

Year 1 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: May 1, 2018-June 30, 2019

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.

Part I: Contact Information

Name of Municipality or Organization: Town of Ipswich

EPA NPDES Permit Number: MA041199

Primary MS4 Program Manager Contact Information

Name: Richard Clarke

Title: Director of Public Works

Street Address Line 1: 25 Green Street

Street Address Line 2: na

City: Ipswich

State: MA

Zip Code: 01938

Email: rickc@ipswich-ma.gov

Phone Number: (978) 356-6612

Fax Number: na

Stormwater Management Program (SWMP) Information

SWMP Location (web address): <https://www.ipswichma.gov/266/Stormwater-Information>

Date SWMP was Last Updated: Jul 1, 2019

If the SWMP is not available on the web please provide the physical address and an explanation of why it is not posted on the web:

A direct link to the SWMP is not available on the website. The website directs interested parties to visit the DPW office to view a full copy of the plan. An electronic version will be made available on the website prior to the end of 2019.

Part II: Self Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

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 1 Requirements

- ☒ Develop and begin public education and outreach program
☒ Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
 - ☒ The SSO inventory is attached to the email submission
 - ☐ The SSO inventory can be found at the following website:
☒ Develop written IDDE plan including a procedure for screening and sampling outfalls
☒ IDDE ordinance complete
☒ Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
 - ☒ The priority ranking of outfalls/interconnections is attached to the email submission
 - ☐ The priority ranking of outfalls/interconnections can be found at the following website:
☒ Construction/ Erosion and Sediment Control (ESC) ordinance complete
☒ Develop written procedures for site inspections and enforcement of sediment and erosion control measures
☒ Develop written procedures for site plan review
☒ Keep a log of catch basins cleaned or inspected
☒ Complete inspection of all stormwater treatment structures

Annual Requirements

- ☐ Annual opportunity for public participation in review and implementation of SWMP
- ☐ Comply with State Public Notice requirements
- ☒ 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
- ☒ All curbed roadways have been swept a minimum of one time per year

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

Annual Requirements

*Public Education and Outreach**

- ☒ Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- ☐ Provide 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)*

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

Since the SWMP and IDDE plan were only recently completed, opportunity for public review of the SWMP, compliance with State Public Notice requirements, and annual IDDE training for employees have not yet been addressed but will occur during the next year.

The Town has contracted with Greenscapes to comply with the Public Education and Outreach requirements. "Scoop the Poop" post was disseminated to Town officials, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/.

Information regarding septic system maintenance was not issued as part of the Public Education Program during this year.

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:

When developing the IDDE Plan, the receiving waters were adjusted due to new information. As detailed in the IDDE, the receiving waters are currently listed as:

Ipswich River
Labor-in-Vain
Kimball Brook
Farley Brook
Muddy Run

This list will continue to be evaluated as outfall inspections are completed.

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 the reporting period: 16

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

BMP: RAIN GARDEN BROCHURE

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich
Informational brochure on the function and importance of Rain Gardens and stormwater filtration.
Construction instructions and plant suggestions also included.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

500 made available in town hall. Distributed by Salem Sound Coastwatch and Ipswich River Watershed Association at many community events. PDF available for download at www.greenscapes.org/resources-brochures.

Message Date(s): Fall of 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:

Was an additional message that was not listed in the NOI.

BMP: LID WORKSHOP

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.
Workshop/Seminar reintroduced the basics of low impact development and its importance. MS4 requirements, as they relate to LID were discussed and Fred Civian (MassDEP) provided tips for designing and passing municipal ordinances to promote LID.

Targeted Audience: Developers (construction)

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Attended by 35. Presentation PDF and "Tip Sheet" sent to municipal contacts and was temporarily available

on Greenscapes website.

Message Date(s): Jan-17-19

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: SOAK UP THE RAIN PRESENTATION

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich. Public presentation held at Nahant Life Saving Station, sponsored by Nahant SWIM, hosted by Greenscapes. Presentation conducted by Greenscapes representative, Barbara Warren, executive director of Salem Sound Coastwatch. Barbara shared natural ways to slow the flow of rainwater, including the planting of gardens designed to capture and absorb rainwater. In these times of unusually high rates of rainfall, small-scale stormwater management, such as a rain garden, is very important for all our communities to help reduce pollution and flooding of our basements, land, driveways and streets.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Attended by 35

Message Date(s): Mar-6-19

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:

Not described in NOI proposal.

BMP: GREENSCAPES 101 & WATER TALK PRESENTATION

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich. Public presentation hosted by the Lynnfield Conservation Commission and Planning Department. Presenters included the Lynnfield Water District and Lynnfield Center Water District directors and Kristen Grubbs, Greenscapes representative and Environmental Planner for the Ipswich River Watershed Association. Topics included a general water conservation and stormwater overview, discussion of the watershed's issues and concerns, followed by solutions – including homeowner greenscaping practices and municipal solutions.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Attended by 30

Message Date(s): May-15-19

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:

Not described in NOI proposal.

BMP: NEW GREENSCAPES GUIDE

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

A revised version of the comprehensive Greenscapes Guide. A new 24 page magazine (PDF) outlining the importance of small-scale stormwater management and sustainable landscaping. Project ideas, plant suggestions and best practices included.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts and available at www.greenscapes.org/greenscapes-guide/

Message Date(s): Published on website 6-30-19

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:

Revised guide does not include messaging about sewer/septic maintenance. This information will be delivered in other Greenscapes materials and messaging.

BMP: KEEPING WATER CLEAN SCHOOL PROGRAM

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Program engages 5th grade students in several activities designed to raise their stormwater and water conservation awareness. Students learn about what a watershed is, what stormwater, groundwater and

wastewater are, how they can negatively or positively impact these water systems, along with more details about each system and how it should be protected/maintained.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Conducted KWC at 27 different schools, reaching 2002 5th grade students and 300 adults across the North Shore.

Message Date(s): 27 programs conducted Sept '18 - June '19.

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:

Was an additional message that was not listed in the NOI.

BMP: "YARD WASTE MANAGEMENT" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Social media post describing the best ways to properly dispose of leaf litter and yard waste, keeping your yard clean and our water resources safe. Composting leaves, leaving them on the lawn for nutrient deposition, or having them picked up by the town are described as good options.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created October 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:

Was an additional message that was not listed in the NOI.

BMP: "KEEP DRAINS CLEAR" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Social media post describing the importance of keeping storm drains clear of leaf debris and litter.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created November 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:

Was an additional message that was not listed in the NOI.

BMP: "ROAD SALT" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Social media post describing many alternatives to traditional road salting practices. The use and benefits of coffee grounds, pickle brine, kitty litter, ashes, sugar beet juice and/or sand were discussed.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created December 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:

Was an additional message that was not listed in the NOI.

BMP: "UN-FLUSHABLES" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Social media post warning residents of the harm caused by flushing "unflushables" such as q-tips, feminine

hygiene products, oil, grease, "flushable" wipes, and more in their wastewater systems. The post clearly states that those items belong in the trash!

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created January 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:

Was an additional message that was not listed in the NOI.

BMP: "SCOOP THE POOP" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.
Social media post educating residents on the harmful bacterial impacts that pet waste can have on our waterways and our health, if not properly disposed of.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created February 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:

Was an additional message that was not listed in the NOI.

BMP: "RAIN GARDENS" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.
Social media post describing the many important benefits rain gardens can have on our waterways by

retaining and filtering stormwater as it travels through our watershed(s).

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created March 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:

Was an additional message that was not listed in the NOI.

BMP: "CAREFUL LAWN CARE" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.
Social media post describing many different sustainable and earth-friendly landscaping practices. Soil testing, mowing routines, watering routines, proper fertilization timing and suggested products are discussed.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created April 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:

Was an additional message that was not listed in the NOI.

BMP: "WATER SMART" POST

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.
Social media post highlighting the importance of thoughtful watering practices such as watering deeply and only when the lawn/plants are "thirsty".

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Sent to 70 municipal contacts for further dissemination, posted on partner social media platforms (Facebook & Twitter) and available at www.greenscapes.org/resources-social-media/

Message Date(s): Created July 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:

Was an additional message that was not listed in the NOI.

BMP: RAIN BARREL SALE

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Greenscapes North Shore Coalition hosted a rain barrel sale and created associated advertisements that promoted water conservation and described how using a rain barrel can greatly reduce a resident's household water use as well as mitigating roof run-off. The barrel sale was open to all residents on the North Shore.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Post sent to 70 municipal contacts, press release sent to 20 local and regional newspapers, 300 "engagements" with post on Salem Sound Coastwatch Facebook, 520 "engagements" on IRWA Facebook, 20 rain barrels sold.

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:

Not described in original NOI

BMP: THINK BLUE FOWL WATER VIDEO

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Think Blue Massachusetts "Fowl Water" video defines stormwater and explains the impact that pollution like trash, oil, cigarettes and dog poop can have on stormwater and our waterways.

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Outreach/"# of impressions" was evaluated in 9 out of 23 Greenscapes Communities. Results claimed that 121,520 impressions were made on Facebook or Youtube. The video was also sent to 70 municipal contacts and is available on the ThinkBlue website and the Greenscapes website at www.greenscapes.org/resources-videos/.

Message Date(s): Spread by ThinkBlue June 23 - June 30, 2019. Shared further July 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:

Not described in original NOI

BMP: MISCELLANEOUS GREENSCAPES TABLING EVENTS

Message Description and Distribution Method:

Completed by Greenscapes North Shore Coalition under contract to Ipswich.

Informational table with Greenscapes demonstrations and materials at local community and school events, including: Grow Spring Expo, Essex STEM Night, Middleton Earth Day, STEAM Night Beverly, Ipswich Garden Club Plant Sale, MassAudubon Nature Fest, Cape Ann Farmer's Market, Rowley Farmer's Market, Beverly Farmer's Market, North Reading Farmer's Market, Billerica Farmer's Market, Waldorf School at Moraine Farm, Wilmington Farmer's Market, Underwater in Salem Sound Lecture Series, Beverly Public Library Lecture Series

Targeted Audience: Residents

Responsible Department/Parties: External Contractor

Measurable Goal(s):

Miscellaneous.

Message Date(s): Events held September '18 - May '19. Farmers markets held weekly in the spring/summer.

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:

Not described in original NOI

Add an Educational Message

MCM2: Public Participation

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

Since the SWMP and IDDE plan were only recently completed, opportunity for public review of the SWMP, compliance with State Public Notice requirements, and annual IDDE training for employees have not yet been addressed but will occur during the next permit year. This is consistent with the NOI, which stated that SWMP annual review and public comment will begin during 2019. The only difference from the NOI is that quarterly Stormwater Committee meetings will begin 4th quarter 2019.

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

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

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

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:

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified since 2013.

Total number of SSOs identified:

Total number of SSOs removed:

MS4 System Mapping

Describe the status of your MS4 map, including any progress made during the reporting period:

Outfall and connectivity mapping was completed in 2010. Modifications will be made, if appropriate, during the outfall screening activities.

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:

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

Number of outfalls screened:

Below, report on the percent of total outfalls/ interconnections screened to date.

Percent of total outfalls screened:

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:

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

Outfalls were identified and an outfall investigation program was developed during Year 1. Dry and wet weather investigations are planned to begin during Year 2 of the permit.

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: [UNITS]

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.

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:

An IDDE Plan was developed during Year 1 and implementation of the IDDE program will begin during Year 2, including dry weather screening and sampling.

Employee Training

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

Annual employee training will begin in 2019 (Year 2). The program will review the requirements of the Town's IDDE Plan and methods to identify illicit discharges, etc. as specified in the IDDE Plan. In the NOI it was stated that training would begin in 2018, but the start date was delayed until the IDDE Plan was completed. With the IDDE Plan now complete, training on the Plan components will begin during the 4th quarter of 2019.

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: Number of enforcement actions taken:

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

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

Ipswich adopted a Stormwater Bylaw and Stormwater Regulations in 2010. The regulations include specific requirements for projects designated as Major (those that disturb 10,000 sf or more) and Minor (projects where land alteration is more than 50% of a parcel, but less than 10,000 sf), as well as requirements for the preparation and submittal of a stormwater management plan, a maintenance agreement, erosion and sediment control, construction period and post construction inspections, and provisions that reference LID site planning and the Massachusetts Stormwater Handbook. The Bylaw and Regulations appear to meet the 2016 Permit requirements but both will be reviewed during Year 2.

As-built Drawings

Describe the status of 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 required to be complete in year 2 of the permit term:

The 2010 Stormwater Regulations includes the following language:

Section 10(A) - "Within ninety (90) days of completion of construction, the DPW may require the submission of Record Drawing(s) prepared by a Massachusetts-licensed Professional Engineer, certifying that the completed project is in accordance with the approved plans and specifications."

Section 9(B) of the regulations addresses Post-Construction Inspections and Maintenance requirements. Specifically, this section requires the following: "At a minimum, inspections shall occur during the first year of operation and at least once every two (2) years thereafter or more frequently as deemed necessary. In addition, a Maintenance Agreement as specified under Section 6.H) of these regulations shall be executed for privately-owned stormwater management systems and shall specify the Responsible Person for conducting long term inspections." Section 9(b)(5) provides a clause that addresses "Failure to Maintain" which provides the Town that authority to correct a violation of the plans or maintenance agreement.

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:

Not yet addressed.

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:

Not yet addressed.

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:

Not yet addressed.

MCM6: Good Housekeeping

Catch Basin Cleaning

Describe the status of the catch basin cleaning optimization plan:

To be completed in Year 2.

If complete, attach the catch basin cleaning optimization plan or the schedule to gather information to develop the optimization plan:

- ☐ The catch basin cleaning optimization plan or schedule is attached to the email submission
- ☐ The catch basin cleaning optimization plan or schedule can be found at the following website:

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: 380

Number of catch basins cleaned: 380

Total volume or mass of material removed from all catch basins: 24 Cubic Yards

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

Total number of catch basins: 1400

If applicable:

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

As detailed in past annual reports, Ipswich has consistently inspected and cleaned (as needed) all of the catchbasins within its system twice per year. Unfortunately, this past year the awarded contractor failed to meet the contract requirements and did not complete the work under its contract. The Town is in the process of rebidding the work and will have a new contractor under contract shortly to complete the work in accordance with the SWMP.

Street Sweeping

Describe the status of the written procedures for sweeping streets and municipal-owned lots:

The Town implemented a street sweeping program a number of years ago. That plan includes sweeping of non-commercial/non-arterial streets on average 2 times/year, and sweeping of commercial/arterial and critical streets 12 times/year. The Town will be re-evaluating that plan during Year 2. The below volume is an estimate.

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

☐ Number of miles cleaned:

☒ Volume of material removed:

☐ Weight of material removed:

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

Winter Road Maintenance

Describe the status of the written procedures for winter road maintenance including the storage of salt and sand:

To be completed in Year 2.

Inventory of Permittee-Owned Properties

Describe the status of the inventory, due in year 2 of the permit term, of permittee-owned properties, including parks and open spaces, buildings and facilities, and vehicles and equipment, and include any updates:

To be completed in Year 2.

O&M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

Describe the status of the operation and maintenance procedures, due in year 2 of the permit term, of permittee-owned properties (parks and open spaces, buildings and facilities, vehicles and equipment) and include maintenance activities associated with each:

To be completed in Year 2.

Stormwater Pollution Prevention Plan (SWPPP)

Describe the status of any SWPPP, due in year 2 of the permit term, for permittee-owned or operated facilities including maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater:

To be completed in Year 2.

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:

O&M Procedures for Stormwater Treatment Structures

Describe the status of the written procedure for stormwater treatment structure maintenance:

To be completed in Year 2.

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):

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:

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:

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 2 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; review annually and update as necessary
- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure (*18 months*)

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

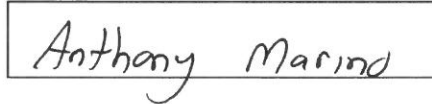
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in 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

Provide any additional details on activities planned for permit year 2 below:

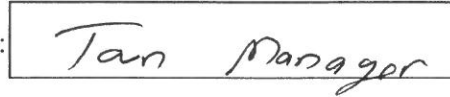
Part V: Certification of Small MS4 Annual Report 2019**40 CFR 144.32(d) Certification**

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:



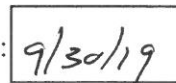
Title:



Signature:



Date:



[Signatory may be a duly authorized representative]

