

Year 5 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2022-June 30, 2023

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are to publicly accessible sites

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, 2022 and June 30, 2023 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 (publicly available 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)			
<i>In State:</i>	☐ Assabet River Phosphorus	☐ Bacteria and Pathogen	☐ Cape Cod Nitrogen
	☐ Charles River Watershed Phosphorus	☐ Lake and Pond Phosphorus	
<i>Out of State:</i>	☐ 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.

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 publicly available 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:

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:

Changes in 2018/2020 integrated list of waters:

1. Waschacum Brook - Updated from Category 3 to Category 5. Impairment added for Dissolved Oxygen.
2. West Waushacum Pond - Updated from Category 3 to Category 4c. Impairments added for Brittle Naiad, Najas Minor and Non-Native Aquatic Plants (impairments not requiring a TMDL)
3. The Quag - Updated from Category 3 to Category 4c. Impairments added for Brittle Naiad, Najas Minor and Non-Native Aquatic Plants (impairments not requiring a TMDL)

No changes in the 2022 integrated list of waters.

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: 1

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: Impact of Road Salt on Surface Waters

Message Description and Distribution Method:

At Sterling DPW Open House, DCR Division of Water Resources attended and set up a display table and passed out educational material on road salt use and its impacts in the watershed.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Inform the general public on the impact of road salt on surface waters.

Message Date(s): 5/6/2023

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:

DCR partnership

BMP: DCR Stormwater Issues

Message Description and Distribution Method:

Copies of all DCR brochures that address a range of stormwater issues specific to homeowners, businesses, and developers are available at the Town Hall.

Targeted Audience: Residents, Businesses, and developers

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Inform general public (all audiences) about stormwater issues

Message Date(s): Year-round

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:[Message name here]

Message Description and Distribution Method:

DCR Rangers and education staff provide educational programs to students and the general public throughout the year that address a variety of topics including stormwater issues. Stormwater pollution prevention public service announcements are read by Ranger staff at all public interpretive programs.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Inform general public about stormwater issues

Message Date(s): Multiple

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:

DCR partnership

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 available on the Town's website.

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**:

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:

All Phase I mapping requirements were completed prior to this reporting period. The map will be updated in the future as-needed to reflect IDDE findings.

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 above referenced outfall screening data is attached to the email submission
- ☐ The above referenced outfall screening data can be found at the following publicly available website:

*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: 100

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

100% of outfalls owned by the Town within the MS4 area were screened/sampled during dry weather prior to this reporting period.

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 publicly available website:

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

Number of catchment investigations completed this reporting period: 29

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

Percent of total catchments investigated: 47

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

29 catchment investigations were determined to be complete during this reporting period. These include catchments where 2021 outfall screening was dry or below all IDDE thresholds and there are no upstream junction manholes.

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 publicly available 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:**

IDDE training was held on 06/06/2023 and was facilitated virtually by an outside consultant.

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: 2

Number of inspections completed: 25

Number of enforcement actions taken: 0

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

In addition, DCR monitored 3 projects during the reporting period including a total of 10 inspections. The projects are complete. The site visits were conducted to confirm that the sites were stable and no longer require monitoring under the EPA Construction General Permit.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): 5/2/2022 (Bylaw updated at Town Meeting)

Website of ordinance or regulatory mechanism: <https://ecode360.com/15005430>

As-built Drawings

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

Number of as-built drawings received: 2

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

Street Design and Parking Lots Report

Below, describe any changes made or planned to be made to local regulations and guidelines based on the report completed in Year 4:

Changes to Stormwater Bylaw approved during Town Meeting in Year 4 (5/2/2022) were approved by the AGO in Year 5 (8/18/2022). Stormwater regulations have been drafted and anticipate to be approved during Year 6.

Green Infrastructure Report

Below, describe progress towards making green infrastructure practices allowable based on the report completed in Year 4:

No update.

Retrofit Properties Inventory

Below, list remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (must maintain a minimum of 5 sites in inventory until less than 5 sites remain):

Fire Department, DPW, Light Department, Light Plant Operations, Police Department

Below, list all properties that have been modified or retrofitted with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.d of the permit. Non-MS4 owned properties that have been modified or retrofitted with BMPs to mitigate impervious area may also be listed, but must be indicated as non-MS4.

None.

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: 100

Number of catch basins cleaned: 100

Total volume or mass of material removed from all catch basins: 0 [Select Units]

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

Total number of catch basins: 1,687

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

1,687 catch basins Town-wide, however only ~460 catch basins are located within the urbanized area.

Street Sweeping

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

☒ Number of miles cleaned: 100

☐ Volume of material removed: [Select Units]

☐ Weight of material removed: [Select Units]

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: 10

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

Five SWPPP sites, two inspections each

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 publicly available 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:

DCR completes biweekly sampling (wet and dry) from two tributaries in Sterling:

Number of samples collected between July 1, 2022, and June 30, 2023:

East Wachusett Brook - 23 bacteria samples collected.

Stillwater River - Muddy Pond Rd - 36 samples collected (24 bacteria samples; 12 nutrient samples)

DCR noted that sometimes bacteria values are high following rain events, but this is not necessarily indicative of illicit discharges as bacteria concentrations in watershed tributaries increase during storm events even in undeveloped forested areas. Annual water quality summary statistics and raw data are available upon request. DCR will continue to monitor these sites.

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. If any of the above year 5 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:

The DCR continues to monitor and map structural best management practices (BMPs) in the watershed. To date, 72 BMPs (including sediment forebays, drywells, infiltration trenches, Stormceptors, and detention basins) have been mapped within Sterling and are part of a larger Geographic Information System (GIS) hydrology layer project.

In addition, DCR monitors basins located on DCR property within the Town to determine if there are any maintenance needs. One DCR Basin site in Sterling was inspected during the reporting period and found to have no outstanding issues.

All agricultural sites are regularly monitored by DCR staff for stormwater related issues such as erosion and manure runoff. Most sites do not pose a risk to storm drain systems or surface waters. 28 agricultural site inspections were performed in Sterling during the reporting period. Most agricultural properties in town are small with no observed violations or need for remediation and do not require annual visits.

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 6 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 6 below:

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Part V: Certification of Small MS4 Annual Report 2023**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.

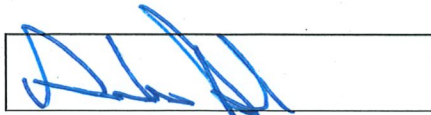
Name:

Andrew Parkhurst

Title:

Chair

Signature:



Date:

9-25-23

[Signatory may be a duly authorized representative]

