

Year 3 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2020-June 30, 2021

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

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2020 and June 30, 2021 unless otherwise requested.

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:

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:

Part II: Self-Assessment

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

| | | | |
|---|--|---|--|
| Impairment(s) | | | |
| <input checked="" type="checkbox"/> Bacteria/Pathogens | <input type="checkbox"/> Chloride | <input type="checkbox"/> Nitrogen | <input checked="" type="checkbox"/> Phosphorus |
| <input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals | | | |
| TMDL(s) | | | |
| <i>In State:</i> | <input checked="" type="checkbox"/> Assabet River Phosphorus | <input type="checkbox"/> Bacteria and Pathogen | <input type="checkbox"/> Cape Cod Nitrogen |
| | <input type="checkbox"/> Charles River Watershed Phosphorus | <input type="checkbox"/> Lake and Pond Phosphorus | |
| <i>Out of State:</i> | <input type="checkbox"/> Bacteria/Pathogens | <input type="checkbox"/> Metals | <input type="checkbox"/> Nitrogen |
| | | | <input type="checkbox"/> Phosphorus |
| | | | <input type="button" value="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 3 Requirements

- Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
- Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary
- Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

In total, 121 of 136 outfalls included in the IDDE program have been dry-weather screened. The locations of the remaining 15 outfalls were visited but the outfalls or upstream manholes were not immediately locatable. As-built plan sets have been obtained from the Town for these outfalls and will be reviewed early in Permit Year 4 so that dry weather screening can be completed, but COVID-19 delayed this work since as-builts could only be found in Town Hall, which was closed for a portion of this year.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented

- This is not applicable because we do not have sanitary sewer
- This is not applicable because we did not find any new SSOs
- The updated SSO inventory is attached to the email submission
- The updated SSO inventory can be found at the following website:

- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated system map due in year 2 as necessary
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

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

COVID-19 put a large amount of strain on the DPW and as a result some routine inspections were not completed, including annual BMP inspections. The Maynard DPW anticipates that annual BMP inspections will take place early in Permit Year 4.

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

Annual Requirements

*Public Education and Outreach**

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

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

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

The Town Clerk included educational material about proper disposal of pet waste in Town Census packets, so over 5,000 households received this information. (A facebook post and septic system mailings were also distributed, see MCM 1 info below.)

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Potential structural BMPs

Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. 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 were documented.

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

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

Maynard plans to estimate phosphorus removal of existing BMPs during Permit Year 4 while developing a NSIR for the Merrimack River.

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



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:

Yes, the 2016 303d list includes an impairment for E. coli for MA82B-05 (a segment of the Assabet River). This impairment was not on the 2014 303d list, which was referenced when writing the NOI.

Part IV: Minimum Control Measures

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

MCM1: Public Education

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

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

BMP: When it Comes to Water Quality... Don't Blow it!

Message Description and Distribution Method:

This message was posted on the Town of Maynard facebook page and encouraged the proper disposal of grass clippings and other yard debris.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

11 likes, 1 comment, 1 share

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: If you use too much fertilizer on your lawn, you might as well fertilize the river.

Message Description and Distribution Method:

This message was posted on the Town of Maynard facebook page and encouraged the proper use of fertilizer

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

15 likes, 2 comments, 5 shares

Message Date(s): 6/10/21

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: Do your Doody

Message Description and Distribution Method:

This message was posted on the Town of Maynard facebook page and encouraged the proper disposal of pet waste.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

14 likes, 7 comments, 3 shares

Message Date(s): 5/12/21

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: Don't "Leaf" Water Quality Behind

Message Description and Distribution Method:

This message was posted on the Town of Maynard facebook page and encouraged the proper disposal of leaf litter.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

6 likes, 1 comment, 1 share

Message Date(s): 10/13/20

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: Proper Pet Waste Disposal

Message Description and Distribution Method:

This message was attached to 2020 town Census packets and sent to all households in Maynard (>5000 households). The message encouraged proper disposal of pet waste and educated dog owners about pet waste's negative impact on water quality.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Over 5,000 fact sheets distributed

Message Date(s): January 2021

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: Proper Septic System Maintenance

Message Description and Distribution Method:

DPW mailed a flyer about proper septic system maintenance to Maynard's list of septic system owners.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

148 mailed flyers

Message Date(s): 1/15/21

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 Webpage

Message Description and Distribution Method:

Maynard's stormwater webpage contains educational materials about what stormwater is, why it matters, Maynard's waterbodies, and what the public can do to help reduce stormwater pollution. The website can be found at: <https://www.townofmaynard-ma.gov/dpw/stormwater-management/>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

371 page views, 272 unique page views, average time on page = 2 min. 50 sec.

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:

Add an Educational Message

MCM2: Public Participation

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

The SWMP is posted on Maynard's Stormwater Webpage and includes a contact form for comments. (<https://www.townofmaynard-ma.gov/dpw/stormwater-management>)

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

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

Annual Household Hazardous Waste Cleanup Day (March 27, 2021)- Maynard DPW provided a household hazardous waste collection day in addition to providing information to residents about other hazardous waste collections. There were 25-50 participants.

Maynard Litter League Events (March 28, April 3, and May 2, 2021)- Maynard DPW provided trash removal for three Litter League events, in which Maynard residents picked up trash in public spaces around town. Events usually take place more frequently but were put on pause during the beginning of the COVID-19 pandemic. Still, during this time, volunteers were encouraged to pick up litter with their households and were provided with bags and pick-up sticks. 15 32-gallon trash bags of litter were collected.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

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

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

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

Minor edits were made to the GIS-based drainage system map based on field observations made during dry weather screening and as-built plans.

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. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- No outfalls were inspected
- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

<https://vhb.maps.arcgis.com/apps/webappviewer/index.html?id=e73dbfc193e24e87beac0814201eaae3>

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

Number of outfalls screened:

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

Percent of outfalls screened:

Optional: Provide additional information regarding your outfall/interconnection screening:

In total, 121 of 136 outfalls have been dry-weather screened. The locations of the remaining 15 outfalls were visited but the outfalls or upstream manholes were not immediately locatable. As-built plan sets have been obtained from the Town for these outfalls and will be reviewed early in Permit Year 4 so that dry weather screening can be completed, but COVID-19 delayed this work since as-builts could only be found in Town Hall, which was closed for a portion of this year.

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.

- No catchment investigations were conducted
- 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:

Maynard plans to begin catchment investigations in Permit Year 4.

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.

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

During dry weather screening, flow and sampling results at five outfalls indicated sewer input, but investigations to identify the illicit discharges have not been completed. The Town has scheduled CCTV and dye testing of these catchments for mid-September 2021 and plans to identify and eliminate illicit discharges as soon as possible.

Employee Training

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

On 3/30/21, VHB provided a 45-minute training to 16 Maynard DPW staff. The training covered stormwater basics and then went into illicit discharges, reviewing topics such as: definition of an illicit discharge, allowable discharges, sources of illicit discharges, illicit discharge evidence to look for, what to do if you see an illicit discharge, etc. The training also included a description of the dry weather screening results VHB has gathered on behalf of Maynard. In addition to IDDE, the training covered how to properly implement O&M procedures to protect stormwater.

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:

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

One violation letter was issued. There was other verbal enforcement but contractors fixed problems promptly and therefore written enforcement letters were not issued.

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

As-built Drawings

*Below, report on the number of as-built drawings received **during this reporting period.***

Number of as-built drawings received:

Optional: Enter any additional information relevant to the submission of as-built drawings:

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:

Maynard plans to draft this report during Permit Year 4.

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:

Maynard plans to draft this report during Permit Year 4.

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:

Maynard plans to draft this inventory during Permit Year 4. That said, Maynard has begun to brainstorm, especially because the new stormwater management regulations allow for offsite mitigation, and Maynard would like to have opportunities ready if a permit application comes along proposing offsite mitigation

MCM6: Good Housekeeping

Catch Basin Cleaning

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

Number of catch basins inspected:

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.

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

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

Number of miles cleaned:

Volume of material removed:

Weight of material removed:

Stormwater Pollution Prevention Plan (SWPPP)

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

Number of site inspections completed:

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

Swept debris from pavement, picked up scattered solid waste (TVs, appliances), purchased additional spill containment unit, hauled away street sweepings.

Due to the strain that the COVID-19 pandemic put on the DPW, only 2 of 4 quarterly inspections were completed this past year, but Maynard has hired a consultant to ensure all 4 all completed this coming year.

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:

COVID-19 Impacts

Optional: If any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Due to COVID-19 concerns, some public outreach events did not take place (e.g., Litter League only had three events this year, beginning in the spring, and usually events take place more frequently). In addition, dry weather screening was not quite completed, since paper copies of as-built plans stored in Town Hall were required to determine the location of the remaining 15 outfalls and there was limited access to Town Hall this year. Finally, COVID-19 put a large amount of strain on the DPW and as a result some routine inspections were not completed i.e., annual BMP inspections and 2/4 quarterly SWPPP inspections were not conducted. Maynard anticipates that COVID-19 impacts will be minimal in Permit Year 4.

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

Yes, I agree

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)

Provide any additional details on activities planned for permit year 4 below:



Part V: Certification of Small MS4 Annual Report 2021

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]