

Year 4 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2021-June 30, 2022

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, 2021 and June 30, 2022 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)

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 4 Requirements

Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

- No updates were recommended
- Updates were recommended. The anticipated date or date of completion for updates is/was:

Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

- No updates were recommended
- Updates were recommended. The anticipated date or date of completion for updates is/was:

Identified a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

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

The DPW in coordination with other town boards is developing their Stormwater Bylaw and Stormwater Regulations. The Stormwater Bylaw is scheduled for submission to Town Meeting in the Spring of 2023. Once adopted, the DPW will be in a position to adopt the Stormwater Regulations. The Town currently has standards in place which allow for reduced pavement widths for low traffic roadways. Being a small

community, the Town does not own many properties and therefore has identified only 1-2 which have potential for reduction in impervious surfaces or BMP retrofits. The island wharf and silvershell beach parking lots have been upgraded with respect to stormwater runoff in the past and are being maintained to ensure proper function. In certain areas the use of gravel roads and parking is avoided to prevent transport of sediment to adjacent wetlands. Once the Bylaw and Regulations have been accepted the Town will be in a better position to steer future development toward LID practices and the adoption of appropriate site specific BMP's.

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:

<https://www.marionma.gov/public-works-department/pages/stormwater-management-information-town-and-public-npdes-ms4-permit>

- Updated system map due in year 2 as necessary
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- 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 or provide any additional details, please use the box below:

The Town voted approval for a new DPW facility at the Spring 2022 Town Meeting to be located at the end of Benson Brook Road in 2-3 years. This facility will be equipped with a salt storage shed which will eliminate the need to cover the existing pile with tarps.

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:

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Nitrogen Source Identification Report

- Completed the Nitrogen Source Identification Report
 - The Nitrogen Source Identification Report is attached to the email submission
 - The Nitrogen Source Identification Report can be found at the following website:

Potential structural BMPs

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

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

<https://www.marionma.gov/public-works-department/pages/stormwater-management-information-town-and-public-npdes-ms4-permit>

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 of Marion is a community with very few Town owned stormwater management systems. In year four storage volume and nitrogen removal calculations were performed for the bioretention systems at Island wharf, the constructed wetland at Silvershell Beach, and the retention basins at Brook Haven Lane.

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:

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: Low Impact Development

Message Description and Distribution Method:

The pamphlet describes the different ways to reduce impervious surfaces and decentralize stormwater management systems to reduce potential stormwater impacts from property development. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The stormwater webpage tracks the number of visitors to the site.

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: Stormwater Pollution Prevention for Small Construction Sites

Message Description and Distribution Method:

List ten steps for pollution prevention during construction of small developments. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

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: Dumpster Management

Message Description and Distribution Method:

Provides guidance on limiting leaks and spills from commercial dumpsters. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

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: Stormwater Pollution Prevention for Industrial Sites

Message Description and Distribution Method:

Provides guidance on preventing pollution from developed industrial sites. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience: Industrial property owners.

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

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: Preventing Stormwater Pollution and You

Message Description and Distribution Method:

Provides basic information for homeowners on how to reduce the amount of pollutants in runoff from their properties for a number of potential sources. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

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: Scoop the Poop: Why is it a problem?

Message Description and Distribution Method:

Informs pet owners of the hazards associated with leaving pet waste outside rather than bagging and disposing in a trash receptacle. The notice is given out to dog owners when they receive their annual license. It is also available to view and download on the stormwater webpage.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations, Town Clerk

Measurable Goal(s):

The number of licenses purchased each year as well as the number of visitors on the stormwater webpage.

Message Date(s): Email notification sent to residents annually in June/July and ongoing on the webpage.

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: Grass Clippings and Fertilizers

Message Description and Distribution Method:

Encourages homeowners to reduce fertilization and promotes the proper disposal of grass clippings. The document is available for viewing and downloading on the stormwater webpage.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

Message Date(s): Email notification sent to residents annually in April/May and ongoing on the webpage.

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: Managing Leaf Litter

Message Description and Distribution Method:

Encourages residents to rake and dispose of leaves to minimize the amount entering drainage systems. The document is available to view and download on the stormwater webpage.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

Message Date(s): Email notification sent to residents annually in Aug/Sept/Oct and ongoing on the webpage.

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: A Homeowners Guide to Septic Systems

Message Description and Distribution Method:

Educates homeowners on the importance of proper septic system maintenance. Document is available for viewing and downloading on the stormwater webpage

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations and Board of Health

Measurable Goal(s):

The number of homes and frequency of septic tank pump out is tracked by the waste haulers and provided to the Board of Health.

Message Date(s): Ongoing on the webpage and as distributed with permits through the Board of Health.

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 Management for the Proactive Business Owner

Message Description and Distribution Method:

Lists basic maintenance tasks for business owners to properly dispose of potential pollutants.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The stormwater website tracks the number of visitors to the site.

Message Date(s): Ongoing on the stormwater webpage.

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:**

Town residents who attended the Spring Town meeting were asked to support the construction of a new DPW facility by voting to authorize funds for the architectural design and construction of the facility. The new facility will include a salt storage shed and vehicle washing area compliant with the MS4 requirements. The warrant article passed at Town meeting and was subsequently placed on the annual town election ballot for an up or down vote. The vote passed allowing the project to move forward. The stormwater webpage is set up as a link within the DPW site on the Town's website. Residents are encouraged to contact the DPW Engineer with any questions or concerns.

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

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

The public is encouraged to report any problems with drainage or spills to the DPW and Board of Health. The DPW conducts a hazardous waste collection day each year.

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:

The Town of Marion MS4 Permit Stormdrain Map is updated as needed by the Buzzards Bay National Estuaries Program.

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://www.marionma.gov/public-works-department/pages/stormwater-management-information-town-and-public-mpdes-ms4-permit>

*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:

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:

<https://www.marionma.gov/public-works-department/pages/stormwater-management-information-town-and-public-mpdes-ms4-permit>

*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:

All catchment investigations were performed by the Massachusetts Maritime Academy through the Buzzards Bay Stormwater Collaborative on behalf of the Town of Marion.

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:

Employee Training

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

2 DPW personnel were trained for IDDE by the Buzzards Bay National Estuary Program on March 10, 2022
2 DPW personnel were trained for IDDE by the Buzzards Bay National Estuary Program on April 19, 2022
1 DPW personnel were trained for IDDE by the Buzzards Bay National Estuary Program on May 5, 2022

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

Number of site plan reviews completed: 0

Number of inspections completed: 0

Number of enforcement actions taken: 0

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

Currently large projects or developments not covered by the Subdivision Control Laws fall under Controlled Construction where the design engineer is responsible for construction inspection and certification of as-builts. The contractor also has responsibilities regarding erosion/sedimentation control under the NPDES SWPPP program. The site inspection responsibilities will be updated once the Stormwater Bylaw is accepted at the Fall Town meeting.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): Scheduled for year 5

As-built Drawings

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

Number of as-built drawings received: 0

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

Retrofit Properties Inventory

Below, list the permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (at least 5):

- Fire Station #1 - 50 Spring Street
- Sippican School - 16 Spring Street
- VFW Building - Mill Street
- DPW Maintenance Garage - 631 Mill Street

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:

The area contributing runoff to the catch basin is inspected to determine the source of sediment and evaluate if stabilization of the road shoulder is required. The portion of the road or parking lot may also be flagged as requiring more frequent sweeping.

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:

N/A

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:

The Island Wharf drainage system consisting of bioretention areas was cleaned out and replanted to restore the health and effectiveness of the vegetation for nitrogen removal.

COVID-19 Impacts

Optional: If any of the above year 4 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:

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

Yes, I agree

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)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 5 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]