

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: Town of Tewksbury

EPA NPDES Permit Number: MAR041226

Primary MS4 Program Manager Contact Information

Name: Kevin Hardiman

Title: Director of Public Works

Street Address Line 1: 999 Whipple Rd

Street Address Line 2: na

City: Tewksbury

State: MA

Zip Code: 01876

Email: khardiman@tewksbury-ma.gov

Phone Number: (978)-640-4440

Stormwater Management Program (SWMP) Information

SWMP Location (publicly available web address): <https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

Date SWMP was Last Updated: Jun 30, 2020

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<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	
<i>Out of State:</i>	<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.

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:

<https://www.tewksbury-ma.gov/262/Tewksbury-Illicit-Discharge-Detection-Di>
- ☒ 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:

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:**

2,014.46 Tons (SODIUM CHLORIDE)
8,725 Gallons (BRINE)

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

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:

<https://www.tewksbury-ma.gov/DocumentCenter/View/4143/Phase-II-PSIR-Report-Tewksbury>

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:

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:

The Town has made changes to their list of outfalls, receiving waters and impairments since the NOI was originally submitted. These changes are a result of mapping updates made during outfall inspections and catchment investigations, and are reflected in the Catchment Ranking Matrix and SVF Analysis. The updated documents can be found at the following link:

<https://www.tewksbury-ma.gov/262/Tewksbury-Illicit-Discharge-Detection-Di>

The Final Massachusetts Integrated List of Waters for the Clean Water Act 2022 Reporting Cycle was approved on June 30, 2023, and included minor changes to some of the Town's impaired waters. The Concord River (MA82A-08) now lists chloride as an impairment that requires the development of a TMDL. The rest of the changes have not altered permit compliance requirements for any of the Town's outfalls or interconnections.

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: Dedicated Page on Town's Website

Message Description and Distribution Method:

The Town's website has a dedicated url address that contains all information to residents about the stormwater management program, public outreach messages, links and important documents for public viewing

www.tewksbury-ma.gov/stormwater

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The Town's Stormwater Website was visited 658 times (540 Unique Visitors) over the permit year (including subpages). All of the public awareness messages, brochures, mailings and TV PSA's include a link to our dedicated web page.

Message Date(s):

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

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

If yes, describe why the change was made:

BMP: "All About Stormwater" Brochure Distribution

Message Description and Distribution Method:

The Town designed it's own town specific Tri-fold brochure "All About Stormwater" which is available for download and viewing on the website and is distributed at displays at following public buildings:

- Library
- Town Hall
- Town Hall Annex
- Public Works Building

The Town also distributes the brochure at all Community Events and Presentations as needed

Link To View Brochure:

<https://www.tewksbury-ma.gov/DocumentCenter/View/370/All-About-Stormwater-Brochure-PDF?bidId=>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Approximately 100 copies printed and distributed throughout the permit year.

Message Date(s): July 1, 2022 to June 30, 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: Alternatives and Tips for De-Icing Public Awareness Message

Message Description and Distribution Method:

Public Awareness Message about Alternatives for De-Icing At Your Home or Business. The message was distributed town-wide on our website, posted to social media and broadcasted though the Town's local access TV station.

Link to Messages Text:

<https://www.tewksbury-ma.gov/264/Stormwater-Public-Awareness-Messages>

Link to Youtube Channel Playlist:

<https://www.youtube.com/playlist?list=PLiF6fIt8vwqz4gbA4C4mr2U1-EWYDJ6Z>

Targeted Audience: Residents, Businesses, institutions and commercial facilities

Responsible Department/Parties: Engineering

Measurable Goal(s):

Broadcasted 1096 times on the Town's local access TV station

Message Contained Link to Town's Dedicated Web page

Message Date(s): December 7, 2022 - Social Media/Website
July 1, 2022 to June 30, 2023 - Town Public Access TV

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:

For a more effective public awareness campaign, the Town has designed a series of Public Awareness Messages to be distributed on an annual basis through social media and local access TV.

BMP: Lawn Maintenance and Yard Waste Tips Public Awareness Message

Message Description and Distribution Method:

Public Awareness Message for Lawn Maintenance and Yard Waste Tips. Includes Leaf pick up options, exterior cleaning, fertilizer use tips. The message was distributed town-wide on our website, posted to social media and broadcasted though the Town's local access TV station.

Link to Messages Text:

<https://www.tewksbury-ma.gov/264/Stormwater-Public-Awareness-Messages>

Link to Youtube Channel Playlist:

<https://www.youtube.com/playlist?list=PLiF6fllt8vwqz4gbA4C4mr2U1-EWYDJ6Z>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Broadcasted 922 times on the Town's local access TV station

Message Contained Link to Town's Dedicated Web page

Message Date(s): November 7, 2022. May 10, 2023 - Social Media/Website
July 1, 2022 to June 30, 2023 - Town Public Access TV

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:

For a more effective public awareness campaign, the Town has designed a series of Public Awareness Messages to be distributed on an annual basis through social media and local access TV.

BMP: Septic Systems Maintenance Public Awareness Message

Message Description and Distribution Method:

Public Awareness Message for Septic Systems Maintenance. The message was distributed town-wide on our website, posted to social media and broadcasted though the Town's local access TV station.

Link to Messages Text:

<https://www.tewksbury-ma.gov/264/Stormwater-Public-Awareness-Messages>

Link to Youtube Channel Playlist:

<https://www.youtube.com/playlist?list=PLiF6fllt8vwqz4gbA4C4mr2U1-EWYDJ6Z>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Broadcasted 1206 times on the Town's local access TV station

Message Contained Link to Town's Dedicated Web page

Message Date(s): June 14, 2023 - Social Media/Website
July 1, 2022 to June 30, 2023 - Town Public Access TV

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:

For a more effective public awareness campaign, the Town has designed a series of Public Awareness Messages to be distributed on an annual basis through social media and local access TV.

BMP: Pet Waste Disposal Public Awareness Message

Message Description and Distribution Method:

Public Awareness Message for Pet Waste Disposal. The message was distributed town-wide on our website, posted to social media and broadcasted through the Town's local access TV station.

Link to Messages Text:

<https://www.tewksbury-ma.gov/264/Stormwater-Public-Awareness-Messages>

Link to Youtube Channel Playlist:

<https://www.youtube.com/playlist?list=PLiF6fllt8vwqz4gbA4C4mr2U1-EWYDJ6Z>

A messages is included in the text of all new and renewed dog permits administered by the Town Clerk

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

2,669 Dog Permits issued in the Permit Year that included the Pest Waste Disposal Public Awareness Message

Broadcasted 769 times on the Town's local access TV station

Message Contained Link to Town's Dedicated Web page

Message Date(s): August 1, 2022, April 4, 2023 - Social Media/Website
July 1, 2022 to June 30, 2023 - Town Public Access TV

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: Licensed Drain Layers Construction Site BMP's Mailing

Message Description and Distribution Method:

A list of Stormwater Best Management Practices (BMPs) for Construction Sites were distributed via US mail to all Licensed Drain Layers. Licensed Drain Layers work on water, sewer excavation, and site work at residential/commercial developments.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Engineering

Measurable Goal(s):

Mailed Letter with list of BMP's to the 50 Licensed Drain Layers Contractors

Message Date(s): March 14, 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:

For a more effective public awareness campaign, the Town has designed a series of Public Awareness Messages to be distributed on an annual basis through social media and local access TV.

BMP: Brochure in annual Consumer Confidence Report (CCR)

Message Description and Distribution Method:

Stormwater Brochure is included the annual Consumer Confidence Report distributed by the Water Treatment Plant about the Town's Drinking water supply that is distributed to entire town, in print and online.

Link to CCR:

<https://www.tewksbury-ma.gov/297/Consumer-Confidence-Reports>

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Consumer Confidence Report (CCR) is displayed on the Town's Website and is distributed to be viewed by every resident and business in town

Message Date(s): June 1, 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: PSA Videos on Local Access TV

Message Description and Distribution Method:

Broadcasting of two Stormwater Videos PSA's that were produced by NMCOG on the Town's Local Access TV Station

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

30 Second NMCOG Stormwater PSA aired 1334 times

2 Minute NMCOG Stormwater PSA aired 1299 times

Message Date(s): July 1, 2022 to June 30, 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:

The Town added a Telemedia Department and Local Access TV after the NOI was submitted

BMP: Town Wide Direct Mailings

Message Description and Distribution Method:

The Town contracted Spectrum Marketing Co. to design and mailout 4 inch by 6 inch mailers (flyers) to each home and multifamily residency in the Town of Tewksbury. There were two mailings with two different messages and two different designs and include QR Code link to the Town's Stormwater Web Page.

See below for dates and links to mailer (flyer):

"All About Stormwater"

Mailed on June 26, 2023

11,889 Homes

<https://www.tewksbury-ma.gov/DocumentCenter/View/367/All-About-Stormwater-Flyer-Town-Wide-Mailer-PDF?bidId=>

"Please Pick Up After Your Pets"

Mailed on April 22, 2023

6,962 Homes (Pet Owners Only)

<https://www.tewksbury-ma.gov/DocumentCenter/View/367/All-About-Stormwater-Flyer-Town-Wide-Mailer-PDF?bidId=>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

SEE ABOVE

Message Date(s): SEE ABOVE

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:

Added the direct marketing mailing strategy to reach more residents

BMP: Dedicated YouTube Video Playlist

Message Description and Distribution Method:

The Town with the assistance of the Telemedia Department has compiled all it's stormwater related videos to one YouTube playlist. There are currently 13 Videos that include PSA's, presentations and trainings.

Link To Video Playlist:

<https://www.youtube.com/playlist?list=PLiF6fllt8vwqz4gbA4C4mr2U1-EWYDJ6Z>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

There are currently 13 Videos with 100 Total Plays

Serves as public access page for all our stormwater public outreach video content

Message Date(s): Since July 1, 2021

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

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

If yes, describe why the change was made:

The Town added a Telemedia Department and Local Access TV with YouTube Channel after the NOI was submitted

BMP: High School Science Class Presentaion

Message Description and Distribution Method:

Engineering Division staff performed two one hour Stormwater classroom presentation for two separate classes at Tewksbury High School. This also included a demonstration of EnviroScape Model.

Targeted Audience: Residents (students)

Responsible Department/Parties: Engineering

Measurable Goal(s):

Approximately 45 Students participated in high school science classes presentation

Message Date(s): January 9, 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:

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 Town's SWMP and all related documents are available on the Town's website for public view and contact information is available for comments.

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

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:**

23 BMPs were installed under Long Pond 319 Non-Point Source Pollution Grant and nine of the BMPs were installed on private property under a license agreement with the Town. Of the 23, six BMP have been adopted by the homeowner which includes a yearly agreement to maintain the BMP to its original capacity and functionality.

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:

Our System Map is located online here:

<https://www.tewksbury-ma.gov/DocumentCenter/View/387/Townwide-Stormwater-System-Map-2020-PDF?bidId=>

We have been field verifying our map during outfall and catchment investigations and will be updating our map in the future

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:

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

*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:

Weston & Sampson completed dry weather screening and sampling during the following dry weather periods: September 16-18, 2020; September 21-24, 2020; September 29, 2020; October 2, 2020;

October 5-9, 2020; October 15, 2020; May 13-14, 2021; May 20-21, 2021; June 1-2, 2021; June 7, 2021; and June 18, 2021. A total of 513 outfalls were screened and sampled during dry weather periods. The Town has not yet started wet weather outfall screening.

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:

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

*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:

Of the 513 Catchment Areas, a total 215 (40 in PY4 and 175 in PY5) have been investigated which equals 42%. However, the Town has not started wet weather sampling for any outfalls and interconnections and therefore is reporting 0 total catchments completed. Per the permit, the Town is only reporting that catchment investigations are complete in catchments where outfalls/interconnections have been screened during dry weather, where key junction manholes in these catchments have been screened, and where wet weather sampling has been completed, and where all results indicated no likely sewer input based on field observations and sampling. The Town has not yet started wet weather outfall sampling. Catchment investigation data referenced above includes all the investigations completed during the reporting period.

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:

<https://www.tewksbury-ma.gov/DocumentCenter/View/4144/Illicit-Discharge-Incidents-Master-List-As-of-June-30-2023>

*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:

During Permit Year 5, as part of catchment investigations, 84 samples were collected from catchments with dry weather flow, and zero (0) were determined to have evidence of an illicit discharge based on the criteria identified in the 2016 MS4 Permit for likely sewer input as summarized below.

The above total illicit discharges do NOT include SSOs, which are included in the previous section and included in a separate tracking spreadsheet. A total of 19 Illicit Discharges are identified as non point sources, such as dog waste removal from storm drains or illegal dumping, See Illicit Discharge Incidents Master List (As of June 30, 2023) here:

<https://www.tewksbury-ma.gov/DocumentCenter/View/4144/Illicit-Discharge-Incidents-Master-List-As-of-June-30-2023>

Employee Training

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

The Engineering Division staff conducted a 45 minute IDDE training for all employees who participate in field work, site inspections and facilities management on the following dates:

- Tuesday, June 6, 2023 at 10AM @ Main Hall in Town Hall
- Wednesday, June 7, 2023 at 10AM @ Main Hall in Town Hall

40 Full Time Employees attended training

Any employee that could not attend a live session viewed the prerecord training session here:

<https://youtu.be/maJ0IDAQpTs>

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:

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): June 10, 2020

Website of ordinance or regulatory mechanism:

<https://www.tewksbury-ma.gov/DocumentCenter/View/376/Tewksburys-Stormwater-Management-and-Erosion-Control-and-Municipal-Stormwater-Discharge-Bylaws-PDF?bidId=>

As-built Drawings

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

Number of as-built drawings received: 8

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

The Town has as-built requirements in Chapter 19 of the General Bylaw, Site Plan Special Permit Regulations, and Subdivision Rules and Regulations. The Planning Board requires Applicants/Developers to submit an as-built plan. This is a condition of the project approval either through the Site Plan Special Permit or Definitive Subdivision process. As additional assurance, the Applicant/Developer is also required to post a bond to cover the cost of an as-built should they not provide one on their own.

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:

No progress has been made. Please see report here:

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

Green Infrastructure Report

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

No progress has been made. Please see report here:

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

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):

All properties, locations and BMP types are included in the BMP Retrofit Inventory Report located here:

<https://www.tewksbury-ma.gov/DocumentCenter/View/2936/Tewksbury-BMP-Retrofit-Inventory-Report---June-2022-PDF>

LIST:

Tewksbury Department of Public Works (999 Whipple Road)

Town Hall Campus (1009 Main Street & 11 Town Hall

Tewksbury Public Library (300 Chandler Street)

East Street Athletic Fields (90 Chandler Street)

Open Space on Park Avenue (Across from 15 Park Avenue)

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.

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: 2,677

Number of catch basins cleaned: 2,677

Total volume or mass of material removed from all catch basins: 343.25 tons

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

Total number of catch basins: 2,677

If applicable:

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

Street Sweeping and Catch basin Cleaning is included under Total volume or mass of material removed

Street Sweeping

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

☒ Number of miles cleaned: 175

☐ Volume of material removed: [Select Units]

☐ Weight of material removed: [Select Units]

Stormwater Pollution Prevention Plan (SWPPP)

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

Number of site inspections completed: 4

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

Reminders to facilities managers to keep dumpsters covered at all times and to sweep materials at storage areas.

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):

<https://www.tewksbury-ma.gov/260/NPDES-MS4-Stormwater-Documents>

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:

On April 20, 2023, Weston & Sampson field staff accessed sampling locations at Long Pond by canoe. A Kemmerer water sampler was used to obtain samples from a depth of two-feet throughout the pond. Samples were taken at eight (8) locations and analyzed using field instrumentation for the following parameters: chlorine, conductivity, salinity, and temperature.

All sampling results were found to be lower than the Massachusetts surface water quality standards for Class C waterbodies.

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:

The Town has annual Stormwater Detention Pond Rehabilitation program in which we bid and contract to have the Town owned Detention Pond (BMPs) cleared of any tree growth and sedimentation. Of the Town owned 53 Detention Ponds we have rehabilitated 8, Thus far.

Part V: Certification of Small MS4 Annual Report 2023

40 CFR 144.32(d) Certification

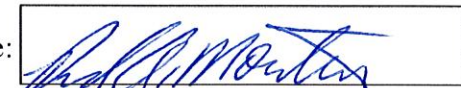
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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:

Richard Montuori

Title: Town Manager

Signature:



[Signatory may be a duly authorized representative]

Date:

9/26/23