-989-7000***



Reduce Chemical Use: Nontoxic Alternatives for Household Cleaning

Some household cleaners contain chemicals that are toxic to humans, animals, and the environment. Using **nontoxic alternatives** can reduce your exposure and keep toxic chemicals out of the environment. Some common household products that are effective substitutes for chemical cleaners are:

Baking soda: Cleans, deodorizes, and scours.

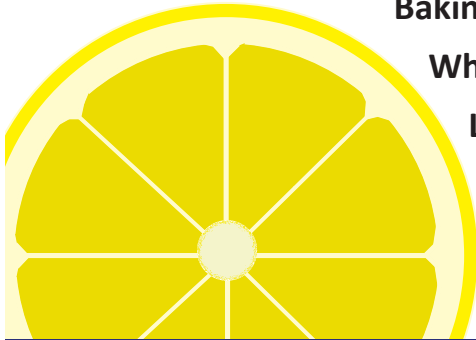
White vinegar: Cuts grease, removes mildew and wax buildup, and kills weeds.

Lemon: Kills household bacteria and removes odors.

Cornstarch: Polishes furniture and removes stains from carpets and rugs.

Unscented soap: Serves as an all-purpose household cleaner.

Olive oil: Can also be used to clean and polish wood.



Wipes Belong in the Trash

Many wipes claim to be “flushable” and “sewer safe.” However, these wipes do not break down as they travel through pipes and into the system.

- Bathroom wipes
- Disinfecting wipes
- Baby wipes
- Towelettes

Wipes can create clogs in both household plumbing and the public sewer system and result in sewer backups. Do your part and keep wipes out of pipes!



Como Desechar Apropriadamente los Desechos Fecales de su Perro

- Cuando saque a pasear su perro lleve una bolsa de plástico y eche allí sus desechos fecales. Tire esa bolsa directamente en un contenedor de basura.
- Nunca eche esos desechos en los drenajes públicos en la calle.
- Los desechos fecales de perro no pueden ser utilizados como fertilizante.
- Nunca eche esos desechos cerca de un árbol o en el suelo porque las bacterias en esos desechos son potencialmente perjudiciales para el medio ambiente y para nuestra salud.



Martin J. Walsh, *Alcalde* | Henry F. Vitale, CPA, *Director Ejecutivo/Tesorero*



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Let's Protect Boston's Waterways

Recoja los Desechos Fecales de su Perro (*Scoop the Poop*)

Prevenga la contaminación de nuestros ríos, canales, parques, y el Puerto de Boston recogiendo los desechos fecales de su perro.

Eche esos desechos en un recipiente específicamente diseñado para ello. Nunca los eche en los drenajes públicos en la calle porque eventualmente llegaran al Puerto de Boston y a otros ríos y canales locales.

La ley de la ciudad de Boston (“Pooper Scooper Law”), requiere que los dueños de perros recojan sus desechos fecales de los andenes, calles, parques, y del césped de sus vecinos. El que viole esta ley será multado por cada infracción.



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