

Year 4 Annual Report
Massachusetts Small MS4 General Permit
New Permittees
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.

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

- Identified and developed an inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
 - The SSO inventory is attached to the email submission
 - The SSO inventory can be found at the following website:

- Identified each outfall and interconnection discharging from MS4, classified into the relevant category, and priority ranked each catchment for investigation
 - The priority ranking of outfalls/interconnections is attached to the email submission
 - The priority ranking of outfalls/interconnections can be found at the following website:

- Developed written IDDE plan including a procedure for screening and sampling outfalls
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
 - Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes

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 has completed SWPPPs for our transfer station, Waste Water Treatment Plant, and a DPW work yard. We did not complete a SWPPP for the main DPW facility or a second DPW facility utilized by the Trees and Grounds Department because the Town is planning to demolish these facilities in the next five years and relocate the DPW.

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
- 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

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:

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)

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:

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 is working with a consultant to complete our Nitrogen Source Identification Report. Once that is complete we will begin inventorying BMPs and tracking nitrogen removal.

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) that encourages the proper use and disposal of grass clippings and encourages 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:

The Town is working with a consultant to complete our Lake Phosphorus Control Plan. Once that is complete we will begin inventorying BMPs and tracking phosphorus removal.

Lake and Pond Phosphorus TMDL

- Completed Legal Analysis

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 is working with an environmental consultant (Fuss & O'Neill) to complete a Lake Phosphorus Control Plan (including the legal analysis) and a Nitrogen Source Identification Report.

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

The Town completed dry weather sampling at 71 outfalls/interconnections in FY22.

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? 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>

- Yes
 No

If yes, describe below, including any relevant impairments or TMDLs:

Amherst has added phosphorus as an impairment due to the phosphorus TMDL for Lake Warner in Hadley. The Mill River, which flows through Amherst, is a tributary to Lake Warner.

Part IV: Minimum Control Measures

Part IV includes some of the metrics that will be required in upcoming annual reports. For this annual report, please report on MCM1 and MCM2 and any other metrics below that have an asterisk (*), along with any other metrics that you have started within this reporting period. Other than the metrics with an asterisk, the rest of the metrics are optional for new permittees. Then, proceed to Part V.

*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: Seasonal Messages - webpage

Message Description and Distribution Method:

Seasonal messages educating the public on proper disposal of grass clippings (spring), pet waste (summer), and leaf litter (fall) are posted on our town stormwater webpage. The messages are on a slideshow that continually switches between messages.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

BMP: Mailing - dog licenses

Message Description and Distribution Method:

A flyer regarding proper disposal of pet waste was mailed to all dog owners with their annual dog tag (license) renewal. A copy of the flyer is being submitted with this report.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Approximately 600 flyers were mailed with dog tags to residents in March 2022.

Message Date(s): March 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: Lawn Signs - pet waste

Message Description and Distribution Method:

Lawn signs, in both English and Spanish, regarding proper disposal of pet waste were placed at popular dog walking trails in town. Photographs of the signs are included with this report submittal.

Targeted Audience: Residents

Responsible Department/Parties: Conservation Commission

Measurable Goal(s):

The Conservation Department staff observed less dog waste in areas where signs were placed at trail entrances.

Message Date(s): 7/1/21-10/31/21 and up again from 5/1/22-6/30/22

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: Mailing - lawn maintenance

Message Description and Distribution Method:

A stormwater pollution prevention flyer including information on lawn maintenance (fertilizer use, waste disposal, excess watering) was mailed with all water bills. A copy of the flyer is being submitted with this report.

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

The flyer was mailed/electronically sent to 6,500 residents with their water bill.

Message Date(s): Mail summer and fall 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: School Stormwater Education Program

Message Description and Distribution Method:

The Town contracted with The Hitchcock Center for the Environment to provide a stormwater educational program to 5th & 6th graders at the Amherst/Pelham elementary schools during the 2021/22 school year. A description of the program is included in this report submittal.

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Approximately 160 students received the educational program during the fall of 2021.

Message Date(s): September/October 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:

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 the Town's stormwater webpage, and readers are asked to submit comments to the Town. Contact information is provided.

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 Town partnered with the Fort River Watershed Association to hold a watershed cleanup day on September 25, 2021.

The 2022 Town of Amherst annual Cleanup Day was held on April 30, 2022. This event involves volunteers picking up along roadways and public lands, and helps to educate them on keeping drainage areas clear of debris.

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:

*Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified **since the effective date of the permit (July 1, 2018).***

Total number of SSOs identified:

Total number of SSOs removed:

MS4 System Mapping

Below, check all that apply.

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments

Initial catchment delineations

Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

We field verified all of our outfalls and interconnections in FY22 as part of completing our outfall/interconnection inventory.

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:

The buttons above are broken, we wanted to check the second button - outfall screening data is attached to the email submission.

*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:

Amherst plans on continuing our dry weather outfall/interconnection sampling in FY23.

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:

Once we complete the dry weather sampling we will begin our catchment investigations.

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:

In FY22, we had one incident of a sewage line leaking into our MS4. The Town has made some repairs to correct this situation, and plans to slip line the sewer pipe in the next few months. See the illicit discharge report submitted with this report for more details. Historically, in FY21 a household sewage service line was disconnected from the MS4. In both FY20 and FY21 illicit dumping into catch basins was reported, and the Town investigated the situations and contacted those responsible.

Employee Training

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

Staff attended the Bay State Roads IDDE training on 12/16/21.

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:

These numbers reflect both construction sites reviewed under MS4 and the state and local wetland regulations.

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

***As-built Drawings**

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

Section 13.0, Final Reports for Projects Requiring Permits, of the Town of Amherst Stormwater Regulations states that as-built drawings must be submitted within two years of project completion. Section 10.0, Operation and Maintenance Plan for Permit Applications, of the Stormwater Regulations describes what is required in an O&M Plan for permittees.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment including any planned or completed changes to local regulations and guidelines:

This report has not been started to date.

Green Infrastructure Report

Describe the status of the green infrastructure report including the findings and progress towards making the practice allowable:

This report has not been started to date.

Retrofit Properties Inventory

Describe the status of the inventory 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:

This inventory has not been compiled to date.

MCM6: Good Housekeeping

***Catch Basin Cleaning**

- The catch basin cleaning optimization plan or schedule is not complete
- The catch basin cleaning optimization plan or schedule is attached to the email submission
- The catch basin cleaning optimization plan or schedule can be found at the following website:

Catch basin cleaning is discussed in the Town's Facilities Inventory and Operation & Maintenance Plan.

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

Number of catch basins inspected:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

That catch basin would be prioritized for cleaning. The source of the sediment would be identified and, to the extent practicable, altered to reduce the amount of sediment being released.

***Street Sweeping**

- The written procedures for sweeping streets and municipal-owned lots is not complete
- The written procedures for sweeping streets and municipal-owned lots is attached to the email submission
- The written procedures for sweeping streets and municipal-owned lots can be found at the following website:

Street sweeping is discussed in the Town's Facilities Inventory and Operation & Maintenance Plan.

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:

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

NA. All our roads are part of our street sweeping program.

***O&M Procedures and Inventory of Permittee-Owned Properties**

Below, check all that apply.

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

***Winter Road Maintenance**

- The written procedures for winter road maintenance including the storage of salt and sand is not complete
- The written procedures for winter road maintenance including the storage of salt and sand is attached to the email submission
- The written procedures for winter road maintenance including storage of salt and sand can be found at the following website:

***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:

Part V: 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:

In FY22, the Town constructed a 450'L X 40'W floodplain along the Fearing Brook just before it's confluence with the Fort River. This BMP was installed to reduce the flow of the brook to decrease erosion, and allow the water time to infiltrate and be treated through vegetation and soil assimilation prior to being discharged into the Fort River.

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

Yes, I agree

- Complete IDDE ordinance
- Complete Construction/ Erosion and Sediment Control (ESC) ordinance
- Develop written IDDE plan including a procedure for screening and sampling outfalls
- Develop a written catchment investigation procedure and added the procedure to the SWMP

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
- Continue public education and outreach program
- Sweep all curbed roadways at least once within the reporting period
- Provide training within the reporting period to employees involved in IDDE program
- Clean catch basins in accordance with catch basin cleaning procedures to ensure that no catch basin is greater than 50% full

Provide any additional details on activities planned for permit year 5 below:

FY23 Proposed MS4 Activities

1. Continue dry weather sampling of outfalls - expect to be 75% (270 outfalls) complete by end of FY23.
2. Begin catchment investigations based on ranking.
3. Install new stormwater treatment chambers along Mill Lane, and at the new Pomeroy Lane roundabout.
4. Work with consultant to complete a Nitrogen Source Identification Report and Lake Phosphorus Control Plan.
5. Complete MS4 map with Phase I requirements.

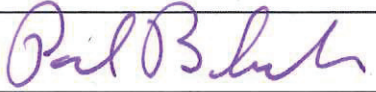
*Part VI: Certification of Small MS4 Annual Report 2021

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: PAUL BOCKEMAN

Title: TOWN MANAGER

Signature: 

Date: 09-29-2022

[Signatory may be a duly authorized representative]