

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:

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. 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)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
In State:	<input type="checkbox"/> Assabet River Phosphorus	<input checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
Out of State:	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> 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:

A SWPPP has been developed for the salt shed, at which sludge and road sweepings are stored in unroofed enclosures.

A new facility for DPW Central Maintenance and Parks & Rec storage and offices is under construction. A

SWPPP will be developed for the new facility in Spring 2021.

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:

DPW and Rec Department maintenance staff did not receive in-person IDDE training intended for Spring 2020 due to Covid-19 disruptions.

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:

The vast majority of homes in Burlington connect to the town's sewer system. A program to identify and

educate the remaining residences with private septic systems was initiated in July 2020 and will be reported in the next annual report.

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:

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:

Not yet commenced.

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

Five town-owned stormceptors were cleaned in July 2019. Each was less than 50% full at that time. Their inspection and cleaning going forward will be added to the catchbasin cleaning contract.

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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:

Vine Brook (MA83-06 in Burlington) now impaired for DO and TSS and not for E. coli.
Long Meadow Brook (MA83-11 In Burlington) now impaired for E. coli.
Sandy Brook (MA83-13 in Burlington) now impaired for E.col,
Shawsheen River (MA83-17 outside Burlington) now impaired for E. Coli and not for DO.
Lubbers Brook (MA92-05 outside Burlington) now impaired for E. Coli and DO
Ipswich River (MA92-06 outside Burlington) now impaired for DO.
Maple Meadow Brook (MA92-04 outside Burlington) now impaired for DO.

The Mystic River Watershed, which extends into the southeastern portion of the Town of Burlington, received an Alternative TMDL for Phosphorus in 2020. Burlington was already listed as a municipality that discharges to waterbodies that are impaired due to phosphorus, or their tributaries.

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: 8

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: Pool & Spa Water Drainage

Message Description and Distribution Method:

Distribute pool drainage guidelines.

Targeted Audience: Residents

Responsible Department/Parties: Conservation Department

Measurable Goal(s):

Disseminated brochures containing pool drainage guidelines to 125 residents who had installed pools within the previous 5 years.

Message Date(s): August 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:

BMP: Salt/De-icing Use & Storage

Message Description and Distribution Method:

Developed and distributed a salt/de-icing materials use and storage brochure.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Conservation Dept & DPW

Measurable Goal(s):

900 brochures distributed with quarterly commercial water/sewer bill

Message Date(s): October 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:

BMP: Industrial materials storage information

Message Description and Distribution Method:

Develop and distribute industrial materials storage information.

Targeted Audience: Industrial facilities

Responsible Department/Parties: Conservation Dept & Board of Health

Measurable Goal(s):

Mailed stormwater pollution prevention brochure to 110 industrial operations with hazardous materials permit.

Message Date(s): January 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: Stormwater Infiltration Program

Message Description and Distribution Method:

Conduct program to encourage on-site stormwater infiltration and provide general stormwater facts to the public, using website, local media, social media, Town events.

Targeted Audience: Residents

Responsible Department/Parties: Conservation Department

Measurable Goal(s):

Recorded hits on Town Website stormwater management page - 192 visits between July 2019 and July 2020. Tweet inviting review of SWMP on 7/19/19 got 140 impressions and similar Facebook post reached 1985 with 205 engagements.

Instagram and Facebook post encouraging residents to clear snow and ice from stormdrains on 2/13/20 reached 980 with 65 engagements.

Post of USEPA's Why are Wetlands Important on 7/17/19 got 437 impressions with 3 engagements.
Facebook post on 6/30/2020 encouraging prudent use of lawn sprinklers reached 1112 people with 201 engagements.

Tweets about classes on watersaving plants and gardening and composting in July 2019 and 2020.

Message Date(s): 7/17/19, 7/19/19, 7/29/19, 2/13/20, 7/6/20, 7/7/20

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:

We are engaging more in social media than envisioned when NOI submitted.

BMP: (I) Dog Waste Reduction & (J) Dog Owner Education

Message Description and Distribution Method:

Added information about the importance of picking up dog waste to regulatory notice provided to dog owners with licences.

Developed door hangers about importance of clearing dog waste and targeted streets with repeated complaints about dog waste issues.

Attached metal No Dumping, Drains to Wetlands markers onto or close to catchbasins around town throughout July and August 2019.

Installed metal signs in September 2019 admonishing residents to Pick Up After Your Dog, targeting streets like Erin Lane with known accumulations of dog waste bags in wetlands and recreation fields.

Social media posts encouraging residents to Scoop the Poop

Targeted Audience: Residents

Responsible Department/Parties: Conservation Department & Town Clerk

Measurable Goal(s):

Distributed 1250 dog waste education flyers to residents between July 2019 and 2020, and 35 at Rabies Clinic in March 2020.

Placed hangers on 103 doors on streets with reported dog waste problems.

Attached approx. 50 metal plates to catchbasins around town.

Installed 2 vertical Pick Up Dog Waste signs on Erin Lane. Number of dog poop bags in Erin Lane wetland was >100 in June 2019, 0 in June 2020.

Scoop the Poop tweet on 6/20/19 garnered 3203 impressions and 23 interactions, Facebook post on 6/22/19 reached 769 with 53 engagements.

Message Date(s): July, August, September, November & December 2019, signs 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:

Message was the same, methods of dissemination changed on the ground.

BMP: Phosphorus Runoff Reduction - Grass

Message Description and Distribution Method:

Distribute annual message in spring encouraging proper use of and disposal of grass clippings and proper use of slow-release and phosphorus-free fertilizer.

Targeted Audience: Residents

Responsible Department/Parties: Conservation & DPW

Measurable Goal(s):

Social media posts about bagging grass clippings on 6/20/20 and 6/29/20 reached 2540 with 77 engagements.

Message Date(s): June 20 and 29, 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: Phosphorus Reduction - Leaves

Message Description and Distribution Method:

Distribute annual message in the Fall encouraging proper disposal of leaves.

Targeted Audience: Residents

Responsible Department/Parties: Conservation & DPW

Measurable Goal(s):

Bag your Leaves facebook post on 9/13/19 reached 506 with 26 engagements.

Message Date(s): September 13, 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:

[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 Plan (SWMP) is posted on the Stormwater Management page, which is linked from the Conservation main page and the DPW main page. A tweet from the Conservation Department on July 19, 2019 inviting residents to review the SWMP amassed 140 impressions. The same invitation on the Burlington DPW Facebook page reached 1985, with 205 engagements. No residents commented on the SWMP.

All documentation required in the SWMP, including all brochures produced for public education and outreach, the IDDE plan and training materials, and all operations and Maintenance Procedures and Standard Operating procedures required for the good housekeeping MCM are available on the Stormwater Management page.

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 flyer containing information about dog licensing and the importance of keeping dog waste out of the environment and stormwater was distributed to 468 drivers dropping off hazardous waste on September 21, 2019.

The Town of Burlington is a member of the Northern Middlesex Stormwater Coalition (NMSC). On behalf of its member municipalities, NMSC undertook the following activities:

A. Trainings and Meetings:

1. 7/9/19-EPA Workshop-Stormwater Financing: Innovative Opportunities to Help You Address Your Stormwater Challenges
2. 7/10/19 - EPA and USDA Webinar: Funding Landscape-scale Nutrient Reductions
3. 7/30/19-Soak Up the Rain Webinar- Planning and Implementing Climate Smart Parks in Massachusetts
4. 7/31/19 – Webinar on Stormwater Compliance Success; Using Proactive BMPs to Minimize Regulatory Discharges
5. 8/1/19 – Statewide Stormwater Coalition Meeting, including ThinkBlue webinar on taking credit for social media in the Annual Report
6. 8/9/19 - Merrimack River Awareness Event hosted by Senator Kennedy
7. 8/14/19 -NMSC Training Session on Annual Reporting (provided by EPA and DEP) and water quality test kits (Tighe and Bond)
8. 8/16/19 – Met with Westford officials, DPE, EPA and legislators to discuss stormwater funding options
9. 8/22/19-EPA webinar on the MS4 Annual Report requirements
10. 8/28/19-Soak Up the Rain Webinar: Accelerating Statewide Green Infrastructure Investment in Rhode Island
11. 9/10/19 EPA Webinar: Using Notification Techniques to Bring Facilities Back to NPDES Compliance
12. 9/10/19 FEMA Webinar-Ethical and Efficient Infrastructure Resilience
13. 9/12/19- EPA Webinar: Centering the Community in Resilience Planning
14. 9/24/19 –Soak Up the Rain Webinar: Goin' Mobile-Mapping Your Stormwater Assets
15. 10/9/19 – Urban Waters Learning Network Webinar: After the Storm-Equitable Recovery and Resilient Adaptation
16. 10/10/19 –North Shore/Merrimack Valley Floodplain Management Works

17. 10/15/19 – MS4 Assistance Grant Bidders Conference
18. 10/19/19 – Massachusetts Association of Conservation Commissions Annual Conference
19. 10/28-29/20 – National Stormwater Center Inspector Training in Waltham
20. 10/29/19 – Merrimack Valley Smart Growth Conference
21. 10/30/19 – Forum on the 2019 DER Culvert Replacement Grant Program
22. 11/2/19 FEMA Webinar: The Past, Present, and Future of Hazard Mitigation Assistance
23. 11/7/19 – Statewide Stormwater Collaborative Meeting
24. 11/13/19 - NMSC Meeting with presentation by DEP and EPA on Year 2 Requirements
25. 11/13/19 – 2019 Regional Conservation Partnership Conference on Natural Climate Solutions for All
26. 11/19/19 – MassDOT Rivers and Roads Training on Fluvial Geomorphology and Road Design
27. 12/5/19 – Soak Up the Rain Webinar: Collaborative Stormwater Management in Central Massachusetts
28. 12/17/19 – Soak Up the Rain Webinar: Rain Gardens for Residents on Aquidneck island
29. 1/6/20 – Soak Up the Rain Webinar: Building resilience Through Living Shorelines
30. 1/7/20 – NOAA Workshop: Building the Case on Our Changing Climate-Accessing and Understanding Data
31. 1/11/20- NEIWPCC Webinar on Think Blue Massachusetts
32. 2/6/20 – Statewide Stormwater Coalition Meeting
33. 2/27/20 – Soak Up the Rain Webinar: EPA’s Watershed Management Optimization Support Tool (WMOST)
34. 3/26/20 – NMSC Meeting with presentation by DEP and EPA on MS4 permit changes
35. 3/26/20 – Soak Up the Rain Webinar: Site Remediation and Green Infrastructure Practices on Contaminated Properties In Chelsea, MA
36. 3/31-4/1/20 – NEIWPCC Conference on “The Science of PFAS: Public Health and the Environment”
37. 4/16/20 – Statewide Stormwater Coalition Meeting
38. 4/30/20 – Webinar: Impervious Cover Disconnection Project- An Integrated Stormwater Management Approach
39. 5/5 and 5/7/20 – Remote IDDE Implementation Training provide by Central Mass Stormwater Coalition
40. 5/7/20 – Soak Up the Rain Webinar: Effective Public Outreach in Massachusetts MS4 Communities
41. 5/7/20 – Statewide Stormwater Coalition virtual meeting
42. 5/8/20 – WPI Webinar on Managing Algae Blooms, Managing NPDES Compliance Costs, and Promoting Stormwater through school curriculum
43. 5/14/20 – Soak Up the Rain Webinar: Reaching Public Consensus on Stormwater Funding in Ashland, MA
44. 5/21/20 – NMSC MS4 Grant Workshop #1: Project Kick-off and Stormwater Code Self-Assessment
45. 6/10 and 6/16/20 – IDDE Training Webinar (recorded) provided by Central Mass Stormwater Coalition
46. 6/11/20- Soak Up the Rain Webinar: Community Buy-in for Stormwater Funding

B. Public Education and Outreach:

1. Distributed customizable brochures and leaflets
2. Provided EnviroScape model to participating communities for various community events
3. Worked with community groups such as Girls Inc., Lowell Charter School, the YWCA, and the Scouts on stormwater education
4. Used social media accounts for community education
5. Rebuilt stormwater website for migration to a new platform
6. Distributed ThinkBlue outreach results to NMSC communities for inclusion in the annual report

C. GIS and other technical tools and information:

1. Provided training on stormwater data collection
2. Pursued GPS joint purchase for interested NMSC communities
3. Assisted communities with MS4 mapping requirements

4. Provided training on using the Year 2 reporting template
5. Provided training on field data collection and recording
6. Provided customized GIS assistance to individual communities based on needs and requests

D. Grant Opportunities:

1. Distributed information on the Massachusetts Division of Ecological Resources Culvert Replacement Grant opportunity
2. Distributed information on the National Wildlife Federation's Five Star and Urban Waters Restoration Grant program
3. Distributed information on the DEP 604(b) and 319 grant programs
4. Distributed information on DEP's MS4 Municipal Assistance Grants, developed application and secured a \$65K grant to assist NMSC communities with code revisions and regulation development, permit tracking tool, etc.
5. Distributed information on the State's Municipal Vulnerability Preparedness Grant Program; Distributed information on the MEMA/FEMA Pre-Disaster Mitigation and Flood Mitigation Assistance grant programs
6. Distributed information on the Department of Fish and Wildlife In Lieu Fee Program for Aquatic Resource Preservation and Restoration
7. Distributed information on the NFWF and Wells Fargo Resilient Communities Grant Program, the TD Bank Green Spaces Grant, NOAA Bay Watershed Education and Training Grant, and DOI BOS WaterSMART Grant.
8. Distributed information on Toxics Use Reduction Institute Grants (TURI).

On behalf of the members of the Northern Middlesex Stormwater Collaborative, Think Blue Massachusetts ran an educational advertising campaign from May 16th to July 5th, 2019.

Burlington had 39,019 Instagram/Facebook impressions and 32,042 YouTube ad impressions.

The post campaign survey revealed that:

- 17% of residents surveyed recalled seeing the ads, up from 15% in 2019 and 8% in 2018.
- Those who recall the ad are more likely to recognize that stormwater goes directly to local waterways (52%) than those who do not recall the ad (32%).
- Those who recall the ad are more likely to describe stormwater as having "major" or "some" impact on waterways (49%) than those who do not recall the ad (31%).

The Think Blue Massachusetts Facebook account has approximately 300 followers and averages approximately 3,000 reaches per month

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:

Summer staff have been identifying and adding BMPs permitted for commercial and residential enterprises to the map.

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:

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:

Two catchments were investigated following high E. coli results. In one investigation, it was found that the stormwater system draining directly to the outfall was dry, so the source was entering a stream upstream. Further investigation revealed that wildlife was the source of E. coli in the stream flowing through the culvert

at that location. In the other catchment, it was also determined that raccoons and other wildlife appear to be the source of the high E. coli levels.

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**:

Four summer staff were trained in IDDE detection and stormwater screening and sampling procedures in June/July 2020.

SWMP Team Coordinator and MS4 Coordinator undertook training to become a Certified Stormwater Inspector in October 28 and 28, 2019;
got credentials in

Calculating Runoff in August 2019, BMP Selection in March 2020

Stormwater Violations & Tips to Avoid Them in April 2020,

Non-structural BMPs in April 2020;

Addressing Stormwater Compliance on Construction Projects using "The 3 C's of Stormwater" in May 2020; participated in the IDDE Training Workshop sponsored by CMRSWC and presented by Fuss & O'Neill in May 2020.

She also attended the following webinars:

Accelerating Statewide Green Infrastructure webinar on August 28, 2019,

the EPA Soak up the Rain Stormwater Mapping Webinar on Sept 28, 2019;

EPA Soak Up the Rain Webinar: Collaborative Stormwater Management in Central Massachusetts on Dec 5, 2019,

EPA Soak Up the Rain Webinar: Rain Gardens for Residents on Aquidneck Island on December 17, 2019;

NOAA Workshop: Building the Case on Our Changing Climate-Accessing and Understanding Data on Jan 7, 2020,

Soak Up the Rain Webinar: Effective Public Outreach in Massachusetts MS4 Communities on May 5, 2020,

Information Session: MA MS4 general permit draft modifications on May 7, 2020,

attended the MACC conference on Feb 29, 2020;

attended the NMSC Meeting with presentation by DEP and EPA on MS4 permit changes on March 26, 2020,

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: 46

Number of inspections completed: 160

Number of enforcement actions taken: 0

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

Site plan reviews and inspections were conducted for 28 Stormwater/Erosion & Sedimentation Control permits issued in year 2 of the permit and for 18 Wetland permit applications that involved stormwater management.

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:

Section 6.9 of the Burlington Stormwater Bylaw Governing Erosion and Sedimentation Control for new and redevelopment projects during construction and post-construction periods requires submission of an Operations and Maintenance Plan for land disturbing activity over 20,000 square feet or 500 cubic feet. Section 6.16 of the Bylaw states that Upon completion of the work and if required by the issuing Commission/Board, the permittee shall submit a report (including certified as-built construction plans) from a Professional Engineer (P.E.), surveyor, certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance with the conditions of the approved permit.

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:

Assessment not yet commenced.

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:

Report not yet commenced.

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:

Inventory not yet commenced.

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: 558

Total volume or mass of material removed from all catch basins: 122 cubic yards

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

Total number of catch basins: 2,600

If applicable:

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

If a catch basin sump is more than 50 percent full during two consecutive routine inspections/cleaning events, that finding shall be documented, the contributing drainage area shall be investigated for sources of excessive sediment loading, and to the extent practicable, contributing sources shall be abated. Based on the results of that investigation, the schedule shall be updated to prioritize areas other than construction site locations that require additional inspections.

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: 288

cubic yards

☐ 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: 0

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

Additional Information

Monitoring or Study Results

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

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

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

Additional Information

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

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:

In-person IDDE training did not occur in spring of 2020 as staff were working from home.

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 Burlington Stormwater Bylaw will be updated and adopted consistent with permit requirements.

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:

Paul F. Sagarino, Jr.

Title:

Town Administrator

Signature:



Date:

9/14/20

[Signatory may be a duly authorized representative]

