

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:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name:

Title:

Street Address Line 1:

Street Address Line 2:

City:

State:

Zip Code:

Email:

Phone Number:

Fax Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

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:

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)*

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

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:

A written standard operating procedure (SOP) was developed for the inspection of Town-owned stormwater BMPs. The Town is currently updating their inventory of Town-owned BMPs and will inspect these in accordance with the SOP.

An SOP was developed for street sweeping and parking lot cleaning as well as catch basin cleaning and inspections. These SOPs are being implemented and the Town will evaluate the street sweeping, parking lot, and catch basin cleaning schedules to determine optimal cleaning frequencies. The Town will continue to street sweep during fall and spring, and the downtown area more frequently in the summer months and adjust cleaning frequencies, as needed. The Town will continue to conduct catch basin cleanings per the SOPs and will increase maintenance frequencies, as needed.

Preliminary priority ranking of outfalls was completed (and is attached). Additional mapping of interconnections will be completed in Year 2 and the ranking updated.

As an alternative to a IDDE bylaw, the Board of Health (BOH) has enforceable regulations that encompass illicit discharge prohibition. This information is being reviewed to see if changes need to be made to local regulations to meet the new permit requirements

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:

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:

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:1B - Displays for Businesses, Institutions, and Commercial Facilities

Message Description and Distribution Method:

Update posters with stormwater management tips and post in Town Hall at the Conservation Commission office.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Update posters and displays with appropriate non-residential stormwater pollution control messages annually to provide diverse messages about stormwater management.

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:

BMP:1E Press Releases for General Public

Message Description and Distribution Method:

The Town is a part of the WaterSmart program developed by the North and South Rivers Water Association (NSRWA). NSRWA hosted a number of events for the public during the Year 1 reporting year including: school programs, regional rain barrel sales, and a green garden expo. Press releases for these events were sent out in the Globe, the Patriot Ledger, Wicked Local, and the Hingham Journal. Press releases were also posted on the NSRWA WaterSmart website for the demonstration at the schools (2/22/19), the rain barrel sale (4/2/19), and the green gardening expo (2/28/19).

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Submit one press release annually to highlight ongoing stormwater activities

Message Date(s): winter and spring 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:1F Website Updates for General Public

Message Description and Distribution Method:

The Town's website home page posted News Flashes that included: a message about proper dog waste disposal (6/14/19), fertilizer use (5/29/19), and nutrient loading and green landscaping tips (5/28/19).

Targeted Audience: General Public

Responsible Department/Parties: DPW Superintendent and Website Manager

Measurable Goal(s):

Promote stormwater awareness by posting key stormwater information on regulations and activities on the Town's website. Track hits with goals of increasing hits annually. Messages were posted to the Hingham Connect Facebook page. The fertilizer message was tracked and had a reach of 2,376 people and 239 engagements.

Message Date(s): Various dates as noted above

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:1I Stormwater TV Broadcasts for General Public

Message Description and Distribution Method:

Stormwater program updates were provided to the Board of Selectman meeting on September 5, 2019 and the presentation is scheduled for re-broadcast on cable TV on September 30 and Oct 1, 2019.

Targeted Audience: General Public

Responsible Department/Parties: DPW Superintendent and Town Officials

Measurable Goal(s):

Continue broadcasting stormwater meetings, tips, and videos on local cable TV at least twice a year

Message Date(s): Various dates as noted above

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:Stormwater Messaging through the WaterSmart Program

Message Description and Distribution Method:

Hingham has joined the WaterSmart Program managed by the North and South Rivers Watershed Association (NSRWA). They have led several public education for the Town including the Pet Waste Outreach Program – which targeted residents in town by highlighting pollution caused by pet waste. A rack card was reprinted and made available for distribution to veterinary offices, pet stores, and locations where dog licenses are issued. Pet waste Scoop It cards were distributed to the town clerk's office (100), Old Derby Animal Hospital (100), Hingham Animal Clinic (100), South Hingham Veterinary Services (100), and Unleashed Pet Store (2-put on bulletin boards). An article was written on The Problem of Dog Waste on the South Shore. This was sent to the Globe, the Patriot Ledger, Wicked Local, and the Hingham Journal.

Targeted Audience: Residents/Pet Owners

Responsible Department/Parties: DPW

Measurable Goal(s):

Provide pet owners and other residents with information on impacts of pet waste pollution and methods for proper management 400 Pet Waste Scoop It cards were distributed.

Message Date(s): From February through June 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:

[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:

The Town developed the SWMP using an internal Town committee across departments. The Plan was completed in late June and a link added to the Town's stormwater webpage so that the public could review the plan. For Year 2, additional outreach will be performed to solicit feedback as the plan is updated.

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:

As part of the Town's partnership with NSRWA, The Water All Around You program was presented in local schools. This included the Watershed Jeopardy and class portion with six hands-on learning stations. The goal of the program is to instill in these students the knowledge, tools, and desire to be future stewards of their water resources. The program was presented to 5th grade students at Foster, South, East, and Plymouth River Elementary Schools. Students and parent volunteers took a brief quiz to gauge the impact of the program. A press release went out to the town, the Globe, the Patriot Ledger, Wicked Local, and the Hingham Journal. The programs were also posted on the NSRWA Facebook page with a reach of 1,439 and 175 engagements, and on the Hingham Connect Facebook page.

The Town continues to operate the illicit stormwater discharge hotline and track phone calls using work order tracking software. Calls and requests that require further attention are put into the work order system to allow tracking of responses. During Year 1 no calls were made to the hotline.

The Town continues to support local park and waterbody clean up events. The following community service projects were supported by DPW: Trail clean-up at Moore-Brewer Park on 5/6/19 (10 bags of trash collected); Clean-up of Triangle Garden at Bare Cove Park on 10/7/18 (10 volunteers participated); Clean-up at Carlson Field on 10/14/18 (7 bags of trash collected); Leaves raked-up at Bare Cove Park on 12/9/18 (12 bags removed to transfer station); Full day of clean-up at Hingham Bathing Beach on 4/12/19 (by the High School Football Team); Fields cleaned-up at South, Plymouth River, and Foster Schools on 5/5/19 (72 volunteers); and Clean-up at Hingham High School on 5/7/19 (4 hours of clean-up, dozens of bags of trash picked up by School maintenance staff).

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 (phase I map due in year 2):

The Town currently has the majority of outfalls, pipe system, manholes, catch basins and receiving waters identified (including impaired waterbodies). The Town will continue to update the stormwater mapping including delineating the catchments for the outfalls/interconnections, and identifying additional interconnections.

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:

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:

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:

One SSO was identified and reported to MassDEP, no additional illicit discharges were found.

Employee Training

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

During Year 1 the employee training for the illicit discharge detection and elimination and good housekeeping and pollution prevention programs was conducted on June 20, 2019 and included staff from DPW, Highway, Transfer Station, Sewer, and the Tree and Parks departments.

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: 18

Number of inspections completed: 31

Number of enforcement actions taken: 0

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:

Regulations have been drafted and are being considered by the Town.

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:

During the Town meeting on 4/22/19, Article 42 Item 13: inserting an "As Built Plan Requirement" was passed and the Town's Zoning bylaw will be amended.

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:

No progress has been made in Year 1.

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:

No progress has been made in Year 1.

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:

Town owned properties will continued to be evaluated for the feasibility to modify or retrofit existing BMPs to mitigate impervious areas and potential opportunities identified.

MCM6: Good Housekeeping**Catch Basin Cleaning**

Describe the status of the catch basin cleaning optimization plan:

During the Year 1 reporting year a catch basin inspection and cleaning standard operating procedure was devel

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:

Number of catch basins cleaned:

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

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

Total number of catch basins:

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 Sweeping

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

During Year 1 street and parking lot sweeping standard operating procedures were developed and are currently being implemented.

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

- Number of miles cleaned:
- Volume of material removed: [UNITS]
- Weight of material removed: [UNITS]tons

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:

During Year 1 winter road maintenance standard operating procedures have been developed and are currently being implemented.

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:

The Town plans to develop this inventory during 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:

The Town plans to develop the O&M procedures during 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:

A SWPPP for the Recycling and Transfer Station was developed in September 2015. The Town will investigate the need for a SWPPP for the DPW facility and develop one if needed, 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:

none

O&M Procedures for Stormwater Treatment Structures

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

During Year 1 written BMP inspection standard operating procedures have been developed and are currently being implemented.

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:

The Town plans to complete the MS4 mapping, delineate the catchments for the outfalls, and update the preliminary outfall priority ranking. Dry weather screening of high and low priority outfalls and catchment investigations of problem outfalls will begin in Year 2. For the Public Education program the Town plans to continue to participate in the NSRWA WaterSmart program. The NSRWA plans to deliver the septic maintenance message to residents, the sediment and erosion control management message to developers, and the leaf litter message to the residents. The IDDE ordinance will be reviewed by the Town and any changes submitted to Town Meeting for approval.

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:
[Signatory may be a duly authorized representative] Date: