

Year 2 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2019-June 30, 2020

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, 2019 and June 30, 2020 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: TOWN OF BLACKSTONE

EPA NPDES Permit Number: MA041015

Primary MS4 Program Manager Contact Information

Name: Daniel M. Keyes Title: Town Administrator

Street Address Line 1: 15 St. Paul Street

Street Address Line 2:

City: Blackstone State: Ma Zip Code: 01504

Email: dkeyes@townofblackstone.org Phone Number: (508) 883-1500

Stormwater Management Program (SWMP) Information

SWMP Location (web address): https://www.townofblackstone.org/sites/g/files/vyhlf166/f/uploads/storm_water_management-ms4_authorization.pdf

Date SWMP was Last Updated: 09/04/2020

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 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- 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
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- 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

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 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 Town also completed its initial priority ranking of outfalls and interconnections, which was not completed during Year 1.
 The Town conducted a review of its remaining mapping needs to complete Phase 1, but has not yet fully

completed the associated mapping work.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:

- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated outfall and interconnection inventory and priority ranking as needed

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

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:

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Potential structural BMPs

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

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

N/A. See below.

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 permit does not require tracking of existing BMPs for municipalities with discharges to water quality limited waterbodies and their tributaries where phosphorus is the cause of the impairment (Appendix H, part II.I.c.iii.). No new structural BMPs have been installed to date, but a tracking spreadsheet has been developed, and any such BMPs will be tracked as they are installed.

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
- Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

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:

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: Yard Waste Flyer

Message Description and Distribution Method:

Posted on Town Website describing how to properly dispose of grass clippings and leaves. Recycling Center open on Saturdays to dispose of leaves, grass clippings and brush.

Targeted Audience: Residents and Businesses, institutions and commercial facilities

Responsible Department/Parties: Department of Public Works and Recycling Center

Measurable Goal(s):

Count done by Recycling Center Employees.

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:Pet Waste Flyer

Message Description and Distribution Method:

The Town posted flyers on proper disposal of pet waste at the Town Clerk's office, on bulletin boards around Town Hall, and on the Police Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Number of views.

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:"Flushable" Wipes Message

Message Description and Distribution Method:

Facebook post on the Blackstone Police Department Facebook page warning against the problems that so-called "flushable" wipes can cause with septic clogging and sewer pipe clogging that could cause sewer pump failures. The post was originated in Natick and featured photos of a sewer pump clogged with wipes. The post was re-shared by Blackstone to continue spreading the word.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Number of views and shares. Post was shared 54 times and received 34 "reactions" on the main post on the Blackstone Police Department Facebook page.

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:

This message was a response to an increase in the use of certain types of wipes during the COVID-19 health crisis. This problem was previously unforeseen but has the potential to cause SSOs and/or septic failures, and was therefore deemed an important and timely message for the public.

BMP:"Tips to Prevent Stormwater Runoff Pollution"

Message Description and Distribution Method:

Simple tips shared on the DPW webpage reminding residents to pick up pet waste, never dump anything into the storm drain system, compost yard waste, use fertilizer sparingly, sweep up driveways and gutters, keep storm drains clean, and dispose of litter properly.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Number of web hits.

Message Date(s): Ongoing throughout the Year since February 2020

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: Think Blue Developers Sediment Control Flyer

Message Description and Distribution Method:

A flyer describing the importance of erosion controls for construction sites will be distributed with every approved construction permit.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Planning Board

Measurable Goal(s):

Number of flyers distributed, as measured by number of permits issued.

Message Date(s): Rolling throughout the 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:

BMP: "What is Stormwater" Flyer

Message Description and Distribution Method:

Flyer distributed at Special Town Meeting 10/1/2019

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Number of flyers distributed.

Message Date(s): 10/1/2019

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:

It was determined that passing out a flyer at special Town meeting would be a good way of reaching people who may not see messages on digital platforms.

BMP:"What you can do as a citizen" flyer

Message Description and Distribution Method:

EPA flyer describing how to do your part in preventing stormwater pollution was posted on the Town website.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Number of views.

Message Date(s): Accessible throughout the reporting period on the Town website.

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:

This specific flyer was not mentioned in the NOI/SWMP.

BMP:Think Blue Massachusetts businesses information

Message Description and Distribution Method:

Messaging and information for businesses from the Think Blue Massachusetts website was made available to local businesses through the Town website.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Number of views.

Message Date(s): Accessible throughout the reporting period.

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:

This specific resource was not mentioned in the NOI/SWMP.

BMP:Rain Garden Flyer

Message Description and Distribution Method:

A Mass Audubon flyer describing the benefits of rain gardens and how to create a rain garden was made available to residents.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Number of flyers.

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:

This specific flyer was not referenced in the NOI/SWMP.

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 Stormwater Management Program is posted on the Town's website for public review and comment.

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 hosted a Clean Up Day on May 3, 2020.
-Prison inmates cleaned approximately 5 miles of roadway in 2019.

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

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

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

The Town conducted a review of its remaining mapping needs to complete Phase 1, but has not yet fully completed the associated mapping work.

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.

- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

[Empty text box]

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

Number of outfalls screened:

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.

- 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:

[Empty text box]

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.

- 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 the reporting period:**

- 12 Town staff attended an EPA webinar titled: Research to Support & Implement Recreational Water Quality Criteria on 02/26/2020.
- 1 staff member attended a program on Preparing and Submitting your MS4 Annual Report on 8/22/2019
- 1 staff member attended a program on Collaborative Stormwater Management in Central MA on 12/5/2019
- 1 staff member attended a webinar on Watershed Management Optimization Support on 2/27/2020
- The Town had contracted with a consultant to conduct IDDE and Good Housekeeping training during the spring, but the training had to be postponed due to COVID-19 and restrictions on group gatherings.

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:

The Town has contracted with Fuss & O'Neill to review revisions to the existing regulations.

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

Ordinance or Regulatory Mechanism

Below, select the option that describes your ordinance or regulatory mechanism progress.

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

As-built Drawings

Describe 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:

Regulations and requirements will be reviewed to determine if any changes to policy are necessary.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

Not yet started. The Town anticipates completing this task by the Year 4 deadline.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

Not yet started. The Town anticipates completing this task by the Year 4 deadline.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

Not yet started. The Town anticipates completing this task by the Year 4 deadline.

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:

No catch basins were found to be 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: [Select Units]

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

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:

No site inspections were conducted during the reporting period, as SWPPPs were not required to be in place until July 1, 2020. The Town will begin conducting quarterly SWPPP inspections during the upcoming reporting period.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- Not applicable
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

COVID-19 Impacts

Optional: If any of the above year 2 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:

As noted above, the Town had contracted with a consultant to conduct IDDE and Good Housekeeping training during the spring, but the training had to be postponed due to COVID-19 and restrictions on group gatherings.

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

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

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 uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- 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

Provide any additional details on activities planned for permit year 3 below:

The Town plans to clean all catch basins in October-November 2020.

Part V: Certification of Small MS4 Annual Report 2020

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]

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: laura.schifman@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](#)