

# **Year 2 Annual Report**

## **Massachusetts Small MS4 General Permit**

### **Reporting Period: July 1, 2019-June 30, 2020**

*\*\*Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form\*\**

*Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2019 and June 30, 2020 unless otherwise requested.*

### **Part I: Contact Information**

Name of Municipality or Organization: City of Quincy

EPA NPDES Permit Number: MAR041081

#### **Primary MS4 Program Manager Contact Information**

Name: Paul Costello, P.E.

Title: City Engineer

Street Address Line 1: Public Works Building

Street Address Line 2: 55 Sea Street

City: Quincy

State: MA

Zip Code: 02169

Email: pcostello@quincyma.gov

Phone Number: (617) 376-1950

#### **Stormwater Management Program (SWMP) Information**

SWMP Location (web address): <https://www.quincyma.gov/govt/depts/pwd/drain/default.htm>

Date SWMP was Last Updated: September 2020

If the SWMP is not available on the web please provide the physical address:

## Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

### Impairment(s)

- ☒ Bacteria/Pathogens
 ☐ Chloride
 ☒ Nitrogen
 ☐ Phosphorus  
☒ Solids/ Oil/ Grease (Hydrocarbons)/ Metals

### TMDL(s)

- In State:**
☐ Assabet River Phosphorus
 ☒ Bacteria and Pathogen
 ☐ Cape Cod Nitrogen  
☐ Charles River Watershed Phosphorus
 ☐ Lake and Pond Phosphorus  
**Out of State:**
☐ Bacteria/Pathogens
 ☐ Metals
 ☐ Nitrogen
 ☐ Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

### Year 2 Requirements

- ☒ Completed Phase I of system mapping
- ☒ Developed a written catchment investigation procedure and added the procedure to the SWMP
- ☒ Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- ☒ Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- ☒ Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- ☒ Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- ☒ Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or
- ☒ operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

In fiscal year 2021, the City rededicated funding previously redirected toward the COVID-19 pandemic response to complete stormwater compliance tasks that were budgeted for completion in Permit Year 2. The tasks listed above have been completed as of the submittal of this report.

Additionally, the City developed a MS4 map containing Phase 1 and some Phase 2 elements presented in the MS4 General Permit during Permit Year 2 and are currently working with the Massachusetts Department of Conservation and Recreation (DCR) to refine outfall ownership information. Mapping efforts were temporarily halted due to staff availability during the COVID-19 pandemic; however, budget and staff have been dedicated during fiscal year 2021 to continue to update the MS4 map as new information becomes available.

### Annual Requirements

- ☒ Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- ☒ Kept records relating to the permit available for 5 years and made available to the public
- ☒ The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
  - ☐ This is not applicable because we do not have sanitary sewer
  - ☐ This is not applicable because we did not find any new SSOs
  - ☒ The updated SSO inventory is attached to the email submission
  - ☐ The updated SSO inventory can be found at the following website:
- ☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- ☒ Provided training to employees involved in IDDE program within the reporting period
- ☒ All curbed roadways were swept at least once within the reporting period
- ☒ Updated outfall and interconnection inventory and priority ranking as needed

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

### **Bacteria/ Pathogens** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

#### Annual Requirements

##### *Public Education and Outreach\**

- ☒ Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- ☐ Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

*\* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

There are about 10-15 septic systems in the City. Due to the limited quantity of septic systems, no septic system messaging was created.

## **Nitrogen** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

### Annual Requirements

#### *Public Education and Outreach\**

- ☒ Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- ☒ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

*\* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

#### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

#### *Potential structural BMPs*

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was

- ☐ estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

- ☐ The BMP information is attached to the email submission
- ☒ The BMP information can be found at the following website:

There is no information related to this field provided in the report. The pdf form doesn't allow the opportunity to uncheck.

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

During this permit year the City conducted an impervious area analysis using GIS as a preliminary step toward calculating nitrogen removal by BMPs. The continued updates and mapping of City-owned structural BMPs was delayed due to the reallocation of stormwater funding to COVID-19 response needs. This work is anticipated to be continued during Permit Year 3.

In PY2 the City worked with the Neponset Stormwater Partnership (through a 604B grant) to prioritize the top ten facilities for potential BMP installation and develop a conceptual design for a rain garden at the Montclair School. The City has also applied for \$317,938 in funding from the CWSRF program to pay for the rain



garden, and will be developing conceptual designs for BMPs at two more locations.

### **Solids, Oil and Grease (Hydrocarbons), or Metals**

#### Annual Requirements

##### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
- ☒ Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

*Optional:* Use the box below to provide any additional information you would like to share as part of your self-assessment:

1. Bacteria/Pathogens - Public Education and Outreach: Out of Quincy's 25,000 water customers, only 10 - 15 own septic systems. Due to the limited quantity of septic systems, no formal education and outreach plan was created for this small portion of the community.

2) Bacteria/Pathogens & Nitrogen - Public Education and Outreach: The educational mailing that highlighted general stormwater/storm drain awareness, as well as specific information about fertilizers, lawn care, phosphorus pollution, pet waste management, dumping and trashcan/dumpster maintenance was sent to audiences the week of July 8, 2019.

3) The City identified and removed material from 535 catch basins requiring cleaning during this annual reporting period.

### Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

☐ Yes

☒ No

If yes, describe below, including any relevant impairments or TMDLs:

The City is in the process of determining ownership of outfalls previously identified to be owned by the City, but recently identified to potentially be owned by the Massachusetts Department of Conservation and Recreation (DCR). The City is coordinating efforts with the DCR to identify DCR-owned outfalls. Although no formal changes have been made to outfall mapping, this effort was initiated during Permit Year 2 and will be resolved during Permit Year 3.

## Part IV: Minimum Control Measures

*Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.*

### MCM1: Public Education

Number of educational messages completed **during this reporting period:**

*Below, report on the educational messages completed **during this reporting period**. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.*

#### **BMP:Maintain Educational Website**

Message Description and Distribution Method:

The City of Quincy has partnered with the Neponset Stormwater Partnership to complete this BMP: Maintained a comprehensive educational website to serve the Neponset Stormwater Partnership service area as a primary resource for key information for all four target audiences.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Neponset Stormwater Partnership's Measurable Goal: Achieve at least unique 500 site visits every year.

This year, there were 3,562 site visitors and 5,614 unique page views. Site visitor and page view quantities were not provided specifically for the City of Quincy.

Message Date(s):

Message Completed for:    Appendix F Requirements ☒    Appendix H Requirements ☒

Was this message different than what was proposed in your NOI?    Yes ☐    No ☒

If yes, describe why the change was made:

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#### **BMP:Operate Stormwater Hotline**

Message Description and Distribution Method:

The City of Quincy has partnered with the Neponset Stormwater Partnership to complete this BMP: Operated a regional “stormwater hotline” to field questions and problem reports regarding stormwater from across the region. Responses were collected via a website form hosted at [yourcleanwater.org](http://yourcleanwater.org), via email submissions to [stormwater@neponset.org](mailto:stormwater@neponset.org), and phone calls to 781-575-0354 x 300. Responses included answers to questions, additional information or follow up investigation, and/or referral of inquiries/reports to the appropriate municipalities as appropriate. Anonymity of inquiries was maintained as requested.

Targeted Audience:

Responsible Department/Parties: DPW working with Neponset Stormwater Partnership

Measurable Goal(s):

Neponset Stormwater Partnership's Measurable Goal: Provide immediate answers to inquiries generated by regionalized outreach activities.

Eight contacts were made to the stormwater hotline this year. Contact quantities were not provided specifically for the City of Quincy.

Message Date(s): Ongoing since May 1, 2018

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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### **BMP:Distribute Pet Waste Information With Dog Licenses**

Message Description and Distribution Method:

Print pet waste cards and posters. Distribute to City clerks and have clerks insert cards when mailing back completed dog licenses. Display posters at the City Clerk's Office where dog license applications are received, and distribute pet waste cards in person at the City Clerk's Office.

Targeted Audience: Residents

Responsible Department/Parties: Neponset Stormwater Partnership, Quincy City Clerk's Office

Measurable Goal(s):

Full participation of City clerks in order to reach 80% of dog owners annually with pet waste management information. Over the 5-year permit period, achieve a reduction in the number of pet waste bags found when cleaning catch basins. For this reporting period, a total of 2,000 cards were printed and distributed to City clerks.

Message Date(s): Materials were distributed to the City Clerk in December 2019 and disseminated to dog owners over the next several months.

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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### **BMP:Summer Pet Waste Campaign**

Message Description and Distribution Method:

The City of Quincy published a post on their Facebook page about the proper disposal of pet waste. The post included a link to the Neponset Stormwater Partnership's web page, which provides proper pet waste

management information, including: health problems that can stem from human interaction with pet waste, the environmental impacts of pet waste pollution in stormwater, and ways residents can prevent their pet's waste from polluting stormwater.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: Neponset Stormwater Partnership, Quincy DPW

Measurable Goal(s):

The post was "liked" 27 times, "shared" 3 times, and commented on 5 times by Facebook users.

Approximately 10,700 Facebook users currently "follow" the City of Quincy's Facebook page and can view the City's postings in their newsfeed.

Message Date(s): August 28, 2019

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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### **BMP:Fall Leaf Waste Campaign**

Message Description and Distribution Method:

The City of Quincy published a post on their Facebook page about the proper management of leaf litter. The post included a link to the Neponset Stormwater Partnership's web page, which provides proper yard waste disposal information, including: how leaves and grass clippings can contribute to stormwater pollution and impact the natural environment, ways residents can help prevent their yard waste from polluting stormwater, and specific information on how to dispose of yard waste in the City of Quincy.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: Neponset Stormwater Partnership, Quincy DPW

Measurable Goal(s):

The post was "liked" 16 times, "shared" 1 time, and commented on 4 times by Facebook users.

Approximately 10,700 Facebook users currently "follow" the City of Quincy's Facebook page and can view the City's postings in their newsfeed.

Message Date(s): October 31, 2019

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

**BMP:Spring Fertilizer and Grass Clipping Campaign**

## Message Description and Distribution Method:

The City of Quincy "retweeted" a post by the Neponset Stormwater Partnership onto the City's Twitter page about the harmful effects of phosphorus-containing fertilizers. The post included a link to the Neponset Stormwater Partnership's web page, which provides proper yard maintenance information, including: how fertilizers can be transported into storm drain systems and surface water via stormwater runoff and thus polluting waterways, fertilizer regulations, alternatives, and a "fertilizer calculator" that allows a user to enter several pieces of information and receive a suggested fertilizer application rate based on guidance from the NEIWPC Northeast Voluntary Turf Fertilizer Initiative.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: Neponset Stormwater Partnership, Quincy DPW

## Measurable Goal(s):

Approximately 7,429 Twitter users currently "follow" the City of Quincy's Twitter page and can view the City's postings in their newsfeed.

Message Date(s): April 23, 2020

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

**BMP:School Outreach Program**

## Message Description and Distribution Method:

Prepare a hands-on watershed education curriculum for 4th or 5th grade students. Curriculum discusses water, wastewater, wastewater and stormwater infrastructure, where water comes from and goes to, water conservation techniques, and stormwater pollution prevention techniques, and incorporates slides, video, and hands-on activities. The program is delivered at the individual classroom level over the course of one 60-minute visit by a watershed educator. The educator also provides students with a water use / pollution prevention checklist and summary of the program for students to take home and review with their families. Due to the spring 2020 COVID-19 pandemic restrictions, schools were shut down and some scheduled school visits during this period could not occur. In lieu of these visits, the educator created digital materials for teachers to use in their virtual classrooms.

Targeted Audience: Residents

Responsible Department/Parties: Neponset Stormwater Partnership, Quincy Public Schools

## Measurable Goal(s):

Reach at least 80% of households with 4th or 5th grade children in participating communities, and 100% positive feedback from participating classroom teachers. The COVID-19 pandemic and subsequent school shut downs prevented educators from completing all visits as scheduled. Online materials were created for use in virtual learning situations.

Message Date(s): September 2019 through June 2020 (school year)

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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**BMP: Education and Outreach to Residents**

Message Description and Distribution Method:

Mail information about the stormwater management program as well as curbside waste & recycling, yard waste, street sweeping, and household hazardous waste disposal to every resident via the bi-annual "InfoLetter." Also make the information available online, on the City of Quincy DPW webpage.

The City of Quincy also posted a single-page summary of the Spring/Summer 2020 "InfoLetter" onto their Facebook page, which included: an update on a new City ordinance prohibiting plastic bags, spring street sweeping and yard waste collection schedules, Household Hazardous Waste Drop-Off Day information, various other helpful tips, and City contacts.

Targeted Audience: Residents

Responsible Department/Parties: Quincy DPW

Measurable Goal(s):

Full participation of the DPW to distribute the "InfoLetter." Over 30,000 Quincy residents were reached by the mailers.

The Spring/Summer 2020 "InfoLetter" summary Facebook post on was "liked" 32 times, "shared" 36 times, and commented on 7 times by Facebook users.

Approximately 10,700 Facebook users currently "follow" the City of Quincy's Facebook page and can view the City's postings in their newsfeed.

Message Date(s): Fall/Winter 2019 and Spring/Summer 2020, Facebook post on March 11, 2020

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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**BMP: Education and Outreach to Residents**

Message Description and Distribution Method:

The City of Quincy published three posts on their Facebook page about the importance of only flushing toilet paper, including two infographics created by the City of Quincy and a link to an article published by Green



Matters. All three postings included information about how flushing disinfecting wipes, "flushable" wipes, paper towels, and any other items other than toilet paper can clog sewer lines and cause plumbing issues in homes and apartments.

Targeted Audience: Residents

Responsible Department/Parties: Quincy DPW, Quincy Mayor's Office

Measurable Goal(s):

The first posting, dated March 19, 2020 was "liked" 79 times, "shared" 125 times, and commented on 1 time by Facebook users; the second posting, dated March 24, 2020 was "liked" 28 times and "shared" 24 times by Facebook users; and the third posting, dated April 20, 2020 was "liked" 28 times, "shared" 15 times, and commented on 10 times by Facebook users

Approximately 10,700 Facebook users currently "follow" the City of Quincy's Facebook page and can view the City's postings in their newsfeed.

Message Date(s): March 19, 2020, March 24, 2020, and April 20, 2020

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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### **BMP:Think Blue “Fowl Weather” Video**

Message Description and Distribution Method:

Think Blue Massachusetts, on behalf of the Neponset Stormwater Partnership, ran a regional education advertising campaign targeting communities in the region, including Quincy. The campaign consisted of an educational video advertisement helping viewers visualize how pollution from pet waste, motor oil and trash become stormwater pollution. This advertisement was run from May 16th-June 5th, 2020 on Facebook, Instagram, and YouTube, and was targeted to coalition residents through account information and IP addresses.

Think Blue Massachusetts "Fowl Water" video (<https://www.thinkbluemassachusetts.org/>)

Targeted Audience: Residents

Responsible Department/Parties: Think Blue Massachusetts, Neponset Stormwater Partnership, Quincy DPW

Measurable Goal(s):

Reach a significant portion of the NSP service area population with a stormwater awareness message in a highly engaging format. A total of 104,041 people in Quincy were reached via Facebook/Instagram “impressions.” Via YouTube, there were 149,819 impressions for Quincy. A survey issued by NSP found that 17% of respondents recalled seeing the campaign during this Permit year, which is continuing an upward trend from 8% and 15% in 2018 and 2019, respectively.

Message Date(s): May 16 to June 5, 2020

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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### **BMP: Education and Outreach to Residents**

Message Description and Distribution Method:

The City of Quincy included a stormwater-related message as a water bill insert, which was sent to residents over the four quarters of the water bill distribution (September 2019, December 2019, March 2020, and June 2020). The message included information related to the ongoing concerns with flood hazards in the City and things residents can do to reduce flooding and damage, including refraining from dumping trash and yard waste into rivers, streams, open spaces, wetlands, ditches, catch basins, and any other drainage channels.

Targeted Audience: Residents

Responsible Department/Parties: Quincy DPW

Measurable Goal(s):

Water bills were mailed to all residents connected to the City's municipal drinking water distribution system.

Message Date(s): March 2020

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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Add an Educational Message

### **MCM2: Public Participation**

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period:**

The City of Quincy made their SWMP available for review and comment at the Department of Public Works and posted on their website, <https://www.quincyma.gov/govt/depts/pwd/drain/default.htm>

Was this opportunity different than what was proposed in your NOI? Yes ☐ No ☒

Describe any other public involvement or participation opportunities conducted **during this reporting period**:

The 31st Annual Cleaner, Greener In Quincy event, originally scheduled for Saturday, May 2, 2020, was canceled due to the COVID-19 pandemic.

The Neponset Stormwater Coalition organized a volunteer-based cleanup of the Neponset River with sites in Milton, Quincy, and Canton (and Boston) on September 21, 2019. Approximately 150 volunteers participated and removed an estimated 6.5 tons of trash and debris from various waterways, parks, and wetlands. Another cleanup day was planned for the spring, but it was canceled due to the COVID pandemic.

The Neponset Stormwater Coalition organized a Regional Water Quality Forum, which was an evening public presentation on the 2019 water quality data collected in the Neponset River Watershed. The presentation covered remaining challenges facing various waterways in the Watershed, and actions individuals can take to address those challenges. The event was held at the Canton Public Library, was publicized across the entire NSP service area, and drew approximately 29 attendees from numerous communities. In addition, the presentation was broadcasted on the local cable news network and a link to the recording was shared on social media.

### **MCM3: Illicit Discharge Detection and Elimination (IDDE)**

#### **Sanitary Sewer Overflows (SSOs)**

*Check off the box below if the statement is true.*

☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer

*Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period**.*

Number of SSOs identified:

Number of SSOs removed:

#### **MS4 System Mapping**

*Below, check all that apply.*

The following elements of the Phase I map have been completed:

- ☒ Outfalls and receiving waters
- ☒ Open channel conveyances
- ☒ Interconnections
- ☒ Municipally-owned stormwater treatment structures
- ☒ Waterbodies identified by name and indication of all use impairments
- ☒ Initial catchment delineations

*Optional:* Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

Mapping efforts are ongoing, with the Phase 1 and some Phase 2 mapping elements incorporated into the City's GIS. The City continues to refine outfall ownership information, as discussed in Part III, and has dedicated staff and budget to complete outstanding Phase 1 mapping requirements as well as update the MS4

map with new information, as necessary.

### **Screening of Outfalls/Interconnections**

*If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses.*

- ☐ The outfall screening data is attached to the email submission
- ☒ The outfall screening data can be found at the following website:

<https://www.quincyma.gov/govt/depts/pwd/drain/default.htm>

*Below, report on the number of outfalls/interconnections screened **during this reporting period**.*

Number of outfalls screened: 59

### **Catchment Investigations**

*If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.*

- ☒ The catchment investigation data is attached to the email submission
- ☐ The catchment investigation data can be found at the following website:

See the Hancock Street Illicit Discharge Removal memorandum for catchment investigation information.

*Below, report on the number of catchment investigations completed **during this reporting period**.*

Number of catchment investigations completed this reporting period: 1

*Below, report on the percent of catchments investigated **to date**.*

Percent of total catchments investigated: 16

*Optional: Provide any additional information for clarity regarding the catchment investigations below:*

The City continues to leverage staff trained in IDDE procedures to conduct opportunistic inspections of MS4 infrastructure during routine maintenance and repair responses to identify potential indicators of illicit discharges. The City also continues to evaluate sewer CCTV data to identify sewer pipe defects that may contribute illicit discharges to the MS4 to target future IDDE related investigations. During this permit year, the City investigated approximately 2.5 miles of sewer and drainage infrastructure for cross-connections and pipe defects. No cross-connections were identified. The City also inspected and improved MS4 infrastructure by removing and resetting casting and inspection of catch basins, drainage manholes, and sewer manholes, contributing to the overall enhanced functionality of the MS4 and potential detection of sewer-related illicit discharges by concurrently conducting sewer improvements in MS4 areas.

### **IDDE Progress**

*If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.*

- ☒ The illicit discharge removal report is attached to the email submission
- ☐ The illicit discharge removal report can be found at the following website:

*Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period**.*

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed:  gallons/day

*Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed **since the effective date of the permit (July 1, 2018)**.*

Total number of illicit discharges identified:

Total number of illicit discharges removed:

*Optional:* Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

### **Employee Training**

Describe the frequency and type of employee training conducted **during the reporting period**:

DPW staff were trained in August 2019 on outfall investigation procedures.

The Neponset Stormwater Coalition provided IDDE training to staff in Quincy and Milton. The IDDE awareness training covered identifying and reporting illicit discharges as well as some general information on IDDE activities that were being conducted by 3rd parties. Nine municipal staff and two 3rd party contractors attended this training on January 30, 2020.

City staff continue to be aware of proper practices to prevent pollution in stormwater due to municipal operations, and new employees go through an orientation program covering these topics. Over the reporting period, DPW staff attended Stormwater Management Committee Meetings, where the overall purpose and scope of the MS4 Program and IDDE Plan were discussed. In addition, DPW staff attended conferences such as those sponsored by AWWA and NEWEA where technical seminars regarding stormwater are presented.

### **MCM4: Construction Site Stormwater Runoff Control**

*Below, report on the construction site plan reviews, inspections, and enforcement actions completed **during this reporting period**.*

Number of site plan reviews completed:

Number of inspections completed: 12

Number of enforcement actions taken: 3

*Optional:* Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

## **MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**

### **Ordinance or Regulatory Mechanism**

*Below, select the option that describes your ordinance or regulatory mechanism progress.*

- ☐ Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- ☐ Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- ☒ Bylaw, ordinance, or regulations have not been updated or adopted

### **As-built Drawings**

Describe the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

Since 2016 as-builts have been required as a standard condition of Special Permits and Site Plan Review Permits. As-builts also need to be submitted electronically and are reviewed before occupancy permits are issued.

All projects subject to the Stormwater Management and Land Disturbance Ordinance are required to submit a Stormwater Management Plan, Erosion and Sediment Control Plan, and Operations & Maintenance Plan as part of their permit application. Upon project completion, a final report, including as-built construction plans, are required to be sent to the Department of Public Works to ensure Stormwater Management BMPs have been constructed in accordance with City standards and meet design and performance criteria.

The City will review the existing ordinance and regulations and determine whether updates or additions are needed to meet the requirements of the General Permit in Year 3.

### **Street Design and Parking Lots Report**

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

To be fully developed in future permit years. The City assessed 17 City-owned parking lots to evaluate site lighting, pavement areas, and ADA compliance. They received a 604B grant to develop conceptual designs for 3 stormwater BMPs to retrofit these areas. A 319 grant application was submitted for construction at one location.

### **Green Infrastructure Report**

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

To be developed in future permit years.

### **Retrofit Properties Inventory**

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

To be developed in future permit years. The Neponset Stormwater Partnership is developing tools to begin this analysis, watershed-wide.

## **MCM6: Good Housekeeping**

### **Catch Basin Cleaning**

*Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins **during this reporting period**.*

Number of catch basins inspected: 1,857

Number of catch basins cleaned: 792

Total volume or mass of material removed from all catch basins: 1,601.25 tons

*Below, report on the total number of catch basins in the MS4 system.*

Total number of catch basins: 9,064

*If applicable:*

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

Street sweepings and catch basin cleanings were disposed together, resulting in 1,601.25 tons of material removed from roadways and catch basins during this Permit year.



If a catch basin is more than 50% full during two consecutive cleanings/inspections, the City must investigate the contributing drainage area for sources of excessive sediment loading and abate contributing sources when possible. Recent data collection and management improvements make it possible to flag these catch basins for cleaning.

### **Street Sweeping**

Report on street sweeping completed **during this reporting period** using one of the three metrics below.

- ☒ Number of miles cleaned:
- ☐ Volume of material removed:  [Select Units]
- ☐ Weight of material removed:  [Select Units]

### **O&M Procedures and Inventory of Permittee-Owned Properties**

*Below, check all that apply.*

The following permittee-owned properties have been inventoried:

- ☒ Parks and open spaces
- ☒ Buildings and facilities
- ☒ Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- ☒ Parks and open spaces
- ☒ Buildings and facilities
- ☒ Vehicles and equipment

### **Stormwater Pollution Prevention Plan (SWPPP)**

*Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period**.*

Number of site inspections completed:

Describe any corrective actions taken at a facility with a SWPPP:

A SWPPP was developed in 2013 for the City's Department of Public Works facility. Due to COVID-19 budgetary constraints, the planned Permit Year 2 update was delayed. The SWPPP update was completed in September 2020. The City will follow the corrective action procedure prescribed in the SWPPP to identify whether future corrective actions are required.

### **Additional Information**

**Monitoring or Study Results**

*Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.*

- ☐ Not applicable
- ☐ The results from additional reports or studies are attached to the email submission
- ☒ The results from additional reports or studies can be found at the following website(s):

[https://www.quincyma.gov/govt/depts/health/hdnews/beach\\_results.htm](https://www.quincyma.gov/govt/depts/health/hdnews/beach_results.htm)

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

During summer, the City of Quincy Health Department performs weekly water sampling at the City's beaches. The beaches are tested for Enterococcus to determine if conditions are acceptable for bathing/swimming. The Health Department considers individual bathing beach water samples with Enterococcus counts less than 104 acceptable for bathing/swimming. Counts greater than 104 for two or more consecutive days indicate the waters are unacceptable for swimming/bathing and beaches will be posted as such. 5-sample geometric mean values of greater than 35 are also deemed unacceptable for swimming. Latest results are posted on the Health Department website ([https://www.quincyma.gov/govt/depts/health/hdnews/beach\\_results.htm](https://www.quincyma.gov/govt/depts/health/hdnews/beach_results.htm)).

**Additional Information**

*Optional:* Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

The City has conducted numerous condition assessments and, if necessary, repairs to outfalls during this permit year. Repairs included minor pipe repairs, debris and sediment removal, major excavations, repair of exposed rebar/jagged metal, and major reconstruction of outfalls. This work contributes to increased functionality of the drainage system and is ongoing as part of the City's commitment to identify potential illicit discharges and/or structural and operational/maintenance defects within the MS4.

**COVID-19 Impacts**

*Optional:* If any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

The Neponset Stormwater Partnership reviewed existing stormwater bylaws and regulations to assess compliance with current MS4 requirements as well as recommended best practices. Areas where updates were needed were identified and shared with the member communities. Updates have been delayed due to COVID-related impacts. The City has contracted with a consultant to continue review of regulations and provide recommendations to meet Permit requirements, if needed, during FY2021.

**Activities Planned for Next Reporting Period**

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

#### Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:

The City has secured funding to complete Permit Year 2 tasks delayed due to the COVID-19 response and is actively engaged in implementing remaining Permit Year 2 tasks in conjunction with Permit Year 3 tasks.

The City is in the process of reviewing sewer infrastructure condition data to identify areas within the sewer network that have the potential to contribute illicit discharges to the MS4 and will this information in conjunction with existing and future outfall screening data to prioritize and target catchment investigation locations.

**Part V: Certification of Small MS4 Annual Report 2020****40 CFR 144.32(d) Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

Thomas P. Koch

Title: Mayor

Signature:



Date:

9-25-20

*[Signatory may be a duly authorized representative]*