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: City of Marlborough

EPA NPDES Permit Number: MAR041128

Primary MS4 Program Manager Contact Information

Name: Thomas DiPersio Jr, PE, PLS Title: City Engineer

Street Address Line 1: 135 Neil Street

Street Address Line 2:

City: Marlborough State: MA Zip Code: 01752

Email: tdipersio@marlborough-ma.gov Phone Number: (508) 624-6910

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:

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:
- ☒ 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 SWMP plan is on the City website to be viewed by the public with contact information for any questions or comments. This was not advertised with State Public Notice requirements.
-We are currently working on the SWPPP for the resident drop off center.

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)

Phosphorus Source Identification Report

☐ Completed the Phosphorus Source Identification Report

- ○ The Phosphorus Sourchace Identification Report is attached to the email submission
- ○ The Phosphorus Source Identification Report can be found at the following website:

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:

We have not completed the phosphorus source identification report. We are actively working on it and hope to complete it within the next month.

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:

Outfalls have been updated, removed or added per the information that was found in the field while completing outfall inspections.

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**: 3

*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:Think Blue Massachusetts

Message Description and Distribution Method:

Think Blue Massachusetts "Fowl Water" video (https://www.thinkbluemassachusetts.org/) Advertisement on Facebook & YouTube. Video available on the Think Blue Massachusetts website.

Targeted Audience: Business, Institutions and Commercial Facilities; Residents; Developers; Industrial

Responsible Department/Parties: Massachusetts Statewide Municipal Stormwater Coalition

Measurable Goal(s):

Approximately 56,646 social media impressions.

Message Date(s): 5/31/2022 - 6/17/2022

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: Yard Waste Flyer

Message Description and Distribution Method:

A flyer describing proper disposal of yard waste was posted to the Department of Public Works Facebook page.

Targeted Audience: Residents, Developers, Business, Institutions and Commercial Facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

There were 9 impressions on the post.

Message Date(s): 11/19/2021

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:Dog Waste Brochure

Message Description and Distribution Method:

A brochure outlining the proper management of dog waste was mailed to 2,600 residents with their dog license renewal reminder letter and given to residents at the City Clerk office when applying for a dog license.

Targeted Audience: Residents

Responsible Department/Parties: Engineering, City Clerk Office

Measurable Goal(s):

The brochure was mailed to 2,600 residents.

Message Date(s): 12/16/2021, throughout the permit year

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**:

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**:

-Annually the City holds project Clean Sweep where volunteers collect debris along roadways and in the parks. This was held on April 30, 2022.
-In the spring (May 14, 2022) and fall (October 16, 2021) the City held Household Hazardous Waste Day. This provides residents and opportunity to dispose of items such as batteries, oil based paints, used motor oil, etc.

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: 1

Number of SSOs removed: 1

MS4 System Mapping

Optional: Provide additional status information regarding your map:

System mapping was updated as outfall inspections were done. Locations that may have been labeled as outfalls and are not have been updated, we have added roughly 50 outfalls locations to the system mapping.

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:

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

Number of outfalls screened: 284

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

Percent of outfalls screened: 85.6

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

Due to staffing issues, we are continuing to screen outfalls. We have 47 outfalls left to screen. We anticipate we will be able to finish screening outfalls before winter.

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: 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:

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: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 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: 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:

Employee Training

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

Employees attended a BSR-Illicit Discharge Detection and Elimination webinar on 12/16/2021.

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: 15

Number of inspections completed: 45

Number of enforcement actions taken: 9

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

The number of inspections done is 45+. All sites are visited at least 3 times, during the pre-construction meeting and for various inspection along the way such as infiltration basins etc., and when/if there are large storm events or siltation issues, and a final inspection is made when everything is completed. Large sites are required to provide weekly stormwater reports to ensure compliance. A report example is attached from a recent large project. This ensures that the contractor is on top of the project. Failure to submit these weekly reports is a violation.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): June 2021

As-built Drawings

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

Number of as-built drawings received: 8

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):

DPW - the master plan for site improvements at the DPW include a detention basin with pre-treatment in the southern portion of the site
Former WeCare composting site - master plan includes detention basin with pre-treatment
Jefferson Street parking lot
Richer School parking lots
Hildreth School parking lots
City Hall - the plaza behind City Hall

City Roadways - reducing pavement widths during reconstruction projects

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: 200

Number of catch basins cleaned: 200

Total volume or mass of material removed from all catch basins: 48 cubic yards

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

Total number of catch basins: 5,300

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: [Select Units]
- ◉ Weight of material removed: 985.5 tons

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: 1

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

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 City received a MAPC grant of $44,500 for the 'Marlborough Tree Planting Initiative'. This was part of the MVP report that was completed in 2019. This report discussed the impacts of climate change and ways a community can work to mitigate and reduce these impacts. The City identified areas in the inner city Environmental Justice neighborhoods, parks and schools where increased tree planting would help mitigate heat islands. The project included planting a total of 93 trees. The City included the schools and Boys and Girls Club as part of this and used this as an opportunity to educated the students and residents about the benefits of trees for shade, heat and stormwater mitigation.
-In the 2021-2022 construction season the City reconstructed Fontaine Street and reduced the roadway width from 38' to 32'. There was existing sidewalks on both sides of the street and that remains after the project. The area of the existing sidewalk on the south side was replaced with loam and seed
-In the 2021-2022 construction season the City reconstructed Lincoln Street, Cashman Street and Prospect Street. As part of the project we added several landscape areas. These locations included decreasing the width of the sidewalk in areas, adding a grass strip between the curb and sidewalk between Broad Street and Grant Street, and landscaped bump out areas for mid-block pedestrian crossings.
-A rain garden was installed at the Korean Veteran Park off of Millham Street.
-In 2021 the City amended the existing sewer ordinance to require properties to tie in to the City sewer system at certain times, (a) prior to transfer of the property, (b) prior to change in use of a structure as set forth in Chapter 650, Zoning, (c) prior to an increase in the sewage design flow applicable to a structure for purposes of Title 5, or (d) upon failure of any system under said Title 5, 310 CMR 15.00

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: Thomas DiPersio Title: City Engineer

Signature: Thomas DiPersio Digitally signed by Thomas DiPersio Date: 2022.09.28 15:53:26 -04'00' Date:

[Signatory may be a duly authorized representative]

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA: stormwater.reports@epa.gov MassDEP: Stormwater.DEP@mass.gov

Paper Signature:

If you did not sign electronically above, you can print the signature page by clicking the button below.

Print Signature Page

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.

Lock Form