

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:

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
- × This is not applicable because there are no septic systems present

** 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:

Educational material for dog owners used to be funded by a Grant. Copies of the "Pet Waste Disposal" are in the public information area in the lobby where dog owners get their licenses. Copy is attached. There are no septic systems in any catchment that discharges to a water body impaired for bacteria or pathogens.

Chloride

Annual Requirements

Public Education and Outreach

- × Included an annual message in November/ December to private road salt applicators and commercial industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

The following type(s) of salt were applied during this reporting period (year 5):

- × Sodium chloride
- × Calcium chloride

- Potassium chloride
- Magnesium chloride
- × Brine solution

Total amount of salt applied **during this reporting period (year 5) including units:**

2,895.12 tons

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:

Salt brine (manufactured in-house), rock salt, and BioMelt AG-64 (Sugar Beet, Corn and Soybean Derivative) Brine Enhancer

We have a SNOW Pamphlet that is available to the Public, and we get information published in the newspaper before the season begins.

Standard Operating Procedure for Winter Road Maintenance is attached. The Salt Reduction Plan will be completed consistent with EPA regulations when due in 2 years. We will further investigate new technologies and update as we go. The Salt Reduction Plan will be completed consistent with EPA regulations when due in 3 years. We will continue this approach with current technologies and implement as we see fit. Our Operations Director has trained multiple municipalities in New England about the importance of winter road maintenance, use and storage of salt and sand and proper disposal of snow.

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)

Structural BMPs

Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the Nitrogen Source Identification Report, including: *(select the items of the evaluation that have been completed below)*

Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date

Estimated cost of redevelopment or retrofit BMPs

Engineering and regulatory feasibility of redevelopment or retrofit BMPs

Completed a listing of planned structural BMPs and a plan and schedule for implementation

- The BMP list and implementation schedule is attached to the email submission
- The BMP list and implementation schedule can be found at the following publicly available website:

Any structural BMPs listed in Attachment 3 to Appendix F 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 3 to Appendix F. 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.

- No BMPs were installed
- The above referenced BMP information is attached to the email submission
- The above referenced BMP information can be found at the following publicly available website:

Total estimated nitrogen removed in lbs/year from the installed BMPs:

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**

- x 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
- x Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- x 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)

Structural BMPs

Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the
 * Phosphorus Source Identification Report, including: *(select the items of the evaluation that have been completed below)*

- * Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date
- * Estimated cost of redevelopment or retrofit BMPs
- * Engineering and regulatory feasibility of redevelopment or retrofit BMPs

* Completed a listing of planned structural BMPs and a plan and schedule for implementation

- The BMP list and implementation schedule is attached to the email submission
- The BMP list and implementation schedule can be found at the following publicly available website:

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.

- No BMPs were installed
- The above referenced BMP information is attached to the email submission
- The above referenced BMP information can be found at the following publicly available website:

Total estimated phosphorus removed in **lbs/year** from the installed BMPs:

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:

4 Infiltration Trench BMPs were installed in the Charles River Watershed prior to paving work, the as-builts have been attached as part of the PCP report.
 The Town sweeps twice a year and has increased sweeping on Charles River Watershed area roads this permit year. The Town will sweep the Charles River Watershed first in the Fall and return there at the end of the season if time permits.

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

- The street sweeping schedule is attached to the email submission
- The street sweeping schedule can be found at the following publicly available website:

- 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:

The Town sweeps twice a year and has increased sweeping on Charles River Watershed area roads this permit year. The Town will sweep the Charles River Watershed first in the Fall and return there at the end of the season if time permits.

Charles River Watershed Phosphorus TMDL

- Completed the written Phase 1 Phosphorus Control Plan (PCP), including: *(select the items in the Phase 1 PCP that have been completed)*
 - Planned nonstructural controls
 - Planned structural controls
 - O&M program for structural controls
 - Implementation schedule
 - Cost of implementation

The Phase 1 PCP: (select one of the following options)

- is attached to the email submission
- can be found at the following publicly available website:

Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.

Baseline phosphorus export reduction required from PCP Area, as identified in Appendix F **(lbs/year) [A]:** 1,168.5

- Documented the nonstructural control measures implemented during **this reporting period** and their phosphorus reduction

total phosphorus reduction from all nonstructural controls this reporting period **(lbs/year) [B]:** 1.9

- No nonstructural control measures were implemented
- The above referenced nonstructural control measures information is attached to the email submission
- The above referenced nonstructural control measures information can be found at the following publicly available website:

- Documented the structural control measures implemented during **this reporting period and all previous years**, including location, phosphorus reduction in mass/year, and date of last completed maintenance and inspection for each control

total phosphorus reduction from all structural controls installed this reporting period and all previous years (lbs/year) [C]:

104

- No structural control measures were implemented
- The structural control measures information is attached to the email submission
- The structural control measures information can be found at the following publicly available website:

Phosphorus load increase due to development incurred since 2005 in lbs/year [D]:

163.7

Current phosphorus export rate from the PCP Area in lbs/year [=A-(B+C)+D from above]:

1,226.3

- I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance
- * with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.
 - * All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31 pertaining to proper use of fertilizers on turf grasses

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:

NON-TRADITIONAL AND TRANSPORTATION MS4s ONLY- municipalities please skip this section:

Describe the planned phosphorus reduction activities on site and coordination progress with the applicable municipality:

Lake and Pond Phosphorus TMDL

Completed the written Lake Phosphorus Control Plan (LPCP), including: (select the items in the LPCP that have been completed)

- Planned nonstructural controls
- Planned structural controls
- O&M program for structural controls
- Implementation schedule
- Cost of implementation

The LPCP: (select one of the following options)

- is attached to the email submission
- can be found at the following publicly available website:

Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.

Baseline phosphorus export reduction required from LPCP Area (lbs/year) [A]:

0

Documented the nonstructural control measures implemented during **this reporting period** and their phosphorus reduction

total phosphorus reduction from all nonstructural controls this reporting period (lbs/year) [B]:

0

- No nonstructural control measures were implemented
- The nonstructural control measures information is attached to the email submission
- The nonstructural control measures information can be found at the following publicly available website:

Documented the structural control measures implemented during **this reporting period and all previous years**, including location, phosphorus reduction in weight/year, and date of last completed maintenance and inspection for each control

total phosphorus reduction from all structural controls installed this reporting period and all previous years (lbs/year) [C]:

0

- No structural control measures were implemented
- The structural control measures information is attached to the email submission
- The structural control measures information can be found at the following publicly available website:

Phosphorus load increase due to development incurred since baseline loading was calculated in lbs/year [D]:

0

Current phosphorus export rate from the LPCP Area in lbs/year [=A-(B+C)+D from above]:

0

I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.

All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31.00 pertaining to proper use of fertilizers on turf grasses

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:

Found an outfall located in the Charles River Watershed and added to our database.

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: Erosion Control Class

Message Description and Distribution Method:

When contractors apply for a trench permit they are emailed the erosion control regulations, a detail of a silt sock, catch basin silt bag, and a construction entrance. They must reply that they have read and understand and will adhere to the erosion control regulations. All building permits for additions and teardowns are reviewed and required to show erosion controls on the plot plan.

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:

Erosion issues were becoming a problem so this step was taken to help reduce construction site erosion.

BMP: General Stormwater: May 2023

Message Description and Distribution Method:

DPW Day at the Lexington, MA Public Works Department. Town Engineering staff educated residents and children on the importance of keeping our streams and ponds clean by not littering, using safe fertilizers, picking up leaf litter, picking up dog waste, and more. Utilized an Enviroscope to show how drainage works. Marketed our Adopt-A-Drain program to residents.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

120 residents attended

Message Date(s): 5/25/23

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: Proper Maintenance of Dumpsters

Message Description and Distribution Method:

The Town of Lexington shared social media post to the Town's Facebook page. "Do you have a dumpster on your property? Follow these four easy steps to make sure your dumpster is prepared for the next rainstorm! Stormwater-proofing your dumpster helps local water quality and prevents trash from washing into local waterways. Learn more at [MysticRiver.org/stormwater](https://mysticriver.org/stormwater)"

Targeted Audience: Businesses, institutions, commercial facilities, and industrial facilities

Responsible Department/Parties: Engineering

Measurable Goal(s):

3 Likes

Message Date(s): 9/9/2022

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: General Stormwater: Turnaround Films Stormwater Video October 2022

Message Description and Distribution Method:

The Town of Lexington shared social media post to the Town's Facebook page. "Spread the word about stormwater pollution! Did you know that many different pollutants including trash, phosphorus, and road salt wash from the streets into our waterways when it rains? Check out this video from Turnaround Films to learn more about the problem of stormwater pollution and visit mysticriver.org/stormwater for simple tips you can follow to reduce stormwater pollution in your neighborhood."

Targeted Audience: Residents

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: General Stormwater: Turnaround Films Stormwater Video October 2022

Message Description and Distribution Method:

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: Proper Use of Salt and Deicer

Message Description and Distribution Method:

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: Proper Use of Salt and Deicer

Message Description and Distribution Method:

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: Proper Disposal of Trash and Litter

Message Description and Distribution Method:

You can help by:

- making sure litter makes it into recycling/trash bins
- picking up trash and properly disposing of it
- clearing storm drains of any trash"

Targeted Audience: Residents, businesses, institutions, commercial facilities, and industrial facilities

Responsible Department/Parties: Engineering

Measurable Goal(s):

1 Like

Message Date(s): 3/3/2023

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:

BMP: Proper Disposal of Trash and Litter

Message Description and Distribution Method:

The Town of Lexington shared social media post to the Town's Engineering Twitter page. "Did you know that the vast majority of trash in our rivers and lakes comes from the street and is washed into the river when it rains?

You can help by:

- making sure litter makes it into recycling/trash bins
- picking up trash and properly disposing of it
- clearing storm drains of any trash"

Targeted Audience: Residents, businesses, institutions, commercial facilities, and industrial facilities

Responsible Department/Parties: Engineering

Measurable Goal(s):

126 Views

Message Date(s): 3/3/2023

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:

BMP: Adopt-A-Drain

Message Description and Distribution Method:

The Town of Lexington shared social media post to the Town's Engineering Twitter page. A new program was launched where residents can adopt a storm drain and help keep it clean and prevent litter and debris from entering our local waterways.

"Looking for a small and meaningful way to help out in our community? Check out the Adopt a Drain program! Keeping drains clear of debris is a simple task and contributes to the overall performance of the stormwater system! [@TownOfLexMA](https://lexingtonma.gov/1705/Adopt-a-Drain)

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

757 Views
1 Retweet

Message Date(s): 5/31/2023

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:

BMP: Proper Disposal of Pet Waste**Message Description and Distribution Method:**

The Town of Lexington shared social media post to the Town's Engineering Twitter page. "This pup is ready for the rain - are you? Remember to bring dog waste bags and #scoopthepoop! Regularly scooping your dog's poop from public areas AND your backyard prevents the poop from washing into our waterways when it rains. For more info visit mysticriver.org/stormwater"

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

565 Views
1 Like
1 Retweet

Message Date(s): 6/30/23

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: Construction Site Maintenance

Message Description and Distribution Method:

The Town of Lexington Engineering Division sent out an email to all developers who are licensed with the Town of Lexington with guidelines from the EPA on Stormwater Pollution Prevention for Small Residential Construction Sites. Brochure that was sent is attached.

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:Stormwater Pollution Class

Message Description and Distribution Method:

A Watershed Educator with the Mystic River Watershed Association taught a stormwater pollution class at one of Lexington's Middle Schools. "We lead programs during class time that allow students to learn about stormwater pollution through various activities like sorting model pollutants, studying our annual water quality maps, watershed modelling, and designing storm drains using recyclables! Programs can take place virtually, in the classroom/schoolyard, or at a local park." Please see attachment, "Re: Stormwater Pollution Class".

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:Grass Clippings

Message Description and Distribution Method:

Clean water tip for grass clippings! Keep grass clippings off of the street to prevent pollution in rivers, lakes, and streams. Dispose of grass clippings properly by bagging them for yard waste, composting them, or leaving them where they fall.

Targeted Audience: Residents, businesses, institutions and commercial facilities

Responsible Department/Parties: External Contractor

Measurable Goal(s):

108 Views

Message Date(s): June 16, 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:

BMP:Fertilizer

Message Description and Distribution Method:

#CleanWaterTip!

Use less fertilizer and if you need it, opt for a slow-release, non-phosphorus fertilizer (look for "0" as the middle number). Excess fertilizer will wash away when it rains, polluting local waterways!

<http://mysticriver.org/stormwater>

Targeted Audience: Residents, businesses, institutions and commercial facilities

Responsible Department/Parties: External Contractor

Measurable Goal(s):

242 Views, 3 Likes

Message Date(s): May 20, 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:

BMP:Leaf Litter

Message Description and Distribution Method:

#CleanWaterTip

Did you know that leaves in the street can cause flooding and too many leaves in our waterways creates pollution? Check out these simple tips to keep leaves off the street and out of storm drains!

#stormwaterpollution #leaves #fall

Targeted Audience: Residents, businesses, institutions and commercial facilities

Responsible Department/Parties: External Contractor

Measurable Goal(s):

4 Likes, 3 Retweets

Message Date(s): October 28, 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:

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:**

SWMP was posted to the website with contact information for any comments or questions from visitors.

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:

Map updates are made in real time. We have the ability to update GIS maps in office and in the field.

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:

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

A new outfall was discovered and has since been screened. All located outfalls/interconnections have been screened. Those that have been unable to be located have been sampled from the nearest upstream structure. The Town began IDDE verification work to evaluate locations for potential illicit connections to the drainage system in PY 5 and continued the work into PY 6.

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:

*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:

The Town began IDDE verification work to evaluate these locations for potential illicit connections to the drainage system in PY 5 and continued the work into PY 6. Five catchments were investigated in 2020 but due to COVID the suspected pipe segments could not be verified with dye testing so they remain incomplete. The Town is continuing to do investigations where possible and working to develop a plan to determine illicit connections that are within safety protocols.

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:

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:

Our IDDE program has grown tremendously with the use of our staff, stormwater interns, and stream team interns who have all had IDDE training prior to outfall screening and sampling. We have our own equipment in house, a quickzoom camera, and a CCTV contractor under contract.

Employee Training

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

Marissa Liggiero:

1. Soak Up the Rain: The New England Stormwater Retrofit Manual (7/26/2022)
2. Urban Drainage Design (3-Day) (8/2/2022)
3. EPA's Soak Up the Rain Webinar Series: Dissolved Phosphorus and Green Infrastructure: Fundamentals, Challenges, and Opportunities (9/28/2022)
4. UNH Professional Development & Training Workshop: Stormwater Hydrology Live Online (11/9/2022)
5. Woodard & Curran Stormwater Management Plan and Training (5/9/2023)
6. NEWEA: The Future of Stormwater in New England - Strategies to Solve Our Nutrient Dilemma (5/10/2023)

John Livsey:

1. Woodard & Curran Stormwater Management Plan and Training (5/9/2023)
2. NEWEA: The Future of Stormwater in New England - Strategies to Solve Our Nutrient Dilemma (5/10/2023)

Omar Gomez:

1. NEWEA: The Future of Stormwater in New England - Strategies to Solve Our Nutrient Dilemma (5/10/2023)

Meghana Shah

1. MassDOT Innovation Conference: Environmental & Natural Environment with GIS (5/3/2023)

John Zaccardi:

1. Woodard & Curran Stormwater Management Plan and Training (5/9/2023)

Marc Valenti:

1. Norfolk Bristol Middlesex Highway Association APWA Winter Certificate Program for Operators - Program Coordinator (November, 2022)
2. UMASS Transportation Center All About Winter Liquids Program, (January 2023) Trainer
3. APWA North American Snow Conference, Omaha, NE (April 2023), Winter Supervisor Certificate Program - Presenter, Winter Weather IoT - Presenter

4. Woodard & Curran Stormwater Management Plan and Training (5/9/2023)
5. Technical Lead on Research Project with Washington State University on Organic Deicer Derived from Apple Pomace (June 2021 - Present)

Karen Mullins:

1. Woodard & Curran Stormwater Management Plan and Training (5/9/2023)

DPW Operations Staff:

1. NBM Operation Training, 10 Staff Members Attended

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:

Erosion and Sediment Training for contractors and builders/developers was continued this permit year. Due to COVID, in-person trainings were restricted to email only and handouts were sent to applicants for all trench permits. They must send the town an email stating they read and understand the erosion and sediment control requirements before a trench permit will be issued. This training aims to capture the majority of soil disturbing construction activities, including the ones below the acre threshold. We did not issue any warnings in permit year 5.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

Website of ordinance or regulatory mechanism:

<https://www.lexingtonma.gov/DocumentCenter/View/584/Town-of-Lexington-Stormwater-Regulations-PDF-Updated-June-2022?bidId=>

As-built Drawings

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

Number of as-built drawings received:

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

As-builts are required as part of the Stormwater Management Regulations. On-going O & M is required through the regulations as well, however enforcement is an issue the Town is trying to solve as this has been difficult to enforce. Some of the permitted projects in PY5 have not been completed and are still under construction so as-builts have not been required of them yet.

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:

In Summer 2023, the Town is planning to update their Planning Board Zoning Regulations for new development to require the submittal of stormwater reports and long-term SCM O&M plans for all major site plan review projects. These new regulations will be consistent with the updated phosphorus removal and long-term O&M requirements in the Town's recently updated Stormwater Management Regulations. The Town is considering changes to Zoning requirements in Planned Commercial (CD) Zones and/or Transportation Management Overlay (TMO) Zones to encourage redevelopment and improvement of stormwater facilities on development parcels and roadways.

Green Infrastructure Report

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

- Consider updates to incentivize phosphorus control options using EPA Region 1 Performance Curves.
- Develop a Town of Lexington Stormwater Design manual that guides land development applicants with selection of stormwater controls that provide the most beneficial stormwater nutrient controls.
- Develop a policy and guide to encourage Public/Private Partnerships.
- Develop a Stormwater Grant Program to provide funding for non-residential property owners to design and construct stormwater retrofits.

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):

Jonas Clarke Middle School
 Bowman Elementary School
 Regional Retrofit 1 – Munroe Road
 Regional Retrofit 2 – Philip Road
 Regional Retrofit 3 – Green Lane
 Regional Retrofit 4 – Valleyfield Street 1
 Regional Retrofit 5 – Valleyfield Street 2
 Roadway Retrofit – Ewell Avenue
 Roadway Retrofit – Benjamin Road

Roadway Retrofit – Valleyfield Street
 Roadway Retrofit – Crosby Road
 Roadway Retrofit – Clematis Road
 Roadway Retrofit – Elena Road
 Roadway Retrofit – Piper Road
 Roadway Retrofit – Allen Street

Please refer to the PCP report submitted as an attachment.

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.

10 Pelham Rd, 3 Forbes Rd, 99 Hayden Ave, 727 Marrett Rd, 200 Shire Way, 92 Hayden Ave, 3022 Massachusetts Ave/752 Marrett Rd, 7 Clematis Rd, 80 Hayden Ave, 1075 Waltham St, 594 Marrett Rd, 324 Marrett Rd, 75 Concord Ave, 690 Marrett/Route 128, 187 Spring St, 39 Marrett Rd, 453 Concord Ave, 18-15D (300 Shire Way), 18-15F (200Shire Way), 18-15G (400 Shire Way), 20 Pelham Rd, 756-758 Marrett Rd, 332 Concord Ave, 17 Stedman Rd, 9 Philip Rd, 45-55 Hayden Ave, 7 Crosby Rd, 1050 Waltham, 45 Lincoln St, 62 Grassland St, 72 Grassland St, 151 Grove St, 310 Concord Ave, 8 Cutler Farm Rd, 8 Cutler Farm Rd, 13 Cutler Farm Rd, 14 Cutler Farm Rd, 116 School St, 19 Wellington Ln, 9 Woodcliffe Rd, 31 Barberry Rd, 33 Barberry Rd, 66 Valleyfield St, 65 Munroe Rd, 66 Munroe Rd, 5 Stonewall Rd, 411 Concord Ave, 470 Concord Ave, 60 Munroe Rd, 37 Barberry Rd, 33 Dawes Rd, 53-55 Watertown St, 56 Watertown St, 960-1010 Waltham, 10 Philip Rd, 443 Lincoln St (Hobbs Brook Ln), 71 Bridge St, 10 Stedman (32 Brookside Ave), 10 Winston, 2 Paddock Ln, 6 Blossom St, 26 Middle St, 64 Middle St, 3 Crescent Rd, 31 Cary Ave, 33 Cary Ave, 35 Cary Ave, Cary Ave, 32 Middle St, 1000 Main Campus Dr, Grey Oaks Cir, 10 Churchill Ln, 341 Marrett Rd, 14 Middle St, 17 Cary Ave, 2 Brookside Ave, 114 Marrett Rd, 24 Valleyfield St, 430 Concord Ave, Journeys End Ln, 55 Cary Ave, 12 Brookside Ave.

Please refer to the PCP report attached.

MCM6: Good Housekeeping

Catch Basin Cleaning

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

Number of catch basins inspected:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

The town has developed a program to analyze catch basin cleaning data to identify basins that need to be cleaned more than once a year. This program will be run on a yearly basis to direct work in order to meet permit requirements. Please see attachment, "50 full CB Data Email".

Street Sweeping

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

- Number of miles cleaned:
- Volume of material removed:
- Weight of material removed:

Stormwater Pollution Prevention Plan (SWPPP)

Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period**.

Number of site inspections completed:

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

Inspections were completed quarterly by Environmental Partners. Items completed were: 1. Erosion stone was removed and replaced in the area behind the Salt Shed. 2. The erosion stone was cleaned and refreshed by the fire hydrant at the back corner of the vehicle storage building. 3. All the catch basins in the DPW complex were cleaned twice. 4. All of the Stormceptors were cleaned. 5. Trash that blew out on the perimeter of the property was picked up on a regular basis.

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:

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:

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:

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.

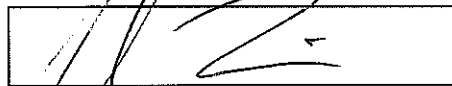
Name:

JOHN LIVSEY

Title:

TOWN ENGINEER

Signature:



Date:

9-28-23

[Signatory may be a duly authorized representative]