

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:

Included in the IDDE Plan at: <https://www.townofmaynard-ma.gov/dpw/stormwater-management/>

- 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:

Included in the IDDE Plan at: <https://www.townofmaynard-ma.gov/dpw/stormwater-management/>. Mapping of interconnections is in progress.

- 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)*

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)Annual Requirements*Public Education and Outreach**

- Distribute 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 and phosphorus-free fertilizers
- Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distribute 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

- Increase 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 Attachment 3 to Appendix F already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the phosphorus
- removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report

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:

Inspection of stormwater treatment structures: All surface features were inspected during the reporting period; inspection of subsurface systems will be completed this fall.

Septic system maintenance message: During the reporting period, Maynard DPW worked on developing a list of properties with septic systems. An educational message will be distributed during Permit Year 2.

Potential Structural BMPs: This is not required for the Assabet River phosphorus TMDL.

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:1-1 Stormwater Management Webpage

Message Description and Distribution Method:

Created a Stormwater Management page on the Town's DPW website. The webpage includes information on stormwater pollution prevention and Maynard's stormwater management program. <https://www.townofmaynard-ma.gov/dpw/stormwater-management/>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

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:1-2 Think Blue Advertising Campaign

Message Description and Distribution Method:

Think Blue Massachusetts ran advertising campaigns on behalf of MS4 communities on May 31-June 25, 2018 and June 23-July 12, 2019. The "Fowl Water" advertisement, targeting MA urban residents, aimed to help viewers visualize stormwater pollution from motor oil, pet waste, and trash. A post-campaign survey demonstrated that the advertising campaigns were effective. Think Blue targeted outreach to Minuteman Advisory Group on Interlocal Coordination (MAGIC) stormwater coalition communities, including Maynard.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

2018 campaign for MAGIC region: Facebook impressions 379,236; Youtube impressions 229,690
2019 campaign (thru FY19) for Maynard only: Facebook impressions 5,813; Youtube impressions 5,115

Message Date(s): May 31-June 25, 2018 and June 23-July 12, 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:1-3 Stormwater Display and Handouts at Town Meeting

Message Description and Distribution Method:

Displayed a stormwater education poster and distributed Think Blue flyers at the spring Town Meeting to raise awareness about the MS4 permit and stormwater pollution prevention.

Targeted Audience: Residents

Responsible Department/Parties: Conservation

Measurable Goal(s):

300 flyers distributed

Message Date(s): Town Meeting date: May 20, 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:1-7 Dog Owner Education

Message Description and Distribution Method:

Began distributing a fact sheet about pet waste management to dog owners seeking or renewing dog licenses.

Targeted Audience: Residents/dog owners

Responsible Department/Parties: Town Clerk

Measurable Goal(s):

Began distributing at end of reporting period; will track the number distributed going forward

Message Date(s): Ongoing

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:1-8 Spring Message about Grass Clippings and Fertilizer

Message Description and Distribution Method:

Posted educational information on social media and the Town Administrator Blog about best practices for grass clippings and fertilizer. Also, notified residents about yard waste pickup dates using reverse 911 calls.

Targeted Audience: Residents

Responsible Department/Parties: Conservation

Measurable Goal(s):

-Facebook post on 5/29/19 about fertilizer management. 6 comments, 29 likes, 9 shares. 1969 followers on Facebook page
 -Town Administrator Blog post on 5/31/19: Town of Maynard Encourages Residents to be Smart about Fertilizer Usage. <https://maynardtownadmin.org/2019/05/31/town-of-maynard-encourages-residents-to-be-smart-about-fertilizer-usage/>
 -Town Administrator Blog post on 6/10/19: Water Quality: Don't Blow It! <https://www.townofmaynard-ma.gov/2019/06/10/wq-grass-clippings/>

Message Date(s): May 29, 2019; May 31, 2019; June 10, 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:1-9 Summer Message about Dog Waste Management

Message Description and Distribution Method:

Posted a dog waste management message on social media and the Town Administrator Blog. In addition, reached out to MayDog, Maynard's dog owner's group, to educate members about dog waste management and stormwater pollution prevention.

Targeted Audience: Residents

Responsible Department/Parties: Conservation

Measurable Goal(s):

-Facebook post on 4/17/19: Do Your Doody, Scoop My Poop. 25 likes, 10 comments, 7 shares. 1969 followers on Facebook page
 -Town Admin blog post on 4/17/19: Town of Maynard Encourages Residents to do their Civic "Doody" by Scooping the Poop. <https://www.townofmaynard-ma.gov/2019/04/17/scoop-the-poop/>.

Message Date(s): April 17, 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:1-10 Fall Message about Leaf Litter

Message Description and Distribution Method:

Maynard Town Planner Bill Nemser hosted a conversation about stormwater management on his Planning, Zoning, Rock and Rolling radio show on 12/4/2018. Leaf litter management was part of the discussion. Also, notified residents about yard waste pickup dates using reverse 911 calls.

Targeted Audience: Residents

Responsible Department/Parties: Planning

Measurable Goal(s):

Radio show: <https://wavm.org/planning-zoning-rock-and-rolling/>

Message Date(s): December 4, 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:

BMP:Display of Educational Materials at Town Hall

Message Description and Distribution Method:

Continuing a BMP initiated under the 2003 MS4 Permit, displayed posters and distributed postcards and flyers about stormwater management and pollution prevention in Town Hall. Messages include: "Put a LID on stormwater Pollution", "Oil and Water Don't Mix", "Make the Connection: Storm Drains Empty Into Waterways!", and "Fertilizer: A 'Growing' Stormwater Problem".

Targeted Audience: Residents, Businesses, Developers

Responsible Department/Parties: Conservation, DPW

Measurable Goal(s):

Posters continue to be displayed in Town Hall in a highly visible location outside the DPW main office

Message Date(s): Ongoing

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:

Continuation of public education program under 2003 MS4 Permit

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:

Posted SWMP online on the DPW website to allow for ongoing public review. <https://www.townofmaynard-ma.gov/dpw/stormwater-management/>

Provided an email link for the public to submit their comments: DPW@TownofMaynard.net

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:

Assabet River Cleanup: DPW provided trash removal for the Assabet River Cleanup on September 15, 2018. 36 people participated in the Maynard cleanup. <http://oars3rivers.org/event/cleanup>

Litter League Cleanups: DPW provided trash removal for the Maynard Litter League Cleanup events on October 27, 2018 (16 participants) and April 27, 2019.

Household Hazardous Waste Collection: DPW provided household hazardous waste collection on August 11, 2018. Vehicle count was 31. <https://www.townofmaynard-ma.gov/dpw/household-hazardous-waste-disposal/>

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:

Most of the outfalls, catch basins, drainage manholes, and culverts have been mapped in GIS. Interconnections have not yet been identified. No progress made during reporting period.

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:

NA

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

Number of catchment investigations completed this reporting period: 0

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

Percent of total catchments investigated: 0

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

NA

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:

NA

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: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 [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: 0

Total number of illicit discharges removed: 0

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

NA

Employee Training

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

On December 18, 2018, provided training workshop for DPW field crew on stormwater basics, MS4 permit, what is an illicit discharge, and municipal pollution prevention. 15 DPW staff attended the training.

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:

Maynard Stormwater Management Bylaw was adopted Oct 26, 2009. Regulations were updated in 2017. The bylaw and regulations will be updated during Permit 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:

Per Maynard Stormwater Management Regulations: At completion of the project the permittee shall submit as-built record drawings of the Stormwater Management System required for the site. The as-built drawing shall show deviations from the approved plans, if any, and be certified by a Registered Professional Engineer.

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 started yet

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 started yet

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 started yet

MCM6: Good Housekeeping

Catch Basin Cleaning

Describe the status of the catch basin cleaning optimization plan:

During routine catch basin cleaning in July 2019, DPW documented catch basins that had sumps more than half full of sediment. DPW will continue to monitor sediment accumulation during routine catch basin cleaning and will increase frequency of cleaning in areas with higher sediment load.

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:

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:

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:

Not started yet

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:

Not started yet

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 draft of the Highway Garage SWPPP is in progress.

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

Number of site inspections completed: NA

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

NA

O&M Procedures for Stormwater Treatment Structures

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

Not started yet

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):

NA

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:

NA

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:

No additional information

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]